ORIGINAL

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BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS
KEVIN THOMPSON - CHAIRMAN
NICK MYERS - VICE-CHAIRMAN
LEA MÀRQUEZ PETERSON
RACHEL WALDEN
RENÉ LOPEZ

IN THE MATTER OF THE APPLICATION OF LIBERTY UTILITIES (LITCHFIELD PARK WATER & SEWER) CORP., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS WASTEWATER RATES AND CHARGES FOR WASTEWATER UTILITY SERVICE AND FOR CERTAIN RELATED APPROVALS	DOCKET NO. SW-01428A-25-0127 **APPLICATION**

OSBORN MALEDON ATTORNEYS AT LAW

Liberty Utilities (Litchfield Park Water & Sewer) Corp. ("Liberty Litchfield Park" or the "Company"), a public service corporation and Class A Utility under the Arizona Corporation Commission ("Commission") regulations, submits this Application ("Application") for an order determining the fair value of its utility plant and property and approving adjustments to its rates and charges for its wastewater division, and states as follows:

1. **The Company**. Liberty Litchfield Park and its predecessors have served the west valley for decades. Liberty Litchfield Park provides water and wastewater utility service to portions of the west valley, including the City of Litchfield Park and portions of the Cities of Goodyear, Phoenix, and Avondale, as well as contract service to Luke Air Force Base and Valley Utilities Water Company. As of December 31, 2024, the Company served approximately 24,205 wastewater customer connections and 22,355 water connections.

2. **Rate Increase**. The Company is concurrently submitting applications for a water rate increase and a wastewater rate increase, and will request that the two

ACC - Docket Control - Received 6/30/2025 12:31 PM
ACC - Docket Control - Docketed 6/30/2025 1:25 PM

dockets be consolidated. The proposed increases in revenue requirements and bill impact for a customer with median usage is shown the table below.

	Increase in Revenue Requirement	%	Bill Impact for Average User
Water	$6,203,028	38.40%	$10.43
Wastewater	$11,586,379	53.76%	$24.49

3. **Test Year.** The Company's proposed rates were developed using a test year ending December 31, 2024. The Company will seek post test year plant through the end of December 31, 2025.

4. **Current Rates.** The Company's current rates were established in Decision No. 76799 (August 15, 2018) based on a test year ending December 31, 2016.

5. **Cost of Capital.** Liberty Litchfield Park requests a rate of return based on a weighted average cost of capital of 8.45%, based on a cost of equity of 10.80%, a cost of debt of 5.69%, and an equity ratio of 54%.

6. **Drivers of rate increase.** The main factors that result in the need for an increase in rates are: (a) significant capital investment in the Company's water and wastewater divisions, including the $105 million Sarival Wastewater Reclamation Facility ("WRF") and multiple new wells; and (b) expenses, the cost of capital projects, and interest rates have all increased since the end of the prior test year in 2016.

7. **Key issues**. The Application includes the following significant issues.

a. ***Capital Improvements.*** The Company has made significant capital improvements that have resulted in increases to rate base.

b. ***Formula Rates***. The Company will be requesting a formula rate mechanism to allow annual rate changes between rate cases. This provides for more gradual rate changes and improves the Company's opportunity to earn its revenue requirement, thus aligning rates with the cost of providing service.

c. ***Hook up fees***. The Company is updating its hook up fee ("HUF") tariff, including increases to its water HUF tariff, as well as revisions to its wastewater HUF tariff to ensure that large commercial and industrial customers pay a fair contribution towards the cost of offsite facilities needed to serve them.

d. ***Federal Compliance Costs***. To the extent a formula rate mechanism is not approved, or if federal compliance costs are not included in the mechanism, the Company seeks a Federal Compliance Cost Recovery Mechanism ("FCCRM").

8. **Customer benefits.** The Company is including the following voluntary concessions and measures to reduce rates or rate impacts to customers.

a. ***Settlement***. This Application carries over certain adjustments agreed to by its affiliates in their recent settlement agreement with Commission Staff and the Residential Utility Consumer Office, including the capitalization factor for capitalized overhead.

b. ***Financing***. Liberty Litchfield Park is concurrently filing a financing application for its water and wastewater divisions to balance its capital structure. The increased debt will lower the Company's equity ratio and thus lower its cost of capital.

c. ***Customer Assistance***. Liberty Litchfield Park is proposing updates and enhancements to its customer assistance tariff.

d. ***No fair value increment***. Liberty Litchfield Park is using its original cost rate base as its fair value rate base, and is therefore not seeking any return on a fair value increment.

9. **Community Outreach.** As discussed in the testimony of the Company's President, Moses Thompson, Liberty Litchfield Park is conducting a community outreach program in connection with this rate application. The Company held an open house for customers on April 29, 2025, and the Company has met with officials of the Cities of Goodyear, Phoenix, and Litchfield Park, elected officials, homeowners' associations, Commission Staff, and the Residential Utility Consumer Office. The Company will schedule additional meetings with stakeholders in the coming weeks.

10. **Witnesses**. The Company is submitting the Direct Testimony of the following witnesses in support of this Application.

Witness	Title	Topics
Moses Thompson	President	Case Overview; Sarival WRF
Matthew Garlick	Vice President, Technical Services	Sarival WRF; Pre-treatment tariff; FCCRM including the impact of forever chemicals; HUF
Terry Gilbertson	Senior Manager of Operations	Other capital improvements and Post Test Year Plant
Manasa Rao	Senior Director of Rates and Regulatory Affairs	Revenue Requirement; Certain rate base and income statement adjustments; formula rate mechanism
Regina Wise	Senior Manager of Rates and Regulatory Affairs	Emergency Water Augmentation Tariff; Fire Services Tariff; FCCRM; Customer Assistance Tariff; HUF
Peter Eichler	Senior Vice President, Business and Financial Planning	Cost Allocation Manual; Corporate Shared Services
Tom Bourassa	Rate consultant	Schedules; Cost of Service Study; Cost of Capital

11. **Tariff revisions**. Liberty Litchfield Park is seeking to revise various tariffs or add new tariffs, as discussed in the testimonies of Company witnesses Regina Wise, Manasa Rao, and Matthew Garlick. Clean and redlined copies of the proposed tariffs are included with the relevant testimonies.

12. **Supplemental Filing Materials**. In addition to this Application, the Direct Testimony, and associated rate schedules, the Company is also attaching the supplemental filing materials required by A.A.C. R14-2-103(B)(5), including the water or wastewater use data sheet, and the plant inventory. There are no Monitoring Assistance Program invoices because the Company does not participate in this program.

13. **Legal basis**. This Application is made pursuant to Article 15, Sections 3 and 4 of the Arizona Constitution, A.R.S. §§ 40-250, 40-251, 40-256, 40-361, 40-365, 40-367 and A.A.C. R14-2-103.

14. **Notice**. Any notices, pleadings, data requests, procedural orders, or other materials to be served on Liberty Lichfield Park should be sent to its attorneys as follows:

Timothy J. Sabo
Elias J. Ancharski
Osborn Maledon, PA
2929 North Central Ave. 20th Floor
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tsabo@omlaw.com
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Liberty Utilities (Litchfield Park Water & Sewer) Corp.
14920 W. Camelback Road
Litchfield Park, Arizona 85340
Stephen.Emedi@libertyutilities.com

With a copy to:

Manasa Rao
Senior Director of Rates and Regulatory Affairs
Regina Wise
Senior Manager of Rates and Regulatory Affairs
Liberty Utilities (Litchfield Park Water & Sewer) Corp.
14920 W. Camelback Road
Litchfield Park, Arizona 85340
Manasa.Rao@libertyutilities.com
Regina.Wise@libertyutilities.com

15. **Rate effective date**. The Company requests that the new rates and charges take effect no later than August 1, 2026.

WHEREFORE, Liberty Litchfield Park requests the following relief:

A. That the Commission or its assigned Administrative Law Judge issue a Procedural Order setting this matter for hearing at the earliest

opportunity, in accordance with the time frames set forth in A.R.S. § 40-256 and A.A.C. R14-2-103(B)(11) and setting forth notice requirement and other deadlines sufficient to meet the aforesaid time frames.

B. That the Commission enter a final order, at the earliest possible time, finding the Company's rate base, the rate of return to be earned on that rate base, and the overall revenue requirement for the Company, together with a schedule of rates and charges sufficient for the Company to earn the revenue requirement so established.

C. That the Commission enter a final order, at the earliest possible time, approving the Company's requests summarized in this Application and as more particularly set forth in the appendixes, schedules and testimony of the Company's witnesses as attached to this Application.

D. That the Commission enter a final order, at the earliest possible time, authorizing such other and further relief as may be appropriate to ensure that the Company has an opportunity to recovery its prudently incurred cost of service, including the cost of capital deployed in the provision of such service.

RESPECTFULLY SUBMITTED this 30th day of June, 2025.

OSBORN MALEDON, P.A.

By /s/ Timothy J. Sabo

Timothy J. Sabo
Elias Ancharski
Osborn Maledon, PA
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Phoenix, Arizona 85012

and

Stephen Emedi
Liberty Utilities (Litchfield Park Water & Sewer) Corp.
14920 W Camelback Rd
Litchfield Park, AZ 85340

Attorneys for Liberty Utilities (Litchfield Park Water & Sewer) Corp.

Copy e-filed this 30th day of June, 2025, with:

https://efiling.azcc.gov
ARIZONA CORPORATION COMMISSION
1200 West Washington Street
Phoenix, Arizona 85007

Copy of the foregoing emailed
This 30th day of June, 2025 to:

Utilities Division
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Phoenix, Arizona 85007

Office of General Counsel
legaldiv@azcc.gov
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1200 W Washington
Phoenix, Arizona 85007

/s/ Patricia Palmer

Direct Testimony

DIRECT TESTIMONY OF MOSES THOMPSON

ON BEHALF OF LIBERTY UTILITIES (LITCHFIELD PARK WATER & SEWER) CORP.

June 30, 2025

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I. INTRODUCTION AND QUALIFICATIONS

Q. Please state your name, employer, and occupation.

A. My name is Moses Thompson. I am employed by Liberty Utilities Service Corp. as President for Arizona and Texas. I am also the acting president for California. In addition, I am the President of Liberty Utilities (Litchfield Park Water & Sewer) Corp. ("Liberty Litchfield Park" or the "Company"). As such, I am responsible for the management and operations of the Company.

Q. Please describe your experience and qualifications.

A. I have over 25 years of management and executive level experience in utility engineering and operations. I have been with Liberty for about five years, starting as Director of Operations for Arizona and Texas in August 2020. I was then promoted to President for Arizona and Texas in August 2022.

Prior to that, I was Vice President of Operations for American Water Works in New York from 2018 to 2020, and Director of Operations and Engineering for Aqua America in North Carolina from 2014 to 2018. I was also Assistant Director of Public Utilities for the City of Portsmouth, Virginia from 2009 to 2013. I also have experience in the natural gas utility industry, including serving in several managerial roles at National Grid from 1993 to 2007, as Manager of Engineering for Virginia and Maryland for Atlanta Gas Light from 2007 to 2009, and Director of Midstream Operations for EQT Corporation from 2013-2014.

I have Bachelor of Science in Mechanical Engineering degree from the University of Rochester, and currently completing my MBA, with an emphasis on Information Technology, from Western Governors University.

II. PURPOSE OF TESTIMONY

Q. What is the purpose of your testimony?

A. I provide an overview of the Company and this rate case. I then discuss our Sarival Water Reclamation Facility—a significant $105 million capital investment and the Company's second water reclamation facility overall. I then discuss additional major investments we have made to increase our water production capacity.

III. SUMMARY OF THE COMPANY AND THIS RATE CASE

Q. Please provide an overview of the Company?

A. Liberty Litchfield Park has served the West Valley community for many years. The Company is part of Algonquin Power & Utilities Corp ("APUC"), a large utility holding company providing service throughout North America. Algonquin is a pure-play utility holding company that provides regulated wastewater, water, natural gas, and electric utility services to more than 1.2 million customer connections in 13 states, Canada, Bermuda, and Chile. The Company thus has access to Liberty Utilities' extensive resources to help the Company meet its obligations to our customers and our regulators.

The Company has about 22,355 water customers and 24,205 wastewater customers. While we provide both water and wastewater service to many customers, we do have wastewater only and some bulk water only customers.

Q. Please provide an overview of the infrastructure used to serve the Company's customers?

A. Our wastewater system has two water reclamation facilities, with a total treatment capacity of 11.3 million gallons per day ("MGD"), as well as

approximately 313 miles of both force and gravity collection mains. Our water system has 16 operating wells with a current total production capacity of 22 MGD, as well as 348 miles of distribution mains.

Q. Please provide an overview of the rate application.

A. We are asking for a revenue increase from test year revenues of $11.596 million (or 53.76%) for wastewater and $6.203 million (or 38.40%) for water. A residential customer with average usage would see an increase to their monthly bill of $10.43 (3/4 inch meter) for water and $24.49 for wastewater.

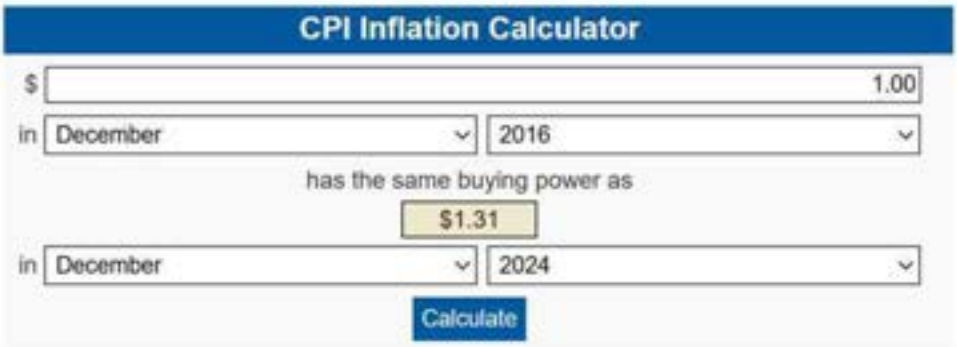
Q. What are the drivers of the rate increase?

A. As discussed in the next sections, we have made substantial capital investments in the Sarival Water Reclamation Facility, as well as significant capital investments in new wells and other water infrastructure. As a result, our rate base is significantly higher than in the Company's last rate case. In addition, the Company's current rates are based on a 2016 test year. Since that 2016 test year, there has been significant inflation, which has impacted all aspects of the Company's operations.

Q. You mentioned inflation. How much inflation has there been since the 2016 test year?

A. Cumulative inflation from December 2016 to December 2024 has been about 31%. In other words, it takes $1.31 to buy what could have been bought for $1 at the end of the last test year.

Figure 1: Consumer Price Index Inflation Calculator



Q. Please provide some more information on the impact of inflation.

A. Inflation has impacted all aspects of our business. This includes cost of chemicals for treatment, materials and equipment, purchased power and labor costs (internal and external). They have all increased substantially since the Company's last rate case. The impact of inflation is not only reflected in an increase in our operating expenses, but also in rate base due to higher construction and capital costs.

Q. Are there other factors that you anticipate will increase costs for the Company?

A. As discussed by Mr. Garlick and Ms. Wise, the United States Environmental Protection Agency has promulgated regulations pertaining to allowable levels of Per- and polyfluoroalkyl substances in our water systems. Complying with these regulations will require considerable investment, though we are trying to minimize impacts on our customers. While these anticipated costs are not part of this rate application, the Company is requesting approval of Federal Compliance Cost Recovery Mechanism ("FCCRM"), which is discussed in Mr. Garlick's testimony.

Q. You mentioned significant investments that the Company has made. Why has the Company made those investments?

A. These investments have been necessary to keep up with the significant growth the Company has experienced. Our service territory has seen substantial increases in residential customers, as well as in commercial and industrial demand (such as warehouses and the like in the Loop 303 corridor). The charts below show increase in customers, and increases in water gallons sold and in wastewater flows over time.

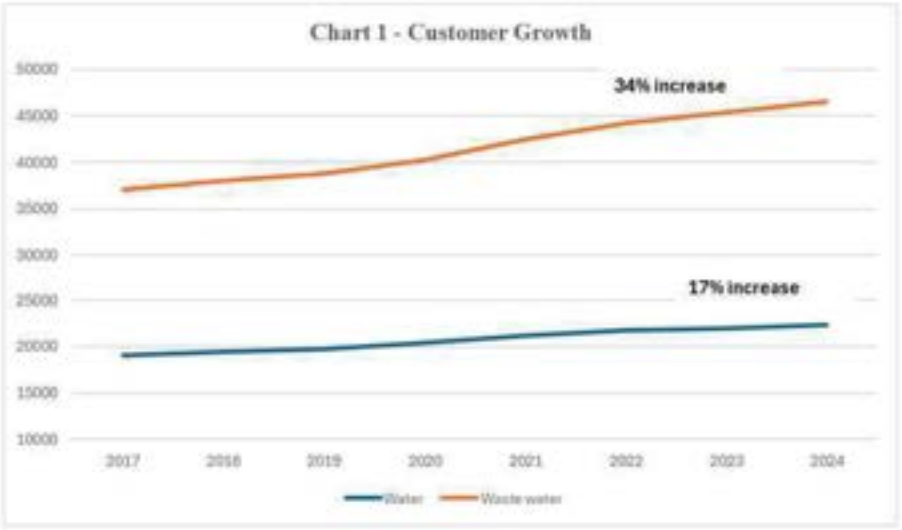


Chart 1 - Customer Growth
50000
45000
40000
35000
30000
25000
20000
15000
10000
34% increase
17% increase
2017
2018
2019
2020
2021
2022
2023
2024
Water
Waste water

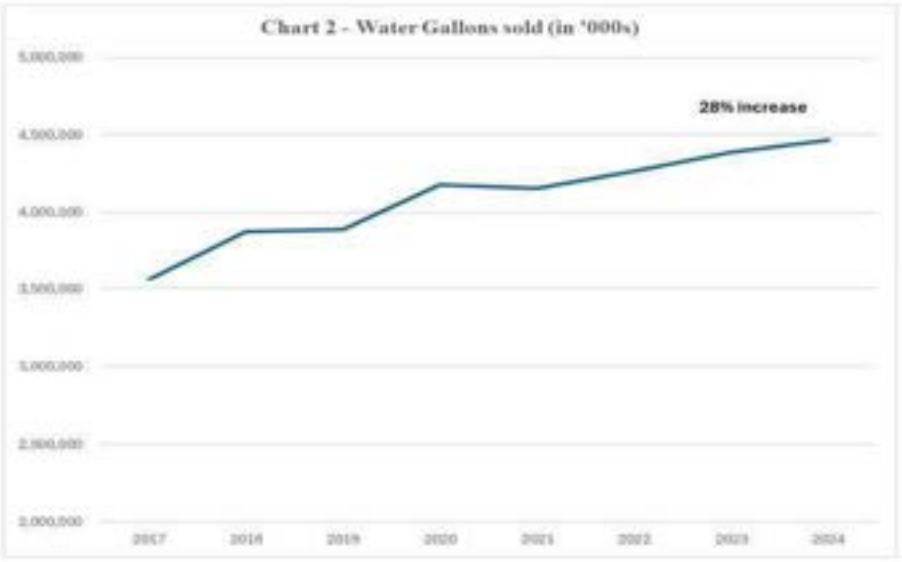


Chart 2 - Water Gallons sold (in '000s)
28% increase

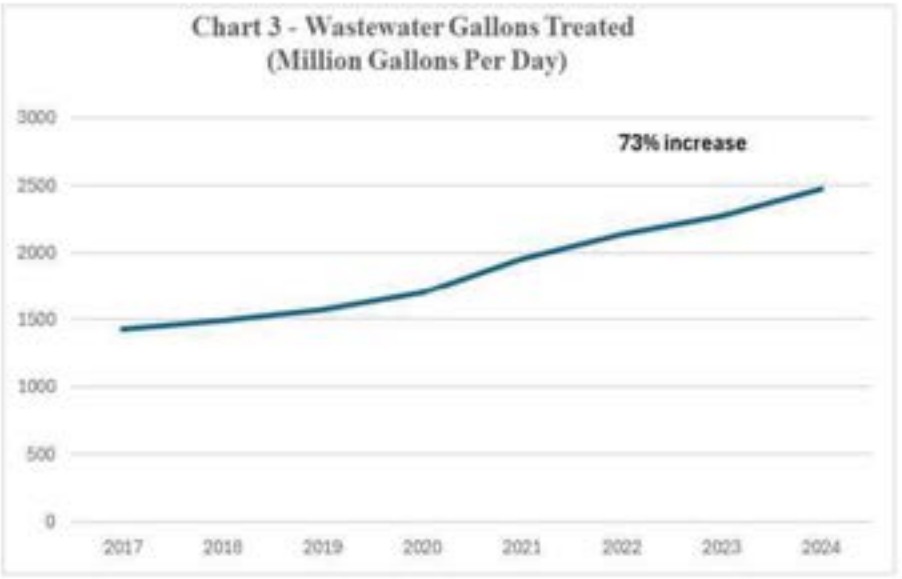


Chart 3 - Wastewater Gallons Treated
(Million Gallons Per Day)
3000
2500
2000
1500
1000
500
0
73% increase
2017
2018
2019
2020
2021
2022
2023
2024

Q. What steps has the Company taken to limit the rate increases for the benefit of customers?

A. Several of the Company's affiliates recently entered into a Settlement Agreement with the Commission Staff and RUCO, which was approved by the Commission in Decision 81361 (June 18, 2025). Our rate application includes many of the adjustments and approaches used in this Settlement Agreement. By including much of the input of Commission Staff and RUCO at the front end, we are hopeful that we can limit the issues in dispute. For example, we have followed the provisions of the Settlement Agreement regarding capitalized overhead costs.[1] Similarly, we have adopted the adjustments to certain corporate costs per the Settlement Agreement.[2] Moreover, we are using our original cost rate base as our fair value rate base, and we are therefore not seeking a return on the fair value increment.

Q. Does the Company maintain a Customer Assistance Tariff that provides bill discounts for certain customers?

A. Yes. In addition, we are proposing a new Customer Assistance Tariff ("CAT"), which will replace Liberty Litchfield Park's existing Alternate Rates for Water and Wastewater ("ARWW"). The CAT is an expanded program designed to alleviate financial hardship that customers might be facing. The CAT is described in the Direct Testimony of Regina Wise.

Q. Please describe the community outreach the Company has done regarding its rate application.

A. We provide regular briefings to community leaders of the cities that we serve such as City of Goodyear and City of Litchfield Park. In addition, we provided updates about this rate application to some of our larger customers and Homeowner Associations. Further, we hosted an in-person customer open house

[1] Decision No. 81361 at Ex. A, Settlement Agreement, Section III.C.3.
[2] *Id.* at Section III.C.4.

on April 29, 2025, where Liberty representatives from various departments of the Company such as Billing, Regulatory, Engineering, and Operations were available to address customer questions and concerns.

We take customer and community outreach very seriously, and the Company will continue its outreach efforts throughout the course of this proceeding to inform our customers of the rate case process and ensure that their questions are addressed.

Q. Is the Company seeking any adjustment mechanisms or surcharge mechanisms?

A. Yes. We are asking the Commission to approve the Cost of Service Reconciliation Mechanism ("CSRM"), a formula rate adjustor mechanism, in accordance with the Commission's Formula Rate Policy Statement. In the alternative, if the CSRM is not approved, the Company requests that the Commission approve a Federal Compliance Cost Recovery Mechanism, Property Tax Adjustment Mechanism, and Purchased Power Adjustment Mechanism.

Q. Are there other new or modified tariffs that the Company is proposing?

A. Yes. We are proposing an Emergency Water Augmentation Tariff, Industrial Fire Services Tariff, and a revised Pre-treatment Tariff.

Q. What witnesses are providing Direct Testimony in support of the Company's Rate Application?

A. In addition to myself, the following witnesses are providing Direct Testimony:

Witness	Title	Topics
Matthew Garlick	Vice President, Technical Services	Sarival WRF; Pre-treatment tariff; FCCRM including the impact of forever chemicals; Hook Up Fee tariff revisions
Terry Gilbertson	Senior Manager of Operations	Other capital improvements and Post Test Year Plant
Manasa Rao	Senior Director of Rates and Regulatory Affairs	Revenue Requirement; Post Test year Plant, Certain rate base adjustments; Rate case expense; CSRM
Regina Wise	Senior Manager of Rates and Regulatory Affairs	Emergency Water Augmentation Tariff; Fire Services Tariff; FCCRM; Customer Assistance Tariff; HUF Tariff
Peter Eichler	Senior Vice President, Business and Financial Planning	Cost Allocation Manual; Corporate Shared Services
Tom Bourassa	Rate consultant	Schedules; Cost of Service Study; Cost of Capital

Although I have provided an overview of our rate application, the details of the calculations are provided by these other witnesses.

Q. Mr. Thompson, please discuss the water and wastewater capacity recently faced by the Company.

A. On the water side, some of our customers experienced reduced water pressures, and on the wastewater side, developers were impacted by capacity limitations.

These challenges were the result of several factors, including extreme summer heat, equipment issues, significant customer growth, and delays in completing certain capacity additions.

We responded by prioritizing the completion of key capital projects that ensure we will meet demand and customer needs now and into the future. As President, my focus is on providing safe and reliable service to our customers and maintaining operational resilience in the face of challenges that may arise. So is the rest of my team. The investments we've made were necessary, prudent and useful in providing safe and reliable water and wastewater service to our customers and give us confidence that we'll continue to accomplish those goals.

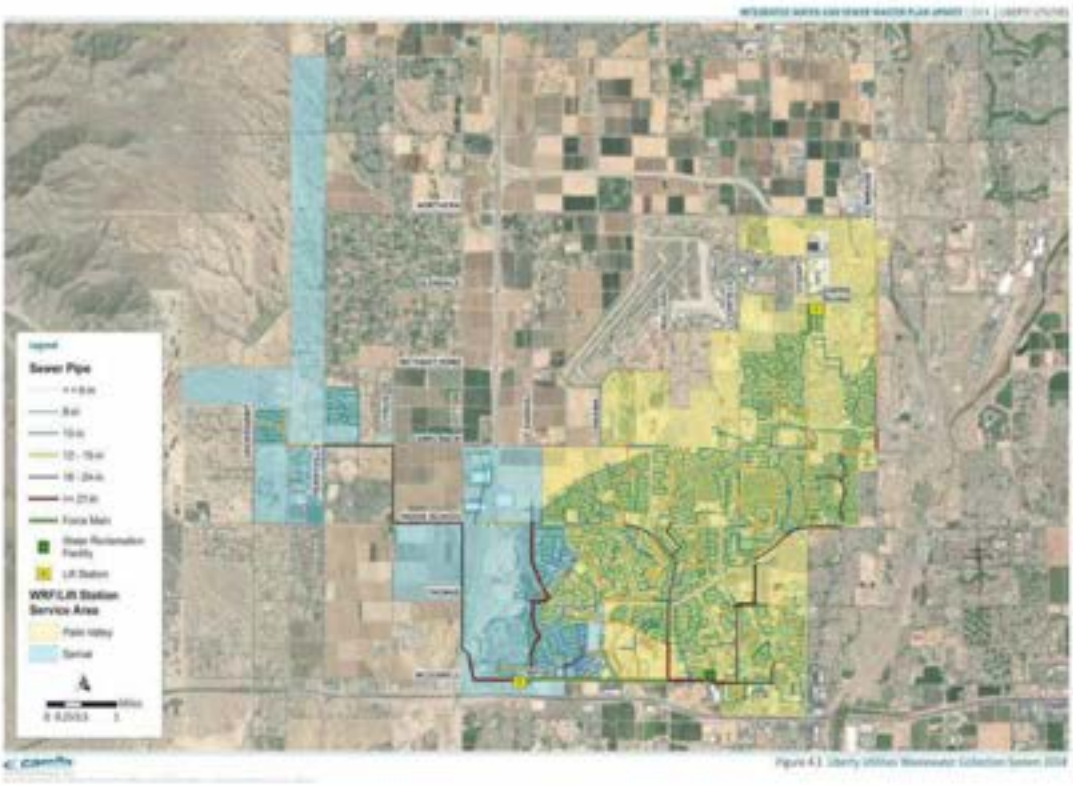
In summary, we have taken the following steps to address these issues:

- We have invested considerable capital in water and wastewater capacity additions, as I discuss in the following sections;
- We received approval for an amended water curtailment plan;
- We have modified our operating procedures, including to make sure we take advantage of the interconnection with the City of Goodyear; and
- We have continued to improve our communication with our customers, the cities we serve, and the developer community.

IV. SARIVAL WASTEWATER TREATMENT PLANT

Q. What is the Sarival Water Reclamation Facility?

A. The Sarival Water Reclamation Facility ("WRF") is the Company's second WRF. It provides four million gallons per day of additional treatment capacity to the Company. The Sarival WRF serves the western portion of the Company's service area. The location of the Company's two WRFs is shown below:



The Sarival WRF was always planned as a second WRF once there was sufficient need. Planning for the Sarival WRF goes back at least to 2000, when it was included in the Company's Maricopa Association of Governments Section 208 Plan Amendment. The site was acquired in 2004, with an additional parcel purchased in 2009. The construction contract was awarded in May 2022, with construction starting on July 5, 2022. This was a large and complex construction project, as shown by the photos included in Mr. Garlick's Direct Testimony. Mr. Garlick also provides more details on this significant project.

Start up of the Sarival WRF began in August 2023, with the Sarival WRF commissioned in March 2024. Once the Sarival WRF was in place, some flows that formerly went to the Company's Palm Valley WRF were diverted to Sarival.

Q. What was the cost of the Sarival WRF and how did the Company pay for that major capital investment?

A. Yes. The Sarival WRF cost approximately $105 million. To reduce the impact on ratepayers, the Company used approximately $25 million in hook up fees to partially cover these costs. Thus, the Company invested about $80 million in the Sarival Plant. This is a very significant investment for the Company, in fact, its single largest investment in Arizona to date.

Q. Has the Company made other investments in the wastewater system?

A. Yes, Mr. Terry Gilbertson discusses this in his Direct Testimony. Overall, our wastewater rate base has increased from $44,135,475 in the 2016 test year, to $133,887,159 in this case, an increase of $89,751,684 or 203.35%.

Q. Did the Commission approve an accounting order regarding deferral of certain costs for the Sarival plant.

A. Yes, the Commission approved an accounting order in Decision No. 80122 (Mar. 20, 2025). Ms. Manasa Rao describes the order and how it impacts rates in this case in her Direct Testimony.

V. MAJOR ADDITIONS TO WATER PLANT

Q. Has the Company also made substantial capital investments in its water system?

A. Yes. Again, Mr. Gilbertson provides the details in his Direct Testimony. In particular, we have brought online additional wells to increase our water production capacity. Those new wells include Marbella Well # 2, which provides about half a million gallons per day, and Well 19B, which provides approximately 1 million gallons per day. Additionally, the Company anticipates bringing the Monument Point Well online later this year, which will provide about 0.86 million gallons per day.

Overall, our water rate base has increased from $40,769,188 in the 2016 test year, to $69,765,704 in this case, an increase of $28,996,516 or 71.12%.

VI. CONCLUSIONS

Q. Mr. Thompson, do you have any concluding thoughts.

A. Rate increases are never popular. We have attempted to limit the impact, by carrying over many provisions of the recent Settlement Agreement approved in Decision No. 81361. The Company has invested significantly in both the water and wastewater systems—this is a major driver of the rate increases. Further, the Company's current rates are based on a 2016 test year, and therefore it is time to update the rates. We look forward to working with the Commission Staff and other stakeholders to answer any questions they have.

DIRECT TESTIMONY OF MATTHEW GARLICK

ON BEHALF OF LIBERTY UTILITIES (LITCHFIELD PARK WATER & SEWER) CORP.

June 30, 2025

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I. INTRODUCTION AND QUALIFICATIONS

Q. Please state your name, employer, and occupation.

My name is Matthew Garlick. I am employed by Liberty Utilities Service Corp. ("Liberty Utilities") as Vice President, Technical Services – Water. In that role, I am responsible for water quality, Geographic Information Systems, policies and procedures, long-term planning, asset management, technical training, and operator certification. These responsibilities are nationwide, including for Liberty Utilities (Litchfield Park Water & Sewer) Corp. ("Liberty Litchfield Park" or the "Company").

Q. Please describe your experience and qualifications.

A. I have worked at Liberty Utilities for the last 25 years, joining in 2000 as technical services manager. After a few years, I became a business manager, and in March 2012 I was named Director of Operations. In June 2015, I was promoted to President of Liberty Utilities' water and wastewater utilities in Arizona and Texas, a role I held for seven years. Subsequently, I transitioned to my current role.

Prior to joining Liberty Utilities, I spent 15 years with an engineering firm working as senior project geologist. My duties included directing and supporting other project scientists working on various Arizona Water Quality Assurance Revolving Fund ("WQARF") groundwater remedial projects.

I hold a Bachelor of Science degree from Northern Arizona University in Earth Science with an emphasis in geology. I have been a member of various professional organizations such as the American Water Works Association. I have also been a board member and Vice President of the Water Utilities Association of Arizona and board member of the Independent Water and Sewer Companies of Texas. I am an Arizona Department of Environmental Quality ("ADEQ") certified

operator (Grade 3 for Water Distribution and Grade 4 for Water Treatment, Wastewater Treatment, and Wastewater Collection). My ADEQ Operator ID is OP010500. I am also a certified backflow specialist.

Q. Have you previously testified before the Commission?

A. Yes. I have testified in various proceedings, such as Liberty Litchfield Park's last rate case[1] and its recent application to expand its Certificate of Convenience and Necessity.[2]

II. PURPOSE OF TESTIMONY

Q. What is the purpose of your testimony?

A. My testimony focuses on our Sarival Water Reclamation Facility ("WRF"), which is one of the most significant projects in the Company's history. I will also discuss our wastewater pretreatment tariff and the operational reasons that support our proposed Federal Compliance Cost Recovery Mechanism ("FCCRM") and our proposed revisions to the hook up fee.

III. SARIVAL WATER RECLAMATION FACILITY

Q. Please discuss the history of the Sarival WRF.

A. The Sarival WRF plant has been in the Company's plans since I joined a quarter century ago. It is very gratifying to see this project come to completion and to see it now serving customers.

For many years, the Palm Valley WRF was Liberty Litchfield Park's sole WRF. The Palm Valley WRF was built in 2002, replacing older, antiquated treatment

[1] Docket No. SW-01428A-17-0058 et al.
[2] Docket No. SW-01428A-24-0191.

facilities. As the Company's first 21st century plant, the Palm Valley WRF uses natural, biological processes to treat sewage to become highly treated, Class A+ reclaimed water. It does so using a Sequential Batch Reactor ("SBR") process. With additional capacity added in 2024, Palm Valley now has a capacity of 6.9 million gallons per day.

The Company has long planned to add the Sarival WRF as a second WRF when there were sufficient flows. For example, the Sarival WRF was included in the Company's Maricopa Association of Governments ("MAG") Section 208 Amendment in 2000, and the Sarival WRF has been reflected in subsequent MAG Section 208 amendments since that time.[3]

Liberty Litchfield Park acquired the site for the Sarival WRF in 2004 and an additional parcel was acquired in 2009.

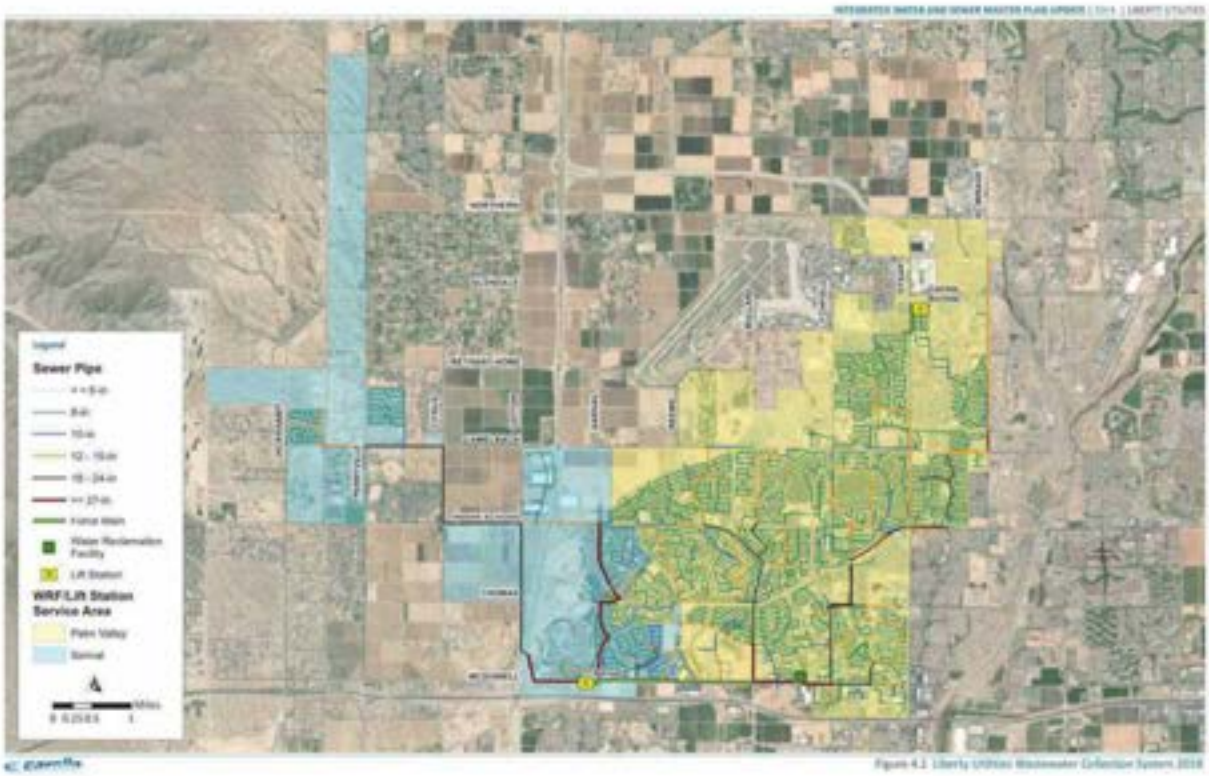
The Palm Valley WRF reached 90% of its treatment capacity in the first quarter of 2022, by which time design for the Sarival WRF was already underway. The Sarival construction contract was awarded on May 11, 2022, and construction began on July 5, 2022. Start-up began in August 2023, and the Sarival WRF was commissioned and placed in service in March 2024.

Q. What areas does the Sarival WRF serve?

A. The Sarival WRF generally serves the western side of the Company's wastewater service area, as shown in the map below. The land in this area slopes downward from north to south. Thus, the Palm Valley WRF and Sarival WRFs are both located at the southern edge of the Company's wastewater service area, enabling

[3] See e.g. https://azmag.gov/portals/0/Documents/WQAC_2013-02-14_MAG-208-Plan-Amendment-for-Litchfield-Park-Service-Company-dba-Liberty-Utilities-Service-Area-Expansion.pdf (July 2012 Plan Amendment)

the maximum use of gravity flows to move the wastewater. Gravity flows are highly reliable. However, the Company is investing in the ability to move flows between the two WRFs, which will enable the most efficient use of existing capacity, as well as adding operational flexibility.



Q. Was this a complex construction project?

A. Yes. Construction took nearly two years, not counting design work. We worked closely with the design-build contractor, PERC Water, to complete this complex project. To give some idea of the scale of this project, I am attaching construction photographs as Appendix MG Dir.1.

Q. Why did the Company use a design-build contract?

A. Using these contracts is a good practice for complex projects. Integrating the design and construction within one firm can provide a number of benefits,

including a focus on a constructable design, better collaboration, reduced cost, and faster project completion.

Q. Has the Sarival WRF won any awards?

A. Yes. PERC Water won the Wastewater Treatment Project of the Year Award for the Sarival WRF, awarded by the Arizona Water Association.[4] The award noted the innovative combination of closed-loop reactors and membrane bioreactors, which produce high-quality reclaimed water. The award also noted the use of smart controls, compact design, and low-energy systems to help the facility achieve top-tier performance with a smaller environmental footprint.

Q. What type of technology is used at the Sarival WRF?

A. As with the Palm Valley WRF, we selected a natural biological treatment process. Specifically, the Sarival WRF uses membrane bioreactors. We believe this is now the best available treatment technology. The membrane bioreactors differ from the sequential batch reactors used in the Palm Valley WRF in using a membrane as a physical barrier in a continuous process to separate solids, which enables very high effluent quality and high biomass concentration.

Q. Please provide more detail on the Sarival WRF treatment process.

A. The treatment process includes an existing influent pump station ("IPS") which includes three (3) new 5.0 million gallon per day pumps that lift influent to a headworks consisting of two (2) 6 mm mechanical coarse screens, two (2) vortex grit removal units and classifiers, and two (2) perforated 2 mm fine screens. The IPS and headworks are fully enclosed under decking with a 4,000 Cubic Feet per Minute ("CFM") activated carbon media odor control system equipped with a mist eliminator (with spare element) and redundant fan.

From the headworks, influent is mixed with return activated sludge ("RAS") in a trough prior to being sent to two (2) Closed Loop Reactor ("CLR") secondary

[4] See https://waterfm.com/perc-water-wins-arizona-water-associations-project-of-the-year/

treatment process trains. Each CLR contains an anoxic zone with two low-speed geared mixers, a swing zone, and aeration zone with fine bubble diffusion. From the CLRs, mixed liquor suspended solids ("MLSS") flows, via equalizer pipes, to a feed trough. From the feed trough, four (4) dedicated 9.1 million gallon per day ("MGD") feed pumps feed MLSS to four (4) membrane bio-reactor ("MBR") separation tanks. From the MBR trains, four (4) permeate pumps deliver effluent to two (2) chlorine contact basins that use sodium hypochlorite, and a final effluent reclamation pump station with three (3) recycled water pumps. Two (2) Waste Activated Sludge ("WAS") pumps will convey sludge and scum from the MBR separation tanks/WAS Collection Pit to the Sludge Holding Tank located at the Bio-solids Dewatering Building. The dewatering equipment consists of an aerated sludge holding tank and two (2) centrifuges, as part of a packaged skid system, which will dewater sludge to a cake. The aerated WAS storage tank has a nominal capacity of 12,000 gallons and a connection for emergency liquid hauling.

In an emergency, liquid sludge can be transported to Liberty's Palm Valley WRF (APP Inventory #100310) for storage and dewatering prior to disposal. The dewatered solids will be discharged to an offloading conveyor and transferred to 20-ton roll-off bins. Dewatered solids, screenings and grit will be hauled off to an approved sanitary landfill for disposal. The biosolids dewatering building is fully enclosed with a 12,000 CFM activated carbon media odor control system equipped with a redundant fan. A Process Flow Diagram is included as Appendix MG Dir.2.

Q. How much did the Sarival WRF cost?

A. Approximately $105 million.

Q. What permits were required for the Sarival WRF?

A. Required permits included the Aquifer Protection Permit ("APP") and the Arizona Pollution Discharge Elimination System Permit ("AZPDES"). The APP and AZPDES permits are attached as Appendices MG_ Dir.3 and 4.

Q. What is the capacity of the Sarival WRF?

A. The Sarival WRF is designed to meet an average daily flow of 4.0 million gallons per day ("MGD"), with a maximum average flow of 4.4 MGD. The Sarival WRF was designed and built to allow for modular additions, and it can be expanded in three phases to up to 12 million gallons per day. However, the MAG Section 208 approves the expansion currently up to 8.2 MGD.

Q. What are the current and committed flows to the Sarival WRF?

A. Upon entering service, flows to the Sarival WRF rapidly reached 2.0 MGD (approximately 50% of current capacity) due to diversion of flows formerly going to the Palm Valley WRF. Adding in capacity committed to new developments and projects, the total committed capacity is now approximately 3.1 MGD (approximately 71% of current capacity). The Palm Valley WRF currently has a capacity of 6.9 MGD, of which approximately 75% is committed.

Q. When will the Company begin design on additions to either plant?

A. Liberty Litchfield Park is closely monitoring both current flows and committed capacity and will initiate design on expansion when appropriate. According to Maricopa County Environmental Services Department's guidelines,[5] the wastewater utility should begin design and construction as follows:

- By the time the average day maximum month flow to the Facility reaches 80% of the Facility's rated capacity, the Owner shall have initiated planning and design of the next expansion of the Facility.
- By the time the average day maximum month flow to the Facility reaches 90% of the Facility's rated capacity, the Owner shall have initiated construction of the next expansion of the Facility.

Liberty Litchfield Park will meet or exceed these requirements. As noted above, the Sarival WRF has a modular design that enables relatively rapid expansion. The first phase has been completed at 4.0 MGD, the second phase will expand the total

[5] https://www.maricopa.gov/Faq.aspx?QID=1087

capacity to up to 8.2 MGD, and the third phase could bring the total capacity to 12 MGD assuming Liberty is granted approval by MAG Section 208

IV. PRETREATMENT TARIFF

Q. What is a pretreatment tariff?

A. A pretreatment tariff requires certain wastewater customers to pretreat their wastewater and design their facilities so that their wastewater flows meet certain standards and do not interfere with the operations of the WRFs or threaten worker's health and safety. This is important to protect our treatment systems and the health and safety of the public. We utilize state-of-the-art biological treatment processes, so harmful chemicals or other conditions could kill the bacteria that preform the biological treatment. Thus, protecting the treatment systems is important. Typical residential customers do not have to do anything under a pretreatment tariff. Some businesses, such as restaurants, must take actions like using grease traps to protect the system. Other pretreatment requirements pertain only to industrial customers that deal with potentially harmful or damaging contaminants.

Q. Does the Company have an existing pretreatment tariff, and if so, why is the Company proposing a revision to this tariff.

A. Yes, the Company has an existing pretreatment tariff.[6] This tariff was most recently modified as approved in Decision No. 76799 (Aug. 15, 2018).[7] We are proposing changes to update this tariff in order to maintain compliance with the General Pretreatment regulations of the Clean Water Act (40 CFR, Part 401), and more specifically to: a) comply with the Liberty Utilities Palm Valley WRF and Sarival WRF Arizona Pollutant Discharge Elimination System ("AZPDES") discharge requirements, b) protect the integrity of wastewater conveyance,

[6] arizona.libertyutilities.com/uploads/Litchfield Park Water and Sewer Tariff.pdf
[7] See Finding of Fact No. 143.

treatment, reuse and disposal infrastructure, c) reduce the level of pollutants discharged by industry and other non-domestic wastewater sources into municipal sewers systems, and d) reduce the amount of pollutants released into the environment through wastewater. The proposed changes are also designed to add clarity and modernize the current tariff. The proposed updated tariff is attached to Ms. Wise's testimony in Appendix RW_Dir 1.

Q. Why is the Company seeking these updates?

A. Liberty Litchfield Park has recently seen significant industrial development since our last rate case, especially in the Loop 303 corridor. Serving large industrial clients can be challenging, especially depending on the constituents of their waste stream. We are updating the tariff to further protect our WRFs, and thus, to ensure that our other customers do not suffer either unwarranted expense or service disruption caused by these industrial customers.

The revised pretreatment program and tariff includes the following revisions:

a. It updates the applicability to both the Palm Valley WRF and the Sarival WRF;

b. It provides more detailed general and specific prohibitions of waste with respect to pretreatment standards;

c. It enhances the restricted types of waste and provides updated limits on specific conventional pollutants;

d. It provides general updates to ensure stringent compliance with current day standards; and

e. Importantly, it allows the Company to terminate service to industrial customers who endanger our WRFs through improper discharges to the wastewater system.

Q. Have other utilities recently updated their pretreatment tariffs?

A. Yes. Both EPCOR Water Arizona[8] and Global Water[9] have done so. Notably, EPCOR Water Arizona also serves a portion of the Loop 303 corridor, and they face issues with industrial users.

V. FEDERAL COMPLIANCE COST RECOVERY MECHANISM

Q. Are you providing testimony in support of the Company's request for the Federal Compliance Cost Recovery Mechanism?

A. Yes. The purpose of the Federal Compliance Cost Recovery Mechanism ("FCCRM") is to help the Company recover its capital as well as operations and maintenance costs incurred because of complying with federal regulations which set nationwide limits for Per- and Polyfluoroalkyl substances ("PFAS") in drinking water. While Ms. Regina Wise provides testimony addressing the details of the proposed mechanism, I will explain what PFAS are; the extent to which they've impacted our system; and what we've done and are doing to address the risk PFAS pose to the public.

Q. What are PFAS?

A. PFAS compounds are a family of over 4,500 different synthetic chemicals such as Perfluorooctanoic acid ("PFOA"), Perfluorooctanesulfonic acid ("PFOS"), Perflueorohexanoic acid ("PFHxA"), Perfluoroheptanoic acid ("PFHpA"), Perfluorohexanesulfonic acid ("PFHxS"), Perfluorobutanesulfonic acid ("PFBS"), and Perfluorononanoic acid ("PFNA"). These chemicals have been used for decades to make products that resist heat, oil, stains, grease, and water.

Q. What types of products are PFAS used in?

A. PFAS are ubiquitous and found in common products including stain-resistant carpets and fabrics, clothing, non-stick cookware, firefighting foam (Aqueous Film

[8] EPCOR refers to its tariff as "Rule 10: Use of Sanitary Sewers by Industrial Dischargers"); *see* Decision No. 76528 (January 3, 2018); Decision No. 79342 (April 18, 2024)(approving revisions)

[9] Decision No. 78644 (July 27, 2022) at footnotes 317 and 320.

Forming Foam or AFFF), and personal care products. Both people and the environment are exposed to PFAS from those products.

Q. Do PFAS naturally degrade after they make their way into the environment?

A. PFAS are extremely persistent in the environment and resistant to typical environmental degradation processes. The substances can be found in people, animals, water, air, and soil across the world.

Q. What impacts do PFAS have on the environment and humans?

A. There's a lot we still don't understand. Studies have shown that exposure to PFAS may be linked to harmful health effects in humans—for example, low birth weight, cancer, and impacts on the immune system. But researchers still do not know how harmful the substances are. Nevertheless, it is a risk the Company is taking seriously.

Q. Are Liberty Litchfield Park's water supplies affected?

A. Yes. In 2016, the U.S. Environmental Protection Agency ("EPA") notified the Company that two of our wells—2AL and 4AL—showed elevated levels of PFOA and PFOS.[10]

In 2021, ADEQ also notified the Company that it had identified numerous public water systems within a four-mile radius of Luke Air Force Base that could be impacted by PFAS—including Liberty Litchfield Park. We then worked in collaboration with ADEQ to assess public health risk by sampling our water system for PFAS.

We continue to monitor the levels of PFAS in our water systems and provide that information to the public in our consumer confidence reports.[11] Our 2025

[10] Decision No. 75718 at 2 (Aug. 23, 2016).

[11] Liberty, Water Quality Reports, https://arizona.libertyutilities.com/avondale/residential/safety/water-quality.html.

Consumer Confidence Report on Water Quality for 2024 is attached as Appendix MG_Dir.5.

Q. What has the Company done to address PFAS in its system?

A. Shortly after the EPA notified us of the presence of PFAS in our system in 2016, Liberty Litchfield Park requested approval from the Commission to take remedial measures to reduce the contaminant levels of the substances in its water supply.[12] At that time, EPA established Health Advisory Levels for PFOA and PFOS at 70 parts per trillion—the concentration at which the agency did not anticipate health effects to occur over a lifetime of exposure. In Decision No. 75718 (Aug. 23, 2016), the Commission ordered Liberty Litchfield Park to an amount less than 70 parts per trillion.

Q. Did Liberty Litchfield Park do that?

A. Yes. We installed granular activated carbon treatment units at wells 2AL and 4AL to meet the requirements of Decision No. 75718.

Q. Are further remediation efforts necessary?

A. Yes. In April 2024, the EPA finalized a new rule setting maximum contaminant levels ("MCL") under the Safe Drinking Water Act to reduce exposure from five different PFAS: PFOA, PFOS, PFNA, PFHxS, and GenX chemicals.[13] EPA set a MCL at 4 parts per trillion for PFOA and PFOS and 10 parts per trillion for PFNA, PFXxS, and GenX chemicals. Liberty Litchfield Park has until 2029 to meet these MCLs.

Q. Is it possible that the EPA may rescind or modify these requirements?

A. It is possible. The EPA announced that it will reconsider the regulatory determinations for PFHxS, PFNA, and GenX chemicals. It also plans to develop a rulemaking to extend the compliance deadline from 2029 to 2031.[14] Until any

[12] Docket No. W-01427A-16-0200.
[13] EPA, PFAS National Primary Drinking Water Regulation, 89 FR 32532, 2024.
[14] EPA, EPA Announces It Will Keep Maximum Contaminant Levels for PFOA, PFOS, https://www.epa.gov/newsreleases/epa-announces-it-will-keep-maximum-contaminant-levels-pfoa-pfos (May 14, 2025).

changes become official, the Company will comply with all applicable rules as they are now written.

Q. Under the EPA's current requirement, how many of the Company's wells will require treatment?

A. Under the EPA's current rule, ten of Liberty Litchfield Park's wells will require treatment.

Q. Aside from the FCCRM, how is the Company attempting to fund the costs of this necessary investment?

A. We're doing everything we can to limit costs to our customers. We have filed a lawsuit against several manufacturers of PFAS and the federal government, who we allege are responsible for the contamination.[15] We intend to use any money received from this suit to help offset the costs of cleaning up our affected water systems. We are also in the process of applying for a low-cost loan from the Water Infrastructure Finance Authority of Arizona, which would be used for design and construction costs.

Q. If the Commission approves the formula rate mechanism proposed by the Company, will the FCCRM be necessary?

A. No, I believe that the formula rate mechanism would obviate the need for the FCCRM.

VI. HOOK UP FEE ("HUF")

Q. Please discuss the proposed revisions to the Hook Up Fee.

A. Ms. Regina Wise will address the regulatory aspects of the proposed revisions to the HUF tariff. But I would like to provide some background. For the Company's wastewater division in particular, we are attempting to address the challenges posed by large industrial plants. The current structure of the hook-up

[15] Liberty Utilities (Litchfield Park Water & Sewer) Corp. v. The United States of America et al., MDL No. 2:18-mn-2873-RMG, Case No. 2:23-cv-02627-RMG.

fee includes "meter multiples" that increase the hook up fee for larger meter sizes. This approach works well for the vast majority of customers. But in the case of large industrial customers, the resulting hook-up fee simply does not adequately contribute towards the cost of the facilities necessary to serve the industrial customer. A new large industrial customer can require wastewater treatment capacity that requires millions of dollars' worth of capital investment to meet these capacity needs and support growth. The current hook-up fees fall far short of addressing this. If the Company invests to make up the difference, the resulting increase in rate base creates rate increases that will be passed on to all customers. We believe that large industrial customers should pay their fair share of the capacity costs that they impose on the wastewater systems. Accordingly, we are proposing that individual contribution contracts be required for each large industrial customer.

Q. Are there any other utilities with similar provisions?

A. Yes. EPCOR has the following language in their HUF tariff for the Sonoran Wastewater District, "Large Users will be required to enter into a separate agreement with the Company that will define the terms and conditions of any hook-up fees required from that customer to provide service, including the amount. timing and nature of the hook-up fees, as well as any other pertinent terms and conditions."

Q. Are there any changes beyond this change for large industrial customers?

A. Yes. Regarding Liberty Litchfield Park's water division, we are proposing updated fees for all customer classes and meter sizes to reflect our current costs. The existing fees have not been updated since 2018, and since then, operational and material costs have significantly increased. Our proposal aligns our fees with the true cost of service and those of similar utilities in the state.

VII. CONCLUSIONS

Q. Mr. Garlick, do you have any concluding thoughts.

A. The Sarival WRF has been one of the most significant projects in the Company's history. It has been in the Company's plans since I joined the Company 25 years ago. Adding this project provides an enormous boost to the Company in terms of treatment capacity and flexibility. The Sarival WRF, the FCCRM, and the proposed revisions to the pretreatment tariff will provide the Company with a solid foundation for serving customers for decades to come.

Sarival Water Reclamation Facility Construction Photographs

JUNE 18, 2022
percwater

AUGUST 31, 2022 FIRST CONCRETE POUR

perc water
DESIGN | BUILD | OPERATE

OCTOBER 18, 2022
perc water

DECEMBER 30, 2022
perc water

FEBRUARY 28, 2023
percwater

APRIL 18, 2023
perc water
DESIGN | BUILD | OPERATE

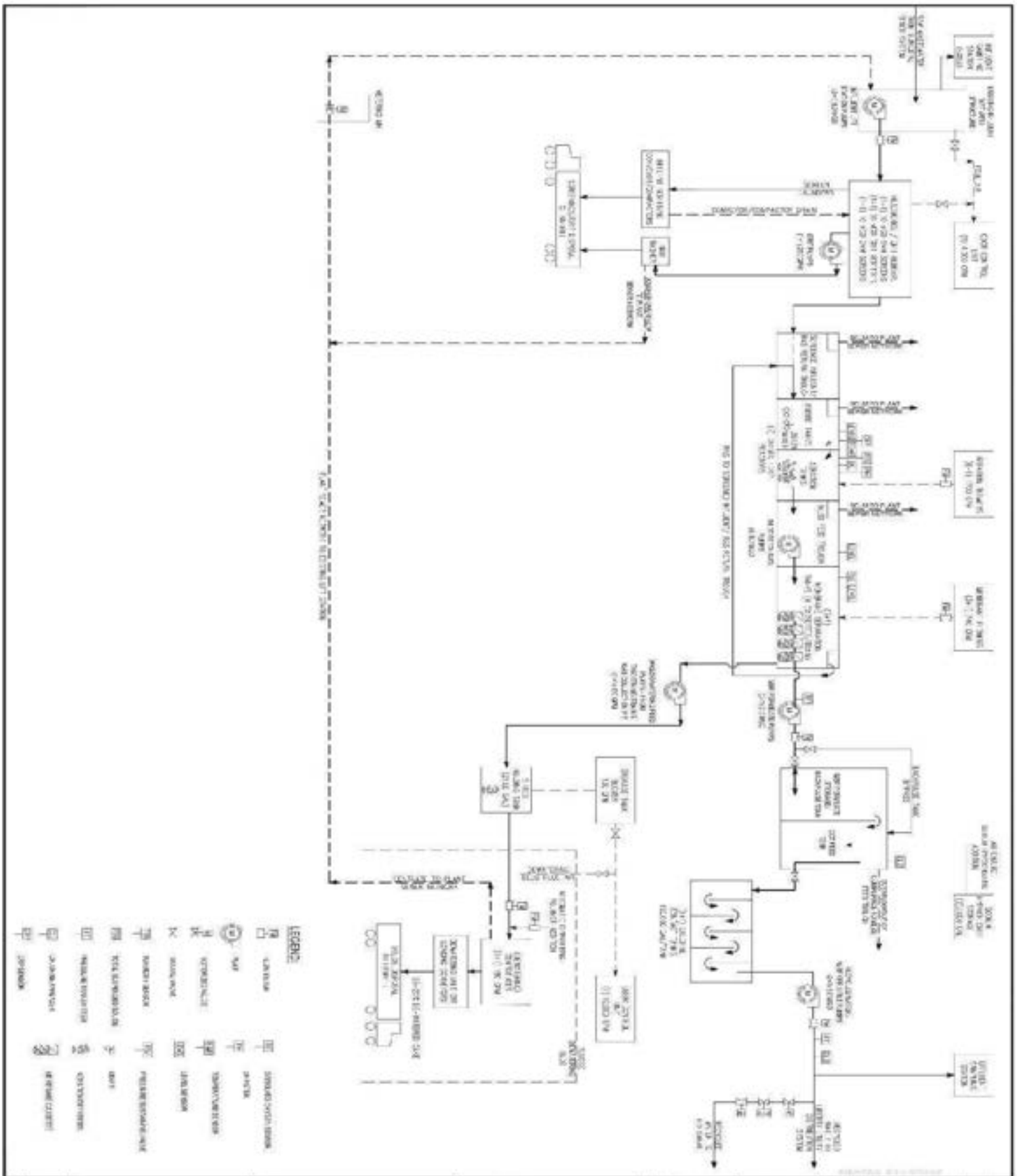
JUNE 13, 2023
percwater
DESIGN / BUILD / OPERATE

SEPTEMBER 2023
perc water
DESIGN | BUILD | OPERATE

NOVEMBER 13, 2023
perc water
DESIGN | BUILD | OPERATE

MARCH 4, 2024
perc water
DESIGN | BUILD | OPERATE

Sarival WRF Process Flow Diagram



percwater

G2.1

SARIVAL WRF
PROCESS FLOW DIAGRAM

PACE
Advanced Water Engineering

Sarival Aquifer Protection Permit

STATE OF ARIZONA
AQUIFER PROTECTION PERMIT NO. P-513981
PLACE ID 224864, LTF 95217
NEW PERMIT

1.0 AUTHORIZATION

In compliance with the provisions of Arizona Revised Statutes (A.R.S.) Title 49, Chapter 2, Articles 1, 2, and 3, Arizona Administrative Code (A.A.C.) Title 18, Chapter 9, Articles 1 and 2, A.A.C. Title 18, Chapter 11, Article 4 and amendments thereto, and the conditions set forth in this permit, the Arizona Department of Environmental Quality (ADEQ) hereby authorizes Liberty Utilities to operate the Sarival Water Reclamation Facility (WRF) located at 1570 N. Sarival Ave., Goodyear, Arizona 85338 in Maricopa County, over the groundwater of the Phoenix Active Management Area.

This permit becomes effective on the date of the Water Quality Division Deputy Director's signature and shall be valid for the life of the facility (operational, closure, and post-closure periods) unless suspended or revoked pursuant to A.A.C. R18-9-A213. The permittee shall construct, operate and maintain the permitted facilities:

1. Following all the conditions of this permit including the design and operational information documented or referenced below, and
2. Such that Aquifer Water Quality Standards (AWQS) are not violated at the applicable point(s) of compliance (POC) set forth below or if an AWQS for a pollutant has been exceeded in an aquifer at the time of permit issuance, that no additional degradation of the aquifer relative to that pollutant and as determined at the applicable POC occurs as a result of the discharge from the facility.

1.1. PERMITTEE INFORMATION

Facility Name:	Sarival Water Reclamation Facility (WRF)
Facility Address:	1570 N. Sarival Ave., Goodyear, Arizona 85338
County:	Maricopa
Permitted Flow Rate:	4.4 million gallons per day
Permittee:	Liberty Utilities
Permittee Address:	14920 W. Camelback Rd., Litchfield, AZ 85340
Facility Contact:	Terry Gilbertson; Operations Manager (Terry.Gilbertson@libertyutilities.com)
Emergency Phone No.:	(623) 298 - 4825 **Mobile:** (623) 337 - 2210
Latitude/Longitude:	33° 27' 48.7" N / 112° 24' 46.9" W
Legal Description:	Township 01N, Range 02W, Section 01, N ½, NE ¼ of the Gila and Salt River Baseline and Meridian

1.2 AUTHORIZING SIGNATURE

Docu[illegible]

B364DB7051FD416

Randall Matas, Deputy Director
Water Quality Division
Arizona Department of Environmental Quality

Signed this 25 day of January, 2023

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2.0 SPECIFIC CONDITIONS

[A.R.S. §§ 49-203(4), 49-241(A)]

2.1. FACILITY / SITE DESCRIPTION

[A.R.S. § 49-243(K)(8), and A.A.C. R18-5-114]

The permittee is authorized to operate the Sarival WRF, with a maximum average monthly flow of 4.4 mgd. The ADEQ has graded this facility as a Grade 4 wastewater treatment plant. The facility shall have an operator in direct responsible charge who is certified for the grade of the facility and inspects the facility Daily.

The Phase 1 Sarival WRF includes an existing influent pump station (IPS) which includes three (3) new 5.0 mgd pumps that lift influent to a headworks consisting of two (2) 6mm mechanical coarse screens, two (2) vortex grit removal units and classifiers, and two (2) perforated 2mm fine screens. The IPS and headworks are fully enclosed with a 4,000 CFM activated carbon media odor control system equipped with a mist eliminator (with spare element) and redundant fan. From the headworks, influent is mixed with return activated sludge (RAS) in a trough prior to being sent to two (2) Closed Loop Reactor (CLR) secondary treatment process trains. Each CLR contains an anoxic zone with two low-speed geared mixers, a swing zone and aeration zone with fine bubble diffusion. From the CLRs, mixed liquor suspended solids (MLSS) flows, via equalizer pipes, to a feed trough. From the feed trough, four (4) dedicated 9.1 mgd feed pumps feed MLSS to four (4) membrane bio-reactor (MBR) separation tanks. From the MBR trains, four (4) permeate pumps deliver effluent to two (2) chlorine contact basins that utilize sodium hypochlorite, and a final effluent reclamation pump station with three (3) recycled water pumps. Two (2) Waste Activated Sludge (WAS) pumps will convey sludge and scum from the MBR separation tanks/WAS Collection Pit to the Sludge Holding Tank (SHT) located at the Bio-solids Dewatering Building. The dewatering equipment will consist of an aerated SHT and two (2) centrifuges, as part of a packaged skid system, which will dewater sludge to a cake. The aerated WAS storage tank will have a nominal capacity of 12,000 gallons and a connection for emergency liquid hauling. In an emergency, liquid sludge can be transported to the Liberty's Palm Valley WRF (APP Inventory #100310) for storage and dewatering prior to disposal. The dewatered solids will be discharged to an off-loading conveyor and transferred to 20-ton roll-off bins. Dewatered solids, screenings and grit will be hauled off to an approved landfill for disposal. The biosolids dewatering building is fully enclosed with a 12,000 CFM activated carbon media odor control system equipped with a redundant fan.

The new Sarival WRF will utilize the existing Liberty effluent reuse distribution system, which currently supplies customers with Class A+ recycled water under valid reuse permits, and also provides groundwater recharge at Liberty's Sustainable Effluent Aquifer Project (SEAP) site (APP Inventory #514107) located at Northwest corner of Camelback Rd. and Bullard Ave. The existing Palm Valley effluent distribution system has an AZPDES permit (AZ0025712) and agreement with Roosevelt Irrigation District (RID) to discharge treated effluent (not requiring dechlorination) to their irrigation canal where it crosses under North Bullard Ave. Additionally, the Sarival WRF will have a new, second discharge point to the RID canal under a valid AZPDES permit (AZ0026425). This new discharge point will be located on the north side of the new treatment plant site and on the south side of the existing canal and will be designed to accommodate the full capacity of the effluent discharge pump station. Dechlorination is not required under this permit.

All industrial hookups and other non-residential hookups to the treatment system shall be authorized according to the applicable federal, state or local regulations.

The site includes the following permitted discharging facilities:

Table 1: DISCHARGING FACILITIES

Facility	Latitude	Longitude
Sarival WRF	33° 27' 48.5" N	112° 24' 47.0" W

2.1.1. Annual Registration Fee

[A.R.S. § 49-242 and A.A.C. R18-14-104]

The annual registration fee for this permit is payable to ADEQ each year. The annual registration fee flow rate is established by the permitted flow rate identified in Section 1.1. If the facility is not constructed or is incapable of discharge, the permittee may be eligible for reduced fees pursuant to A.A.C. R18-14-104(A), Table 2. Send all correspondence requesting reduced fees to the Groundwater Protection Value Stream. Please reference the permit number, LTF number, and the reason for requesting reduced fees under this rule.

2.1.2. Financial Capability

[A.R.S. § 49-243(N) and A.A.C. R18-9-A203]

The permittee has demonstrated financial capability under A.R.S. § 49-243(N) and A.A.C. R18-9-A203. The estimated dollar amount for facility closure is $1,540,100. The financial capability was demonstrated through A.A.C. R18-9-A203(C)(2) (3) (4) (5).

2.2. BEST AVAILABLE DEMONSTRATED CONTROL TECHNOLOGY (BADCT)

[A.R.S. § 49-243(B) and A.A.C. R18-9-A202(A)(5)]

The treatment facility shall be designed, constructed, operated, and maintained to meet the treatment performance criteria for new facilities as specified in A.A.C. R18-9-B204. The facility shall meet the performance requirement for industrial pre-treatment as per A.A.C. R18-9-B204(B)(6)(b).

The treatment facility shall not exceed a maximum seepage rate of 550 gallons per day per acre for all containment structures within the treatment works.

2.2.1. Engineering Design

The treatment facility was designed as per the design plans and design report signed, dated, and sealed by James A. Matthews, P.E. (Civil #34090) of PACE Advanced Water Engineering dated October 7, 2022 (MCESD Complete Plans) and November 28, 2022 (Basis of Design Technical Memorandum), Application submittals received on August 19, 2022 and subsequent submittals.

2.2.2. Site-Specific Characteristics

Site specific characteristics were not used to determine BADCT.

2.2.3. Pre-Operational Requirements

Prior to initiating use of the Sarival WRF, the permittee shall submit a signed, dated, and sealed Engineer's Certificate of Completion in a format approved by the Department per Section 3.0, Table 5: COMPLIANCE SCHEDULE ITEMS, Item #2. The certificate shall be submitted to the Groundwater Protection Value Stream in accordance with Section 2.7.5.

Prior to initiating use of the Sarival WRF, Liberty Utilities shall ensure that a complete copy of the Operations and Maintenance manual has been delivered to the Sarival WRF to comply with Item #1 of Section 2.2.4.

2.2.4. Operational Requirements

1. The permittee shall maintain a copy of the up-to-date operations and maintenance manual at the treatment facility site at all times; the manual shall be available upon request during inspections by ADEQ personnel.
2. The pollution control structures shall be inspected for the items listed in Section 4.2, Table 9: FACILITY INSPECTION AND OPERATIONAL MONITORING

2.2.5. Reclaimed Water Classification

[A.A.C. R18-9-B701(C)(2)(a), A.A.C. R18-11-303 through 307]

The treatment facility is rated as producing reclaimed water meeting the Class A+ Reclaimed Water Quality Standards (A.A.C. R18-11, Article 3) which may be used for any allowable Class A, B, or C use under a valid reclaimed water permit (A.A.C. R18-9, Article 7).

2.2.6. Certified Areawide Water Quality Management Plan Conformance

[A.A.C. R18-9-A201(B)(6)(a)]

Facility operations must conform to the approved Certified Areawide Water Quality Management Plan according to the 208 consistency determination in place at the time of permit issuance.

2.3. DISCHARGE LIMITATIONS

[A.R.S. §§ 49-201(14), 49-243 and A.A.C. R18-9-A205(B)]

1. The permittee is authorized to operate the treatment facility with a maximum average monthly flow of 4.4 million gallons per day (mgd).
2. The permittee shall notify all users that the materials authorized to be disposed of through the treatment facility are typical household sewage and pre-treated commercial wastewater and shall not include motor oil, gasoline, paints, varnishes, hazardous wastes, solvents, pesticides, fertilizers or other materials not generally associated with toilet flushing, food preparation, laundry facilities and personal hygiene.
3. The permittee shall operate and maintain all permitted facilities to prevent unauthorized discharges pursuant to A.R.S. § 49-201(12) resulting from failure or bypassing of applicable BADCT.
4. Specific discharge limitations are listed in Section 4.2, Table 6: ROUTINE FLOW MONITORING and Table 7: ROUTINE DISCHARGE MONITORING.

2.4. POINT OF COMPLIANCE (POC)

[A.R.S. § 49-244]

The Points of Compliance (POCs) have been established at the following locations:

Table 2: POINT(S) OF COMPLIANCE

POC #	POC Location	Latitude	Longitude
1 (Conceptual)	Southwest Corner of the WRF	33° 27' 46.45" N	112° 24' 48.81" W

The depth to groundwater at the facility is approximately 135 feet below ground surface (bgs). The aquifer is unconfined to partially confined in the vicinity of the facility. The direction of flow is generally to the West.

Groundwater monitoring is not required at the point of compliance well. POC #1 well is a conceptual well, monitoring is not required except as a contingency action. The director may require an amendment of this permit to install a monitoring well if there is cause or concern that groundwater quality may be impacted at the POC. The Director may amend this permit to designate additional points of compliance if information on groundwater gradients or groundwater usage indicates the need.

2.5. MONITORING REQUIREMENTS

[A.R.S. § 49-243(K)(1), A.A.C. R18-9-A206(A)]

Unless otherwise specified in this permit, all monitoring required in this permit shall continue for the duration of the permit, regardless of the status of the facility. Unless otherwise provided, monitoring shall commence the first full monitoring period following permit issuance. All sampling, preservation and holding times shall be in accordance with currently accepted standards of professional practice. Trip blanks, equipment blanks and duplicate samples shall also be obtained, and Chain-of-Custody procedures shall be followed, in accordance with currently accepted standards of professional practice. Copies of laboratory analyses and Chain-of-Custody forms shall be maintained at the permitted facility. Upon request, these documents shall be made immediately available for review by ADEQ personnel.

2.5.1. Pre-Operational Monitoring

Not Applicable

2.5.2. Routine Discharge Monitoring

The permittee shall monitor the effluent according to Section 4.2, Table 7: ROUTINE DISCHARGE MONITORING. Representative samples of the effluent shall be collected at the point of discharge from the effluent auto sampler.

2.5.3. Reclaimed Water Monitoring

The permittee shall monitor the reclaimed water according to the Class A+ Reclaimed Water Monitoring Table in Section 4.2, Table 8: RECLAIMED WATER MONITORING in addition to the routine discharge monitoring parameters listed in Table 7: ROUTINE DISCHARGE MONITORING. Representative samples of the reclaimed water shall be collected at the point of discharge from the effluent auto sampler.

2.5.4. Facility / Operational Monitoring

Operational monitoring inspections shall be conducted according to Section 4.2, Table 9: FACILITY INSPECTION AND OPERATIONAL MONITORING.

If any damage of the pollution control structures is identified during inspection, proper repair procedures shall be performed. All repair procedures and materials used shall be documented in the facility log book as per Section 2.7.2 and reported to ADEQ in case of a violation or exceedance as per Section 2.7.3.

2.5.5. Groundwater Monitoring and Sampling Protocols

Not required at time of issuance.

2.5.6. Surface Water Monitoring and Sampling Protocols

Routine surface water monitoring is not required under the terms of this permit.

2.5.7. Analytical Methodology

All samples collected for compliance monitoring shall be analyzed using Arizona state-approved methods. If no state-approved method exists, then any appropriate EPA-approved method shall be used. Regardless of the method used, the detection limits must be sufficient to determine compliance with the regulatory limits of the parameters specified in this permit. If all methods have detection limits higher than the applicable limit, the permittee shall follow the applicable contingency requirements of Section 2.6 and may propose "other actions" including amending the permit to set higher limits. Analyses shall be performed by a laboratory licensed by the Arizona Department of Health Services, Office of Laboratory Licensure and Certification unless exempted under A.R.S. 36-495.02. For results to be considered valid, all analytical work shall meet quality control standards specified in the approved methods. A list of state-certified laboratories in Arizona can be obtained at the address below:

Arizona Department of Health Services
Office of Laboratory Licensure and Certification
250 North 17th Avenue
Phoenix, Arizona 85007
Phone: (602) 364-0720

2.5.8. Installation and Maintenance of Monitoring Equipment

Monitoring equipment required by this permit shall be installed and maintained so that representative samples required by the permit can be collected. If new groundwater wells are determined to be necessary, the construction details shall be submitted to the Groundwater Protection Value Stream for approval prior to installation and the permit shall be amended to include any new monitoring points.

2.6. CONTINGENCY PLAN REQUIREMENTS

[A.R.S. § 49-243(K)(3), (K)(7) and A.A.C. R18-9-A204 and R18-9-A205]

2.6.1. General Contingency Plan Requirements

At least one copy of this permit and the approved contingency and emergency response plan, submitted per Section 3.0 Table 5: COMPLIANCE SCHEDULE ITEMS No. 1, shall be maintained at the location where day-to-day decisions regarding the operation of the facility are made. The permittee shall be aware of and follow the contingency and emergency plans.

Any AL exceedance, or violation of a DL, or other permit condition shall be reported to ADEQ following the reporting requirements in Section 2.7.3, unless more specific reporting requirements are set forth in Section 2.6.2 through 2.6.5.

Some contingency actions involve verification sampling. Verification sampling shall consist of the first follow-up sample collected from a location that previously indicated a violation or the exceedance of an AL. Collection and analysis of the verification sample shall use the same protocols and test methods to analyze for the pollutant or pollutants that exceeded an AL or violated a DL. Where verification sampling is specified in this permit, it is the option of the permittee to perform such sampling. If verification sampling is not conducted within the timeframe allotted, ADEQ and the permittee shall presume the initial sampling result to be confirmed as if verification sampling had been conducted. The permittee is responsible for compliance with contingency plans relating to the exceedance of an AL or violation of a DL or any other permit condition. The permittee is subject to enforcement action for the failure to comply with any contingency actions in this permit.

2.6.2. Exceeding of Alert Levels and Performance Levels

2.6.2.1. Exceeding of Performance Levels Set for Operational Conditions

For freeboard performance levels, the permittee shall comply with the requirements as specified in Section 4.2, Table 9: FACILITY INSPECTION AND OPERATIONAL MONITORING to prevent the overtopping of a tank. If an impoundment/tank is overtopped, the permittee shall follow the requirements in Section 2.6.5.3 and the reporting requirements of Section 2.7.3.

If a performance level set in Section 4.2, Table 9: FACILITY INSPECTION AND OPERATIONAL MONITORING has been exceeded the permittee shall:

1. Notify the Groundwater Protection Value Stream within five (5) days of becoming aware of the exceedance per Section 2.7.5.
2. Submit a written report to the Groundwater Protection Value Stream within thirty (30) days after becoming aware of the exceedance per Section 2.7.5. The report shall document all of the following:
    a. A description of the exceedance and the cause of the exceedance;

b. The period of the exceedance, including exact date(s) and time(s), if known, and the anticipated time period during which the exceedance is expected to continue;

c. Any action taken or planned to mitigate the effects of the exceedance or spill, or to eliminate or prevent recurrence of the exceedance or spill;

d. Any monitoring activity or other information which indicates that any pollutants would be reasonably expected to cause a violation of an AWQS; and

e. Any malfunction or failure of pollution control devices or other equipment or process.

3. The facility is no longer on alert status once the operational indicator no longer indicates that a performance level is being exceeded. The permittee shall, however, complete all tasks necessary to return the facility to its pre-alert operating condition.

2.6.2.2. Exceeding of Alert Levels (ALs) Set for Discharge Monitoring

1. If an AL set in Section 4.2, Table 7: ROUTINE DISCHARGE MONITORING has been exceeded, the permittee shall immediately investigate to determine the cause. The investigation shall include the following:

   a. Inspection, testing, and assessment of the current condition of all treatment or pollutant discharge control systems that may have contributed to the exceedance;

   b. Review of recent process logs, reports, and other operational control information to identify any unusual occurrences; and

   c. If the investigation procedures indicated in (a) and (b) above fail to reveal the cause of the exceedance, the permittee shall sample individual waste streams composing the wastewater for the parameter(s) in question, if necessary to identify the cause of the exceedance.

2. The permittee shall initiate actions identified in the approved contingency plan referenced in Section 2.6.1 and specific contingency measures identified in Section 2.6 to resolve any problems identified by the investigation which may have led to the AL exceedance. To implement any other corrective action the permittee shall obtain prior approval from ADEQ according to Section 2.6.6.

3. Within thirty (30) days of an AL exceedance, the permittee shall submit the laboratory results to the Groundwater Protection Value Stream per Section 2.7.5 along with a summary of the findings of the investigation, the cause of the exceedance, and actions taken to resolve the problem.

4. Upon review of the submitted report, the Department may amend the permit to require additional monitoring, increased frequency of monitoring, amendments to permit conditions or other actions.

2.6.2.2.1. Exceeding Permit Flow Limit

If the AL for average monthly flow in, Table 6: ROUTINE FLOW MONITORING has been exceeded, the permittee shall submit an application to the Groundwater Protection Value Stream for a permit amendment to expand the treatment facility, or submit a report detailing the reasons an expansion is not necessary. Acceptance of the report instead of an application for amendment requires ADEQ approval.

2.6.2.3. Exceeding of Alert Levels in Groundwater Monitoring

No ALs have been established for Groundwater Monitoring.

2.6.3. Discharge Limit Violation

1. If a DL set in Section 4.2, Table 7: ROUTINE DISCHARGE MONITORING or Table 8: RECLAIMED WATER MONITORING has been violated, the permittee shall immediately investigate to determine the cause. The investigation shall include the following:

    a. Inspection, testing, and assessment of the current condition of all treatment or pollutant discharge control systems that may have contributed to the violation;

    b. Review of recent process logs, reports, and other operational control information to identify any unusual occurrences;

    c. If the investigation procedures indicated in (a) and (b) above fail to reveal the cause of the violation, the permittee shall sample individual waste streams composing the wastewater for the parameters in violation, as necessary to identify the cause of the violation.

    The permittee shall submit a report to the Groundwater Protection Value Stream according to Section 2.7.3, which includes a summary of the findings of the investigation, the cause of the violation, and actions taken to resolve the problem. The permittee shall consider and ADEQ may require corrective action that may include control of the source of discharge, cleanup of affected soil, surface water or groundwater, notification of downstream or downgradient users who may be directly affected by the discharge, and mitigation of the impact of pollutants on existing uses of the aquifer. Corrective actions shall either be specifically identified in this permit, included in an ADEQ-approved contingency plan, or separately approved according to Section 2.6.6.

2. Upon review of the submitted report, the Department may amend the permit to require additional monitoring, increased frequency of monitoring, amendments to permit conditions, or other actions.

2.6.4. Aquifer Quality Limit Violation

Not required at time of issuance.

2.6.5. Emergency Response and Contingency Requirements for Unauthorized Discharges

[A.R.S. § 49-201(12) AND PURSUANT TO A.R.S. § 49-241]

2.6.5.1. Duty to Respond

The permittee shall act immediately to correct any condition resulting from a discharge pursuant to A.R.S. § 49-201(12) if that condition could pose an imminent and substantial endangerment to public health or the environment.

2.6.5.2. Discharge of Hazardous Substances or Toxic Pollutants

In the event of any unauthorized discharge pursuant to A.R.S. § 49-201(12) of suspected hazardous substances (A.R.S. § 49-201(19)) or toxic pollutants (A.R.S. § 49-243(I)) on the facility site, the permittee shall promptly isolate the area and attempt to identify the discharged material. The permittee shall record information, including name, nature of exposure and follow-up medical treatment, if necessary, on persons who may have been exposed during the incident. The permittee shall notify the Groundwater Protection Value Stream within 24 hours of discovering the discharge of hazardous material which (a) has the potential to cause an AWQS or (b) could pose an endangerment to public health or the environment.

2.6.5.3. Discharge of Non-Hazardous Materials

In the event of any unauthorized discharge pursuant to A.R.S. § 49-201(12) of non-hazardous materials from the facility, the permittee shall promptly attempt to cease the discharge and isolate the discharged material. Discharged material shall be removed and the site cleaned up as soon as possible. The permittee shall notify the Groundwater Protection Value Stream within 24 hours of discovering the discharge of non-hazardous material which has the potential to cause an AWQS exceedance, or could pose an endangerment to public health or the environment.

2.6.5.4. Reporting Requirements

The permittee shall submit a written report for any unauthorized discharges reported under Sections 2.6.5.2 and 2.6.5.3 to the Groundwater Protection Value Stream per Section 2.7.5 within thirty (30) days of the discharge or as required by subsequent ADEQ action. The report shall summarize the event, including any human exposure, and facility response activities and include all information specified in Section 2.7.3. If a notice is issued by ADEQ subsequent to the discharge notification, any additional information requested in the notice shall also be submitted within the time frame specified in the notice. Upon review of the submitted report, ADEQ may require additional monitoring or corrective actions.

2.6.6. Corrective Actions

Specific contingency measures identified in Section 2.6 and the contingency plan approved as part of Section 3.0 Table 5: COMPLIANCE SCHEDULE ITEMS No. 1 have already been approved by ADEQ and do not require written approval to implement.

With the exception of emergency response actions taken under Section 2.6.5, the permittee shall obtain written approval from the Groundwater Protection Value Stream prior to implementing a corrective action to accomplish any of the following goals in response to exceedance of an AL, DL, or another permit condition:

1. Control of the source of an unauthorized discharge;
2. Soil cleanup;
3. Cleanup of affected surface waters;
4. Cleanup of affected parts of the aquifer;
5. Mitigation to limit the impact of pollutants on existing uses of the aquifer.

Within thirty (30) days of completion of any corrective action, the operator shall submit to the Groundwater Protection Value Stream per Section 2.7.5, a written report describing the causes, impacts, and actions taken to resolve the problem.

2.7. REPORTING AND RECORDKEEPING REQUIREMENTS

[A.R.S. § 49-243(K)(2), A.A.C. R18-5-104, R18-9-A206(B), and R18-9-A207]

2.7.1. Self-Monitoring Report Form

1. The permittee shall complete the Self-Monitoring Reporting Forms (SMRFs) provided by ADEQ, and submit the completed report through the myDEQ online reporting system per Section 2.7.5. The permittee shall use the format devised by ADEQ.
2. The permittee shall complete the SMRF to the extent that the information reported may be entered on the form. If no information is required during a reporting period, the permittee shall enter "not required" on the form, include an explanation, and submit the form to the Groundwater Protection Value Stream.
3. The tables contained in Section 4.0 list the monitoring parameters and the frequencies for reporting results on the SMRF:

a. Table 6: ROUTINE FLOW MONITORING

b. Table 7: ROUTINE DISCHARGE MONITORING

c. Table 8: RECLAIMED WATER MONITORING

The parameters listed in the above-identified tables from Section 4.0 are the only parameters for which SMRF reporting is required.

2.7.2. Operation Inspection / Log Book Recordkeeping

A signed copy of this permit shall be maintained at all times at the location where day-to-day decisions regarding the operation of the facility are made. A log book (paper copies, forms, or electronic data) of the inspections and measurements required by this permit shall be maintained at the location where day-to-day decisions are made regarding the operation of the facility. The log book shall be retained for ten years from the date of each inspection, and upon request, the permit and the log book shall be made immediately available for review by ADEQ personnel. The information in the log book shall include, but not be limited to, the following information as applicable:

1. Name of inspector;
2. Date and shift inspection was conducted;
3. Condition of applicable facility components;
4. Any damage or malfunction, and the date and time any repairs were performed;
5. Documentation of sampling date and time; and
6. Any other information required by this permit to be entered in the log book.
7. Monitoring records for each measurement shall comply with A.A.C. R18-9-A206(B)(2).
8. Daily operator in direct responsible charge site visit sign-in to comply with R18-5-104.

2.7.3. Permit Violation and Alert Level Status Reporting

1. The permittee shall notify the Groundwater Protection Value Stream per Section 2.7.5 within five (5) days (except as provided in Section 2.6.5) of becoming aware of an AL exceedance, or violation of any permit condition, or DL for which notification requirements are not specified in Sections 2.6.2 through 2.6.5.
2. The permittee shall submit a written report to the Groundwater Protection Value Stream per Section 2.7.5 within thirty (30) days of becoming aware of the violation of any permit condition, or DL. The report shall document all of the following:
    a. Identification and description of the permit condition for which there has been a violation and a description of the cause;
    b. The period of violation including exact date(s) and time(s), if known, and the anticipated time period during which the violation is expected to continue;
    c. Any corrective action taken or planned to mitigate the effects of the violation, or to eliminate or prevent a recurrence of the violation;
    d. Any monitoring activity or other information which indicates that any pollutants would be reasonably expected to cause a violation of an AWQS;
    e. Proposed changes to the monitoring which include changes in constituents or increased frequency of monitoring; and
    f. Description of any malfunction or failure of pollution control devices or other equipment or processes.

2.7.4. Operational, Other or Miscellaneous Reporting

The permittee shall record the information as required in Section 4.2, Table 9: FACILITY INSPECTION AND OPERATIONAL MONITORING in the facility log book as per Section 2.7.2, and report to the Groundwater Protection Value Stream any violations or exceedances as per Section 2.7.3.

If the treatment facility is classified for reclaimed water under this permit, the permittee shall submit the reclaimed water monitoring results and flow volumes to any of the following in accordance with A.A.C. R18-9-B701(C)(2)(c):

1. Any reclaimed water agent who has contracted for delivery of reclaimed water from the permittee; and
2. Any end user who has not waived interest in receiving this information.

2.7.5. Reporting Location

All Self-Monitoring Report Forms (SMRFs) shall be submitted through the myDEQ portal accessible on the ADEQ website at: http://www.azdeq.gov/welcome-mydeq. Contact at 602-771-4571 for any inquiry related to the SMRFs.

5-day and 30-day contingency notification and reports, laboratory reports, and verification sampling results required by this permit should be submitted through the myDEQ portal accessible on the ADEQ website at: http://www.azdeq.gov/welcome-mydeq.

If the required reports cannot be submitted, or require further documentation that cannot be submitted on the myDEQ portal, then submit items to groundwaterpermits@azdeq.gov or the address listed below:

The Arizona Department of Environmental Quality
Groundwater Protection Value Stream
1110 West Washington Street
Phoenix, Arizona 85007
Phone (602) 771-4999

2.7.6. Reporting Deadline

The following table lists the quarterly report due dates:

Table 3: QUARTERLY REPORTING DEADLINES	
Monitoring Conducted During Quarter:	**Quarterly Report Due By:**
January-March	April 30
April-June	July 30
July-September	October 30
October-December	January 30

The following table lists the semi-annual and annual report due dates if applicable:

Table 4: (SEMI-)ANNUAL REPORTING DEADLINES	
Monitoring Conducted:	**Report Due By:**
Semi-annual: January-June	July 30
Semi-annual: July-December	January 30
Annual: January-December	January 30

2.7.7. Changes to Facility Information in Section 1.0 and Section 2.0

The Groundwater Protection Value Stream shall be notified per Section 2.7.5 within ten days of any change of facility information including Facility Name, Permittee Name, Mailing or Street Address, Facility Contact Person, Certified Operator in Direct Responsible Charge or Emergency Telephone Number.

2.8. Temporary Cessation

[A.R.S. § 49-243(K)(8) and A.A.C. R18-9-A209(A)]

The permittee shall give written notice to the Groundwater Protection Value Stream per Section 2.7.5 before ceasing operation of the facility for a period of 60 days or greater. The permittee shall take the following measures upon temporary cessation:

1. If applicable, direct the wastewater flows from the facility to another state-approved wastewater treatment facility;
2. Correct the problem that caused the temporary cessation of the facility; and
3. Notify the Groundwater Protection Value Stream with a monthly facility status report describing the activities conducted on the treatment facility to correct the problem.
4. Submittal of Self-Monitoring Report Forms (SMRFs) is still required; report "temporary cessation" in the comment section.

At the time of notification the permittee shall submit for ADEQ approval a plan for maintenance of discharge control systems and for monitoring during the period of temporary cessation. Immediately following ADEQ approval, the permittee shall implement the approved plan. If necessary, ADEQ shall amend permit conditions to incorporate conditions to address temporary cessation. During the period of temporary cessation, the permittee shall provide written notice to the Groundwater Protection Value Stream of the operational status of the facility every three years. If the permittee intends to permanently cease operation of any facility, the permittee shall submit closure notification, as set forth in Section 2.9 below.

2.9. Closure

[A.R.S. §§ 49-243(K)(6), 49-252 and A.A.C. R18-9-A209(B)]

For a facility addressed under this permit, the permittee shall give written notice of closure to the Groundwater Protection Value Stream per Section 2.7.5 of the intent to cease operation without resuming activity for which the facility was designed or operated. Submittal of SMRFs is still required; report "closure in process" in the comment section.

2.9.1. Closure Plan

Within 90 days following notification of closure, the permittee shall submit for approval to the Groundwater Protection Value Stream per Section 2.7.5, a closure plan which meets the requirements of A.R.S. § 49-252 and A.A.C. R18-9-A209(B)(3).

If the closure plan achieves clean-closure immediately, ADEQ shall issue a letter of approval to the permittee. If the closure plan contains a schedule for bringing the facility to a clean-closure configuration at a future date, ADEQ may incorporate any part of the schedule as an amendment to this permit.

2.9.2. Closure Completion

Upon completion of closure activities, the permittee shall give written notice to the Groundwater Protection Value Stream per Section 2.7.5 indicating that the approved closure plan has been implemented fully and providing supporting documentation to demonstrate that clean-closure has been achieved (soil sample results, verification sampling results, groundwater data, as applicable). If clean-closure has been achieved, ADEQ shall issue a letter of approval to the permittee at that time. If any of the following conditions apply, the permittee shall follow the terms of post-closure stated in this permit:

1. Clean-closure cannot be achieved at the time of closure notification or within one year thereafter under a diligent schedule of closure actions;

2. Further action is necessary to keep the facility in compliance with the AWQS at the applicable POC or, for any pollutant for which the AWQS was exceeded at the time this permit was issued, further action is necessary to prevent the facility from further degrading the aquifer at the applicable POC with respect to that pollutant;
3. Remedial, mitigative or corrective actions or controls are necessary to comply with A.R.S. § 49-201(36) and Title 49, Chapter 2, Article 3;
4. Further action is necessary to meet property use restrictions.
5. SMRF submittals are required until Clean Closure is issued.

2.10. Post-closure

[A.R.S. §§ 49-243(K)(6), 49-252 and A.A.C. R18-9 A209(C)]

Post-closure requirements shall be established based on a review of facility closure actions and will be subject to review and approval by the Groundwater Protection Value Stream.

In the event clean-closure cannot be achieved pursuant to A.R.S. § 49-252, the permittee shall submit for approval to the Groundwater Protection Value Stream a post-closure plan that addresses post-closure maintenance and monitoring actions at the facility. The post-closure plan shall meet all requirements of A.R.S. §§ 49-201(30) and 49-252 and A.A.C. R18-9-A209(C). Upon approval of the post-closure plan, this permit shall be amended or a new permit shall be issued to incorporate all post-closure controls and monitoring activities of the post-closure plan.

2.10.1. Post-Closure Plan

A specific post-closure plan may be required upon the review of the closure plan.

2.10.2. Post-Closure Completion

Not required at the time of permit issuance.

3.0 COMPLIANCE SCHEDULE

[A.R.S. § 49-243(K)(5) and A.A.C. R18-9-A208]

Unless otherwise indicated, for each compliance schedule item listed below, the permittee shall submit the required information to the Groundwater Protection Value Stream per Section 2.7.5.

Table 5: COMPLIANCE SCHEDULE ITEMS

No.	Description	Due By:	Permit Amendment Required?
1	Submit a complete and up to date Emergency Operation/Contingency Plan (EOP). The EOP should have an appendix of Emergency contact numbers and cover emergency situations (e.g. FEMA).	Within 6 months of issuance of this permit.	No
2	The permittee shall submit a signed, dated, and sealed Engineer's Certificate of Completion in a format approved by the Department that confirms that the facility is constructed according to the Department-approved design report or plans and specifications, as applicable.	Prior to discharging under this permit and within 90 days of completion of construction.	No
3	The permittee shall submit a demonstration that the financial assurance mechanism listed in Section 2.1, Financial Capability, is being maintained as per A.R.S. 49-243.N.4 and A.A.C. R18-9-A203(H) for all estimated closure and post-closure costs including updated costs submitted under Section 3.13, below. The demonstration shall include a statement that the closure and post-closure strategy has not changed, the discharging facilities listed in the permit have not been altered in a manner that would affect the closure and post-closure costs and discharging facilities have not been added. The demonstration shall also include information in support of a Letter of Credit as required in A.A.C. R18-9-A203(C)(5).	On or before January 29, 2029 and every 6 years for the duration of the permit.	No
4	The permittee shall submit updated cost estimates for facility closure and post-closure, as per A.A.C. R18-9-A201(B)(5) and A.R.S. 49-243.N.2.a, and an updated financial assurance demonstration for the updated cost estimate as per A.A.C. R18-9-A203.	On or before January 29, 2029 and every 6 years for the duration of the permit.	Yes

4.0 TABLES OF MONITORING REQUIREMENTS

4.1. PRE-OPERATIONAL MONITORING (OR CONSTRUCTION REQUIREMENTS)

Not applicable.

4.2. COMPLIANCE OR OPERATIONAL MONITORING

Table 6: ROUTINE FLOW MONITORING					
Sampling Point Number	**Sampling Point Identification**			**Latitude (North)**	**Longitude (West)**
1 – Influent Flow Meter[1]	Influent Flow Meter			33° 27' 50.39"	112° 24' 47.57"
2 – RID Flow Meter	RID Alternative Discharge			33° 27' 52.65"	112° 24' 43.52"
3 – Reuse/Recharge Flow Meter	Reuse & SEAP Distribution System			33° 27' 49.53"	112° 24' 47.65"
Parameter	**Alert Level**	**Discharge Limit**	**Units**	**Sampling Frequency**	**Reporting Frequency**
Influent Total Flow[2]: Daily[3]	Not Applicable[4]	Not Applicable	mgd[5]	Daily	Quarterly
Influent Total Flow: Monthly Average[6]	3.74	4.40	mgd	Monthly Calculation	Quarterly
RID Alt Discharge: Daily	Not Applicable	Not Applicable	mgd	Daily	Quarterly
RID Alt Discharge Flow: Monthly Average	3.74	4.40	mgd	Monthly Calculation	Quarterly
Liberty Reuse Dist. System[7] Flow: Daily	Not Applicable	Not Applicable	mgd	Daily	Quarterly
Liberty Reuse Dist. System Flow: Monthly Average	3.74	4.40	mgd	Monthly Calculation	Quarterly

[1] All wastewater flow measurement devices must be calibrated prior to the first year of reporting and recalibrated either biennially (every 2 years) or at the minimum frequency specified by the manufacturer. Wastewater flow measurement devices must be calibrated using the procedures specified by the device manufacturer.
[2] Influent Total Flow includes flows received from the conveyance system and sidestream/recycled flows from the Sarival WRF
[3] Total Daily Flow shall be measured using a continuous recording flow meter that totals the flows daily.
[4] Not Applicable means that monitoring is required, but no limits have been specified at the time of permit issuance
[5] mgd = million gallons per day
[6] Monthly Average means the calculated average of daily flow values in a month
[7] Liberty Utility's Effluent Reuse distribution system which also delivers flow to the Sustainable Effluent Aquifer Project (SEAP)

Table 7: ROUTINE DISCHARGE MONITORING					
Sampling Point Number	**Sampling Point Identification**			**Latitude (North)**	**Longitude (West)**
4 – Effluent Auto Sampler	After Disinfection			33° 27' 49.42"	112° 24' 47.57"
Parameter	**Alert Level**	**Discharge Limit**	**Units**	**Sampling Frequency**	**Reporting Frequency**
Fecal Coliform: Single sample maximum	Not Applicable	23.0	MPN[8]	Daily[9]	Quarterly
Fecal Coliform: four (4) of seven (7) samples in a week[10]	Not Applicable	Non-detect[11]	MPN	Weekly Evaluation	Quarterly
Total Nitrogen[12] :Five-sample rolling geometric mean[13]	8.0	10.0	mg/l[14]	Monthly Calculation	Quarterly
Cyanide (as free cyanide)	0.16	0.2	mg/l	Quarterly	Quarterly
Fluoride	3.2	4.0	mg/l	Quarterly	Quarterly
Metals (Total)					
Antimony	0.0048	0.006	mg/l	Quarterly	Quarterly
Arsenic	0.04	0.05	mg/l	Quarterly	Quarterly
Barium	1.60	2.00	mg/l	Quarterly	Quarterly
Beryllium	0.0032	0.004	mg/l	Quarterly	Quarterly
Cadmium	0.004	0.005	mg/l	Quarterly	Quarterly
Chromium	0.08	0.1	mg/l	Quarterly	Quarterly
Lead	0.04	0.05	mg/l	Quarterly	Quarterly
Mercury	0.0016	0.002	mg/l	Quarterly	Quarterly
Nickel	0.08	0.1	mg/l	Quarterly	Quarterly
Selenium	0.04	0.05	mg/l	Quarterly	Quarterly
Thallium	0.0016	0.002	mg/l	Quarterly	Quarterly

[8] MPN = Most Probable Number / 100 ml sample. For MPN, a value of <2.2 shall be considered to be non-detect

[9] For fecal coliform, "daily" sampling means every day in which a sample can practicably be obtained and delivered in sufficient time for proper analysis, provided that no less than four samples in each week are obtained and analyzed

[10] Week means a seven-day period starting on Sunday and ending on the following Saturday. The reporting form for this parameter consists of 13 weeks per quarter

[11] Fecal coliform 4 of 7 samples requires entering "Compliance" or "Non-compliance" on the SMRF for each week of the reporting period. Evaluate the daily fecal coliform results for that week (Sunday through Saturday). If, of these seven days, four or more of the daily fecal coliform results are non-detect, report "Compliance" for that week's entry on the SMRF. If three or fewer of the daily fecal coliform results are non-detect, report "Non-compliance" for that week's entry on the SMRF

[12] Total Nitrogen = Nitrate as N + Nitrite as N + Total Kjeldahl Nitrogen

[13] The five-sample rolling geometric mean is determined by multiplying the five (5) most recent monthly sample values together then taking the fifth root of the product. *Example:* $GM_5 = \sqrt[5]{(m_1)(m_2)(m_3)(m_4)(m_5)}$ (For the first four samples enter "Not Required" on SMRFs)

[14] mg/l = milligrams per liter

Table 7: ROUTINE DISCHARGE MONITORING (Continued)					
Sampling Point Number	**Sampling Point Identification**			**Latitude (North)**	**Longitude (West)**
4 – Effluent Auto Sampler	After Disinfection			33° 27' 49.42"	112° 24' 47.57"
Parameter	**Alert Level**	**Discharge Limit**	**Units**	**Sampling Frequency**	**Reporting Frequency**
Volatile and Semi-Volatile Organic Compounds (VOCs and SVOCs)					
Benzene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Carbon tetrachloride	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
o-Dichlorobenzene	0.48	0.6	mg/l	Semi-Annually	Semi-Annually
para-Dichlorobenzene	0.06	0.075	mg/l	Semi-Annually	Semi-Annually
1,2-Dichloroethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
1,1-Dichloroethylene	0.0056	0.007	mg/l	Semi-Annually	Semi-Annually
cis-1,2-Dichloroethylene	0.056	0.07	mg/l	Semi-Annually	Semi-Annually
trans-1,2-Dichloroethylene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Dichloromethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
1,2-Dichloropropane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Ethylbenzene	0.56	0.7	mg/l	Semi-Annually	Semi-Annually
Hexachlorobenzene	0.0008	0.001	mg/l	Semi-Annually	Semi-Annually
Hexachlorocyclopentadiene	0.04	0.05	mg/l	Semi-Annually	Semi-Annually
Monochlorobenzene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Styrene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Tetrachloroethylene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Toluene	0.8	1.0	mg/l	Semi-Annually	Semi-Annually
Trihalomethanes (total)[15]	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
1,1,1-Trichloroethane	0.16	0.2	mg/l	Semi-Annually	Semi-Annually
1,2,4 - Trichlorobenzene	0.056	0.07	mg/l	Semi-Annually	Semi-Annually
1,1,2 - Trichloroethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Trichloroethylene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Vinyl Chloride	0.0016	0.002	mg/l	Semi-Annually	Semi-Annually
Xylenes (Total)	8.0	10.0	mg/l	Semi-Annually	Semi-Annually

[15] Total Trihalomethanes (TTHMs) are comprised of Bromoform, Bromodichloromethane, Chloroform, and Dibromochloromethane

Table 8: RECLAIMED WATER MONITORING				
Reclaimed water monitoring under Table 8: RECLAIMED WATER MONITORING shall be performed in addition to routine discharge monitoring required under Section 4.2, Table 7: ROUTINE DISCHARGE MONITORING				
Sampling Point Number	**Sampling Point Identification**		**Latitude (North)**	**Longitude (West)**
4 – Effluent Auto Sampler[16]	After Disinfection		33° 27' 49.42"	112° 24' 47.57"
Parameter	**Discharge Limit**	**Units**	**Sampling Frequency**	**Reporting Frequency**
Fecal Coliform Single-sample maximum:	23.0	MPN[8]	Daily[9]	Quarterly
Fecal Coliform: Four (4) of last seven (7) samples in a week[10]	Non-detect[11]	MPN	Weekly Evaluation	Quarterly
Total Nitrogen[12]: Five-sample rolling geometric mean[13]	10.0	mg/l[14]	Monthly Calculation	Quarterly
Turbidity[17]: Single reading	5.0	NTU[18]	Daily[19]	Quarterly
Turbidity: 24-hour average	2.0	NTU	Daily Calculation	Quarterly
Enteric Virus[20]: Four (4) of last seven (7) samples	Non-detect	MPN[8]	Monthly / Suspended[21]	Quarterly

[16] Reuse enters the distribution system just after the Effluent Pump Station, so Routine Discharge and Reclaimed Water monitoring share the same sampling point. Fecal and Total Nitrogen samples collected and reported for Routine Discharge Monitoring may also be used for Reclaimed Water Monitoring.

[17] Turbidimeter shall be placed at a point in the wastewater treatment process after filtration and immediately before disinfection and shall have a signal averaging time not exceeding 120 seconds. All exceedances must be explained and submitted to the Department with the corresponding quarterly SMRF; occasional spikes due to back-flushing or instrument malfunction shall not be considered an exceedance

[18] NTU = Nephelometric Turbidity Units

[19] For the single turbidity reading, daily means the maximum reading during the 24-hour period.

[20] Initial monthly enteric virus sampling shall be performed to indicate four (4) out of seven (7) sample results of non-detect.

[21] Enteric virus sampling shall resume only when the discharge limit for the 24-hour average for turbidity is exceeded for two (2) consecutive 24-hour monitoring periods. Monthly enteric virus monitoring shall continue until four (4) out of seven (7) consecutive sample results show no detection. During times when enteric virus sampling is suspended, enter "suspended" in the appropriate space on the SMRF

Table 9: FACILITY INSPECTION AND OPERATIONAL MONITORING			
The permittee shall record the inspection performance levels in a log book as per Section 2.7.2, and report any violations or exceedances as per Section 2.7.3. In the case of an exceedance, identify which structure exceeds the performance level in the log book.			
Pollution Control Structure/Parameter	**Performance Level**	**Inspection Frequency**	**Reporting Frequency**
Sludge Holding Tank (SHT) Freeboard	One (1) Linear Foot	Daily	See Section 2.7.3
Closed Loop Reactors (CLRs) Freeboard	One (1) Linear Foot	Daily	
Membrane Separation Tanks Freeboard	One (1) Linear Foot	Daily	
IPS & Headworks Structure	No visible structural damage, or leakage	Weekly	
Membrane Tanks, CLRs & SHT Structure	No visible structural damage, or leakage	Weekly	
Pump Integrity	Good working condition	Weekly	
Treatment Plant Components	Good working condition	Weekly	
Vegetation Removal around tanks/structures	No vegetation present in the tanks or within five feet of the tanks or treatment structures	Monthly	
WRF Activated Carbon Odor Control Systems	Good working condition H_2S and flow	Monthly	

5.0 REFERENCES AND PERTINENT INFORMATION

The terms and conditions set forth in this permit have been developed based upon the information contained in the following, which are on file with the Department:

APP Application, dated: 08/08/2022 and subsequent submittals

Contingency Plan, dated: To be submitted as part of:

Section 3.0 COMPLIANCE SCHEDULE
Table 5: COMPLIANCE SCHEDULE ITEMS; Item #1

6.0 NOTIFICATION PROVISIONS

6.1. Annual Registration Fees

The permittee is notified of the obligation to pay an Annual Registration Fee to ADEQ. The Annual Registration Fee is based on the amount of daily influent or discharge of pollutants in gallons per day (gpd) as established by A.R.S. § 49-242.

6.2. Duty to Comply

[A.R.S. §§ 49-221 through 263]

The permittee is notified of the obligation to comply with all conditions of this permit and all applicable provisions of Title 49, Chapter 2, Articles 1, 2 and 3 of the Arizona Revised Statutes, Title 18, Chapter 9, Articles 1 through 4, and Title 18, Chapter 11, Article 4 of the Arizona Administrative Code. Any permit non-compliance constitutes a violation and is grounds for an enforcement action pursuant to Title 49, Chapter 2, Article 4 or permit amendment, suspension, or revocation.

6.3. Duty to Provide Information

[A.R.S. §§ 49-243(K)(2) and 49-243(K)(8)]

The permittee shall furnish to the Director, or an authorized representative, within a time specified, any information which the Director may request to determine whether cause exists for amending or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

6.4. Compliance with Aquifer Water Quality Standards

[A.R.S. §§ 49-243(B)(2) and 49-243(B)(3)]

The permittee shall not cause or contribute to a violation of an Aquifer Water Quality Standard (AWQS) at the applicable point of compliance (POC) for the facility. Where, at the time of issuance of the permit, an aquifer already exceeds an AWQS for a pollutant, the permittee shall not discharge that pollutant so as to further degrade, at the applicable point of compliance for the facility, the water quality of any aquifer for that pollutant.

6.5. Technical and Financial Capability

[A.R.S. §§ 49-243(K)(8) and 49-243(N) and A.A.C. R18-9-A202(B) and R18-9-A203(E) and (F)]

The permittee shall have and maintain the technical and financial capability necessary to fully carry out the terms and conditions of this permit. Any bond, insurance policy, trust fund, or other financial assurance mechanism provided as a demonstration of financial capability in the permit application, pursuant to A.A.C. R18-9-A203(C), shall be in effect prior to any discharge authorized by this permit and shall remain in effect for the duration of the permit.

6.6. Reporting of Bankruptcy or Environmental Enforcement

[A.A.C. R18-9-A207(C)]

The permittee shall notify the Director within five days after the occurrence of any one of the following:

1. the filing of bankruptcy by the permittee; or
2. the entry of any order or judgment not issued by the Director against the permittee for the enforcement of any environmental protection statute or rule.

6.7. Monitoring and Records

[A.R.S. § 49-243(K)(8) and A.A.C. R18-9-A206]

The permittee shall conduct any monitoring activity necessary to assure compliance with this permit, with the applicable water quality standards established pursuant to A.R.S. §§ 49-221 and 49-223 and §§ 49-241 through 49-252.

6.8. Inspection and Entry

[A.R.S. §§ 49-1009, 49-203(B), and 49-243(K)(8)]

In accordance with A.R.S. §§ 41-1009 and 49-203(B), the permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to enter and inspect the facility as reasonably necessary to ensure compliance with Title 49, Chapter 2, Article 3 of the Arizona Revised Statutes, and Title 18, Chapter 9, Articles 1 through 4 of the Arizona Administrative Code and the terms and conditions of this permit.

6.9. Duty to Modify

[A.R.S. § 49-243(K)(8) and A.A.C. R18-9-A211]

The permittee shall apply for and receive a written amendment before deviating from any of the designs or operational practices authorized by this permit.

6.10. Permit Action: Amendment, Transfer, Suspension, and Revocation

[A.R.S. §§ 49-201, 49-241 through 251, A.A.C. R18-9-A211, R18-9-A212 and R18-9-A213]

This permit may be amended, transferred, suspended, or revoked for cause, under the rules of the Department. The permittee shall notify the Groundwater Protection Value Stream in writing within 15 days after any change in the owner or operator of the facility. The notification shall state the permit number, the name of the facility, the date of property transfer, and the name, address, and phone number where the new owner or operator can be reached. The operator shall advise the new owner or operators of the terms of this permit and the need for permit transfer in accordance with the rules.

7.0 ADDITIONAL PERMIT CONDITIONS

7.1. Other Information

[A.R.S. § 49-243(K)(8)]

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, the permittee shall promptly submit the correct facts or information.

7.2. Severability

[A.R.S. §§ 49-201, 49-241 through 251, A.A.C. R18-9-A211, R18-9-A212 and R18-9-A213]

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby. The filing of a request by the permittee for a permit action does not stay or suspend the effectiveness of any existing permit condition.

7.3. Permit Transfer

This permit may not be transferred to any other person except after notice to and approval of the transfer by the Department. No transfer shall be approved until the applicant complies with all transfer requirements as specified in A.A.C. R18-9-A212(B) and (C).

Sarival Authorization to Discharge Under the AZPDES

ADEQ Arizona Department of Environmental Quality

ADEQ Inventory No.	514111	Permit No.	AZ0026425
LTF No.	96995	Place ID No.	224864

AUTHORIZATION TO DISCHARGE UNDER THE ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of Arizona Revised Statutes (A.R.S.) Title 49, Chapter 2, Article 3.1; the Federal Water Pollution Control Act, (33 U.S.C. §1251 *et seq.*, as amended), and Arizona Administrative Code (A.A.C.) Title 18, Chapter 9, Articles 9 and 10, and amendments thereto the,

Liberty Utilities
Sarival Water Reclamation Facility (WRF)
14920 W. Camelback Road
Litchfield Park, Arizona 85340

is authorized to discharge treated domestic wastewater from the wastewater treatment plant located at 1570 N. Sarival Avenue serving the Western Service Area which includes portions of Litchfield Park, Glendale, Goodyear, and unincorporated Maricopa County in Maricopa County, Arizona to Roosevelt Irrigation District (RID) Canal, a protected surface water in Arizona that is a Water of the U.S. (WOTUS), in the Middle Gila River Basin at:

Outfall No.	Latitude	Longitude	Legal
Outfall - 001	33° 27' 53.1" N	112° 24' 43.8" W	Township 01 N, Range 02 W , Section 1

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein, and in the attached "Standard AZPDES Permit Conditions."

Annual Registration Fee [A.R.S. 49-255.01 and A.A.C. R18-14-104]

The annual registration fee for this permit is payable to ADEQ each year. The permitted flow for fee calculation is 4,400,000 gallons per day (gpd). If the facility is not yet constructed or is incapable of discharge at this time, the permittee may be eligible for reduced fees under rule. Send all correspondence requesting reduced fees to the Water Quality Division of ADEQ. Please reference the permit number, LTF number and why reduced fees are requested under rule.

This permit shall become effective on April 20, 2023.

This permit and the authorization to discharge shall expire on April 19, 2028.

Signed 4/18/2023

DocuSigned by:
7A7C283F922A4A2...

Trevor Baggiore, Director
Water Quality Division
Arizona Department of Environmental Quality

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PART I. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. Effluent Limitations and Monitoring Requirements

The Permittee shall limit and monitor discharges from Outfall 001 as specified in Table 1 which follows. These requirements are based on a design capacity of 4.4 million gallons per day (MGD).

Table 1. Effluent Limitations and Monitoring Requirements

Parameter	Maximum Allowable Discharge Limitations						Monitoring Requirement (2)	
	Mass Limits (1)			Concentration Limits				
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Monitoring Frequency	Sample Type
Discharge Flow (MGD)	REPORT (3)	---	REPORT	---	---	---	Continuous	Metered
Biochemical Oxygen Demand (BOD) (5-day)	500 kg/day	749 kg/day	---	30 mg/L	45 mg/L	---	1 x / Every 2 weeks	24-hour Composite (4)
BOD (5)	---	---	---	85% REMOVAL MINIMUM	---	---	1 x / Every 2 weeks	24-hour Composite
Total Suspended Solids (TSS)	500 kg/day	749 kg/day		30 mg/L	45 mg/L		1 x / Every 2 weeks	24-hour Composite
TSS (5)	---	---	---	85% REMOVAL MINIMUM	---	---	1 x / Every 2 weeks	24-hour Composite
E. coli	---	---	---	126 cfu/100 mL (6)	---	575 cfu/100 mL (6)	4 x / month	Discrete
pH (7)	Not less than 6.5 standard units (S.U.) nor greater than 9.0 S.U.						1 x / week	Discrete

Footnotes

1 Mass values are to be calculated and reported using the following formulas: 1) Mass in kilograms per day = 3.785 x flow in MGD x concentration in mg/L, and 2) mass in grams per day = 3.785 x flow in MGD x concentration in µg/L.

2 If discharge is infrequent, see Part I.D for minimum effluent characterization monitoring requirements.

3 Monitoring and reporting required. No limit set at this time. See Part II.B for reporting requirements.

4 For the purposes of this permit, a "24-hour composite" sample has been defined as a flow-proportioned mixture of not less than three discrete samples (aliquots) obtained at equal time intervals during a 24-hour period. The volume of each aliquot shall be directly proportional to the discharge flow rate at the time of sampling.

5 Both the influent and the effluent shall be monitored.

6 cfu = colony forming units; "most probable number" (mpn) is considered equivalent for reporting purposes. The monthly average for *E. coli* is calculated as a geometric mean. A minimum of 4 samples are required in order to report a geometric mean. See the definition for "Monthly or Weekly Average Concentration Limit" in Appendix A.

7 pH must be measured at the time of sampling and do not require use of a certified laboratory. Measurements must be obtained in accordance with the applicable method and must meet all method quality assurance/quality control requirements to be considered valid data.

B. Trace Substance Monitoring

The permittee shall monitor discharges from Outfall 001 as specified in Table 2. Monitoring results above the Assessment Levels (ALs) listed below do not constitute a permit violation, but may trigger evaluation of Reasonable Potential (RP) by ADEQ. The permittee shall use an approved analytical method with a Limit of Quantitation (LOQ) lower than the AL values as described in Part II.A.5.

Table 2. Assessment Level Monitoring

Parameter	Assessment Levels (1) (2)		Monitoring Requirements (3)	
	Monthly Average	Daily Maximum	Monitoring Frequency	Sample Type
Arsenic	200 µg/L	400 µg/L	1 x / month	24-hr. Composite
Boron	1,000 µg/L	2,000 µg/L	1 x / month	24-hr. Composite
Cadmium	50 µg/L	100 µg/L	1 x / month	24-hr. Composite
Chromium, total	1,000 µg/L	2,000 µg/L	1 x / month	24-hr. Composite
Copper	500 µg/L	1,000 µg/L	1 x / month	24-hr. Composite
Cyanide (as free cyanide)	200 µg/L	400 µg/L	1 x / month	Discrete
Lead	100 µg/L	200 µg/L	1 x / month	24-hr. Composite
Mercury	10 µg/L	20 µg/L	1 x / month	Discrete
Oil & grease	10 mg/L	15 mg/L	1 x / month	Discrete
Selenium	20 µg/L	40 µg/L	1 x / month	24-hr. Composite
Zinc	10,000 µg/L	20,000 µg/L	1 x / month	24-hr. Composite

Footnotes

1 Concentration values are calculated based on Arizona Water Quality Standards. Monitoring and reporting required.
2 All metals effluent Assessment Levels are for total recoverable metals.
3 If discharge is infrequent see Part I.D for minimum effluent characterization monitoring requirements.

C. Alternate Sampling Schedule

After the permittee obtains at least ten monthly samples for all the parameters listed in Table 2 and all results are lower than the assessment level, the permittee may submit the data to ADEQ and request ADEQ to re-evaluate the reasonable potential (RP). If the additional data indicates that RP does not exist for any of the parmaters, ADEQ will notify the permittee and monitoring may be suspended for the remainder of the permit. For puposeses of this request, samples may be taken more frequently than specified in Table 2. Request shall be in writing and include all data accured and submit to ADEQ at AZPDES@adeq.gov.

ADEQ will timely re-evaluate the data and advice the permittee in writing if reduction in monitoring is acceptable based on an evaluation of the data. Permittees may not reduce the monitoring frequency until written approval is obtained. (The permittee is also advised ADEQ review of data could potentially trigger a finding of RP with the need to modify this permit to add limits).

D. Effluent Characterization Testing

The permittee shall monitor to characterize the facility's effluent for the parameters listed in Tables 3.a – e, whether discharging or not. When the facility discharges, monitoring is to be conducted at the frequency indicated in Tables 1 and 2. No limits or ALs are established, but the LOQ must be low enough to allow comparison of the results to the applicable water quality standards (WQS). If a LOQ below the WQS cannot be achieved, then the permittee shall use the method expected to achieve the lowest LOQ, as defined in Appendix A of this permit. Samples are to be representative of any seasonal variation in the discharge:

Table 3.a. Effluent Characterization Testing—General Chemistry and Microbiology

Parameter	Reporting Units	Monitoring Requirements	
		Monitoring Frequency (1)	Sample Type
Ammonia (as N)	mg/L	1 x / quarter	Discrete
Biochemical Oxygen Demand (BOD-5)	mg/L	1 x / quarter	24-hr. Composite
Chlorine, Total Residual (TRC)	µg/L	1 x / quarter	Discrete
Dissolved Oxygen (2)	mg/L	1 x / quarter	Discrete
E. coli	cfu/100 mL (3)	1 x / quarter	Discrete
Nitrate/Nitrite (as N)	mg/L	1 x / quarter	24-hr. Composite
Nitrogen, Total Kjeldahl (TKN)	mg/L	1 x / quarter	24-hr. Composite
Oil and Grease	mg/L	1 x / quarter	Discrete
pH (2)	S.U.	1 x / quarter	Discrete
Phosphorus	mg/L	1 x / quarter	24-hr. Composite
Temperature (2)	°Celsius	1 x / quarter	Discrete
Total Dissolved Solids (TDS)	mg/L	1 x / quarter	24-hr. Composite
Total Suspended Solids (TSS)	mg/L	1 x / quarter	24-hr. Composite

Footnotes

1 If more frequent monitoring of any of these parameters is required by another part of this permit, those sampling results may be used to satisfy Table 3.a. requirements.

2 Temperature, pH, TRC, and dissolved oxygen must be measured at the time of sampling and do not require use of a certified laboratory. Measurements must be obtained in accordance with the applicable method and must meet all method quality assurance/quality control requirements to be considered valid data.

3 cfu = colony forming units; "most probable number" (mpn) is considered equivalent for reporting purposes

Table 3.b. Effluent Characterization Testing—Selected Metals, and Cyanide

Parameter (1)	Reporting Units	Monitoring Requirements	
		Monitoring Frequency (2)	Sample Type
Arsenic	µg/L	1 x / 6 months	24-hr. Composite
Boron	µg/L	1 x / 6 months	24-hr. Composite
Cadmium	µg/L	1 x / 6 months	24-hr. Composite
Chromium (3)	µg/L	1 x / 6 months	24-hr. Composite
Chromium VI (3)	µg/L	1 x / 6 months	Discrete
Copper	µg/L	1 x / 6 months	24-hr. Composite
Lead	µg/L	1 x / 6 months	24-hr. Composite
Mercury	µg/L	1 x / 6 months	Discrete
Selenium	µg/L	1 x / 6 months	24-hr. Composite
Zinc	µg/L	1 x / 6 months	24-hr. Composite
Cyanide (as free cyanide)	µg/L	1 x / 6 months	Discrete

Footnotes

1 All metals analyses shall be for total recoverable metals, except chromium VI, which is dissolved.

2 If more frequent monitoring of any of these parameters is required by another part of this permit, those sampling results may be used to satisfy Table 3.b. requirements.

3 If total chromium exceeds 8 µg/L, the permittee must conduct sampling for chromium VI for the remainder of the permit. Otherwise, monitoring for chromium VI is not required.

Table 3.c. Effluent Characterization Testing—Selected Volatile Organic Compounds

Parameter	Reporting Units	Monitoring Requirements	
		Monitoring Frequency	Sample Type
1,1,1-trichloroethane	µg/L	1 x / year	Discrete

Table 3.d. Effluent Characterization Testing—Selected Base Neutral Compounds

Parameter	Reporting Units	Monitoring Requirements	
		Monitoring Frequency	Sample Type
Benzidine	µg/L	1 x / year	24-hr. Composite

Table 3.e. Effluent Characteristic Testing - Based on Designated Uses

Additional Parameters from the Arizona Surface Water Quality Standards, Appendix A; Table 1			
Parameter	Reporting Units	Monitoring Requirements	
		Monitoring Frequency	Sample Type
Aldrin (1)	µg/L	1 x / year in years 2024,2025,2026 of permit term	24-hr. Composite
Boron	µg/L	1 x / year in years 2024,2025,2026 of permit term	24-hr. Composite
4,4-DDD (p,p,-Dichlorodiphenyldicholoroethane)	µg/L	1 x / year in years 2024,2025,2026 of permit term	24-hr. Composite
4,4-DDE (p,p-Dichlorodiphenyldichloroethylene)	µg/L	1 x / year in years 2024,2025,2026 of permit term	24-hr. Composite
4,4-DDT (p,p-Dichlorodiphenyltrichloroethane)	µg/L	1 x / year in years 2024,2025,2026 of permit term	24-hr. Composite
2,4-Dichlorophenoxyacetic acid (2,4-D) (2)	µg/L	1 x / year in years 2024,2025,2026 of permit term	24-hr. Composite
Dieldrin (1)	µg/L	1 x / year in years 2024,2025,2026 of permit term	24-hr. Composite
Endrin	µg/L	1 x / year in years 2024,2025,2026 of permit term	24-hr. Composite
Manganese	µg/L	1 x / year in years 2024,2025,2026 of permit term	24-hr. Composite
Polychlorinated biphenyls (PCBs)	µg/L	1 x / year in years 2024,2025,2026 of permit term	24-hr. Composite
Toxaphene	µg/L	1 x / year in years 2024,2025,2026 of permit term	24-hr. Composite

Footnotes

1 The aldrin / dieldrin standard is exceeded when the sum of the two compunds exceeds 0.003 µg/L.

2 There may be no approved wastewater methods for analyses of these parameters in 40 CFR 136. As such, 500 series drinking water Methods may be used; in this case, a 10X sample dilution is acceptable for these parameters. Appropriate data qualifiers are to be used.

E. Surface Water Quality Standards

1. The discharge shall be free from pollutants in amounts or combinations that:
   a. Settle to form bottom deposits that inhibit or prohibit the habitation, growth or propagation of aquatic life;
   b. Cause objectionable odor in the area in which the surface water is located;
   c. Cause off-flavor in aquatic organisms;
   d. Are toxic to humans, animals, plants or other organisms;
   e. Cause the growth of algae or aquatic plants that inhibit or prohibit the habitation, growth or propagation of other aquatic life or that impair recreational uses;

f. Change the color of the surface water from natural background levels or color.

2. The discharge shall be free from oil, grease and other pollutants that float as debris, foam, or scum; or that cause a film or iridescent appearance on the surface of the water; or that cause a deposit on a shoreline, bank or aquatic vegetation.

PART II. MONITORING AND REPORTING

A. Sample Collection and Analysis

1. Samples taken for the monitoring requirements specified in Part I shall be collected at the following locations:
   a. Influent samples shall be taken after the last addition to the collection system and prior to the first treatment process.
   b. Effluent samples shall be taken downstream from the last treatment process and prior to mixing with the receiving waters.

2. The permittee is responsible for the quality and accuracy of all data required under this permit.

3. The permittee shall keep a QA Manual on site that describes the sample collection and analyses processes. If the permittee collects samples or conducts sample analyses in house, the permittee shall develop a QA Manual that addresses these activities. If a third party collects and/or analyzes samples on behalf of the permittee, the permittee shall obtain a copy of the applicable QA procedures. The QA Manual shall be available for review by ADEQ upon request. The QA Manual shall be updated as necessary to reflect current conditions, and shall describe the following:
   a. Project Management, including:
      i. Purpose of sample collection and sample frequency;
      ii. When and where samples will be collected;
      iii. How samples will be collected;
      iv. Laboratory(s) that will perform analyses;
      v. Any field tests to be conducted (detail methods and specify equipment, including a description of any needed calibrations); and
      vi. Pollutants or analytes being measured and for each, the permit-specific limits, Assessment Levels, or thresholds (e.g. the associated detection limits needed).
   b. Sample collection procedures including:
      i. Equipment to be used;
      ii. Type and number of samples to be collected including QA/QC samples (i.e., background samples, duplicates, and equipment or field blanks);
      iii. Types, sizes and number of sample bottles needed;
      iv. Preservatives and holding times for the samples (see methods under 40 CFR 136 or 9 A.A.C. 14, Article 6 or any condition within this permit that specifies a particular test method);
      v. Chain of Custody procedures.
   c. Specify approved analytical method(s) to be used and include;
      i. Limits of Detection (LOD) and Limits of Quantitation (LOQs);
      ii. Required quality control (QC) results to be reported (e.g., matrix spike recoveries, duplicate relative percent differences, blank contamination, laboratory control sample recoveries, surrogate spike recoveries, etc.) and acceptance criteria; and
      iii. Corrective actions to be taken by the permittee or the laboratory as a result of problems identified during QC checks.
   d. How the permittee will perform data review; complete DMRs and records used to report results to ADEQ; resolve data quality issues; and identify limitations on the use of the data.

4. Sample collection, preservation and handling shall be performed as described in 40 CFR 136 including the referenced Edition of *Standard Methods for the Examination of Water and Wastewater*, or by procedures referenced in A.R.S. Title 9, Chapter 14 of the Arizona Department of Health Services (ADHS) Laboratory Licensure rules. The permittee shall outline the proper procedures in the QA Manual, and samples taken for this permit must conform to these procedures whether collection and handling is performed directly by the permittee or contracted to a third-party.

5. Analytical requirements
   a. The permittee shall use a laboratory licensed by the ADHS Office of Laboratory Licensure and Certification that has demonstrated proficiency within the last 12 months under A.A.C. R9-14-609, for each parameter to be sampled under this permit. However, this requirement does not apply to parameters which require analysis at the time of sample accordance with A.A.C. 36-495.02(A)(3). (These parameters may include flow, dissolved oxygen, pH, temperature, and total residual chlorine.)
   b. The permittee must utilize analytical methods specified in this permit. If no test procedure is specified, the permittee shall analyze the pollutant using:
      i. A test procedure listed in 40 CFR 136 which is also approved under A.A.C. R9-14-610 and is sufficiently sensitive in accordance with 40 CFR 136.1(c);
      ii. An alternative test procedure approved by EPA as provided in 40 CFR 136 and which is also approved under A.A.C. R9-14-610;
      iii. A test procedure listed in 40 CFR 136, with modifications allowed by EPA or approved as a method alteration by ADHS under A.A.C. R9-14-610C; or
      iv. If no test procedure for a pollutant is available under (5)(b)(i) through (5)(b)(iii) above, any Method approved under A.A.C. R9-14-610(B) for wastewater may be used, except the use of field kits is not allowed unless otherwise specified in this permit. If there is no approved wastewater method for a parameter, any other method identified in 9 A.A.C. 14, Article 6 that will achieve appropriate detection and reporting limits may be used for analyses.
   c. For results to be considered valid, all analytical work, including those tests conducted by the permittee at the time of sampling (see Part II.A.4.a), shall meet quality control standards specified in the approved methods.
   d. The permittee shall use analytical methods with a Limit of Quantitation (LOQ) that is lower than the effluent limitations, Assessments Levels, Action Levels, or other water quality criteria, if any, specified in this permit. If all methods have LOQs higher than the applicable water quality criteria, the Permittee shall use the approved analytical method with the lowest LOQ.
   e. The permittee shall use a standard calibration curve when applicable to the method, where the lowest standard point is equal to or less than the LOQ.

6. Metals Analyses - In accordance with 40 CFR 122.45(c), all effluent metals concentrations, with the exception of chromium VI, shall be measured as "total recoverable metals". Discharge Limits and Assessment Levels in this permit, if any, are for total metals, except for chromium VI for which the levels listed are dissolved.

B. Reporting of Monitoring Results

1. The permittee shall report monitoring results on Discharge Monitoring Report (DMR) to the ADEQ electronic submission portal MyDEQ. The permittee shall submit results of all monitoring required by this permit in a format that will allow direct comparison with the limitations and requirements of this permit. If no discharge occurs during a reporting period, the permittee shall specify "No discharge" on the DMR. The results of all discharge analyses conducted during the monitoring period shall be included in determinations of the monthly average and daily maximums reported on the DMRs if the analyses were by methods specified in Part II.A above, as applicable.

2. DMRs and attachments are to be submitted by the 28th day of the month following the end of a monitoring period. For example, if the monitoring period ends January 31st, the permittee shall submit the DMR by February 28th. The permittee shall electronically submit all compliance monitoring data and reports using the myDEQ electronic portal provided by ADEQ. If the facility is not yet constructed, the permittee shall note "Not constructed" on the DMRs. The permittee shall notify ADEQ within 30 days of commencing full operations, whether discharging or not. The notification shall be made in a letter and submitted with the DMRs for the first monitoring period in which the facility begins full operations. The reports required to be electronically submitted include, but are not limited to, the following:
   a. Discharge Monitoring Reports
   b. Original copies of laboratory results
   c. AZPDES discharge flow records (See Appendix B)
   d. Bench sheets or similar documentation for field testing parameters

3. If requested to participate, the permittee shall submit the results of the annual NPDES DMR/QA Study to ADEQ and ADHS for all laboratories used in monitoring compliance with this permit by December 31st of each year. The permittee shall also conduct any proficiency testing required by the NPDES DMR-QA Study for those parameters listed in the study that the permittee analyzes in house or tests in the field at the time of sampling (these parameters may include pH and total residual chlorine). All results of the NPDES DMR-QA Study shall be submitted to the email and addresses listed below, or submit by any other alternative mode as specified by ADEQ:

   Arizona Department of Environmental Quality
   Email: AZPDES@azdeq.gov

   Arizona Department of Health Services
   Attn: Office of Laboratory Licensure and Certification
   250 North 17th Avenue
   Phoenix, AZ 85007

4. For the purposes of reporting, the permittee shall use the Limit of Quantitation.

5. For parameters with Daily Maximum Limits or Daily Maximum Assessment Levels in this permit, the permittee shall review the results of all samples collected during the reporting period and report as outlined in Table 4.

6. For parameters with Monthly Average Limits or Monthly Average Assessment Levels in this permit, the permittee shall review the results of all samples collected during the reporting period and report as outlined in Table 4.

Table 4. DMR Reporting Requirements for Daily Maximum Limits and Assessment Levels

For Daily Maximum Limits/Assessment Levels	The Permittee shall Report on the DMR
When the maximum value of any analytical result is greater than or equal to the LOQ	The maximum value of all analytical results
When the maximum value detected is greater than or equal to the laboratory's LOD but less than the LOQ	NODI (Q)
When the maximum value is less than the laboratory's LOD	NODI (B)

Table 5. DMR Reporting Requirements for Monthly Average Limits / Assessment Levels

For Monthly Average Limits/Assessment Levels		**The Permittee shall Report on the DMR**
If **only one sample** is collected during the reporting period (weekly, monthly, quarterly, annually, etc.) (In this case, the sample result **is** also the weekly or monthly average.)	When the value detected is greater than or equal to the LOQ	The analytical result
	When the value detected is greater than or equal to the laboratory's LOD, but less than the LOQ	NODI (Q)
	When the value is less than the laboratory's LOD	NODI (B)
If more than one sample is collected during the reporting period	All samples collected in the same calendar month must be averaged. • When all results are greater than or equal to the LOQ, all values are averaged • If some results are less than the LOQ, use the LOD value in the averaging • Use '0' for values less than the LOD	The highest monthly average which occurred during the reporting period

7. For all field testing, or if the information below is not included on the laboratory reports required by Part II.B.2, the permittee shall attach a bench sheet or similar documentation to each DMR that includes, for all analytical results during the reporting period the following:
   a. the analytical result,
   b. the number or title of the approved analytical method, preparation and analytical procedure utilized by the field personnel or laboratory, and the LOD and LOQ for the analytical method for the parameter, and
   c. any applicable data qualifiers using the most current revision of the Arizona Data Qualifiers (available online at: http://www.azdhs.gov)

C. Twenty-four Hour Reporting of Noncompliance

1. The permittee shall orally report to the Emergency Response Unit hotline at (602) 771-2330 any noncompliance that poses imminent threat to the environment or human health within 24 hours from the time the permittee becomes aware of the circumstances. The permittee shall also submit an electronic notification within 5 days of the noncompliance event using the myDEQ electronic portal provided by ADEQ. The permittee shall include in the written notification: a description of the noncompliance and its cause; the period of noncompliance, including dates and times, and, if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

   The following instances of noncompliance are subject to the 24-hour and 5-day reporting requirements and must be reported orally to the Emergency Response Unit hotline:
   a. Any unanticipated bypass which exceeds any effluent limitations in the permit,
   b. Any upset which exceeds any effluent limitation in the permit, or
   c. Any spill or discharge that poses an imminent threat to human health or the environment.

2. All other instances of noncompliance remain subject to the 24-hour and 5-day reporting requirements, and must call the ADEQ AZPDES hotline at (602) 771-1440. For example, an exceedance of any maximum daily limit for the parameters listed in Part 1.A Table 1 that does not poses an imminent threat to human health or the environment.

3. The permittee shall retain the following monitoring records:
   a. Date, exact location and time of sampling or measurements performed, preservatives used;
   b. Individual(s) who performed the sampling or measurements;
   c. Date(s) the analyses were performed;
   d. Laboratory(s) which performed the analyses;
   e. Analytical techniques or methods used;
   f. Chain of custody forms;
   g. Any comments, case narrative or summary of results produced by the laboratory. These comments should identify and discuss QA/QC analyses performed concurrently during sample analyses and should specify whether analyses met project requirements and 40 CFR 136. If results include information on initial and continuing calibration, surrogate analyses, blanks, duplicates, laboratory control samples, matrix spike and matrix spike duplicate results, sample receipt condition, or holding times and preservation, these records must also be retained.
   h. Summary of data interpretation and any corrective action taken by the permittee.

PART III. BIOSOLIDS / SEWAGE SLUDGE REQUIREMENTS

Note: "Biosolids" refers to non-hazardous sewage sludge as defined in 40 CFR 503.9 and Arizona Administrative Code (A.A.C.) R18-9-1001.7. Sewage sludge that is hazardous as defined in 40 CFR 261 must be disposed of in accordance with the Resource Conservation and Recovery Act (RCRA). Sludge with PCB (polychlorinated biphenyls) levels greater than 50 mg/kg must be disposed of in accordance with 40 CFR 761.

A. Use of Disposal Requirements

1. All biosolids/sewage sludge generated and/or prepared at this facility shall be used or disposed of in compliance with the applicable portions of 18 A.A.C. 9, Article 10 and

2. 40 CFR 503 Subpart C: for biosolids that are placed on the land (surface disposal) for the purpose of disposal (dedicated land disposal sites, lagoons, or monofills).

3. 40 CFR 258: for biosolids disposed of in municipal solid waste landfills; and

4. 40 CFR 257: for all biosolids use and disposal practices not covered under 40 CFR 258 or 503.

B. Biosolids Preparer's Responsibility

1. The permittee is responsible for ensuring that all biosolids/sewage sludge produced or accepted at this facility are used or disposed of in accordance with 40 CFR 503 Subpart C, 257, 258 and 18 A.A.C. 9, Article 10, as applicable, whether the permittee uses or disposes of the biosolids itself or transfers them to another party for further treatment, use, or disposal. The permittee is responsible for informing any subsequent transporters, preparers, applicators, and disposers of the requirements that they must meet under 18 A.A.C. 9, Article 10.

C. Duty to Mitigate

1. The permittee shall take all reasonable steps to prevent or minimize any biosolids use or disposal which has a likelihood of adversely affecting human health or the environment.

D. General Requirements

1. The permittee shall ensure that:
   a. No biosolids generated and/or prepared at this facility enter wetlands or other waters of the United States;
   b. Biosolids treatment, storage, use or disposal does not contaminate surface water or groundwater. (Note: Surface disposal or land treatment sites for biosolids must be permitted under the aquifer

protection program per A.A.C. R18-9-1002(E)(2) and may also require a separate AZPDES permit. The permittee shall ensure a site has appropriate permits before directing biosolids to a surface disposal or land treatment site.)

c. Biosolids treatment, storage, and use or disposal does not create a nuisance such as malodorous smell or attraction of flies or other disease carrying vectors.
d. Biosolids generated and/or prepared at this facility are not applied to the land or placed on a surface disposal site if the biosolids are likely to adversely affect a threatened or endangered species as listed under section 4 of the Endangered Species Act (16 U.S.C 1533), or its designated critical habitat as defined in 16 U.S.C. 1532;
e. Land application sites receiving bulk biosolids generated and/or prepared at this facility are registered with ADEQ in accordance with A.A.C. R18-9-1004.

E. Biosolids Storage

1. Biosolids shall not be stored on land for over two years from the time they are generated unless permit for surface disposal is obtained per 18 A.A.C. 9, Article 10 and 40 CFR 503 Subpart C, or written notification has been submitted to the ADEQ Surface Water Permits Unit with the information in 40 CFR 503.209(b) that sufficiently demonstrates the need for longer temporary storage.

2. For the protection of public health, biosolids shall not be stored uncovered on-site or off-site unless the permittee can demonstrate that prior to placement in storage:
   a. Biosolids meet Class A or B pathogen reduction requirements established in A.A.C. R18-9-1006(D) or (E), and
   b. Biosolids meet one of the vector attraction reduction alternatives in A.A.C. R18-9-1010 subsections (A)(1) through (A)(8).
   c. For biosolids which are classified as EQ or Class A, or as Class B through pathogen reduction Alternative 1, the permittee must also sample for pathogen reduction following storage and within 30 days prior to reuse/disposal or distribution (see Part III.J.2.d). Sampling before storage shall occur at least at the minimum frequencies given in Part III.I.1, and sampling after storage shall be conducted as specified in Part III.I.4.

3. Prior to storing biosolids at an off-site storage location, the permittee shall notify the ADEQ Surface Water Permits Unit in writing where the biosolids will be stored and the expected date of final use or disposal.

F. Surface Water Protection

1. The permittee must design and operate all on-site treatment, disposal, or storage areas for biosolids to:
   a. Divert surface run-on from adjacent areas to prevent contact with biosolids;
   b. Protect the site boundaries from erosion; and
   c. Prevent any drainage that has contacted biosolids from escaping the site.

2. These features shall be designed to be protective for at least a 25-year 24-hour storm event. If the permittee sends biosolids off-site that are not EQB, the permittee shall ensure all treatment, disposal, or storage areas that receive those biosolids have the same level of protection.

G. Facilities with Pretreatment Programs

1. Permittees with pretreatment programs shall:
   a. Sample and analyze biosolids for all the priority pollutants listed under Section 307.a.1 of the Clean Water Act, except asbestos. This shall consist of an annual full priority pollutant scan, with quarterly samples analyzed only for those pollutants detected in the full scan.
   b. Sample and analyze biosolids quarterly for the following Pollutants of Concern:

Arsenic	Copper	Mercury	Selenium
Cadmium	Cyanide	Molybdenum	Silver
Chromium	Lead	Nickel	Zinc

2. If any biosolids generated and/or prepared at this facility are or will be land applied, the permittee shall design local limits to achieve the ceiling and monthly average pollutant concentration levels for pollutants given in Table 8 of this permit. If pollutants in the biosolids exceed any of these monthly average pollutant concentration levels, the permittee shall revise its local limits as necessary in order to meet these levels.

H. Inspection and Entry

The permittee shall allow, directly or through contractual arrangements with their biosolids management contractors, authorized representatives of ADEQ and EPA to:

1. Enter upon all premises where biosolids are treated, stored, used, or disposed, either by the permittee or by another party to whom the permittee transfers the biosolids for treatment, storage, use, or disposal;

2. Have access to and copy any records that must be kept under the conditions of this permit and per 18 A.A.C. 9, Article 10 (including those in 40 CFR 503 Subpart C) by the permittee or by another party to whom the permittee transfers the biosolids for further treatment, storage, use, or disposal; and

3. Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations used in biosolids treatment, storage, use, or disposal by the permittee or by another party to whom the permittee transfers the biosolids for treatment, use, or disposal.

I. General Biosolids Monitoring Requirements (dry weight testing)

1. Biosolids Self-monitoring Frequency
   Unless otherwise specified in this permit, the permittee shall conduct self-monitoring events at least at the frequency listed in Table 7 for any sampling required in Part III of this permit.

Table 6. Biosolids Self-Monitoring Frequency

Amount of Biosolids Prepared per Calendar Year (dry metric tons)	**Minimum Monitoring Frequency**
> 0 to < 290	One sampling event per year
≥ 290 to < 1,500	One sampling event per quarter
≥ 1500 to < 15,000	One sampling event per 60 days
≥ to 15,000	One sampling event per month

2. Sampling and Analysis Method
   a. The permittee shall ensure biosolids are tested using the methods specified in 40 CFR 503.8, as required in A.A.C. R18-9-1012(G) that are sufficiently sensitive in accordance with 40 CFR 122.21(e)(3). Testing shall be performed at a laboratory operating in compliance with A.R.S. 36-495. Because of the potential for re-growth of pathogens, for Class A or EQ biosolids, samples demonstrating pathogen reduction shall be taken within 30 days before biosolids are shipped off-site, so verification that requirements are met is obtained before the biosolids leave the site.

3. Representative Sampling:
   a. The permittee shall ensure that sampling conducted during a monitoring period adequately represents the quality of all biosolids used/treated/disposed over the monitoring period. This may entail taking several samples per sampling event and/or sampling more frequently than the minimum specified.

4. Testing Stockpiled/Accumulated Biosolids Prior to Distribution or Use

a. If, after treatment, biosolids classified as EQ or Class A, or as Class B demonstrated through Alternative 1, are stockpiled or accumulated on-site prior to reuse/disposal, the permittee shall develop a sampling plan that ensures samples representative of the entire stockpile are collected and analyzed for pathogens within 30 days before distribution or use. The plan shall detail the number and location of samples to be taken from a cross section of each pile or area. The plan must include at least 1 sample for each 0-290 metric dry ton increments. More sampling is appropriate when the biosolids are inconsistent in nature or non-uniformly treated.

b. The permittee must collect and analyze representative samples per the sampling plan. Distribution or use/disposal shall not occur until the permittee verifies that the biosolids sampled meet all applicable requirements for its use/disposal.

5. Testing for Hazardous Waste Determination
   a. The permittee shall test biosolids at least annually, and more frequently as necessary, to determine if biosolids are hazardous in accordance with 40 CFR 261. Initial screening of the biosolids may be conducted by analyzing biosolids for the total amount of a pollutant. This screening test is all that is required each monitoring period if the total amount doesn't exceed the 20X TCLP screening value in Table 8. If the total amount of a pollutant exceeds the 20X TCLP screening value, then the leachable amount must be determined using the Toxicity Characteristic Leaching Procedure (TCLP). The disposal of biosolids that test hazardous is not covered under this permit, and all such biosolids must be disposed of in accordance with the Resource Conservation and Recovery Act (RCRA).

Table 7. Toxicity Characteristic Leaching Procedure Test

Parameter	TCLP Limit mg/L	20 X TCLP Screening Value mg/kg	Minimal Monitoring Frequency per Generator
Metals			
Arsenic	5	100	1x / year
Barium	100	2000	1x / year
Cadmium	1	20	1x / year
Chromium	5	100	1x / year
Lead	5	100	1x / year
Mercury	0.2	4	1x / year
Selenium	1	20	1x / year
Silver	5	100	1x / year
Volatiles and Semi-Volatiles			
Benzene	0.5	10	1x / year
Carbon Tetrachloride	0.5	10	1x / year
Chlorobenzene	100	2000	1x / year
Chloroform	6	120	1x / year
1,2-Dichloroethane	0.5	10	1x / year
1,1-Dichloroethylene	0.7	14	1x / year
Methyl ethyl ketone	200	4000	1x / year

Parameter	TCLP Limit mg/L	20 X TCLP Screening Value mg/kg	Minimal Monitoring Frequency per Generator
Tetrachloroethylene	0.7	14	1x / year
Trichloroethylene	0.5	10	1x / year
Vinyl Chloride	0.2	4	1x / year
1,4-Dichlorobenzene	7.5	150	1x / year
o-cresol (1)	200	4000	1x / year
m-cresol (1)	200	4000	1x / year
p-cresol (1)	200	4000	1x / year
Cresol (total) (1)	200	4000	1x / year
2,4-Dinitrotoluene	0.13	2.6	1x / year
Hexachlorobenzene	0.13	2.6	1x / year
Hexachlorobutadiene	0.5	10	1x / year
Hexachloroethane	3	60	1x / year
Nitrobenzene	2	40	1x / year
Pentachlorophenol	100	2000	1x / year
Pyridine	5	100	1x / year
2,4,5-Trichlorophenol	400	8000	1x / year
2,4,6-Trichlorophenol	2	40	1x / year
Herbicides / Pesticides			
2,4-D	10	200	1x / year
2,4,5-TP (Silvex)	1	20	1x / year
Chlordane	0.03	0.6	1x / year
Endrin	0.02	0.4	1x / year
Heptachlor	0.008	0.16	1x / year
Heptachlor epoxide	0.008	0.16	1x / year
Lindane	0.44	8.8	1x / year
Methoxychlor	10	200	1x / year
Toxaphene	0.5	10	1x / year

Footnotes

1 If o-, m-, and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/L.

J. Biosolids Limitations and Monitoring Requirements for Land Applications

1. The permittee shall monitor biosolids generated and/or prepared at this facility for land application and limit their use as follows (Table 8).

a. Metals Concentrations for Land Application - Biosolids shall be sampled for the metals listed in the following table at a frequency not less than the minimum indicated for the amount of biosolids prepared annually. Samples shall be taken after all treatment and blending processes, but prior to land application.
b. The permittee shall not land apply biosolids with pollutant concentrations that exceed any of the ceiling concentrations in Table 8. The permittee shall not sell or give away biosolids for land application if pollutant concentrations exceed any of the ceiling concentrations in the following table.
c. If biosolids exceed any Ceiling Concentration in the following table, the permittee must:
   i. Notify the ADEQ Surface Water Permits Unit;
   ii. Find alternative disposal methods other than land application for the biosolids represented by that sampling event; and
   iii. Identify the source of the pollutants and take appropriate source control measures to reduce the presence of the pollutant(s) of concern.
d. If biosolids exceed a Monthly Average Pollutant Concentration listed in the table in Part III.I.1.a above:
   i. The biosolids shall not be applied as bulk biosolids to a lawn or garden.
   ii. The biosolids shall not be sold or given away if any annual pollutant loading rate listed in Table 3 of A.A.C. R18-9-1005(D) will be exceeded. The annual pollutant loading rate shall be determined using the methodology in18 A.A.C. 9, Article 10, Appendix A.
   iii. The biosolids shall not be applied to a site if any cumulative pollutant loading rate in Table 4 of A.A.C. R18-9-1005(D) will be exceeded. The cumulative pollutant loading rate shall be determined using the methodology in A.A.C. R18-9-1005(D).
e. The permittee shall not apply, sell, or give away biosolids for application to a lawn or garden unless they are Exceptional Quality (EQ) biosolids.
f. The permittee shall be able to demonstrate that all biosolids meet the definition of EQ biosolids in order to claim exemption from the management practices in A.A.C. R18-9-1007 and R18-9-1008. If claiming biosolids are EQ, during the first two years of EQ biosolids preparation, the permittee shall submit the results of all biosolids testing and details about the pathogen and vector control treatment processes to the ADEQ Surface Water Permits Unit. The permittee shall receive written confirmation from ADEQ that the results demonstrate the biosolids meet EQ requirements prior to selling or giving away or land applying any biosolids for uses requiring an EQ biosolids classification.

Table 8. Metal Concentrations for Land Applications

Pollutant	**Ceiling Concentrations** (milligrams/ kilogram) (1)	**Monthly Average Pollutant Concentrations** (milligrams/ kilogram) (1)	**Minimum Monitoring Frequency per Volume Prepared Annually**
Arsenic	75.0	41.0	0 to < 290 dry metric tons—1 sampling event /year ≥ 290 to < 1500 dry metric tons—1 sampling event /quarter ≥ 1500 to < 15,000 dry metric tons—1 sampling event/60 days ≥ 15,000 dry metric tons—1 sampling event /month
Cadmium	85.0	39.0	
Chromium	3000.0	Not Applicable	
Copper	4300.0	1500.00	
Lead	840.0	300.00	
Mercury	57.0	17.0	
Molybdenum	75.0	Not Applicable	
Nickel	420.0	420.00	
Selenium	100.0	100.0	
Zinc	7500.0	2800.00	

Footnotes
(1) Dry-weight basis.

2. Pathogen Reduction Requirements for Land Application
   a. Biosolids must meet Class A or Class B pathogen reduction requirements established in A.A.C. R18-9-1006 at the time the biosolids are land applied and, if stored uncovered prior to land application, at the time the biosolids are stored. The permittee shall also verify that the reduction is met within 30 days prior to distribution (see Part III.I.4). The permittee shall document and retain records of the treatment used to achieve Class A or Class B pathogen reduction levels and, if demonstrating treatment to Class A, the fecal coliform or *Salmonella sp.* density. Retesting is required within 30 days of distribution for EQ and Class A biosolids and for Class B biosolids if pathogen reduction was demonstrated through Alternative 1.
   b. Biosolids sold or given away in a bag or other container for land application, or applied on a lawn or home garden, shall meet the Class A pathogen reduction requirements established in A.A.C. R18-9-1006(D).
   c. The permittee shall maintain daily records of the operating parameters for the pathogen reduction treatment alternative used. If using A.A.C. R18-9-1006(D) Alternative 4, the permittee shall demonstrate acceptable levels of enteric virus and viable helminth ova through monitoring.
   d. Microbiological monitoring for fecal coliforms or *Salmonella sp.* to demonstrate pathogen reduction during a given monitoring period shall be conducted as close to the actual distribution or disposal of the biosolids as feasible. The analytical results must demonstrate effective pathogen reduction is achieved prior to distributing or disposing of the biosolids. If the permittee stores biosolids before they are distributed for use or disposal, microbiological testing must take place within 30 days prior to distribution or disposal.
   e. In order to demonstrate Class B pathogen reduction using A.A.C. R18-9-1006(E) Alternative 1;
      i. At least seven individual grab samples must be taken and analyzed for fecal coliform during each monitoring event (unless an alternate sampling plan has been approved by ADEQ).
      ii. The geometric mean of the results must be <2,000,000 MPN/gram or CFU/gram of total solids (dry-weight basis).
      iii. Samples are to be taken over a 14-day period to adequately represent sludge variability.

      (Note: A 'monitoring event' includes the period of time that samples are collected, analyzed, and the sample results provided to the permittee.)
   f. In order to demonstrate Class A pathogen reduction, in addition to meeting one of the alternative pathogen treatment options in A.A.C. R18-9-1006(D)
      i. At least seven individual grab samples must be collected and analyzed for fecal coliform during each monitoring event (unless an alternate sampling plan has been approved by ADEQ) and all seven samples must be < 1,000 MPN/gram.; or
      ii. At least seven individual grab samples must be collected and analyzed for *Salmonella sp.* during each monitoring event (unless an alternate sampling plan has been approved by ADEQ) and each must be <3 MPN/4 grams total solids (dry-weight basis).
      iii. Samples are to be taken over a 14-day period to adequately represent sludge variability.

   g. If demonstrating Class A pathogen reduction using A.A.C. R18-9-1006(D) Alternative 4;
      i. One composite sample consisting of at least seven grab samples must be collected and analyzed for enteric virus during each monitoring event and the arithmetic mean of 4 duplicate analyses of that composite must be < 1 PFU/ 4 grams total solids (dry-weight basis). Grab samples are to be taken over a 14-day period prior to compositing them to adequately represent sludge variability, and the maximum holding time is 2 weeks.
      ii. One composite sample consisting of at least seven grab samples must be collected and analyzed for viable helminth ova during each monitoring event and the arithmetic mean of 4 duplicate analyses of that composite must be < 1 viable ova/ 4 grams total solids (dry-weight basis). Grab samples are to be taken over a 14-day period prior to compositing them to adequately represent sludge variability.

3. Vector Attraction Reduction Requirements for Land Application
   a. The permittee shall ensure that all biosolids generated and/or prepared at this facility meet the vector attraction reduction requirements established in A.A.C. R18-9-1010 when the biosolids are land-applied. If biosolids are stored uncovered prior to land application, one of the vector attraction reduction alternatives established in A.A.C. R18-9-1010 subsections (A)(1) through (A)(8) must be met prior to storage. The permittee shall document and retain records of the operational parameters or application methods used to achieve the vector attraction reduction requirements.
   b. The permittee shall ensure that all biosolids generated and/or prepared at this facility that are sold or given away in a bag or other container, or applied to a lawn or home garden, meet one of the vector attraction reduction alternatives established in A.A.C. R18-9-1010 subsections (A)(1) through (A)(8). The permittee shall document and retain records of the operational parameters or application methods used to achieve the vector attraction reduction requirements.

K. Management Practices for Land Applications

1. The permittee shall ensure that all non-EQ bulk biosolids generated and/or prepared at this facility are land applied in accordance with the management practices in A.A.C. R18-9-1007, unless the bulk biosolids are land applied for reclamation.

2. If the permittee generates or prepares non-EQ bulk biosolids that are land applied for reclamation, the permittee shall ensure that the biosolids are land applied in accordance with the management practices in A.A.C. R18-9-1008.

3. If the permittee generates or prepares non-EQ biosolids placed in a bag or other container for distribution/land application or reclamation, the permittee shall distribute a label or information sheet to the person receiving the material. This label or information sheet shall contain the information in A.A.C. R18-9-1007(B).

L. Biosolids/Sewage Sludge Limitations and Monitoring Requirements for Surface Disposal

The permittee shall ensure that any sewage sludge or biosolids directed to or placed in a surface disposal unit meets the requirements of 40 CFR 503 Subpart C. The permittee shall also ensure the surface disposal site is permitted under the aquifer protection program and has a valid AZPDES permit prior to disposal of any biosolids in the unit.

M. Biosolids Monitoring Requirements for Disposal in a Municipal Landfill

Biosolids placed in a municipal landfill shall be tested by the Paint Filter Test (method 9095) at the frequency in Table 8 or more often as necessary to demonstrate that there are no free liquids. The permittee shall keep records documenting that biosolids disposed in a municipal landfill did not contain free liquids.

N. On-site Management Plan

1. The permittee shall submit a Management Plan (Plan) within 180 days of permit issuance or maintain a previously submitted Plan for the on-site management operations.

2. This Plan shall detail how sludge/biosolids are managed from the time that they are generated at the facility until they are shipped off-site. The Plan shall give specific protocols to be followed to ensure that the material generated at this facility will consistently meet all applicable requirements in 18 A.A.C. 9, Article 10 and 40 CFR Part 503 Subpart C and the provisions of this permit. The Plan must address issues of potential concern such as storage areas; run-on and run-off control; odor and dust control; and include a professional diagram of facilities/areas used in the operation and the area surrounding the operation. The Plan shall specify how and when representative samples of biosolids will be taken and contain a contingency plan for managing biosolids that exceed the requirements for the expected end use/disposal.

O. Record Keeping

1. The permittee shall collect and retain all biosolids information required by this permit and A.A.C. R18-9-1013(A)(1) through (A)(6) for at least five years.

2. The permittee shall keep analytical test results and all documentation that supports the biosolids classification on-site and available for review.

3. All biosolid records are subject to periodic inspection, and copying by ADEQ.

P. Notification Requirements

1. The permittee, either directly or through contractual arrangements with their biosolids management contractors, shall comply with the following:

2. Notification of Noncompliance
   a. The permittee shall notify ADEQ of any noncompliance with the biosolids provisions of this permit or with 18 A.A.C. 9, Article 10, which may endanger health or the environment. The permittee shall provide the information orally within 24 hours from the time the permittee becomes aware of the circumstances (See Part II.C of this permit.)
   b. For other instances of noncompliance with the biosolids provisions, the permittee shall notify the ADEQ Surface Water Permits Unit in writing within five working days of becoming aware of the circumstances.
   c. Permittees shall require their biosolids management contractors to notify ADEQ of any noncompliance within the time-frames specified in Sections P.2.a and b.

3. Notification of Shipment to another State
   If biosolids are shipped to another State or to Indian Lands, the permittee shall send a notice of the shipment to the NPDES permitting authorities in the receiving State or Indian Land (the EPA Regional Office for that area and the State/Indian authorities) with a copy to the Arizona Surface Water Permits Unit. The notice shall be sent at least 60 days before the biosolids are planned to be shipped.

4. Notification of Change in Land Application Sites, Applicators, or Disposal Methods
   a. Prior to sending, placing or applying any bulk biosolids generated and/or prepared at this facility to a site that the permittee has not previously utilized for biosolids use/disposal within the last five years, the permittee must verify that the application site has been registered in accordance with A.A.C. R18-9-1004 and shall notify the ADEQ Surface Water Permits Unit of the planned change. The notification shall include a description and topographic map of the proposed site(s), latitude and longitude coordinates at the center of each field/site, slope of land surface, names and addresses of the applicator(s) and site owner(s), a listing of any state or local permits which must be obtained, a description of the crops or vegetation to be grown at each site, proposed loading rates and determination of agronomic rates.
   b. Prior to selling or giving away bulk biosolids for land application to an applicator that the permittee has not sold or given biosolids to within the last five years, the permittee shall notify the ADEQ Surface Water Permits Unit of the planned change. The notification shall include: the name, address, and telephone number of the applicator and any agent of the applicator; the name and telephone number of a primary contact person who has specific knowledge of the land application activities of the applicator; and whether the applicator holds a NPDES or AZPDES permit, and, if so, the permit number.
   c. Prior to changing the method of biosolids use, treatment or disposal that was identified in the permittee's application for this permit, the permittee shall notify the ADEQ Surface Water Permits Unit of the planned change in writing. If ADEQ determines that the newly proposed practice is not covered under this permit, the permittee shall request and receive a permit modification prior to making the change.
   d. The permittee shall keep records of site registration verifications and of all notifications made to ADEQ.

5. Notification of Land Application of Biosolids that Exceed Monthly Average Pollutant Concentrations
The permittee must notify the ADEQ Surface Water Permits Unit and any subsequent biosolids handlers if biosolids generated and/or prepared at this facility do not meet any of the Monthly Average Pollutant Concentration values listed in Table 8. The permittee shall ensure that bulk biosolids exceeding a monthly average pollutant concentration will not be applied to a site if any cumulative pollutant loading rate (Table 4 in A.A.C. R18-9-1005) will be exceeded per A.A.C. R18-9-1005(D)(2).

6. Notification to Subsequent Land Applicators
The permittee shall notify the applicator of all the applicator's requirements under Title 18 Chapter 9 Article 10 including the requirement that the applicator certify that management practices, site restrictions, and any applicable vector attraction reduction requirements have been met.

7. Notification of Surface Disposal
Prior to disposal in a new or previously unreported surface disposal site, the permittee shall notify the Surface Water Permits Unit in writing. Notice shall include a description and a topographic map of the proposed site; the names of the site operator and site owner; whether the site has any permits; and shall include a description of procedures for ensuring public access and grazing restrictions until three years following site closure. The permittee shall not direct biosolids to the surface disposal site without prior written approval from ADEQ.

Q. Annual Report for all Permittees

1. The permittee shall submit an annual biosolids report to ADEQ by February 19 of each year for the period covering the previous calendar year. The report shall be filled out on forms prescribed by ADEQ and shall include.
   a. The amount of biosolids received/generated the previous calendar year and the amount stored at the beginning and end of the previous calendar year, in dry tons or dry metric tons (prefer metric tons), and the amount distributed.
   b. The results of all biosolids analytical monitoring conducted during the previous calendar year and copies of the laboratory analytical reports. Metals (other than TCLP metals) shall be reported on a 100% dry weight basis. Note: make certain microbiological testing submitted meets required holding times.
   c. Descriptions of pathogen reduction methods and vector attraction reduction methods used during the previous calendar year. The permittee must submit sludge processing data used to demonstrate how treatment alternative(s) in A.A.C. R18-9-1006 and R18-9-1010 were attained, (such as time, temperature, percent solids, pH etc.) as applicable.
   d. Names, mailing addresses, and street addresses of all persons who received biosolids generated and/or prepared at this facility for storage, further treatment, disposal in a municipal waste landfill, or for other use/disposal methods not covered under 40 CFR 258 or 503, and the amount delivered to each.
   e. Except for biosolids that are demonstrated to be EQ, the following information shall be submitted by the permittee for land application sites, unless the permittee requires its biosolids management contractors to report this information directly to ADEQ:
      i. Locations of land application sites (with field names and numbers) used that calendar year, size of each field applied to, applier, and site owner;
      ii. Volumes applied to each field (in wet tons and dry metric tons), nitrogen applied, calculated plant available nitrogen;
      iii. Crop(s) planted, date of planting, harvesting;
      iv. For any biosolids exceeding A.A.C. R18-9-1005 Table 2 metals concentrations, the locations of sites where applied and cumulative metals loading at each of these sites to date;
      v. Certifications of management practices in A.A.C. R18-9-1007 or A.A.C. R18-9-1008; and
      vi. Certifications of site restrictions in A.A.C. R18-9-1009.
   f. For surface disposal sites, the permittee shall ensure that the following information is submitted, the permittee requires its biosolids management contractors to report this information directly to ADEQ:

i. Locations of sites, site operator, site owner, size of parcel on which disposed;
ii. Results of any required groundwater monitoring;
iii. A description of and certifications of management practices in 40 CFR 503.24; and
iv. For closed sites, date of site closure and certifications of management practices for the three years following site closure.

R. Reporting

An electronic copy of the annual report shall be submitted to biosolids@azdeq.gov. ADEQ is developing an electronic reporting portal through myDEQ where all annual reports shall be submitted. ADEQ will notify the permittee that all reports shall be submitted through the electronic portal in accordance with the U.S. EPA's electronic reporting requirements when the myDEQ portal becomes available.

PART IV. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

Not Applicable

PART V. SPECIAL CONDITIONS

A. Operation

The permittee shall ensure that the facilities or systems are operated by or under the supervision of an operator currently certified by ADEQ at the level appropriate for the facility or system.

B. Pretreatment Conditions

The permitee shall notify ADEQ in writing atleast 3 months prior to connecting any significant industrial user (SIU) to the Sarival WRF. The notification shall include: the name, location, anticipated volume and quality of discharge, and the proposed wastewater treatment or control processes. This notification shall be submitted to the email address AZPDES@azdeq.gov.

C. Reopener

This permit may be modified per the provisions of A.A.C. R18-9-B906, and R18-9-A905 which incorporates 40 CFR Part 122. This permit may be reopened based on newly available information; to add conditions or limits to address demonstrated effluent toxicity; to implement any EPA-approved new Arizona water quality standard; or to re-evaluate reasonable potential (RP), if Assessment Levels in this permit are exceeded.

Appendix A. Part A: Acronyms

A.A.C.	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
ADHS	Arizona Department of Health Services
EQ	Exceptional Quality (biosolids)
AZPDES	Arizona Pollutant Discharge Elimination System
A.R.S.	Arizona Revised Statutes
CFR	Code of Federal Regulations
CFU	Colony Forming Units
Director	The Director of ADEQ or any authorized representative thereof
DMR	Discharge Monitoring Report
EPA	The U.S. Environmental Protection Agency
kg/day	Kilograms per day
MGD	Million Gallons per Day
mg/L	Milligrams per Liter, also equal to parts per million (ppm)
MPN	Most Probable Number
NPDES	National Pollutant Discharge Elimination System
PFU	Plaque-Forming Unit
QA	Quality Assurance
SSU	Sewage Sludge Unit
TBEL	Technology-based Effluent Limitation
µg/L	Micrograms per Liter, also equal to parts per billion (ppb)
WQBEL	Water quality-based Effluent Limitation

Appendix A. Part B: Definitions

Active Sewage Sludge Unit	A sewage sludge unit that has not closed.
Agronomic Rate	The whole biosolids application rate on a dry-weight basis that meets the following conditions: a.) The amount of nitrogen needed by existing vegetation or a planned or actual crop has been provided, and b.) The amount of nitrogen that passes below the root zone of the crop or vegetation is minimized.
Annual Pollutant Loading Rate	The maximum amount of a pollutant that can be applied to an acre or hectare of land during a 365-day period.
Applicator	A person who arranges for and controls the site-specific land application of biosolids in Arizona.
Base Flood	A flood that has a one percent chance of occurring in any given year (or a flood that is likely to occur once in 100 years).
Bulk Biosolids	Biosolids that are transported and land-applied in a manner other than in a bag or other container holding biosolids of 1.102 short tons or 1 metric ton or less.
Composite Sample	A sample that is formed by combining a series of individual, discrete samples of specific volumes at specified intervals. Composite samples characterize the quality of a discharge over a given period of time.Although, composite samples can be time-weighted or flow-weighted, this permit requires the collection of flow-proportional composite samples. This means that samples are collected and combined using aliquots in proportion to flow rather than time. Also see Flow-Proportional Composite.

Cumulative Pollutant Loading Rate	The maximum amount of a pollutant applied to land application site.
Daily Maximum Concentration Limit	The maximum allowable discharge of a pollutant in a calendar day as measured on any single discrete sample or composite sample.
Daily Maximum Mass Limit	The maximum allowable total mass of a pollutant discharged in a calendar day.
Discrete or Grab Sample	An individual sample of at least 100 mL collected from a single location, or over a period of time not exceeding 15 minutes.
Dry-Weight Basis	The weight of biosolids calculated after the material has been dried at 105 °C until reaching a constant mass.
Exceptional Quality Biosolids	Biosolids certified under R18-9-1013(A)(6) as meeting the pollutant concentrations in R18-9-1005 Table 2, Class A pathogen reduction in R18-9-1006, and one of the vector attraction reduction requirements in subsections R-18-9-1010(A)(1) through R18-9-1010(A)(8).
Flow Proportional Composite Sample	A sample that combines discrete samples collected over time, based on the flow of the discharge being sampled. There are two methods used to collect this type of sample. One collects a constant sample volume at time intervals that vary based on stream flow. The other collects discrete samples that are proportioned into aliquots of varying volumes based on stream flow, at constant time intervals (i.e. flow-weighted composite sample).
Hardness	The sum of the calcium and magnesium concentrations, expressed as calcium carbonate ($CACO_3$) in milligrams per liter.
Land Application or Land Apply	Spraying or spreading biosolids on the surface of the land, injecting biosolids below the land's surface, or incorporating biosolids into the soil to amend, condition, or fertilize the soil.
Land Treatment Facility	An operation designed to treat and improve the quality of waste, wastewater, or both, by placement wholly or in part on the land surface to perform part or all of the treatment. A land treatment facility includes a facility that performs biosolids drying, processing, or composting, but not land application performed in compliance with 18 A.A.C. 9, Article 10.
LC50	The toxicant (or effluent) concentration that would cause death in 50 percent of the test organisms.
Limit of Quantitation (LOQ)	The minimum levels, concentrations, or quantities of a target variable such as an analyte that can be reported with a specific degree of confidence.The calibration point shall be at or below the LOQ. The LOQ is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all of the method-specified sample weights, volumes, and processing steps have been followed.
Limit of Detection (LOD)	An analyte and matrix-specific estimate of the minimum amount of a substance that the analytical process can reliably detect with a 99% confidence level. This may be laboratory dependent and is developed according to R9014-615(C)(7).
Method Detection Limit (MDL)	See LOD
Monthly or Weekly Average Concentration Limit	Other than for bacteriological testing, means the highest allowable average calculated as an arithmetic mean of consecutive measurements made during calendar month or week, respectively. The "monthly or weekly average concentration limit" for *E. coli* bacteria means the highest allowable average calculated as the geometric mean of a minimum of four (4) measurements made during a calendar month or week, respectively. The geometric mean is the nth root of the product of n numbers. For

	either method (CFU or MPN), when data are reported as "0" or non-detect then input a "1" into the calculation for the geometric mean.
Non-wotus protected surface water	Non-wotus protected surface water means a protected surface water that is not a WOTUS.
Pathogen	A disease-causing organism.
Publicly owned treatment works	Publicly owned treatment works" means a treatment works owned by this state or a municipality of this state as defined in section 502(4) of the clean water act or that discharges to a protected surface water.
Runoff	Rainwater, leachate, or other liquid that drains over any part of a land surface and runs off of the land surface.
Sewage Sludge Unit	Land on which only sewage sludge is placed for final disposal. This does not include land on which sewage sludge is either stored or treated. Land does not include navigable waters.
Significant Difference	Defined as statistically significant difference (e.g., 95% confidence level) in the means of two distributions of sampling results.
Store Biosolids or Storage of Biosolids	The temporary holding or placement of biosolids on land before land application.
Surface Disposal Site	An area of land that contains one or more active sewage sludge units.
Submit	As used in this permit, means post-marked, documented by other mailing receipt, sent electronically, or hand-delivered to ADEQ.
Surface Water Quality Standards	Surface Water Quality Standards means a standard adopted for a protected surface water pursuant to Section 49-221 and, in the case of WOTUS, pursuant to Section 49-222.
Ton	A net weight of 2000 pounds and is known as a short ton.
Total Solids	The biosolids material that remains when sewage sludge is dried at 103° C to 105° C.
Vectors	Rodents, flies, mosquitoes, or other organisms capable of transporting pathogens.
Waters of the United States (WOTUS)	Waters of the United States (WOTUS) means protected surface waters that are also navigable waters as defined by Section502(7) of the Clean Water Act.
WOTUS Protected Surface Water	WOTUS protected surface water- means a protected surface water that is a WOTUS.

Appendix B. AZPDES Discharge Flow Record

Sarival Water Reclamation Facility (WRF)—AZ0026425			
Discharge to Roosevelt Irrgiation District (RID) Canal in the Middle Gila River Basin At:			
Outfall No:			
Location:			
Month:		**Year:**	
Date:	**Flow Duration [1] (Total hours per day)**	**Flow Rate [2] (Total MGD per day)**	
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
Comment:			

Footnotes

1 Total time of discharge in hours per day. If actual time is not available, use an estimate of flow duration.

2 Report flow discharge in MGD. If no discharge occurs on any given day, report 'ND" for the flow for that day.

Appendix C. Standard AZPDES Permit Conditions & Notifications

(Updated as of February 2, 2004)

1. Duty to Reapply—[R18-9-B904(B)]
   Unless the Permittee permanently ceases the discharging activity covered by this permit, the Permittee shall reapply, submit a new application, 180 days before the existing permit expires. ADEQ must receive the new application at least 180 days before permit expiration in order to start the re-application process.

2. Applications—[R18-9-A905(A)(1)(C) which incorporates 40CFR 122.22]

   a. All applications shall be signed as follows:

      i. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
         A. A president, secretary, treasure, or vice-president of the corporation in charge of a principle business function, or any other person who performs similar policy-or decision-making functions for the corporation, or

         B. The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

      ii. For partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

      iii. For a municipality, State, Federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes: (i) The chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

   b. All reports required by permits and other information requested by the Director shall be signed by a person described in paragraph (a) of this Section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

      i. The authorization is made in writing by a person described in paragraph (a) of this section;

      ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) and,

      iii. The written authorization is submitted to the Director.

   c. Changes to Authorization. If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

   d. Certification. Any person signing a document under paragraph (a) or (b) of this section shall make the following certification:

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

3. Duty to Comply - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(a)(i) and A.R.S. §49- 262, 263.01, and 263.02.]

   a. The Permittee shall comply with all conditions of this permit and any standard and prohibition required under A.R.S. Title 49, Chapter 2, Article 3.1 and A.A.C. Title 18, Chapter 9, Articles 9 and 10. For discharges to a WOTUS, any permit noncompliance constitutes a violation of the Clean Water Act; A.R.S. Title 49, Chapter 2, Article 3.1; and A.A.C. Title 18, Chapter 9, Articles 9 and 10, and is grounds for enforcement action, permit termination, revocation and reissuance, or modification, or denial of a permit renewal application.

   b. The issuance of this permit does not waive any federal, state, county, or local regulations or permit requirements with which a person discharging under this permit is required to comply.

   c. The Permittee shall comply with the effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Clean Water Act within the time provided in the regulation that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

   d. Civil Penalties. A.R.S. § 49-262(C) provides that any person who violates any provision of A.R.S. Title 49, Chapter 2, Article 3.1 or a rule, permit, discharge limitation or order issued or adopted under A.R.S. Title 49, Chapter 2, Article 3.1 is subject to a civil penalty not to exceed $25,000 per day per violation.

   e. Criminal Penalties. Any a person who violates a condition of this permit, or violates a provision under A.R.S. Title 49, Chapter 2, Article 3.1, or A.A.C. Title 18, Chapter 9, Articles 9 and 10 is subject to the enforcement actions established under A.R.S. Title 49, Chapter 2, Article 4, which may include the possibility of fines and/or imprisonment.

4. Need to Halt or Reduce Activity Not a Defense—[R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(c)]

   It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

5. Duty to Mitigate - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(d)]

   The Permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

6. Proper Operation and Maintenance - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(e)]

   The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

7. Permit Actions - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(f)]

   This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

8. Property Rights - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(g)]

   This permit does not convey any property rights of any sort, or any exclusive privilege.

9. Duty to Provide Information - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(h)]

   The Permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee shall also furnish to the Director upon request, copies of records required to be kept by this permit.

10. Inspection and Entry [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(i)]

    The Permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and such other documents as may be required by law, to:

    a. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

    b. Have access to and copy, at reasonable times, any records that must be kept under the terms of the permit;

    c. Inspect at reasonable times any facilities, equipment (including monitoring equipment or control equipment), practices or operations regulated or required under this permit; and

    d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by A.R.S. Title 49, Chapter 2, Article 3.1, and A.A.C. Title 18, Chapter 9, Articles 9 and 10, any substances or parameters at any location

11. Monitoring and Records - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(j)]

    a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

    b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application, except for records of monitoring information required by this permit related to the Permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503). This period may be extended by request of the Director at any time.

    c. Records of monitoring information shall include:

       i. The date, exact place and time of sampling or measurements;

       ii. The individual(s) who performed the sampling or measurements;

       iii. The date(s) the analyses were performed;

       iv. The individual(s) who performed the analyses;

       v. The analytical techniques or methods used; and

       vi. The results of such analyses.

d. Monitoring must be conducted according to test procedures specified in this permit. If a test procedure is not specified in the permit, then monitoring must be conducted according to test procedures approved under A.A.C. R18-9-A905(B) including those under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503 (for sludge).

e. The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained in this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than two years per violation, or by both for first conviction. For a second conviction, such a person is subject to a fine of not more than $20,000 per day of violation, or imprisonment for not more than four years, or both.

Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained in this permit is subject to the enforcement actions established under A.R.S. Title 49, Chapter 2, Article 4, which includes the possibility of fines and/or imprisonment.

12. Signatory Requirement - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(k)]

a. All applications, reports, or information submitted to the Director shall be signed and certified. (See 40 CFR 122.22 incorporated at R18-9-A905(A)(1)(c))

b. The CLEAN WATER ACT provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than two years per violation, or by both for a first conviction. For a second conviction, such a person is subject to a fine of not more than $20,000 per day of violation, or imprisonment of not more than four years, or both.

13. Reporting Requirements - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(l)]

a. Planned changes. The Permittee shall give notice to the Director as soon as possible of any planned physical alterations of additions to the permitted facility. Notice is required only when:

i. The alteration or addition to a permitted facility that dischargers to a WOTUS, may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b) (incorporated by reference at R18-9-A905(A)(1)(e)); or

ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1) (incorporated by reference at R18-9-A905(A)(3)(b)).

iii. The alteration or addition results in a significant change in the Permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

b. Anticipated noncompliance. The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

c. Transfers. (R18-9-B905) This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the Permittee and incorporate such other requirements as may be necessary under Arizona Revised Statutes and the Clean Water Act.

d. Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.

i. Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices.

ii. If the Permittee monitors any pollutant more frequently than required by the permit, then the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR, or sludge reporting form specified by the Director.

iii. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

e. Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

f. Twenty-four hour reporting.

i. The Permittee shall report any noncompliance which may endanger human health or the environment. Any information shall be provided orally within 24 hours from the time the Permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

ii. The following shall be included as information which must be reported within 24 hours under this paragraph.

A. Any unanticipated bypass which exceeds any effluent limitation in the permit. (See 40 CFR 122.41(g) which is incorporated by reference at R18-9-A905(A)(3)(a)).

B. Any upset which exceeds any effluent limitation in the permit.

C. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours. (See 40 CFR 122.44(g) which is incorporated by reference at R18-9-A905(A)(3)(d)).

g. Other noncompliance. The Permittee shall report all instances of noncompliance not reported under paragraphs (d), (e), and (f) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (f) of this section.

h. Other information. Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

14. Bypass - [R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(m)]

a. Definitions

i. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

ii. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Bypass not exceeding limitations. The Permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provision of paragraphs (c) and (d) of this section.

c. Notice.

i. Anticipated bypass. If the Permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of bypass.

ii. Unanticipated bypass. The Permittee shall submit notice of an unanticipated bypass as required in paragraph (f)(2) of section 13 (24-hour notice).

d. Prohibition of bypass.

i. Bypass is prohibited, and the Director may take enforcement action against a Permittee for bypass, unless:

A. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

B. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment down time. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

C. The Permittee submitted notices as required under paragraph (c) of this section.

ii. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph (d)(1) of this section.

15. Upset - [A.R.S.§§49-255(8) and 255.01(E), R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(n)]

a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions necessary for a demonstration of upset. A Permittee who wishes to establish the affirmative defenses of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

i. An upset occurred and that the Permittee can identify the cause(s) of the upset;

ii. The permitted facility was at the time being properly operated; and

iii. The Permittee submitted notice of the upset as required in paragraph (f)(2) of Section 13 (24-hour notice).

iv. The Permittee has taken appropriate measure including all reasonable steps to minimize or prevent any discharge or sewage sludge use or disposal that is in violation of the permit and that has a reasonable likelihood of adversely affecting human health or the environment per A.R.S. § 49-255.01(E)(1)(d).

d. Burden of proof. In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

16. Existing Manufacturing, Commercial, Mining, and Silvicultural Dischargers - [R18-9-A905(A)(3)(b) which incorporates 40 CFR 122.42(a)]

In addition to the reporting requirements under 40 CFR 122.41(l) (which is incorporated at R18-9-A905(A)(3)(a)), all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

i. One hundred micrograms per liter (100 µg/l);

ii. hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

iii. Five times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7) (which is incorporated at R18-9-A905(A)(1)(b)); or

iv. The level established by the Director in accordance with 40 CFR 122.44(f) (which is incorporated at R18-9-A905(A)(3)(d)).

b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

i. Five hundred micrograms per liter (500 µg/l);

ii. One milligram per liter (1 mg/l) for antimony;

iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7)(which is incorporated at R18-9-A905(A)(1)(b));

iv. The level established by the Director in accordance with 40 CFR 122.44(f) (which is incorporated at R18-9-A905(A)(3)(d)).

17. Publicly Owned Treatment Works - [R18-9-A905(A)(3)(b) which incorporates 40 CFR 122.42(b)]

This section applies only to publicly owned treatment works as defined at ARS § 49-255(5).

a. All POTW's must provide adequate notice to the Director of the following:

i. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of the CLEAN WATER ACT if it were directly discharging those pollutants; and

ii. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

iii. For the purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharge from the POTW.

Publicly owned treatment works may not receive hazardous waste by truck, rail, or dedicated pipe except as provided under 40 CFR 270. Hazardous wastes are defined at 40 CFR 261 and include any mixture containing any waste listed under 40 CFR 261.31 - 261.33. The Domestic Sewage Exclusion (40 CFR 261.4) applies only to wastes mixed with domestic sewage in a sewer leading to a publicly owned treatment works and not to mixtures of hazardous wastes and sewage or septage delivered to the treatment plant by truck.

18. Reopener Clause - [R18-9-A905(A)(3)(d) which incorporates 40 CFR 122.44(c)]
This permit shall be modified or revoked and reissued to incorporate any applicable effluent standard or limitation or standard for sewage sludge use or disposal under sections 301(b)(2)(C), and (D), 304(b)(2), 307(a)(2) and 405(d) which is promulgated or approved after the permit is issued if that effluent or sludge standard or limitation is more stringent than any effluent limitation in the permit, or controls a pollutant or sludge use or disposal practice not limited in the permit.

19. Privately Owned Treatment Works - [R18-9-A905(A)(3)(d) which incorporates 40 CFR 122.44]

This section applies only to privately owned treatment works as defined at 40 CFR 122.2.

a. Materials authorized to be disposed of into the privately owned treatment works and collection system are typical domestic sewage. Unauthorized material are hazardous waste (as defined at 40 CFR Part 261), motor oil, gasoline, paints, varnishes, solvents, pesticides, fertilizers, industrial wastes, or other materials not generally associated with toilet flushing or personal hygiene, laundry, or food preparation, unless specifically listed under "Authorized Non-domestic Sewer Dischargers" elsewhere in this permit.

b. It is the Permittee's responsibility to inform users of the privately owned treatment works and collection system of the prohibition against unauthorized materials and to ensure compliance with the prohibition. The Permittee must have the authority and capability to sample all discharges to the collection system, including any from septic haulers or other unsewered dischargers, and shall take and analyze such samples for conventional, toxic, or hazardous pollutants when instructed by the permitting authority. The Permittee must provide adequate security to prevent unauthorized discharges to the collection system.

c. Should a user of the privately owned treatment works desire authorization to discharge non-domestic wastes, the Permittee shall submit a request for permit modification and an application, pursuant to 40 CFR 122.44(m), describing the proposed discharge. The application shall, to the extent possible, be submitted using ADEQ Forms 1 and 2C, unless another format is requested by the permitting authority. If the privately owned treatment works or collection system user is different from the Permittee, and the Permittee agrees to allow the non-domestic discharge, the user shall submit the application and the Permittee shall submit the permit modification request. The application and request for modification shall be submitted at least 6 months before authorization to discharge non-domestic wastes to the privately owned treatment works or collection system is desired.

20. Transfers by Modification - [R18-9-B905]

Except as provided in section 21, a permit may be transferred by the Permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made under R18-9-B906, to identify the new Permittee and incorporate such other requirements as may be necessary.

21. Automatic Transfers [R18-9-B905]

An alternative to transfers under section 20, any AZPDES permit may be automatically transferred to a new Permittee if:

a. The current Permittee notifies the Director at least 30 days in advance of the proposed transfer date;

b. The notice includes a written agreement between the existing and new Permittee containing a specific date for transfer of permit responsibility, coverage, and liability between them; and

c. The Director does not notify the existing Permittee and the proposed new Permittee of his or her intent to modify or revoke and reissue the permit. A modification under this subparagraph may also be a minor modification under R18-9-B906(B).

22. Minor Modification of Permits [R18-9-B906(B)]

Upon the consent of the Permittee, the Director may modify a permit to make the corrections or allowances for changes in the permitted activity listed in this section, without following public notice procedures under R18-9-A907 or A908. Minor modifications may only:

a. Correct typographical errors;

b. Update a permit condition that changed as a result of updating an Arizona water quality standard;

c. Require more frequent monitoring or reporting by the Permittee;

d. Change an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement;

e. Allow for a change in ownership or operational control of a facility where the Director determines that no other change in their permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittee has been submitted to the Director.

f. Change the construction schedule for a discharger that dischargers to a WOTUS which is a new source. No such change shall affect a discharger's obligation prior to discharge under 40 CFR 122.29 (which is incorporated by reference in R18-9-A905(A)(1)(e)).

g. Delete a point source outfall when the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except in accordance with the permit limits.

h. Incorporate conditions of a POTW pretreatment program that has been approved in accordance with the procedures in 40 CFR 403.11 and 403.18 as enforceable conditions of the POTW's permit.

i. Annex an area by a municipality.

23. Termination of Permits - [R-9-B906(C)]

The following are causes for terminating a permit during its term, or for denying a permit renewal application:

a. Noncompliance by the Permittee with any condition of the permit;

b. The Permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the Permittee's misrepresentation of any relevant facts at any time;

c. A determination that the permitted activity endangers human health or the environment and can only by regulated to acceptable levels by permit modification or termination; or

d. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge controlled by the permit (for example, a plant closure or termination of discharge by connection to a POTW).

24. Availability of Reports - [Pursuant to A.R.S § 49-205]

Except for data determined to be confidential under A.R.S § 49-205(A), all reports prepared in accordance with the terms of this permit shall be available for public inspection at ADEQ offices. As required by A.R.S. § 49-205(B) and (C), permit applications, permits, and effluent data shall not be considered confidential.

25. Removed Substances - [Pursuant to Clean Water Act Section 301]

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

26. Severability - [Pursuant to A.R.S § 49-324(E)]
The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and remainder of this permit, shall not be affected thereby.

27. Civil and Criminal Liability - [Pursuant to A.R.S § 49-262, 263.01, and 263.02]

Except as provided in permit conditions on "Bypass" (Section 14) and "Upset" (Section 15), nothing in this permit shall be construed to relieve the Permittee from civil or criminal penalties for noncompliance.

28. Oil and Hazardous Substance Liability - [Pursuant to Clean Water Act Section 311].

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties established pursuant to any applicable State or Tribal law or regulation under authority preserved by Section 510 of the Clean Water Act.

29. State or Tribal Law - [Pursuant to R 18-9-A904 (C)].
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties established pursuant to any applicable State or Tribal law or regulation under authority preserved by Section 510 of the Clean Water Act.

Consumer Confidence Report on Water Quality for 2024

2025 Consumer Confidence Report on Water Quality for 2024

Annual Water Quality Report

Liberty Water LPSCO

PWS # AZ04-07-046

Liberty

Message from the President

Liberty is committed to providing customers with safe, quality drinking water. We are proud to present this Water Quality Report (Consumer Confidence Report) that shares detailed information regarding local water service and our compliance with state and federal water quality standards during the 2024 calendar year.

Liberty makes appropriate investments each year to deliver water that meets the safety standards established by the States Environmental Protection Agency (EPA), the Public Utilities Commission (PUC), and the United States Environmental Protection Agency (EPA). We invest responsibly to maintain the local water infrastructure because a strong infrastructure is key to delivering quality water. The water we deliver to your home or business is thoroughly tested by independent laboratories, and data is provided to ADEQ to verify compliance with primary and secondary state and federal water quality standards.

We know our customers rely on us for water that is safe to drink, and we take this responsibility seriously. At Liberty, "Sustaining Energy and Water for Life" is more than a tagline. Our employees live in the community and take pride in providing quality water and reliable service to you and your neighbors.

If you have any questions about this report, please don't hesitate to contact us at 800-727-5987.

On behalf of the entire Liberty family, thank you for being a valued customer and neighbor. We are proud to be your water provider.

Sincerely,

Moses Thompson

President, Liberty Arizona/Texas

This report contains important information about your drinking water. Please contact Liberty at (800) 727-5987 for assistance in Spanish.

Este informe contiene información muy importante sobre su agua para beber. Favor comunicarse con Liberty al (800) 727-5987 para asistirlo en Español.

To request a printed copy of this report, please call us at 1-800-727-5987. This report can also be found at www.libertyenergyandwater.com.

Where Does My Water Come From?

Liberty drinking water comes from the Western Valley Salt River Aquifer. An aquifer is a layer of permeable rock, sand, and gravel that stores the water supplying wells and springs. This particular aquifer is divided into three distinct units: the upper, middle, and lower alluvial units. Liberty draws its water from the middle and lower alluvial units located approximately 200 to 600 feet below the surface. Water is pumped either directly into the distribution system or into two multi-million gallon reservoirs. Before entering our system, this high-quality groundwater may undergo arsenic removal treatment then a small amount of chlorine is added to minimize the possibility of bacterial contamination.

In 2024, Liberty purchased some drinking water from the City of Goodyear. Data from the City of Goodyear testing is also summarized in this report.

Source Water Assessment

In 2003, the ADEQ completed a source water assessment for the 12 groundwater wells used by Liberty at that time. The Assessment reviewed the adjacent land uses that may pose a potential risk to the sources. These risks include, but are not limited to, gas stations, landfills, dry cleaners, agriculture fields, wastewater treatment plants, and mining activities. Once adjacent land uses were identified, they were ranked as to their potential to affect the water source. The result of the assessment was low risk for all of the 12 groundwater wells, indicating that most source water protection measures are either already implemented, or the hydrogeology is such that the source water protection measures will have little impact on protection. Residents can help protect sources by taking household chemicals to hazardous chemical collection days, practicing good septic maintenance, and limiting pesticide and fertilizer use. The complete Source Water Assessment is available for review at ADEQ, 1110 W. Washington St., Phoenix, AZ 85007, or you may request an electronic copy from ADEQ by email: recordscenter@azdeq.gov. For more information visit the ADEQ website at: http://azdeq.gov/SourceWaterProtection.

What are Drinking Water Standards?

Drinking water standards are the regulations set by the USEPA to control the level of contamination in the nation's drinking water. The USEPA and the ADEQ are the agencies responsible for establishing drinking water quality standards in Arizona. This approach includes assessing and protecting drinking water sources; protecting wells and surface water; making sure water is treated by qualified operators; ensuring the integrity of the distribution system; and making information about water quality available to the public. The water delivered to your home meets the standards required by the USEPA and the ADEQ.

This report describes those contaminants that have been detected in the analyses of almost 200 different potential contaminants, nearly 100 of which are regulated by the USEPA and the ADEQ. Liberty is proud to tell you that there have been no contaminants detected that exceed any federal or state drinking water standards. Hundreds of samples analyzed every month by Liberty's contract certified laboratory assures that all primary (health-related) and secondary (aesthetic) drinking water standards are being met. Sample results are available in the Table that is part of this report.

This report is intended to provide information for all water users. If received by an absentee landlord, a business, or a school, please share the information with tenants, employees or students. We are happy to make additional copies of this report available. You may also access this report on the Liberty web page at www.libertyenergyandwater.com.

Substances That Could be in Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. These substances are also called contaminants.

Contaminants that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic Contaminants, such as salts and metals, which can be naturally- occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive Contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

To protect public health, the USEPA and the ADEQ prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration (USFDA) also establishes limits for contaminants in bottled water that provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA Safe Drinking Water Hotline at 1-800-426-4791 or visiting their website at https://www.epa.gov/safewater. For information on bottled water visit the USFDA website at www.fda.gov.

Do I Need to Take Special Precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such

as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers. The USEPA and Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

Important Health Information

Lead - Lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing.

Liberty Water LPSCO is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk.

Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water.

To address lead in drinking water, public water systems were required to develop and maintain an inventory of service line materials by Oct 16, 2024. Developing an inventory and identifying the location of lead service lines (LSL) is the first step for beginning LSL replacement and protecting public health. Please contact us at 1-800-727-5987 or visit https://arizona.libertyutilities.com/avondale/residential/safety/water-quality.html if you would like more information about the inventory or any lead sampling that has been done.

If you are concerned about lead in your water and wish to have your water tested, contact us at 1-800-727-5987. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at http://www.epa.gov/safewater/lead.

Arsenic - While your drinking water meets the United States Environmental Protection Agency's (EPA) standard for arsenic, it does contain low levels of arsenic. The EPA standard balances the current understanding of arsenic's possible health effects against the cost of removing it from drinking water. The EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Nitrate – Nitrates in drinking water at levels above 10 ppm are a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

Per- and polyfluoroalkyl substances (PFAS) - Please note that there are thousands of different PFAS, some of which have been more widely used and studied than others. Scientific research suggests that exposure to certain PFAS may lead to adverse health outcomes. Research is still ongoing to determine how exposure to these different PFAS chemicals occurs and how they can affect human health.

Perfluorooctanoic acid (PFOA) exposures resulted in increased liver weight and cancer in laboratory animals. Perfluorooctanesulfonic acid (PFOS) exposures resulted in immune suppression and cancer in laboratory animals. Perfluorohexane sulfonic acid (PFHxS) exposures resulted in

decreased total thyroid hormone in male rats. For information on PFOA, PFOS, and other PFAS, including possible health outcomes, you may visit these websites: https://www.epa.gov/pfas.

Unregulated Contaminants (UCMR5) – PFAS Information

Your drinking water was sampled in 2023, and 2024 for the presence and concentration of lithium, and 29 different per- and polyfluoroalkyl substances, some known by the acronyms PFAS, PFOA, PFNA, PFHxS, PFBS, and GenX, a group of contaminants in the final stages of becoming regulated by the EPA. PFAS are man-made chemicals that are resistant to heat, water, and oil. They have been used since the 1940s to manufacture various consumer products, including fire-fighting foam and stain resistant, water-resistant, and nonstick items. Many PFAS do not break down easily and can build up in people, animals, and the environment over time. Scientific studies have shown that exposure to certain PFAS can be harmful to people and animals, depending on the level and duration of exposure.

To learn more about this group of chemicals, we encourage you to read the ADEQ-provided "PFAS 101 Fact Sheet" and to visit the ADEQ website at https://www.azdeq.gov/pfas-resources.

How Might I Become Actively Involved?

If you would like to observe the decision-making process that affects drinking water quality or if you have any further questions about your drinking water report, please call us at 1-800-727-5987 to inquire about scheduled meetings or contact persons.

Testing Results

During the year, Liberty collects water samples to determine the presence of any radioactive, biological, inorganic, or organic contaminants. All of the substances listed in the table below tested under the Maximum Contaminant Level (MCL). Liberty believes it is important you know what was detected, and how much of the substance was present. The state allows the monitoring of certain substances less than once a year because the concentrations of these substances do not change frequently. If a substance was tested and there was no detection, it is not listed in this table. You can find Definitions, Terms and Abbreviations related to this Table in the next section for easy reference.

Liberty Water LPSCO 2024 Annual Water Quality Report							
PRIMARY STANDARDS – Health Based							
DISTRIBUTION SYSTEM							
Disinfectant Residuals	**Violation? (Yes/No)**	**Primary MCL (MRDL)**	**PHG (MRDLG)**	**Range of Detection**	**Highest Level Detected**	**Most Recent Sampling Date**	**Typical Source of Constituent**
Chlorine [as Cl_2] (ppm)	No	(4.0)	4	1 - 1	1	2024	Drinking water disinfectant added for treatment
Disinfection By-Products	**Violation? (Yes/No)**	**Primary MCL**	**PHG (MCLG)**	**Range of Detection**	**Highest Level Detected**	**Most Recent Sampling Date**	**Typical Source of Constituent**
TTHMs [Total of Four Trihalomethanes] (ppb)	No	80	N/A	ND – 22.5	16	2024	Byproduct of drinking water disinfection
HAA5 [Total of Five Haloacetic Acids] (ppb)	No	60	N/A	ND – 3.1	2	2024	Byproduct of drinking water disinfection
Lead and Copper (Residential Internal Plumbing)	**Violation? (Yes/No)**	**Action Level (AL)**	**PHG (MCLG)**	**#Site over AL**	**90th Percentile Level**	**Most Recent Sampling Date**	**Typical Source of Constituent**
Copper (ppm)	No	1.3	0.3	0	0.15	2023	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	No	15	0.2	0	ND	2023	Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SOURCE WATER									
Inorganic Constituents	**Violation? (Yes/No)**	**Primary MCL**	**MCLG**	**Range of Detection for Goodyear Sources**	**Highest Result or Highest Average/ Goodyear**	**Range of Detection for Liberty Sources**	**Highest Result or Highest Average/ Liberty**	**Most Recent Sampling Date**	**Typical Source of Constituent**
Arsenic (ppb)	No	10	0	1-8	8	ND – 24[N]	7	2024	Erosion of natural deposits; runoff from orchards, glass and electronics production wastes
Barium (ppm)	No	2	2	0.016-0.19	0.19	0.058 – 0.21	0.21	2024	Erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries
Chromium (total) (ppb)	No	100	100	ND-19	19	0 - 13	13	2024	Erosion of natural deposits; discharges from steel and pulp mills and chrome plating
Selenium (ppb)	No	50	50	ND-4	4	ND	ND	2024	Erosion of natural deposits; discharge from petroleum and metal refineries; discharge from mines
Nitrate (ppm)	No	10	10	0.4-10	10	3.87 – 7.03	7	2024	Runoff from fertilizer use; erosion of natural deposits; leaching from septic tanks & sewage
Bromate (ppm)	No	0.01	0	ND-0.016	0.016	N/A	N/A	2024	Byproduct of drinking water chlorination.
Fluoride (ppm) [Naturally occurring]	No	4.0	4.0	ND-3.46	3.46	ND – 1.64	1.64	2024	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Volatile Organic Chemicals (VOC)	**Violation? (Yes/No)**	**Primary MCL**	**MCLG**	**Range of Detection for Goodyear Sources**	**Highest Result or Highest Average/ Goodyear**	**Range of Detection for Liberty Sources**	**Highest Result or Highest Average/ Liberty**	**Most Recent Sampling Date**	**Typical Source of Constituent**
Trichloroethylene (ppb)	No	5	0	ND-1.3	1.3	ND	ND	2024	Discharge from metal degreasing sites and other factories
Radiological Constituents	**Violation? (Yes/No)**	**Primary MCL**	**MCLG**	**Range of Detection for Goodyear Sources**	**Highest Result or Highest Average/ Goodyear**	**Range of Detection for Liberty Sources**	**Highest Result or Highest Average/ Liberty**	**Most Recent Sampling Date**	**Typical Source of Constituent**
Gross Alpha (pCi/L)	No	15	0	1.2	1.2	ND - 5	3	2024	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation

OTHER CONSTITUENTS									
	Violation? (Yes/No)	Notification Level	MCLG	Range of Detection for Goodyear Sources	Highest Result or Highest Average/ Goodyear	Range of Detection for Liberty Sources	Highest Result or Highest Average/ Liberty	Most Recent Sampling Date	Typical Source of Constituent
Calcium (ppm)	N/A	N/A	N/A	N/A	N/A	36-80	55	2024	Leaching from natural deposits
Magnesium (ppm)	N/A	N/A	N/A	N/A	N/A	18-39	28	2024	Leaching from natural deposits
Sodium (ppm)	N/A	N/A	N/A	82-240	240	72-220	133	2024	Refers to the salt present in the water and is generally naturally occurring
Hardness [as CaCO3] (ppm)	N/A	N/A	N/A	N/A	N/A	170-360	256	2024	The sum of polyvalent cations present in the water, generally magnesium and calcium; the cations are usually naturally occurring
Hardness [as CaCO3] (grains/gal)	N/A	N/A	N/A	N/A	N/A	9.9-21.1	14.8	2024	

UNREGULATED CHEMICAL MONITORING (UCMR5)									
	Violation? (Yes/No)	Notification Level	MCLG	Range of Detection for Goodyear Sources	Highest Result or Highest Average/ Goodyear	Range of Detection for Liberty Sources	Highest Result or Highest Average/ Liberty	Most Recent Sampling Date	Typical Source of Constituent
Perfluorobutanesulfonic acid (PFBS) (ppt)	N/A	N/A	N/A	ND-13	13	ND-5.9	5.9	2024	PFAS are a group of synthetic chemicals used in a wide range of consumer products and industrial applications, including non-stick cookware, water-repellent clothing, stain-resistant fabrics and carpets, cosmetics, firefighting foams, electroplating, and products that resist grease, water, and oil. PFAS are found in the blood of people and animals and in water, air, fish, and soil at locations across the United States and the world.
Perfluorobutanoic acid (PFBA) (ppt)	N/A	N/A	N/A	ND	ND	ND-20.3	20.3	2024	
Perfluoroheptanoic acid (PFHpA) (ppt)	N/A	N/A	N/A	ND-5	5	ND-3.9	3.9	2024	
Perfluorohexanesulfonic acid (PFHxS) (ppt)	N/A	N/A	N/A	ND-5	5	ND-17	17	2024	

UNREGULATED CHEMICAL MONITORING (UCMR5) (Continued)									
	Violation? (Yes/No)	Notification Level	MCLG	Range of Detection for Goodyear Sources	Highest Result or Highest Average/ Goodyear	Range of Detection for Liberty Sources	Highest Result or Highest Average/ Liberty	Most Recent Sampling Date	Typical Source of Constituent
Perfluorohexanoic acid (PFHxA) (ppt)	N/A	N/A	N/A	ND	ND	ND-9.1	9.1	2024	PFAS are a group of synthetic chemicals used in a wide range of consumer products and industrial applications, including non-stick cookware, water-repellent clothing, stain-resistant fabrics and carpets, cosmetics, firefighting foams, electroplating, and products that resist grease, water, and oil. PFAS are found in the blood of people and animals and in water, air, fish, and soil at locations across the United States and the world.
Perfluorononanoic acid (PFNA) (ppt)	N/A	N/A	N/A	ND-4	4	ND-2.6	2.6	2024	
Perfluorooctanesulfonic acid (PFOS) (ppt)	N/A	N/A	N/A	ND-7	7	ND-12.4	12.4	2024	
Perfluorooctanoic acid (PFOA) (ppt)	N/A	N/A	N/A	ND-4	4	ND-10.2	10.2	2024	
Perfluoropentanoic acid (PFPeA) (ppt)	N/A	N/A	N/A	ND-3	3	ND-12.5	12.5	2024	
Lithium (ppb)	N/A	N/A	N/A	56-196	196	72.7-166	166	2024	Naturally occurring metal that may concentrate in brine waters; lithium salts are used as pharmaceuticals, used in electrochemical cells, batteries, and in organic syntheses.

(a) Operational issue. A confirmation sample was collected with a result of 3.4 ppb

Violation Table

Ground Water Rule			
The Ground Water Rule specifies the appropriate use of disinfection while addressing other components of ground water systems to ensure public health protection			
Violation Type	**Violation Begin**	**Violation End**	**Violation Explanation**
FAILURE ADDRESS DEFICIENCY (GWR)	12/25/2023	2024	We failed to properly respond to a significant deficiency in our water system.

Definitions, Terms and Abbreviations

AL: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

Contaminant: Any physical, chemical, biological, or radiological substance or matter in water.

HAA5: Haloacetic Acids (mono-, di- and tri-chloroacetic acid, and mono- and di- bromoacetic acid) as a group.

Herbicide: Any chemical(s) used to control undesirable vegetation.

Level 1 Assessment: A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

LRAA: Locational Running Annual Average, or the locational average of sample analytical results for samples taken during the previous four calendar quarters.

MCLG: Maximum Contaminant Level Goal is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

MCL: Maximum Contaminant Level is the highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

MCL: Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MRDL: Maximum Residual Disinfectant Level is the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG: Maximum Residual Disinfectant Level Goal, is the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

N/A: not applicable.

ND: not detectable at testing limits.

NTU: Nephelometric Turbidity Unit, used to measure cloudiness in drinking water.

pCi/L: picocuries per liter, a measure of radioactivity.

PDWS: Primary Drinking Water Standards are MCLs, MRDLs, and treatment techniques (TTs) for contaminants that affect health, along with their monitoring and reporting requirements.

Pesticide: Generally, any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest.

ppb: parts per billion or micrograms per liter.

ppm: parts per million or milligrams per liter.

ppt: parts per trillion or nanograms per liter.

PHG: Public Health Goal is the level of a contaminant in drinking water below which there is no known or expected risk to health.

RAA: Running Annual Average, or the average of sample analytical results for samples taken during the previous four calendar quarters.

Range of Results: Shows the lowest and highest levels found during a testing period, if only one sample was taken, then this number equals the Highest Test Result or Highest Value.

SMCL: Secondary Maximum Contaminant Level, or the secondary standards that are non-enforceable guidelines for contaminants and may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor or color) in drinking water. EPA recommends these standards but does not require water systems to comply

TT: Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

TTHM: Total Trihalomethanes (chloroform, bromodichloromethane, dibromochloromethane, and bromoform) as a group.

Conservation Tips for Consumers

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- ✓ Take short showers – a 5-minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- ✓ Shut off water while brushing your teeth, washing your hair, and shaving and save up to 500 gallons a month.
- ✓ Use a water-efficient showerhead. They are inexpensive, easy to install, and can save you up to 750 gallons a month.
- ✓ Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- ✓ Water plants only when necessary.

- ✓ Fix leaking toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- ✓ Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- ✓ Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- ✓ Visit https://www.epa.gov/watersense for more information.

Contact Information

For information about this report, or your water quality in general, please contact Liberty's office at 1-800-727-5987 or Paul Friedman at (623) 243-3748 or Paul.Friedman@Libertyutilities.com.

2025 Reporte de Confianza del Consumidor sobre Calidad de Agua para el 2024

Reporte Anual de Calidad de agua

Liberty Water LPSCO

PWS # AZ04-07-046

Liberty

Mensaje del Presidente

Liberty se compromete a brindar a sus clientes agua potable segura y de calidad. Nos enorgullece presentar este Informe de Calidad del Agua (Informe de Confianza del Consumidor), que ofrece información detallada sobre el servicio local de agua y nuestro cumplimiento de las normas estatales y federales de calidad del agua durante el año calendario 2024.

Liberty realiza inversiones adecuadas cada año para suministrar agua que cumpla con los estándares de seguridad establecidos por la Agencia de Protección Ambiental de los Estados Unidos (EPA), la Comisión de Servicios Públicos (PUC) y la Agencia de Protección Ambiental de los Estados Unidos (EPA). Invertimos responsablemente para mantener la infraestructura hídrica local, ya que una infraestructura sólida es clave para el suministro de agua de calidad. El agua que suministramos a su hogar o negocio se analiza exhaustivamente en laboratorios independientes, y los datos se proporcionan a ADEQ para verificar el cumplimiento de los estándares de calidad del agua estatales y federales, tanto primarios como secundarios.

Sabemos que nuestros clientes confían en nosotros para obtener agua potable, y nos tomamos esta responsabilidad muy en serio. En Liberty, "Energía y agua sostenibles para la vida" es más que un eslogan. Nuestros empleados viven en la comunidad y se enorgullecen de brindar agua de calidad y un servicio confiable a usted y a sus vecinos.

Si tiene alguna pregunta sobre este informe, no dude en comunicarse con nosotros al 800-727-5987.

En nombre de toda la familia Liberty, gracias por ser un valioso cliente y vecino. Nos enorgullece ser su proveedor de agua.

Atentamente,

Moses Thompson

Presidente, Liberty Arizona/Texas

Este informe contiene información importante sobre su agua potable. Por favor Comuníquese con Liberty al (800) 727-5987 para asistencia en español .

Este informe contiene información muy importante sobre su agua para beber. Favor comunicarse con Liberty al (800) 727-5987 para asistirlo en español .

A Solicitar una copia impresa Copiar de este informe , por favor llamar Contáctenos al 1-800-727-5987. Este informe también está disponible en www.libertyenergyandwater.com .

¿De dónde viene mi agua?

El agua potable de Liberty proviene del Acuífero del Río Salado del Valle Occidental. Un acuífero es una capa de roca permeable, arena y grava que almacena el agua que abastece pozos y manantiales. Este acuífero se divide en tres unidades distintas: las aluviales superior, media e inferior. Liberty obtiene su agua de las unidades aluviales media e inferior, ubicadas aproximadamente entre 200 y 600 pies por debajo de la superficie. El agua se bombea directamente al sistema de distribución o a dos embalses de varios millones de galones . Antes de entrar en nuestro sistema, esta agua subterránea de alta calidad puede someterse a un tratamiento de eliminación de arsénico, tras lo cual se le añade una pequeña cantidad de cloro para minimizar la posibilidad de contaminación bacteriana.

En 2024, Liberty adquirió agua potable de la ciudad de Goodyear. Este informe también resume los datos de las pruebas realizadas por la ciudad de Goodyear.

Evaluación de la fuente de agua

En 2003, ADEQ realizó una evaluación de las fuentes de agua para los 12 pozos de agua subterránea que Liberty utilizaba en ese momento. La evaluación revisó los usos del suelo adyacentes que podrían representar un riesgo potencial para las fuentes. Estos riesgos incluyen, entre otros, gasolineras, vertederos, tintorerías, campos agrícolas, plantas de tratamiento de aguas residuales y actividades mineras. Una vez identificados los usos del suelo adyacentes, se clasificaron según su potencial para afectar la fuente de agua. El resultado de la evaluación fue de bajo riesgo para los 12 pozos de agua subterránea, lo que indica que la mayoría de las medidas de protección de las fuentes de agua ya están implementadas o que la hidrogeología es tal que dichas medidas tendrán poco impacto en la protección. Los residentes pueden ayudar a proteger las fuentes llevando los productos químicos domésticos a los días de recolección de productos químicos peligrosos, realizando un buen mantenimiento de los sistemas sépticos y limitando el uso de pesticidas y fertilizantes. La Evaluación completa del Agua de Origen está disponible para su consulta en ADEQ, 1110 W. Washington St., Phoenix, AZ 85007, o puede solicitar una copia electrónica a ADEQ por correo electrónico: recordscenter@azdeq.gov . Para más información, visite el sitio web de ADEQ: http://azdeq.gov/SourceWaterProtection .

¿Qué son las normas sobre agua potable?

Los estándares de agua potable son las regulaciones establecidas por la USEPA para controlar el nivel de contaminación del agua potable del país. La USEPA y el ADEQ son las agencias responsables de establecer los estándares de calidad del agua potable en Arizona. Este enfoque incluye evaluar y proteger las fuentes de agua potable; proteger los pozos y las aguas superficiales; asegurar que el agua sea tratada por operadores calificados; asegurar la integridad del sistema de distribución; y poner a disposición del público información sobre la calidad del agua. El agua que se entrega a su hogar cumple con los estándares exigidos por la USEPA y el ADEQ.

Este informe describe los contaminantes detectados en los análisis de casi 200 contaminantes potenciales diferentes, casi 100 de los cuales están regulados por la USEPA y el ADEQ. Liberty se enorgullece de informarles que no se han detectado contaminantes que excedan los estándares federales o estatales para el agua potable. Cientos de muestras analizadas mensualmente por el laboratorio certificado por Liberty garantizan el cumplimiento de todos los estándares primarios (relacionados con la salud) y secundarios (estéticos) para el agua potable. Los resultados de las muestras están disponibles en la tabla que forma parte de este informe.

Este informe tiene como objetivo proporcionar información a todos los usuarios de agua. Si lo recibe un propietario ausente, una empresa o una escuela, por favor, comparta la información con inquilinos, empleados o estudiantes. Con gusto pondremos a su disposición copias adicionales de este informe. También puede acceder a él en la página web de Liberty: www.libertyenergyandwater.com .

Sustancias que podrían estar en el agua

Las fuentes de agua potable (tanto agua del grifo como embotellada) incluyen ríos, lagos, arroyos, estanques, embalses, manantiales y pozos. Al circular por la superficie terrestre o a través del suelo, el agua disuelve minerales naturales y, en algunos casos, material radiactivo, y puede absorber sustancias derivadas de la presencia de animales o de la actividad humana. Estas sustancias también se denominan contaminantes.

Los contaminantes que pueden estar presentes en el agua de origen incluyen:

- **Contaminantes microbianos** , semejante como virus y bacterias, cual puede venir de plantas de tratamiento de aguas residuales, sistemas sépticos, operaciones agrícolas y ganaderas y vida silvestre.
- **Contaminantes inorgánicos** , como sales y metales, que pueden estar presentes de forma natural o ser resultado de escorrentías de aguas pluviales urbanas, descargas de aguas residuales industriales o domésticas, producción de petróleo y gas, minería o agricultura.
- **Pesticidas y herbicidas** , que pueden provenir de diversas fuentes, como la agricultura, la escorrentía de aguas pluviales urbanas y el uso residencial. usos.
- **Contaminantes químicos orgánicos** , incluidos los productos químicos orgánicos sintéticos y volátiles, que son subproductos de los procesos industriales y de la producción de petróleo, y que también pueden provenir de gasolineras y aguas pluviales urbanas. escorrentía y fosas sépticas sistemas.
- **Contaminantes radiactivos** , que pueden estar presentes de forma natural o ser resultado de la producción de petróleo y gas y la minería actividades.

Para proteger la salud pública, la USEPA y el ADEQ establecen regulaciones que limitan la cantidad de ciertos contaminantes en el agua suministrada por los sistemas públicos de agua. La Administración de Alimentos y Medicamentos de los Estados Unidos (FDA) también establece límites para los contaminantes en el agua embotellada que brindan la misma protección para la salud pública.

Es razonable esperar que el agua potable, incluida el agua embotellada, contenga al menos pequeñas cantidades de algunos contaminantes. La presencia de contaminantes no implica necesariamente que el agua represente un riesgo para la salud. Puede obtener más información

sobre los contaminantes y sus posibles efectos en la salud llamando a la Línea Directa de Agua Potable Segura de la USEPA al 1-800-426-4791 o visitando su sitio web: https://www.epa.gov/safewater. Para obtener información sobre el agua embotellada, visite el sitio web de la USFDA: www.fda.gov .

¿Necesito tomar precauciones especiales?

Algunas personas pueden ser más vulnerables a los contaminantes del agua potable que la población general. Las personas inmunodeprimidas, como las personas con cáncer que reciben quimioterapia, las personas que se han sometido a trasplantes de órganos, las personas con VIH/SIDA u otros trastornos del sistema inmunitario, algunos ancianos y los bebés, pueden tener un riesgo especial de contraer infecciones. Estas personas deben consultar con sus profesionales de la salud sobre el agua potable. Las directrices de la USEPA y los Centros para el Control y la Prevención de Enfermedades (CDC) sobre las medidas adecuadas para reducir el riesgo de infección por Cryptosporidium y otros microbios... Los contaminantes están disponibles llamando a la línea directa de agua potable segura al 1-800-426-4791.

Información importante de salud

Plomo: El plomo puede causar graves problemas de salud, especialmente en mujeres embarazadas y niños pequeños. El plomo presente en el agua potable proviene principalmente de materiales y componentes asociados con las líneas de servicio y la plomería doméstica.

Liberty Water LPSCO es responsable de proporcionar agua potable de alta calidad y de retirar las tuberías de plomo, pero no puede controlar la variedad de materiales utilizados en los componentes de plomería de su hogar. Usted comparte la responsabilidad de protegerse a sí mismo y a su familia del plomo en las tuberías de su hogar. Puede asumir la responsabilidad identificando y retirando los materiales con plomo de las tuberías de su hogar y tomando medidas para reducir el riesgo para su familia.

Antes de beber agua del grifo, limpie las tuberías durante varios minutos abriendo el grifo, dándose una ducha, lavando la ropa o lavando los platos. También puede usar un filtro certificado por un certificador acreditado por el Instituto Nacional de Estándares Americanos (ANSI) para reducir el plomo en el agua potable.

Para abordar el problema del plomo en el agua potable, los sistemas públicos de agua debían desarrollar y mantener un inventario de los materiales de las líneas de servicio antes del 16 de octubre de 2024. Desarrollar un inventario e identificar la ubicación de las líneas de servicio de plomo (LSL) es el primer paso para comenzar a reemplazarlas y proteger la salud pública. Para obtener más información sobre el inventario o cualquier muestreo de plomo realizado, contáctenos al 1-800-727-5987 o visite https://arizona.libertyutilities.com/avondale/residential/safety/water-quality.html .

Si le preocupa la presencia de plomo en el agua y desea analizarla, contáctenos al 1-800-727-5987. Encontrará información sobre el plomo en el agua potable, los métodos de análisis y las medidas que puede tomar para minimizar la exposición en http://www.epa.gov/safewater/lead .

Arsénico: Si bien el agua potable cumple con el estándar de arsénico de la Agencia de Protección Ambiental de los Estados Unidos (EPA) , contiene niveles bajos de arsénico. El estándar de la EPA equilibra la comprensión actual. de arsénico posible salud efectos contra el El costo de eliminarlo del agua potable. La EPA continúa investigando salud efectos de bajo niveles de arsénico cual es a mineral Se sabe que causa cáncer en humanos en altas concentraciones y está relacionado con otros efectos sobre la salud, como daños en la piel y problemas circulatorios.

Nitratos: Los nitratos en el agua potable, en niveles superiores a 10 ppm, representan un riesgo para la salud de los bebés menores de seis meses. Los

altos niveles de nitratos en el agua potable pueden causar el síndrome del bebé azul. Los niveles de nitratos pueden aumentar rápidamente durante períodos cortos debido a las lluvias o la actividad agrícola. Si está cuidando a un bebé, consulte con su profesional de la salud.

Sustancias perfluoroalquiladas y polifluoroalquiladas (PFAS): Tenga en cuenta que existen miles de PFAS diferentes, algunos de los cuales se han utilizado y estudiado más ampliamente que otros. La investigación científica sugiere que la exposición a ciertos PFAS puede tener consecuencias adversas para la salud. Aún se están realizando investigaciones para determinar cómo se produce la exposición a estos diferentes PFAS y cómo pueden afectar la salud humana.

La exposición al ácido perfluorooctanoico (PFOA) provocó un aumento del peso del hígado y cáncer en animales de laboratorio. La exposición al ácido perfluorooctanosulfónico (PFOS) provocó inmunosupresión y cáncer en animales de laboratorio. La exposición al ácido perfluorohexano sulfónico (PFHxS) provocó una disminución de la hormona tiroidea total en ratas macho. Para obtener información sobre el PFOA, el PFOS y otros PFAS, incluyendo sus posibles consecuencias para la salud, puede visitar estos sitios web: https://www.epa.gov/pfas .

Contaminantes no regulados (UCMR5) – Información sobre PFAS

Su agua potable fue muestreada en 2023 y 2024 para la presencia y concentración de litio, y 29 sustancias perfluoroalquilo y polifluoroalquilo diferentes, algunas conocidas por los acrónimos PFAS, PFOA, PFNA, PFHxS , PFBS y GenX , un grupo de contaminantes en las etapas finales de ser regulados por la EPA. Los PFAS son sustancias químicas artificiales resistentes al calor, al agua y al aceite. Se han utilizado desde la década de 1940 para fabricar diversos productos de consumo, incluyendo espuma contra incendios y artículos resistentes a las manchas, al agua y antiadherentes. Muchos PFAS no se descomponen fácilmente y pueden acumularse en personas, animales y el medio ambiente con el tiempo. Estudios científicos han demostrado que la exposición a ciertos PFAS puede ser perjudicial para personas y animales, dependiendo del nivel y la duración de la exposición.

Para obtener más información sobre este grupo de sustancias químicas, le recomendamos leer la "Hoja informativa PFAS 101" proporcionada por ADEQ y visitar el sitio web de ADEQ en https://www.azdeq.gov/pfas-resources .

¿Cómo puedo participar activamente?

Si desea observar el proceso de toma de decisiones que afecta la calidad del agua potable o si tiene más preguntas sobre su informe de agua potable, llámenos al 1-800-727-5987 para solicitar información sobre reuniones programadas o personas de contacto.

Resultados de la prueba

Durante el año, Liberty recolecta muestras de agua para determinar la presencia de contaminantes radiactivos, biológicos, inorgánicos u orgánicos. Todas las sustancias enumeradas en la tabla a continuación se analizaron por debajo del Nivel Máximo de Contaminante (MCL). En Liberty, es importante que usted sepa qué se detectó y qué cantidad de sustancia estaba presente. El estado permite el monitoreo de ciertas sustancias menos de una vez al año porque sus concentraciones no cambian con frecuencia. Si una sustancia se analizó y no se detectó, no se incluye en esta tabla. Puede encontrar definiciones, términos y abreviaturas relacionados con esta tabla en la siguiente sección para facilitar su consulta.

Informe anual sobre la calidad del agua de Liberty Water LPSCO 2024							
NORMAS PRIMARIAS – Basadas en la Salud							
SISTEMA DE DISTRIBUCIÓN							
Residuos de desinfectante	**¿Violación? (Sí/No)**	**primario (MRDL)**	**PHG (MRDLG)**	**Rango de detección**	**Nivel más alto detectado**	**Fecha de muestreo más reciente**	**Fuente típica de constituyente**
Cloro [como Cl_2] (ppm)	No	(4.0)	4	1 - 1	1	2024	Desinfectante de agua potable añadido para su tratamiento.
Subproductos de desinfección	**¿Violación? (Sí/No)**	**MCL primario**	**PHG (MCLG)**	**Rango de detección**	**Nivel más alto detectado**	**Fecha de muestreo más reciente**	**Fuente típica de constituyente**
TTHM [Total de cuatro trihalometanos] (ppb)	No	80	N / A	ND – 22.5	16	2024	Subproducto de la desinfección del agua potable
HAA5 [Total de cinco ácidos haloacéticos] (ppb)	No	60	N / A	ND – 3.1	2	2024	Subproducto de la desinfección del agua potable
Plomo y cobre (plomería interna residencial)	**¿Violación? (Sí/No)**	**Nivel de acción (NA)**	**PHG (MCLG)**	**#Sitio sobre AL**	**Nivel del percentil 90**	**Fecha de muestreo más reciente**	**Fuente típica de constituyente**
Cobre (ppm)	No	1.3	0.3	0	0.15	2023	Corrosión interna de los sistemas de plomería domésticos; erosión de depósitos naturales; lixiviación de conservantes de madera
Plomo (ppb)	No	15	0.2	0	ND	2023	Corrosión interna de sistemas de plomería domésticos; descargas de fabricantes industriales; erosión de depósitos naturales

FUENTE DE AGUA									
Constituyentes inorgánicos	**¿Violación? (Sí/No)**	**MCL primario**	**MCLG**	**Rango de detección de fuentes Goodyear**	**Resultado más alto o promedio más alto/Goodyear**	**Rango de detección de fuentes Liberty**	**Resultado más alto o promedio más alto/libertad**	**Fecha de muestreo más reciente**	**Fuente típica de constituyente**
Arsénico (ppb)	No	10	0	1-8	8	ND – 24 [a]	7	2024	Erosión de depósitos naturales; escorrentía de huertos, desechos de producción de vidrio y productos electrónicos
Bario (ppm)	No	2	2	0.016-0.19	0,19	0.058 – 0.21	0,21	2024	Erosión de depósitos naturales; descarga de desechos de perforación; descarga de refinerías de metales
Cromo (total) (ppb)	No	100	100	ND-19	19	0 - 13	13	2024	Erosión de depósitos naturales; descargas de fábricas de acero y pulpa y de cromado
Selenio (ppb)	No	50	50	ND-4	4	ND	ND	2024	Erosión de depósitos naturales; descargas de refinerías de petróleo y metales; descargas de minas
Nitrato (ppm)	No	10	10	0.4-10	10	3.87 – 7.03	7	2024	Escorrentía por el uso de fertilizantes; erosión de depósitos naturales; lixiviación de fosas sépticas y aguas residuales
Bromato (ppm)	No	0.01	0	ND-0.016	0.016	N / A	N / A	2024	Subproducto de la cloración del agua potable.
Fluoruro (ppm) [Presencia natural]	No	4.0	4.0	ND-3.46	3.46	ND – 1.64	1.64	2024	Erosión de depósitos naturales; aditivo de agua que promueve dientes fuertes; descarga de fábricas de fertilizantes y aluminio
Compuestos orgánicos volátiles (COV)	**¿Violación? (Sí/No)**	**MCL primario**	**MCLG**	**Rango de detección de fuentes Goodyear**	**Resultado más alto o promedio más alto/Goodyear**	**Rango de detección de fuentes Liberty**	**Resultado más alto o promedio más alto/libertad**	**Fecha de muestreo más reciente**	**Fuente típica de constituyente**
Tricloroetileno (ppb)	No	5	0	ND-1.3	1.3	ND	ND	2024	Descarga de plantas de desengrasado de metales y otras fábricas
Componentes radiológicos	**¿Violación? (Sí/No)**	**MCL primario**	**MCLG**	**Rango de detección de fuentes Goodyear**	**Resultado más alto o promedio más alto/Goodyear**	**Rango de detección de fuentes Liberty**	**Resultado más alto o promedio más alto/libertad**	**Fecha de muestreo más reciente**	**Fuente típica de constituyente**
Alfa bruto (pCi /L)	No	15	0	1.2	1.2	ND-5	3	2024	Erosión de depósitos naturales de ciertos minerales que son radiactivos y pueden emitir una forma de radiación conocida como radiación alfa.

OTROS COMPONENTES									
	¿Violación? (Sí/No)	Nivel de notificación	MCLG	Rango de detección de fuentes Goodyear	Resultado más alto o promedio más alto/Goodyear	Rango de detección de fuentes Liberty	Resultado más alto o promedio más alto/libertad	Fecha de muestreo más reciente	Fuente típica de constituyente
Calcio (ppm)	N / A	N / A	N / A	N / A	N / A	36-80	55	2024	Lixiviación de depósitos naturales
Magnesio (ppm)	N / A	N / A	N / A	N / A	N / A	18-39	28	2024	Lixiviación de depósitos naturales
Sodio (ppm)	N / A	N / A	N / A	82-240	240	72-220	133	2024	Se refiere a la sal presente en el agua y generalmente se produce de forma natural.
Dureza [como CaCO3] (ppm)	N / A	N / A	N / A	N / A	N / A	170-360	256	2024	La suma de cationes polivalentes presentes en el agua, generalmente magnesio y calcio; los cationes suelen estar presentes de forma natural.
Dureza [como CaCO3] (granos/gal)	N / A	N / A	N / A	N / A	N / A	9.9-21.1	14.8	2024	

MONITOREO DE PRODUCTOS QUÍMICOS NO REGULADOS (UCMR5)									
	¿Violación? (Sí/No)	Nivel de notificación	MCLG	Rango de detección de fuentes Goodyear	Resultado más alto o promedio más alto/Goodyear	Rango de detección de fuentes Liberty	Resultado más alto o promedio más alto/libertad	Fecha de muestreo más reciente	Fuente típica de constituyente
perfluorobutanosulfónico (PFBS) (ppt)	N / A	N / A	N / A	ND-13	13	ND-5.9	5.9	2024	Las PFAS son un grupo de sustancias químicas sintéticas que se utilizan en una amplia gama de productos de consumo y aplicaciones industriales, como utensilios de cocina antiadherentes, ropa hidrófuga, telas y alfombras antimanchas, cosméticos, espumas ignífugas, galvanoplastia y productos resistentes a la grasa, el agua y el aceite. Las PFAS se encuentran en la sangre de personas y animales, así como en el agua, el aire, los peces y el suelo en todo Estados Unidos y el mundo.
perfluorobutanoico (PFBA) (ppt)	N / A	N / A	N / A	ND	ND	ND-20.3	20.3	2024	
Ácido perfluoroheptanoico (PFHpA) (ppt)	N / A	N / A	N / A	ND-5	5	ND-3.9	3.9	2024	
Ácido perfluorohexanosulfónico (PFHxS) (ppt)	N / A	N / A	N / A	ND-5	5	ND-17	17	2024	

MONITOREO QUÍMICO NO REGULADO (UCMR5) (Continuación)									
	¿Violación? (Si/No)	Nivel de notificación	MCLG	Rango de detección de fuentes Goodyear	Resultado más alto o promedio más alto/Goodyear	Rango de detección de fuentes Liberty	Resultado más alto o promedio más alto/libertad	Fecha de muestreo más reciente	Fuente típica de constituyente
Ácido perfluorohexanoico (PFHxA) (ppt)	N / A	N / A	N / A	ND	ND	ND-9.1	9.1	2024	Las PFAS son un grupo de sustancias químicas sintéticas que se utilizan en una amplia gama de productos de consumo y aplicaciones industriales, como utensilios de cocina antiadherentes, ropa hidrófuga, telas y alfombras antimanchas, cosméticos, espumas ignífugas, galvanoplastia y productos resistentes a la grasa, el agua y el aceite. Las PFAS se encuentran en la sangre de personas y animales, así como en el agua, el aire, los peces y el suelo en todo Estados Unidos y el mundo.
perfluorononanoico (PFNA) (ppt)	N / A	N / A	N / A	ND-4	4	ND-2.6	2.6	2024	
Ácido perfluorooctanosulfónico (PFOS) (ppt)	N / A	N / A	N / A	ND-7	7	ND-12.4	12.4	2024	
Ácido perfluorooctanoico (PFOA) (ppt)	N / A	N / A	N / A	ND-4	4	ND-10.2	10.2	2024	
Ácido perfluoropentanoico (PFPeA) (ppt)	N / A	N / A	N / A	ND-3	3	ND-12.5	12.5	2024	
Litio (ppb)	N / A	N / A	N / A	56-196	196	72.7-166	166	2024	Metal de origen natural que puede concentrarse en aguas salobres; las sales de litio se emplean como productos farmacéuticos, en celdas electroquímicas, baterías y en síntesis orgánicas.

(a) Problema operativo. Se tomó una muestra de confirmación con un resultado de 3,4 ppb.

Tabla de infracciones

Regla del agua subterránea			
La Norma sobre Aguas Subterráneas especifica el uso apropiado de la desinfección al tiempo que aborda otros componentes de los sistemas de aguas subterráneas para garantizar la protección de la salud pública.			
Tipo de infracción	**Inicio de la infracción**	**Fin de la infracción**	**Explicación de la infracción**
DEFICIENCIA DE DIRECCIÓN DE FALLO (GWR)	25/12/2023	2024	No respondimos adecuadamente a una deficiencia importante en nuestro sistema de agua.

Definiciones, términos y abreviaturas

AL : Nivel de acción, o la concentración de un contaminante que, cuando se excede, desencadena el tratamiento u otros requisitos que un sistema de agua debe seguir.

Contaminante: Cualquier sustancia o materia física, química, biológica o radiológica presente en el agua.

HAA5 : Ácidos haloacéticos (ácido mono-, di- y tricloroacético, y ácido mono- y dibromoacético) como grupo.

Herbicida: Cualquier producto químico utilizado para controlar la vegetación indeseable.

Evaluación de nivel 1: Un estudio del sistema de agua para identificar problemas potenciales y determinar (si es posible) por qué se han encontrado bacterias coliformes totales en nuestro sistema de agua.

Evaluación de nivel 2: Un estudio muy detallado del sistema de agua para identificar problemas potenciales y determinar (si es posible) por qué se ha producido una violación del MCL de E. coli y/o por qué se han encontrado bacterias coliformes totales en nuestro sistema de agua en múltiples ocasiones.

LRAA : Promedio móvil anual por ubicación, o promedio por ubicación de los resultados analíticos de muestras tomadas durante los cuatro trimestres calendario anteriores.

MCLG : El Objetivo de Nivel Máximo de Contaminante (MCLG) es el nivel de un contaminante en el agua potable por debajo del cual no existe ningún riesgo conocido o esperado para la salud. Los MCLG son establecidos por la Agencia de Protección Ambiental de los Estados Unidos.

MCL: El Nivel Máximo de Contaminante (MCL) es el nivel máximo de un contaminante permitido en el agua potable. Los MCL primarios se establecen lo más cerca posible de los PHG (o MCLG) que sea económica y tecnológicamente viable. Los MCL secundarios se establecen para proteger el olor, el sabor y la apariencia del agua potable.

MCL : Nivel máximo de contaminante, o el nivel más alto de un contaminante que se permite en bebida agua. MCL son colocar como cerca a los MCLG tan pronto como sea posible usando el mejor Tecnología de tratamiento disponible.

MRDL : Nivel Máximo Residual de Desinfectante (MRDL) es el nivel máximo de desinfectante permitido en el agua potable. Existe evidencia convincente de que la adición de un desinfectante es necesaria para controlar los contaminantes microbianos.

MRDLG : Objetivo de Nivel Máximo Residual de Desinfectante. Es el nivel de desinfectante para agua potable por debajo del cual no existe ningún riesgo conocido ni previsto para la salud. Los MRDLG no reflejan los beneficios del uso de desinfectantes para controlar los contaminantes microbianos.

N/A : no aplicable.

ND : no detectable en los límites de prueba.

NTU : Unidad de turbidez nefelométrica, utilizada para medir la turbidez en el agua potable.

pCi /L : picocurios por litro, una medida de radiactividad.

PDWS: Los estándares primarios de agua potable son MCL, MRDL y técnicas de tratamiento (TT) para contaminantes que afectan la salud, junto con sus requisitos de monitoreo y presentación de informes.

Pesticida: En general, cualquier sustancia o mezcla de sustancias destinadas a prevenir, destruir, repeler o mitigar cualquier plaga.

ppb : partes por mil millones o microgramos por litro.

ppm : partes por millón o miligramos por litro.

ppt : partes por billón o nanogramos por litro.

PHG: Objetivo de salud pública es el nivel de un contaminante en el agua potable por debajo del cual no existe ningún riesgo conocido o esperado para la salud.

RAA : Promedio anual móvil, o el promedio de los resultados analíticos de muestras tomadas durante los cuatro trimestres calendario anteriores.

Rango de resultados : muestra los niveles más bajos y más altos encontrados durante un período de prueba, si solo se tomó una muestra, entonces este número es igual al resultado de prueba más alto o al valor más alto.

SMCL : Nivel Máximo de Contaminante Secundario, o las normas secundarias que constituyen directrices no vinculantes para contaminantes y que pueden causar efectos cosméticos (como decoloración de la piel o los dientes) o estéticos (como sabor, olor o color) en el agua potable. La EPA recomienda estas normas, pero no exige que los sistemas de agua las cumplan.

TT : Técnica de tratamiento, o proceso requerido destinado a reducir el nivel de un contaminante en el agua potable.

TTHM : Trihalometanos totales (cloroformo, bromodiclorometano, dibromoclorometano y bromoformo) como grupo.

Consejos de conservación para consumidores

¿Sabías que un hogar promedio en Estados Unidos usa aproximadamente 400 galones de agua al día, o 100 galones por persona al día? Afortunadamente, existen muchas maneras económicas y gratuitas de conservar agua. Pequeños cambios pueden marcar una gran diferencia: prueba uno hoy y pronto te resultará natural.

- ✓ Tome duchas cortas: una ducha de 5 minutos utiliza entre 4 y 5 galones de agua, en comparación con los 50 galones que se utilizan para un baño.
- ✓ Cierre el agua mientras se cepilla los dientes, se lava el cabello o se afeita y ahorre hasta 500 galones al mes.

- ✓ Use un cabezal de ducha de bajo consumo de agua. Son económicos, fáciles de instalar y pueden ahorrarle hasta 750 galones al mes.
- ✓ Use la lavadora y el lavavajillas solo cuando estén llenos. Puede ahorrar hasta 1000 galones al mes.
- ✓ Riega las plantas sólo cuando sea necesario.
- ✓ Repare los inodoros y grifos que gotean. Las arandelas de los grifos son económicas y se cambian en solo unos minutos. Para comprobar si su inodoro tiene una fuga, coloque unas gotas de colorante alimentario en el tanque y espere. Si se filtra en la taza sin tirar de la cadena, tiene una fuga. Repararlo o reemplazarlo por un modelo nuevo y más eficiente puede ahorrar hasta 1000 galones al mes.
- ✓ Ajuste los aspersores para que solo se riegue el césped. Aplique agua solo tan rápido como la tierra pueda absorberla y durante las horas más frescas del día para reducir la evaporación.
- ✓ Enseñe a sus hijos a conservar el agua para asegurar una futura generación que la use con prudencia. ¡Hagamos un esfuerzo familiar para reducir la factura del agua del próximo mes!
- ✓ Visite https://www.epa.gov/watersense para obtener más información.

Información del contacto

Para obtener información sobre este informe o la calidad del agua en general, comuníquese con la oficina de Liberty al 1-800-727-5987 o con Paul Friedman al (623) 243-3748 o Paul.Friedman@Libertyutilities.com .

DIRECT TESTIMONY OF TERRY GILBERTSON

ON BEHALF OF LIBERTY UTILITIES (LITCHFIELD PARK WATER & SEWER) CORP.

June 30, 2025

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I. INTRODUCTION AND QUALIFICATIONS

Q. Please state your name, employer and occupation.

My name is Terry Gilbertson. I am employed by Liberty Utilities Service Corp. as Senior Operations Manager. In that role, I am responsible for water and wastewater operations for Liberty Utilities (Litchfield Park Water & Sewer) Corp. ("Liberty Litchfield Park" or the "Company").

Q. Please describe your experience and qualifications.

A. I have 16 years of experience in the drinking water and wastewater industry. In June 2009, I joined Liberty Utilities Service Corp. as an Operator at the Palm Valley Water Reclamation Facility. In 2013, I became Supervisor of Operations in the Collections department, and in 2015, I became the Supervisor of Operations in the Wastewater treatment department. In 2021, I was promoted to Manager of Operations for Liberty Litchfield Park and Beardsley utilities. In 2023, I was promoted to Senior Manager of Operations. I have a bachelor's degree in Integrated Studies with a primary focus on Business and Operational Leadership.

I currently hold the following certifications in the State of Arizona: Grade IV – Water Treatment and Distribution; Grade IV – Wastewater Treatment and Collections.

Q. Have you previously testified before the Commission?

A. Yes. I provided testimony in Liberty's recent consolidated rate cases (Docket Nos. W-02074A-23-0337 et al.).

II. PURPOSE OF TESTIMONY

Q. What is the purpose of your testimony?

A. My testimony focuses on Liberty Litchfield Park's current operations; the Company's l capital investments since the last rate case, including a summary of major projects and in-service date; the Company's in-service used and useful capital investments for Post Test Year Plant; and Liberty Litchfield Park's Post Test Year Plant that is not yet in service but will be in service by the end of 2025.

III. DESCRIPTION OF LIBERTY LITCHFIELD PARK'S PLANT AND OPERATIONS

Q. Please provide an overview of Liberty Litchfield Park.

A. As discussed by Mr. Thompson, Liberty Litchfield Park has provided water and wastewater service to the West Valley community for many years, including to customers in the City of Litchfield Park and portions of the Cities of Goodyear, Avondale, and Glendale.

As of December 31, 2024, Liberty Litchfield Park has 24,205 wastewater customers, broken down as follows, by class:

Class	Number of Customers
Residential	23,533
Multi-family	184
Commercial Measured	488

In addition, as of December 31, 2024, the Company has 22,355 water customers, broken down as follows, by class:

Class	Number of Customers
Residential	20,407
Commercial/Non-Residential	500
Irrigation	891
Multi-family	221

Fire	334
Bulk	2

Liberty Litchfield Park also provides water and wastewater service to the Wigwam Resort and bulk water service to Luke Air Force Base, City of Goodyear, and Valley Utilities Water Company.

Q. Please describe Liberty Litchfield Park's Water System.

A. The Company's water supply is comprised entirely of groundwater pumped from wells located within the service area. There are currently sixteen operating wells. Four of the wells pump directly into the distribution system for delivery to customers. Several of the wells pump to two reservoirs—the Town Well reservoir and the Airline reservoir with an approximate combined capacity of 10.4 million gallons, where the water is treated, blended, and chlorinated.

Q. Please describe Liberty Litchfield Park's Wastewater Treatment Facilities.

A. The Company owns and operates two wastewater treatment facilities: the Palm Valley Water Reclamation Facility ("WRF") and the Sarival WRF. A history and description of those facilities is provided by Mr. Garlick.

Q. Is Liberty Litchfield Park in compliance with relevant ADEQ and the ACC rules and regulations?

A. Yes, the Company is currently in compliance with the rules and regulations of the Arizona Department of Environmental Quality and Arizona Corporation Commission.

Q. Please discuss Liberty Litchfield Park's approach to safety.

A. Liberty Litchfield Park prides itself on its safety performance. Due to the continuous focus on safety, Liberty Litchfield Park has had no Loss Time Incidents in over 8 years. All meetings of five or more participants requires a Safety Moment to be shared prior to moving to the meeting topic. Liberty Litchfield Park supervisors hold weekly safety tailgate meetings with our staff to discuss a

common safety topic, hold morning huddles to discuss the tasks of the day and the potential hazards of these tasks and how to mitigate these hazards. All Liberty Litchfield Park staff have the right to Stop Work in the event of an unsafe situation and work on correcting the unsafe situation before resuming the work. Management holds monthly safety meetings to review the safety performance metrics and discuss any near misses and the corrective actions associated with these near misses.

IV. CAPITAL PROJECTS COMPLETED SINCE LAST RATE CASE

Q. What capital investments has Liberty Litchfield Park made since the last rate case filed in 2017?

A. Since the last rate case, Liberty Litchfield Park has made substantial capital investments of over $67 million for its water system and approximately $157 million for its wastewater system. In addition to these capital projects, Manasa Rao's testimony provides a discussion of the enterprise-wide Customer First and Cybersecurity investments allocated to Liberty Litchfield Park.

A summary of capital investments since the last rate case to the end of the 2024 test year is provided in Appendix TG_Dir.1 for water and Appendix TG_Dir.2 the wastewater division.

V. POST TEST YEAR PLANT

Q. Have you prepared a schedule for post test year plant ("PTYP") actual costs?

A. Yes, a summary of post test year plant by asset class, through December 31, 2025, is included in Appendix TG_Dir.1 for water and Appendix TG_Dir.2 the wastewater division. The PTYP summary represents projected costs for capital

investments through December 31, 2025 that we are seeking for recovery in this rate case. Ms. Rao's testimony provides a further discussion in support of recovery of PTYP.

Q. Can you discuss some of the notable PTYP projects?

A. Liberty Litchfield Park is projecting to invest over $8 million into the development and fitting of Monument Point well site, which is expected to be in service in Q3 2025. This well site will greatly improve the reliability of service for our Liberty Litchfield Park customers by providing an additional 600 gallons per minute or 0.86 million gallons per day into the distribution system.

VI. NOTABLE PLANT ADDITIONS

Q. Please discuss some of the notable water projects completed by the Company.

A. Since the last rate case Liberty Litchfield Park has recently brought online three new wells at a cost of $19.6 million: Marbella Well #1, Marbella Well #2, and Well 19B. These new assets have added approximately 1.75 million gallons per day of new water into the distribution system. This additional water enables Liberty Litchfield Park to provide safe and reliable water service at the pressures that our customers expect while maintaining sufficient volume of storage to support demand.

Additionally, these wells required treatment measures to provide the highest quality of water for our customers. Marbella wells #1 and #2 require Arsenic treatment. Liberty Litchfield Park has incorporated a pH adjustment system that provides a more efficient removal of the Arsenic constituent during the treatment process while extending media life. This system then adjusts the pH back to a neutral level before entering the distribution system to ensure an aesthetically pleasing product.

Well 19B requires an advanced method of treatment to remove the Nitrate constituent in the groundwater. Liberty Litchfield Park has incorporated Reverse Osmosis, which is the best solution to remove the nitrate and provide safe and high-quality water to our customers.

Q. Can you describe some of the other water capital investments made by the Company since the last rate case?

A. Yes, since the last rate case, Liberty Litchfield Park has made several necessary upgrades to the production and distribution systems as discussed below.

a. Pressure Regulating Valves ("PRV"): Liberty Litchfield Park has implemented pressure zones within the distribution system to maintain a more consistent water pressure throughout the upper and lower areas of the distribution system for increased reliability. The Company installed four PRVs along the Camelback Road corridor of the utility to split the distribution system into two zones: Zone 1 is the lower elevation south of Camelback Road, and Zone 2 is the higher elevation north of Camelback Road. These PRVs maintain a set pressure in Zone 2 that is supplied by Liberty's Airline reservoir booster station and Zone 1 is maintained by Liberty's Townwell reservoir booster station.

b. Pressure transducers: The Company installed twenty pressure transducers throughout the distribution system to continuously monitor, in real time, the water pressure throughout the system. Should a transducer fall below a minimum set point, it sends an alert via text, email, and phone call to alert our staff of the current pressures. Company personnel can then respond appropriately to correct the issue in that location of the distribution system to bring the pressure back within the specified levels.

c. Metering Equipment – Liberty Litchfield Park continues to expand its radio read metering through the installation of new meters and Encoder Receiver

Transmitter units compatible with radio read technology for all new build connections and all replacement orders. This continues to improve meter route read efficiency. Liberty Litchfield Park is currently at 75% radio read and 25% touch read.

d. Pump replacements - Several well sites had the pumps inspected and replaced. These replacements increased the reliability and efficiency of the well sites.

e. Booster Pumps: Liberty Litchfield Park also upgraded several booster pumps at the Townwell and Airline reservoirs. These improvements increased the reliability and efficiency of water distribution to customers.

f. Other Treatment: Liberty Litchfield Park has replaced the pH adjustment system at the Townwell reservoir with new CO2 tank storage to eliminate material loss due to leakage. Liberty Litchfield Park has also installed a pH adjustment system at the Airline reservoir to increase treatment efficiency of Arsenic removal. This will allow Liberty Litchfield Park to treat a larger volume of flow.

Q. Mr. Garlick discusses the Sarival Wastewater Treatment Facility. Please discuss any notable wastewater improvements other than the Sarival WRF.

A. Liberty Litchfield Park is made several necessary investments in maintaining the sewer collection system.

- **Waste Water Treatment** – Liberty Litchfield Park invested $2.2 million into the Palm Valley Water Reclamation Facility to extend the useful life of the equalization basin by performing a bypass operation that allowed for a regrouting procedure to recover compromised areas of the walls and ceiling of the basin due to hydrogen sulfide (H2S) attack. This procedure will extend the useful life of the basin by approximately 10 years.
- **Solar Peak Power Reduction** – The Company invested $2.4M to install solar panel collector assemblies that charge onsite Tesla batteries at the

Palm Valley Water Reclamation Facility. This system lowers the cost of each kilowatt by reducing the Peak Demand charges applied by the provider. The Tesla batteries take the full load demand of equipment starting up off of the provider grid and transfer the demand to our batteries until the full load demand is completed. In doing this, the provider does not see the peak demand on the system and reduces the cost per kilowatt due to the reduced peak demand load, essentially making each kilowatt cheaper and reducing the energy cost of treatment at the Palm Valley Water Reclamation Facility.

- **Other** – Liberty Litchfield Park purchased a combination vacuum/jetter truck. to perform the cleaning functions of the sewer collection system internally and reduce its reliance on outside contractors thus, reducing operational costs of maintaining the sewer collection system. This combo truck also enables the Company to be proactive and responsive to customer concerns regarding odors and/or blockages as staff can be dispatched right away versus a relying upon a contractor's availability.

Q. **Turning to the Sarival Water Reclamation Facility, do you have anything to add to Mr. Garlick's testimony?**

A. With the installation of the Sarival WRF, Liberty Litchfield Park is engaging some of the latest technologies in wastewater treatment including use of a Membrane Bioreactor (MBR). In the MBR process, wastewater is treated with a biological process and then filtered through hollow fiber membranes. These hollow fiber membranes are assembled into cassettes that contain thousands of the hollow fiber membranes and are capable of removing particulates, including *e. coli*, from the treated process stream. With this highly filtered effluent water the disinfection process is much more efficient as it reduces the amount of sodium hypochlorite required to achieve sufficient disinfection to meet permit requirements and produces a high-quality A+ effluent for distribution to the reuse system.

Q. Please discuss any notable recharge projects.

A. To increase the recharge efficiency of the Sustainable Effluent Aquifer Project (SEAP), Liberty Litchfield Park has retrofitted two of the four percolation basins to a trench and bore system. Recognizing the inefficiency of the standard percolation method of recharge, LPSCO performed a pilot test outside of the basins to test the efficiency of the trench and bore technology. The pilot proved that the trench and bore recharge efficiency was much better than that of the percolation method and basins two and three have been retrofitted. This has increased the recharge from approximately 1200-acre feet per year to over 2400-acre feet per year. Liberty Litchfield Park was able to revise the current Aquifer Protection Permit to the phase two build out capacity without additional recharge basin construction costs.

Q. Does this conclude your testimony?

A. Yes.

Liberty Utilities (Litchfield Park Water & Sewer Corp) - Water
Appendix TG_Dir.1

Line No.	NARUC	Account Description	[A] Gross Utility Plant per last rate case*	[B] Plant Additions 01/01/2017 - 12/31/2024	[C] Plant Additions Post Test Year	[D] Gross Utility Plant Current Rate Case	[E] = [D] - [A] Increase (Decrease)
1	301	Organization Cost	$ 21,100	$ (10)	$ -	$ 21,090	$ (10)
2	302	Franchise Cost	-	-	-	-	-
3	303	Land and Land Rights	1,511,979	1,582,077	-	3,094,055	1,582,077
4	304	Structures & Improvements	26,144,217	5,761,798	-	31,906,016	5,761,798
5	305	Collecting & Impounding Reservoirs	-	-	-	-	-
6	306	Lake, River, Canal Intakes	-	-	-	-	-
7	307	Wells & Springs	3,445,357	11,726,746	6,757,850	21,929,952	18,484,596
8	308	Infiltration Galleries	-	-	-	-	-
9	309	Raw Water Supply Mains	947,593	3,287,074	-	4,234,667	3,287,074
10	310	Power Generation Equipment	466,388	65,670	-	532,059	65,670
11	310.1	Solar Generator	2,247,645	-	-	2,247,645	-
12	311	Pumping Equipment	1,271,168	7,316,309	307,500	8,894,977	7,623,809
13	320	Water Treatment Equipment	-	5,602,397	-	5,602,397	5,602,397
14	320.1	Water Treatment Plants	4,881,662	1,673,759	-	6,555,421	1,673,759
15	320.2	Solution Chemical Feeders	11,415	25,243	20,625	57,283	45,868
16	330	Distribution Reservoirs & Standpipes	0	1,052,044	-	1,052,045	1,052,044
17	330.1	Storage Tanks	1,494,112	(582,128)	-	911,984	(582,128)
18	330.2	Pressure Tanks	490,054	(0)	-	490,054	(0)
19	331	Transmission & Distribution Mains	42,626,597	7,970,743	609,363	51,206,703	8,580,105
20	333	Services	6,384,313	1,398,382	110,000	7,892,695	1,508,382
21	334	Meters	7,701,772	3,541,059	210,000	11,452,831	3,751,059
22	335	Hydrants	3,549,046	430,584	15,125	3,994,755	445,709
23	336	Backflow Prevention Devices	38,281	63,146	-	101,427	63,146
24	339	Other Plant & Misc Equipment	315,805	118,853	-	434,658	118,853
25	340	Office Furniture & Equipment	682,180	126,933	-	809,113	126,933
26	340.1	Computers & Software	17,193	27,524	-	44,717	27,524
27	341	Transportation Equipment	796,769	238,629	-	1,035,398	238,629
28	341.1	Transportation Equipment - Golf Carts	29,255	-	-	29,255	-
29	342	Stores Equipment	37,143	-	-	37,143	-
30	343	Tools, Shop & Garage Equipment	82,680	65,451	16,500	164,631	81,951
31	344	Laboratory Equipment	15,537	0	-	15,537	0
32	345	Power Operated Equipment	18,956	0	-	18,956	0
33	346	Communication Equipment	709,192	903,467	-	1,612,659	903,467
34	347	Miscellaneous Equipment	-	36,881	-	36,881	36,881
35	347.1	Miscellaneous Equipment - CNG Plant	468,467	32	-	468,499	32
36	348	Other Tangible Plant	130,462	(10,637)	-	119,825	(10,637)
37		**Total Gross Utility Plant**	**$ 106,536,337**	**$ 52,422,025**	**$ 8,046,963**	**$ 167,005,324**	**$ 60,468,987**
38							
39				**Allocated Corporate Plant**			
40			**Per last rate case**	**Additions (2017-2024)**	**PTY Plant**	**Current Rate Case Gross Plant**	**Increase (Decrease)**
41	903	Land and Land Rights	$ 35,676	$ 26,060	$ -	$ 26,060	$ (10,615)
42	904	Structures and Improvments	489,213	940,326	-	940,326	451,112
43	940	Office Furniture and Fixtures	62,500	251,247	-	251,247	188,747
44	940.1	Computers and Software	851,809	997,763	236,265	1,234,029	382,220
45	940.2	Customer First	-	5,897,151	-	5,897,151	5,897,151
46	955	Power Generation	-	705	-	705	705
47	995	Power Operated Equipment	-	116,519	-	116,519	116,519
48	997	Miscellaneous Equipment	4,031	-	-	-	(4,031)
49		**Total Allocated Corporate Plant**	**$ 1,444,228**	**$ 8,229,771**	**$ 236,265**	**$ 8,466,036**	**$ 7,021,808**
50							
51		**Combined TOTAL**	**$ 107,980,565**	**$ 60,651,796**	**$ 8,283,228**	**$ 175,471,361**	**$ 67,490,795**
52							
53		***Gross Plant approved per last rate case includes plant as of 12.31.2016 and certain Post Test Year Plant for 2017**					

Liberty Utilities (Litchfield Park Water & Sewer Corp) - Sewer
Appendix TG_Dir.2

Line No.	NARUC	Account Description	[A] Gross Utility Plant per last rate case*	[B] Plant Additions 01/01/2017 - 12/31/2024	[C] Plant Additions Post Test Year	[D] Gross Utility Plant Current Rate Case	[E] = [D] - [A] Increase / (Decrease)
1	351	Organization	$ -	$ (3,211)	$ -	$ (3,211)	$ (3,211)
2	352	Franchise	-	$ 29,596	$ -	$ 29,596	29,596
3	353	Land	4,163,584	$ 21,708	$ -	$ 4,185,292	21,708
4	354	Structures & Improvements	33,097,953	$ 51,753,695	$ -	$ 84,851,648	51,753,695
5	355	Power Generation	605,351	$ 4,722,794	$ -	$ 5,328,145	4,722,794
6	355.1	Solar Generation	-	$ -	$ -	$ -	-
7	360	Collection Sewer Forced	1,716,700	$ 11,593,836	$ -	$ 13,310,536	11,593,836
8	361	Collection Sewers Gravity	33,315,925	$ 21,329,472	$ 274,583	$ 54,919,980	21,604,055
9	362	Special Collecting Structures	-	$ -	$ -	$ -	-
10	363	Customer Services	302,331	$ 1,144,029	$ 41,250	$ 1,487,610	1,185,279
11	364	Flow Measuring Devices	153,078	$ 19,047	$ -	$ 172,125	19,047
12	365	Flow Measuring Installations	-	$ -	$ -	$ -	-
13	366	Reuse Services	4,078,105	$ 75,374	$ -	$ 4,153,479	75,374
14	367	Reuse Meters And Installation	51,431	$ 168,050	$ -	$ 219,481	168,050
15	370	Receiving Wells	860,393	$ 212,364	$ -	$ 1,072,757	212,364
16	371	Pumping Equipment	3,788,912	$ 4,623,567	$ 256,437	$ 8,668,916	4,880,004
17	374	Reuse Distribution Reservoirs	65,916	$ 1,633,018	$ -	$ 1,698,934	1,633,018
18	375	Reuse Trans. and Dist. System	729,030	$ 684,010	$ -	$ 1,413,040	684,010
19	380	Treatment & Disposal Equipment	20,915,651	$ 25,581,193	$ 214,812	$ 46,711,657	25,796,006
20	380.1	Odor Control GAC	-	$ -	$ -	$ -	-
21	381	Plant Sewers	6,816,496	$ 15,731,797	$ -	$ 22,548,293	15,731,797
22	382	Outfall Sewer Lines	343,681	$ -	$ -	$ 343,681	-
23	389	Other Sewer Plant & Equipment	839,750	$ -	$ -	$ 839,750	-
24	390	Office Furniture & Equipment	331,367	$ 185,248	$ -	$ 516,616	185,248
25	390.1	Computers and Software	192,129	$ 264,968	$ -	$ 457,098	264,968
26	391	Transportation Equipment	331,469	$ 71,985	$ -	$ 403,454	71,985
27	392	Stores Equipment	8,968	$ -	$ -	$ 8,968	-
28	393	Tools, Shop And Garage Equip	375,781	$ 268,404	$ 13,200	$ 657,385	281,604
29	394	Laboratory Equip	201,290	$ 24,025	$ -	$ 225,315	24,025
30	395	Power Operated Equipment	61,831	$ 438,372	$ -	$ 500,203	438,372
31	396	Communication Equip	1,429,409	$ 4,707,843	$ 160,000	$ 6,297,253	4,867,843
32	397	Misc Equipment	331,743	$ 44,239	$ -	$ 375,982	44,239
33	397.1	Misc Equipment CNG	291,453	$ 27,073	$ -	$ 318,526	27,073
34	398	Other Tangible Plant	-	$ 79,028	$ -	$ 79,028	79,028
35		**Total Gross Utility Plant**	**$ 115,399,727**	**$ 145,431,525**	**$ 960,283**	**$ 261,791,535**	**$ 146,391,808**
36							
37					**Allocated Corporate Plant**		
38			**Per last rate case**	**Additions (2017-2024)**	**PTY Plant**	**Current Rate Case Gross Plant**	**Increase (Decrease)**
39	903	Land and Land Rights	40,298	$ 37,777	$ -	$ 37,777	$ (2,522)
40	904	Structures and Improvments	538,374	$ 1,355,038	-	1,355,038	816,664
41	940	Office Furniture and Fixtures	68,672	$ 361,396	-	361,396	292,723
42	940.1	Computers and Software	935,014	$ 1,435,188	339,845	1,775,034	840,020
43	940.2	Customer First		$ 8,482,495	-	8,482,495	8,482,495
44	955	Power Generation		$ 1,014	-	1,014	1,014
45	995	Power Operated Equipment		167,601	-	167,601	167,601
46	947	Miscellaneous Equipment	4429			-	(4,429)
47		**Total Allocated Corporate Plant**	**$ 1,586,787**	**$ 11,840,509**	**$ 339,845**	**$ 12,180,354**	**$ 10,593,567**
48							
49		**Combined TOTAL**	**$ 116,986,515**	**$ 157,272,034**	**$ 1,300,129**	**$ 273,971,889**	**$ 156,985,375**
50							
51		***Gross Plant approved per last rate case includes plant as of 12.31.2016 and certain Post Test Year Plant for 2017**					

DIRECT TESTIMONY OF MANASA RAO

ON BEHALF OF LIBERTY UTILITIES (LITCHFIELD PARK WATER & SEWER) CORP.

June 30, 2025

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I. INTRODUCTION AND QUALIFICATIONS

Q. Please state your name, employer, and occupation.

My name is Manasa Rao. I am employed by Liberty Utilities Service Corp. as the Senior Director Rates & Regulatory Affairs (West Region). As the Senior Director of Rates & Regulatory Affairs for the West Region, I am responsible for the development and execution of the regulatory strategy, including rate cases and other regulatory matters for Liberty's regulated operations in Arizona, California, and Texas, including Liberty Utilities (Litchfield Park Water & Sewer) Corp. ("Liberty Litchfield Park" or the "Company").

Q. Please describe your experience and qualifications.

A. Prior to my present role as the Senior Director of Rates & Regulatory Affairs for the West Region, I was the Director of Financial Planning & Analysis, West Region for two years. Prior to that, I was employed by Liberty Utilities (Canada) Corp. for over seven years in various finance related positions, including Manager, External Reporting and Senior Manager, Financial Planning & Analysis. I received my bachelor's degree in business administration from Truman State University, Missouri in 2004 and hold a Chartered Professional Accountant (CPA, CMA) designation from Canada.

Q. Have you previously testified before the Commission?

A. Yes, I provided written and oral testimony before the Arizona Corporation Commission ("Commission") for Liberty's consolidated rate case for Beardsley Water, Bella Vista Water, Cordes Lakes Water, and Rio Rico Water & Sewer (Docket No. W-02074A-23-0337 et al.). I have also previously provided written and oral testimony before the California Public Utility Commission in general rate case and cost of capital proceedings.

II. OVERVIEW OF LIBERTY LITCHFIELD PARK'S APPLICATION

Q. What is the purpose of your testimony?

A. In my testimony, I provide an overview of Liberty Litchfield Park's rate application for both its water and wastewater divisions. The Company's current rates were established in Decision No. 76799 (August. 15, 2018) based on a test year ending December 31, 2016. Since then, the Company has made significant investments—most notably the Sarival Water Reclamation Facility ("WRF") and several new wells. Those investments combined with increased expenses, costs of capital projects, and interest rates have significantly altered the financial realities we face in providing safe and reliable service to our customers. My testimony will summarize the impact of these changes on the Company's revenue requirement. I will also address rate case expenses, proposed Plant-in-service adjustments including Post Test Year Plant (PTYP) adjustments, and the Sarival Accounting Order. Additionally, I will also discuss the Company's request for a Cost of Service Reconciliation Mechanism ("CSRM") that is consistent with the Commission's Policy Statement Regarding Formula Rates ("Policy Statement"). (Decision No. 79647).

Q. Can you summarize Liberty Litchfield Park's request for new rates?

A. Yes. As reflected on its divisions' respective A-1 Schedules, the Company is requesting the following increases in annual revenues:

- Liberty Litchfield Park's water division proposes an increase in annual revenues of $6,203,028 or 38.40% based on a fair value rate base of $69,765,704 and a required operating income of $5,893,283 premised on an 8.45% rate of return on rate base.
- Liberty Litchfield Park's wastewater division proposes an increase in annual revenues of $11,586,379 or 53.76% based on a fair value rate base of

$133,887,159 and a required operating income of $11,309,783 premised on an 8.45% rate of return on rate base.

As discussed in more detail by Mr. Bourassa in his testimony, the Company's schedules support the fair value rate base and operating income noted above. The overall rate of return is based upon a capital structure consisting of 54 percent equity and 46 percent debt, with a return on equity of 10.80 percent.

Q. Under Liberty Litchfield Park's proposal, what is the average bill impact on residential customers?

A. The average bill impacts based on the Company's requested revenue increase are found in H Schedules sponsored by Mr. Bourassa and are summarized as follows:

Division	Meter Size	Avg. Use (gallons)	Current Bill	Proposed Bill	Change ($)
Water	¾ Inch	8,150	$24.16	$34.60	$10.43
Wastewater	N/A	N/A	$45.23	$69.72	$24.49

Q. Does that account for rate case expense?

A. No, Liberty Litchfield Park is requesting a rate case surcharge. The monthly rate case expense surcharge will be collected from customers over three years and is currently estimated at $0.43 for the Company's water division and $0.52 for the wastewater division.

Q. Why is the Company proposing to recover rate case expense through a surcharge?

A. Liberty Litchfield Park understands that rate case expense surcharges are becoming more frequent in Arizona as a means of ensuring that utilities recover their authorized rate case expense. As long as utilities are allowed an actual chance to recover the full amount of authorized rate case expense, this process should ultimately be fair to the Company and customers.

Q. How much is the Company requesting for rate case expense?

A. At this time, we can only estimate rate case expense. Based on recent Liberty Utility rate cases, we estimate that Liberty Litchfield Park will likely incur a rate case expense of no less than $800,000. That amount could increase or decrease depending on factors including, but not limited to, the number of intervenors, scope of discovery, number of issues in dispute, length of the hearing, and need for closing briefs.

Q. Given that you can only estimate this expense, could the Company modify its request later in these proceedings?

A. Yes, Liberty Litchfield Park may adjust the rate case expense as necessary to more closely approximate the expenses incurred.

Q. Why are you recommending a three-year recovery?

A. Because it is likely that Liberty Litchfield Park will file another rate case within three years of a decision in this matter.

III. PLANT ADDITIONS

Q. Please summarize plant-in-service adjustments included in Liberty Litchfield Park's water and wastewater divisions' rate bases.

A. There are five plant-in-service ("PIS") adjustments included in the water and wastewater divisions' rate bases as shown in Adjustment 1 on Schedule B-2, page 2. These adjustments are shown on Schedule B-2, page 3, and are labeled as adjustments "A", "B", "C", "D" and "E".

- Adjustment 1-A of B-2 reflects corporate plant allocated to Liberty Litchfield Park, including the Customer First investment. I discuss the Customer First project in more detail later in my testimony.

- Adjustment 1-B of B-2 reflects the Company's proposed post-test year plant ("PTYP"), which I discuss in more detail later in section IV of my testimony.
- Adjustment 1-C of B-2 reflects the Company's capitalized overhead related adjustments. Consistent with the Company's last rate case, a 21 percent capitalized overhead rate related to allocated corporate shared services was utilized for rate base additions from 2017 through April 2022. From May 2022 onward, consistent with the Settlement Agreement adopted in Decision No. 81361 (June 18, 2025), Liberty Litchfield Park utilized a capitalization rate of 14 percent and 21 percent to calculate the capitalized overhead related to allocated costs from corporate shared services and regional shared services, respectively.
- Adjustment 1-D of B-2 reflects transfers of used and useful plant as of December 31, 2024, from Construction Work-In-Process to PIS.
- Adjustment E of B-2 adjusts PIS to reflect the reconciliation of the Company's PIS detail to the amount recorded at the end of the test year as reflected on the E-1 schedule.

Mr. Bourassa's testimony provides additional details of the adjustments noted on B schedules for the Company.

Q. Please provide an overview of the Customer First investment included in Liberty Litchfield Park's water and wastewater divisions' rate base.

A. Customer First is a corporate-wide initiative to transform how Liberty does business and manages data. It consists of a series of major improvements to business processes and computer systems to put our customers first in how we deliver services. The project includes a set of enterprise-wide technology investments, system upgrades, infrastructure improvements, and changes to

business processes across the Liberty enterprise and its operating utilities—including the Company—that address critical needs by leveraging the capabilities and experience of the organization and upgrading or replacing key systems that have become obsolete, costly to maintain, not well integrated with other Liberty systems, and/or potentially present security risks.

Customer First is a project that includes changes to technology and systems, and associated employee training. It serves to install a comprehensive enterprise-wide solution to replace and improve legacy computer systems or, if there is no system in place, to serve as the necessary computer system. Platforms addressed are systems related to customer information, finance and accounting, network operations, procurement, accounts payable, employee time, and payroll services.

Q. When was Customer First placed in service for Liberty Litchfield Park?

A. Customer First was placed in service in April 2023 for the Company.

Q. Please outline the capital investment associated with the Customer First Project.

A. Customer First was fully deployed across all Liberty entities in 2024 with a final cost of $544.3 million in enterprise-wide capital expenditures. Of the total enterprise cost, approximately $14.38 million allocated to Liberty Litchfield Park is included in its rate base—$5.90 million in the water division and $8.48 million in the wastewater division.

Q. Has the Commission previously reviewed and approved recovery of Customer First in other proceedings?

A. Yes. The Commission approved inclusion of Customer First project in rate base as prudent, used and useful for other Liberty Arizona utilities in Decision No. 81361 (June 18, 2025).

Q. Please provide an overview of the Cybersecurity investments included in Liberty Litchfield Park's water and wastewater divisions' rate base.

A. Liberty's Cybersecurity Program is a 5-year enterprise initiative to implement and improve cybersecurity capabilities to adequately defend threats to corporate systems, data, and operational assets. The Company has included PTYP related to the Cybersecurity Program in the amount of $236,265 and $339,845 for water and wastewater division, respectively.

IV. POST TEST YEAR PLANT

Q. Is the Company requesting that post test year plant be included in its water and wastewater divisions' rate bases?

A. Yes, we have made PTYP adjustments to rate base of $8,046,963 for our water division and $960,283 for our wastewater division. PTYP adjustments in rate base include projects such as new wells (e.g., Monument Point), mainline and service line replacements, meter replacements, pump replacements, booster equipment replacements and Liberty cybersecurity program investments. PTYP additions for the Liberty Litchfield Park are discussed in Mr. Gilbertson's testimony.

Q. Please summarize the Company's proposed PTYP adjustments.

A. The Company is proposing a twelve-month PTYP adjustment (Adjustment 1-B on Schedule B-2 in Mr. Bourassa's direct testimony) to the recorded rate base amounts as of December 31, 2024. The adjustment includes non-revenue producing projects expected to be closed through December 31, 2025, and that will be used and useful in providing service to customers prior to a hearing in this matter.

Q. What is the purpose of the Company's PTYP adjustment, and why is its recognition beneficial?

A. The PTYP adjustments are designed to more accurately reflect the costs that Liberty Litchfield Park will incur serving its customers during the rate-effective period. As mentioned, the adjustments include investments that are expected to be in service and used and useful in providing safe and reliable service.

Recognizing PTYP adjustments is beneficial because it helps mitigate regulatory lag—the delay between when the Company incurs costs and when it can recover those costs through rates. PTYP adjustments reduce regulatory lag by allowing more timely recovery of investments, aligning rates more closely with cost of service.

This is beneficial for Liberty Litchfield Park and its customers alike. Allowance of PTYP promotes financial stability, reduces the need for more frequent rate cases, and supports gradualism in rate changes. For customers, the adjustment ensures more accurate price signals and fairer cost allocation.

Q. What is the current Commission policy or practice on PTYP in rate case proceedings?

A. The Commission does not have a formal policy statement on PTYP. However, the Commission typically allows 12 months of PTYP.

Q. What was the authorized PTYP period in Liberty's recent rate cases?

A. The Commission approved 12 months of PTYP in Liberty's consolidated rate cases for its Beardsley, Bella Vista, Cordes Lakes, and Rio Rico utilities.[1] Likewise, the Commission approved 12 months of PTYP in the last Liberty Utilities (Gold Canyon Sewer) Corp. rate case.[2]

Q. Is the Company's proposed PTYP adjustment consistent with recent Commission decisions?

A. Yes. The Company proposes the inclusion of 12 months of PTYP through December 31, 2025, limited to plant that is used and useful (or that will be used and useful by the time this matter goes to hearing). The PTYP is not meant to generate or support system growth or new customers, focusing on non-revenue

[1] Decision No. 81361 (June 18, 2025).
[2] Decision No. 78871 (Mar. 15, 2023).

producing infrastructure that enhances service, reliability, and safety for existing customers.

V. SARIVAL ACCOUNTING ORDER

Q. Please provide an overview of the Accounting Order related to the Sarival WRF.

A. In August 2024, the Company filed an application with the Commission for approval of an Accounting Order to defer depreciation expense for its Sarival WRF, placed in service in March 2024. In its Accounting Order application, the Company estimated $108 million of total project costs, which included approximately $7 million of work-in-progress that was completed in Q4 2024. The actual costs of Sarival WRF came in at $105 million, which are included in the plant additions in this rate case application.

The Commission approved the Accounting Order in Decision No. 80122 subject to the following:

- The cost deferral would not include any Indirect Overhead ("INDOH") or AFUDC for the Sarival WRF plant
- The costs eligible deferral would be limited to depreciation expense subject to the removal of INDOH and AFUDC
- The cut-off point for including Sarival WRF project costs in the deferral will be December 31, 2024
- That the Commission specifically reserve any finding of prudency regarding the Sarival Plant until after the details are reviewed with[in] the context of a general rate case filing.

Q. Has the Company included any cost deferrals related to the Sarival Accounting Order in this rate application?

A. Yes. The Company has included $5.2 million of eligible Sarival WRF cost deferrals, pursuant to Decision No. 80122, through December 31, 2025 in its rate application as an adjustment to rate base. The Company proposes to amortize the accounting order using a composite useful life related to Sarival WRF plant of 4.68%. Please see Adjustment No. 8 on the B-2 schedule for the rate base adjustment and Schedule C-2, page 2 for the related amortization expense.

VI. COST OF SERVICE RECONCILIATION MECHANISM ("CSRM")

Q. What is the purpose of Liberty Litchfield Park's CSRM proposal?

A. The CSRM is a mechanism that would allow the Company to adjust its rates annually based on historical changes in the Company's revenue requirement using the framework included in the Commission's Policy Statement. The CSRM does not include a future test year, nor does it project change in future expenses. The CSRM allows timely cost recovery and reduces regulatory lag, benefiting both the Company and its customers. Liberty Litchfield Park's initiative aligns with the Commission's Policy Statement's desire to enhance regulatory stability.

Q. What process did the Commission use to adopt the Formula Rate Policy Statement?

A. The Commission conducted a series of workshops on March 19, 2024 and October 3, 2024. The workshops contained detailed information on how formula rates have been applied by other states and by the Federal Energy Regulatory Commission. Notably, the various workshop presentations showed that formula rates have been

used in at least 12 states[3], while at least 23 states used projections for future test years.[4]

Commission Staff also submitted a Staff Report on April 11, 2024. The Commission voted to adopt the Formula Rate Policy Statement at the December 3, 2024 Open Meeting, and then voted to adopt the conforming order at the December 17, 2024 Open Meeting. Subsequently, the Commission issued Decision No. 79647 (Dec. 31, 2024), which is the order adopting the Formula Rate Policy Statement. The Commission also issued an order denying rehearing in Decision No. 79732 (Feb. 19, 2025).

Q. Has the Commission approved any formula rate mechanisms?

A. Not yet. However, we are aware that formula rates have been proposed in several pending cases. Liberty Litchfield Park is open to considering improvements to its proposed CSRM mechanism as the formula rate mechanism is developed by the Commission in various rate cases.

Q. Generally, how does the formula rate mechanism work?

A. The CSRM mechanism is like other adjustors (e.g., the System Improvement Benefit mechanism or SIB), which the Commission approved in the past, only more comprehensive. Indeed, the formula rate mechanism appears to be modeled on the SIB and the Arsenic Cost Recovery Mechanism ("ACRM"). Thus, contrary to the arguments of opponents of formula rates, there is nothing inherently new or unprecedented about formula rates.

Simply put, the proposed CSRM mechanism is a transparent method used to update rates annually based on historical changes in Liberty Litchfield Park's revenue

[3] APS workshop presentation, at PDF page 139 in Commission Staff Memorandum filed on October 4, 2024 in Docket No. AU-00000A-23-0012.

[4] Staff Memorandum in Docket No. AU-00000A-23-0012 dated April 11, 2024 at pages 4 and 5 (lists of states with optional test years and future test years).

requirement. Using that historical data, the mechanism utilizes a template to calculate an updated revenue requirement, revenue deficiency or excess, rate base, and rates. The mechanism is a benefit to the Company and customers alike as it will reduce regulatory lag and regulatory burden, better match costs and revenues, and promote rate gradualism.

The CSRM does not eliminate rate cases. Instead, CSRM will allow for annual rate changes between rate cases. There will still be full rate cases, with detailed review of our expenses, plant investments, capital structure and all other rate elements, as well as data requests, multiple rounds of pre-filed testimony, and a full evidentiary hearing. Under the Commission's Formula Rates Policy Statement, a full rate case must be filed every five years.

A detailed description of the rules and procedures of the CSRM are provided in the Plan of Administration ("POA"), attached as Appendix MR_Dir.1. The POA governs the annual process for updating and reviewing the CSRM and an Excel workbook with a fixed framework for updating rates ("CSRM Rate Template") is attached to the POA.

Q. What are the differences between the CSRM Annual Update and a full rate case?

A. A key tenet of the CSRM mechanism is that it will include a Commission-approved formula rate template which cannot be altered in any way as part of the Company's annual update. The annual update is limited to populating information in designated line items of the formula rate template. As a result, no resources are required to debate many of the typical rate case issues such as return on equity, depreciation rates, capital structure, and the myriad of other historically contested issues. Instead, these will be fixed in the formula by the Commission's decision in this rate case. The same will be true for the treatment of certain types of

expenditures, such as board of director fees, which will also be fixed based on the Commission's decision in this rate case. Further, elements such as rate design are set in the formula rate template.

Annual updates will not include development of typical rate case elements such as depreciation studies, class cost of service studies, cost of equity studies, lead lag studies, new tariffs, tariff language changes, and changes to rules and regulations. The annual update also will not include many of the typical pro forma adjustments used to calculate revenue requirement in a full rate case proceeding, saving significant time and effort.

Q. How does the POA align with the Commission's Policy Statement?

A. The CSRM POA is consistent with Commission guidance provided in the Policy Statement. Among other things, the mechanism does not use a future test year or projected costs. Rather, the annual updates are based on a historical test year recorded information. Each year, Liberty Litchfield Park will calculate and file an annual update with a true-up that includes an earnings test. After docketing an annual update, Liberty Litchfield Park will hold an annual meeting to provide interested parties with additional details about the filing. In addition, those parties will have the ability to request additional information about the Company's annual update. Any change in rates will not go into effect until the Commission issues a final order, which would include a prudency determination and current finding of the Company's fair value. While the Policy Statement provides a guideline of the process and schedule, and process, the Company's proposed CSRM POA includes a shorter schedule. We believe that the proposed changes are reasonable when applying the Policy Statement to water and wastewater utilities and the Company's size.

Q. After Commission approval, how will these annual updates be reflected in rates?

A. The increase or decrease to the revenue requirement as calculated in the annual update will be applied as a fixed surcharge to customer bills.

Q. You mention that CSRM will benefit customers—can you elaborate?

A. The CSRM offers several direct benefits to our customers:

- **Smaller incremental changes to rates**: By adjusting rates annually based on a Commission-approved formula, customers will experience more frequent but smaller changes to rates, reducing the likelihood of sudden, large rate increases that can occur with full rate cases, which tend to be filed less frequently. That is, formula rates help promote rate gradualism.
- **Timely cost savings**: Any cost savings achieved by the Company, such as reductions in operational expenses or favorable changes in tax credits, are passed on to customers more quickly through rate adjustments.
- **Enhanced transparency**: The POA includes annual updates with true-ups and annual meetings with stakeholders, which improve transparency and allow customers to better understand how their rates are determined and adjusted.
- **Reduced regulatory lag**: By reducing regulatory lag, the mechanism ensures that rates more accurately reflect current costs and revenues, leading to fairer pricing for customers.
- **Investment in infrastructure**: Formula rates facilitate investment in necessary infrastructure, ensuring reliable service and compliance with safety standards that promote public health, which directly benefits customers.
- **Annual True Ups**. Annual true ups will ensure there is no under-recovery or over-recovery, thus ensuring that rates are aligned with the cost of service.
- **Earnings test**. The earnings test ensures that the Company cannot over earn.

Q. How do formula rates reduce regulatory lag, and how does that contribute to a more financially stable utility?

A. Formula rates, such as the CSRM we've proposed, reduce regulatory lag by allowing rates to adjust annually based on a pre-approved formula that accounts

for updates to a utility's expenses, revenues, and capital investments. In short, formula rates ensure that a utility's rates more accurately reflect its actual costs and revenues in a timely manner. Reducing regulatory lag has several benefits for financial stability.

By adjusting rates annually, Liberty Litchfield Park can recover its costs more promptly, avoiding the financial strain that can occur when there is a significant delay between rate cases. With more predictable and stable revenue, the Company can plan its financials more accurately, making it easier for us to budget for future projects and operations necessary to provide safe and reliable service for our customers.

Q. Are there other benefits that formula rates can provide that you haven't yet discussed?

A. Yes, in addition to all the benefits discussed earlier in my testimony, we anticipate that approval of CSRM will result in us filing fewer rate cases in the future. The Commission Policy Statement requires the Company to file a rate case after the first five years of CSRM adjustments and every five years thereafter, unless the requirement is modified by the Commission. While Liberty Litchfield Park has not filed a rate case since 2017, going forward, we would likely file rate cases every two to three years in the absence of formula rates. Additionally, if the CSRM is adopted, we will also be able to eliminate some of our existing adjustor mechanisms such as Property Tax Adjustment Mechanism ("PTAM") and Purchased Power Adjustment Mechanism ("PPAM"). Fewer rate cases and adjuster mechanism filings equate to less administrative burden and lower costs for the Commission, rate case stakeholders, the utilities and its customers.

Q. Do you have any final remarks regarding Liberty's CSRM mechanism proposal?

A. I agree with the premise set forth in the Policy Statement regarding the benefits of Formula Rates in terms of transparency, regulatory efficiency, and customer protection and believe the adoption of such a mechanism would be in the public interest. The CSRM will enhance Liberty Litchfield Park's ability to manage costs effectively while providing reliable and affordable service to our customers.

Q. Does this conclude your testimony?

A. Yes.

Appendix 1

Liberty Utilities (Litchfield Park Water and Sewer) Corp.
"Liberty Litchfield Park" or "Company"
Cost of Service Reconciliation Mechanism ("CSRM")
Plan of Administration

I. Applicability

The following procedures (the "Plan of Administration") shall apply to the Liberty Utilities (Litchfield Park Water and Sewer) Corp.'s ("Liberty Litchfield" or "Company") calculations set forth in the Company's Cost of Service Reconciliation Mechanism ("CSRM") Tariff, Appendix A CSRM Surcharge/Sur-credit Calculation Template ("CSRM Rate Template"). The Company shall follow the methodology specified in the CSRM Rate Template to calculate annually its revenue requirement, revenue deficiency or excess, rate base, and rates. The Annual Update (as defined below) produced from the CSRM Rate Template shall be applicable to service on and after September 1st of each calendar year, subject to the review and Commission approval, and true-up with interest, as provided herein.

II. Annual Filing Requirements

a. By May 1st each year, Liberty Litchfield Park shall calculate and file its CSRM Surcharge[1]. If May 1st falls on a weekend or holiday, Liberty Litchfield Park shall file on the next business day. Within one business day of the filing, Liberty Litchfield Park shall provide all models and workpapers electronically in native format with all formulas and links intact to the parties in the docket, including Arizona Corporation Commission ("Commission") Utilities Division Staff.

b. The CSRM filing shall be made in Docket Nos. W-01427A-25-0126 and SW-01428A-25-0127 authorizing the CSRM.

c. The first Annual Update shall be filed by May 1, 2027, utilizing a twelve-month test year ending December 31, 2026. Future filings shall also utilize a twelve-month test year ending December 31.

d. The filing shall:

   i. Use a historical test year as required under A.A.C. R14-2-103(A)(3)(p) ("CSRM Test Year").

   ii. Include an Annual Update with a true-up.

   iii. Include an earnings test, preventing Liberty Litchfield Park from exceeding its authorized return outside of the 'dead band'.

[1] While referenced as Surcharge here, this encompasses surcharge or sur-credit throughout the document.

1 The dead band shall be +/- 20 basis points of the authorized Return on Equity. For example, if the authorized Return on Equity is 9.80%, the dead band is 9.60% - 10.00%. Thus, a Return on Equity falling within 9.60% - 10.00% shall result in no rate change, a Return on Equity exceeding 10.00% shall result in a rate decrease and a Return on Equity below 9.60% shall result in a rate increase.

e. The surcharge or sur-credit will be composed of two components.
   i. The first component is the Annual Update reflecting changes in the revenue requirement based on the CSRM Test Year with adjustments as specified in this Plan of Administration.
   ii. The second component is a true up. The true up shall be the difference between the amount collected from the surcharge or sur-credit, and the CSRM Revenue Requirement from the prior CSRM Annual Update. The true up component may be positive or negative. The true up component will accrue interest per Section 9 of this Plan of Administration.
   iii. There is no true up component for the first annual CSRM filing.

f. The minimum schedules to be filed with the CSRM as defined in A.A.C. R14-2-03(B)(1) are: A-1, B-1, B-2, C-1, C-2, C-3 and D-1.

g. To increase the transparency and ease stakeholder review, the CSRM Rate Template inputs for the following ratemaking elements shall be a stated value to be used in the CSRM Rate Template until changed pursuant to full general rate case approved by the Commission. The stated values shall be those authorized by the Commission in the underlying Decision authorizing the use of the CSRM.

   i. Equity component of capital structure as typically found on the D-1 schedule;

   ii. Debt component of capital structure as typical found on the D-1 schedule;

   iii. Return on Equity as typically found on the D-1 schedule;

   iv. Cost of Debt as typically found on the D-l schedule;

   v. Depreciation and CIAC Amortization Rates as typically found on the C-2 adjustment schedule;

   vi. Gross Revenue Conversion Factor as typically found on the C-3 schedule; and

   vii. Federal and State Income Tax rates as reflected on the C-3 schedule, unless statutorily changed.

h. Cost disallowances:

i. Voluntary rate base or expense adjustments made by the Company - If the Company proposed any rate base or expense adjustments in its prior rate case direct application that was accepted by the parties, that same methodology shall be followed in Annual Updates. The final Plan of Administration approved by the Commission shall include details of those adjustments for greater transparency in the CSRM Rate Template.

ii. Expense or Rate Base Adjustments authorized by the Commission - If the Commission orders any rate base ('B' schedules) or expense ('C' schedules) adjustments in its final Decision, that same methodology shall be followed in Annual Updates. For example, 50/50 sharing of a specific expense. The final Plan of Administration approved by the Commission shall include details of those adjustments for greater transparency in the CSRM Rate Template.

i. The Annual Update for the CSRM Test Year shall:

i. to the extent specified in the CSRM Rate Template, be based upon data accurately recorded in the Company's regulatory books of account for the most recent calendar year maintained consistent with the Uniform System of Accounts ("USoA") and Commission accounting policies;

ii. as and to the extent specified in the CSRM Rate Template or data requests, provide supporting non-confidential or competitively sensitive documentation for data not otherwise available in the regulatory books of account that are used in the CSRM Rate Template;

iii. disclose any accounting changes or adjustments that affect inputs to the CSRM Rate Template, including;

1. the initial implementation of an accounting standard or policy;
2. the initial implementation of accounting practices for unusual or unconventional items where the Commission has not provided specific accounting direction;
3. the effect of any change to an accounting standard, policy or the underlying USoA;
4. correction of errors and prior period adjustments that impact the calculation;
5. the implementation of new estimation methods or policies that change prior estimates;
6. changes to income tax elections; and
7. reclassifications, including mapping changes, among NARUC accounts between calendar years.

iv. provide notice of changes in the Company's accounting policies and practices from

those in effect for the calendar year upon which the immediately preceding Annual Update was based ("Accounting Changes");

v. identify items included in the CSRM Rate Template at an amount other than on a historical cost basis (*e.g.*, fair value adjustments);

vi. identify any reorganization or merger transaction and explain the effect of the accounting for such transactions on inputs to the CSRM Rate Template;

vii. make note of any aspects of the CSRM Rate Template or its inputs that are the subject of an ongoing dispute;

viii. to the extent accounting changes and other matters affect the Company's inputs to its CSRM Rate Template, provide a narrative explanation of the individual impact of those items on charges billed under the CSRM Rate template

ix. be subject to review, as to whether the input data are accurately recorded, whether the costs and expenditures included for recovery in the Annual Update are prudent, and as to the accuracy of the data and the consistency with the CSRM Rate Template, including the terms and procedures in this plan of administration, of the charges shown in the Annual Update; and

x. not seek to modify the CSRM Rate Template and shall not be subject to challenge by seeking to modify the CSRM Rate Template (*i.e.*, all such modifications to the CSRM Rate Template, items specified in Section II.e., will require, as applicable, a full rate case).

III. General Policies of the CSRM

a. The actual date of the filing of the Annual Update shall be that year's "Filing Date."

b. The CSRM Rate Template is premised upon the following predicates ("Fundamental Predicates"):

i. The National Association of Regulatory Utility Commissioners' ("NARUC's") 1996 USoA for Class A Water Utilities;

ii. The Commission's orders establishing general accounting directives and precedents;

iii. The Commission's requirement for water utilities to maintain regulatory books of account in accordance with the NARUC USoA; and

iv. The Company's accounting policies, practices and procedures.

c. The first Annual Update shall use a test year with twelve months ending December 31, 2026 with subsequent updates to be December 31 of each following year.

IV. Interim Documentation Provided

a. To increase transparency and ease the administrative burden, Liberty Litchfield Park shall:

i. On a semi-annually basis, email Commission Utilities Division Co-Directors and Engineering Manager, the following information related to capital expenditures placed in-service:

1. A list, description, location, NARUC account and total cost of all capital projects greater than $500,000.
2. For each project listed, a ledger of all costs and all invoices or related documentation for individual costs greater than $40,000.
3. For each project listed, any permits received from other regulatory agencies (AOCs, DAs, etc.)
4. A map of the project's general location.
5. Pictures of the project.
6. Details regarding whether the project was funded by Advances in Aid of Construction or Contributions in Aid of Construction.

ii. File the first report no later than June 30, 2026, containing data from the first five months of 2026 with subsequent emails to be made semi-annually thereafter.

V. CSRM Surcharge Rate Design

a. The CSRM Surcharge rate design shall be as follows:

i. The CSRM Surcharge shall be a fixed monthly surcharge/surcredit.
The CSRM Surcharge shall apply to all of the Company's metered customers, including private fire service customers.

ii. The CSRM Surcharge shall be calculated by dividing the revenue deficiency or surplus by the number of active equivalent 5/8-inch x 3/4-inch meters based on updated billing determinants at the end of the test year period included in the CSRM Test Year, and shall increase with meter size based on the following meter capacity multipliers:

Meter Size	Multiplier
5/8-inch x 3/4 -inch	1.0 times
3/4-inch	1.5 times
1-inch	2.5 times

1-1/2 inch	5 times
2-inch	8 times
3-inch	16 times
4-inch	25 times
6-inch	50 times
8-inch	80 times
10-inch	145 times
12-inch	215 times

iii. Liberty Litchfield Park is not required to perform an updated Class Cost of Service Study nor update allocation of the revenue requirement between customer classes.

VI. CSRM Surcharge Customer Notice Requirements

Within thirty days of filing each application to implement a CSRM Surcharge, the Company shall provide a proposed form of notice to Staff for review, and a Summary of what the Company requested in the application. Once the notice is approved by Staff, the

Company shall provide a copy of the approved notice to its customers via newsletter or bill insert in its next regular billing cycle. Liberty Litchfield Park shall post the notice on its

website. After providing notice, the Company shall file a copy of the notice and a description of when and how it provided notice with each application to implement a CSRM Surcharge. The Summary and Notice shall include at least the following information: 1. The individual CSRM Surcharge, by meter size, 2. A summary of all capital projects included in the CSRM surcharge and a general discussion of operating expense increase or decreases in the past year.

a. A CSRM Surcharge shall not become effective until approved by the Commission.

VII. Annual Review Procedures and Timelines

Each Annual Update shall be subject to the following annual review procedures ("Annual Review Procedures"):

a. By May 1, Liberty Litchfield Park files its Annual Update.

b. By May 30, the Company shall organize a meeting or conference call among the parties to the docket ("Annual Meeting") during which the Company shall present details about its Annual Update. The Company shall provide remote access for participation at the Annual Meeting. The Annual Meeting shall also provide parties to the docket the chance to seek information and clarifications from the Company about the Annual Update.

c. By May 30, provide a sample customer notice to Commission Utilities Division Staff.

d. By July 31, Commission Utilities Division Staff shall issue a proposed Report and Order.

e. By August 31, the Commission shall issue a final Order. The Order shall include a prudency determination and a current finding of fair value by supplementing and updating the fair value determination from the previous rate case.

f. By, October 1, Liberty Litchfield Park shall implement the CSRM Surcharge.

VIII. CSRM Administration Calendar

	Base Rate Case Test Year	**CSRM Test Year**	**Required Filing Date**	**New Rates Effective Date**
Initial Base Rate Case Test Year	December 31, 2024		N/A	
1st CSRM Annual Update		December 31, 2026	May 1, 2027	October 1, 2027
2nd Annual Update		December 31, 2027	May 1, 2026	October 1, 2028
3rd Annual Update		December 31, 2028	May 1, 2029	October 1, 2029
4th Annual Update		December 31, 2029	May 1, 2030	October 1, 2030
5th Annual Update		December 31, 2030	May 1, 2031	October 1, 2031
Next Base Rate Case Filing Requirement Date – Test Year ended December 31, 2031.				

IX. CSRM Administration Calendar

Changes to Annual Updates shall accrue interest based on rate to be determined.

X. Full Rate Case Requirements

The Company may voluntarily file a rate case at any time. A rate case shall be required to be filed no later than within one calendar year of the new rates effective date of the fifth Annual Update as reflected in the table in Section VIII. Notwithstanding the requirements herein, the Commission may order the Company to file a rate case at any time.

DIRECT TESTIMONY OF REGINA WISE

ON BEHALF OF LIBERTY UTILITIES (LITCHFIELD PARK WATER & SEWER) CORP.

JUNE 30, 2025

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I. INTRODUCTION AND QUALIFICATIONS

Q. Please state your name, employer, and occupation.

A My name is Regina Wise. I am employed by Liberty Utilities as its Senior Manager of Rates and Regulatory Affairs. In that role, I am responsible for water and wastewater rate cases and regulatory proceedings for regulated Liberty Utilities entities in Arizona and Texas, including Liberty Utilities (Litchfield Park Water & Sewer) Corp. ("Liberty Litchfield Park" or the "Company").

Q. Please describe your experience and qualifications.

A. In 1999, I completed my Bachelor of Science from California State University, Chico in Business Administration. I have ten years' experience in the utility industry. I held the position of Finance Manager and Treasurer for a public utility in Truckee, Ca., the Truckee Donner Public Utility District, serving electric and water to the community. Additionally, I worked at NV Energy in Nevada as the Revenue and Rates Manager which led me to a Senior Analyst position for Arizona and Texas with Liberty Utilities. I've since been promoted to my current position of Senior Manager, Rates and Regulatory.

Q. Have you previously testified before the Commission?

A. No.

II. PURPOSE OF TESTIMONY

Q. What is the purpose of your testimony?

A. In my testimony, I address Liberty Litchfield Park's requests for approval of: (a) an Emergency Water Augmentation Mechanism ("EWAM") tariff; (b) an industrial fire services tariff; (c) a Federal Compliance Cost Recovery Mechanism ("FCCRM"); (d) a Customer Assistance Tariff ("CAT"), and (e) revisions to the Company's Hook Up Fee ("HUF") tariff. The Company's revised tariff

(including EWAM, CAT, HUF, and FCCRM) is included as Appendix RW_Dir 1.

III. CUSTOMER ASSISTANCE TARIFF

Q. Is Liberty Litchfield Park proposing changes to its existing customer financial assistance program?

A. Yes, the Company is proposing a new Customer Assistance Tariff ("CAT"), which will replace Liberty Litchfield Park's existing Alternate Rates for Water and Wastewater ("ARWW"). The CAT includes Low-Income, Deployed Service Members, and Disabled Veteran program, which are designed to alleviate financial hardship that customers might be facing. The tariff is consistent with what the Commission recently approved in Decision No. 81361 (June 18, 2025).

Q. What is the difference between CAT and ARWW?

A. The ARWW program is limited to customers that have qualifying annual incomes, i.e., 150% of the federal poverty level. In contrast, the CAT expands the applicability of the tariff to additional groups of customers: deployed service members, and disabled veterans. Additionally, CAT increases qualifying annual incomes to 200% of the federal poverty level.

Q. How is the CAT administered?

A. Customers will be eligible to apply for relief on a first come, first served basis with a limit of customers, as stated in the Tariffs, to participate in CAT programs. Customers submit applications which are reviewed by the Company's Customer Care team for verification of eligibility. Enrolled customers must also go through a recertification process every two years to remain eligible for the reduced rate.

Q. How are the costs of the CAT recovered?

A. Costs associated with the CAT are recovered through a surcharge charged to all non-participating customers. The Company calculates the monthly surcharge each

year based on the active number of customer connections as of December 31 of the prior year. The Company proposes filing notice of the surcharge, along with a report on the CAT, with the Commission on or before January 31 and the surcharge would be implemented on customer bills in February of each year with the recovery period ending in January of the following year.

IV. FEDERAL COMPLIANCE COST RECOVERY MECHANISM

Q. Please explain the Company's proposed Federal Compliance Cost Recovery Mechanism.

A. The Federal Compliance Cost Recovery Mechanism ("FCCRM") is the same mechanism that the Commission approved in Decision No. 81361 (June 18, 2025). The Company proposes that the Commission allow for recovery of costs incurred to remediate federally regulated Per- and polyfluoroalkyl substances known as PFAS via a rate adjustment mechanism. The mechanism will allow the Company to recover expenditures deployed to fund plant additions and operating and maintaining expenses required to achieve compliance with all federally mandated Maximum Contaminant Levels (MCLs) of PFAS and other similar substances. Mr. Garlick's testimony addresses what PFAS are, how they've impacted our system, and what we are doing to address the risks posed by these substances.

Q. Why is it important for the Company to have the FCCRM?

A. The Company is requesting the FCCRM to help recover the disproportionate costs expected to be incurred because of the regulations promulgated by the United States Environmental Protection Agency ("EPA") regarding PFAS. The ratemaking mechanism is necessary to reduce the impact of regulatory lag in the recovery of extraordinary expenditures required to fund plant assets and operation

and maintenance expenses dedicated to achieving compliance with these federal regulations.

The Commission's approval of the FCCRM aligns squarely with the public interest. The FCCRM will serve as a valuable tool toward the mitigation of health risks associated with PFAS and will increase stability by reducing volatility in rates. By approving the FCCRM, as it has previously done, the Commission will continue to demonstrate crucial regulatory support toward the provision of safe, adequate, and reliable service to ratepayers.

Q. What is the estimated cost to comply with the EPA's current regulations?

A. Based on the current MCLs set by the EPA, at least ten wells in Liberty Litchfield Park's water system will likely require treatment. Preliminary estimates indicate that the Company could incur over $40 million in costs to comply with the EPA's regulations as they are currently written. This estimate does not include operation and maintenance expenses.

Q. Please summarize the benefits which the FCCRM provides to all stakeholders.

A. The FCCRM mechanism safeguards public health by ensuring the Company has the financial means to treat PFAS, comply with federal regulations, and enhance the quality of water delivered to consumers. Additionally, it supports rate stability and strengthens the Company's financial health.

Q. If the Company's formula rate mechanism is approved, will the FCCRM be necessary?

A. No. The formula rate mechanism will accomplish the same important goals as the FCCRM.

V. INDUSTRIAL FIRE SERVICE TARIFF

Q. What is the purpose of the Company's new Water Rates Industrial Fire Service Tariff?

A. Liberty Litchfield Park has several industrial customers that utilize private, industrial fire services. As Mr. Garlick discusses, there is significant industrial development within our service territory. This new tariff addresses the costs for such service including a monthly minimum charge of 20% of the fixed charge of meter size, as well as commodity rates at the current tiered rate per meter size. In addition, under the proposed tariff customers are responsible for the entire cost of the private fire service. The tariff also ensures that private fire services contain a flow meter and a backflow prevention device.

Q. What is the importance of a flow meter?

A. A flow meter is a crucial component on these services because flow readings can help the Company detect tampering, fraudulent use, and can help us determine if our industrial customers are using the fire service for system testing. Unauthorized system testing has been a problem historically that the Company would like to address.

Q. Under the tariff, who owns the service?

A. All facilities paid for by the customer shall be the sole property of the customer as stated in the tariff.

Q. Under the tariff, is the private fire service separate from the industrial users' regular domestic water service?

A. Yes. The fire service must be completely separate from the domestic water service. Unauthorized use or cross-connections are prohibited and may result in termination of service.

Q. Has the Commission approved similar tariffs for other utilities?

A. Yes. A similar tariff was approved in Decision No. 77956 (Apr. 15, 2021) for Arizona Water Company.

VI. EMERGENCY WATER AUGMENTATION TARIFF

Q. What is the purpose of the Company's proposed Emergency Water Augmentation Tariff?

A. The Company is proposing this tariff out of an abundance of caution. In the event of a serious water shortage, it is possible that the Company will purchase water and hauling services. This tariff would authorize the Company to recover those costs through a surcharge.

Q. What do you mean by a serious water shortage?

A. The tariff is only applicable in emergency situations. As defined by the tariff, an "emergency water shortage" is one that is serious; develops suddenly or unexpectedly; is out of the Company's control; demands immediate attention; and triggers at least Stage 3 curtailment.

Q. Is notice required if the Company intends to implement the surcharge?

A. Yes. For any month that Liberty Litchfield Park intends to bill customers under the tariff, the Company must provide notice to Commission Staff. If Staff is in agreement, the Company will include the surcharge as a separate line item on customers' monthly bills.

VII. HOOK UP FEE TARIFFS

Q. Is Liberty Litchfield Park proposing changes to its existing Hook Up Fee ("HUF") tariff?

A. Yes, Liberty Litchfield Park is proposing revisions to its HUF tariff. Mr Garlick's testimony provides discussion and support for these revisions to reflect the Company's current costs and to make sure that large industrial customers pay their fair share of the Company's wastewater investments.

VIII. OTHER SERVICE CHARGES

Q. Are there any additional changes to the tariff that you would like to identify?

A. Yes, in addition to the above, the Company is proposing increases to the establishment, disconnection, and after-hours service call charges. Additionally on the water and sewer tariff the Company is proposing an additional tariff that enables a charge to be applied when a failed inspection occurs for new connections for water and wastewater. The Company is proposing a fee of $75.00. This fee is intended to reduce the impact of multiple-failed inspection occurrences being incurred by the developer while also, promoting infrastructure quality, and optimize operator availability. The charge was based on a cost of service analysis on a two-hour minimum, calculated at the mid-range Operator rate.

Q. Does this conclude your testimony?

A. Yes.

Appendix RW Dir 1, Part A - Proposed Tariff (Clean)

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Applies to all **WATER** service areas
PART ONE
STATEMENT OF CHARGES

I. RATES

In Decision No. XXXXX, dated XXXXX, the Commission authorized the following rates and charges to become effective XXXXX:

A. Monthly Minimum Charge

RESIDENTIAL (includes multi-family)

Meter Size	Charge[1]
5/8 x 3/4" Meter	$ 16.52
3/4" Meter	16.52
1" Meter	37.17
1 1/2" Meter	82.60
2" Meter	132.16
3" Meter	264.32
4" Meter	413.00
6" Meter	826.00
8" Meter	1,321.60
10" Meter	1,899.80
12" Meter	3,551.80

[1] Customer Assistance Tariff ("CAT") – A 30% discount is available on monthly minimum and commodity charges to qualified residential customers meeting the CAT qualifications.

Applies to all **WATER** service areas

PART ONE
STATEMENT OF CHARGES

COMMERCIAL/NON-RESIDENTIAL

Meter Size	**Charge**
5/8 x 3/4" Meter	$ 16.52
3/4" Meter	16.52
1" Meter	41.30
1 1/2" Meter	82.60
2" Meter	132.16
3" Meter	264.32
4" Meter	413.00
6" Meter	826.00
8" Meter	1,321.60
10" Meter	1,899.80
12" Meter	3,551.80

Applies to all **WATER** service areas

PART ONE
STATEMENT OF CHARGES

IRRIGATION

Meter Size	Charge
5/8 x 3/4" Meter	$ 16.52
3/4" Meter	16.52
1" Meter	41.30
1 1/2" Meter	82.60
2" Meter	132.16
3" Meter	264.32
4" Meter	413.00
6" Meter	826.00
8" Meter	1,321.60
10" Meter	1,899.80
12" Meter	3,551.80

BULK WATER RESALE

Meter Size	Charge[2]
4' Meter	$ 264.32
6" Meter	223.02
8" Meter	713.66
10" Meter	1,025.89
12" Meter	1,917.97
Luke Air Force Base	Per Contract*

* Liberty Litchfield Park will charge the monthly meter charge per the Contract with Luke Airforce Base.

[2] Bulk service is limited to customers outside the CC&N.

Applies to all **WATER** service areas

PART ONE

STATEMENT OF CHARGES

Construction Hydrants	**Charge**
Construction Hydrants	$264.32

Fire Service Lines	**Minimum**
Fire Service Lines	By Meter Size*
Industrial Fire Service	*Per Part 3 Industrial Fire Services

* Liberty Litchfield Park will charge the monthly meter charge associated with the meter size.

Applies to all **WATER** service areas
PART ONE
STATEMENT OF CHARGES

B. Commodity Rates

The rate for use in addition to the minimum stated above shall be at the following rates per 1,000 gallons:

RESIDENTIAL (includes multi-family)

Meter Size	Consumption	Charge[3]
5/8" x 3/4" Meter – and 3/4"	0 to 3,000 gallons	$0.8864
	3,001 to 10,000 gallons	2.9937
	10,000 to 20,000 gallons	3.9937
	Over 20,000	4.3937
1" Meter	0 to 5,000 gallons	0.8864
	5,001 to 19,000 gallons	2.9937
	19,001 to 30,000 gallons	3.9937
	Over 30,000	4.3937
1 1/2" Meter	0 to 40,000 gallons	2.9937
	Over 40,000 gallons	4.3937
2" Meter	0 to 60,000 gallons	2.9937
	Over 60,000 gallons	4.3937
3" Meter	0 to 120,000 gallons	2.9937
	Over 120,000 gallons	4.3937
4" Meter	0 to 180,000 gallons	2.9937
	Over 180,000 gallons	4.3937
6" Meter	0 to 360,000 gallons	2.9937
	Over 360,000 gallons	4.3937
8" Meter	0 to 650,000 gallons	2.9937
	Over 650,000 gallons	4.3937
10" Meter	0 to 940,000 gallons	2.9937
	Over 940,000 gallons	4.3937
12" Meter	0 to 1,248,000 gallons	2.9937
	Over 1,248,000 gallons	4.3937

[3] Customer Assistance Tariff ("CAT") – A 30% discount is available on monthly minimum and commodity charges to qualified residential customers meeting the CAT qualifications.

Applies to all **WATER** service areas
PART ONE
STATEMENT OF CHARGES

COMMERCIAL/NON-RESIDENTIAL

Meter Size	Consumption	Charge[4]
5/8" x 3/4" Meter – and 3/4"	0 to 9,000 gallons	$2.9937
	Over 9,000 gallons	4.3937
1" Meter	0 to 20,000 gallons	2.9937
	Over 20,000 gallons	4.3937
1 1/2" Meter	0 to 40,000 gallons	2.9937
	Over 40,000 gallons	4.3937
2" Meter	0 to 60,000 gallons	2.9937
	Over 60,000 gallons	4.3937
3" Meter	0 to 120,000 gallons	2.9937
	Over 120,000 gallons	4.3937
4" Meter	0 to 180,000 gallons	2.9937
	Over 180,000 gallons	4.3937
6" Meter	0 to 360,000 gallons	2.9937
	Over 360,000 gallons	4.3937
8" Meter	0 to 650,000 gallons	2.9937
	Over 650,000 gallons	4.3937
10" Meter	0 to 940,000 gallons	2.9937
	Over 940,000 gallons	4.3937
12" Meter	0 to 1,248,000 gallons	2.9937
	Over 1,248,000 gallons	4.3937

[4] Customer Assistance Tariff ("CAT") – A 30% discount is available on monthly minimum and commodity charges to qualified residential customers meeting the CAT qualifications.

Applies to all **WATER** service areas

PART ONE

STATEMENT OF CHARGES

IRRIGATION

Meter Size	Consumption	Charge
5/8" x 3/4" Meter – and 3/4"	0 to 9,000 gallons	$2.9937
	Over 9,000 gallons	4.3937
1" Meter	0 to 20,000 gallons	2.9937
	Over 20,000 gallons	4.3937
1 1/2" Meter	0 to 40,000 gallons	2.9937
	Over 40,000 gallons	4.3937
2" Meter	0 to 60,000 gallons	2.9937
	Over 60,000 gallons	4.3937
3" Meter	0 to 120,000 gallons	2.9937
	Over 120,000 gallons	4.3937
4" Meter	0 to 180,000 gallons	2.9937
	Over 180,000 gallons	4.3937
6" Meter	0 to 360,000 gallons	2.9937
	Over 360,000 gallons	4.3937
8" Meter	0 to 650,000 gallons	2.9937
	Over 650,000 gallons	4.3937
10" Meter	0 to 940,000 gallons	2.9937
	Over 940,000 gallons	4.3937
12" Meter	0 to 1,248,000 gallons	2.9937
	Over 1,248,000 gallons	4.3937

Applies to all **WATER** service areas

PART ONE

STATEMENT OF CHARGES

BULK WATER RESALE

Meter Size	Consumption	Charge
4' Meter	All gallons	$2.0280
6" Meter	All gallons	2.0280
8" Meter	All gallons	2.0280
10" Meter	All gallons	2.0280
12" Meter	All gallons	2.0280
Luke Airforce Base	All gallons	Per Contract*

* Liberty Litchfield Park will charge the monthly meter charge per the Contract with Luke Airforce Base

Meter Type	Consumption	Charge
Hydrants	All gallons	$4.3937
Fire Line	All gallons	By Meter Size
Industrial Fire Service	All Gallons	*Per Part 3

Applies to all **WATER** service areas
PART ONE
STATEMENT OF CHARGES

C. Service Line and Meter Installation Charges

(Refundable Pursuant to A.A.C. R14-2-405)

Meter Size	Line	Meter	Total
5/8 x 3/4" Meter	$565.00	$168.00	$733.00
3/4" Meter	565.00	260.00	825.00
1" Meter	629.00	321.00	950.00
1 1/2" Meter	699.00	536.00	1,235.00
2" Turbine Meter	At Cost	At Cost	At Cost
2" Compound Meter	At Cost	At Cost	At Cost
3" Turbine Meter	At Cost	At Cost	At Cost
3" Compound Meter	At Cost	At Cost	At Cost
4" Turbine Meter	At Cost	At Cost	At Cost
4" Compound Meter	At Cost	At Cost	At Cost
6" Turbine Meter	At Cost	At Cost	At Cost
6" Compound Meter	At Cost	At Cost	At Cost
8" Meter & Larger Meters	At Cost	At Cost	At Cost

*Hydrant Meter Deposit	Total
3" Turbine Meter	$1,470.00
3" Compound Meter	2,265.00

*Shall have a non-interest-bearing deposit of the amount indicated, refundable in its entirety upon return of the meter in good condition and payment of the final bill.

Applies to all **WATER** service areas

PART ONE
STATEMENT OF CHARGES

D. Miscellaneous Service Charges

Service	Charge
Establishment per A.A.C. R14-2-403(D)(1)	$30.00
Re-Establishment per A.A.C. R14-2-403(D)(1)	(b)
Reconnection per A.A.C. R14-2-403(D)(1)	$50.00
Meter Test (if correct) per Rule R14-2-408(F)	$30.00
Meter Reread (if correct) per Rule R14-2-408(C)	$20.00
Fire Hydrant Meter Relocation	$50.00
Fire Hydrant Meter Repair	At Cost
NSF Check per A.A.C. R14-2-408(E)(1)	$25.00 (a)
Deferred Payment, Per Month	1.5%
Late Charge	(c)
Service Calls - After Hours	$125 (d)
Deposit Requirements	(e)
Deposit Interest per A.A.C. R14-2-403(B)	6.00%
Water Hook-Up Fee	(f)
Failed Final Inspection Fee	$75

(a) Liberty Litchfield Park may charge only one NSF fee when customers are billed for water and sewer services on one bill Per Commission Rule A.A.C. R14-2-403.B.

(b) Minimum Charges times number of full months off the system per A.A.C. R14-2-403(D)

(c) Greater of $5.00 or 1.50% of unpaid balance

(d) Customer shall be charged for after-hours service calls outside of normal working hours for work performed at the customer's request or convenience

(e) Per ACC Rules R14-2-403(B) Residential - two times the average bill by class. Non-residential - two and one-half times the customer's estimated maximum monthly bill

(f) Customers shall pay the applicable Water Hook-Up fees per tariff

IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM ITS CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES, USE, AND FRANCHISE TAX. PER COMMISSION RULE 14-2-409D.5.

Applies to all **WATER** service areas
PART ONE
STATEMENT OF CHARGES

II. TAXES AND ASSESSMENTS

In addition to the collection of regular rates, the Company will collect from its customers a proportionate share of any privilege, sales, and use tax per A.A.C. R14-2-409.D.5.

All Advances or Contributions are to include labor, materials, overheads, and all applicable taxes, including all gross-up taxes for income taxes. Cost to include labor, materials and parts, overheads, and all applicable taxes.

Under applicable law, any contributions or advances provided by a Developer are taxable income to the Utility. In accordance with the Gross-Up Sharing Method policy adopted by the Commission in Decision No. 76974, the Company will collect from the Developer an applicable share of income taxes for the Company's state and federal tax liability on all funds contributed and/or advanced. The funds will be collected prior to the commencement of service.

Applies to all **WATER** service areas

PART TWO
STATEMENT OF TERMS AND CONDITIONS

I. PERMITTED COSTS

A. Costs shall be verified by invoice.

B. For services that are provided by the Company at cost, costs shall include labor, materials, other charges incurred, and overhead not to exceed 10%. However, prior to any such service being provided, the estimated cost of such service will be provided by the Company to the customer. After review of the cost estimate, the customer will pay the amount of the estimated cost to the Company.

C. In the event that the actual cost is less than the estimated cost, the Company will refund the excess to the customer within 30 days after completion of the provision of the service or after Company's receipt of invoices, timesheets or other related documents, whichever is later.

D. In the event the actual cost is more than the estimated cost, the Company will bill the customer for the amount due within 30 days after completion of the provision of the service or after the Company's receipt of invoices, timesheets or other related documents, whichever is later. The amount so billed will be due and payable 30 days after the invoice date. However, if the actual cost is more than five percent (5%) greater than the total amount paid, the customer will only be required to pay five percent (5%) more than the total amount paid, unless the Company can demonstrate that the increased costs were beyond its control and could not be foreseen at the time the estimate for the total amount paid was made.

E. At the customer's request, the Company shall make available to the customer all invoices, timesheets or related documents that support the cost for providing such service.

F. Permitted costs shall include any Federal, State or local taxes that are or may be payable by the Company as a result of any tariff or contract for water facilities under which the Customer advances or contributes funds or facilities to the Company.

Applies to all **WATER** service areas

PART TWO

STATEMENT OF TERMS AND CONDITIONS

II. INTERRUPTIBLE SERVICE; COMPANY'S LIABILITY LIMITATIONS

The Company will supply only such water at such pressures as may be available from time to time as a result of the normal operation of its water system. The Company will maintain a minimum water pressure of 20 p.s.i. and will not guarantee a specific gallons per minute flow rate at any public fire hydrants or fire sprinkler service. In the event service is interrupted, irregular or defective, or fails from causes beyond the Company's control or through ordinary negligence of its employees or agents, the Company will not be liable for any injuries or damages arising therefrom.

III. TERMINATION OFWATER SERVICE FOR VIOLATION OF WASTEWATER RULES AND REGULATIONS

The Company is authorized to discontinue water service to any person connected to both its water and sewer systems who violates the Company's wastewater terms and conditions or in any way creates a public health hazard or the likelihood of such a public health hazard. This termination authority also applies to non-payment for wastewater services.

IV. RULES AND REGULATIONS

The Company has adopted the Rules and Regulations established by the Commission as the basis for its operating procedures. A.A.C. R14-2-401 through A.A.C. R14-2-411 will be controlling of Company procedures, unless specific Commission Order(s) provide otherwise.

Applies to all **WATER** service areas

PART THREE
WATER RATES INDUSTRIAL FIRE SERVICE

MONTHLY RATES:

- All Meter Sizes - At Cost (refundable pursuant to A.A.C. R14-2-405)
- Retrofit (Wrap-around, solar powered) - No Charge
- Monthly Minimum Charge at 20% of Meter Size
- Commodity Rate at Current Tiered Rate per Meter Size

SPECIAL PROVISIONS:

A. The customer shall pay, the entire cost of the private fire service.

B. The private fire service shall be installed by the Company or under the Company's direction. The cost of the entire installation excluding the connection at the main shall be paid for by the applicant. Such payment shall not be subject to refund. All facilities paid for by the applicant shall be the sole property of the applicant, adjacent to the property line. The expense of maintaining the fire protection facilities on the applicant's premises (including the vault, meter detector type check valves, backflow device and appurtenances) shall be paid for by the applicant.

C. The Company and its duly authorized agents shall have the right to ingress to and egress from the premises for all purposes relating to said facilities.

D. The minimum diameter for industrial fire service will be four (4) inches. The maximum diameter shall not be larger than the diameter of the existing water main to which the fire protection service is connected.

E. If a distribution main of adequate size to serve a private fire protection service in addition to all other normal services does not exist in the street, easement or right-of-way adjacent to the location to be served, then a main from the nearest existing main of adequate capacity shall be installed by the Company, or under the utility's direction, and the cost paid by the applicant as a contribution in aid of construction.

F. The industrial fire service facilities shall include a flow meter and backflow prevention device. The facilities may be located within the customer's premises or within a public right of way adjacent thereto. Where located within the premises, the Company and its duly authorized agents shall have the right of ingress to and egress from the premises for all purposes related to said facilities.

Applies to all **WATER** service areas

PART THREE
WATER RATES INDUSTRIAL FIRE SERVICE

G. No structure shall be built over the industrial fire service and the customer shall maintain and safeguard the area occupied by the service from traffic and other hazardous conditions. The customer shall be responsible for any damage to the private fire service facilities whether resulting from the use or operation of appliances and facilities on customer's premises or otherwise.

H. The customer's installation must be such as to effectively separate the industrial fire service from that of the customer's regular domestic water service. Any fraudulent use of water through the private fire service will be charged for at the applicable tariff rates and shall be grounds for the Company terminating service without notice pursuant to A.A.C. R14-2-410(B).

I. There shall be no cross connection between the systems supplied by water through the Company's private fire service and any other source of supply without the specific approval of the Company. The specific approval, if given, will at least require, at the customer's expense, a special double check valve installation or other device acceptable to the Company. Any unauthorized cross connection shall be grounds for the Company terminating service without notice pursuant to A.A.C. R14-2-410(B).

J. The Company will supply only such water at such pressure as may be available from time to time as a result of the normal operation of its water system. The Company does not guarantee a specific water pressure or gallons-per-minute flow rate at any of the private fire service facilities installed. In the event service is interrupted, irregular, or defective or fails from causes beyond the Company's control or through ordinary negligence of its employees, servants or agents, the Company will not be liable for any injuries or damages arising therefrom.

K. The customer shall make no claim against the Company for any loss or damage resulting from services provided under this schedule except for the Companies gross negligence.

Applies to all **WATER** service areas

PART FOUR
CROSS-CONNECTION OR BACKFLOW TARIFF

I. PURPOSE:

The purpose of this tariff is to protect Liberty Utilities (LITCHFIELD PARK Water & Sewer) Corp. (the "Company") water from the possibility of contamination caused by backflow of contaminants that may be present on the customer's premises by requiring the installation and periodic testing of backflow-prevention assemblies pursuant to the provisions of the Arizona Administrative Code ("A.A.C.") R14-2-405.B.6. and A.A.C. R18-4-215.

II. REQUIREMENTS:

In compliance with the Rules and Regulations of the Arizona Corporation Commission ("Commission") and the Arizona Department of Environmental Quality ("ADEQ"), specifically A.A.C. R14-2-405.B.6 and A.A.C. R18-4-215 relating to backflow prevention:

1. The Company may require a customer to pay for and have installed, and to maintain, test and repair a backflow-prevention assembly if A.A.C. R18-4-215.B or C applies.

2. A backflow-prevention assembly required to be installed by the customer under Paragraph 1 of this tariff shall comply with the requirements set forth in A.A.C. R18-4-215.D and E.

3. Subject to the provisions of A.A.C. R14-2-407 and 410, and in accordance with Paragraphs 1 and 7 of this tariff, the Company may terminate service or deny service to a customer who fails to install a backflow-prevention assembly as required by this tariff.

4. The Company shall give any existing customer who is required to install a backflow-prevention assembly written notice of said requirement. If A.A.C. R14-2-410.B.1.a is **not** applicable, the customer shall be given thirty (30) days from the time such written notice is received in which to comply with this notice. If the customer can show good cause as to why he cannot install the backflow-prevention assembly within thirty (30) days, the Company or Commission Staff may suspend this requirement for a reasonable period of time.

5. Testing shall be in conformance with the requirements of A.A.C. R18-4-215.F. The Company may require the customer to pay to have the backflow-prevention assembly tested as long as the Company does not require an unreasonable number of tests. The Company may also require the customer to pay for repairs to a backflow-prevention assembly.

Applies to all **WATER** service areas

PART FOUR
CROSS-CONNECTION OR BACKFLOW TARIFF

6. The customer shall provide the Company with records of installation and testing. For each backflow-prevention assembly, these records shall include:

    a. assembly identification number and description;
    b. location;
    c. date(s) of test(s);
    d. description of repairs and recommendations for repairs made by tester;
    e. tester's name and certificate number; and
    f. tester's field test kit certification documentation.

7. In the event the backflow-prevention assembly does not function properly or fails any test, and an obvious hazard as contemplated under A.A.C. R14-2-410.B.1.a. exists, the Company may terminate service immediately and without notice. The backflow-prevention assembly shall be repaired or replaced by the customer and retested.

8. In the event the backflow-prevention assembly does not function properly or fails any test, or in the event that a customer fails to comply with the testing requirement, and A.A.C. R14-2-410.B.1.a. is **not** applicable, the backflow-prevention assembly shall be repaired or replaced within fourteen (14) days of the initial discovery of the deficiency in the assembly or its function. Failure to remedy the deficiency of dysfunction of the assembly, or failure to retest, shall be grounds for termination of water service in accordance with A.A.C. R14-2-410.

Applies to all **WATER** service areas

PART FIVE
CURTAILMENT PLAN

ADEQ Public Water System:

ADEQ Public Water System Number: 07-046

PURPOSE:

Liberty Utilities (LITCHFIELD PARK Water & Sewer) Corp. ("Company") is authorized to curtail water service to all customers within its certified area under the terms and conditions listed in this tariff.

APPLICABILITY

This curtailment plan shall become part of the Arizona Department of Environmental Quality Emergency Operations Plan for the Company.

The Company shall notify its customers of this new tariff as part of its next regularly scheduled billing after the effective date of the tariff or no later than sixty (60) days after the effective date of the tariff.

The Company shall provide a copy of the curtailment tariff to any customer, upon request.

Stage 1 Exists When:

Company is able to maintain water storage in the systems at 80 to 100 percent of capacity and there are no known problems with its well production or water storage in the system.

Restrictions: Under Stage 1, the Company is deemed to be operating normally and no curtailment is necessary but conservation efforts are encouraged as a best management practice[5].

Notice Requirements: Under Stage 1, no notice is necessary.

[5] Best management practice is defined as a practice that can help to understand and manage water use.

Applies to all **WATER** service areas

PART FIVE
CURTAILMENT PLAN

Stage 2 Exists When:

a. Company's water storage or well production has been less than 80 percent of capacity for at least 48 consecutive hours, and

b. Company has identified issues such as a steadily declining water table, increased draw down threatening pump operations, or poor water production, creating a reasonable belief the Company will be unable to meet anticipated water demand on a sustained basis.

Restrictions: Under Stage 2, the Company may request the customers to voluntarily employ water conservation measures to reduce water consumption by approximately 50 percent. The below conservation measures are encouraged to reduce water consumption:

- Divide outside watering on uniform basis such as:

Address Ends In	1, 2, 4, 7, 0	3, 5, 6, 8, or 9
Watering Days	Monday and Wednesday	Tuesday and Thursday

- Outdoor watering should be limited between the following times:

Seasonal Period	Watering Prohibited
April – September	6:00 a.m. – 7:00 p.m.
October - March	8:00 a.m. – 7:00 p.m.

- Eliminate outside watering on weekends and holidays
- Eliminate runoff from outdoor irrigation
- Use a shut-off hose nozzle if using hose to irrigate landscape or wash vehicles
- Eliminate washing of hard surfaces outdoors except washing to alleviate health or fire hazards
- Construction water blackout period between the hours of 5:00 am and 9:00 am, Monday through Sunday implemented
- Fix indoor and outdoor leaks
- Indoor water conservation techniques should be employed whenever possible

Notice Requirements: Company is required to notify customers by delivering written notice to each service address or by utilizing the Company's emergency messaging system which includes email, text, and phone call, or by posting on Company's website, or at the Company's option a combination of these notifications. Such notice shall notify the customers of the general nature of the problem and the need to conserve water.

The Company shall notify the Consumer Services Section of the Utilities Division of the Corporation Commission at least 12 hours prior to entering Stage 2.

Applies to all **WATER** service areas

PART FIVE
CURTAILMENT PLAN

Stage 3 Exists When:

a. Company's total water storage or well production has been less than 50 percent of capacity for at least 24 consecutive hours, and

b. Company has identified issues such as a steadily declining water table, increased draw down threatening pump operations, or poor water production, creating a reasonable belief the Company will be unable to meet anticipated water demand on a sustained basis.

Restrictions: Under Stage 3, the Company shall inform the customers of a **mandatory** restriction to employ water conservation measures to reduce daily consumption. All restrictions from Stage 2 shall be employed in addition to the below conservation measures:

- All outside watering eliminated, except livestock
- Draining and refilling water features is prohibited
- The filling of any swimming pool, spas, fountains or ornamental pools is prohibited
- Washing of any vehicle is prohibited, including commercial car washes and commercial truck washes.
- Water runoff is prohibited
- The use of drip or misting systems of any kind is prohibited
- The use of water for dust control or any outdoor cleaning uses is prohibited
- The use of construction water is prohibited

The following priority of use for delivery of water is set forth: (1) All existing regularly metered [presidential customers; (2) All regularly metered commercial customers that are classified as healthcare; (3) All regularly metered commercial customers; (3) All uses of water, other than fire hydrant use for new construction; (4) Fire hydrant use for landscape irrigation or lakes; (5) All other construction fire hydrant use, metered or unmetered.

Notice Requirements:

1. Company is required to notify customers by delivering written notice to each service address or by utilizing the Company's emergency messaging system which includes email, text, and phone call, or by posting on Company's website, or at the Company's option a combination of these notifications. Such notice shall notify the customers of the general nature of the problem and the need to conserve water.
2. Beginning with Stage 3, the Company shall post at least two (2) signs showing the curtailment stage. Signs shall be posted at noticeable locations, like at the well sites and at the entrance to major subdivisions served by the Company.

Applies to all **WATER** service areas
PART FIVE
CURTAILMENT PLAN

3. The Company shall notify the Consumer Services Section of the Utilities Division of the Corporation Commission at least 12 hours prior to entering Stage 3.

Once Stage 3 has been reached, the Company must begin to augment the supply of water by either hauling or through an emergency interconnect with an approved water supply in an attempt to maintain the curtailment at a level no higher than Stage 3 until a permanent solution has been implemented.

Customers who fail to comply with the above restrictions will be given a written notice to end all outdoor uses. Failure to comply within twenty-four (24) hours of receipt of the notice may result in temporary loss of service through the installation and use of a flow restrictor device or other means until an agreement can be made to end unauthorized use of outdoor water. To restore service, the customer shall be required to pay all authorized reconnection fees. If a customer believes he/she has been disconnected in error, the customer may contact the Commission's Consumer Services Section at 1-800-222-7000 to initiate an investigation.

Stage 4 Exists When:

a. Company's total water storage or well production has been less than 25 percent of capacity for at least 12 consecutive hours, and

b. Company has identified issues such as a steadily declining water table, increased draw down threatening pump operations, or poor water production, creating a reasonable belief the Company will be unable to meet anticipated water demand on a sustained basis.

Restrictions: Under Stage 4, Company shall inform the customers of a **mandatory** restriction to employ water conservation measures to reduce daily consumption. Failure to comply will result in temporary customer disconnection. All restrictions from Stage 2 and Stage 3 shall be employed in addition to the following uses of water being prohibited:

- Restaurant patrons shall be served water only upon request
- All leaks, breaks, or other malfunctions in the customer's plumbing fixtures and/or irrigation system must be repaired within five (5) business days of written notification by the utility.
- Any other water intensive activity is prohibited
- The addition of new service lines and meter installations is prohibited.

The following priority of use for delivery of water is set forth: (1) All existing regularly metered residential customers; (2) All regularly metered commercial customers; (3) All uses of water, other than fire hydrant use for new construction; (4) Fire hydrant use for landscape irrigation or lakes; (5) All other construction fire hydrant use, metered or unmetered.

Applies to all **WATER** service areas

PART FIVE
CURTAILMENT PLAN

Notice Requirements:

1. Company is required to notify customers by delivering written notice to each service address or by utilizing the Company's emergency messaging system which includes email, text, and phone call, or by posting on Company's website, or at the Company's option a combination of these notifications. Such notice shall notify the customers of the general nature of the problem and the need to conserve water.

2. Company shall post at least two (2) signs showing curtailment stage. Signs shall be posted at noticeable locations, like at the well sites and at the entrance to major subdivisions served by the Company.

3. Company shall notify the Consumer Services Section of the Utilities Division of the Corporation Commission at least 12 hours prior to entering Stage 4.

Once Stage 4 has been reached, the Company must augment the supply of water by hauling or through an emergency interconnect from an approved supply or must otherwise provide emergency drinking water for its customers until a permanent solution has been implemented.

Customers who fail to comply with the above restrictions will be given a written notice to end all outdoor uses. Failure to comply within twenty-four (24) hours of receipt of the notice may result in temporary loss of service through the installation and use of a flow restrictor device or other means until an agreement can be made to end unauthorized use of outdoor water. To restore service, the customer shall be required to pay all authorized reconnection fees. If a customer believes he/she has been disconnected in error, the customer may contact the Commission's Consumer Services Section at 1-800-222-7000 to initiate an investigation.

Applies to all **WATER** service areas

PART SIX

HOOK UP FEES-WATER

LIBERTY UTILITIES (LITCHFIELD PARK WATER & SEWER) CORP.
WATER HOOK-UP FEE TARIFF

I. PURPOSE AND APPLICABILITY

The purpose of the off-site hook-up fees payable to Liberty Utilities (Litchfield Park Water & Sewer) Corp. (the "Company") pursuant to this tariff is to equitably apportion the costs of constructing additional off-site facilities necessary to provide water production, delivery, storage, and pressure among all new service connections. These charges are applicable to all new service connections after the effective date of this tariff. The charges are one-time charges and are payable as a condition to Company's establishment of service, as more particularly provided below.

II. DEFINITIONS

Unless the context otherwise requires, the definitions set forth in R-14-2-401 of the Arizona Corporation Commission's ("Commission") rules and regulations governing water utilities shall apply in interpreting this tariff schedule.

"Applicant" means any person or entity requesting service to one or more new service connections and may include Developers and/or Builders of new residential subdivisions and/or commercial and industrial properties.

"Company" means Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Water Division.

"Main Extension Agreement" means any agreement whereby an Applicant, Developer and/or Builder agrees to advance the costs of the installation of water facilities necessary to the Company to serve new service connections within a development, or installs such water facilities necessary to serve new service connections and transfers ownership of such water facilities to the Company, which agreement shall require the approval of the Commission pursuant to A.AC. R-14-2-406, and shall have the same meaning as "Water Facilities Agreement" or "Line Extension Agreement."

"Off-site Facilities" means wells, storage tanks and related appurtenances necessary for proper operation, including engineering and design costs. Off-site facilities may also include booster pumps, pressure tanks, transmission mains and related appurtenances necessary for proper operation if these facilities are not for the exclusive use of the applicant and will benefit the entire water system.

"Service Connection" means and includes all service connections for single-family residential, commercial, industrial or other uses, regardless of meter size.

Applies to all **WATER** service areas

PART SIX
HOOK UP FEES-WATER

III. WATER HOOK-UP FEE

For each new service connection, the Company shall collect an Off-Site Hook-Up Fee derived from the following table:

OFF-SITE WATER HOOK-UP FEE TABLE		
Meter Size	**Size Factor**	**Total Fee**
5/8" x 3/4"	1	$2,584
3/4"	1.5	$3,876
1"	2.5	$6,460
1-1/2"	5	$12,920
2"	8	$20,672
3"	16	$41,344
4"	25	$64,600
6"	50	$129,200
8"	80	$206,720
10" (turbine)	145	$374,680
12" (turbine)	215	$555,560

(A) For "Active Adult" communities with demonstrated age-restricted zoning and/or CCR's providing for age-restricted living, the Total Fee for domestic water use shall be Two-Thirds (2/3) of the Total Fee shown above for Residential properties, based on an ERU factor of 190 gallons per day. All non-domestic service connections shall pay the Hook-up fee per the above table.

IV. TERMS AND CONDITIONS

(A) Assessment of One Time Off-Site Hook-up Fee: The off-site hook-up fee will be assessed only once per residential parcel. For non-residential Properties, that reside on one parcel but has future additional construction that requires an upsize in water meters or additional water meters, the Company shall assess an additional Hook-up fee based on Hook-up Fees associated with old water meter size and new water meter size difference in fees or the Hook-up Fee associated with the additional requested water meter size.

(B) Use of Off-Site Hook-up Fee: Off-site hook-up fees may only be used to pay for capital items of Off-site Facilities, or for repayment of loans obtained to fund the cost of installation of off- site facilities. Off-site hook-up fees shall not be used to cover repairs, maintenance, or operational costs. The Company shall record amounts collected under the tariff as CIAC; however, such amounts shall not be deducted from rate base until such amounts have been expended for plant.

Applies to all **WATER** service areas

PART SIX
HOOK UP FEES-WATER

(C) Time of Payment:

1) For those requiring a Main Extension Agreement: In the event that the person or entity that will be constructing improvements ("Applicant", "Developer" or "Builder") is otherwise required to enter into a Main Extension Agreement , whereby the Applicant , Developer or Builder agrees to advance the costs of installing mains , valves , fittings, hydrants and other on-site improvements in order to extend service in accordance with R-14-2-406(B), payment of the Hook-Up Fees required hereunder shall be made by the Applicant , Developer or Builder no later than within 15 calendar days after receipt of notification from the Company that the Utilities Division of the Arizona Corporation Commission has approved the Main Extension Agreement in accordance with R-14-2-406(M).

2) For those connecting to an existing main: In the event that the Applicant, Developer or Builder for service is not required to enter into a Main Extension Agreement, the Hook-Up Fee charges hereunder shall be due and payable at the time the meter and service line installation fee is due and payable.

(D) Off-Site Facilities Construction by Developer: Company and Applicant, Developer, or Builder may agree to construction of off-site facilities necessary to serve a particular development by Applicant, Developer or Builder, which facilities are then conveyed to Company. In that event, Company shall credit the. total cost of such off-site facilities as an offset to off-site hook-up fees due under this Tariff. If the total cost of the off-site facilities constructed by Applicant, Developer or Builder and conveyed to Company is less than the applicable off-site hook-up fees under this Tariff, Applicant, Developer or Builder shall pay the remaining amount of off-site hook-up fees owed hereunder. If the total cost of the off-site facilities contributed by Applicant, Developer or Builder and conveyed to Company is more than the applicable off-site hook-up fees under this Tariff, Applicant, Developer or Builder shall be refunded the difference upon acceptance of the off-site facilities by the Company.

(E) Failure to Pay Charges; Delinquent Payments: The Company will not be obligated to make an advance commitment to provide or actually provide water service to any Developer, Builder or other applicant for service in the event that the Developer, Builder or other applicant for service has not paid in full all charges hereunder. Under no circumstances will the Company set a meter or otherwise allow service to be established if the entire amount of any payment due hereunder has not been paid.

Applies to all **WATER** service areas

PART SIX
HOOK UP FEES-WATER

(F) Large Subdivision Projects: In the event that the Applicant, Developer or Builder is engaged in the development of a residential subdivision containing more than 150 lots, the Company may, in its discretion, agree to payment of off-site hook-up fees in installments. Such installments may be based on the residential subdivision development's phasing and should attempt to equitably apportion the payment of charges hereunder based on the Applicant's, Developer's or Builder's construction schedule and water service requirements. In the alternative, the Applicant, Developer, or Builder shall post an irrevocable letter of credit in favor of the Company in a commercially reasonable form, which may be drawn by the Company consistent with the actual or planned construction and hook up schedule for the subdivision and/or development.

(G) Off-Site Hook-Up Fees Non-refundable: The amounts collected by the Company as Hook-Up Fees pursuant to the off-site hook-up fee tariff shall be non-refundable contributions in aid of construction ("CIAC").

(H) Use of Off-Site Hook-Up Fees Received: All funds collected by the Company as off-site hook-up fees shall be deposited into a separate interest bearing trust account and used solely for the purposes of paying for the costs of installation of off-site facilities, including repayment of loans obtained for the installation of off-site facilities that will benefit the entire water system.

(I) Off-Site Hook-up Fee in Addition to On-site Facilities: T The off-site hook-up fee shall be in addition to any costs associated with the construction of on-site facilities under a Main Extension Agreement pursuant to A.A.C. Rl4-2-406 and any applicable Main Extension Tariff.

(J) Disposition of Excess Funds: After all necessary and desirable off-site facilities are constructed utilizing funds collected pursuant to the off-site hook-up fees, or if the off-site hook-up fee has been terminated by order of the Arizona Corporation Commission, any funds remaining in the trust shall be refunded. The manner of the refund shall be determined by the Commission at the time a refund becomes necessary.

(K) Fire Flow Requirements: In the event the applicant for service has fire flow requirements that require additional facilities beyond those facilities whose costs were included in the off-site hook-up fee, and which are contemplated to be constructed using the proceeds of the off-site hook-up Fee, the Company may require the applicant to install such additional facilities as are required to meet those additional fire flow requirements, as a non-refundable contribution, in addition to the off-site hook-up fee.

(L) Status Reporting Requirements to the Commission: The Company shall submit a calendar year Off-Site Hook-Up Fee status report each January to Docket Control for the prior twelve (12) month period, beginning January 2019, until the hook-up fee tariff is no longer in effect. This status report shall contain a list of all customers that have paid the hook-up fee tariff, the amount each has paid, the physical location/address of the property in respect of which such fee was paid, the amount of money spent from the account, the amount of interest earned on the funds within the tariff account, and a list of all facilities that have been installed with the tariff funds during the 12 month period.

Applies to all **WATER** service areas

PART SEVEN

FEDERAL COST RECOVERY MECHANISM PLAN OF ADMINISTRATION

APPLICABLE TO:

- Liberty Utilities (LITCHFIELD PARK Water & Sewer) Corp. (the Company") (Decision No._____);

I. INTRODUCTION:

Liberty LITCHFIELD PARK (Water & Sewer) Corp. shall adopt a Federal Compliance Cost Recovery Mechanism ("FCCRM"). This document is the Plan of Administration *("*POA*")* for the FCCRM. The FCCRM allows the Company to pass through to its customers the costs to recover the capital and on-going operations and maintenance costs of complying with the Environmental Protection Agency ("EPA") Forever Chemical rules in between rate cases, including water treatment facilities needed to comply with federal mandates on safe drinking water adopting Maximum Contaminant Level ("MCL") regulations and governing "forever chemicals" (per- and polyfluorinated alkyl substances) or ("PFAS").

II. GENERAL DESCRIPTION OF FCCRM:

The Company. will be entitled to seek recovery of the surcharge according to the following stages:

1. **Step 1** - Company may begin the engineering design of the facility.
2. **Step 2** - Once design is complete, before beginning construction, the Signatories agree to meet and confer to discuss the stars of any potential rule changes regarding compliance with federal mandates on safe drinking water.
3. **Step 3** – The Company shall file a separate FCCRM surcharge application for Commission approval in conformance with this FCCRM POA.

Applies to all **WATER** service areas

PART SEVEN

FEDERAL COST RECOVERY MECHANISM PLAN OF ADMINISTRATION

Under the FCCRM, the Company will bill all customers by means of a monthly fixed rate and a commodity rate billed on a per thousand gallons basis. The costs will be split evenly between the fixed and commodity rate components. The FCCRM Surcharge will appear on customers' bills as a separate line item labeled "Federal Compliance Cost Recovery Mechanism." Capital investments funded by proceeds of the FCCRM surcharge shall be subject to prudency review in the next rate case as well as an annual true-up of any over- or under-collections. The FCCRM will be subject to review for reinstatement in the next general rate case for the Company.

III. COMPONENTS OF THE FCCRM SURCHARGE.

i. The most current balance sheet at the time of the filing,
ii. The most current income statement
iii. An earnings test schedule,
iv. A rate review schedule (including the incremental and pro forma effect of the proposed increase),
v. A revenue requirement calculation,
vi. A surcharge calculation,
vii. An annual true-up calculation,
viii. An adjusted rate base schedule,
ix. A CWIP ledger, and
x. A typical bill analysis under present and proposed rates

IV. FCCRM SURCHARGE RATE DESIGN.

The FCCRM Surcharge rate design shall be as follows:

1. The FCCRM rate will be billed to all customers by means of a monthly fixed rate and a commodity rate billed on a per thousand gallons basis. The costs will be split between the fixed and commodity rate components.

2. The fixed component of the FCCRM Surcharge shall be calculated by dividing 50% of the FCCRM Revenue Requirement by the number of active equivalent 5/8 x 3/4-inch meters at the end of the most recent 12-month period, and shall increase with meter sized based on the following meter capacity multipliers

Applies to all **WATER** service areas

PART SEVEN

FEDERAL COST RECOVERY MECHANISM PLAN OF ADMINISTRATION

5/8-inch x 3/4-inch	1.0 times
3/4-inch	1.5 times
1-inch	2.5 times
1-1/2-inch	5.0 times
2-inch	8.0 times
3-inch	16.0 times
4-inch	25.0 times
6-inch	50.0 times
8-inch	80.0 times

3. The commodity rate will be calculated by dividing 50% of the FCCRM Revenue Requirement by the average gallons sold for the two most recent 12-month periods.
4. The FCCRM Surcharge will apply to all customers' bills.
5. The FCCRM Surcharge will appear on customers' bills as a separate line item labeled "Federal Compliance Cost Recovery Mechanism."

V. FCCRM SURCHARGE FILING.

The FCCRM Surcharge will be filed in alignment with Step 3.[6] The Company will submit to the Commission a detailed description of the plant and supporting invoices, a calculation of the associated revenue requirement, and the associated detailed schedules and tariffs. The Company will also provide Staff and the Residential Utility Consumer Office ("RUCO") electronic copies of all work papers and supporting documents.

VI. FCCRM SURCHARGE NOTICE REQUIREMENTS.

The FCCRM Surcharge will not become effective until approved by the Commission. The Company will notice its customers of the FCCRM Surcharge approved as soon as possible in a form acceptable to Staff. In addition, the Company must provide notice of each request for a surcharge to each party to Docket No. SW-01428A-25-0127, (will have an opportunity to be heard and participate in the surcharge proceedings). The surcharge review procedures will be the same as those for an Arsenic Cost Recovery Mechanism surcharge, as described in Decision No. 66400 (October 14, 2003).

[6] See Step 3, General Description of FCCRM

Applies to all **WATER** service areas

PART EIGHT

EMERGENCY WATER AUGMENTATION SURCHARGE TARIFF AND PLAN OF ADMINISTRATION

I. Purpose and Applicability

PURPOSE:

The purpose of this tariff is to authorize Liberty Utilities (Litchfield Park Water & Sewer) Corp. (the "Company") to make monthly adjustments to it rates and charges for water service in order to recover cost incurred for water purchases and hauling ("Water Augmentation Costs") in the event that Liberty Utilities (Litchfield Park Water & Sewer) Corp. experiences an emergency water shortage[7]. The charges will be assessed based on usage as provided below.

Applicability:

This tariff is obtained during the processing of a permanent rate application. This tariff only applies in the event of an "emergency water shortage" as defined in Section II of the definitions below.

II. Definitions

Unless the context otherwise requires, the definitions set forth in R-14-2-401 of the Arizona Corporation Commission's ("Commission") rules and regulations governing water utilities shall apply in interpreting this tariff schedule.

"Affiliate," means any other entity[8] directly or indirectly controlling or controlled by, or under direct or indirect common control with the Company. For purposes of this definition, the term "control" (including the correlative meanings of the terms "controlled by" and "under common control with"), as used with respect to any entity means the power to direct the management policies of such entity, whether through ownership of voting securities. or by contract, or otherwise.

[7] See definition for meaning of emergency water shortage.

[8] A corporation, partnership, limited partnership, joint venture, trust, estate or natural person.

Applies to all **WATER** service areas

PART EIGHT

EMERGENCY WATER AUGMENTATION SURCHARGE TARIFF AND PLAN OF ADMINISTRATION

"Curtailment Account Balance" means the monies collected under the curtailment tariff authorized in Decision No. xxxxx.

"Emergency Water Augmentation Surcharge" means the surcharge calculated in accordance with Section IV be1ow.

"Emergency Water Shortage" means a water shortage of a serious nature, developing suddenly or unexpectedly, that is out of the Company's control, and demanding immediate attention and has triggered at least Stage 3 of the Company's approved Curtailment Plan.

"Surcharge Rate" means the rate per 1,000 gallons that is calculated in accordance with Section III below.

"Water Augmentation Cost" means the actual cost of water purchased and water hauling costs not already included in the utility's existing rates per the last approved rate case.

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"Water Augmentation Quantity" means the actual quantity of augmented water (in thousands of gallons).

"Water Sold" means the actual quantity (in thousands of gallons) of water sold by the Company to its Customers during the month corresponding to the month in which water was purchased.

III. Surcharge Rate Calculation

The surcharge is calculated using data from the previous month's bill, for example, the water augmentation surcharge that is applied on the July bill is calculated using the June water augmentation costs and the June total gallons sold. See Figure A for an example of the calculation.

Figure A

For each month that the Company augments water, the Company will calculate the Surcharge Rate per the following formula:

Water Augmentation Cost/Water Sold

Applies to all **WATER** service areas

PART EIGHT

EMERGENCY WATER AUGMENTATION SURCHARGE TARIFF AND PLAN OF ADMINISTRATION

Example

This example illustrates how the water augmentation surcharge that is included on a customer's bill would be calculated using 2,000 gallons of usage.

[A]	[B]	[C]	[D]
Total June Water & Hauling Costs	June Ending Curtailment Account Balance	Total Gallons Sold in June in 1,000s	Emergency Water Augmentation Surcharge per 1,000 gallons
$3,000	$100	494	$6.28

[E]	[F]	[G]
Customer's Current Usage Gallons in 1,000s	Emergency Water Augmentation Surcharge (from Col.D)	Total Emergency Water Augmentation Surcharge on Current Bill
2	$6.28	$12.55

II.

IV. Plan of Administration

(A) Intent To Bill Emergency Water Augmentation Surcharge: For any month in which water is augmented, after completing its billing for the month and receiving the billing for the month, the Company will calculate the Surcharge Rate using the same methodology discussed herein und shown on Figure A and provide Utilities Division of the Arizona Corporation Commission ("Commission Staff') notice of the Company's intent to bill the Emergency Water Augmentation Surcharge.

(B) Notice to Commission Staff: For any month in which the Company intends to bill customers an Emergency Water Augmentation Surcharge, the Company shall provide Commission Staff notice of the Company's intent to bill the Emergency Water Augmentation Surcharge. The notice to Commission Staff shall include the following:

Applies to all **WATER** service areas

PART EIGHT

EMERGENCY WATER AUGMENTATION SURCHARGE TARIFF AND PLAN OF ADMINISTRATION

1. The Water Augmentation Cost.
2. The Water Augmentation Quantity.
3. A copy of the bill(s) received for the Water Augmentation.
4. A description of the system problem necessitating Water Augmentation and a description of the action being taken by the Company to resolve the problem including the date operations did or are expected to return to normal.
5. The dates for beginning and ending Water Augmentation.
6. A schedule showing the calculation of the Emergency Water Augmentation Surcharge Rate in excel format with formulas intact.
7. Identification of the hauling(s) available. If only one option was available, please state that there was only one option.
8. Whether or not the hauling entity was an affiliate.

(C) Implementation of Emergency Water Augmentation Surcharge: Commission Staff will review the Notice. If the filing is acceptable to Commission Staff, the resulting Surcharge will be charged to Liberty Utilities (Litchfield Park Water & Sewer) Corp. customers as a Emergency Water Augmentation Surcharge to be included on customers monthly bill as a separate line item.

(D) Documentation to Be Maintained: The Company shall maintain documentation for all costs, billing determinants, and revenue recoveries.

(E) Customer Notice: The Company shall notify its customers or this new tariff as part of its next regularly scheduled billing after the effective date of the tariff but no later than sixty (60) days after the effective date of the tariff in a form acceptable to Staff.

Applies to all **WASTEWATER** service areas

PART NINE
STATEMENT OF CHARGES

I. RATES

In Decision No. XXXXX, dated XXXXX, the Commission authorized the following rates and charges to become effective XXXXX:

A. Monthly Usage Charges

Residential:	**Charge**[10]
Residential Service	$ 69.72
Multiple Unit Housing – Monthly Per Unit	64.73
Commercial/Non-Residential:	
Small Commercial – Monthly Service	117.91
Commercial Measured Service:	
Regular Domestic – Monthly Service Charge	66.01
Restaurants, Motels, Grocery Store & Dry Cleaning Estab. – Monthly Service	66.01*
Wigwam Resort:	
Wigwam Resort Monthly Rate – Per Room	67.25
Wigwam Resort Main Hotel Facilities – Per Month	2,663.08
Schools:	
Elementary Schools	1,810.88
Middle & High Schools	2,130.45
Community College	3,202.21
Effluent**	Market Rate

*Motels without restaurants included (eliminate multi-unit monthly rate provision)

**Market Rate – Maximum effluent rate shall not exceed $xx per acre foot based on potable water rate of $xx per thousand gallons.

[10] Low Income Tariff – A 30% discount is available on monthly minimum and commodity charges to qualified residential customers meeting the low income qualifications.

Applies to all **WASTEWATER** service areas

PART NINE

STATEMENT OF CHARGES

B. Commodity Rates

Commercial/Non-Residential Customers (water usage Data Available)*

Regular Domestic per 1,000 gallons water usage	$6.01
Restaurants, Motels Grocery Stores & Dry Cleaning Estab, per 1,000 gallons water usage	7.71

Commercial/Non-Residential Customers (influent Data)**

Regular Domestic per 1,000 gallons water usage	$7.51
Restaurants, Motels Grocery Stores & Dry Cleaning Estab, per 1,000 gallons water usage	10.64

*For Commercial/Non-Residential Customers that are provided with water service from the Company or whose water usage is available to the Company from another water utility, Company shall bill non-residential customers based on water usage data provided by Liberty Utilities or water usage data provided by another local water provider. If, at any point, Company is unable to obtain actual water usage data for such commercial/non-residential customers, Company shall bill non-residential customers based on the last known, most recent usage data as a proxy. Billing shall be trued up when actual data is obtained. If no water data can be obtained, a non-residential customer may be required to install an influent meter at cost and such customers shall be billed in accordance with the influent data rates set forth above.

** For customers that are not receiving water service from the Company, and/or the Company is not receiving water usage data information from another water provider, a meter to measure influent will be installed at cost and paid by customer and such customers shall be billed in accordance with the influent data rates set forth above.

Applies to all **WASTEWATER** service areas

PART NINE
STATEMENT OF CHARGES

C. Service Charges

Service	Charge
Establishment per A.A.C. R14-2-603(D)(1)	$30.00
Re-Establishment of Service per A.A.C. R14-2-603(D)(1)	(a)
Disconnection	At Cost (b)
Reconnection per A.A.C. R14-2-603(D)(1)	(b)
NSF Check per A.A.C. R14-2-608(E)(1)	$25 (c)
Deferred Payment (per month)	1.5% per month
Late Charge	(d)
Service Calls - After Hours	$125 (e)
Deposit Requirement	(f)
Deposit Interest per A.A.C. R14-2-603(B)	6%
Service Lateral Connection Charge – All Sizes	(g)
Collection Main Extension Tariff Per A.A.C R14-2-606(B)	(h)
Influent Meter and Metering System Installation	At Cost (i)
Wastewater Hook-up Fee	At Cost (j)
Failed Final Inspection Fee	$75

a) Minimum charge times number of full months off the system, per Rule R14-2-603(D).
b) Customer shall pay the actual cost including costs for excavation and trenching, pipeline modification, sewer block, backfill and grading, road repairs and permitting. Customer will be provided copies of invoices for actual costs incurred. There shall be no charge if no work is performed.Per Commission Rule A.A.C. R-14-2-603.B
c) Liberty Litchfield Park may only charge one NSF fee when customers are billed for water and sewer services on one bill.
d) Greater of $5.00 or 1.50% of unpaid balance greater of $5 or 1.5% of unpaid balance
e) Customer shall be charged for after-hours service calls outside of normal working hours for work performed at customer's request or convenience.
f) Per A.A.C. R14-2-603(B)(7):
   1. Residential – two times the average bill by class
   2. Commercial – two and one-half times the customer's estimated maximum monthly bill
g) At cost. Customer/Developer shall install or cause to be installed all Service Laterals as refundable advance in aid of construction.
h) All Main Extensions shall be completed at cost and shall be treated as refundable advances-in-aid of construction.
i) The cost of the influent meter and metering system installation shall be at the sole expense of the commercial and industrial user and not subject to refund.
j) Residential and Commercial – Customers/Developers shall pay the applicable Wastewater Hook-up Fees tariff

IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM ITS CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES, USE, AND FRANCHISE TAX. PER COMMISSION RULE 14-2-608D(5).

Applies to all **WASTEWATER** service areas

PART NINE

STATEMENT OF CHARGES

II. TAXES AND ASSESSMENTS

In addition to the collection of regular rates, the Company will collect from its customers a proportionate share of any privilege, sales, use and franchise tax per Commission Rule 14-2-608.D.5.

All Advances or Contributions are to include labor, materials, overheads, and all applicable taxes, including all gross-up taxes for income taxes. Cost to include labor, materials and parts, overheads, and all applicable taxes.

Under applicable law, any contributions or advances provided by a Developer are taxable income to the Utility. In accordance with the Gross-Up Sharing Method policy adopted by the Commission in Decision No. 76974, the Company will collect from the Developer an applicable share of income taxes for the Company's state and federal tax liability on all funds contributed and/or advanced. The funds will be collected prior to the commencement of service.

Applies to all **WASTEWATER** service areas

PART TEN
STATEMENT OF TERMS AND CONDITIONS

I. PERMITTED COSTS

A. Costs shall be verified by invoice.

B. For services that are provided by the Company at cost, costs shall include labor, materials, other charges incurred, and overhead. However, prior to any such service being provided, the estimated cost of such service will be provided by the Company to the customer. After review of the cost estimate, the customer will pay the amount of the estimated cost to the Company.

C. In the event that the actual cost is less than the estimated cost, the Company will refund the excess to the customer within 30 days after completion of the provision of the service or after Company's receipt of invoices, timesheets or other related documents, whichever is later.

D. In the event the actual cost is more than the estimated cost, the Company will bill the customer for the amount due within 30 days after completion of the invoices, timesheets or other related documents, whichever is later. The amount so billed will be due and payable 30 days after the invoice date. However, if the actual cost is more than five percent (5%) greater than the total amount paid, the customer will only be required to pay five percent (5%) more than the total amount paid, unless the Company can demonstrate that the increased costs were beyond its control and could not be foreseen at the time the estimate for the total amount paid was made.

E. At the customer's request, the Company shall make available to the customer all invoices, timesheets or related documents that support the cost for providing such service.

F. Permitted costs shall include any Federal, State or local taxes that are or may be payable by the Company as a result of any tariff or contract for wastewater facilities under which the Customer advances or contributes funds or facilities to the Company.

Applies to all **WASTEWATER** service areas

PART TEN
STATEMENT OF TERMS AND CONDITIONS

II. CUSTOMER DISCHARGE TO SYSTEM

A. Service Subject to Regulation

Company provides wastewater service using treatment and collection facilities that are regulated by numerous county, state and federal Statutes and Regulations. Those Regulations include limitations as to domestic strength wastewater and the type of wastewater that may be discharged into the system by any person directly or indirectly connected to the plant.

B. Waste Limitations

Company has established the permissible limits of concentration as domestic strength wastewater and will limit concentration for various specific substances, materials, waters, or wastes that can be accepted in the sewer system, and to specify those substances, materials, waters, or wastes that are prohibited from entering the sewer system. Each permissible limit so established shall be placed on file in the business office of Company, with a copy filed with the Commission. No person shall discharge, or cause to be discharged, any new sources of inflow including, but not limited to, storm water, surface water, groundwater, roof runoffs, subsurface drainage, cooling water, or polluted industrial process waters into the sanitary sewer. Company will require an affidavit from all non-residential customers, and their professional engineer, stating that the wastewater discharged to the system does not exceed domestic strength or applicable pre-treatment standards.

C. Inspection and Right of Entry

Every facility that is involved directly or indirectly with the discharge of wastewater to the Treatment Plant may be inspected by Company as it deems necessary. These facilities shall include but not be limited to sewer; sewage pumping plants; all processes; devices and connection sewer; and all similar sewerage facilities. Inspections may be made to determine that such facilities are maintained and operated properly and are adequate to meet the provisions of these rules and this tariff. Inspections may include the collection of samples. Authorized personnel of Company shall be provided immediate access to all of the above facilities or to other facilities directly or indirectly connected to the Treatment Plant at all reasonable times including those occasioned by emergency conditions. Any permanent or temporary obstruction to easy access to the user's facility to be inspected shall promptly be removed by the facility user or owner at

Applies to all **WASTEWATER** service areas
PART TEN
STATEMENT OF TERMS AND CONDITIONS

the written or verbal request of Company and shall not be replaced. No person shall interfere with, delay, resist or refuse entrance to an authorized Company representative attempting to inspect any facility involved directly or indirectly with a discharge of wastewater to the Treatment Plant. Adequate identification shall be provided by Company for all inspectors and other authorized personnel and these persons shall identify themselves when entering any property for inspection purposes or when inspecting the work of any contractor.

All transient motor homes, travel trailers and other units containing holding tanks must arrive at Company's service area in an empty condition. Inspection will be required of said units prior to their being allowed to hookup to the wastewater system.

D. Termination of Water Service for Violation of Wastewater Rules and Regulations

Company is authorized to discontinue water service to any person connected to both its water and sewer systems who violates Company's wastewater terms and conditions as set forth in this section or in any way creates a public health hazard or the likelihood of such a public health hazard. This termination authority does not apply to non-payment for water or wastewater services.

III. RULES AND REGULATIONS

Company has adopted the Rules and Regulations established by the Commission as the basis for its operating procedures. A.A.C. R14-2-601 through A.A.C. R14-2-609 will be controlling of Company procedures, unless specifically approved tariffs or Commission Order(s) provide otherwise.

Applies to all **WASTEWATER** service areas

PART ELEVEN

HOOK-UP FEE TARIFF – WASTEWATER

I. Purpose and Applicability

The purpose of the off-site facilities hook-up fees payable to Liberty Utilities (Litchfield Park Water & Sewer) Corp. (the "Company") pursuant to this tariff is to equitably apportion the costs of constructing additional off-site facilities to provide wastewater treatment and disposal facilities among all new service laterals. These charges are applicable to all new service laterals undertaken via Collection Main Extension Agreements, or requests for service not requiring a Collection Main Extension Agreement, entered into after the effective date of this tariff. The charges are one-time charges and are payable as a condition to Company's establishment of service, as more particularly provided below.

II. Definitions

Unless the context otherwise requires, the definitions set forth in R-14-2-601 of the Arizona Corporation Commission's ("Commission") rules and regulations governing sewer utilities shall apply interpreting this tariff schedule.

"Applicant" means any party entering into an agreement with Company for the installation of wastewater facilities to serve new service laterals, and may include Developers and/or Builders of new residential subdivisions, and industrial or commercial properties.

"Company" means Liberty Utilities (Litchfield Park Water & Service) Corp. – Wastewater Division.

"Collection Main Extension Agreement" means an agreement whereby an Applicant, Developer and/or Builder agrees to advance the costs of the installation of wastewater facilities necessary to serve new service laterals, or install wastewater facilities to serve new service laterals and transfer ownership of such wastewater facilities to the Company, which agreement does not require the approval of the Commission pursuant to A.A.C. R-14-2-606, and shall have the same meaning as "Wastewater Facilities Agreement."

"Off-site Facilities" means the wastewater treatment plant, sludge disposal facilities, effluent disposal facilities and related appurtenances necessary for proper operation, including engineering and design costs. Offsite facilities may also include lift stations, force mains, transportation mains and related appurtenances necessary for proper operation if these facilities are not for the exclusive use of the applicant and benefit the entire wastewater system.

"Service Lateral" means and includes all service laterals for single-family residential, commercial, industrial or other uses.

Applies to all **WASTEWATER** service areas

PART ELEVEN

HOOK-UP FEE TARIFF – WASTEWATER

III. Wastewater Hook-up Fee

For each new residential service lateral, the Company shall collect a Hook-Up Fee of $2,697 based on the Equivalent Residential Unit ("ERU") of 270 gallons per day. Commercial and industrial applicants shall pay based on the total ERUs of their development calculated by dividing the estimated total daily wastewater capacity usage needed for service using standard engineering standards and criteria by the ERU factor of 270 gallons per day. For "Active Adult" communities with demonstrated age-restricted zoning and/or CCRs providing for age-restricted living, the Hook-Up Fee for residential properties shall be $1,070, based on an ERU factor of 190 gallons per day.

IV. Terms and Conditions

(A) Assessment of One Time Off-Site Facilities Hook-up Fee: The off-site facilities hook-up fee may be assessed only once per residential parcel. For non-residential properties that reside on one parcel but have future additional construction that adds additional impact to the Company's existing wastewater infrastructure, an incremental Hook-Up Fee shall be applied based upon the additional EDU equivalents added by such construction activity.

(B) Use of Off-Site Facilities Hook-up Fee: Off-site facilities hook-up fees may only be used to pay for capital items of Off-site Facilities, or for repayment of loans obtained to fund the cost of installation of off-site facilities. Off-site hook-up fees shall not be used to cover repairs, maintenance, or operational costs. The Company shall record amounts collected under the tariff as CIAC; however, such amounts shall not be deducted from rate base until such amounts have been expended for plant.

(C) Time of Payment:

(1) In the event that the person or entity that will be constructing improvements ("Applicant", "Developer" or "Builder") is otherwise required to enter into a Collection Main Extension Agreement, payment of the fees required hereunder shall be made by the Applicant, Developer or Builder within 15 days of execution of a Main Extension Agreement.

(2) In the event that the Applicant, Developer or Builder for service is not required to enter into a Collection Main Extension Agreement, the Hook-Up Fee charges hereunder shall be due and payable at the time wastewater service is requested for the property.

Applies to all **WASTEWATER** service areas

PART ELEVEN

HOOK-UP FEE TARIFF – WASTEWATER

(D) Off-Site Facilities Construction by Developer: Company and Applicant, Developer, or Builder may agree to construction of off-site facilities necessary to serve a particular development by Applicant, Developer or Builder, which facilities are then conveyed to Company. In that event, Company shall credit the total cost of such off-site facilities as an offset to off-site hook-up fees due under this Tariff. If the total cost of the off-site facilities constructed by Applicant, Developer or Builder and conveyed to Company is less than the applicable off-site hook-up fees under this Tariff, Applicant, Developer or Builder shall pay the remaining amount of off-site hook-up fees owed hereunder. If the total cost of the off-site facilities contributed by Applicant, Developer or Builder and conveyed to Company is more than the applicable off-site hook-up fees under this Tariff, Developer or Builder shall be refunded the difference upon acceptance of the off-site facilities by the Company.

(E) Failure to Pay Charges; Delinquent Payments: The Company will not be obligated to make an advance commitment to provide or actually provide wastewater service to any Developer, Builder or other applicant for service in the event that the Developer, Builder or other applicant for service has not paid in full all charges hereunder. Under no circumstances will the Company connect service or otherwise allow service to be established if the entire amount of any payment has not been paid.

(F) Large Subdivision and/or Development Projects: In the event that the Applicant, Developer or Builder is engaged in the development of a residential subdivision and/or development containing more than 150 lots, the Company may, in its reasonable discretion, agree to payment of off-site hook-up fees in installments. Such installments may be based on the residential subdivision and/or development's phasing, and should attempt to equitably apportion the payment of charges hereunder based on the Applicant's, Developer's or Builder's construction schedule and water service requirements. In the alternative, the Applicant, Developer, or Builder shall post an irrevocable letter of credit in favor of the Company in a commercially reasonable form, which may be drawn by the Company consistent with the actual or planned construction and hook up schedule for the subdivision and/or development.

(G) Off-Site Hook-Up Fees Non-refundable: The amounts collected by the Company pursuant to the off-site facilities hook-up fee tariff shall be non-refundable contributions in aid of construction.

(H) Use of Off-Site Hook-Up Fees Received: All funds collected by the Company as off-site facilities hook-up fees shall be deposited into a separate account and bear interest and shall be used solely for the purposes of paying for the costs of installation of off-site facilities, including repayment of loans obtained for the installation of off-site facilities.

(I) Off-Site Facilities Hook-up Fee in Addition to On-site Facilities: The off-site facilities hook-up fee shall be in addition to any costs associated with the construction of on-site facilities under a Collection Main Extension Agreement.

Applies to all **WASTEWATER** service areas

PART ELEVEN

HOOK-UP FEE TARIFF – WASTEWATER

(J) Disposition of Excess Funds: After all necessary and desirable off-site facilities are constructed utilizing funds collected pursuant to the off-site facilities hook-up fees, or if the off-site facilities hook-up fee has been terminated by order of the Arizona Corporation Commission, any funds remaining in the trust shall be refunded. The manner of the refund shall be determined by the Commission at the time a refund becomes necessary.

(K) Status Reporting Requirements to the Commission: The Company shall submit a calendar year Off-Site Facilities Hook-Up Fee status report each January to Docket Control for the prior twelve (12) month period, beginning January 2022, until the hook-up fee tariff is no longer in effect. This status report shall contain a list of all customers that have paid the hook-up fee tariff, the amount each has paid, the physical location/address of the property in respect of which such fee was paid, the amount of money spent from the account, the amount of interest earned on the funds within the tariff account, and an itemization of all facilities that have been installed using the tariff funds during the 12 month period.

(L) Large Users: Large users requiring wastewater treatment capacity exceeding 25,000 gallons per day are considered Large Users. Large Users will be required to enter into a separate agreement with the Company that will define the terms and conditions of any hook-up fees required from that customer to provide service, including the amount. timing and nature of the hook-up fees, as well as any other pertinent terms and conditions. In the absence of any specific terms and conditions set forth in such an agreement to the contrary, the terms and conditions as set forth in Section IV of this tariff will apply.

Applies to all service areas

PART TWELVE
CUSTOMER ASSISTANCE TARIFF
DOMESTIC SERVICE - SINGLE FAMILY ACCOMMODATION

Applicability

Applicable to residential water and wastewater service for domestic use rendered to individuals who meet all the program qualifications and special conditions of this rate schedule.

Programs

This Customer Assistance Tariff (CAT) contains the following programs: (1) Low-Income Program; (2) Deployed Services Member Program; and (3) Disabled Veteran Program. Collectively, these three programs are referred to as the "Customer Assistance Programs".

Territory

Within all customer service areas served by Liberty Utilities (LITCHFIELD PARK Water & Sewer) Corp. ("Liberty" or "Company").

Rates

Thirty percent (30%) discount applied to the regular filed tariff.

Program Qualifications

1. The Liberty bill must be in your name and the address must be your primary residence.
2. You may not be claimed as a dependent on another person's tax return.
3. You must reapply each time you move residences.
4. You must renew your application once every year, or sooner, if requested.
5. You must notify Liberty within thirty (30) days if you become ineligible for the CAT.

Applies to all service areas

PART TWELVE
CUSTOMER ASSISTANCE TARIFF
DOMESTIC SERVICE - SINGLE FAMILY ACCOMMODATION

Special Conditions

1. Application: An application on a form authorized by the Commission is required for each request for service under this schedule. A customer must reapply every year or sooner, if requested.

2. Commencement of Rate: Eligible customers whose applications have been approved shall be billed on this schedule commencing with the next regularly scheduled billing period that follows receipt of application by Liberty.

3. Verification: Information provided by the applicant is subject to verification by Liberty. Refusal or failure of a customer to provide documentation of eligibility acceptable to Liberty, upon request by Liberty, shall result in removal from this rate schedule.

4. Notice from Customer: It is the customer's responsibility to notify Liberty if there is a change of eligibility status.

5. Rebilling: Customers may be re-billed retroactively for periods of ineligibility under the applicable rate schedule.

6. Participation Limit: The CAT (for all three programs included) is limited to 5,000 water division customers and 5,000 wastewater division customers of the Company. Applications will be reviewed and approved on a first come, first serve basis. Applicants will be placed on a waiting list if the participation limit has been met.

7. Qualification: A customer that qualifies for more than one program will only receive benefits from one program per year. CAT benefits will not be combined or accumulated.

Applies to all service areas

PART TWELVE
CUSTOMER ASSISTANCE TARIFF
DOMESTIC SERVICE - SINGLE FAMILY ACCOMMODATION

LOW INCOME PROGRAM

To qualify for the low income program, the total gross annual income of all persons living in your household cannot exceed the income levels below:

Effective xxxx xx, xxxx

No. of Person in Household	Total Gross Annual Income*
1	$31,300
2	$42,300
3	$53,300
4	$64,300
5	$75,300
6	$86,300

For families/households with more than 6 persons, add $11,000 for each additional person.

***Qualifying annual incomes are set at 200 percent of the 2025 federal poverty levels for the first year, and will be adjusted annually to maintain qualifying incomes at 200 percent of the federal poverty level for each subsequent year.**

Acceptance into the program is subject to verification of income source.

For the purpose of the program the "gross household income" means all money and non-cash benefits, available for living expenses, from all sources, both taxable and non-taxable, before deductions for all people who live in your home. This includes, but is not limited to:

Wages or salaries
Interest or dividends from: Savings account, stocks or bonds
Unemployment benefits
TANF (AFDC)
Pensions
Gifts
Social Security, SSI, SSP
Scholarships, grants, or other aid used for living expenses
Disability payments
Food Stamps
Insurance settlements
Rental or royalty income
Profit from self-employment (IRS form Schedule C, Line 29)
Worker's Compensation
Child Support
Spousal Support

Applies to all service areas

PART TWELVE
CUSTOMER ASSISTANCE TARIFF
DOMESTIC SERVICE - SINGLE FAMILY ACCOMMODATION

DEPLOYED SERVICES MEMBER PROGRAM

This program allows the Company to provide a 15% discount to deployed service members of the United States Military. The Company will provide the credit on the deployed service member's bill provided that the following criteria are met:

The Company will provide the credit on the deployed service member's bill provided that the following criteria are met:

1. Deployment is not a "permanent change of station." Permanent change of station requires a service member to permanently change his or her place of residence, paid for by the applicable military branch. A service member's decision to keep a secondary residence in Arizona would be discretionary and would not qualify for this credit.
2. Deployed member does not have family living in the premises. Short term deployments, where a spouse and/or dependents remain in the United States would not qualify, as the service member would receive separate compensation from the military to cover domestic expenses while deployed.
3. The deployed service member is an active member of the military (*e.g.*, Air Force, Army, Coast Guard, Marines, Space Force, and Navy), as defined by 10 U.S.C. § 101(a)(4), and includes any member of the Reserves or National Guard called to active duty.

Administration

1. Participation shall be determined on a first come, first served basis.
2. Each service member's eligibility must be verified based on written orders from the service member's command.
3. Continued eligibility will be determined periodically through a recertification process.
4. The Company is permitted to seek Commission approval to change participant limits based on level of participation.

Qualifying annual incomes are set at 200 percent of the 202X federal poverty levels.

Applies to all service areas

PART TWELVE

CUSTOMER ASSISTANCE TARIFF

DOMESTIC SERVICE - SINGLE FAMILY ACCOMMODATION

DEPLOYED SERVICES MEMBER PROGRAM

Effective xxxx xx, xxxx

No. of Person in Household	Total Gross Annual Income*
1	$31,300
2	$42,300
3	$53,300
4	$64,300
5	$75,300
6	$86,300

For families/households with more than 6 persons, add $11,000 for each additional person.
***Qualifying annual incomes are set at 200 percent of the 2025 federal poverty levels for the first year, and will be adjusted annually to maintain qualifying incomes at 200 percent of the federal poverty level for each subsequent year.**
Acceptance into the program is subject to verification of income source.

For the purpose of the program the "gross household income" means all money and non-cash benefits, available for living expenses, from all sources, both taxable and non-taxable, before deductions for all people who live in your home. This includes, but is not limited to:

Wages or salaries	Social Security, SSI, SSP	Rental or royalty income
Interest or dividends from:	Scholarships, grants, or other aid	Profit from self-employment (IRS form Schedule C, Line 29)
Savings account, stocks or bonds	used for living expenses	
Unemployment benefits	Disability payments	Worker's Compensation
TANF (AFDC)	Food Stamps	Child Support
Pensions	Insurance settlements	Spousal Support
Gifts		

Applies to all service areas

PART TWELVE
CUSTOMER ASSISTANCE TARIFF
DOMESTIC SERVICE - SINGLE FAMILY ACCOMMODATION

DISABLED MILITARY VETERAN PROGRAM

This program allows the Company to provide a 30% discount to disabled military veterans of the United States Military. The Company will provide the credit on the disabled military veteran's bill provided that the following criteria are met:

The Company will provide the credit on the disabled military veteran's bill provided that the following criteria are met:

1. Disabled military veteran was honorably discharged from the armed forces.
2. Disabled military veteran must have a permanent disability rating related to their military duty service.
3. The disabled military veteran must have been an active member of the military (*e.g.*, Air Force, Army, Coast Guard, Marines, and Navy), as defined by 10 U.S.C. § 101(a)(4), and includes any member of the Reserves or National Guard called to active duty.

Administration

1. Participation shall be determined on a first come, first served basis.
2. Each service member's eligibility must be verified based on documentation demonstrating a medical discharge or other written documentation from the United States Department of Defense or Department of Veteran Affairs.
3. Continued eligibility will be determined periodically through a recertification process.
4. The Company is permitted to seek Commission approval to change participant limits based on level of participation.
5. Qualifying annual incomes are set at 200 percent of the 202X federal poverty levels

Applies to all service areas

PART TWELVE

CUSTOMER ASSISTANCE TARIFF

DOMESTIC SERVICE - SINGLE FAMILY ACCOMMODATION

DISABLED MILITARY VETERAN PROGRAM

Effective xxxx xx, xxxx

No. of Person in Household	Total Gross Annual Income*
1	$31,300
2	$42,300
3	$53,300
4	$64,300
5	$75,300
6	$86,300

For families/households with more than 6 persons, add $11,000 for each additional person.
***Qualifying annual incomes are set at 200 percent of the 2025 federal poverty levels for the first year, and will be adjusted annually to maintain qualifying incomes at 200 percent of the federal poverty level for each subsequent year.**

Acceptance into the program is subject to verification of income source.

For the purpose of the program the "gross household income" means all money and non-cash benefits, available for living expenses, from all sources, both taxable and non-taxable, before deductions for all people who live in your home. This includes, but is not limited to:

Wages or salaries	Social Security, SSI, SSP	Rental or royalty income
Interest or dividends from: Savings account, stocks or bonds	Scholarships, grants, or other aid used for living expenses	Profit from self-employment (IRS form Schedule C, Line 29)
Unemployment benefits	Disability payments	Worker's Compensation
TANF (AFDC)	Food Stamps	Child Support
Pensions	Insurance settlements	Spousal Support
Gifts		

Applies to all service areas

PART TWELVE
CUSTOMER ASSISTANCE TARIFF
DOMESTIC SERVICE - SINGLE FAMILY ACCOMMODATION

RECOVERY OF COST OF CUSTOMER ASSISTANCE TARIFF AND CUSTOMER SURCHARGES

The Company shall recover the CAT costs from a monthly CAT surcharge on all residential and non-residential water customers who are not participating in the CAT. Liberty is entitled to seek recovery of direct costs (*i.e.*, those costs directly associated with the programs, which costs would not be incurred in the absence of the programs). The Company shall account for those direct costs separately from other operating costs.

Liberty shall be entitled to implement a CAT surcharge on non-participating residential and non-residential water as follows.

- For customers participating in the CAT, the Company shall maintain a balancing account detailing the beginning and ending balance of the cumulative unrecovered program costs each month.
- Liberty's authorized rate of return shall be applied monthly to the average of the beginning balances of the cumulative unrecovered program costs for water service and included in the beginning balances for the following month.
- Using the balancing account, Liberty shall calculate the monthly surcharge for each customer as follows:

  (Ending Balance for Low-Income Tariff Balancing Account including amortized carrying costs during recovery period /Number of active non-participating water connections at year end)/12

- The ending balance in the balancing account shall equal the beginning balances plus discounts allowed on bills for the twelve month tracking period, plus direct program costs incurred in the twelve month period plus the return less surcharge fees billed in the twelve month tracking period.
- Liberty shall implement a monthly surcharge for the CAT for each twelve month period of the CAT. The Company shall calculate the monthly surcharge each year based on the active number of customer connections as of December 31 of the prior year. The Company shall file notice of the surcharge, along with a report on the CAT, with the Arizona Corporation Commission on or before January 31 and the surcharge shall be implemented on customer bills in February of each year with the recovery period ending in January of the following year.

Applies to all service areas

PART THIRTEEN
PLAN OF ADMINISTRATION FOR
PURCHASED POWER ADJUSTMENT MECHANISM

I. GENERAL DESCRIPTION.

This document is the Plan of Administration ("POA") for the Purchased Power Adjustment Mechanism ("PPAM") for Liberty Utilities (LITCHFIELD PARK Water & Sewer) Corp. The PPAM allows Liberty LITCHFIELD PARK to pass through to its customers the increase or decrease in purchased power costs that result from a rate change for any Commission-regulated electric service provider supplying retail electric service to the Company.

II. PPAM RELATED FILINGS.

A. Within 60 days of the effective date of a Commission Decision authorizing a rate change in the approved tariffs for any Commission-regulated electric service provider supplying retail electric service to the Company, the Company shall file with Docket Control an analysis of the actual impact on the energy portion of the Company's electric service costs.

B. The Company will provide the Commission with spreadsheets detailing exactly how the Company's purchased power expenses were calculated in the time period prior to a change in the rate that the Company must pay for purchased power. These calculations will include basic service charges and rate and volume figures. That is, the Company will break down its total purchased power bill into the amount due to fixed fees, volume of electricity used, and the rates paid per unit of electricity. For the period following the rate change, the Company will provide the same information, then compare the two periods, isolating any change in purchased power cost that is due exclusively to a rate change. The specific intent is to show exactly how much of any increase or decrease is due to changes in rates beyond the Company's control and how much is due to a change in the amount of power that the Company consumes. The Company will only recover increases or refund decreases that are due to changes in rates.

C. All revised schedules filed with the Commission pursuant to the provisions of this PPAM will be accompanied by documentation prepared by the Company in a format approved by Utilities Division Staff of the Commission and will contain sufficient detail to enable the Commission to verify accuracy of the Company's calculations.

D. The surcharges will not become effective until approved by the Commission.

E. The Company will file annually with the Commission a report detailing the Company's purchased power costs and any conservation or power-shifting measures employed by the Company.

F. The Company shall provide notice (in a form acceptable to Staff) of the rate increases to customers with the bill where the rate increase first appears.

Applies to all service areas

PART THIRTEEN

PLAN OF ADMINISTRATION FOR

PURCHASED POWER ADJUSTMENT MECHANISM

III. APPLICATION TO WATER AND WASTEWATER CUSTOMERS.

A. The increase or decrease in purchased power costs that are due to changes in rates at the Company's water facilities will be allocated on a per capita basis.

B. See the following example for water customers:

Test Year	
Purchased Power Rate	**$0.0800**
Kilowatt Hours Used	1,250,000
Purchased Power Expense	$100,000

→

Current Year	
Purchased Power Rate	**$0.1000**
Kilowatt Hours Used	1,250,000
Purchased Power Expense	$125,000

Pass Through Calculation	
Current Year Purchased Power Expense	$125,000
Test Year Purchased Power Expense	$100,000
Increase in Purchased Power Expense Due to Rate Increase	$25,000

PPAM Charge on Sample Customer Bill	
Increase in Purchased Power Expense Due to Rate Increase	$25,000
Number of Water Customers	20,000
PPAM Charge on Sample Customer Bill	$1.25

C. See the following example for wastewater customers:

Test Year	
Purchased Power Rate	**$0.0800**
Kilowatt Hours Used	1,250,000
Purchased Power Expense	$100,000

→

Current Year	
Purchased Power Rate	**$0.1000**
Kilowatt Hours Used	1,250,000
Purchased Power Expense	$125,000

Pass Through Calculation	
Current Year Purchased Power Expense	$125,000
Test Year Purchased Power Expense	$100,000
Increase in Purchased Power Expense Due to Rate Increase	$25,000

PPAM Charge on Sample Customer Bill	
Increase in Purchased Power Expense Due to Rate Increase	$25,000
Number of Wastewater Customers	20,000
PPAM Charge on Sample Customer Bill	$1.25

Applies to all service areas

PART FOURTEEN
PLAN OF ADMINISTRATION FOR
PROPERTY TAX ADJUSTMENT MECHANISM

I. GENERAL DESCRIPTION.

This document is the Plan of Administration ("POA") for the Property Tax Adjustment Mechanism ("PTAM") for Liberty Utilities (LITCHFIELD PARK Water & Sewer) Corp. The PTAM allows Liberty LITCHFIELD PARK to pass through to its water and wastewater customers the increase or decrease in property taxes that results from a change in the applicable assessment ratio and/or property tax rates.

II. PTAM RELATED FILINGS.

A. Within 60 days of the effective date of a change in the assessment ratio and/or property tax rates applicable to the Company, the Company shall file with Docket Control an analysis of the actual impact on the Company's property tax expenses.

B. The Company will provide the Commission with spreadsheets detailing exactly how the Company's property tax expenses were calculated in the time period prior to a change in the assessment ratio and/or property tax rate that affects the Company's property tax expenses. These calculations will include the assessment ratio, the property tax rates, and the value of the property that was taxed. For the period following the change(s), the Company will provide the same information, then compare the two periods, isolating any change in property tax expense that is due exclusively to changes in the assessment ratio and/or property tax rates. The specific intent is to show exactly how much of any increase or decrease in property tax expense is due to changes in the assessment ratio and tax rates beyond the Company's control and how much is due to changes in the value of the property the Company owns. The Company will only recover increases or refund decreases that are due to changes in the assessment ratio and tax rates.

C. All revised schedules filed with the Commission pursuant to the provisions of this PTAM will be accompanied by documentation prepared by the Company in a format approved by Utilities Division Staff of the Commission and will contain sufficient detail to enable the Commission to verify accuracy of the Company's calculations.

D. The surcharges will not become effective until approved by the Commission.

E. The Company will file annually with the Commission a report detailing the Company's property tax expenses.

F. The Company shall provide notice (in a form acceptable to Staff) of the rate increases to customers with the bill where the rate increase first appears.

Applies to all service areas

PART FOURTEEN
PLAN OF ADMINISTRATION FOR
PROPERTY TAX ADJUSTMENT MECHANISM

III. APPLICATION TO WATER CUSTOMERS.

A. The increase or decrease in property tax expenses that are due to changes in the assessment ratio and/or property tax rates at the Company's facilities will be allocated on a per capita basis.

B. See the examples on the next page:

Applies to all service areas

PART FOURTEEN
PLAN OF ADMINISTRATION FOR
PROPERTY TAX ADJUSTMENT MECHANISM

Change in Assessment Ratio Example

Test Year	
Assessment Ratio	**20.00%**
Property Full Cash Value	$10,000,000
Assessed Valuation	$2,000,000

➡

Current Year	
Assessment Ratio	**21.00%**
Property Full Cash Value	$10,000,000
Assessed Valuation	$2,100,000

Change in Assessed Valuation	
Current Year Assessed Valuation	$2,100,000
Test Year Assessed Valuation	$2,000,000
Increase in Assessed Valuation Due to Increase in Assessment Ratio	$100,000

Test Year	
Total Property Tax Rate	10.00%
Assessed Valuation	$2,000,000
Property Tax Expense	$200,000

Current Year	
Total Property Tax Rate	10.00%
Assessed Valuation	$2,100,000
Property Tax Expense	$210,000

PTAM Charge on Sample Customer Bill	
Increase in Property Tax Expense Due to Increase in Assessment Ratio	$10,000
Number of WATER or WASTEWATER Customers	20,000
PTAM Charge on Sample Customer Bill	$0.50

Change in Total Property Tax Rate Example

Test Year	
Total Property Tax Rate	**10.00%**
Assessed Valuation	$2,000,000
Property Tax Expense	$200,000

➡

Current Year	
Total Property Tax Rate	**11.00%**
Assessed Valuation	$2,000,000
Property Tax Expense	$220,000

Pass Through Calculation	
Current Year Property Tax Expense	$220,000
Test Year Property Tax Expense	$200,000
Increase in Property Tax Expense Due to Rate Increase	$20,000

PTAM Charge on Sample Customer Bill	
Increase in Property Tax Expense Due to Rate Increase	$20,000
Number of WATER or WASTEWATER Customers	20,000
PTAM Charge on Sample Customer Bill	$1.00

Applies to all **WASTEWATER** service areas

PART SIXTEEN

INDUSTRIAL PRETREATMENT PROGRAM AND TARIFF

ADEQ Public Water System:

ADEQ Public Water System Number: 07-046

SECTION 1

1.0 INTRODUCTION

To control the discharge of pollutants to the Nation's waters, the Clean Water Act (CWA) requires the Environmental Protection Agency (EPA) to promulgate regulations related to discharges. Discharges from non-domestic dischargers can impact the operations of Water Reclamation Facilities (WRFs) and Publicly Owned Treatment Works (POTWs) as the pollutants can pass through or interfere with the operations of the plants, threaten worker's health and safety, or contaminate sludges. The WRFs and POTWs are designed to treat domestic sewage. The non-domestic discharges are regulated by the National Pretreatment Program. Industrial and commercial dischargers (known as IUs) are required to obtain permits, or other control mechanisms to discharge wastewater to the POTW/WRF under the National Pretreatment Program. EPA promulgated the General Pretreatment Regulations (Title 40 Code of Federal Regulations (CFR) Section 403), which defines the National Pretreatment Program. The Arizona Administrative Code (AAC R18-9-A905(A)(8)(b)) incorporates the General Pretreatment Program/Regulations.

Liberty Utilities (Litchfield Park Water & Sewer) Corp. (hereinafter referred to as Liberty Utilities) operates the Palm Valley Water Reclamation Facility (PVWRF) located at McDowell Road and Litchfield Park Road and the Sarival Water Reclamation Facility (SWRF) located at Sarival Avenue and McDowell Road. PVWRF can treat up to 6.9 million gallons per day (MGD) of wastewater and the SWRF can treat up to 4.0 million gallons per day (MGD), collectively "Facilities." The Facilities are owned and operated by Liberty Utilities and serve the Litchfield Park and Goodyear communities. Liberty Utilities can regulate discharges from IUs for potential contaminants of concern to minimize impact on its POTW/WRF under Liberty Utilities' Industrial Pretreatment Program Tariff.

The discharge of toxic and other harmful pollutants from IUs can be effectively controlled through a local pretreatment program that is based on these regulations, structured to address specific local concerns, and enforced through Liberty Utilities Industrial Pretreatment Program and Tariff.

Applies to all **WASTEWATER** service areas

PART SIXTEEN

INDUSTRIAL PRETREATMENT PROGRAM AND TARIFF

The objective of a Pretreatment Program (the General Pretreatment Regulations of the Clean Water Act (40 CFR, Part 403)) is to:

a. comply with the Liberty Utilities PVWRF and SWRF AZPDES discharge requirements.
b. protect the integrity of wastewater conveyance, treatment, reuse and disposal infrastructure.
c. reduce the level of pollutants discharged by industry and other non-domestic wastewater sources into municipal sewer systems.
d. reduce the amount of pollutants released into the environment through wastewater.

The objectives of the Pretreatment Program are:

- to promote consistent application of pretreatment requirements among customers and to maintain the integrity of Liberty Utilities - PVWRF and SWRF so that the continuity of safe and reliable service to all customers and the protection of the environment are preserved.
- to prevent the introduction of pollutants into the POTW/WRF that will interfere with its operation.
- to prevent the introduction of inadequately treated pollutants into the collection systems that will pass through the POTW/WRF into the receiving waters, the atmosphere, and landfills, or otherwise be incompatible with the POTW/WRF.
- to protect both POTW/WRF personnel who may be affected by wastewater and sludge in the course of their employment and the general public.
- to promote reuse and recycling of industrial wastewater and sludge from the POTW/WRF.
- to provide fees for the apportionment of the costs of operation, maintenance, and improvement of the POTW/WRF.
- to enable Liberty Utilities to comply with its AZPDES conditions, sludge use and disposal requirements, and any other Federal or State laws to which the POTW/WRF is subject.

The Pretreatment Program and tariff document (collectively, Tariff) shall apply to all IUs Liberty Utilities receiving service from Liberty Utilities. The Pretreatment Program sets forth uniform requirements for industrial discharges into the WRFs, and also establishes a separate industrial discharge permit requirement IUs. The Pretreatment Program includes the issuance of individual wastewater discharge permits; provides monitoring, compliance, and enforcement activities; establishes administrative review procedures; requires IUs reporting; and provides for the setting of fees for the apportionment of costs resulting from the program established herein.

Applies to all **WASTEWATER** service areas

PART SIXTEEN

INDUSTRIAL PRETREATMENT PROGRAM AND TARIFF

1.1 ADMINISTRATION

Except as otherwise provided herein, Liberty Utilities shall administer, implement, and enforce the provisions of this Pretreatment Program. Any powers granted to, or duties imposed upon, Liberty Utilities may be delegated by Liberty Utilities to a duly authorized employee of Liberty Utilities.

1.2 ABBREVIATIONS

The following abbreviations, when used in this document shall have the designated meanings:

AAC	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
APP	Aquifer Protection Permit
ARS	Arizona Revised Statute
AZPDES	Arizona Pollutant Discharge Elimination System
APP	Arizona Aquifer Protection Permit
AZPDES	Arizona Pollutant Discharge Elimination System
BOD	Biochemical Oxygen Demand (mg/l, typically 5-day equivalent)
BMP	Best Management Practice
BMR	Baseline Monitoring Report
CFR	Code of Federal Regulations
CIU	Categorical Industrial User
COD	Chemical Oxygen Demand (mg/l)
COP	Code of Practice
EPA	U.S. Environmental Protection Agency
GPD	Gallons per day
IU	Industrial User
mg/L	milligrams per liter
NPDES	National Pollutant Discharge Elimination System
POTW	Publicly Owned Treatment Works
RCRA	Resource Conservation and Recovery Act
SIU	Significant Industrial User
SNC	Significant Noncompliance
TSS	Total Suspended Solids (mg/l)
TRC	Technical Review Criteria
U.S.C.	United States Code
WRF	Water Reclamation Facility
U.S.C.	United States Code

Applies to all **WASTEWATER** service areas

PART SIXTEEN

INDUSTRIAL PRETREATMENT PROGRAM AND TARIFF

1.3 APPLICABILITY

These Pretreatment Standards and Program requirements apply to any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes, and other conveyances of wastewater to the Facilities.

The Pretreatment Program is applicable as follows:

1. IUs or users subject to the National Categorical Pretreatment Standards. Any IU, as defined herein, or user subject to the National Categorical Pretreatment Standards (40 CFR Chapter I, Subchapter N - Effluent Guidelines and Standards) shall meet the Pretreatment Standards and the requirements of the Pretreatment Program including applicable categorical standards.

2. All Non-Residential Dischargers. Any Non-Residential Discharger irrespective of their designation as an IU, shall meet the Pretreatment Standards as described herein for:
    a) Specific Limitations (Section 3.0).
    b) Local Regulatory Limits based on concentrations and daily flow.
        i. Prohibited Waste (Section 3.1)
        ii. Restricted Waste (Section 3.2)
        iii. Specified Waste (Section 3.2)

3. This application extends to Non-Residential Dischargers, IUs, users subject to the National Categorical Pretreatment Standards and Residential Dischargers who operate practices, or systems from a residence, that changes the constituent nature of the wastewater produced by the customer.

4. This application extends to PART SIXTEEN of the Tariff 'Code of Practice'.

1.4 DEFINITIONS

A. Act or "the Act." The Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. section 1251 et seq.

B. Approval Authority. Arizona Department of Environmental Quality, Arizona. *See* Arizona Administrative Code R18-9-A905(A)(8).

Applies to all **WASTEWATER** service areas

PART FIFTEEN
INDUSTRIAL PRETREATMENT PROGRAM AND TARIFF

C. Authorized or Duly Authorized Representative of the IU.

1. If the IU is a corporation:
   a. The president, secretary, treasurer, or a vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation.

   b. The manager of one or more manufacturing, production, or operating facilities, provided the manager is (i) authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiate and direct other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; (ii) can ensure that the necessary systems are established or actions taken to gather complete and accurate information for individual wastewater discharge permit requirements; and (iii) where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

2. If the IU is a partnership or sole proprietorship: a general partner or proprietor, respectively.

3. If the IU is a Federal, State, or local governmental facility: a director or highest official appointed or designated to oversee the operation and performance of the activities of the government facility, or their designee.

4. The individuals described in paragraphs 1 through 3, above, may designate a Duly Authorized Representative if the authorization is in writing, the authorization specifies the individual or position responsible for the overall operation of the facility from which the discharge originates or having overall responsibility for environmental matters for the company, and the written authorization is submitted to Liberty Utilities.

D. Biochemical Oxygen Demand or BOD. The quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedures for five (5) days at 20 degrees centigrade, usually expressed as a concentration (e.g., mg/l).

E. Best Management Practices (or BMPs). Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the prohibitions listed in 40 CFR 403.5(a)(1) and (b) and/or the Arizona Administrative Code (AAC) R18-9-A905(A)(8)(b). BMPs include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.

Applies to all **WASTEWATER** service areas

PART FIFTEEN
INDUSTRIAL PRETREATMENT PROGRAM AND TARIFF

F. Categorical Pretreatment Standard or Categorical Standard. Any regulation containing pollutant discharge limits promulgated by EPA in accordance with sections 307(b) and (c) of the Act (33 U.S.C. section 1317) that apply to a specific category of IUs and that appear in 40 CFR Chapter I, Subchapter N, Parts 405-471c.

G. Categorical Industrial User. An IU subject to a categorical Pretreatment Standard or Categorical Standard.

H. Liberty Utilities Manager. A duly authorized representative of Liberty Utilities.

I. Liberty Utilities Organizational Structure. Liberty Utilities, through a duly authorized representative, Liberty Utilities shall administer this Pretreatment Program and Tariff.

J. Chemical Oxygen Demand or COD. A measure of the oxygen (as chemical) required to oxidize all compounds, both organic and inorganic, in water.

K. Control Authority. Liberty Utilities (Liberty Utilities).

L. See BMPs.

M. Daily Maximum. The arithmetic average of all effluent samples for a pollutant collected during a calendar day. Total mass is a product of concentrations and daily total flow.

N. Daily Maximum Limit. The maximum allowable discharge limit of a pollutant during a calendar day. Where Daily Maximum Limits are expressed in units of mass, the daily discharge is the total mass discharged over the course of the day. Where Daily Maximum Limits are expressed in terms of a concentration, the daily discharge is the arithmetic average measurement of the pollutant concentration derived from all measurements taken that day

O. Environmental Protection Agency or EPA. The U.S. Environmental Protection Agency or, where appropriate, the Regional Water Management Division Director, the Regional Administrator, or other duly authorized official of said agency.

P. Existing Source. Any source of discharge that is not a "New Source.".

Q. Grab Sample. A sample that is taken from a waste stream without regard to the flow in the waste stream and over a period not to exceed fifteen (15) minutes.

R. Industrial User (IU). A customer who generates a source of Indirect Discharge (40 CFR § 403.3).

Applies to all **WASTEWATER** service areas

PART FIFTEEN
INDUSTRIAL PRETREATMENT PROGRAM AND TARIFF

S. Indirect Discharge or Discharge. The introduction of pollutants into the POTW/WRF from any nondomestic source.

T. Instantaneous Limit. The maximum concentration of a pollutant allowed to be discharged at any time, determined from the analysis of any discrete or composited sample collected independent of the industrial flow rate and the duration of the sampling event.

U. Interference. A discharge that, alone or in conjunction with a discharge or discharges from other sources, inhibits or disrupts the POTW/WRF, its treatment processes or operations or its sludge processes, use or disposal; and therefore, is a cause of a violation of Liberty Utilities's AZPDES permit or of the prevention of sewage sludge use or disposal in compliance with any of the following statutory/regulatory provisions or permits issued thereunder, or any more stringent State or local regulations: Section 405 of the Clean Water Act; the Solid Waste Disposal Act, including Title II commonly referred to as the Resource Conservation and Recovery Act (RCRA); any State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the Solid Waste Disposal Act; the Clean Air Act; the Toxic Substances Control Act; and the Marine Protection, Research, and Sanctuaries Act.

V. Local Regulatory Limit. Specific discharge limits developed and enforced by Liberty Utilities upon industrial, or commercial facilities, to implement the general and specific discharge prohibitions listed in 40 CFR 403.5(a)(1) and (b).

W. Medical Waste. Isolation wastes, infectious agents, human blood and blood products, pathological wastes, sharps, body parts, contaminated bedding, surgical wastes, potentially contaminated laboratory wastes, and dialysis wastes.

X. Monthly Average. The sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.

Y. Monthly Average Limit. The highest allowable of "daily maximum discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.

Applies to all **WASTEWATER** service areas

PART FIFTEEN
INDUSTRIAL PRETREATMENT PROGRAM AND TARIFF

Z. New Source

1. Any building, structure, facility, or installation from which there is (or may be) a discharge of pollutants, the construction of which commenced after the publication of proposed Pretreatment Standards under section 307(c) of the Act that will be applicable to such source if such Standards are thereafter promulgated in accordance with that section, provided that:

    a) The building, structure, facility, or installation is constructed at a site at which no other source is located; or
    b) The building, structure, facility, or installation totally replaces the process or production equipment that causes the discharge of pollutants at an Existing Source; or
    c) The production or wastewater generating processes of the building, structure, facility, or installation are substantially independent of an Existing Source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the Existing Source, should be considered.

2. Construction on a site at which an Existing Source is located and results in a modification rather than a New Source if the construction does not create a new building, structure, facility, or installation meeting the criteria of Section (1)(b) or (c) above but otherwise alters, replaces, or adds to existing process or production equipment.

3. Construction of a New Source as defined under this paragraph has commenced if the owner or operator has:

    a) Begun, or caused to begin, as part of a continuous onsite construction program:

        i. any placement, assembly, or installation of facilities or equipment; or
        ii. significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment.

    b) Entered a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this paragraph.

Applies to all **WASTEWATER** service areas

PART FIFTEEN
INDUSTRIAL PRETREATMENT PROGRAM AND TARIFF

AA. Noncontact Cooling Water. Water used for cooling that does not come into direct contact with any raw material, intermediate product, waste product, or finished product.

BA. Non-Residential Discharger. A customer discharging into Liberty Utilities that is engaged in any activity that changes the constituent nature of the wastewater from typical household wastewater.

CA. Pass Through. A discharge which exits the POTW/WRF into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of Liberty Utilities's AZPDES permit, including an increase in the magnitude or duration of a violation.

DA. Person. Any individual, partnership, corporation, firm, company, corporation, association, joint stock company, trust, estate, governmental entity, or any other legal entity; or their legal representatives, agents, or assigns. This definition includes all Federal, State, and local governmental entities.

EA. pH. A measure of the acidity, or alkalinity, of a solution, expressed in standard units.

FA. Pollutant. Dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, medical waste, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, municipal, agricultural and industrial wastes, and certain characteristics of wastewater (e.g., pH, temperature, TSS, turbidity, color, BOD, COD, toxicity, or odor).

GA. Pretreatment. The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to, or in lieu of, introducing such pollutants into the POTW/WRF. This reduction or alteration can be obtained by physical, chemical, or biological processes; by process changes; or by other means, except by diluting the concentration of the pollutants unless allowed by an applicable Pretreatment Standard.

HA. Pretreatment Requirements. Any substantive, or procedural requirement, related to pretreatment imposed on an IU, other than a Pretreatment Standard.

IA. Pretreatment Standards or Pretreatment Requirements. Prohibited discharge standards, categorical Pretreatment Standards, and Local Regulatory Limits.

JA. Prohibited Discharge Standards or Prohibited Discharges. Absolute prohibitions against the discharge of certain substances. These prohibitions appear in Sections 3.1 and 14.2 and of this Pretreatment Program.

Applies to all **WASTEWATER** service areas

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KA. Publicly Owned Treatment Works (POTW). A treatment works, as defined by section 212 of the Act (33 U.S.C. section 1292), which is owned by a state or municipality (as defined by Section 502(4) of the Clean Water Act). This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes, and other conveyances only if they convey wastewater to a POTW. The term also means the municipality as defined in Section 502(4) of the Clean Water Act, which has jurisdiction over the Indirect Discharges to and the discharges from such a wastewater treatment plant.

LA. Septic Tank Waste. Any sewage from holding tanks such as vessels, chemical toilets, campers, trailers, and septic tanks

MA. Sewage. Human excrement and gray water (household showers, dishwashing operations, etc.).

NA. Significant Industrial User (SIU).

1. An IU subject to categorical Pretreatment Standards

2. An IU that:

   a. Discharges an average of twenty-five thousand (25,000) gpd, or more of process wastewater, to the POTW/WRF (excluding sanitary, noncontact cooling and boiler blowdown wastewater);

   b. Contributes a process waste stream which makes up five (5) percent or more of the average dry weather hydraulic, or organic (BOD, ammonia, and/or total nitrogen) capacity of the POTW/WRF; or

   c. Is designated as such by Liberty Utilities on the basis that it has a reasonable potential for adversely affecting the POTW's/WRF's operations, or for violating any Pretreatment Standard, or Requirement.

OA. Sewage. Human excrement and gray water (household showers, dishwashing operations, etc.).

PA. Significant Industrial User (SIU).

Applies to all **WASTEWATER** service areas

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3. An IU subject to categorical Pretreatment Standards

4. An IU that:

   d. Discharges an average of twenty-five thousand (25,000) gpd, or more of process wastewater, to the POTW/WRF (excluding sanitary, noncontact cooling and boiler blowdown wastewater);

   e. Contributes a process waste stream which makes up five (5) percent or more of the average dry weather hydraulic, or organic (BOD, ammonia, and/or total nitrogen) capacity of the POTW/WRF; or

   f. Is designated as such by Liberty Utilities on the basis that it has a reasonable potential for adversely affecting the POTW's/WRF's operations, or for violating any Pretreatment Standard, or Requirement.

5. Liberty Utilities may determine that an IU is subject to categorical Pretreatment Standards, hereinafter referred to as a Non-Significant Categorical IU, rather than a SIU on a finding that the IU never discharges more than 100 gallons per day (gpd) of total categorical wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater, unless specifically included in the Pretreatment Standard) and the following conditions are met:

   a. The IU, prior to Liberty Utilities' finding, has consistently complied with all applicable categorical Pretreatment Standards and Requirements.

   b. The IU annually submits the certification statement required in Section 7.7.14, together with any additional information necessary to support the certification statement.

   c. The IU never discharges any untreated concentrated wastewater.

6. Upon a finding that an IU meeting the criteria in Subsection (2) of this part has no reasonable potential for adversely affecting the POTW's/WRF's operation or for violating any Pretreatment Standard or Requirement, Liberty Utilities may at any time, on its own initiative or in response to a petition received from an IU, and in accordance with procedures in 40 CFR 403.8(f)(6), determine that such IU should not be considered a SIU.

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QA. Slug Load or Slug Discharge. Any discharge at a flow rate or concentration could cause a violation of the prohibited discharge standards in Section 14.2 and 15.0 of the Pretreatment Program. A Slug Discharge is any Discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch Discharge, which has a reasonable potential to cause Interference or Pass Through, or in any other way violate the POTW's/WRF's regulations, Local Limits or Permit conditions.

RA. Storm Water: Any flow occurring during, or following any form of natural precipitation, and resulting from such precipitation, including snowmelt.

SA. Total Suspended Solids or Suspended Solids. The total suspended matter that floats on the surface of, or is suspended in, water, wastewater, or other liquid, and that is removable by laboratory filtering.

TA. User or Industrial User. A source of indirect discharge.

UA. Wastewater. Liquid and water-carried industrial wastes and sewage from residential dwellings, commercial buildings, industrial and manufacturing facilities, and institutions, whether treated or untreated, which are contributed to the POTWWRF.

VA. Wastewater Treatment Plant or Treatment Plant. That portion of the POTW/WRF which is designed to provide treatment of municipal sewage and industrial waste.

WA. Water Reclamation Facility (WRF). A treatment works, as defined by section 212 of the Act (33 U.S.C. section 1292), which is owned by Liberty Utilities. This definition includes any devices or systems used in the collection, storage, treatment, recycling, and reclamation of sewage, or industrial wastes, of a liquid nature and any conveyances, which convey wastewater to a treatment plant.

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SECTION 2

2.0 AUTHORITY

Pretreatment Requirements apply to POTWs/WRFs

Regulations under the Federal Water Pollution Control Act (also known as the Clean Water Act), require POTWs/WRFs to develop a pretreatment program for any POTW/WRF (or combination of POTWs operated by the same authority) with a total design flow greater than 5 million gallons per day (MGD) within a single collection system and receive wastewater from Industrial Users pollutants which Pass Through or may Interfere with the operation of the WRF, or are otherwise subject to Pretreatment Standards.

Liberty Utilities is a Water Management Utility Under Section 502(4) of the Clean Water Act

Section 208 of the Clean Water Act devolves regional water quality management Designated Planning Agencies, or DPAs. In this case, the DPA is the Maricopa Association of Governments (MAG), and MAG maintains a Section 208 Area-wide Water Quality Management Plan (the MAG 208 Plan) detailing the management of wastewater, recycled water and biosolids within Maricopa County.

DPAs engage other agencies for the management and execution of the short- and long-term strategies of the DPA. These agencies are Designated Management Agencies (DMAs) and Wastewater Management Utilities (WMUs). While a DMA and a WMU perform the same functions, they are organizationally different: DMAs are governmental entities; WMUs are public service corporations.

A DMA is defined as "a local government subdivision that is certified by ADEQ as having adequate resources and capabilities to design, operate, and maintain wastewater facilities and the desire to implement portions of the MAG 208 Plan." A WMU is "a privately-owned centralized wastewater treatment facility and a collection system that provides services to multiple properties. To be a WMU, ADEQ must certify that the entity has the resources, capability, and desire to function as a DMA." In addition, to be established as a WMU, the private entity must provide a 20-year future growth plan and coordinate with neighboring DMAs and other WMUs that will implement other strategies in the MAG 208 Plan.

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Liberty Utilities – Responsibilities as a WMU

Pursuant to Section 208(c)(2) of the Clean Water Act, a DMA or designated WMU must be able to:

- Carry out appropriate portions of a regional 208 Plan.
- Manage effectively waste treatment facilities and related facilities in conformance with the 208 Plan.
- Design, construct, operate, and maintain new and existing wastewater treatment facilities, directly or by contract, as required by any plan established to fulfill Section 208 planning requirements.
- Accept and utilize grants or other funds from any source for waste treatment management purposes.
- Raise revenues, including assessment of waste treatment changes.
- Incur short-term and long-term indebtedness.
- Assure in the implementation of the regional 208 Plan that each participating community pays its proportionate share of treatment costs.
- Refuse to receive any waste from any municipality or subdivision which does not comply with any provisions of an approved plan established to fulfill Section 208 planning requirements.
- Accept industrial waste for treatment.

Liberty Utilities has an approved 208 Plan Amendments, approved by the applicable governmental authority for each of the Liberty Utilities.

Pretreatment Requirements apply to Non-Domestic Sources of Wastewater

Under 40 CFR 403.1(b), pretreatment requirements apply to:

(1) Pollutants from non-domestic sources covered by Pretreatment Standards which are indirectly discharged into or transported by truck or rail or otherwise introduced into POTW/WRF as defined in 40 CFR § 403.3.

(2) POTW/WRF which receives wastewater from sources subject to National Pretreatment Standards.

(3) States which have or are applying for National Pollutant Discharge Elimination System (NPDES) programs approved in accordance with section 402 of the Act.

(4) Any new or existing source subject to Pretreatment Standards. National Pretreatment Standards do not apply to sources which Discharge to a sewer which is not connected to a POTW/WRF.

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In Arizona, the requirements of the federal pretreatment standards have been incorporated by reference as AAC R18-9-A905(A)(8)(b).

The Pretreatment Standards and Pretreatment Program are Approved ACC Tariffs

Liberty Utilities - Pretreatment Standards and the Pretreatment Program have been adopted in the Corporation's Terms and Conditions of Service and are approved Tariffs.

SECTION 3

3.0 PRETREATMENT STANDARDS

Liberty Utilities enforces pretreatment standards by limiting the discharges as described below and will review pretreatment prior to approval of any industrial non-domestic discharge into its wastewater systems.

A. **General Prohibitions.** No IU or non-residential discharger shall introduce or cause to be introduced into the POTW/WRF any pollutant or wastewater which causes Pass Through or Interference. These general prohibitions apply to all IUs and non-residential dischargers of the POTW/WRF whether or not they are subject to categorical Pretreatment Standards or any other National, State, or local Pretreatment Standards or Requirement.

In addition to those pollutants classified as Prohibited Waste (Section 3.1), the following are prohibited from discharge into the Liberty Utilities POTW/WRF:

- Discharge of any substances which will inhibit the operation or performance of the Liberty Utilities - PVWRF and SWRF or pass through the system and cause Liberty Utilities - PVWRF and SWRF to violate any requirements of any operating or discharge permit issued by the county, state or federal government, or any WMU discharge permit limits.

- Discharge of any substance which may cause the Liberty Utilities - PVWRF and SWRF reclaimed water or treatment residues, biosolids or scum to be unsuitable for reclamation, reuse, or disposal or which may interfere with such reclamation, reuse, or disposal processes.

- Discharge of any wastewater which causes the Liberty Utilities - PVWRF and SWRF effluent to exhibit toxicity to test organisms in a standard biological toxicity test as defined by local, state, or federal requirements, or which the Company determines would be toxic to or impede the treatment capabilities of the biological processes in the Liberty Utilities - PVWRF and SWRF

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- Discharge of any substance which may cause the Liberty Utilities - PVWRF and SWRF to be in a noncompliance with biosolids use or disposal criteria, guidelines or regulations developed under Section 405 of the Clean Water Act, any criteria, guidelines or regulations affecting biosolids uses or disposal developed pursuant to the Solid Waste Disposal Act, the Clean Air Act, the Toxic Substances Control Act or state or local standards applicable to the biosolids management method adopted by Liberty Utilities and/or local and state authorities.

- Discharge of any wastewater containing hazardous substances, toxic, conventional, or non-conventional pollutants in sufficient quantity, either singly or by interaction, which could injure or interfere with any wastewater treatment process, constitutes a health or safety hazard to humans or animals, or exceed the limitations set forth in the Local Regulatory Limits (Section 4.4) or the categorical pretreatment standards appropriate for the specific industrial user is prohibited. Hazardous substances, toxic, conventional or non-conventional pollutants will include, but not be limited to, any pollutant identified in 40 CFR Part 122, Appendix D - Tables II, III, IV, and V (AZPDES Permit Limits that are applicable), or substances alone or in combination with other constituents that are determined to be toxic by the toxicity test as defined in 40 CFR Part 136 for wastewater or the toxicity characteristic leaching procedure test as defined in 40 CFR Part 261 for biosolids.

B. Local Regulatory Limits

No industrial user of the Liberty Utilities - PVWRF and SWRF shall discharge wastes or wastewaters included in this Section and having concentrations of pollutants higher than those listed in this Section.

The Local Regulatory Limits apply at the point where the wastewater is discharged to the POTW/WRF.

All concentrations for metallic substances are for total metal unless indicated otherwise. Liberty Utilities may impose mass limitations in addition to the concentration-based limitations herein.

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3.1 PROHIBITED WASTE

Prohibited Waste means material or waste streams that shall not be discharged to any of the collection systems operated by Liberty Utilities – PVWRF and SWRF.

This includes any waste, other than sanitary waste, which by itself or in combination with another substance either:

1. constitutes or may constitute a significant health or safety hazard to any person;
2. may interfere with any sewer or sewage treatment process;
3. may cause a discharge from a sewage facility to contravene any requirements of or under any ADEQ APP, AZPDES discharge permit, Reuse permit, direct or indirect potable water reuse, or any other act, or any other law or regulation governing the quality of the discharge, or may cause the discharge to result in a hazard to people, animals, property or vegetation; or
4. may cause biosolids to fail criteria for beneficial land application

Prohibited Wastes include:

Non-Sanitary Wastewater

Discharge of storm water, surface water, ground water, artesian well water, roof runoff, or subsurface drainage.

Air Contaminant Waste

Any waste other than sanitary waste which, by itself or in combination with another substance, is capable of creating, causing or introducing an air contaminant outside any sewer or sewage facility or is capable of creating, causing or introducing an air contaminant within any sewer or sewage facility which would prevent safe entry by authorized personnel.

Flammable or Explosive Waste or High Temperature Wastes

A high temperature waste is any waste which, by itself or in combination with another substance, will create heat in amounts which will interfere with the operation and maintenance of a sewer or sewage facility or with the treatment of waste in a sewage facility.

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Discharge of any waste streams with a closed cup flash point of less than 140 degrees Fahrenheit (60 degrees Celsius) using the test methods specified in federal regulations, 40 CFR § 261.21.

Wastewater having a temperature greater than 100 degrees F, or which will inhibit biological activity in the POTW/WRF resulting in interference.

In addition, any waste which, by itself or in combination with another substance, is capable of causing or contributing to an explosion or supporting combustion in any sewer or sewage facility including, but not limited to gasoline, naphtha, propane, diesel, fuel oil, kerosene or alcohol.

Discharge of any liquids, solids or gases that by reason of their nature or quantity are, or may be, sufficient either alone or by interaction to cause fire or explosion or be injurious in any other way to either:

- the operation of the Liberty Utilities wastewater collection system or the Liberty Utilities – PVWRF and/or SWRF.
- the integrity of the sewer system or cause a danger to the public health or safety.

Reactive Waste

Any waste which, by itself, or in combination with another substance, is capable of causing or contributing to an undesirable physical or chemical reaction when introduced to sanitary sewer systems, including endothermic reactions, exothermic reactions, precipitation, etc.

Odorous Waste

Discharge of any noxious or malodorous liquids, gases or solids which, either singly or by interaction, can create a public nuisance or hazard to life or are sufficient to prevent entry into the sewers without specialized hazardous material protective equipment or clothing for sewer maintenance or repair.

pH Waste

Any non-domestic waste which, at the point of discharge into a sewer, has a pH lower than 5.5 or higher than 9.0, as determined by either a grab or a composite sample.

Slug Loads

Discharge of any slug load as defined in Sections 5.2, 14.2 and 15 of this Tariff including oxygen demanding pollutants (BOD, etc.), released in a single extraordinary discharge episode of such volume or strength as to cause interference to Liberty Utilities – PVWRF or SWRF.

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Obstructive Waste

Discharge of any solid or viscous substances that will or may cause obstruction to the flow in a sewer or other interference with the operation of the wastewater system.

This includes any waste which, by itself or in combination with another substance, is capable of obstructing the flow of, or interfering with, the operation or performance of any sewer or sewage facility including, but not limited to: earth, sand, sweepings, gardening or agricultural waste, ash, chemicals, paint, metal, glass, sharps, rags, cloth, tar, asphalt, cement-based products, plastic, wood, waste portions of animals, fish or fowl, and solidified fat.

Corrosive Waste

Any waste with corrosive properties which, by itself or in combination with any other substance, may cause damage or hazard to any sewer or sewage facility or structure, interference with operations or which may prevent safe entry by authorized personnel.

Radioactive Waste

Discharge of any wastewater containing any radioactive wastes or isotopes of such half-life or concentration as to exceed limits established by the local, state or federal regulations.

Oily Waste

Discharge of any petroleum oil, non-biodegradable cutting oil or products of mineral oil origin that will cause Interference or Pass Through the Liberty Utilities – PVWRF or SWRF.

Biomedical Waste

Any of the following categories of biomedical waste: human or animal anatomical waste, animal waste, untreated microbiological waste, waste sharps and untreated human or animal blood and body fluids.

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Miscellaneous Prohibited Wastes

Any of the following wastes:

a. Seawater
b. Polychlorinated biphenyl compounds (PCBs)
c. chlorinated phenols
d. pesticides
e. tetrachloroethylene
f. 4,4' - DOE
g. 4,4' -DDT
h. Aldrin
i. BHC-Alpha
j. BHC-Gamma (Lindane)
k. Heptachlor
l. Heptachlor Epoxide
m. Per- and polyfluoroalkyl substances – known as PFAS

Pollutants which result in the presence of toxic gases, vapors, or fumes within the WRF/POTW in a quantity that may cause acute worker health and safety problems.

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3.2 RESTRICTED WASTE

Restricted waste means waste that may be permitted to be discharged to collection systems operated by Liberty Utilities but have specific criteria which must be met prior to that discharge.

These include:

Non-Residential Wastewater

Condensate, non-contact cooling water and industrial or commercial wastewater unless specifically authorized by the Liberty Utilities in the Pretreatment Program.

Food Waste

Any non-domestic waste from cooking and handling of food that, at the point of discharge into a sewer, contains particles larger than 0.5 centimeters in any dimension.

Trucked or Hauled Waste

Discharge of any trucked or hauled pollutants, unless the hauler has first obtained written approval from Liberty Utilities in accordance with the Pretreatment Program (Section 4.0).

Detergent Waste

Discharge of detergents, surface active agents, or other substances which might cause excessive foaming in the POTW/WRF.

Sludges & Residue

Sludges, screenings, and other residues from the pretreatment of industrial wastes or from the cleaning of interceptors or sewer collection systems.

Dyes and Coloring Material

Discharge of any substance with objectionable color not removed in the treatment process, such as, but not limited to, dye wastes and vegetable tanning solutions, where the dye is used by Liberty Utilities, or one or more of its agents, as a tracer. Discharge of portable toilet contents utilizing dyes is strictly prohibited.

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Petroleum Oil

Nonbiodegradable cutting oil, or products of mineral oil origin, in amounts that will cause Interference or Pass Through.

Other Pollutants

Other pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems.

3.3 State Pretreatment Standards

IUs must comply with AAC R18-9-A905(A)(8) – Effluent guidelines and standards.

3.4 Local Limits

Liberty Utilities is authorized to establish Local Limits pursuant to 40 CFR 403.5(c). Any waste which, at the point of discharge into a sewer, contains any contaminant at a concentration in excess of the limits set out Title 18, Chapter 4 of the Arizona Administrative Code. or as more specifically defined in the tables below. All concentrations are expressed as total concentrations which includes all forms of contaminants, whether dissolved or undissolved. The concentration limits apply to both grab and composite samples. Contaminant definitions and methods of analysis are outlined in standard methods.

A. The following pollutant limits are established to protect against Pass Through and Interference. No person shall discharge wastewater containing in excess of the following Daily Maximum Limits:

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CONVENTIONAL POLLUTANTS [mg/L]		
	Monthly Average	Daily Maximum
Biochemical Oxygen Demand (BOD)	350	525
Chemical Oxygen Demand (COD)	1000	1500
Ammonia	55	80
Total Nitrogen- as NO3	100	150
Oil and Grease'	64	96
Suspended Solids	350	525

ORGANIC CONTAMINANTS (Daily Maximum)	
Benzene	Reserved
Ethyl Benzene	Reserved
Toluene	Reserved
Xylenes	Reserved
Reserved	Reserved
Chloroform	Reserved
Total Oil and Grease (hydrocarbons)	96
Perfluoroalkyl Substances (PFAS)	4 parts per trillion

ISSUED BY:
Moses Thompson, President
Liberty Utilities (LITCHFIELD PARK Water & Sewer) Corp.
14920 W Camelback Rd
Litchfield Park, AZ 85340
Decision No. XXXX

Applies to all **WASTEWATER** service areas

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TRACE METALS	
PARAMETER	Daily Average Effluent Limitation (mg/L)
Antimony (Sb)	0.0048
Arsenic (As)	0.008
Beryllium (Be)	0.008
Cadmium (Cd)	0.012
Chloride (CI)	Reserved
Chromium (Cr)	0.0238
Cobalt (Co)	Reserved
Copper (Cu)	Reserved
Cyanide (CN)	Reserved
Fluoride (F)	3.00
Iron (Fe)	Reserved
Lead (Pb)	0.13
Manganese (Mn)	Reserved
Mercury (Hg)	0.005
Molybdenum (Mo)	Reserved
Nitrate (NO3)	100

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Nickel (Ni)	0.242
Selenium (Se)	0.142
Silver (Ag)	Reserved
Sulfate (SO4)	Reserved
Sulfide (S)	N/A
Thallium (TI)	0.005
Zinc (Zn)	Reserved

The above limits apply at the point where the wastewater is discharged to the POTW/WRF. All concentrations for metallic substances are for total metal unless indicated otherwise. Liberty Utilities may impose mass limitations in addition to the concentration-based limitations above.

Liberty Utilities may accept certain pollutants which are compatible with the Liberty Utilities – PVWRF or SWRF treatment processes; however, the IU shall pay a surcharge, established based on quantity, to cover the costs of such treatment. Any surcharge shall be at cost.

3.5 Corporation Right of Revision

Liberty Utilities reserves the right to establish, by agreement or in individual wastewater discharge permits, more stringent Pretreatment Standards or Requirements on discharges to the POTW/WRF consistent with the purpose of this Tariff.

3.6 Dilution

No IU shall ever increase the use of process water, or in any way attempt to dilute a discharge, as a partial or complete substitute for adequate treatment to achieve compliance with a discharge limitation unless expressly authorized by an applicable Pretreatment Standard or Requirement. Liberty Utilities may impose mass limitations on IU who are using dilution to meet applicable Pretreatment Standards or Requirements, or in other cases when the imposition of mass limitations is appropriate.

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SECTION 4 - PRETREATMENT PROGRAM

This Pretreatment Program shall apply to all Non-Residential Dischargers, IUs, or users subject to the National Categorical Pretreatment Standards discharging to the Liberty Utilities – PVWRF and SWRF.

4.1 Administration

Except as otherwise provided herein, Liberty Utilities shall administer, implement, and enforce the provisions of the Pretreatment Program. Liberty Utilities may delegate some or all these duties to duly authorized Liberty Utilities employees.

4.2 National Categorical Pretreatment Standards

IUs must comply with the categorical Pretreatment Standards found in 40 CFR Chapter I, Subchapter N, Parts 405-471.

A. Where a categorical Pretreatment Standard is expressed only in terms of either the mass or the concentration of a pollutant in wastewater, Liberty Utilities may impose equivalent concentration or mass limits.

B. When the limits in a categorical Pretreatment Standard are expressed only in terms of mass of pollutant per unit of production, the Liberty Utilities may convert the limits to equivalent limitations expressed either as mass of pollutant discharged per day or effluent concentration for purposes of calculating effluent limitations applicable to individual IUs.

C. When wastewater subject to a categorical Pretreatment Standard is mixed with wastewater not regulated by the same Standard, Liberty Utilities shall impose an alternate limit in accordance with 40 CFR § 403.6(e).

D. A user may obtain a net/gross adjustment to a categorical pretreatment standard in accordance with 40 CFR § 403.15.

E. All users subject to a categorical pretreatment standard shall comply with all requirements of such standard and shall also comply with any limitations and prohibitions contained in this article. Where the same pollutant is limited by more than one pretreatment standard, the limitations which are more stringent shall prevail. Compliance with categorical pretreatment standards for existing sources shall be within the timeframe specified in the applicable categorical pretreatment standard. Compliance with categorical pretreatment standards for new sources shall be upon commencement of discharge.

F. Liberty Utilities may establish more stringent pretreatment standards, or additional Liberty Utilities, site specific effluent limits, when, in its judgment, such limitations are necessary to implement the objectives of the Pretreatment Program.

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4.3 State Pretreatment Standards

In addition to the requirements of this Pretreatment Program, IUs must comply with AAC R18-9-A906.

4.4 Local Regulatory Limits

A. Liberty Utilities is authorized to establish Local Regulatory Limits pursuant to 40 CFR § 403.5(c).

B. Section 3.3 Pretreatment Standards establishes the Local regulatory Limits.

C. Liberty Utilities may develop BMPs for any significant industrial user or other user, as needed, to implement this Pretreatment Program.

D. These COPs are Pretreatment Standards.

4.4.1 Right of Revision

Liberty Utilities reserves the right to establish, by tariff, and subsequently in individual wastewater discharge permits, more stringent Standards or Requirements on discharges to the POTW consistent with the purpose of this Pretreatment Program.

4.5 Waste Discharge Permits

A waste discharge permit, as set forth in Section 6, is required for industrial and non-domestic wastewater generators for the following conditions:

a) Any discharge subject to National Categorical Pretreatment Standards.

b) Any Significant Industrial discharge as defined by Liberty Utilities.

c) Any discharger whose discharge would be in violation with Local Regulatory Limits detailed in the Pretreatment Standards.

d) Any discharger required by the State Pretreatment Standards to obtain a permit.

e) Any other discharger directed by Liberty Utilities to apply for a permit.

Permit applications and fees, violations and enforcement, and specific penalties are subject to the terms of the approved Tariff.

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PART FIFTEEN

INDUSTRIAL PRETREATMENT PROGRAM AND TARIFF

SECTION 5

5.0 Pretreatment Facilities

IUs shall provide wastewater treatment as necessary to comply with this Pretreatment Program and shall achieve compliance with all categorical Pretreatment Standards, Local Limits, and the prohibitions set out in Section 3.0 of this Pretreatment Program within the time limitations specified by EPA, the State, or Liberty Utilities, whichever is more stringent. Any facilities necessary for compliance shall be provided, operated, and maintained at the IU's expense. Detailed plans describing such facilities and operating procedures shall be submitted to Liberty Utilities for review and shall be acceptable to Liberty Utilities before such facilities are constructed. The review of such plans and operating procedures shall in no way relieve the IU from the responsibility of modifying such facilities as necessary to produce a discharge acceptable to Liberty Utilities under the provisions of this Tariff. The IU shall be responsible for all costs incurred by Liberty Utilities in connection with reviewing the plans and operating procedures set forth in this Section and any specialty inspections that may be required at the sole discretion of Liberty Utilities.

5.1 Additional Pretreatment Measures

A. Whenever deemed necessary, Liberty Utilities may require IUs to restrict their discharge during peak flow periods, designate that certain wastewater be discharged only into specific sewers, relocate and/or consolidate points of discharge, separate sewage waste streams from industrial waste streams, and such other conditions as may be necessary to protect the POTW/WRF and determine the IU's compliance with the requirements of this Pretreatment Program.

B. Liberty Utilities may require any person discharging into the POTW/WRF to install and maintain, on their property and at their expense, a suitable storage and flow control facility to ensure equalization of flow. An individual wastewater discharge permit may be issued solely for flow equalization.

C. Grease, oil, and sand interceptors shall be provided when Liberty Utilities claims them necessary for the proper handling of wastewater containing excessive amounts of grease and oil, or sand; except that such interceptors shall not be required for residential users. All interception units shall be of a type and capacity approved by Liberty Utilities, shall be so located to be easily accessible for cleaning and inspection. Such interceptors shall be inspected, cleaned, and repaired by the IU at their expense.

D. IUs with the potential to discharge flammable substances may be required to install and maintain an approved combustible gas detection meter.

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5.2 Accidental Discharge/Slug Discharge Control Plans

Liberty Utilities shall evaluate whether each SIU needs an accidental discharge/slug discharge control plan or other action to control Slug Discharges. Liberty Utilities may require any IU to develop, submit for approval, and implement such a plan or take such other action that may be necessary to control Slug Discharges. Alternatively, Liberty Utilities may develop such a plan for any IU. An accidental discharge/slug discharge control plan shall address, at a minimum, the following:

A. Description of discharge practices, including non-routine batch discharges

B. Description of stored chemicals

C. Procedures for immediately notifying Liberty Utilities of any accidental or Slug Discharge, as required by Sections 5.2, 14.2 and 15 of this Pretreatment Program

D. Procedures to prevent adverse impact from any accidental or Slug Discharge. Such procedures include, but are not limited to, inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site runoff, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants, including solvents, and/or measures and equipment for emergency response.

5.3 Hauled Wastewater

A. Septic tank waste may be introduced into the POTW/WRF only at locations designated by Liberty Utilities, and at such times as are established by Liberty Utilities. Such waste shall not violate Section 3 of this Pretreatment Program, or any other requirements established by Liberty Utilities. Liberty Utilities may require septic tank waste haulers to obtain individual wastewater discharge permits.

B. Industrial Waste:

a. Liberty Utilities will require haulers of industrial waste to obtain individual wastewater discharge permits.
b. Liberty Utilities will require generators of hauled industrial waste to obtain individual wastewater discharge permits.
c. Liberty Utilities also may prohibit the disposal of hauled industrial waste. The discharge of hauled industrial waste is subject to all other requirements of the Pretreatment Program.
d. Industrial waste haulers may discharge loads only at locations designated by Liberty Utilities. No load may be discharged without prior consent of Liberty Utilities.

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e. Liberty Utilities may collect samples of each hauled load to ensure compliance with applicable Pretreatment Standards.
f. Liberty Utilities may require the industrial waste hauler to provide a waste analysis of any load prior to discharge.
g. Industrial waste haulers must provide a waste tracking form for every load. This form shall include, at a minimum, the name and address of the industrial waste hauler, permit number, truck identification, names and addresses of sources of waste, and volume and characteristics of waste. The form shall identify the type of industry, known or suspected waste constituents, and whether any wastes are RCRA hazardous wastes.

SECTION 6 - INDIVIDUAL WASTEWATER DISCHARGE PERMITS

6.1 Wastewater Analysis

When requested by Liberty Utilities, an IU must submit information on the nature and characteristics of its wastewater within 30 days of the request. Liberty Utilities is authorized to prepare a form for this purpose and may periodically require IUs to update this information.

6.2 Individual Wastewater Discharge Permit Requirement

A. No SIU shall discharge wastewater into the POTW/WRF without first obtaining an individual wastewater discharge permit from Liberty Utilities, except that a SIU that has filed a timely application pursuant to Sections 3.0 and 3.1 of this Tariff may continue to discharge for the time period specified therein.

B. Liberty Utilities may require other IUs to obtain individual wastewater discharge permits as necessary to carry out the purposes of this Tariff.

C. Any violation of the terms and conditions of an individual wastewater discharge permit shall be deemed a violation of this Tariff and subjects the wastewater discharge permittee to the sanctions set out in the Pretreatment Program. Obtaining an individual wastewater discharge permit does not relieve a permittee of its obligation to comply with all Federal

D. and State Pretreatment Standards or Requirements or with any other requirements of Federal, State, and local law.

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6.3 Individual Wastewater Discharge Permitting: Existing Connections

Any IU required to obtain an individual wastewater discharge permit who was discharging wastewater into the POTW/WRF prior to the effective date of this Pretreatment Program and who wishes to continue such discharges in the future, shall, within 90 days after said date, apply to Liberty Utilities for an individual wastewater discharge permit in accordance with Section 6.5 of this Pretreatment Program, and shall not cause or allow discharges to the POTW/WRF to continue after 30 days of the effective date of this Tariff except in accordance with an individual wastewater discharge permit issued by Liberty Utilities.

6.4 Individual Wastewater Discharge Permitting: New Connections

Any IU required to obtain an individual wastewater discharge permit who proposes to begin or recommence discharging into the POTW/WRF must obtain such permit prior to the beginning or recommencing of such discharge. An application for this individual wastewater discharge permit, in accordance with Section 6.5 of this Tariff, must be filed at least 90 days prior to the date upon which any discharge will begin or recommence.

6.5 Individual Wastewater Discharge Permit Application Contents

A. All IUs required to obtain an individual wastewater discharge permit must submit a permit application. Liberty Utilities may require IUs to submit all, or some of the following applicable information as part of a permit application:

1. Identifying Information.
    a. The name and address of the facility, including the name of the operator and owner.
    b. Contact information, description of activities, facilities, and plant production processes on the premises.

2. Environmental Permits. A list of any environmental control permits held by or for the facility. For permits that are required or currently pending, a description of the status of each permit.
3. Description of Operations.

    a. A brief description of the nature, average rate of production (including each product produced by type, amount, processes, and rate of production), and standard industrial classifications of the operation(s) carried out by such IU. This description should include a schematic process diagram, which indicates points of discharge to the POTW/WRF from the regulated processes.

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b. Types of waste generated, and a list of all raw materials and chemicals used, or stored at the facility, which are, or could accidentally or intentionally be, discharged to the POTW/WRF.

c. Number and type of employees, hours of operation, and proposed or actual hours of operation.

d. Type and number of raw materials processed (average and maximum per day).

e. Site plans, floor plans, mechanical and plumbing plans, and details to show all sewers, floor drains, and appurtenances by size, location, and elevation, and all points of discharge.

4. Time and duration of discharges.

5. The location for monitoring all waste covered by the permit.

6. Flow Measurement. Information showing the measured average daily and maximum daily flow, in gallons per day, to the POTW/WRF from regulated process streams and other streams, as necessary, to allow use of the combined waste stream formula set out in 40 CFR 403.6(e).

7. Measurement of Pollutants.
   a. The categorical Pretreatment Standards applicable to each regulated process and any new categorically regulated processes for Existing Sources.
   b. The results of sampling and analysis identifying the nature and concentration, and/or mass, where required by the Standard or by Liberty Utilities, of the regulated pollutants in the discharge from each regulated process.
   c. Instantaneous, Daily Maximum, and long-term average concentrations, or mass, where required, shall be reported.

   d. The sample shall be representative of daily operations and shall be analyzed in accordance with procedures set out in Sections 7.7.8, 7.7.10, 7.711, 8.1, and 9.0 of this Tariff. Where the Standard requires compliance with a BMP, COP, or pollution prevention alternative, the IU shall submit documentation as required by Liberty Utilities, or the applicable Standards to determine compliance with the Standard.

   e. Sampling must be performed in accordance with procedures set out in Sections 7.7.8, 7.7.10, 7.711, 8.1, and 9.0 of this Tariff of the Pretreatment Program.

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8. Any other information may be deemed necessary by Liberty Utilities to evaluate the permit application.

9. Incomplete, or inaccurate applications, will not be processed and will be returned to the IU for revision.

6.6 Application Signatories and reports

A. All wastewater discharge permit applications, IU reports and certification statements must be signed by an Authorized Representative of the IU and contain the certification statement in Section 7.7.14.

B. If the designation of an Authorized Representative is no longer accurate because a different individual or position has responsibility for the overall operation of the facility or overall responsibility for environmental matters for the company, a new written authorization satisfying the requirements of this Section must be submitted to Liberty Utilities prior to, or together with, any reports to be signed by an Authorized Representative.

6.7 Individual Wastewater Discharge Permit Decisions

Liberty Utilities will evaluate the data furnished by the IU and may require additional information, if necessary. Within 30 days of receipt of a complete permit application, Liberty Utilities will determine whether to issue an individual wastewater discharge permit. Liberty Utilities may deny any application for an individual wastewater discharge permit.

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SECTION 7 - INDIVIDUAL WASTEWATER DISCHARGE PERMIT ISSUANCE

7.1 Individual Wastewater Discharge Permit Duration

An individual wastewater discharge permit shall be issued for a specified time period, not to exceed five (5) years from the effective date of the permit. An individual wastewater discharge permit may be issued for a period less than five (5) years, at the discretion of Liberty Utilities. Each individual wastewater discharge permit will indicate a specific date upon which it will expire.

7.2 Individual Wastewater Discharge Permit Contents

An individual wastewater discharge permit shall include such conditions as are deemed reasonably necessary by Liberty Utilities to prevent Pass Through, or Interference, protect the quality of the water body receiving the POTW/WRF effluent, protect worker health and safety, facilitate sludge management and disposal, and protect against damage to the POTW/WRF.

A. Individual wastewater discharge permits must contain:

1. A statement that indicates the wastewater discharge permit issuance date, expiration date and effective date.

2. A statement that the wastewater discharge permit is nontransferable.

3. Effluent limits, including Best Management Practices, based on applicable Pretreatment Standards.

4. Self-monitoring, sampling, reporting, notification, and record-keeping requirements. These requirements shall include an identification of pollutants (or best management practice) to be monitored, sampling location, sampling frequency, and sample type based on Federal, State, and local law.

5. A statement of applicable civil and criminal penalties for violation of the Pretreatment Standards and Requirements, and any applicable compliance schedule. Such a schedule may not extend the time for compliance beyond that required by applicable Federal, State, or local law.

6. Requirements to control Slug Discharge, if determined by Liberty Utilities to be necessary.

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B. Individual wastewater discharge permits may contain, but need not be limited to, the following conditions:

1. Limits on the average and/or maximum rate of discharge, time of discharge, and/or requirements for flow regulation and equalization.

2. Requirements for the installation of pretreatment technology, pollution control, or construction of appropriate containment devices, designed to reduce, eliminate, or prevent the introduction of pollutants into the treatment works.

3. Requirements for the development and implementation of spill control plans or other special conditions including management practices necessary to adequately prevent accidental, unanticipated, or non-routine discharges.

4. Development and implementation of waste minimization plans to reduce the amount of pollutants discharged to the POTW/WRF for the term of the individual wastewater discharge permit.

5. The unit charge or schedule of IU charges and fees for the management of the wastewater discharged to the POTW/WRF.

6. Requirements for installation and maintenance of inspection and sampling facilities and equipment, including flow measurement devices.

7. A statement that compliance with the individual wastewater discharge permit does not relieve the permittee of responsibility for compliance with all applicable Federal and State Pretreatment Standards, including those which become effective during the term of the individual wastewater discharge permit.

8. Other conditions as deemed appropriate by Liberty Utilities to ensure compliance with this Pretreatment Program, and State and Federal laws, rules, and regulations.

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7.3 Permit Modification

Liberty Utilities may modify an individual wastewater discharge permit for good cause, including, but not limited to, the following reasons:

A. To incorporate any new or revised Federal, State, or local Pretreatment Standards or Requirements.

B. To address significant alterations, or additions to the IU's operation, processes, or wastewater volume or character since the time of the individual wastewater discharge permit issuance

C. A change in the POTW/WRF that requires either a temporary or permanent reduction or elimination of the authorized discharge.

D. Information indicating that the permitted discharge poses a threat to a Liberty Utilities POTW/WRF, Liberty Utilities personnel, or the receiving waters.

E. Violation of any terms or conditions of the individual wastewater discharge permit.

F. Misrepresentations, or failure to fully disclose all relevant facts, in the wastewater discharge permit application or in any required reporting.

G. Revision of, or a grant of variance, from categorical Pretreatment Standards pursuant to 40 CFR 403.13.

H. To correct typographical, or other errors in the individual wastewater discharge permit.

I. To reflect a transfer of the facility ownership or operation to a new owner or operator were requested in accordance with Section 6.7.

7.4 Individual Wastewater Discharge Permit Transfer

Individual wastewater discharge permits may be not be transferred. New owner or operator shall apply for a new discharge permit 60 days prior to the date of facility transfer. Failure of new owner or operator to apply for a new discharge permit will render the existing individual wastewater permit void as of the date of facility transfer.

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7.5 Individual Wastewater Discharge Permit Revocation

Liberty Utilities may revoke an individual wastewater discharge permit for good cause, including, but not limited to, the following reasons:

A. Failure to notify Liberty Utilities of significant changes to the wastewater prior to the changed discharge.

B. Failure to provide prior notification to Liberty Utilities of changed conditions pursuant to Section 6.3 of this Document.

C. Misrepresentation or failure to fully disclose all relevant facts in the wastewater discharge permit application.

D. Falsifying self-monitoring reports and certification statements.

E. Tampering with monitoring equipment.

F. Refusing to allow Liberty Utilities timely access to the facility premises and records.

G. Failure to meet effluent limitations.

H. Failure to pay fines.

I. Failure to pay sewer charges.

J. Failure to meet compliance schedules.

K. Failure to complete a wastewater survey or the wastewater discharge permit application.

L. Failure to provide advance notice of the transfer of business ownership of a permitted facility.

M. Violation of any Pretreatment Standard or Requirement, or any terms of the wastewater discharge permit or this Pretreatment Program.

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Individual wastewater discharge permits will be voidable upon cessation of operations or transfer of business ownership. All individual wastewater discharge permits issued to an IU are void upon the issuance of a new individual wastewater discharge permit to that IU.

7.6 Individual Wastewater Discharge Permit Reissuance

An IU with an expiring individual wastewater discharge permit shall apply for individual wastewater discharge permit reissuance by submitting a complete permit application, in accordance with Section 6.5 of this Pretreatment Program, a minimum of 90 days prior to the expiration of the IU's existing individual wastewater discharge permit.

7.7 Reporting Requirements

7.7.1 Metering

If required by the individual wastewater permit approved by Liberty Utilities, the IU shall install a metering device of a form and at a location acceptable to Liberty Utilities.

Unless designated to the IU in the individual wastewater permit, Liberty Utilities will be responsible for the reading of water and/or wastewater meters when installed in discharger's establishment.

Meters will always be accessible to Liberty Utilities and/or the applicable Liberty Utilities' representatives.

7.7.2 Baseline Monitoring Reports

Within either one hundred eighty (180) days after the effective date of a categorical Pretreatment Standard, or the final administrative decision on a category determination under 40 CFR 403.6(a)(4), whichever is later, existing Categorical IUs currently discharging to or scheduled to discharge to the POTW/WRF shall submit to Liberty Utilities a report which contains the information listed in paragraph B, below. At least ninety (90) days prior to commencement of their discharge, New Sources, and sources that become Categorical IUs subsequent to the promulgation of an applicable categorical Standard, shall submit to Liberty Utilities a report which contains the information listed in paragraph B, below. A New Source shall report on the method of pretreatment it intends to use to meet applicable categorical Standards. A New Source also shall give estimates of its anticipated flow and quantity of pollutants to be discharged.

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A. IUs described above shall submit the information set forth below:

1. All information required in Section 4.5 (a), Section 4.5 b, Section c, and Section 4.5d.

2. Measurement of pollutants.

    a. The IU shall provide the information required in Section 6.5.

    b. The IU shall take a minimum of one representative sample to compile that data necessary to comply with the requirements of this paragraph.

    c. Samples should be taken immediately downstream from pretreatment facilities (POTW/WRF) if such exist or immediately downstream from the regulated process if no pretreatment exists. If other wastewaters are mixed with the regulated wastewater prior to pretreatment the IU should measure the flows and concentrations necessary to allow use of the combined waste stream formula in 40 CFR 403.6(e) to evaluate compliance with the Pretreatment Standards.

    d. Where an alternate concentration or mass limit has been calculated in accordance with 40 CFR 403.6(e) this adjusted limit along with supporting data shall be submitted to Liberty Utilities.

    e. Sampling and analysis shall be performed in accordance with Sections 7.7.8, 7.7.10, 7.711, 8.1, and 9.0.

    f. Liberty Utilities may allow the submission of a baseline report which utilizes only historical data so long as the data provides information sufficient to determine the need for industrial pretreatment measures.

    g. The baseline report shall indicate the time, date and place of sampling and methods of analysis, and shall certify that such sampling and analysis is representative of normal work cycles and expected pollutant Discharges to the POTW/WRF.

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3. Compliance Certification: A statement, reviewed by the IU's Authorized Representative as defined in Section 1.4.C and certified by a qualified professional, indicating whether Pretreatment Standards are being met on a consistent basis, and, if not, whether additional operation and maintenance (O&M) and/or additional pretreatment is required to meet the Pretreatment Standards and Requirements.

4. Compliance Schedule: If additional pretreatment and/or O&M will be required to meet the Pretreatment Standards, the shortest schedule by which the IU will provide such additional pretreatment and/or O&M must be provided. The completion date in this schedule shall not be later than the compliance date established for the applicable Pretreatment Standard. A compliance schedule pursuant to this Section must meet the requirements set out in Section 6.2 of this Pretreatment Program.

5. Signature and Report Certification: All baseline monitoring reports must be certified in accordance with Section 7.7.14 of this Document and signed by an Authorized Representative as defined in Section 1.4.C.

7.7.3 Compliance Schedule Progress Reports

The following conditions shall apply to the compliance schedule required this Pretreatment Program:

A. The schedule shall contain progress increments in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the IU to meet the applicable Pretreatment Standards (such events include, but are not limited to, hiring an engineer, completing preliminary and final plans, executing contracts for major components, commencing and completing construction, and beginning and conducting routine operation).

B. No increment referred to above shall exceed nine (9) months.

C. The IU shall submit a progress report to Liberty Utilities no later than fourteen (14) days following each date in the schedule and the final date of compliance including, as a minimum, whether it complied with the increment of progress, the reason for any delay, and, if appropriate, the steps being taken by the IU to return to the established schedule.

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D. In no event shall more than nine (9) months elapse between such progress reports to Liberty Utilities and Categorical Pretreatment Standard Deadlines. Within ninety (90) days following the date for final compliance with applicable categorical Pretreatment Standards, or in the case of a New Source following commencement of the introduction of wastewater into the POT/WRF, any IU subject to such Pretreatment Standards and Requirements shall submit to Liberty Utilities a report containing the information described in Section 7.0 of this Pretreatment Program. For IUs subject to equivalent mass or concentration limits established in accordance with the procedures in Section 3.0, this report shall contain a reasonable measure of the IU's long term production rate. For all other IUs subject to categorical Pretreatment Standards expressed in terms of allowable pollutant discharge per unit of production (or other measure of operation), this report shall include the IU's actual production during the appropriate sampling period. All compliance reports must be signed and certified in accordance with Section 8 of this Pretreatment Program. All sampling will be done in conformance with 7.7.8, 7.7.10, 7.711, 8.1, and 9.0.

7.7.4 Periodic Compliance Reports

Except as specified in Section 8, all IUs must, at a frequency determined by Liberty Utilities, submit no less than once per year (January 31) a report indicating the nature and concentration of pollutants in the discharge which are limited by Pretreatment Standards and the measured or estimated average and maximum daily flows for the reporting period. In cases where the Pretreatment Standard requires compliance with a BMP, or pollution prevention alternative, the IU must submit documentation required by Liberty Utilities or the Pretreatment Standard necessary to determine the compliance status of the IU.

A. Pursuant to 40 CFR 403.12(e)(2), Liberty Utilities may authorize an IU subject to a categorical Pretreatment Standard to forego sampling of a pollutant regulated by a categorical Pretreatment Standard if the IU has demonstrated through sampling and other technical factors that the pollutant is neither present nor expected to be present in the Discharge or is present only at background levels from intake water and without any increase in the pollutant due to activities of the IU. This authorization is subject to the following conditions:

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1. The waiver may be authorized where a pollutant is determined to be present solely due to sanitary wastewater discharged from the facility provided that the sanitary wastewater is not regulated by an applicable categorical Standard and otherwise includes no process wastewater.

2. The monitoring waiver is valid only for the duration of the effective period of the individual wastewater discharge permit, but in no case longer than five (5) years. The IU must submit a new request for the waiver before the waiver can be granted for each subsequent individual wastewater discharge permit.

3. In making a demonstration that a pollutant is not present, the IU must provide data from at least one sampling of the facility's process wastewater prior to any treatment present at the facility that is representative of all wastewaters from all processes.

4. The request for a monitoring waiver must be signed in accordance with Section 1.4(C) and include the certification statement in 7.7.14 (40 CFR 403.6(a)(2)(ii)).

5. Non-detectable sample results may be used only as a demonstration that a pollutant is not present if the EPA approved method from 40 CFR Part 136 with the lowest minimum detection level for that pollutant was used in the analysis.

6. Any grant of the monitoring waiver by Liberty Utilities must be included as a condition in the IU's permit. The reasons supporting the waiver and any information submitted by the IU in its request for the waiver must be maintained by Liberty Utilities for 3 years after expiration of the waiver.

7. Upon approval of the monitoring waiver and revision of the IU's permit by Liberty Utilities, the IU must certify on each report with the statement in Section 8.0 below, that there has been no increase in the pollutant in its waste stream due to activities of the IU.

8. In the event that a waived pollutant is found to be present or is expected to be present because of changes that occur in the IU's operations, the IU must immediately comply with the monitoring requirements of Section 7.1.4, or other more frequent monitoring requirements imposed by Liberty Utilities, and notify Liberty Utilities.

9. This provision does not supersede certification processes and requirements established in categorical Pretreatment Standards, except as otherwise specified in the categorical Pretreatment Standard.

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B. Reduced reporting is not available to IUs that have in the last two (2) years been in Significant Noncompliance, as defined in Section 10 of this Pretreatment Program. In addition, reduced reporting is not available to an IU with daily flow rates, production levels, or pollutant levels that vary so significantly that, in the opinion of Liberty Utilities, decreasing the reporting requirement for this IU would result in data that are not representative of conditions occurring during the reporting period.

C. All periodic compliance reports must be signed and certified in accordance with Section 7.1.14 of this Pretreatment Program.

D. All wastewater samples must be representative of the IU's discharge. Wastewater monitoring and flow measurement facilities shall be properly operated, kept clean, and always maintained in good working order. The failure of an IU to keep its monitoring facility in good working order shall not be grounds for the IU to claim that sample results are unrepresentative of its discharge.

E. Pursuant to 40 CFR 403.12(g)(6), if an IU subject to the reporting requirement in this Section 7 monitors any regulated pollutant at the appropriate sampling location more frequently than required by Liberty Utilities, using the procedures prescribed in 7.7.8, 7.7.10, 7.711, 8.1, and 9.0 of this Pretreatment Program, the results of this monitoring shall be included in the report.

7.7.5 Reports of Changed Conditions

Each IU must notify Liberty Utilities of any significant changes to the IU's operations or system which might alter the nature, quality, or volume of its wastewater at least ninety (90) days before the change.

A. Liberty Utilities may require the IU to submit such information as may be deemed necessary to evaluate the changed condition, including the submission of a wastewater discharge permit application under Section 4.5 of this Pretreatment Program.

B. Liberty Utilities may issue an individual wastewater discharge permit under Section 6.5 of this Pretreatment Program or modify an existing wastewater discharge permit under Section 6 of this Pretreatment Program in response to changed conditions or anticipated changed conditions.

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7.7.6 Reports of Potential Problems

A. In the case of any Discharge, including, but not limited to, accidental discharges, discharges of a non-routine, episodic nature, a non-customary batch discharge, a Slug Discharge, or Slug Load, that might cause potential problems for the POTW/WRF, the IU shall telephone and notify Liberty Utilities within two hours of the incident. This notification shall include the location of the discharge, type of waste, concentration and volume, if known, and corrective actions taken by the IU.

Within five (5) days following such Discharge, the IU shall, unless waived by Liberty Utilities, submit a detailed written report describing the cause(s) of the discharge and the measures to be taken by the IU to prevent similar future occurrences. Such notification shall not relieve the IU of any expense, loss, damage, or other liability which might be incurred as a result of damage to the POTW/WRF, natural resources, or any other damage to person or property; nor shall such notification relieve the IU of any fines, penalties, or other liability which may be imposed pursuant to this Pretreatment Program.

B. A notice shall be permanently posted on the IU's bulletin board or other prominent place advising employees who to call in the event of a discharge described in paragraph A, above. Employers shall ensure that all employees who could cause such a discharge to occur, are advised of the emergency notification procedure.

C. SIUs are required to notify Liberty Utilities immediately of any changes at its facility affecting the potential for a Slug Discharge.

7.7.7 Reports from Unpermitted IUs

All IUs not required to obtain an individual wastewater discharge permit shall provide reports required under this Tariff at Liberty Utilities' request.

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7.7.8 Notice of Violation/Repeat Sampling and Reporting

If sampling performed by an IU indicates a violation, the IU must notify Liberty Utilities within twenty-four (24) hours of becoming aware of the violation. The IU shall also repeat the sampling and analysis and submit the results of the repeat analysis to Liberty Utilities within thirty (30) days after becoming aware of the violation. Resampling by the IU is not required if Liberty Utilities performs sampling at the IU's facility at least once a month, or if Liberty Utilities performs sampling at the IU between the time when the initial sampling was conducted and the time when the IU or Liberty Utilities receives the results of this sampling, or if Liberty Utilities has performed the sampling and analysis in lieu of the IU.

7.7.9 Notification of the Discharge of Hazardous Waste

A. Any IU who commences the discharge of hazardous waste shall notify Liberty Utilities, the EPA Regional Waste Management Division Director, and State hazardous waste authorities, in writing, of any discharge into the POTW/WRF of a substance which, if otherwise disposed of, would be a hazardous waste under 40 CFR Part 261. Such notification must include the name of the hazardous waste as set forth in 40 CFR Part 261, the EPA hazardous waste number, and the type of discharge (continuous, batch, or other). If the IU discharges more than one hundred (100) kilograms of such waste per calendar month to the POTW/WRF, the notification also shall contain the following information to the extent such information is known and readily available to the IU: an identification of the hazardous constituents contained in the wastes, an estimation of the mass and concentration of such constituents in the waste stream discharged during that calendar month, and an estimation of the mass of constituents in the waste stream expected to be discharged during the following twelve (12) months. All notifications must take place no later than one hundred and eighty (180) days after the discharge commences. Any notification under this paragraph needs to be submitted only once for each hazardous waste discharged. However, notifications of changed conditions must be submitted under Section 6.5 of this Pretreatment Program. The notification requirement in this Section does not apply to pollutants already reported by IUs subject to categorical Pretreatment Standards under the self-monitoring requirements of Section 7.7.13 of this Pretreatment Program.

B. Dischargers are exempt from the requirements of paragraph A, above, during a calendar month in which they discharge no more than fifteen (15) kilograms of hazardous wastes, unless the wastes are acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e). Discharge of more than fifteen (15) kilograms of non-acute hazardous wastes in a calendar month, or of any quantity of acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e), requires a onetime notification. Subsequent months during which the IU discharges more than such quantities of any hazardous waste do not require additional notification.

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C. In the case of any new regulations under section 3001 of RCRA identifying additional characteristics of hazardous waste or listing any additional substance as a hazardous waste, the IU must notify Liberty Utilities, the EPA Regional Waste Management Waste Division Director, and State hazardous waste authorities of the discharge of such substance within ninety (90) days of the effective date of such regulations.

D. In the case of any notification made under this Section, the IU shall certify that it has a program in place to reduce the volume and toxicity of hazardous wastes generated to the degree it has determined to be economically practical.

E. This provision does not create a right to discharge any substance not otherwise permitted to be discharged by this Pretreatment Program, a permit issued thereunder, or any applicable Federal or State law.

7.7.10 Analytical Requirements

All pollutant analyses, including sampling techniques, to be submitted as part of a wastewater discharge permit application or report shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto, unless otherwise specified in an applicable categorical Pretreatment Standard. If 40 CFR Part 136 does not contain sampling or analytical techniques for the pollutant in question, or where the EPA determines that the Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analyses shall be performed by using validated analytical methods at a State of Arizona certified lab or any other applicable sampling and analytical procedures, including procedures suggested by Liberty Utilities, or other parties approved by EPA.

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7.7.11 Sample Collection

Samples collected to satisfy reporting requirements must be based on data obtained through appropriate sampling and analysis performed during the period covered by the report, based on data that is representative of conditions occurring during the reporting period.

A. Except as indicated in Section B and C below, the IU must collect wastewater samples using 24-hour flow proportional composite sampling techniques, unless time proportional composite sampling or grab sampling is authorized by Liberty Utilities. Where time proportional composite sampling or grab sampling is authorized by Liberty Utilities, the samples must be representative of the discharge. Using protocols (including appropriate preservation) specified in 40 CFR Part 136 and appropriate EPA guidance, multiple grab samples collected during a 24-hour period may be composited prior to the analysis as follows: for cyanide, total phenols, and sulfides the samples may be composited in the laboratory or in the field; for volatile organics and oil and grease, the samples may be composited in the laboratory. Composite samples for other parameters unaffected by the compositing procedures as documented in approved EPA methodologies may be authorized by Liberty Utilities, as appropriate. In addition, grab samples may be required to show compliance with Local Limits.

B. Samples for oil and grease, temperature, pH, cyanide, total phenols, sulfides, and volatile organic compounds must be obtained using grab collection techniques.

C. For sampling required in support of baseline monitoring and 90 day compliance reports required in Sections 6.3, 6.4, 6.5 of the Pretreatment Program (40 CFR 403.12(b) and (d)), a minimum of four (4) grab samples must be used for pH, cyanide, total phenols, oil and grease, sulfide and volatile organic compounds for facilities for which historical sampling data do not exist; for facilities for which historical sampling data are available, Liberty Utilities may authorize a lower minimum. For the response required by paragraphs Section 6.4 (40 CFR 403.12(e) and 403.12(h)), the IU is required to collect the number of grab samples necessary to assess and assure compliance with applicable Pretreatment Standards and Requirements.

7.7.12 Date of Receipt of Reports

Written reports will be deemed to have been submitted on the date postmarked or if hand delivered, date received by Liberty Utilities.

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7.7.13 Recordkeeping

IUs subject to the reporting requirements of this Pretreatment Program shall retain, and make available for inspection and copying, all records of information obtained pursuant to any monitoring activities required by this Pretreatment Program, any additional records of information obtained pursuant to monitoring activities undertaken by the IU independent of such requirements, and documentation associated with Best Management Practices established under Sections 1.4 (4) and 7.2. Records shall include the date, exact place, method, and time of sampling, and the name(s) of the person(s) taking the samples; the dates analyses were performed; who performed the analyses; the analytical techniques or methods used; and the results of such analyses. These records shall remain available for a period of at least three (3) years. This period shall be automatically extended for the duration of any litigation concerning the IU or Liberty Utilities, or where the IU has been specifically notified of a longer retention period by Liberty Utilities.

7.7.14 Certification Statements

A. Certification of Permit Applications, IU Reports and Initial Monitoring Waiver. The following certification statement is required to be signed and submitted by: (i) IUs submitting permit applications in accordance with Section 4.5; (ii) IUs submitting baseline monitoring reports under Section 8; (iii) IUs submitting reports on compliance with the categorical Pretreatment Standard deadlines under Section 4.0; (iv) IUs submitting periodic compliance reports required by Section 7.7.4; and (v) IUs submitting an initial request to forego sampling of a pollutant on the basis of Section 6.2. The following certification statement must be signed by an Authorized Representative as defined in Section 1.4(C):

   a. I certify under penalty of law that this document and all attachments were prepared under my direction, or supervision, in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons, who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

B. Annual Certification for Non-Significant Categorical IUs. A facility determined to be a Non-Significant Categorical IU by Liberty Utilities pursuant to Section 1.4.NA.3 and 40 CFR 403.3(v)(2) must annually submit the following certification statement signed in accordance with the signatory requirements in Section 1.3.C and 40 CFR 403.12. The following certification must accompany an alternative report required by Liberty Utilities:

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Based on my inquiry of the person or persons directly responsible for managing compliance with the categorical Pretreatment Standards under 40 CFR _____, I certify that, to the best of my knowledge and belief that during the period from _____ , _____ to _____, _____ [months, days, year]:

a) The facility described as _____ [facility name] met the definition of a Non-Significant Categorical IU a as described in Section 1.4.NA.3 of Liberty Utilities' Pretreatment Program and Tariff and 40 CFR 403.3(v)(2); and

b) The facility complied with all applicable Pretreatment Standards and requirements during this reporting period; and the facility never discharged more than 100 gallons of total categorical wastewater on any given day during this reporting period.

This compliance certification is based on the following information.

_____

_____

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SECTION 8 - COMPLIANCE MONITORING

8.1 Right of Entry: Inspection and Sampling

Liberty Utilities shall have the right to enter the premises of any IU to determine whether the IU is complying with all requirements of this Pretreatment Program and any individual wastewater discharge permit or order issued hereunder. IUs shall allow Liberty Utilities ready access to all parts of the premises for the purposes of inspection, sampling, records examination and copying, and the performance of any additional duties.

A. Where an IU has security measures in force which require proper identification and clearance before entry into its premises, the IU shall make necessary arrangements with its security guards so that, upon presentation of suitable identification, Liberty Utilities shall be permitted to enter without delay for the purposes of performing specific responsibilities.

B. Liberty Utilities shall have the right to set up on the IU's property or require installation of such devices as are necessary to conduct sampling and/or metering of the IU's operations.

   Liberty Utilities may require the IU to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the IU at its own expense. All devices used to measure wastewater flow and quality shall be calibrated no less than annually to ensure their accuracy.

C. Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the IU at the written or verbal request of Liberty Utilities and shall not be replaced. The costs of clearing such access shall be borne by the IU.

D. Unreasonable delays in allowing Liberty Utilities access to the IU's premises shall be a violation of this Pretreatment Program.

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8.2 Compliance with Pretreatment Program as a Term of Service

The Pretreatment Program is an approved Tariff under the ACC rules and regulations and is included as part of the Terms of Service for customers. Under AAC R14-2-609 and this Tariff, Liberty Utilities may terminate service for failure of the customer to provide the utility reasonable access to its equipment and property; a breach of a written contract for service, if there is the existence of an obvious hazard to the safety or health of the consumer or the general population, or for noncompliance with this tariff.

If Liberty Utilities has been refused access to a building, structure, or property, or any part thereof, and is able to demonstrate probable cause to believe that there may be a violation of the Pretreatment Program, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with the Pretreatment Program or any permit issued hereunder, or to protect the overall public health, safety and welfare of the community. These remedies are cumulative, and Liberty Utilities may elect to terminate service without recourse to the courts.

SECTION 9 - CONFIDENTIAL INFORMATION

Information and data on an IU obtained from reports, surveys, wastewater discharge permit applications, individual wastewater discharge permits, monitoring programs, and Liberty Utilities inspection and sampling activities, shall be available to the public without restriction, unless the IU specifically requests, and is able to demonstrate to the satisfaction of Liberty Utilities, that the release of such information would divulge information, processes, or methods of production entitled to protection as trade secrets under applicable State law. Any such request must be asserted at the time of submission of the information or data. When requested and demonstrated by the IU furnishing a report that such information should be held confidential, the portions of a report which might disclose trade secrets or secret processes shall not be made available for inspection by the public but shall be made available immediately upon request to governmental agencies for uses related to the NPDES program or pretreatment program, and in enforcement proceedings involving the person furnishing the report. Wastewater constituents and characteristics and other effluent data, as defined at 40 CFR 2.302 shall not be recognized as confidential information and shall be available to the public without restriction.

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SECTION 10 - PUBLICATION OF IUS IN SIGNIFICANT NONCOMPLIANCE

Liberty Utilities shall publish annually, in a newspaper of general circulation that provides meaningful public notice within the jurisdictions served by Liberty Utilities, a list of the IUs which, at any time during the previous twelve (12) months, were in Significant Noncompliance with applicable Pretreatment Standards and Requirements. The term Significant Noncompliance shall be applicable to all Significant IUs (or any other IU that violates paragraphs (C), (D) or (H) of this Section) and shall mean:

A. Chronic violations of wastewater discharge limits, defined here as those in which sixty six percent (66%) or more of all the measurements taken for the same pollutant parameter taken during a six (6) month period exceed (by any magnitude) a numeric Pretreatment Standard or Requirement, including Instantaneous Limits as defined in Sections 1.4.(T) and 6.6.7.c.

B. Technical Review Criteria (TRC) violations, defined in 40 CFR § 403.8(f)(vii)(B) as those in which thirty three percent (33%) or more of wastewater measurements taken for each pollutant parameter during a six (6) month period equals or exceeds the product of the numeric Pretreatment Standard or Requirement including Instantaneous Limits, as defined by Sections 1.4(T) and 6.6.7.cmultiplied by the applicable criteria (1.4 for BOD, TSS, fats, oils and grease, and 1.2 for all other pollutants except pH).

C. Any other violation of a Pretreatment Standard or Requirement as defined by Sections 4.5(e) and 7.7.14 and (Daily Maximum, long term average, Instantaneous Limit, or narrative standard) that Liberty Utilities determines has caused, alone or in combination with other discharges, Interference or Pass Through, including endangering the health of POTW/WRF personnel or the general public.

D. Any discharge of a pollutant that has caused imminent endangerment to the public or to the environment or has resulted in Liberty Utilities exercise of its emergency authority to halt or prevent such a discharge.

E. Failure to meet, within ninety (90) days of the scheduled date, a compliance schedule milestone contained in an individual wastewater discharge permit or enforcement order for starting construction, completing construction, or attaining final compliance.

F. Failure to provide within forty-five (45) days after the due date, any required reports, including baseline monitoring reports, reports on compliance with categorical Pretreatment Standard deadlines, periodic self-monitoring reports, and reports on compliance with compliance schedules.

G. Failure to accurately report noncompliance.

H. Any other violation(s), which may include a violation of BMP or COP, which Liberty Utilities determines will adversely affect the operation or implementation of the local pretreatment program.

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SECTION 11- ENFORCEMENT REMEDIES AND GUIDELINES

11.1 Utility Right to Shut off and Terminate Service.

The purpose of this Tariff is to is to prevent the introduction of pollutants into Liberty Utilities' WRF or a POTW that will interfere with its operation, including interference with its use or disposal of sludge, prevent the introduction of pollutants into a WRF/POTW that could adversely impact the treatment works or otherwise be incompatible with it, and to obtain compliance with all applicable laws and regulations by those regulated dischargers into the WRF/POTW.

11.2 Liberty Utilities will have sole and complete discretion to shut off wastewater services to any IU for any violation of any provision in this Tariff, or for any violation of any provision in the waste discharge permit in accordance with the terms and conditions of the waste discharge permit between an IU and Liberty Utilities.

11.3 Violation of this Tariff or of any provision of a waste discharge permit is cause for shutting off of or termination of service at Liberty Utilities' discretion. Liberty Utilities will notify the Arizona Corporation Commission at least two business days before it terminates service to any IU.

11.4 Shutting off of services for any violation of this Tariff or a wastewater discharge permit between an IU and Liberty Utilities will be in accordance with the terms of the wastewater discharge permit between an IU and Liberty Utilities. The wastewater discharge permit will provide for the suspension of wastewater flows from any IU for a violation of this Tariff or the applicable wastewater discharge permit. This is to ensure the integrity of Liberty Utilities' wastewater operations and avoid adverse impacts to the provision of safe and reliable service to other customers.

A. IU will provide contact information (including name, service address. contact address (if different), telephone number and email address as part of IU's request for service);
B. Liberty Utilities will contact IU with a written notification of non-compliance, whereby IU has five (5) calendar days to respond with a written plan for satisfactory correction and prevention of future violations;
C. Upon providing response, IU will then have 72 hours to implement plan and come into compliance, provided the plan is to Liberty Utilities' satisfaction;
D. Failure to come into compliance could then result in Liberty Utilities shutting off service to IU at Liberty Utilities' sole and complete discretion;
E. Under no circumstances can IU dispute the Liberty Utilities notification until after response and implementation of plan occurs and compliance is achieved.

Service will not be restored to IU until IU has resolved all outstanding violations and penalties to Liberty Utilities' satisfaction.

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11.5 IU must provide information to Liberty Utilities describing maximum average and peak wastewater flows discharged from IU's facility that IU is requesting Liberty Utilities collect and treat during a 24-hour period. Any exceedance of such wastewater flows may be considered a Slug Discharge/Load and a violation of this Tariff for purposes of enforcement and shutting off of services in Liberty Utilities' sole discretion.

11.6 Liberty Utilities will install metering and vault, and other equipment as necessary, so that it has the ability to shut off Indirect Discharge into it's the WRF/POTW when a violation by an IU has occurred in Liberty Utilities sole discretion. Design standards for the discharge point for IU facilities must include plans for the discharge of Indirect Discharge.

11.7 IU is liable to the extent any violation results in any damage to Liberty Utilities WRF or any facilities used in the provision of wastewater service to any Liberty Utilities customers, as well as to the extent such violation causes any harm to any persons, and the waste discharge permit will include a provision that IU will indemnify Liberty Utilities in accordance with this provision.

11.8 Should vault and haul services be necessary due to the violation by IU, then IU will be fully and solely responsible for the costs against any IU, to the extent the vault and haul services are due to the violation by the IU.

11.9 Violation of this rule could result in enforcement or other legal action against the IU by interconnected municipalities, the Arizona Department of Environmental Quality and/or the U.S. Environmental Protection Agency. These entities are authorized by law to impose monetary penalties of up to $37,500 per day per violation.

11.10 An effluent parameter exceedance charge may be assessed for any exceedance of the waste discharge permit requirements, when deemed necessary by Liberty Utilities.

11.11 In addition to or instead of any other remedies currently set forth, Liberty Utilities may, in its full discretion, impose the following penalties for the listed violations as set forth in the following table:

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Violations	Nature of Violations	Fine/Action	Notifications (Timeframe to Address)
Exceedance of Local Limit, Permit Limit or Federal Standard	A pattern of exceedances will constitute one violation. For purposes of this violation, a pattern will mean exceedances that (1) occur once per day (i.e., a 24-hour period) over three consecutive days or (2) occur more than twice in any specific day.	$25,000 per each violation.	Discharger will have up to five (5) days from receipt of notification to address before commencement of fines.
Failure to Report	Failure to provide correct information, or provision of missing or incomplete information after notification by Liberty Utilities that information is incorrect, missing or incomplete.	Up to $5,000 per day per violation (i.e. each piece of incorrect, missing or incomplete information).	Three days from the time of notification of incomplete or missing information to address before commencement of fines.
Failure to Monitor Correctly	Failure to Monitor All Pollutants as set forth in this Tariff or a waste discharge permit (if applicable).	Up to $5,000 per day per violation	Three days from the time of notification that discharger is failing to monitor as required.
Failure to install monitoring equipment.	Delay of 30 days or more after notification by Liberty Utilities.	Up to $5,000 per day per violation	Three days after expiration of the 30day period and notification by Liberty Utilities.
Denial of Entry onto Dischargers property for verification of compliance with this Tariff and a waste discharge permit.	Entry Denied or Consent Withdrawn, Liberty Utilities request for copies of records pertinent this Tariff or a waste discharge permit is denied	Up to $1,000 per day per violation	Commencement of fines can begin 24 hours after denial of entry.

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11.12 The proceeds of any fine(s) will be used towards making additional investments as needed in the Liberty Utilities wastewater infrastructure.

11.13 Liberty Utilities may recover the cost of damages caused by any violation of this Tariff or the waste discharge permit by an IU.

11.14 The remedies provided for in this Pretreatment Program are not exclusive. Liberty Utilities may take any, all, or any combination of these actions against a noncompliant IU when the circumstances warrant. Enforcement of pretreatment violations will generally be in accordance with Liberty Utilities' enforcement response plan. Further, Liberty Utilities is empowered to take more than one enforcement action against any noncompliant IU.

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SECTION 12-SUPPLEMENTAL ENFORCEMENT ACTION

12.1 Penalties for Late Reports

A penalty of $250 shall be assessed to any IU for each day that a report required by this Pretreatment Program, a permit or order issued hereunder is late, beginning five days after the date the report is due. Increased penalties may also be assessed where reports are more than 30-45 days late. Actions taken by Liberty Utilities to collect late reporting penalties shall not limit Liberty Utilities' authority to initiate other enforcement actions that may include penalties for late reporting violations.

12.2 Performance Bonds or Letter of Credit

Liberty Utilities may decline to issue or reissue an individual wastewater discharge permit to any IU who has failed to comply with any provision of this Pretreatment Program, a previous individual wastewater discharge permit, or any other Pretreatment Standard or Requirement, unless such IU first files a satisfactory bond or letter of credit, payable to Corporation, in a sum not to exceed a value determined by Liberty Utilities to be necessary to achieve consistent compliance.

12.3 Liability Insurance

Liberty Utilities may decline to issue or reissue an individual wastewater discharge to any IU who has failed to comply with any provision of this Pretreatment Program, a previous individual wastewater discharge permit, or order issued hereunder, or any other Pretreatment Standard or Requirement, unless the IU first submits proof that it has obtained financial assurances sufficient to restore or repair damage to the POTW/WRF caused by its discharge.

12.4 Payment of Outstanding Fees and Penalties

Liberty Utilities may decline to issue or reissue an individual wastewater discharge permit to any IU who has failed to pay any outstanding fees, fines or penalties incurred as a result of any provision of this Pretreatment Program, a previous individual wastewater discharge permit, or order issued hereunder.

12.5 Water and Wastewater Supply Severance

Whenever an IU has violated or continues to violate any provision of this Pretreatment Program, an individual wastewater discharge permit, or order issued hereunder, or any other Pretreatment Standard or Requirement, wastewater and/or water service to the IU may be severed. Service will recommence, at the IU's expense, only after the IU has satisfactorily demonstrated its ability to comply.

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PART FIFTEEN

INDUSTRIAL PRETREATMENT PROGRAM AND TARIFF

SECTION 13-PROHIBITED BYPASS

13.1 Bypass

A. For the purposes of this Section,

(1) Bypass means the intentional diversion of waste streams from any portion of an IU's treatment facility.

(2) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

B. An IU may allow any bypass to occur which does not cause Pretreatment Standards or Requirements to be violated, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provision of paragraphs (C) and (D) of this Section.

C. Bypass Notifications

(1) If an IU knows in advance of the need for a bypass, it shall submit prior notice to Liberty Utilities, at least ten (10) days before the date of the bypass.

(2) An IU shall submit oral notice to Liberty Utilities of an unanticipated bypass that exceeds applicable Pretreatment Standards within twenty-four (24) hours from the time it becomes aware of the bypass. A written submission shall also be provided within five (5) days of the time the IU becomes aware of the bypass. The written submission shall contain a description of the bypass and its cause; the duration of the bypass, including exact dates and times, and, if the bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass. Liberty Utilities may waive the written report on a case-by-case basis if the oral report has been received within twenty-four (24) hours.

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D. Bypass

(1) Bypass is prohibited, and Liberty Utilities may take an enforcement action against an IU for a bypass, unless:

(a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage.

(b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance.

(c) The IU submitted notices as required under paragraph C of this section. Liberty Utilities may approve an anticipated bypass, after considering its adverse effects, if Liberty Utilities determines compliance with Section 14.

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SECTION 14 – PROHIBITED DISCHARGE STANDARDS

14.1 Declining to Issue Individual Wastewater Discharge Permit

Liberty Utilities may decline to issue or reissue an individual wastewater discharge permit to any IU who has failed to comply with any provision of the Pretreatment Program, a previous individual wastewater discharge permit, or any other Pretreatment Standard or requirement, unless such IU first files a satisfactory bond, payable to Liberty Utilities, in a sum not to exceed a value determined by Liberty Utilities to be necessary to achieve consistent compliance.

14.2 Emergency Shutdown

A. For the purposes of this Section,

   a. Emergency shut down means the intentional diversion of waste streams from any portion of an IU's treatment facility. Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of an emergency shut down. Severe property damage does not mean economic loss caused by delays in production.

B. An IU may allow any bypass to occur which does not cause Pretreatment Standards or Requirements to be violated, but only if it also is for essential maintenance to assure efficient operation. These emergency shutdowns are not subject to the provision of paragraphs (C) and (D) of this Section.

C. Shut Down Notifications

   a. If an IU knows in advance of the need for a bypass, it shall submit prior notice to Liberty Utilities at least ten (10) days before the date of the emergency shut down, if possible.

   b. An IU shall submit oral notice to Liberty Utilities of an unanticipated emergency shutdown that exceeds applicable Pretreatment Standards within twenty-four (24) hours from the time it becomes aware of the emergency shut down. A written submission shall also be provided within five (5) days of the time the IU becomes aware of the emergency shut down. The written submission shall contain a description of the emergency shut down; its cause; the duration of the bypass, including exact dates and times, and, if the emergency shut down has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the emergency shut down. Liberty Utilities may waive the written report on a case-by-case basis if the oral report has been received within twenty-four (24) hours.

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D. Emergency Shutdown

a. Emergency shut down is prohibited, and Liberty Utilities may take an enforcement action against an IU for a bypass, unless:

i. Emergency shut down was unavoidable to prevent loss of life, personal injury, or severe property damage.

ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance.

iii. The IU submitted notice as required under paragraph C of this Section.

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PART SIXTEEN

CODE OF PRACTICE

EXECUTIVE SUMMARY

Liberty Utilities (Litchfield Park Water & Sewer) Corp. ("Corporation") hereby declares that the following Code of Practice has been prepared and adopted to provide for pretreatment standards in the maintenance and operation of wastewater treatment at the Palm Valley Water Reclamation Facility ("PVWRF") and the Sarival Water Reclamation Facility ("SWRF"). This Code of Practice shall be filed with the Arizona Corporation Commission and made part of Corporation's Wastewater Service Tariff, Part Four, Section LB [Waste Limitations].

Corporation hereby expressly reserves the right to make any lawful addition and/or revisions in this Code of Practice when and as they may become advisable to properly manage the WRF and to promote the peace, health, safety and welfare of the customers that will be served. This Code of Practice is supplementary to, and are not to be construed as, any abridgement of any lawful rights of the Company as outlined in the Arizona Revised Statutes governing Public Utilities (Title 40) and the Arizona Administrative Corporation Commission Rules on Sewer (Title 14, Article 6), including the right to disconnect or to refuse permission to connect a customer to the Company's wastewater system for violation of this Code of Practice or any other applicable law of the State of Arizona.

This Code of Practice incorporates pretreatment standards per 40 CFR 403, A.A.C. Title 12, Article 4, and A.A.C. Title 18, Chapter 9, Article 3. This Code of Practice is enforceable per the authority granted to wastewater utilities established under A.A.C. Title 14, Chapter 2, Article 6 of the Arizona Administrative Code.

Applies to all **WASTEWATER** service areas
PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-001)
SECTION 1 – DEFINITIONS

A. PROHIBITED WASTE

Prohibited waste means:

1. Air Contaminant Waste

Any waste other than sanitary waste which, by itself or in combination with another substance, is capable of creating, causing or introducing an air contaminant outside any sewer or sewage facility or is capable of creating, causing or introducing an air contaminant within any sewer or sewage facility which would prevent safe entry by authorized personnel.

2. Flammable **or** Explosive Waste

any pollutants which create a fire or explosion hazard to the sewer or any waste other than sanitary waste which, which by itself or in combination with another substance, is capable of causing or contributing to an explosion or supporting combustion in any sewer or sewage facility including, but not limited to gasoline, naphtha, propane, diesel, fuel oil, kerosene or alcohol.

3. Obstructive Waste

Any waste other than sanitary waste which, by itself or in combination with another substance, is capable of obstructing the flow of, or interfering with, the operation or performance of any sewer or sewage facility including, but not limited to: earth, sand, sweepings, gardening or agricultural waste, ash, chemicals, paint, metal, glass, sharps, rags, cloth, tar, asphalt, cement-based products, plastic, wood, waste portions of animals, fish or fowl and solidified fat.

4. Corrosive Waste

Any waste other than sanitary waste which, with corrosive properties which, by itself or in combination with any other substance, may cause damage to any sewer or sewage facility or which may prevent safe entry by authorized personnel.

5. High Temperature Waste

Any waste other than sanitary waste which, by itself or in combination with another substance, will create heat in amounts which will **interfere** with the operation and maintenance of a sewer or sewage facility or with the treatment of waste in a sewage facility;

Any waste other than sanitary waste which, will raise the temperature of waste entering any sewage facility to 38 degrees Celsius (100 degrees Fahrenheit) or more; or any non-domestic waste with a temperature of 65 degrees Celsius (150 degrees Fahrenheit) or more.

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PART SIXTEEN

CODE OF PRACTICE (LPSCO-CP-01-001)

SECTION 1 - DEFINITIONS

6. Biomedical Waste

Any of the following categories of biomedical waste: human anatomical waste, animal waste, untreated microbiological waste, waste sharps, medical products, and untreated human blood and body fluids known to contain viruses and agents.

7. Miscellaneous Wastes

Any storm water, surface water, groundwater, roof runoff, or surface drainage is prohibited.

8. Dilution Wastes

Any discharge that has been in any way, been diluted as a substitute for pretreatment, for the purposes of obtain1ng compliance with any categorical standard or pretreatment requirement or any other requirement imposed by this article except where dilution is expressly authorized by a categorical standard.

9. Other Discharge Limitations.

Any discharge that is transported from the point of generation to the sewer by any hauler, unless the hauler has first:

a. Obtained authorization to discharge from the Company.

b. Disclosed the nature, origin, and volume of the discharge.

Any waste, other than sanitary waste, which by itself or in combination with another substance:

a. constitutes or may constitute a significant health or safety hazard to any person;
b. Any waste other than sanitary waste which may interfere with any sewer or sewage treatment process;
c. may cause a discharge from a sewage facility to contravene any requirements by or under any ADEQ or AZPDES discharge permit or any other act, approved Waste Minimization Plan (WMP), or any other law or regulation governing the quality of the discharge, or may cause the discharge to result in a hazard to people, animals, property or vegetation;
d. may cause bio-solid to fail criteria for beneficial land application.

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PART SIXTEEN

CODE OF PRACTICE (LPSCO-CP-01-001)

SECTION 1 - DEFINITIONS

B. RESTRICTED WASTE (LPSCO-CP-01-001)

Restricted waste means:

1. Specified Waste

Any waste other than sanitary waste which, at the point of discharge into a sewer, contains any contaminant at a concentration in excess of the Limits set out below. All concentrations are expressed as total concentrations which includes all forms of the contaminant, whether dissolved or un-dissolved. The concentration limits apply to both grab and composite samples. Contaminant definitions and methods of analysis are outlined in standard methods.

CONVENTIONAL CONTAMINANTS (mg/L)	
Biochemical Oxygen Demand (BOD)	350
Chemical Oxygen Demand (COD)	1000
Ammonia	55
Total Nitrogen- as NO3	100
Oil and Grease	64
Suspended Solids	350

ORGANIC CONTAMINANTS (mg / L)	
Benzene	Reserved
Ethyl Benzene	Reserved
Toluene	Reserved
Xylenes	Reserved
Reserved	Reserved
Chloroform	Reserved
Total Oil and Grease (hydrocarbons)	96
Perfluoroalkyl Substances (PFAS)	4 parts per trillion

Applies to all **WASTEWATER** service areas

PART SIXTEEN

CODE OF PRACTICE (LPSCO-CP-01-001)

SECTION 1 - DEFINITIONS

TRACE METALS	
PARAMETER	DAILY AVERAGE (mg/L)
Antimony (Sb)	0.0048
Arsenic	0.008
Beryllium	0.008
Cadmium (Cd)	0.012
Chloride (Cl)	Reserved
Chromium (Cr)	0.238
Cobalt (Co)	Reserved
Copper (Cu)	Reserved
Cyanide (CN)	Reserved
Fluoride	3.00
Iron (Fe)	Reserved
Lead (Pb)	0.13
Manganese (Mn)	Reserved
Mercury (Hg)	0.0050
Nitrate	100
Molybdenum (Mo)	Reserved
Nickel (Ni)	0.242
Selenium (Se)	0.142
Silver (Ag)	Reserved
Sulfate (SQ4)	Reserved
Sulfide (S)	N/A
Thallium	0.005
Zinc (Zn)	Reserved

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-001)
SECTION 1 - DEFINITIONS

2. Food Waste

Any solid or viscous pollutants, animal fats, oil, and grease (FOG) in amounts that may cause obstruction to the flow io sewers or pass through or other interference or damage to the sewer collection system. Any pollutant, including oxygen demanding pollutants (BOD, COD, TOC, etc.) released in a discharge flow at a rate and/or pollutant concentration which may cause interference with the sewer collection system or wastewater treatment process. This also includes petroleum oil, non-biodegradable cutting oil, or other products of mineral oil origin in amounts that may cause interference or pass through at the wastewater treatment facility.

3. Radioactive Waste

Any discharge containing a toxic, radioactive, poisonous or other substances in which sufficient quantity to cause or have the potential to cause injury or damage to a person or property or interference with any sewage treatment process, cause corrosive structural damage, constitute a hazard to humans or create any hazard to the sewer system or the effluent of the sewer system. All such wastes shall be subject to compliance with Nuclear Regulatory Commission standards for sewer disposal including the Unity Equation. Radioactive waste industrial users shall be treated in accordance with applicable federal and state regulations and guidelines, including section 40 of the Code of Federal Regulations.

4. pH Waste

Any discharge with a pH less than 5.5 standard units (SU) or greater than 9.5 SU as determined by either a grab or a composite sample.

5. Dyes and Coloring: Material

Dyes or coloring materials which may pass through a sewage facility and discolor the effluent from a sewage facility except where the dye is used by the Sewer Company, or one or more of its agents, as a tracer.

6. Miscellaneous us Restricted Wastes Any of the following wastes:

a. 4,4' - DOE
b. 4,4' - DDT
c. Aldrin
d. BHC-Alpha
e. BHC-Beta
f. BHC- Gamma(Lindane)
g. Heptachlo

Applies to all **WASTEWATER** service areas
PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-001)
SECTION 1 - DEFINITIONS

h. Heptachlor epoxide.
i. Polychlorinated biphenyl compounds (PCB's)
j. chlorinated phenols[11]
k. pesticides
l. herbicides
m. tetrachloroethylene
n. polynuclear aromatic hydrocarbons (PAH' s)[12]

7. Temperature

Any waste other than sanitary waste which, will raise the temperature of waste entering any sewage facility to 38 degrees Celsius (100 degrees Fahrenheit) or more; or any non-domestic waste with a temperature of 65 degrees Celsius (150 degrees Fahrenheit) or more.

[11] include: chlorophenol l (ortho, meta, para); dichlorophenol (2,3, 2,4-, 2,5-, 2,6-, 3,4-, 3,5-); trichlorophenol (2,3,4-, 2,3,5-, 2,3,6-, 2,4,5-, 2,4,6-, 3,4,5-); tetrachlorophenol (2,3,4,5-, 2,3,4,6-, 2,3,5,6-); pentachloro phenol

[12] includes: naphthalene benzo(a) anthracene; acenaphthylene chrysene; acenaphthene benzo(k)fluoranthene; fluorene benzo(k)fluoranthene; phenanthrene benzo(a)pyrene; anthracene dibenzo(a,h)anthracene fluoranthene indeno(1,2,3-cd)pyrene; pyrene benzo(g,h,i)perylene

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-002)
SECTION 2 - DENTAL OPERATIONS

I. APPLICATION

This code of practice for dental operations defines mandatory requirements for managing non-domestic waste discharged directly or indirectly into a sewer connected to a sewage facility.

This code of practice applies to dental operations.

II. DISCHARGE REGULATIONS

An operator of a dental operation must not discharge waste which, at the point of discharge into a sewer, contains;

a. prohibited waste, special waste, or storm water; or
b. restricted waste with the exception of mercury measured at the point of discharge from a certified amalgam separator.

An operator of a dental operation that produces liquid waste from photographic imaging containing silver shall comply with the requirements of LPSCO-CP-01-001.

An operator of a dental operation that produces wastewater containing dental amalgam must either:

a. collect and transport the wastewater from the dental operation for off-site waste management; or
b. treat the wastewater at the dental operation site prior to discharge to the sewer using a certified amalgam separator.

An operator of a dental operation must install and maintain the amalgam separator according to the manufacturer's or supplier's recommendations in order that the amalgam separator functions correctly. Such separator must be certified for use by the manufacturer.

An operator of a dental operation who installs an amalgam separator must ensure that:

a. all dental operation wastewater that contains dental amalgam is treated using the amalgam separator;
b. a monitoring point is installed at the outlet of the amalgam separator or downstream of the amalgam separator at a location upstream of any discharge of other waste;
c. the monitoring point must be installed in such a manner that the total flow from the amalgam separator may be intercepted and sampled; and
d. the monitoring point shall be readily and easily accessible at all times for inspection.

Applies to all **WASTEWATER** service areas
PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-002)
SECTION 2 - DENTAL OPERATIONS

If the amalgam separator is located downstream of a wet vacuum system, an operator of a dental operation must ensure that:

a. the wet vacuum system is fitted with an internal flow control fitting; or
b. a flow control fitting is installed on the water supply line to the wet vacuum system.

The flow control fitting must be sized to limit the flow to a rate that is no more than the maximum inlet flow rate of the amalgam separator as stated by the manufacturer of the amalgam separator.

An operator of a dental operation must locate an amalgam separator in such a manner that an accidental spill, leak or collecting container failure will not result in waste containing amalgam entering any sewer. If a location is not available, an operator of a dental operation must do one of the following:

a. install spill containment to contain spills or leaks from the amalgam separator; or
b. cap all floor drains into which liquid spilled from the amalgam separator would normally flow.

An operator of a dental operation must replace the amalgam separator's collecting container when any one of the following occurs:

a. the manufacturer's or supplier's recommended expiry date, as shown on the amalgam separator, has been reached; or
b. the warning level specified by the manufacturer has been reached; or
c. analytical data obtained using a method of analysis outlined in standard methods, or an alternative method of analysis approved by the manager, having a method detection limit of 0.0000005 mg/L or lower, indicates that the total concentration of mercury in the discharge from the amalgam separator is greater than, or equal to 0.005 mg/ L.

An operator of a dental operation shall not dispose of dental amalgam collected in an amalgam separator, a collecting container, or any other device, to a sewer.

III. RECORD KEEPING AND RETENTION

An operator of a dental operation that uses an amalgam separator must keep at the site of installation of the amalgam separator, an operation and maintenance manual containing instructions for installation, use, maintenance and service of the amalgam separator installed.

An operator of a dental operation that uses an amalgam separator must post, at the site of installation of the amalgam separator, a copy of the manufactures standard test report pertaining to the amalgam separator installed.

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-002)
SECTION 2 - DENTAL OPERATIONS

An operator of a dental operation that uses an amalgam separator must keep a record book at the dental operation site that includes the following information pertaining to the amalgam separator installed:

a. date of installation of the amalgam separator and name of the installation service provider;
b. serial number and expiry date of the amalgam separator and/or its components;
c. maximum recommended flow rate through the amalgam separator, where applicable;
d. dates of inspection, maintenance, cleaning and replacement of any amalgam separation equipment or components;
e. dates and descriptions of all operational problems, spills, leaks or collecting container failures associated with the amalgam separator and remedial actions taken;
f. name, address and telephone number of any person or company who performs any maintenance or disposal services related to the operation of the amalgam separator; and
g. dates of pick-up of the collecting container for o ff-site disposal, volume of waste disposed and the location of disposal.

The records must be retained for a period of two years and must be available on request by an company representative.

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-003)
SECTION 3 – DRY-CLEANING OPERATIONS

I. APPLICATION

This code of practice for Dry Cleaning operations defines the requirements for managing waste discharged directly or indirectly into a sewer connected to a sewage facility from dry cleaning businesses, or other facilities employing solvent or chemical cleaning routines.
Definitions are included in LPSCO-CP-01-DEF.

II. DISCHARGE REGULATIONS

An operator of a dry-cleaning operation must not discharge waste, which at the point of discharge into a sewer contains:

a. Tetrachloroethylene and Perchloroethylene is prohibited;
b. Petroleum solvent in a concentration that is in excess of 15 milligrams per liter as analyzed in a grab sample; and
c. Prohibited waste, restricted waste, special waste, storm water, or contaminated water.

An operator of a dry-cleaning operation that generates wastewater containing petroleum solvent shall either:

a. Collect and transport the wastewater from the dry-cleaning operation for offsite waste management; or
b. Install and maintain a solvent/water separator and holding tank in accordance with this code of practice.

Solvent Water Separators and Holding Tanks

Solvent/water separator and holding tank installations must conform to the requirements of this code of practice.

An operator of a dry-cleaning operation shall not directly discharge wastewater from the solvent/water separator to a sewage facility

a. An operator of a dry-cleaning operation must:
b. Collect the wastewater discharged from a solvent/water separator into a transparent, solvent-compatible, holding tank with a containment capacity 25% larger than the total volume of the solvent/water separator; and
c. Allow the wastewater to stand undisturbed for a period of not less than 12 hours following each operating date.

An operator of a dry-cleaning operation must check the contents of the holding tank after the specified period of time bas elapsed to determine whether the wastewater contains any visible residual solvent. If there is no visible residual solvent in the holding tank, the contents may be discharged to the sewer.

Applies to all **WASTEWATER** service areas
PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-003)
SECTION 3 – DRY-CLEANING OPERATIONS

If the holding tank contains any visible tetrachloroethylene or petroleum solvent after the specified period of time, then the tetrachloroethylene or petroleum solvent must be separated and returned to the solvent recovery system. After the removal of all visible solvent, the wastewater may be discharged to the sanitary sewer.

Visual Inspections

An operator of a dry-cleaning operation must:

a. Visually inspect the solvent/water separator on a daily basis and
b. Clean the solvent/water separator at least once every seven (7) days to manufacturer's standards.

Spills and Leaks

An operator of a dry-cleaning operation must install spill containment facilities in all chemical storage areas and around all dry-cleaning machines.

An operator of a dry-cleaning operation must block off all sewer drains within the containment area for chemical storage and dry-cleaning equipment to prevent any accidental discharge of solvent to a sewer.

An operator of a dry-cleaning operation must inspect all dry-cleaning equipment for liquid leaks at least once per day.

An operator of a dry-cleaning operation must keep all equipment clean to ensure that leaks are visible. The following areas and items are to be checked for leaks:

a. hose connections, unions, couplings and valves
b. machine door gasket and seating
c. filter head gasket and seating
d. pumps
e. base tanks and storage
f. solvent/water separators
g. filter sludge recovery
h. distillation unit
i. diverter valves
j. saturated lint in lint baskets
k. holding tanks
l. cartridge filters

Applies to all **WASTEWATER** service areas

PART SIXTEEN

CODE OF PRACTICE (LPSCO-CP-01-003)

SECTION 3 – DRY-CLEANING OPERATIONS

An operator of a dry-cleaning operation who detects any liquid leak from dry cleaning equipment or chemical storage must repair the leak within 72 hours and must immediately prevent any discharge of contaminants to a sewer.

III. RECORD KEEPING AND RETENTION

Every dry-cleaning operation must keep a record book on site for inspection with records from the previous two years.

Th e following information shall be recorded in the record book:

a. record of all inspections done by the operator, employees or other hired personnel;
b. record of any liquid leaks detected and remedial action taken;
c. record of solvent/water separator cleaning;
d. record of holding tank cleaning and solvent transfer; and
e. record of all other equipment maintenance and repair.

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-004)
SECTION 4 – FOOD SERVICE OPERATIONS

I. APPLICATION

This code of practice for Food Service operations defines the requirements for managing waste discharged directly or indirectly into a sewer connected to a sewage facility from restaurants, or other facilities employing food service (such as food preparation services) as a primary or secondary business operation. Traps, interceptors and separators shall be provided to prevent the discharge of oil, grease, sand and other substances harmful or hazardous to the building drainage system, the collection system the private sewage disposal system or the sewage treatment plant or processes.

Traps, interceptors and separators shall be installed:

a. operators of a food services operation that adds kitchen equipment that discharges oil and grease;
b. operators of a food services operation that discharges non-domestic waste to sewer that exceeds any of the restricted waste criteria specified in LPSCO-CP-01-DE F; or
c. any food service operation, as determined by Corporation's wastewater operations group.
d. at new facilities
e. at existing food service facilities, not equipped with a trap, interceptor or separator, when additions, alterations or remodel are done which Increase servicing volume, seating capacity, etc.
f. at existing food service facilities, equipped with a trap, interceptor or separator, when additions, alterations or remodel are done which increase servicing volume, seating capacity, changes to the menu, etc.
g. at any non-food facilities when additions, alterations, or remodeling is proposed for the purpose of food preparation and service.
h. at existing facilities not equipped with a trap, interceptor or separator, which is proposed for the purpose of food preparation and service.

Definitions are included in LPSCO-CP-01-DEF.

II. DISCHARGE REGULATIONS

An operator of a Food Service Operation must not discharge waste, which at the point of discharge into a sewer, contains:

1. oil and grease in a concentration that is in excess of 100 milligrams per liter as analyzed in a grab sample;
2. suspended solids in a concentration that is in excess of 350 milligrams per liter as analyzed in a grab sample;
3. 5-day biochemical oxygen demand (BOD 5) in a concentration that is in excess of 350 milligrams per liter in a grab sample;
4. prohibited waste, restricted waste, special waste, storm water, or contaminated water.

Applies to all **WASTEWATER** service areas

PART SIXTEEN

CODE OF PRACTICE (LPSCO-CP-01-004)

SECTION 4 – FOOD SERVICE OPERATIONS

III. GREASE INTERCEPTORS

Grease interceptors are required to be installed and maintained by the Owner of food service operations within the collection system of Corporation facilities. Grease interceptor installations shall conform to the requirements of th.is code of practice.

Interceptors, such as grease, oil, or sand shall be provided by laundries, restaurants, service stations, auto repair shops, carwashes and other industrial use.rs when, in the opinion of Corporation, interceptors are necessary for the proper handling of wastewater containing oil and grease or sand or any flammable wastes. Such interceptors shall not be required for domestic users.

Construction:

All traps, interceptors and separators shall be constructed of impervious materials capable of withstanding abrupt and extreme changes in temperature. New or upgraded grease device shall have a three-lid manhole, properly sized per Table 1. Traps, interceptors and separators shall be watertight and equipped with easily removable covers. Covers shall be gastight and watertight.

Cleaning and Maintenance:

Cleaning and maintenance must be performed when total volume of captured oil, grease and solids material displaces more than twenty-five (25) percent of the total volume of the trap, interceptor or separator or when the pH of a sample taken from the effluent side of the interceptor drops below 5.0 or when odor generation becomes a health issue or when the Company inspection determines a cleaning is necessary.

Maintenance Records:

All traps, interceptors and separators shall be maintained by the user in efficient operating condition at all times. Written records and documentation of all cleaning, repair, calibration, and maintenance shall be maintained at the facility for a minimum of three (3) years and be made available upon request.

Maintenance Inspection:

All traps, interceptors and separators shall be inspected by Corporation representative during normal working bouts. Inspection results shall be made available to person, firm or corporation in reasonable charge of the traps, interceptors and separators. Corporation representative shall require correction in order to enforce Corporation pretreatment code of practices.

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-004)
SECTION 4 – FOOD SERVICE OPERATIONS

Skimming:
Skimming, decanting or discharging of removed waste or wastewater back into any traps, interceptors and separators or any appurtenance of the wastewater collection system is strictly prohibited.

Pumping:
All oil, sand and grease interceptors shall be pumped out or cleaned out completely not less than once every ninety (90) calendar days. Grease traps must be cleaned out completely not less than once every thirty (30) calendar days. Traps and interceptors shall be cleaned more frequently when necessary or required.

Bacteria as a Substitute:
The use of bacteria additives as a supplement to maintenance may be authorized by Corporation when a written request is made to the Corporation which includes material safety data sheets. The addition of emulsifiers, de- emulsifiers, surface active agents, enzymes, or degreasers directly or into any drain leading to any grease removal device is strictly prohibited unless approved by the Corporation.

Use:
Traps, interceptors and separators shall be single user only. When an interceptor can be safely used by multiple users (e.g., food courts), multiple users may be allowed when approved by Corporation. Multiple facilities operated by the same person, firm or corporation may be allowed to connect to a single interceptor with approval from Corporation. The person, firm or corporation in reasonable charge of the trap, interceptor or separator shall take any and all steps necessary to assure adequacy which includes repair, modification or replacement.

Alternate Devices and Technology:
Alternative devices and technologies shall be submitted to Corporation for approval before any such device is installed. The service facility will be required to furnish analytical data demonstrating the effluent discharge concentration to Corporation wastewater collection system will not exceed those listed in LPSCO-CP-01-001.

Sizing:
All traps, interceptors and separators shall be properly sized per Tab le 1. When an interceptor is sized less than five hundred (500) gallons or more than two thousand five hundred (2,500) gallons, the person, firm or corporation making the permit application shall first meet with the Corporation to verify the reduced or increased size has been correctly calculated and that no other options are available.

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-004)
SECTION 4 – FOOD SERVICE OPERATIONS

Size Modification:
Modifying the size of any trap or interceptor shall only be done when sizing per Table 1 allows the modification. Modifying the size of any trap or interceptor shall not be done without the approval of Corporation.

Domestic Wastewater:
Domestic wastewater shall not be discharged to the interceptor.

Minimization Plan:
All facilities required to install and operate a trap, interceptor or separator shall develop and implement a Waste Minimization Plan pertaining to the disposal of grease, oils, and food bearing wastes.

Best Management:
All establishments requiring a trap, interceptor or separator shall adopt BMP's (Best Management Practices) for handling sources of floatable oils, fat or grease originating within their facility. Proof of employee training in BMP's shall be shown to Corporation upon request.

Other Fixtures:
Toilets, urinals, and other similar fixtures shall not discharge through a grease interceptor.

Minimization Program:
The applicant shall establish and submit a written waste minimization plan (maintenance program) outlying specific methods (Best Management Practices) that the facility will use on a daily basis to reduce the discharge of oil and grease as well as solids from entering the interception device and ultimately, the Corporation sewer system. This plan shall be acceptable to and approved by the Corporation. The approved document shall accompany the permit application.

Discharge Permit:
This document will be used in lieu of a discharge permit to assist with enforcing all Corporation codes of practices.

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-004)
SECTION 4 – FOOD SERVICE OPERATIONS

Grease interceptors automatic grease removal requited:

A grease interceptor or automatic grease removal device shall be required to receive the drainage from fixtures and equipment with grease-laden waste located in food preparation areas, such as in restaurants, hotel kitchens, hospitals, school kitchens, bars, factory cafeterias, caterers, nursing homes, day care center, churches and clubs. Fixtures and equipment shall include pot sinks, pre-rinse sinks; soup kettles or similar devices; workstations; floor drains or sinks into which kettles are drained; automatic hood wash units and dishwashers without pre-rinse sinks. Grease interceptors and automatic grease removal devices shall receive waste only from fixtures and equipment that allow fats, oils or grease to be discharged. Interceptors, such as grease, oil or sand shall be provided at laundries, restaurants, service stations, auto repair shops, carwashes and other industrial users when the proper handling of wastewater containing oil and grease or sand or any flammable wastes is necessary.

Location:

All Interceptors shall be approved and shall be located to be readily and easily accessible for cleaning and inspection.

Food waste grinder:

Where food waste grinders connect to grease interceptors, a solids interceptor shall separate the discharge before connecting to the grease interceptor. Solids interceptors and grease interceptors shall be sized and rated for the discharge of the food waste grinder. Emulsifiers, chemicals, enzymes and bacteria shall not discharge into the food waste grinder. Corporation shall require any user to cease operation of a garbage grinder and permanently remove such equipment when it is determined that the grinder is imposing any adverse effect on interceptor function.

Grease interceptor capacity:

Grease interceptors shall have the grease retention capacity indicated in Table 1 for the flow-through rates indicated. Corporation shall make determinations of interceptor adequacy and need, based on review of all relevant information regarding interceptor performance, facility site and building plan review and to require repairs to, modifications, or replacement of such traps.

Applies to all **WASTEWATER** service areas

PART SIXTEEN

CODE OF PRACTICE (LPSCO-CP-01-004)

SECTION 4 – FOOD SERVICE OPERATIONS

TABLE 1 - CAPACITY OF GREASE INTERCEPTO RS - E PA-2 Model

A Determine maximum drainage flow from fixtures:					
Type of Fixture	Total Fixtures		Flow Rate		Amount
Restaurant kitchen sink		X	15 gpm	=	
Single compartment sink		X	20gpm	=	
Double compartment sink		X	25gpm	=	
2, single compartment sinks		X	25 gpm	=	
2, double compartment sinks		X	35gpm	=	
Triple sink 1.5 inch drain		X	35 gpm	=	
Triple sink 2 inch drain		X	50gpm	=	
30gallon dishwasher		X	15gpm	=	
50gallon dishwasher		X	25gpm	=	
50--100gallon dishwasher		X	40gpm	=	
B. Total	Number of fixtures			--	gpm
C. Loading Factors					
Restaurant type	Fast food-paper delivery			=	.50
	Low volume			=	.50
	Medium volume			=	.75
	High Volume			=	1.0
D. Bx C = D, subtotal					
E. D x 60 = Subtotal x 60 minutes = E, maximum flow for one (1) hour, in gallons					
F. Ex 2 = maximum flow for one hour times two (2) hours retention time (based on restaurant volume) = F, volume of trap in gallons =					

ISSUED BY:
Moses Thompson, President
Liberty Utilities (LITCHFIELD PARK Water & Sewer) Corp.
14920 W Camelback Rd
Litchfield Park, AZ 85340

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-004)
SECTION 4 – FOOD SERVICE OPERATIONS

Access and maintenance of traps, interceptors, and separators:

Complete access shall be provided to each interceptor and separator for service, maintenance and inspection of the inner chamber(s) and viewing and sampling of effluent wastewater discharged to the sewer. Interceptors and separators shall be maintained by periodic removal of accumulated grease, scum, oil, or other floating substances and solids deposited in the interceptor or separator.

Periodic Inspection:

All traps, inceptors and separators shall be subject to periodic inspections by Corporation during normal operating hours. These inspections can be based on an annual inspection or when a complaint is registered with Corporation regarding a grease-removal device. Should the inspection of any trap, interceptor or separator indicate a violation of any item in (1) thru (3) below, the person, firm or corporation in reasonable charge shall bring the device into compliance within the timeframe noted on the notice of violation, but not longer than fourteen (14) calendar days.

If twenty-five (25) percent of the interceptor is full; both surface (oil and grease) and bottom (solids).

When OSHA (Occupational, Safety and Health Administration) atmospheric levels of Hydrogen Sulfide limits have been exceeded - "Short Term Exposure Limit" (STEL) of fifteen (15) ppm over a fifteen-minute time-weighted average. When the "Immediately Dangerous to Life and Health" (IDLH) level is 100 ppm or above, immediate action shall be performed to return the level of Hydrogen Sulfide to safe and acceptable limits. If the violation cannot be immediately resolved, all use of the Trap, Interceptor or Separator shall cease until compliance is obtained.

When pH in the effluent chamber falls below 5.0 - which is an unhealthy anaerobic interceptor condition.

Maintenance:

Any trap, interceptor or separator not adequately maintained to prevent floatable oils, fat or grease from entering the sewerage system or produce excessive odors shall be in violation of Corporation codes of practice.

Clearing Obstructions:

Corporation shall take appropriate action to clear any obstruction of the Corporation sewer that causes a sewer overflow. When the obstruction is found to be caused by an overburdened or non-maintained trap, interceptor or separator, the person, firm or corporation in reasonable charge of the trap, interceptor or separator reimbursement of Corporation costs associated with clean-up efforts including any fines leveled against Corporation. Any establishments that continuously violate Corporation code of practice shall be subject to having sewer service discontinued.

Contain and/or Clean Up:

Should Corporation find it necessary to contain and/or clean up a private sanitary sewer overflow caused by blockage of private or public sewer lateral or system, all associated cost shall be the responsibility of the person, firm or corporation in reasonable charge of the property.

Applies to all **WASTEWATER** service areas
PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-004)
SECTION 4 – FOOD SERVICE OPERATIONS

Repairs or Replacements:
When repairs or replacements are necessary to a trap, interceptor or separator, all repairs or replacements shall be completed within the time frame stated on the notice to comply. Corporation may authorize a time extension, not to exceed thirty (30) days, for justifiable cause.

Grease Removal:
The person, fi.cm or corporation in reasonable charge shall remove and dispose of grease at a facility permitted to receive and process such waste. Cleaning frequencies shall be dependent on the amount of oil, grease or solids generated at each operation, the size of the grease trap or interceptor, and the approved written waste minimization program, but not to exceed thirty-day intervals for traps and ninety-day intervals for interceptors. Traps and interceptors shall be cleaned by a license d contractor.

Interference, Operation and Odors:

Any facility whose effluent discharge into the sewerage system causes interference in the conveyance system, operation of the sewerage system, or emits excessive odors shall be required to sample the discharge from the trap, interceptor or separator and have it analyzed for oil and grease and sulfides, total and dissolved. Results of the analysis shall be immediately reported. Corporation may sample the grease interception device at any time, utilizing Corporation representatives. The person, firm or corporation in reasonable charge shall be responsible for any and all associated cost of such testing or sampling.

IV. RECORD KEEPING AND RETENTION

An operator of a food services operation must keep a record at the food services operation of all grease interceptor inspection and maintenance activities including:

a. the date of inspection or maintenance;
b. the maintenance conducted;
c. the type and quantity of material removed from the grease interceptor; and
d. the location of disposal of the material removed from the grease interceptor.

The records shall be reta1r.ed for a period of three years, and shall be available on request by an company· representative.

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-005)
SECTION 5 - PHOTOGRAPHIC IMAGING OPERATIONS

I. APPLICATION

This code of practice for photographic imaging operations defines mandatory requirements for managing non - domestic waste discharged directly or indirectly into a sewer connected to a sewage facility.

This code of practice applies to photographic imaging operations. Definitions are included in LPSCO-CP-01-DEF.

II. DISCHARGE REGULATIONS

An operator of a photographic imaging operation must not discharge waste which, at the point of discharge into a sewer, contains:

a. silver in a concentration that is in excess of prescribed local limit analyzed in a grab sample; or,
b. prohibited waste, restricted waste, special waste, storm water, or contaminated water as defined in LPSCO-CP-01-DEF.

An operator of a photographic imaging operation that produces liquid waste containing silver must either:

a. collect and transport the waste from the photographic imaging operation for off-site waste management; or
b. treat the waste at the photographic imaging operation site prior to discharge to the sewer using one of the following silver recovery technologies:
   i. two chemical recovery cartridges connected in a series;
   ii. an electrolytic recovery unit followed by two chemical recovery cartridges connected in series; or
   iii. any other silver recovery technology, or combination of technologies, capable of reducing the concentration of silver in the waste to 1.2 mg/L or less where valid analytical test data has been submitted to, and accepted by, the Corporation wastewater group.

An operator of a photographic imaging operation must install and maintain silver recovery technology according to the manufacturer's or supplier's recommendations.

An operator of a photographic imaging operation must collect all liquid waste containing silver in a holding tank and must deliver this waste to the chemical recovery cartridges using a metering pump.

An operator of a photographic imaging operation must calibrate the metering pump at least once per year.

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-005)
SECTION 5 - PHOTOGRAPHIC IMAGING OPERATIONS

Spill/ Leak Prevention

An operator of a photographic imaging operation must locate the silver recovery system in such a manner that an accidental spill, leak or container failure will not result in liquid waste containing silver in concentrations greater than 1.2 mg/L entering any sewer.

If a location referred to above is not available, an operator of a photographic imaging operation must do one of the following:

a. install spill containment to contain spills or leaks from the silver recovery system; or
b. cap all floor drains into which liquid spilled from the silver recovery system would normally flow.

Testing:

When using two separate chemical recovery cartridges, an operator of a photographic imaging operation must test the discharge from the first cartridge for silver content at least once per month using either silver test paper or a portable silver test kit.

When the discharge from the first chemical recovery cartridge referred to above cannot be sampled, an operator of a photographic imaging operation must:

c. install a cumulative flow meter on the silver recovery system; and
d. test the discharge from the second chemical recovery cartridge once per week using silver test paper or a silver test kit.

Cartridge Replacement

An operator of a photographic imaging operation must replace the chemical recovery cartridges when any one of the following occurs:

a. the manufacturer's or supplier's recommended expiry date, as shown on each cartridge, has been reached;
b. eighty percent (80%) of the manufacturer's or supplier's maximum recommended capacity, or total cumulative flow, for each cartridge has been reached;
c. test data, using silver test paper or a silver test kit, indicates that the discharge from the first cartridge is greater than 1000 mg/L; or
d. analytical data using a method of analysis outlined in standard methods, or an alternative method of analysis approved by the manager, having a method detection limit of 0.5 mg/ L silver or lower, indicates that the concentration of silver in the discharge from the silver recovery system is greater than, or equal to, 1.2 mg/ L.

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-005)
SECTION 5 - PHOTOGRAPHIC IMAGING OPERATIONS

I. RECORD KEEPING AND RETENTION

An operator of a photographic imaging operation that uses a silver recovery system must keep, at the photographic imaging operation site, an operation and maintenance manual pertaining to all equipment used in the silver recovery system.

An operator of a photographic imaging operation that uses two chemical recovery cartridges connected in series must keep a record book at the photographic imaging operation site which includes the following information recorded for the previous two years:

a. serial number of each chemical recovery cartridge used;
b. installation date of each chemical recovery cartridge used;
c. expiry date of each chemical recovery cartridge used (where provided by manufacturers or suppliers);
d. maximum recommended capacity, or total cumulative flow, of each chemical recovery cartridge used;
e. dates of all metering pump calibrations;
f. monthly silver test results on the discharge from the first chemical recovery cartridge; or where the discharge from the first cartridge cannot be sampled, weekly silver test results on the discharge from the second chemical recovery[13] cartridge and weekly cumulative flows thro ugh the silver recovery system; and
g. dates and descriptions of all operational problems associated with the chemical recovery cartridges and remedial actions taken.

Both chemical recovery cartridges used following an electrolytic recovery unit must be replaced by the operator of the photographic imaging operation when one of the events referred to above occurs if this is recommended by the manufacturer or supplier of the cartridges.

An operator of a photographic imaging operation that uses an electrolytic recovery unit in addition to two chemical recovery cartridges connected in series must keep a record book at the photographic imaging operation site which includes the following information recorded for the previous two years:

a. all information specified above;
b. date of each removal of silver from the electrolytic recovery unit;
c. date of each maintenance check on the electrolytic recovery unit;
d. dates and descriptions of all operational problems associated with the electrolytic recovery unit anti remedial actions taken.

[13] If treatment of liquid waste with two chemical recovery cartridges connected io series is the only silver recovery technology being used, then the owner of the photographic imaging operation must replace both chemical recovery cartridges when one of the events referred to occurs.

Applies to all **WASTEWATER** service areas
PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-006)
SECTION 6 – RV PARK OPERATIONS

I. APPLICATION

This code of practice for RV park operations defines the requirements for managing waste discharged directly or indirectly into a sewer connected to a sewage facility from RVs, mobile homes, trailers, watercraft and other sources which employ storage, chemical disinfection/stabilization and discharge as a waste disposal mechanism.

This code of practice applies to all RV park operations. Definitions are included in LPSCO-CP-01-DEF.

II. DISCHARGE REGULATIONS

An operator of an RV park operation must not discharge waste, which at the point of discharge into a sewer, contains:

a. oil and grease in a concentration that is in excess of 100 milligrams per liter as analyzed in a grab sample;
b. suspended solids in a concentration that is in excess of 350 milligrams per liter as analyzed in a grab sample;
c. 5-day biochemical oxygen demand (BOD,) in a concentration that is in excess of 350 milligrams per liter in a grab sample;
d. total nitrogen in excess of 100 mg/I;
e. prohibited waste, restricted waste, special waste, storm water, or contaminated water.

If the RV park operation accepts RV customers with the intention of providing sewerage hook-ups, that practice is only acceptable if one of the following conditions is met:

1. If the RV park operation has a dedicated pre-treatment facility, that facility must be used for the disposal of the first discharge of wastewater from any entering RVs. The facility must be maintained as per manufacturer's or engineer's operating instructions. Discharge from that facility which is directed to a sewer connected to a sewerage facility shall be metered such that large slugs of waste are not introduced to the sewer instantaneously. Discharges from such facilities to sewers are limited to 10% of the average daily sewerage flow (in USGPM) experienced in the sewer.
2. In the absence of a dedicated pre-treatment facility, the RV park operation shall require incoming RVs to certify that, prior to connection to a sewer, that the holding tanks of the RV have been discharged at an approved facility.

Applies to all **WASTEWATER** service areas
PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-006)
SECTION 6 – RV PARK OPERATIONS

III. RECORD KEEPING AND RETENTION

An operator of an RV park operation must keep a record at the RV park operation of:

a. all disposals of RV waste into a dedicated pre-treatment facility;
b. Pre-treatment facility inspection and maintenance activities including:
    1. the date of inspection or maintenance;
    2. the maintenance conducted; and
    3. the type and quantity of material removed from the facility;
c. Certifications of waste disposal prior to hook up of RVs to sewer services.

The records shall be retained for a period of two years and shall be available on request by Corporation representative.

Applies to all **WASTEWATER** service areas

PART SIXTEEN

CODE OF PRACTICE (LPSCO-CP-01-007)

SECTION 7 - PRETREATMENT/ INDUSTRIALWASTE CONTROL

Reference **PART FIFTEEN** Liberty Utilities (Litchfield Park Water and Sewer) Corp. **Industrial Pretreatment Program and Tariff.**

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-008)
SECTION 8 - NONCOMPLIANCE / ENFORCEMENT

I. NOTICE OF VIOLATIONS

Whenever the Company determines that any customer has violated or is violating any provision of this Code, or any directives, orders, or permits issued or approved to which the Company is bound, the Company may serve upon such customer a written notice ("Notice") stating the nature of the violations(s) in accordance with A.A.C. R.14-2-609.C, and requiring that the customer correct the violation(s) within a specified period of time; perform such tasks as the Company determines are necessary for the customer to correct the violations; or perform such tasks and submit such information as is necessary for the Company to evaluate the extent of noncompliance or to determine appropriate enforcement actions to be taken in conjunction with the applicable regulatory agencies. A copy of the Notice shall also be provided to the Director of the Utilities Division of the Arizona Corporation Commission.

II. SUSPENSION OF SERVICE

If the customer does not cure the violation, or present a satisfactory plan of remediation to Company, within the time specified in the Notice, then Company may suspend or disconnect wastewater treatment service in accordance with A.A.C. R.14-2-609.C.

In addition, the Company may suspend wastewater treatment service, in accordance with A.A.C. R.14-2-609.B (without notice), when such suspension is necessary, in the opinion of the Company, in order to stop an actual or threatened discharge which presents or may present an imminent or substantial endangerment to the health or welfare of persons, to the environment, or causes the Company to violate any condition of its aquifer protection permit, AZPDES discharge permit, or any applicable sludge disposal regulations.

Any customer notified of an immediate suspension of the wastewater treatment service shall immediately stop or eliminate the discharge. In the event of a failure of the customer to comply voluntarily with the cease-and-desist request, the Company shall take such steps as deemed necessary, including immediate severance of the sewer connection and/or immediate disconnection of the water service, to prevent or minimize damage to the company's wastewater system or endangerment to any individuals or the environment. Any action that results in the immediate suspension of service, or disconnection, of a customer shall be reported to the Director of the Utilities Division of the Arizona Corporation Commission and Maricopa County Environmental Services Department (MCESD) within twenty-four (24) hours of the suspension or disconnection. Any reconnection of the affected customer shall be in accordance with the Company's Tariff for which the customer must pay the cost of disconnection and reconnection, plus the cost of parts and installation of an Elder valve (or similar equipment) to allow for easier disconnection in the event of a repeated discharge offense by customer.

Appendix RW Dir 1, Part B - Proposed Tariff (showing changes)

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ISSUED BY:
Moses Thompson, President
Liberty Utilities (LITCHFIELD PARK Water & Sewer) Corp.
14920 W Camelback Rd
Litchfield Park, AZ 85340
Decision No. XXXX

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Applies to all **WATER** service areas

PART ONE

STATEMENT OF CHARGES

I. RATES

In Decision No. XXXXX, dated XXXXX, the Commission authorized the following rates and charges to become effective XXXXX:

A. Monthly Minimum Charge

RESIDENTIAL (includes multi-family)

Meter Size	Charge[1]
5/8 x 3/4" Meter	$ ~~XX~~16.52
3/4" Meter	16.52~~XX~~
1" Meter	~~XX~~37.17
1 1/2" Meter	~~XX~~82.60
2" Meter	~~XX~~132.16
3" Meter	264.32 ~~XX~~
4" Meter	413.00~~XX~~
6" Meter	826.00~~XX~~
8" Meter	~~XX~~1,321.60
10" Meter	1,899.80~~XX~~
12" Meter	~~XX~~3,551.80

[1] Customer Assistance Tariff ("CAT") – A 30% discount is available on monthly minimum and commodity charges to qualified residential customers meeting the CAT qualifications.

Applies to all **WATER** service areas

PART ONE

STATEMENT OF CHARGES

COMMERCIAL/NON-RESIDENTIAL

Meter Size	**Charge**
5/8 x 3/4" Meter	$ ~~XX~~16.52
3/4" Meter	16.52~~XX~~
1" Meter	~~XX~~41.30
1 1/2" Meter	82.60~~XX~~
2" Meter	132.16~~XX~~
3" Meter	264.32~~XX~~
4" Meter	413.00~~XX~~
6" Meter	826.00~~XX~~
8" Meter	1,321.60~~XX~~
10" Meter	1,899.80~~XX~~
12" Meter	3,551.80~~XX~~

Applies to all **WATER** service areas

PART ONE

STATEMENT OF CHARGES

IRRIGATION

Meter Size	**Charge**
5/8 x 3/4" Meter	$ 16.52~~$ XX~~
3/4" Meter	16.52~~XX~~
1" Meter	41.30~~XX~~
1 1/2" Meter	82.60~~XX~~
2" Meter	132.16~~XX~~
3" Meter	264.32 ~~XX~~
4" Meter	413.00~~XX~~
6" Meter	826.00~~XX~~
8" Meter	1,321.60~~XX~~
10" Meter	1,899.80~~XX~~
12" Meter	3,551.80~~XX~~

BULK WATER RESALE

Meter Size	**Charge[2]**
4' Meter	$ ~~XX~~264.32
6" Meter	223.02~~XX~~
8" Meter	713.66~~XX~~
10" Meter	1,025.89~~XX~~
12" Meter	1,917.97~~XX~~
Luke Air Force Base	Per Contract*

* Liberty Litchfield Park will charge the monthly meter charge per the Contract with Luke Airforce Base.

[2] Bulk service is limited to customers outside the CC&N.

Applies to all **WATER** service areas

PART ONE

STATEMENT OF CHARGES

Construction Hydrants	**Charge**
Construction Hydrants	~~$XX~~264.32

Fire Service Lines	**Minimum**
Fire Service Lines	By Meter Size*
Industrial Fire Service	*Per Part 3 Industrial Fire Services

* Liberty Litchfield Park will charge the monthly meter charge associated with the meter size.

Applies to all **WATER** service areas

PART ONE

STATEMENT OF CHARGES

B. Commodity Rates

The rate for use in addition to the minimum stated above shall be at the following rates per 1,000 gallons:

RESIDENTIAL (includes multi-family)

Meter Size	Consumption	Charge[3]
5/8" x 3/4" Meter – and 3/4"	0 to 3,000 gallons	$0.8864~~XX~~
	3,001 to 10,000 gallons	2.9937~~XX~~
	10,000 to 20,000 gallons	3.9937~~XX~~
	Over 20,000	4.3937~~XX~~
1" Meter	0 to 5,000 gallons	0.8864~~XX~~
	5,001 to 19,000 gallons	2.9937~~XX~~
	19,001 to 30,000 gallons	3.9937~~XX~~
	Over 30,000	4.3937~~XX~~
1 1/2" Meter	0 to 40,000 gallons	2.9937~~XX~~
	Over 40,000 gallons	4.3937~~XX~~
2" Meter	0 to 60,000 gallons	2.9937~~XX~~
	Over 60,000 gallons	4.3937~~XX~~
3" Meter	0 to 120,000 gallons	2.9937~~XX~~
	Over 120,000 gallons	4.3937~~XX~~
4" Meter	0 to 180,000 gallons	2.9937~~XX~~
	Over 180,000 gallons	4.3937~~XX~~
6" Meter	0 to 360,000 gallons	2.9937~~XX~~
	Over 360,000 gallons	4.3937~~XX~~
8" Meter	0 to 650,000 gallons	2.9937~~XX~~
	Over 650,000 gallons	4.3937~~XX~~
10" Meter	0 to 940,000 gallons	2.9937~~XX~~
	Over 940,000 gallons	4.3937~~XX~~
12" Meter	0 to 1,248,000 gallons	2.9937~~XX~~
	Over 1,248,000 gallons	4.3937~~XX~~

[3] Customer Assistance Tariff ("CAT") – A 30% discount is available on monthly minimum and commodity charges to qualified residential customers meeting the CAT qualifications.

Applies to all **WATER** service areas

PART ONE

STATEMENT OF CHARGES

COMMERCIAL/NON-RESIDENTIAL

Meter Size	Consumption	Charge[4]
5/8" x 3/4" Meter – and 3/4"	0 to 9,000 gallons	$2.9937~~$~~
	Over 9,000 gallons	4.3937~~XX~~
1" Meter	0 to 20,000 gallons	2.9937~~XX~~
	Over 20,000 gallons	4.3937~~XX~~
1 1/2" Meter	0 to 40,000 gallons	2.9937~~XX~~
	Over 40,000 gallons	4.3937~~XX~~
2" Meter	0 to 60,000 gallons	2.9937~~XX~~
	Over 60,000 gallons	4.3937~~XX~~
3" Meter	0 to 120,000 gallons	2.9937~~XX~~
	Over 120,000 gallons	4.3937~~XX~~
4" Meter	0 to 180,000 gallons	2.9937~~XX~~
	Over 180,000 gallons	4.3937~~XX~~
6" Meter	0 to 360,000 gallons	2.9937~~XX~~
	Over 360,000 gallons	4.3937~~XX~~
8" Meter	0 to 650,000 gallons	2.9937~~XX~~
	Over 650,000 gallons	4.3937~~XX~~
10" Meter	0 to 940,000 gallons	2.9937~~XX~~
	Over 940,000 gallons	4.3937~~XX~~
12" Meter	0 to 1,248,000 gallons	2.9937~~XX~~
	Over 1,248,000 gallons	4.3937~~XX~~

[4] Customer Assistance Tariff ("CAT") – A 30% discount is available on monthly minimum and commodity charges to qualified residential customers meeting the CAT qualifications.

Applies to all **WATER** service areas

PART ONE

STATEMENT OF CHARGES

IRRIGATION

Meter Size	Consumption	Charge
5/8" x 3/4" Meter – and 3/4"	0 to 9,000 gallons	$2.9937~~8~~
	Over 9,000 gallons	4.3937~~XX~~
1" Meter	0 to 20,000 gallons	2.9937~~XX~~
	Over 20,000 gallons	4.3937~~XX~~
1 1/2" Meter	0 to 40,000 gallons	2.9937~~XX~~
	Over 40,000 gallons	4.3937~~XX~~
2" Meter	0 to 60,000 gallons	2.9937~~XX~~
	Over 60,000 gallons	4.3937~~XX~~
3" Meter	0 to 120,000 gallons	2.9937~~XX~~
	Over 120,000 gallons	4.3937~~XX~~
4" Meter	0 to 180,000 gallons	2.9937~~XX~~
	Over 180,000 gallons	4.3937~~XX~~
6" Meter	0 to 360,000 gallons	2.9937~~XX~~
	Over 360,000 gallons	4.3937~~XX~~
8" Meter	0 to 650,000 gallons	2.9937~~XX~~
	Over 650,000 gallons	4.3937~~XX~~
10" Meter	0 to 940,000 gallons	2.9937~~XX~~
	Over 940,000 gallons	4.3937~~XX~~
12" Meter	0 to 1,248,000 gallons	2.9937~~XX~~
	Over 1,248,000 gallons	4.3937~~XX~~

Applies to all **WATER** service areas

PART ONE

STATEMENT OF CHARGES

BULK WATER RESALE

Meter Size	Consumption	Charge
4" Meter	All gallons	~~XX~~$2.0280
6" Meter	All gallons	2.0280~~XX~~
8" Meter	All gallons	2.0280~~XX~~
10" Meter	All gallons	2.0280~~XX~~
12" Meter	All gallons	2.0280~~XX~~
Luke Airforce Base	All gallons	Per Contract*

* Liberty Litchfield Park will charge the monthly meter charge per the Contract with Luke Airforce Base

Meter Type	Consumption	Charge
Hydrants	All gallons	$~~XX~~4.3937
Fire Line	All gallons	~~XX~~By Meter
Industrial Fire Service	All Gallons	*Per Part 3

Applies to all **WATER** service areas

PART ONE

STATEMENT OF CHARGES

C. Service Line and Meter Installation Charges

(Refundable Pursuant to A.A.C. R14-2-405)

Meter Size	Line	Meter	Total
5/8 x 3/4" Meter	$At	$At Cost168.00	$At Cost733.00
3/4" Meter	565.00At Cost	At Cost260.00	825.00At Cost
1" Meter	At Cost629.00	321.00At Cost	At Cost950.00
1 1/2" Meter	At Cost699.00	At Cost536.00	At Cost1,235.00
2" Turbine Meter	At Cost	At Cost	At Cost
2" Compound Meter	At Cost	At Cost	At Cost
3" Turbine Meter	At Cost	At Cost	At Cost
3" Compound Meter	At Cost	At Cost	At Cost
4" Turbine Meter	At Cost	At Cost	At Cost
4" Compound Meter	At Cost	At Cost	At Cost
6" Turbine Meter	At Cost	At Cost	At Cost
6" Compound Meter	At Cost	At Cost	At Cost
8" Turbine MeterMeter & Larger Meters	At Cost	At Cost	At Cost
8" Compound Meter	At Cost	At Cost	At Cost
10" Turbine Meter	At Cost	At Cost	At Cost
10" Compound Meter	At Cost	At Cost	At Cost
12" Turbine Meter	At Cost	At Cost	At Cost
12" Compound Meter	At Cost	At Cost	At Cost

*Hydrant Meter Deposit	Total
3" Turbine Meter	$XX1,470.00
3" Compound Meter	XX2,265.00

*Shall have a non-~~interest-bearing~~interest-bearing deposit of the amount indicated, refundable in its entirety upon return of the meter in good condition and payment of the final bill.

Applies to all **WATER** service areas
PART ONE
STATEMENT OF CHARGES

D. Miscellaneous Service Charges

Service	Charge
Establishment per A.A.C. R14-2-403(D)(1)~~Establishment~~	$30.00
Re-Establishment per A.A.C. R14-2-403(D)(1)~~Re-Establishment (within~~	(b~~a~~)
Reconnection per A.A.C. R14-2-403(D)(1)~~Reconnection (Delinquent)~~	$530.00
Meter Test (if correct) per Rule R14-2-408(F)~~Meter Test (if correct)~~	$30.00
Meter Reread (if correct) per Rule R14-2-408(C)~~Meter Re-Read (if correct)~~	$20.00
Fire Hydrant Meter Relocation~~Deposit~~	$50.00~~(b)~~
Fire Hydrant Meter Repair~~Fire Hydrant Meter Relocation~~	~~$50~~At Cost
NSF Check per A.A.C. R14-2-408(E)(1)~~Fire Hydrant Meter Repair~~	$~~At Cost~~25.00 (a)
Deferred Payment, Per Month~~Deposit Interest per A.A.C. R14-2-403(B)~~	~~6%(b)~~1.5%
Late Charge~~NSF Check (c)~~	(c)~~$20.00~~
Service Calls - After Hours~~Late Payment Penalty (b)~~	~~1.50% per month~~$125
Deposit Requirements~~Deferred Payment (R-01-2-409.G)~~	~~1.50% per month~~(e)
Deposit Interest per A.A.C. R14-2-403(B)~~Moving meter at customer~~	~~at Cost~~6.00%
Water Hook-Up Fee~~After Hours Service Call Charge (d)~~	~~$125.00~~(f)
Failed Final Inspection Fee	$75
~~Water Hook-Up Fee~~	~~(f)~~

~~(a)~~ Liberty Litchfield Park may charge only one NSF fee when customers are billed for water and sewer services on one bill Per~~Per Commission Rule A.A.C. R14-2-403.D - residential and non-residential shall pay the applicable monthly minimum charge times the number of months disconnected.~~

~~(b) Per~~ Commission Rule A.A.C. R14-2-403.B.

(a)

~~(c)~~ Minimum Charges times number of full months off the system per A.A.C. R14-2-403(D)~~LITCHFIELD PARK may only charge one NSF fee when customers are billed for water and sewer services on one bill.~~

(b)

~~(d)~~ Greater of $5.00 or 1.50% of unpaid balance~~At customer's request. No charge for service during normal working hours.~~

(c)

~~(e)~~ Customer shall be charged for after-hours service calls outside of normal working hours for work performed at the customer's request or convenience~~Greater of $5 or 1.50% of unpaid balance.~~

(d)

~~(f)~~ Per ACC Rules R14-2-403(B) Residential - two times the average bill by class. Non-residential - two and one-half times the customer's estimated maximum monthly bill~~Customers shall pay the applicable Water Hook-Up Fees per tariff~~

(e)

~~(a)~~ Customers shall pay the applicable Water Hook-Up fees per tariff~~At customer's request. Customer shall pay the actual cost of physical disconnection and Establishment there shall be no charge for disconnection if no physical work is performed.~~

(f)

IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM ITS CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES, USE, AND FRANCHISE TAX. PER COMMISSION RULE 14-2-409D.5.

Applies to all **WATER** service areas

PART ONE

STATEMENT OF CHARGES

II. TAXES AND ASSESSMENTS

In addition to the collection of regular rates, the Company will collect from its customers a proportionate share of any privilege, sales, and use tax per A.A.C. R14-2-409.D.5.

All Advances or Contributions are to include labor, materials, overheads, and all applicable taxes, including all gross-up taxes for income taxes. Cost to include labor, materials and parts, overheads, and all applicable taxes.

Under applicable law, any contributions or advances provided by a Developer are taxable income to the Utility. In accordance with the Gross-Up Sharing Method policy adopted by the Commission in Decision No. 76974, the Company will collect from the Developer an applicable share of income taxes for the Company's state and federal tax liability on all funds contributed and/or advanced. The funds will be collected prior to the commencement of service.

Applies to all **WATER** service areas

PART TWO
STATEMENT OF TERMS AND CONDITIONS

I. PERMITTED COSTS

A. Costs shall be verified by invoice.

B. For services that are provided by the Company at cost, costs shall include labor, materials, other charges incurred, and overhead not to exceed 10%. However, prior to any such service being provided, the estimated cost of such service will be provided by the Company to the customer. After review of the cost estimate, the customer will pay the amount of the estimated cost to the Company.

C. In the event that the actual cost is less than the estimated cost, the Company will refund the excess to the customer within 30 days after completion of the provision of the service or after Company's receipt of invoices, timesheets or other related documents, whichever is later.

D. In the event the actual cost is more than the estimated cost, the Company will bill the customer for the amount due within 30 days after completion of the provision of the service or after the Company's receipt of invoices, timesheets or other related documents, whichever is later. The amount so billed will be due and payable 30 days after the invoice date. However, if the actual cost is more than five percent (5%) greater than the total amount paid, the customer will only be required to pay five percent (5%) more than the total amount paid, unless the Company can demonstrate that the increased costs were beyond its control and could not be foreseen at the time the estimate for the total amount paid was made.

E. At the customer's request, the Company shall make available to the customer all invoices, timesheets or related documents that support the cost for providing such service.

F. Permitted costs shall include any Federal, State or local taxes that are or may be payable by the Company as a result of any tariff or contract for water facilities under which the Customer advances or contributes funds or facilities to the Company.

Applies to all **WATER** service areas

PART TWO

STATEMENT OF TERMS AND CONDITIONS

II. INTERRUPTIBLE SERVICE; COMPANY'S LIABILITY LIMITATIONS

The Company will supply only such water at such pressures as may be available from time to time as a result of the normal operation of its water system. The Company will maintain a minimum water pressure of 20 p.s.i. and will not guarantee a specific gallons per minute flow rate at any public fire hydrants or fire sprinkler service. In the event service is interrupted, irregular or defective, or fails from causes beyond the Company's control or through ordinary negligence of its employees or agents, the Company will not be liable for any injuries or damages arising therefrom.

III. TERMINATION OFWATER SERVICE FOR VIOLATION OF WASTEWATER RULES AND REGULATIONS

The Company is authorized to discontinue water service to any person connected to both its water and sewer systems who violates the Company's wastewater terms and conditions or in any way creates a public health hazard or the likelihood of such a public health hazard. This termination authority also applies to non-payment for wastewater services.

IV. ~~IV.~~ RULES AND REGULATIONS

The Company has adopted the Rules and Regulations established by the Commission as the basis for its operating procedures. A.A.C. R14-2-401 through A.A.C. R14-2-411 will be controlling of Company procedures, unless specific Commission Order(s) provide otherwise.

Applies to all **WATER** service areas

PART THREE

WATER RATES INDUSTRIAL FIRE SERVICE

MONTHLY RATES:

- All Meter Sizes - At Cost (refundable pursuant to A.A.C. R14-2-405)
- Retrofit (Wrap-around, solar powered) ~~No~~ No Charge
- Monthly Minimum Charge at ~~10~~ 20% of Meter Size
- Commodity Rate at Current Tiered Rate per Meter Size

SPECIAL PROVISIONS:

A. ~~1.~~ The customer shall pay, the entire cost of the private fire service.

B. The private fire service shall be installed by the Company or under the Company's direction. The cost of the entire installation excluding the connection at the main shall be paid for by the applicant. Such payment shall not be subject to refund. All facilities paid for by the applicant shall be the sole property of the applicant, adjacent to the property line. The expense of maintaining the fire protection facilities on the applicant's premises (including the vault, meter detector type check valves, backflow device and appurtenances) shall be paid for by the applicant.

C. The Company and its duly authorized agents shall have the right to ingress to and egress from the premises for all purposes relating to said facilities.

~~2. The private fire service shall be Installed by the Company or under the Company's direction and shall be the sole property and subject to the control of the Company, with the right to alter, repair, replace and remove upon discontinuous of service.~~

D. ~~3.~~ The minimum diameter for industrial fire service will be four (4) inches. The maximum diameter shall not be larger than the diameter of the existing water main to which the fire protection service is connected.

E. ~~4~~ If a distribution main of adequate size to serve a private fire protection service in addition to all other normal services does not exist in the street, easement or right-of-way adjacent to the location to be served, then a main from the nearest existing main of adequate capacity shall be installed by the Company, or under the utility's direction, and the cost paid by the applicant as a contribution in aid of construction.

F. ~~5.~~ The industrial fire service facilities shall include a flow meter and backflow prevention device. The facilities may be located within the customer's premises or within a public right of way

adjacent thereto. Where located within the premises, the Company and its duly authorized agents shall have the right of ingress to and egress from the premises for all purposes related to said facilities.

~~A.~~

Applies to all **WATER** service areas

PART THREE

WATER RATES INDUSTRIAL FIRE SERVICE

~~B. 6.~~ No structure shall be built over the industrial fire service and the customer shall maintain and safeguard the area occupied by the service from traffic and other hazardous conditions. The customer ~~will~~ shall be responsible for any damage to the private fire service facilities whether resulting from the use or operation of appliances and facilities on customer's premises or otherwise.

G.

H. ~~7.~~ The customer's installation must be such as to effectively separate the industrial fire service from that of the customer's regular domestic water service. Any fraudulent use of water through the private fire service will be charged for at the applicable tariff rates and shall be grounds for the Company terminating service without notice pursuant to A.A.C. R14-2-410(B).

I. ~~8.~~ There shall be no cross connection between the systems supplied by water through the Company's private fire service and any other source of supply without the specific approval of the Company. The specific approval, if given, will at least require, at the customer's expense, a special double check valve installation or other device acceptable to the Company. Any unauthorized cross connection shall be grounds for the Company terminating service without notice pursuant to A.A.C. R14-2-410(B).

~~Applies to all **WATER** service areas~~

~~**PART THREE**~~

~~**WATER RATES INDUSTRIAL FIRE SERVICE**~~

J. ~~9.~~ The Company will supply only such water at such pressure as may be available from time to time as a result of the normal operation of its water system. The Company does not guarantee a specific water pressure or gallons-per-minute flow rate at any of the private fire service facilities installed. In the event service is interrupted, irregular, or defective or fails from causes beyond the Company's control or through ordinary negligence of its employees, servants or agents, the Company will not be liable for any injuries or damages arising therefrom.

K. ~~10.~~ The customer shall make no claim against the Company for any loss or damage resulting from services provided under this schedule except for the Companies gross negligence.

Applies to all **WATER** service areas

PART FOUR

CROSS-CONNECTION OR BACKFLOW TARIFF

I. PURPOSE:

The purpose of this tariff is to protect Liberty Utilities (LITCHFIELD PARK Water & Sewer) Corp. (the "Company") water from the possibility of contamination caused by backflow of contaminants that may be present on the customer's premises by requiring the installation and periodic testing of backflow-prevention assemblies pursuant to the provisions of the Arizona Administrative Code ("A.A.C.") R14-2-405.B.6. and A.A.C. R18-4-215.

II. REQUIREMENTS:

In compliance with the Rules and Regulations of the Arizona Corporation Commission ("Commission") and the Arizona Department of Environmental Quality ("ADEQ"), specifically A.A.C. R14-2-405.B.6 and A.A.C. R18-4-215 relating to backflow prevention:

1. The Company may require a customer to pay for and have installed, and to maintain, test and repair a backflow-prevention assembly if A.A.C. R18-4-215.B or C applies.

2. A backflow-prevention assembly required to be installed by the customer under Paragraph 1 of this tariff shall comply with the requirements set forth in A.A.C. R18-4-215.D and E.

3. Subject to the provisions of A.A.C. R14-2-407 and 410, and in accordance with Paragraphs 1 and 7 of this tariff, the Company may terminate service or deny service to a customer who fails to install a backflow-prevention assembly as required by this tariff.

4. The Company shall give any existing customer who is required to install a backflow-prevention assembly written notice of said requirement. If A.A.C. R14-2-410.B.1.a is **not** applicable, the customer shall be given thirty (30) days from the time such written notice is received in which to comply with this notice. If the customer can show good cause as to why he cannot install the backflow-prevention assembly within thirty (30) days, the Company or Commission Staff may suspend this requirement for a reasonable period of time.

5. Testing shall be in conformance with the requirements of A.A.C. R18-4-215.F. The Company may require the customer to pay to have the backflow-prevention assembly tested as long as the Company does not require an unreasonable number of tests. The Company may also require the customer to pay for repairs to a backflow-prevention assembly.

Applies to all **WATER** service areas

PART FOUR

CROSS-CONNECTION OR BACKFLOW TARIFF

6. The customer shall provide the Company with records of installation and testing. For each backflow-prevention assembly, these records shall include:

    a. assembly identification number and description;
    b. location;
    c. date(s) of test(s);
    d. description of repairs and recommendations for repairs made by tester;
    e. tester's name and certificate number; and
    f. tester's field test kit certification documentation.

7. In the event the backflow-prevention assembly does not function properly or fails any test, and an obvious hazard as contemplated under A.A.C. R14-2-410.B.1.a. exists, the Company may terminate service immediately and without notice. The backflow-prevention assembly shall be repaired or replaced by the customer and retested.

8. In the event the backflow-prevention assembly does not function properly or fails any test, or in the event that a customer fails to comply with the testing requirement, and A.A.C. R14-2-410.B.1.a. is **not** applicable, the backflow-prevention assembly shall be repaired or replaced within fourteen (14) days of the initial discovery of the deficiency in the assembly or its function. Failure to remedy the deficiency of dysfunction of the assembly, or failure to retest, shall be grounds for termination of water service in accordance with A.A.C. R14-2-410.

Applies to all **WATER** service areas

PART FIVE
CURTAILMENT PLAN

ADEQ Public Water System:

ADEQ Public Water System Number: 07-046

PURPOSE:

Liberty Utilities (LITCHFIELD PARK Water & Sewer) Corp. ("Company") is authorized to curtail water service to all customers within its certified area under the terms and conditions listed in this tariff.

APPLICABILITY

This curtailment plan shall become part of the Arizona Department of Environmental Quality Emergency Operations Plan for the Company.

The Company shall notify its customers of this new tariff as part of its next regularly scheduled billing after the effective date of the tariff or no later than sixty (60) days after the effective date of the tariff.

The Company shall provide a copy of the curtailment tariff to any customer, upon request.

Stage 1 Exists When:

Company is able to maintain water storage in the systems at 80 to 100 percent of capacity and there are no known problems with its well production or water storage in the system.

Restrictions: Under Stage 1, the Company is deemed to be operating normally and no curtailment is necessary but conservation efforts are encouraged as a best management practice[5].

Notice Requirements: Under Stage 1, no notice is necessary.

[5] Best management practice is defined as a practice that can help to understand and manage water use.

Applies to all **WATER** service areas

PART FIVE
CURTAILMENT PLAN

Stage 2 Exists When:

a. Company's water storage or well production has been less than 80 percent of capacity for at least 48 consecutive hours, and

b. Company has identified issues such as a steadily declining water table, increased draw down threatening pump operations, or poor water production, creating a reasonable belief the Company will be unable to meet anticipated water demand on a sustained basis.

Restrictions: Under Stage 2, the Company may request the customers to voluntarily employ water conservation measures to reduce water consumption by approximately 50 percent. The below conservation measures are encouraged to reduce water consumption:

- Divide outside watering on uniform basis such as:

Address Ends In	1, 2, 4, 7, 0	3, 5, 6, 8, or 9
Watering Days	Monday and Wednesday	Tuesday and Thursday

- Outdoor watering should be limited between the following times:

Seasonal Period	Watering Prohibited
April – September	6:00 a.m. – 7:00 p.m.
October - March	8:00 a.m. – 7:00 p.m.

- Eliminate outside watering on weekends and holidays
- Eliminate runoff from outdoor irrigation
- Use a shut-off hose nozzle if using hose to irrigate landscape or wash vehicles
- Eliminate washing of hard surfaces outdoors except washing to alleviate health or fire hazards
- Construction water blackout period between the hours of 5:00 am and 9:00 am, Monday through Sunday implemented
- Fix indoor and outdoor leaks
- Indoor water conservation techniques should be employed whenever possible

Notice Requirements: Company is required to notify customers by delivering written notice to each service address or by utilizing the Company's emergency messaging system which includes email, text, and phone call, or by posting on Company's website, or at the Company's option a combination of these notifications. Such notice shall notify the customers of the general nature of the problem and the need to conserve water.

The Company shall notify the Consumer Services Section of the Utilities Division of the Corporation Commission at least 12 hours prior to entering Stage 2.

Applies to all **WATER** service areas

PART FIVE
CURTAILMENT PLAN

Stage 3 Exists When:

a. Company's total water storage or well production has been less than 50 percent of capacity for at least 24 consecutive hours, and

b. Company has identified issues such as a steadily declining water table, increased draw down threatening pump operations, or poor water production, creating a reasonable belief the Company will be unable to meet anticipated water demand on a sustained basis.

Restrictions: Under Stage 3, the Company shall inform the customers of a **mandatory** restriction to employ water conservation measures to reduce daily consumption. All restrictions from Stage 2 shall be employed in addition to the below conservation measures:

- All outside watering eliminated, except livestock
- Draining and refilling water features is prohibited
- The filling of any swimming pool, spas, fountains or ornamental pools is prohibited
- Washing of any vehicle is prohibited, including commercial car washes and commercial truck washes.
- Water runoff is prohibited
- The use of drip or misting systems of any kind is prohibited
- The use of water for dust control or any outdoor cleaning uses is prohibited
- The use of construction water is prohibited

The following priority of use for delivery of water is set forth: (1) All existing regularly metered [presidential customers; (2) All regularly metered commercial customers that are classified as healthcare; (3) All regularly metered commercial customers; (3) All uses of water, other than fire hydrant use for new construction; (4) Fire hydrant use for landscape irrigation or lakes; (5) All other construction fire hydrant use, metered or unmetered.

Notice Requirements:

1. Company is required to notify customers by delivering written notice to each service address or by utilizing the Company's emergency messaging system which includes email, text, and phone call, or by posting on Company's website, or at the Company's option a combination of these notifications. Such notice shall notify the customers of the general nature of the problem and the need to conserve water.
2. Beginning with Stage 3, the Company shall post at least two (2) signs showing the curtailment stage. Signs shall be posted at noticeable locations, like at the well sites and at the entrance to major subdivisions served by the Company.

Applies to all **WATER** service areas

PART FIVE

CURTAILMENT PLAN

3. The Company shall notify the Consumer Services Section of the Utilities Division of the Corporation Commission at least 12 hours prior to entering Stage 3.

Once Stage 3 has been reached, the Company must begin to augment the supply of water by either hauling or through an emergency interconnect with an approved water supply in an attempt to maintain the curtailment at a level no higher than Stage 3 until a permanent solution has been implemented.

Customers who fail to comply with the above restrictions will be given a written notice to end all outdoor uses. Failure to comply within twenty-four (24) hours of receipt of the notice may result in temporary loss of service through the installation and use of a flow restrictor device or other means until an agreement can be made to end unauthorized use of outdoor water. To restore service, the customer shall be required to pay all authorized reconnection fees. If a customer believes he/she has been disconnected in error, the customer may contact the Commission's Consumer Services Section at 1-800-222-7000 to initiate an investigation.

Stage 4 Exists When:

a._____ Company's total water storage or well production has been less than 25 percent of capacity for at least 12 consecutive hours, and

b._____ Company has identified issues such as a steadily declining water table, increased draw down threatening pump operations, or poor water production, creating a reasonable belief the Company will be unable to meet anticipated water demand on a sustained basis.

Restrictions: Under Stage 4, Company shall inform the customers of a **mandatory** restriction to employ water conservation measures to reduce daily consumption. Failure to comply will result in temporary customer disconnection. All restrictions from Stage 2 and Stage 3 shall be employed in addition to the following uses of water being prohibited:

- Restaurant patrons shall be served water only upon request
- All leaks, breaks, or other malfunctions in the customer's plumbing fixtures and/or irrigation system must be repaired within five (5) business days of written notification by the utility.
- Any other water intensive activity is prohibited
- The addition of new service lines and meter installations is prohibited.

The following priority of use for delivery of water is set forth: (1) All existing regularly metered residential customers; (2) All regularly metered commercial customers; (3) All uses of water, other than fire hydrant use for new construction; (4) Fire hydrant use for landscape irrigation or lakes; (5) All other construction fire hydrant use, metered or unmetered.

Applies to all **WATER** service areas

PART FIVE
CURTAILMENT PLAN

Notice Requirements:

1. Company is required to notify customers by delivering written notice to each service address or by utilizing the Company's emergency messaging system which includes email, text, and phone call, or by posting on Company's website, or at the Company's option a combination of these notifications. Such notice shall notify the customers of the general nature of the problem and the need to conserve water.

2. Company shall post at least two (2) signs showing curtailment stage. Signs shall be posted at noticeable locations, like at the well sites and at the entrance to major subdivisions served by the Company.

3. Company shall notify the Consumer Services Section of the Utilities Division of the Corporation Commission at least 12 hours prior to entering Stage 4.

Once Stage 4 has been reached, the Company must augment the supply of water by hauling or through an emergency interconnect from an approved supply or must otherwise provide emergency drinking water for its customers until a permanent solution has been implemented.

Customers who fail to comply with the above restrictions will be given a written notice to end all outdoor uses. Failure to comply within twenty-four (24) hours of receipt of the notice may result in temporary loss of service through the installation and use of a flow restrictor device or other means until an agreement can be made to end unauthorized use of outdoor water. To restore service, the customer shall be required to pay all authorized reconnection fees. If a customer believes he/she has been disconnected in error, the customer may contact the Commission's Consumer Services Section at 1-800-222-7000 to initiate an investigation.

Applies to all **WATER** service areas

PART SIX
HOOK UP FEES-WATER

LIBERTY UTILITIES (LITCHFIELD PARK WATER & SEWER) CORP.
WATER HOOK-UP FEE TARIFF

I. PURPOSE AND APPLICABILITY

The purpose of the off-site hook-up fees payable to Liberty Utilities (Litchfield Park Water & Sewer) Corp. (the "Company") pursuant to this tariff is to equitably apportion the costs of constructing additional off-site facilities necessary to provide water production, delivery, storage, and pressure among all new service connections. These charges are applicable to all new service connections after the effective date of this tariff. The charges are one-time charges and are payable as a condition to Company's establishment of service, as more particularly provided below.

II. DEFINITIONS

Unless the context otherwise requires, the definitions set forth in R-14-2-401 of the Arizona Corporation Commission's ("Commission") rules and regulations governing water utilities shall apply in interpreting this tariff schedule.

"Applicant" means any person or entity requesting service to one or more new service connections and may include Developers and/or Builders of new residential subdivisions and/or commercial and industrial properties.

"Company" means Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Water Division.

"Main Extension Agreement" means any agreement whereby an Applicant, Developer and/or Builder agrees to advance the costs of the installation of water facilities necessary to the Company to serve new service connections within a development, or installs such water facilities necessary to serve new service connections and transfers ownership of such water facilities to the Company, which agreement shall require the approval of the Commission pursuant to A.AC. R-14-2-406, and shall have the same meaning as "Water Facilities Agreement" or "Line Extension Agreement."

"Off-site Facilities" means wells, storage tanks and related appurtenances necessary for proper operation, including engineering and design costs. Off-site facilities may also include booster pumps, pressure tanks, transmission mains and related appurtenances necessary for proper operation if these facilities are not for the exclusive use of the applicant and will benefit the entire water system.

"Service Connection" means and includes all service connections for single-family residential, commercial, industrial or other uses, regardless of meter size.

Applies to all **WATER** service areas

PART SIX

HOOK UP FEES-WATER

III. WATER HOOK-UP FEE

For each new service connection, the Company shall collect an Off-Site Hook-Up Fee derived from the following table:

OFF-SITE WATER HOOK-UP FEE TABLE		
Meter Size	**Size Factor**	**Total Fee**
5/8" x 3/4"	1	~~$1,800~~ $2,584
3/4"	1.5	~~$2,700~~ 3,876
1"	2.5	~~$4,500~~ 6,460
1-1/2"	5	~~$9,000~~ 12,920
2"	8	~~$14,400~~ 20,672
3"	16	~~$28,800~~ 41,344
4"	25	~~$45,000~~ 64,600
6"	50	~~$90,000~~ 129,200
8"	80	~~$144,000~~ 206,720
10" (turbine)	145	~~$261,000~~ 374,680
12" (turbine)	215	~~$387,000~~ 555,560

(A) For "Active Adult" communities with demonstrated age-restricted zoning and/or CCR's providing for age-restricted living, the Total Fee for domestic water use shall be Two-Thirds (2/3) of the Total Fee shown above for Residential properties, based on an ERU factor of 190 gallons per day. All non-domestic service connections shall pay the Hook-up fee per the above table.

IV. TERMS AND CONDITIONS

(A) Assessment of One Time Off-Site Hook-up Fee: The off-site hook-up fee will be assessed only once per residential parcel. For non-residential Properties, that reside on one parcel but has future additional construction that requires an upsize in water meters or additional water meters, the Company shall assess an additional Hook-up fee based on Hook-up Fees associated with old water meter size and new water meter size difference in fees or the Hook-up Fee associated with the additional requested water meter size.

(B) Use of Off-Site Hook-up Fee: Off-site hook-up fees may only be used to pay for capital items of Off-site Facilities, or for repayment of loans obtained to fund the cost of installation of off- site facilities. Off-site hook-up fees shall not be used to cover repairs, maintenance, or operational costs. The Company

shall record amounts collected under the tariff as CIAC; however, such amounts shall not be deducted from rate base until such amounts have been expended for plant.

Applies to all **WATER** service areas

PART SIX
HOOK UP FEES-WATER

(C) Time of Payment:

1) For those requiring a Main Extension Agreement: In the event that the person or entity that will be constructing improvements ("Applicant", "Developer" or "Builder") is otherwise required to enter into a Main Extension Agreement , whereby the Applicant , Developer or Builder agrees to advance the costs of installing mains , valves , fittings, hydrants and other on-site improvements in order to extend service in accordance with R-14-2-406(B), payment of the Hook-Up Fees required hereunder shall be made by the Applicant , Developer or Builder no later than within 15 calendar days after receipt of notification from the Company that the Utilities Division of the Arizona Corporation Commission has approved the Main Extension Agreement in accordance with R-14-2-406(M).

2) For those connecting to an existing main: In the event that the Applicant, Developer or Builder for service is not required to enter into a Main Extension Agreement, the Hook-Up Fee charges hereunder shall be due and payable at the time the meter and service line installation fee is due and payable.

(D) Off-Site Facilities Construction by Developer: Company and Applicant, Developer, or Builder may agree to construction of off-site facilities necessary to serve a particular development by Applicant, Developer or Builder, which facilities are then conveyed to Company. In that event, Company shall credit the. total cost of such off-site facilities as an offset to off-site hook-up fees due under this Tariff. If the total cost of the off-site facilities constructed by Applicant, Developer or Builder and conveyed to Company is less than the applicable off-site hook-up fees under this Tariff, Applicant, Developer or Builder shall pay the remaining amount of off-site hook-up fees owed hereunder. If the total cost of the off-site facilities contributed by Applicant, Developer or Builder and conveyed to Company is more than the applicable off-site hook-up fees under this Tariff, Applicant, Developer or Builder shall be refunded the difference upon acceptance of the off-site facilities by the Company.

(E) Failure to Pay Charges; Delinquent Payments: The Company will not be obligated to make an advance commitment to provide or actually provide water service to any Developer, Builder or other applicant for service in the event that the Developer, Builder or other applicant for service has not paid in full all charges hereunder. Under no circumstances will the Company set a meter or otherwise allow service to be established if the entire amount of any payment due hereunder has not been paid.

Applies to all **WATER** service areas

PART SIX
HOOK UP FEES-WATER

(F) Large Subdivision Projects: In the event that the Applicant, Developer or Builder is engaged in the development of a residential subdivision containing more than 150 lots, the Company may, in its discretion, agree to payment of off-site hook-up fees in installments. Such installments may be based on the residential subdivision development's phasing and should attempt to equitably apportion the payment of charges hereunder based on the Applicant's, Developer's or Builder's construction schedule and water service requirements. In the alternative, the Applicant, Developer, or Builder shall post an irrevocable letter of credit in favor of the Company in a commercially reasonable form, which may be drawn by the Company consistent with the actual or planned construction and hook up schedule for the subdivision and/or development.

(G) Off-Site Hook-Up Fees Non-refundable: The amounts collected by the Company as Hook-Up Fees pursuant to the off-site hook-up fee tariff shall be non-refundable contributions in aid of construction ("CIAC").

(H) Use of Off-Site Hook-Up Fees Received: All funds collected by the Company as off-site hook-up fees shall be deposited into a separate interest bearing trust account and used solely for the purposes of paying for the costs of installation of off-site facilities, including repayment of loans obtained for the installation of off-site facilities that will benefit the entire water system.

(I) Off-Site Hook-up Fee in Addition to On-site Facilities: T The off-site hook-up fee shall be in addition to any costs associated with the construction of on-site facilities under a Main Extension Agreement pursuant to A.A.C. Rl4-2-406 and any applicable Main Extension Tariff.

(J) Disposition of Excess Funds: After all necessary and desirable off-site facilities are constructed utilizing funds collected pursuant to the off-site hook-up fees, or if the off-site hook-up fee has been terminated by order of the Arizona Corporation Commission, any funds remaining in the trust shall be refunded. The manner of the refund shall be determined by the Commission at the time a refund becomes necessary.

(K) Fire Flow Requirements: In the event the applicant for service has fire flow requirements that require additional facilities beyond those facilities whose costs were included in the off-site hook-up fee, and which are contemplated to be constructed using the proceeds of the off-site hook-up Fee, the Company may require the applicant to install such additional facilities as are required to meet those additional fire flow requirements, as a non-refundable contribution, in addition to the off-site hook-up fee.

(L) Status Reporting Requirements to the Commission: The Company shall submit a calendar year Off-Site Hook-Up Fee status report each January to Docket Control for the prior twelve (12) month period, beginning January 2019, until the hook-up fee tariff is no longer in effect. This status report shall contain a list of all customers that have paid the hook-up fee tariff, the amount each has paid, the physical location/address of the property in respect of which such fee was paid, the amount of money spent from the

account, the amount of interest earned on the funds within the tariff account, and a list of all facilities that have been installed with the tariff funds during the 12 month period.

Applies to all **WATER** service areas

PART SEVEN

FEDERAL COST RECOVERY MECHANISM PLAN OF ADMINISTRATION

APPLICABLE TO:

- Liberty Utilities (LITCHFIELD PARK Water & Sewer) Corp. (the Company") (Decision No._____);

I. INTRODUCTION:

Liberty LITCHFIELD PARK (Water & Sewer) Corp. shall adopt a Federal Compliance Cost Recovery Mechanism ("FCCRM"). This document is the Plan of Administration *("POA")* for the FCCRM. The FCCRM allows the Company to pass through to its customers the costs to recover the capital and on-going operations and maintenance costs of complying with the Environmental Protection Agency ("EPA") Forever Chemical rules in between rate cases, including water treatment facilities needed to comply with federal mandates on safe drinking water adopting Maximum Contaminant Level ("MCL") regulations and governing "forever chemicals" (per- and polyfluorinated alkyl substances) or ("PFAS").

II. GENERAL DESCRIPTION OF FCCRM:

The Company. will be entitled to seek recovery of the surcharge according to the following stages:

1. **Step l** ~~- Due to concern that if the EPA or any other governmental agency or office may attempt to repeal, revoke or amend the final rule for regulating PFAS or ("PFAS Rule") that makes treatment for PFAS not required by rule, the Company agrees not to commence engineering design of the facility until after June 30, 2025. Assuming there is no final, non-appealable judicial decision, executive order, or legislation rendering the PFAS Rule null, void or voidable, by June 30, 2025, then the~~ Company may begin the engineering design of the facility.
2. **Step 2** - Once design is complete, before beginning construction, the Signatories agree to meet and confer to discuss the stars of any potential rule changes ~~contemplated in Step 1~~regarding compliance with federal mandates on safe drinking water.~~.~~
3. **Step 3** – The Company shall file a separate FCCRM surcharge application for Commission approval in conformance with this FCCRM POA.

Applies to all **WATER** service areas

PART SEVEN

FEDERAL COST RECOVERY MECHANISM PLAN OF ADMINISTRATION

Under the FCCRM, the Company will bill all customers by means of a monthly fixed rate and a commodity rate billed on a per thousand gallons basis. The costs will be split evenly between the fixed and commodity rate components. The FCCRM Surcharge will appear on customers' bills as a separate line item labeled "Federal Compliance Cost Recovery Mechanism." Capital investments funded by proceeds of the FCCRM surcharge shall be subject to prudency review in the next rate case as well as an annual true-up of any over- or under-collections. The FCCRM will be subject to review for reinstatement in the next general rate case for the Company.

III. COMPONENTS OF THE FCCRM SURCHARGE.

i. The most current balance sheet at the time of the filing,
ii. The most current income statement
iii. An earnings test schedule,
iv. A rate review schedule (including the incremental and pro forma effect of the proposed increase),
v. A revenue requirement calculation,
vi. A surcharge calculation,
vii. An annual true-up calculation,
viii. An adjusted rate base schedule,
ix. A CWIP ledger, and
x. A typical bill analysis under present and proposed rates

IV. FCCRM SURCHARGE RATE DESIGN.

The FCCRM Surcharge rate design shall be as follows:

1. The FCCRM rate will be billed to all customers by means of a monthly fixed rate and a commodity rate billed on a per thousand gallons basis. The costs will be split between the fixed and commodity rate components.

2. The fixed component of the FCCRM Surcharge shall be calculated by dividing 50% of the FCCRM Revenue Requirement by the number of active equivalent 5/8 x 3/4-inch meters at the end of the most recent 12-month period, and shall increase with meter sized based on the following meter capacity multipliers

Applies to all **WATER** service areas

PART SEVEN

FEDERAL COST RECOVERY MECHANISM PLAN OF ADMINISTRATION

5/8-inch x 3/4-inch	1.0 times
3/4-inch	1.5 times
1-inch	2.5 times
1-1/2-inch	5.0 times
2-inch	8.0 times
3-inch	16.0 times
4-inch	25.0 times
6-inch	50.0 times
8-inch	80.0 times

3. The commodity rate will be calculated by dividing 50% of the FCCRM Revenue Requirement by the average gallons sold for the two most recent 12-month periods.
4. The FCCRM Surcharge will apply to all customers' bills.
5. The FCCRM Surcharge will appear on customers' bills as a separate line item labeled "Federal Compliance Cost Recovery Mechanism."

V. FCCRM SURCHARGE FILING.

The FCCRM Surcharge will be filed in alignment with Step 3.[6] The Company will submit to the Commission a detailed description of the plant and supporting invoices, a calculation of the associated revenue requirement, and the associated detailed schedules and tariffs. The Company will also provide Staff and the Residential Utility Consumer Office ("RUCO") electronic copies of all work papers and supporting documents.

VI. FCCRM SURCHARGE NOTICE REQUIREMENTS.

The FCCRM Surcharge will not become effective until approved by the Commission. The Company will notice its customers of the FCCRM Surcharge approved as soon as possible in a form acceptable to Staff. In addition, the Company must provide notice of each request for a surcharge to each party to Docket No. W-02074A-23-0337, W-02465-23-0338, W-02060A-23-0339, SW-01428A-25-XXXX, (will have an opportunity to be heard and participate in the surcharge proceedings). The surcharge review procedures will be the same as those for an Arsenic Cost Recovery Mechanism surcharge, as described in Decision No. 66400 (October 14, 2003).

[6] See Step 3, General Description of FCCRM

Applies to all **WATER** service areas

PART EIGHT

EMERGENCY WATER AUGMENTATION SURCHARGE TARIFF AND PLAN OF ADMINISTRATION

I. Purpose and Applicability

PURPOSE:

The purpose of this tariff is to authorize Liberty Utilities (Litchfield Park Water & Sewer) Corp. (the "Company") to make monthly adjustments to it rates and charges for water service in order to recover cost incurred for water purchases and hauling ("Water Augmentation Costs") in the event that Liberty Utilities (Litchfield Park Water & Sewer) Corp. experiences an emergency water shortage[7]. The charges will be assessed based on usage as provided below.

Applicability:

This tariff is obtained during the processing of a permanent rate application. This tariff only applies in the event of an "emergency water shortage" as defined in Section II of the definitions below.

II. Definitions

Unless the context otherwise requires, the definitions set forth in R-14-2-401 of the Arizona Corporation Commission's ("Commission") rules and regulations governing water utilities shall apply in interpreting this tariff schedule.

"Affiliate," means any other entity[8] directly or indirectly controlling or controlled by, or under direct or indirect common control with the Company. For purposes of this definition, the term "control" (including the correlative meanings of the terms "controlled by" and "under common control with"), as used with respect to any entity means the power to direct the management policies of such entity, whether through ownership of voting securities. or by contract, or otherwise.

[7] See definition for meaning of emergency water shortage.

[8] A corporation, partnership, limited partnership, joint venture, trust, estate or natural person.

Applies to all **WATER** service areas

PART EIGHT

EMERGENCY WATER AUGMENTATION SURCHARGE TARIFF AND PLAN OF ADMINISTRATION

"Curtailment Account Balance" means the monies collected under the curtailment tariff authorized in Decision No. xxxxx.

"Emergency Water Augmentation Surcharge" means the surcharge calculated in accordance with Section IV below.

"Emergency Water Shortage" means a water shortage of a serious nature, developing suddenly or unexpectedly, that is out of the Company's control, and demanding immediate attention and has triggered at least Stage 3 of the Company's approved Curtailment Plan.

"Surcharge Rate" means the rate per 1,000 gallons that is calculated in accordance with Section III below.

"Water Augmentation Cost" means the actual cost of water purchased and water hauling costs not already included in the utility's existing rates per the last approved rate case.

.

"Water Augmentation Quantity" means the actual quantity of augmented water (in thousands of gallons).

"Water Sold" means the actual quantity (in thousands of gallons) of water sold by the Company to its Customers during the month corresponding to the month in which water was purchased.

III. Surcharge Rate Calculation

The surcharge is calculated using data from the previous month's bill, for example, the water augmentation surcharge that is applied on the July bill is calculated using the June water augmentation costs and the June total gallons sold. See Figure A for an example of the calculation.

Figure A

For each month that the Company augments water, the Company will calculate the Surcharge Rate per the following formula:

Water Augmentation Cost/Water Sold

Applies to all **WATER** service areas

PART EIGHT

EMERGENCY WATER AUGMENTATION SURCHARGE TARIFF AND PLAN OF ADMINISTRATION

Example

This example illustrates how the water augmentation surcharge that is included on a customer's bill would be calculated using 2,000 gallons of usage.

[A]	[B]	[C]	[D]
Total June Water & Hauling Costs	June Ending Curtailment Account Balance	Total Gallons Sold in June in 1,000s	Emergency Water Augmentation Surcharge per 1,000 gallons
$3,000	$100	494	$6.28

[E]	[F]	[G]
Customer's Current Usage Gallons in 1,000s	Emergency Water Augmentation Surcharge (from Col.D)	Total Emergency Water Augmentation Surcharge on Current Bill
2	$6.28	$12.55

II.

IV. Plan of Administration

(A) **Intent To Bill Emergency Water Augmentation Surcharge:** For any month in which water is augmented, after completing its billing for the month and receiving the billing for the month, the Company wi11 calculate the Surcharge Rate using the same methodology discussed herein und shown on Figure A and provide Utilities Division of the Arizona Corporation Commission ("Commission Staff') notice of the Company's intent to bill the Emergency Water Augmentation Surcharge.
~~(A)~~

(B) Notice to Commission Staff: For any month in which the Company intends to bill customers an Emergency Water Augmentation Surcharge, the Company shall provide Commission Staff notice of the Company's intent to bill the Emergency Water Augmentation Surcharge. The notice to Commission Staff shall include the following:

~~(B)~~

Applies to all **WATER** service areas

PART EIGHT

EMERGENCY WATER AUGMENTATION SURCHARGE TARIFF AND PLAN OF ADMINISTRATION

1. The Water Augmentation Cost.
2. The Water Augmentation Quantity.
3. A copy of the bill(s) received for the Water Augmentation.
4. A description of the system problem necessitating Water Augmentation and a description of the action being taken by the Company to resolve the problem including the date operations did or are expected to return to normal.
5. The dates for beginning and ending Water Augmentation.
6. A schedule showing the calculation of the Emergency Water Augmentation Surcharge Rate in excel format with formulas intact.
7. Identification of the hauling(s) available. If only one option was available, please state ~~that there~~that there was only one option.
8. Whether or not the hauling entity was an affiliate.

(C) Implementation of Emergency Water Augmentation Surcharge: Commission Staff will review the Notice. If the filing is acceptable to Commission Staff, the resulting Surcharge will be charged to Liberty Utilities (Litchfield Park Water & Sewer) Corp. customers as a Emergency Water Augmentation Surcharge to be included on customers monthly bill as a separate line item.

(D) Documentation to Be Maintained: The Company shall maintain documentation for all costs, billing determinants, and revenue recoveries.

(E) Customer Notice: The Company shall notify its customers or this new tariff as part of its next regularly scheduled billing after the effective date of the tariff but no later than sixty (60) days after the effective date of the tariff in a form acceptable to Staff.

Applies to all **WASTEWATER** service areas

PART NINE

STATEMENT OF CHARGES

I. RATES

In Decision No. XXXXX, dated XXXXX, the Commission authorized the following rates and charges to become effective XXXXX:

A. Monthly Usage Charges

Residential:	**Charge[10]**
Residential Service	$ 69.72~~xx~~
Multiple Unit Housing – Monthly Per Unit	64.73~~xx~~
Commercial/Non-Residential:	
Small Commercial – Monthly Service	117.91~~xx~~
Commercial Measured Service:	
Regular Domestic – Monthly Service Charge	66.01~~xx~~
Restaurants, Motels, Grocery Store & Dry Cleaning Estab. – Monthly Service	~~Xx~~66.01*
Wigwam Resort:	
Wigwam Resort Monthly Rate – Per Room	67.25~~xx~~
Wigwam Resort Main Hotel Facilities – Per Month	2,663.08~~xx~~
Schools:	
Elementary Schools	1,810.88~~xx~~
Middle & High Schools	~~xx~~2,130.45
Community College	3,202.21~~xx~~
Effluent**	~~xx~~Market Rate

*Motels without restaurants included (eliminate multi-unit monthly rate provision)

**Market Rate – Maximum effluent rate shall not exceed $xx per acre foot based on potable water rate of $xx per thousand gallons.

[10] Low Income Tariff – A 30% discount is available on monthly minimum and commodity charges to qualified residential customers meeting the low income qualifications.

Applies to all **WASTEWATER** service areas

PART NINE

STATEMENT OF CHARGES

B. Commodity Rates

Commercial/Non-Residential Customers (water usage Data Available)*

Regular Domestic per 1,000 gallons water usage	$6.01~~88~~
Restaurants, Motels Grocery Stores & Dry Cleaning Estab, per 1,000 gallons water usage	7.71~~88~~

Commercial/Non-Residential Customers (influent Data)**

Regular Domestic per 1,000 gallons water usage	$7.51~~88~~
Restaurants, Motels Grocery Stores & Dry Cleaning Estab, per 1,000 gallons water usage	10.64~~88~~

*For Commercial/Non-Residential Customers that are provided with water service from the Company or whose water usage is available to the Company from another water utility, Company shall bill non-residential customers based on water usage data provided by Liberty Utilities or water usage data provided by another local water provider. If, at any point, Company is unable to obtain actual water usage data for such commercial/non-residential customers, Company shall bill non-residential customers based on the last known, most recent usage data as a proxy. Billing shall be trued up when actual data is obtained. If no water data can be obtained, a non-residential customer may be required to install an influent meter at cost and such customers shall be billed in accordance with the influent data rates set forth above.

** For customers that are not receiving water service from the Company, and/or the Company is not receiving water usage data information from another water provider, a meter to measure influent will be installed at cost and paid by customer and such customers shall be billed in accordance with the influent data rates set forth above.

Applies to all **WASTEWATER** service areas

PART NINE
STATEMENT OF CHARGES

C. Service Charges

Service	Charge
Establishment per A.A.C. R14-2-603(D)(1)~~Establishment~~	$30.00
Re-Establishment of Service per A.A.C. R14-2-603(D)(1)~~Re-Establishment (within~~	(a)
Disconnection ~~(Delinquent)~~	At Cost (b)
Reconnection per A.A.C. R14-2-603(D)(1)~~Reconnection (Delinquent)~~	(b)
NSF Check per A.A.C. R14-2-608(E)(1)~~NSF Check (a)~~	$25 (c)
Deferred Payment (per month)	1.5% per month
Late Charge~~Late Payment Penalty~~	(d)
Service Calls - After Hours~~Service Charge – after hours (b)~~	$125 (e)
~~Failed Final Inspection Fee~~Deposit Requirement	(f)~~$75~~
Deposit Interest per A.A.C. R14-2-603(B)~~Deposit~~	6%~~(f)~~
Service Lateral Connection Charge – All Sizes~~Deposit Interest~~	(g)~~6%~~
Collection Main Extension Tariff Per A.A.C R14-2-606(B)~~Service Lateral~~	(h)~~(g)~~
Influent Meter and Metering System Installation~~Collection Main Extension Tariff~~	At Cost (i)~~(h)~~
~~Influent Meter and Metering System Installation~~Wastewater Hook-up Fee	At Cost (ij)
Failed Final Inspection Fee~~Wastewater Hook-up Fee~~	$75~~(j)~~

a) Minimum charge times number of full months off the system, per Rule R14-2-603(D). ~~Per Commission Rule A.A.C. R14-2-603.D - Months off the system times the monthly minimum.~~

~~b)~~ Customer shall pay the actual cost including costs for excavation and trenching, pipeline modification, sewer block, backfill and grading, road repairs and permitting. Customer will be provided copies of invoices for actual costs incurred. There shall be no charge if no work is performed. ~~The actual cost of disconnection and reconnection, including costs for excavation and trenching, pipeline modification, backfill and grading, road repairs and permitting. Customer will be provided copies of invoices for actual cost. There shall be no charge for disconnection if no work is performed.~~

~~c)~~ Per Commission Rule A.A.C. R-14-2-603.B

b)

~~d)~~ Liberty~~LITCHFIELD PARK~~ Litchfield Park may only charge one NSF fee when customers are billed for water and sewer services on one bill.

c)

~~l.~~ Greater of $5.00 or 1.50% of unpaid balance greater~~At customer's request. No charge for service during normal working hours.~~

~~e)~~d) ~~Greater~~ of $5 or 1.5% of unpaid balance

~~f)~~ Customer shall be charged for after-hours service calls outside of normal working hours for work performed at customer's request or convenience. ~~Customer shall be charged for after-hours service calls outside of normal working hours for worked performed at customer's request or convenience.~~

e)

ISSUED BY:
Moses Thompson, President
Liberty Utilities (LITCHFIELD PARK Water & Sewer) Corp.
14920 W Camelback Rd
Litchfield Park, AZ 85340

g)() Per A.A.C. R14-2-603(B)(7):

1. Residential – two times the average bill by class
2. Commercial – one(two and one-half times the customer's estimated maximum monthly bill

h)g) At cost. Customer/Developer shall install or cause to be installed all Service Laterals as refundable advance in aid of construction.

i)h) All Main Extensions shall be completed at cost and shall be treated as refundable advances-in-aid of construction.

j)i) The cost of the influent meter and metering system installation shall be at the sole expense of the commercial and industrial user and not subject to refund.

k)j) Residential and Commercial – Customers/Developers shall pay the applicable Wastewater Hook-up Fees tariff

IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM ITS CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES, USE, AND FRANCHISE TAX. PER COMMISSION RULE 14-2-608D(5).

Applies to all **WASTEWATER** service areas

PART NINE

STATEMENT OF CHARGES

II. TAXES AND ASSESSMENTS

In addition to the collection of regular rates, the Company will collect from its customers a proportionate share of any privilege, sales, use and franchise tax per Commission Rule 14-2-608.D.5.

All Advances or Contributions are to include labor, materials, overheads, and all applicable taxes, including all gross-up taxes for income taxes. Cost to include labor, materials and parts, overheads, and all applicable taxes.

Under applicable law, any contributions or advances provided by a Developer are taxable income to the Utility. In accordance with the Gross-Up Sharing Method policy adopted by the Commission in Decision No. 76974, the Company will collect from the Developer an applicable share of income taxes for the Company's state and federal tax liability on all funds contributed and/or advanced. The funds will be collected prior to the commencement of service.

Applies to all **WASTEWATER** service areas

PART TEN
STATEMENT OF TERMS AND CONDITIONS

I. PERMITTED COSTS

A. Costs shall be verified by invoice.

B. For services that are provided by the Company at cost, costs shall include labor, materials, other charges incurred, and overhead. However, prior to any such service being provided, the estimated cost of such service will be provided by the Company to the customer. After review of the cost estimate, the customer will pay the amount of the estimated cost to the Company.

C. In the event that the actual cost is less than the estimated cost, the Company will refund the excess to the customer within 30 days after completion of the provision of the service or after Company's receipt of invoices, timesheets or other related documents, whichever is later.

D. In the event the actual cost is more than the estimated cost, the Company will bill the customer for the amount due within 30 days after completion of the invoices, timesheets or other related documents, whichever is later. The amount so billed will be due and payable 30 days after the invoice date. However, if the actual cost is more than five percent (5%) greater than the total amount paid, the customer will only be required to pay five percent (5%) more than the total amount paid, unless the Company can demonstrate that the increased costs were beyond its control and could not be foreseen at the time the estimate for the total amount paid was made.

E. At the customer's request, the Company shall make available to the customer all invoices, timesheets or related documents that support the cost for providing such service.

F. Permitted costs shall include any Federal, State or local taxes that are or may be payable by the Company as a result of any tariff or contract for wastewater facilities under which the Customer advances or contributes funds or facilities to the Company.

Applies to all **WASTEWATER** service areas

PART TEN

STATEMENT OF TERMS AND CONDITIONS

II. CUSTOMER DISCHARGE TO SYSTEM

A. Service Subject to Regulation

Company provides wastewater service using treatment and collection facilities that are regulated by numerous county, state and federal Statutes and Regulations. Those Regulations include limitations as to domestic strength wastewater and the type of wastewater that may be discharged into the system by any person directly or indirectly connected to the plant.

B. Waste Limitations

Company has established the permissible limits of concentration as domestic strength wastewater and will limit concentration for various specific substances, materials, waters, or wastes that can be accepted in the sewer system, and to specify those substances, materials, waters, or wastes that are prohibited from entering the sewer system. Each permissible limit so established shall be placed on file in the business office of Company, with a copy filed with the Commission. No person shall discharge, or cause to be discharged, any new sources of inflow including, but not limited to, storm water, surface water, groundwater, roof runoffs, subsurface drainage, cooling water, or polluted industrial process waters into the sanitary sewer. Company will require an affidavit from all non-residential customers, and their professional engineer, stating that the wastewater discharged to the system does not exceed domestic strength or applicable pre-treatment standards.

C. Inspection and Right of Entry

Every facility that is involved directly or indirectly with the discharge of wastewater to the Treatment Plant may be inspected by Company as it deems necessary. These facilities shall include but not be limited to sewer; sewage pumping plants; all processes; devices and connection sewer; and all similar sewerage facilities. Inspections may be made to determine that such facilities are maintained and operated properly and are adequate to meet the provisions of these rules and this tariff. Inspections may include the collection of samples. Authorized personnel of Company shall be provided immediate access to all of the above facilities or to other facilities directly or indirectly connected to the Treatment Plant at all reasonable times including those occasioned by emergency conditions. Any permanent or temporary obstruction to easy access to the user's facility to be inspected shall promptly be removed by the facility user or owner at

Applies to all **WASTEWATER** service areas

PART TEN

STATEMENT OF TERMS AND CONDITIONS

the written or verbal request of Company and shall not be replaced. No person shall interfere with, delay, resist or refuse entrance to an authorized Company representative attempting to inspect any facility involved directly or indirectly with a discharge of wastewater to the Treatment Plant. Adequate identification shall be provided by Company for all inspectors and other authorized personnel and these persons shall identify themselves when entering any property for inspection purposes or when inspecting the work of any contractor.

All transient motor homes, travel trailers and other units containing holding tanks must arrive at Company's service area in an empty condition. Inspection will be required of said units prior to their being allowed to hookup to the wastewater system.

D. Termination of Water Service for Violation of Wastewater Rules and Regulations

Company is authorized to discontinue water service to any person connected to both its water and sewer systems who violates Company's wastewater terms and conditions as set forth in this section or in any way creates a public health hazard or the likelihood of such a public health hazard. This termination authority does not apply to non-payment for water or wastewater services.

III. RULES AND REGULATIONS

Company has adopted the Rules and Regulations established by the Commission as the basis for its operating procedures. A.A.C. R14-2-601 through A.A.C. R14-2-609 will be controlling of Company procedures, unless specifically approved tariffs or Commission Order(s) provide otherwise.

~~Applies to all **WASTEWATER** service areas~~

~~**PART ELEVEN**~~

~~**PRETREATMENT STANDARDS**~~

Applies to all **WASTEWATER** service areas
PART ~~TWELVE~~ELEVEN
HOOK-UP FEE TARIFF – WASTEWATER

I. Purpose and Applicability

The purpose of the off-site facilities hook-up fees payable to Liberty Utilities (Litchfield Park Water & Sewer) Corp. (the "Company") pursuant to this tariff is to equitably apportion the costs of constructing additional off-site facilities to provide wastewater treatment and disposal facilities among all new service laterals. These charges are applicable to all new service laterals undertaken via Collection Main Extension Agreements, or requests for service not requiring a Collection Main Extension Agreement, entered into after the effective date of this tariff. The charges are one-time charges and are payable as a condition to Company's establishment of service, as more particularly provided below.

II. Definitions

Unless the context otherwise requires, the definitions set forth in R-14-2-601 of the Arizona Corporation Commission's ("Commission") rules and regulations governing sewer utilities shall apply interpreting this tariff schedule.

"Applicant" means any party entering into an agreement with Company for the installation of wastewater facilities to serve new service laterals, and may include Developers and/or Builders of new residential subdivisions, and industrial or commercial properties.

"Company" means Liberty Utilities (Litchfield Park Water & Service) Corp. – Wastewater Division.

"Collection Main Extension Agreement" means an agreement whereby an Applicant, Developer and/or Builder agrees to advance the costs of the installation of wastewater facilities necessary to serve new service laterals, or install wastewater facilities to serve new service laterals and transfer ownership of such wastewater facilities to the Company, which agreement does not require the approval of the Commission pursuant to A.A.C. R-14-2-606, and shall have the same meaning as "Wastewater Facilities Agreement."

"Off-site Facilities" means the wastewater treatment plant, sludge disposal facilities, effluent disposal facilities and related appurtenances necessary for proper operation, including engineering and design costs. Offsite facilities may also include lift stations, force mains, transportation mains and related appurtenances necessary for proper operation if these facilities are not for the exclusive use of the applicant and benefit the entire wastewater system.

"Service Lateral" means and includes all service laterals for single-family residential, commercial, industrial or other uses.

Applies to all **WASTEWATER** service areas

PART ~~TWELVE~~ELEVEN

HOOK-UP FEE TARIFF – WASTEWATER

III. Wastewater Hook-up Fee

For each new residential service lateral, the Company shall collect a Hook-Up Fee of $2,697 based on the Equivalent Residential Unit ("ERU") of 270 gallons per day. Commercial and industrial applicants shall pay based on the total ERUs of their development calculated by dividing the estimated total daily wastewater capacity usage needed for service using standard engineering standards and criteria by the ERU factor of 270 gallons per day. For "Active Adult" communities with demonstrated age-restricted zoning and/or CCRs providing for age-restricted living, the Hook-Up Fee for residential properties shall be $1,070, based on an ERU factor of 190 gallons per day.

IV. Terms and Conditions

(A) Assessment of One Time Off-Site Facilities Hook-up Fee: The off-site facilities hook-up fee may be assessed only once per residential parcel. For non-residential properties that reside on one parcel but have future additional construction that adds additional impact to the Company's existing wastewater infrastructure, an incremental Hook-Up Fee shall be applied based upon the additional EDU equivalents added by such construction activity.

(B) Use of Off-Site Facilities Hook-up Fee: Off-site facilities hook-up fees may only be used to pay for capital items of Off-site Facilities, or for repayment of loans obtained to fund the cost of installation of off-site facilities. Off-site hook-up fees shall not be used to cover repairs, maintenance, or operational costs. The Company shall record amounts collected under the tariff as CIAC; however, such amounts shall not be deducted from rate base until such amounts have been expended for plant.

(C) Time of Payment:

(1) In the event that the person or entity that will be constructing improvements ("Applicant", "Developer" or "Builder") is otherwise required to enter into a Collection Main Extension Agreement, payment of the fees required hereunder shall be made by the Applicant, Developer or Builder within 15 days of execution of a Main Extension Agreement.

(2) In the event that the Applicant, Developer or Builder for service is not required to enter into a Collection Main Extension Agreement, the Hook-Up Fee charges hereunder shall be due and payable at the time wastewater service is requested for the property.

Applies to all **WASTEWATER** service areas
PART ~~TWELVE~~ELEVEN
HOOK-UP FEE TARIFF – WASTEWATER

(D) Off-Site Facilities Construction by Developer: Company and Applicant, Developer, or Builder may agree to construction of off-site facilities necessary to serve a particular development by Applicant, Developer or Builder, which facilities are then conveyed to Company. In that event, Company shall credit the total cost of such off-site facilities as an offset to off-site hook-up fees due under this Tariff. If the total cost of the off-site facilities constructed by Applicant, Developer or Builder and conveyed to Company is less than the applicable off-site hook-up fees under this Tariff, Applicant, Developer or Builder shall pay the remaining amount of off-site hook-up fees owed hereunder. If the total cost of the off-site facilities contributed by Applicant, Developer or Builder and conveyed to Company is more than the applicable off-site hook-up fees under this Tariff, Developer or Builder shall be refunded the difference upon acceptance of the off-site facilities by the Company.

(E) Failure to Pay Charges; Delinquent Payments: The Company will not be obligated to make an advance commitment to provide or actually provide wastewater service to any Developer, Builder or other applicant for service in the event that the Developer, Builder or other applicant for service has not paid in full all charges hereunder. Under no circumstances will the Company connect service or otherwise allow service to be established if the entire amount of any payment has not been paid.

(F) Large Subdivision and/or Development Projects: In the event that the Applicant, Developer or Builder is engaged in the development of a residential subdivision and/or development containing more than 150 lots, the Company may, in its reasonable discretion, agree to payment of off-site hook-up fees in installments. Such installments may be based on the residential subdivision and/or development's phasing, and should attempt to equitably apportion the payment of charges hereunder based on the Applicant's, Developer's or Builder's construction schedule and water service requirements. In the alternative, the Applicant, Developer, or Builder shall post an irrevocable letter of credit in favor of the Company in a commercially reasonable form, which may be drawn by the Company consistent with the actual or planned construction and hook up schedule for the subdivision and/or development.

(G) Off-Site Hook-Up Fees Non-refundable: The amounts collected by the Company pursuant to the off-site facilities hook-up fee tariff shall be non-refundable contributions in aid of construction.

(H) Use of Off-Site Hook-Up Fees Received: All funds collected by the Company as off-site facilities hook-up fees shall be deposited into a separate account and bear interest and shall be used solely for the purposes of paying for the costs of installation of off-site facilities, including repayment of loans obtained for the installation of off-site facilities.

(I) Off-Site Facilities Hook-up Fee in Addition to On-site Facilities: The off-site facilities hook-up fee shall be in addition to any costs associated with the construction of on-site facilities under a Collection Main Extension Agreement.

Applies to all **WASTEWATER** service areas
PART ~~TWELVE~~ELEVEN
HOOK-UP FEE TARIFF – WASTEWATER

(J) Disposition of Excess Funds: After all necessary and desirable off-site facilities are constructed utilizing funds collected pursuant to the off-site facilities hook-up fees, or if the off-site facilities hook-up fee has been terminated by order of the Arizona Corporation Commission, any funds remaining in the trust shall be refunded. The manner of the refund shall be determined by the Commission at the time a refund becomes necessary.

(K) Status Reporting Requirements to the Commission: The Company shall submit a calendar year Off-Site Facilities Hook-Up Fee status report each January to Docket Control for the prior twelve (12) month period, beginning January 2022, until the hook-up fee tariff is no longer in effect. This status report shall contain a list of all customers that have paid the hook-up fee tariff, the amount each has paid, the physical location/address of the property in respect of which such fee was paid, the amount of money spent from the account, the amount of interest earned on the funds within the tariff account, and an itemization of all facilities that have been installed using the tariff funds during the 12 month period.

~~V. Large Users~~

(L) ~~(A)~~ Large Users: Large users requiring wastewater treatment capacity ~~over~~exceeding ~~750~~25,000 gallons per ~~acre per~~ day are considered Large Users. Large Users will be required ~~to~~to enter into a separate agreement with the Company that will define the terms and conditions of any hook-up fees required from that customer to provide service, including the amount, timing and nature of the hook-up fees, as well as any other pertinent terms and conditions. In the absence of any specific terms and conditions set forth in such an agreement to the contrary, the terms and conditions as set forth in Section IV of this tariff will apply.

Applies to all service areas

PART ~~THIRTEEN~~TWELVE

CUSTOMER ASSISTANCE TARIFF

DOMESTIC SERVICE - SINGLE FAMILY ACCOMMODATION

Applicability

Applicable to residential water and wastewater service for domestic use rendered to individuals who meet all the program qualifications and special conditions of this rate schedule.

Programs

This Customer Assistance Tariff (CAT) contains the following programs: (1) Low-Income Program; (2) Deployed Services Member Program; and (3) Disabled Veteran Program. Collectively, these three programs are referred to as the "Customer Assistance Programs".

Territory

Within all customer service areas served by Liberty Utilities (LITCHFIELD PARK Water & Sewer) Corp. ("Liberty" or "Company").

Rates

~~Fifteen~~ Thirty percent (30%) discount applied to the regular filed tariff.

Program Qualifications

1. The Liberty bill must be in your name and the address must be your primary residence.
2. You may not be claimed as a dependent on another person's tax return.
3. You must reapply each time you move residences.
4. You must renew your application once every year, or sooner, if requested.
5. You must notify Liberty within thirty (30) days if you become ineligible for the CAT.

Applies to all service areas

PART ~~THIRTEEN~~TWELVE

CUSTOMER ASSISTANCE TARIFF

DOMESTIC SERVICE - SINGLE FAMILY ACCOMMODATION

Special Conditions

1. Application: An application on a form authorized by the Commission is required for each request for service under this schedule. A customer must reapply every year or sooner, if requested.

2. Commencement of Rate: Eligible customers whose applications have been approved shall be billed on this schedule commencing with the next regularly scheduled billing period that follows receipt of application by Liberty.

3. Verification: Information provided by the applicant is subject to verification by Liberty. Refusal or failure of a customer to provide documentation of eligibility acceptable to Liberty, upon request by Liberty, shall result in removal from this rate schedule.

4. Notice from Customer: It is the customer's responsibility to notify Liberty if there is a change of eligibility status.

5. Rebilling: Customers may be re-billed retroactively for periods of ineligibility under the applicable rate schedule.

6. Participation Limit: The CAT (for all three programs included) is limited to 5,000 water division customers and 5,000 wastewater division customers of the Company. Applications will be reviewed and approved on a first come, first serve basis. Applicants will be placed on a waiting list if the participation limit has been met.

7~~6~~. Qualification: A customer that qualifies for more than one program will only receive benefits from one program per year. CAT benefits will not be combined or accumulated.

Applies to all service areas

PART ~~THIRTEEN~~TWELVE

CUSTOMER ASSISTANCE TARIFF

DOMESTIC SERVICE - SINGLE FAMILY ACCOMMODATION

LOW INCOME PROGRAM

To qualify for the low income program, the total gross annual income of all persons living in your household cannot exceed the income levels below:

Effective xxxx xx, xxxx

No. of Person in Household	Total Gross Annual Income*
1	$31,300
2	$42,300
3	$53,300
4	$64,300
5	$75,300
6	$86,300

For families/households with more than 6 persons, add $11,000 for each additional person.

***Qualifying annual incomes are set at 200 percent of the 2025 federal poverty levels for the first year, and will be adjusted annually to maintain qualifying incomes at 200 percent of the federal poverty level for each subsequent year.**

Acceptance into the program is subject to verification of income source.

For the purpose of the program the "gross household income" means all money and non-cash benefits, available for living expenses, from all sources, both taxable and non-taxable, before deductions for all people who live in your home. This includes, but is not limited to:

Wages or salaries
Interest or dividends from: Savings account, stocks or bonds
Unemployment benefits
TANF (AFDC)
Pensions
Gifts
Social Security, SSI, SSP
Scholarships, grants, or other aid used for living expenses
Disability payments
Food Stamps
Insurance settlements
Rental or royalty income
Profit from self-employment (IRS form Schedule C, Line 29)
Worker's Compensation
Child Support
Spousal Support

Applies to all service areas

PART ~~THIRTEEN~~TWELVE

CUSTOMER ASSISTANCE TARIFF

DOMESTIC SERVICE - SINGLE FAMILY ACCOMMODATION

DEPLOYED SERVICES MEMBER PROGRAM

This program allows the Company to provide a 15~~30~~% discount to deployed service members of the United States Military. The Company will provide the credit on the deployed service member's bill provided that the following criteria are met:

The Company will provide the credit on the deployed service member's bill provided that the following criteria are met:

1. Deployment is not a "permanent change of station." Permanent change of station requires a service member to permanently change his or her place of residence, paid for by the applicable military branch. A service member's decision to keep a secondary residence in Arizona would be discretionary and would not qualify for this credit.
2. Deployed member does not have family living in the premises. Short term deployments, where a spouse and/or dependents remain in the United States would not qualify, as the service member would receive separate compensation from the military to cover domestic expenses while deployed.
3. The deployed service member is an active member of the military (*e.g.*, Air Force, Army, Coast Guard, Marines, Space Force, and Navy), as defined by 10 U.S.C. § 101(a)(4), and includes any member of the Reserves or National Guard called to active duty.

Administration

1. Participation shall be determined on a first come, first served basis.
2. Each service member's eligibility must be verified based on written orders from the service member's command.
3. Continued eligibility will be determined periodically through a recertification process.
4. The Company is permitted to seek Commission approval to change participant limits based on level of participation.

Qualifying annual incomes are set at 200 percent of the 202X federal poverty levels.

Applies to all service areas

PART ~~THIRTEEN~~TWELVE

CUSTOMER ASSISTANCE TARIFF

DOMESTIC SERVICE - SINGLE FAMILY ACCOMMODATION

DEPLOYED SERVICES MEMBER PROGRAM

Effective xxxx xx, xxxx

No. of Person in Household	Total Gross Annual Income*
1	$31,300
2	$42,300
3	$53,300
4	$64,300
5	$75,300
6	$86,300

For families/households with more than 6 persons, add $11,000 for each additional person.

***Qualifying annual incomes are set at 200 percent of the 2025 federal poverty levels for the first year, and will be adjusted annually to maintain qualifying incomes at 200 percent of the federal poverty level for each subsequent year.**

Acceptance into the program is subject to verification of income source.

For the purpose of the program the "gross household income" means all money and non-cash benefits, available for living expenses, from all sources, both taxable and non-taxable, before deductions for all people who live in your home. This includes, but is not limited to:

Wages or salaries	Social Security, SSI, SSP	Rental or royalty income
Interest or dividends from: Savings account, stocks or bonds	Scholarships, grants, or other aid used for living expenses	Profit from self-employment (IRS form Schedule C, Line 29)
Unemployment benefits	Disability payments	Worker's Compensation
TANF (AFDC)	Food Stamps	Child Support
Pensions	Insurance settlements	Spousal Support
Gifts		

Applies to all service areas

PART ~~THIRTEEN~~TWELVE

CUSTOMER ASSISTANCE TARIFF

DOMESTIC SERVICE - SINGLE FAMILY ACCOMMODATION

DISABLED MILITARY VETERAN PROGRAM

This program allows the Company to provide a 30% discount to disabled military veterans of the United States Military. The Company will provide the credit on the disabled military veteran's bill provided that the following criteria are met:

The Company will provide the credit on the disabled military veteran's bill provided that the following criteria are met:

1. Disabled military veteran was honorably discharged from the armed forces.
2. Disabled military veteran must have a permanent disability rating related to their military duty service.
3. The disabled military veteran must have been an active member of the military (*e.g.*, Air Force, Army, Coast Guard, Marines, and Navy), as defined by 10 U.S.C. § 101(a)(4), and includes any member of the Reserves or National Guard called to active duty.

Administration

1. Participation shall be determined on a first come, first served basis.
2. Each service member's eligibility must be verified based on documentation demonstrating a medical discharge or other written documentation from the United States Department of Defense or Department of Veteran Affairs.
3. Continued eligibility will be determined periodically through a recertification process.
4. The Company is permitted to seek Commission approval to change participant limits based on level of participation.
5. Qualifying annual incomes are set at 200 percent of the 202X federal poverty levels

Applies to all service areas

PART ~~THIRTEEN~~TWELVE

CUSTOMER ASSISTANCE TARIFF

DOMESTIC SERVICE - SINGLE FAMILY ACCOMMODATION

DISABLED MILITARY VETERAN PROGRAM

Effective xxxx xx, xxxx

No. of Person in Household	Total Gross Annual Income*
1	$31,300
2	$42,300
3	$53,300
4	$64,300
5	$75,300
6	$86,300

For families/households with more than 6 persons, add $11,000 for each additional person.
***Qualifying annual incomes are set at 200 percent of the 2025 federal poverty levels for the first year, and will be adjusted annually to maintain qualifying incomes at 200 percent of the federal poverty level for each subsequent year.**

Acceptance into the program is subject to verification of income source.

For the purpose of the program the "gross household income" means all money and non-cash benefits, available for living expenses, from all sources, both taxable and non-taxable, before deductions for all people who live in your home. This includes, but is not limited to:

Wages or salaries
Interest or dividends from:
Savings account, stocks or bonds
Unemployment benefits
TANF (AFDC)
Pensions
Gifts
Social Security, SSI, SSP
Scholarships, grants, or other aid used for living expenses
Disability payments
Food Stamps
Insurance settlements
Rental or royalty income
Profit from self-employment (IRS form Schedule C, Line 29)
Worker's Compensation
Child Support
Spousal Support

Applies to all service areas

PART ~~THIRTEEN~~TWELVE

CUSTOMER ASSISTANCE TARIFF

DOMESTIC SERVICE - SINGLE FAMILY ACCOMMODATION

RECOVERY OF COST OF CUSTOMER ASSISTANCE TARIFF AND CUSTOMER SURCHARGES

The Company shall recover the CAT costs from a monthly CAT surcharge on all residential and non-residential water customers who are not participating in the CAT. Liberty is entitled to seek recovery of direct costs (*i.e.*, those costs directly associated with the programs, which costs would not be incurred in the absence of the programs). The Company shall account for those direct costs separately from other operating costs.

Liberty shall be entitled to implement a CAT surcharge on non-participating residential and non-residential water as follows.

- For customers participating in the CAT, the Company shall maintain a balancing account detailing the beginning and ending balance of the cumulative unrecovered program costs each month.
- Liberty's authorized rate of return shall be applied monthly to the average of the beginning balances of the cumulative unrecovered program costs for water service and included in the beginning balances for the following month.
- Using the balancing account, Liberty shall calculate the monthly surcharge for each customer as follows:

  (Ending Balance for Low-Income Tariff Balancing Account including amortized carrying costs during recovery period /Number of active non-participating water connections at year end)/12

- The ending balance in the balancing account shall equal the beginning balances plus discounts allowed on bills for the twelve month tracking period, plus direct program costs incurred in the twelve month period plus the return less surcharge fees billed in the twelve month tracking period.
- Liberty shall implement a monthly surcharge for the CAT for each twelve month period of the CAT. The Company shall calculate the monthly surcharge each year based on the active number of customer connections as of December 31 of the prior year. The Company shall file notice of the surcharge, along with a report on the CAT, with the Arizona Corporation Commission on or before January 31 and the surcharge shall be implemented on customer bills in February of each year with the recovery period ending in January of the following year.

Applies to all service areas

PART ~~FOURTEEN~~THIRTEEN

PLAN OF ADMINISTRATION FOR

PURCHASED POWER ADJUSTMENT MECHANISM

I. GENERAL DESCRIPTION.

This document is the Plan of Administration ("POA") for the Purchased Power Adjustment Mechanism ("PPAM") for Liberty Utilities (LITCHFIELD PARK Water & Sewer) Corp. The PPAM allows Liberty LITCHFIELD PARK to pass through to its customers the increase or decrease in purchased power costs that result from a rate change for any Commission-regulated electric service provider supplying retail electric service to the Company.

II. PPAM RELATED FILINGS.

A. Within 60 days of the effective date of a Commission Decision authorizing a rate change in the approved tariffs for any Commission-regulated electric service provider supplying retail electric service to the Company, the Company shall file with Docket Control an analysis of the actual impact on the energy portion of the Company's electric service costs.

B. The Company will provide the Commission with spreadsheets detailing exactly how the Company's purchased power expenses were calculated in the time period prior to a change in the rate that the Company must pay for purchased power. These calculations will include basic service charges and rate and volume figures. That is, the Company will break down its total purchased power bill into the amount due to fixed fees, volume of electricity used, and the rates paid per unit of electricity. For the period following the rate change, the Company will provide the same information, then compare the two periods, isolating any change in purchased power cost that is due exclusively to a rate change. The specific intent is to show exactly how much of any increase or decrease is due to changes in rates beyond the Company's control and how much is due to a change in the amount of power that the Company consumes. The Company will only recover increases or refund decreases that are due to changes in rates.

C. All revised schedules filed with the Commission pursuant to the provisions of this PPAM will be accompanied by documentation prepared by the Company in a format approved by Utilities Division Staff of the Commission and will contain sufficient detail to enable the Commission to verify accuracy of the Company's calculations.

D. The surcharges will not become effective until approved by the Commission.

E. The Company will file annually with the Commission a report detailing the Company's purchased power costs and any conservation or power-shifting measures employed by the Company.

F. The Company shall provide notice (in a form acceptable to Staff) of the rate increases to customers with the bill where the rate increase first appears.

Applies to all service areas

PART ~~FOURTEEN~~THIRTEEN

PLAN OF ADMINISTRATION FOR

PURCHASED POWER ADJUSTMENT MECHANISM

III. APPLICATION TO WATER AND WASTEWATER CUSTOMERS.

A. The increase or decrease in purchased power costs that are due to changes in rates at the Company's water facilities will be allocated on a per capita basis.

B. See the following example for water customers:

Test Year	
Purchased Power Rate	**$0.0800**
Kilowatt Hours Used	1,250,000
Purchased Power Expense	$100,000

→

Current Year	
Purchased Power Rate	**$0.1000**
Kilowatt Hours Used	1,250,000
Purchased Power Expense	$125,000

Pass Through Calculation	
Current Year Purchased Power Expense	$125,000
Test Year Purchased Power Expense	$100,000
Increase in Purchased Power Expense Due to Rate Increase	$25,000

PPAM Charge on Sample Customer Bill	
Increase in Purchased Power Expense Due to Rate Increase	$25,000
Number of Water Customers	20,000
PPAM Charge on Sample Customer Bill	$1.25

C. See the following example for wastewater customers:

Test Year	
Purchased Power Rate	**$0.0800**
Kilowatt Hours Used	1,250,000
Purchased Power Expense	$100,000

→

Current Year	
Purchased Power Rate	**$0.1000**
Kilowatt Hours Used	1,250,000
Purchased Power Expense	$125,000

Pass Through Calculation	
Current Year Purchased Power Expense	$125,000
Test Year Purchased Power Expense	$100,000
Increase in Purchased Power Expense Due to Rate Increase	$25,000

PPAM Charge on Sample Customer Bill	
Increase in Purchased Power Expense Due to Rate Increase	$25,000
Number of Wastewater Customers	20,000
PPAM Charge on Sample Customer Bill	$1.25

Applies to all service areas

PART ~~FIFTEEN~~FOURTEEN

PLAN OF ADMINISTRATION FOR

PROPERTY TAX ADJUSTMENT MECHANISM

I. GENERAL DESCRIPTION.

This document is the Plan of Administration ("POA") for the Property Tax Adjustment Mechanism ("PTAM") for Liberty Utilities (LITCHFIELD PARK Water & Sewer) Corp. The PTAM allows Liberty LITCHFIELD PARK to pass through to its water and wastewater customers the increase or decrease in property taxes that results from a change in the applicable assessment ratio and/or property tax rates.

II. PTAM RELATED FILINGS.

A. Within 60 days of the effective date of a change in the assessment ratio and/or property tax rates applicable to the Company, the Company shall file with Docket Control an analysis of the actual impact on the Company's property tax expenses.

B. The Company will provide the Commission with spreadsheets detailing exactly how the Company's property tax expenses were calculated in the time period prior to a change in the assessment ratio and/or property tax rate that affects the Company's property tax expenses. These calculations will include the assessment ratio, the property tax rates, and the value of the property that was taxed. For the period following the change(s), the Company will provide the same information, then compare the two periods, isolating any change in property tax expense that is due exclusively to changes in the assessment ratio and/or property tax rates. The specific intent is to show exactly how much of any increase or decrease in property tax expense is due to changes in the assessment ratio and tax rates beyond the Company's control and how much is due to changes in the value of the property the Company owns. The Company will only recover increases or refund decreases that are due to changes in the assessment ratio and tax rates.

C. All revised schedules filed with the Commission pursuant to the provisions of this PTAM will be accompanied by documentation prepared by the Company in a format approved by Utilities Division Staff of the Commission and will contain sufficient detail to enable the Commission to verify accuracy of the Company's calculations.

D. The surcharges will not become effective until approved by the Commission.

E. The Company will file annually with the Commission a report detailing the Company's property tax expenses.

F. The Company shall provide notice (in a form acceptable to Staff) of the rate increases to customers with the bill where the rate increase first appears.

Applies to all service areas

PART ~~FIFTEEN~~FOURTEEN

PLAN OF ADMINISTRATION FOR

PROPERTY TAX ADJUSTMENT MECHANISM

III. APPLICATION TO WATER CUSTOMERS.

A. The increase or decrease in property tax expenses that are due to changes in the assessment ratio and/or property tax rates at the Company's facilities will be allocated on a per capita basis.

B. See the examples on the next page:

Applies to all service areas

PART ~~FIFTEEN~~FOURTEEN

PLAN OF ADMINISTRATION FOR

PROPERTY TAX ADJUSTMENT MECHANISM

Change in Assessment Ratio Example

Test Year			***Current Year***	
Assessment Ratio	**20.00%**	→	**Assessment Ratio**	**21.00%**
Property Full Cash Value	$10,000,000		Property Full Cash Value	$10,000,000
Assessed Valuation	$2,000,000		Assessed Valuation	$2,100,000

Change in Assessed Valuation	
Current Year Assessed Valuation	$2,100,000
Test Year Assessed Valuation	$2,000,000
Increase in Assessed Valuation Due to Increase in Assessment Ratio	$100,000

Test Year		***Current Year***	
Total Property Tax Rate	10.00%	Total Property Tax Rate	10.00%
Assessed Valuation	$2,000,000	Assessed Valuation	$2,100,000
Property Tax Expense	$200,000	Property Tax Expense	$210,000

PTAM Charge on Sample Customer Bill	
Increase in Property Tax Expense Due to Increase in Assessment Ratio	$10,000
Number of WATER or WASTEWATER Customers	20,000
PTAM Charge on Sample Customer Bill	$0.50

Change in Total Property Tax Rate Example

Test Year			***Current Year***	
Total Property Tax Rate	**10.00%**	→	**Total Property Tax Rate**	**11.00%**
Assessed Valuation	$2,000,000		Assessed Valuation	$2,000,000
Property Tax Expense	$200,000		Property Tax Expense	$220,000

Pass Through Calculation	
Current Year Property Tax Expense	$220,000
Test Year Property Tax Expense	$200,000
Increase in Property Tax Expense Due to Rate Increase	$20,000

PTAM Charge on Sample Customer Bill	
Increase in Property Tax Expense Due to Rate Increase	$20,000
Number of WATER or WASTEWATER Customers	20,000
PTAM Charge on Sample Customer Bill	$1.00

Applies to all **WASTEWATER** service areas

PART SIXTEEN
INDUSTRIAL PRETREATMENT PROGRAM AND TARIFF

ADEQ Public Water System:

ADEQ Public Water System Number: 07-046

SECTION 1

1.0 INTRODUCTION

To control the discharge of pollutants to the Nation's waters, the Clean Water Act (CWA) requires the Environmental Protection Agency (EPA) to promulgate regulations related to discharges. Discharges from non-domestic dischargers can impact the operations of Water Reclamation Facilities (WRFs) and Publicly Owned Treatment Works (POTWs) as the pollutants can pass through or interfere with the operations of the plants, threaten worker's health and safety, or contaminate sludges. The WRFs and POTWs are designed to treat domestic sewage. The non-domestic discharges are regulated by the National Pretreatment Program. Industrial and commercial dischargers (known as IUs) are required to obtain permits, or other control mechanisms to discharge wastewater to the POTW/WRF under the National Pretreatment Program. EPA promulgated the General Pretreatment Regulations (Title 40 Code of Federal Regulations (CFR) Section 403), which defines the National Pretreatment Program. The Arizona Administrative Code (AAC R18-9-A905(A)(8)(b)) incorporates the General Pretreatment Program/Regulations.

Liberty Utilities (Litchfield Park Water & Sewer) Corp. (hereinafter referred to as Liberty Utilities) operates the Palm Valley Water Reclamation Facility (PVWRF) located at McDowell Road and Litchfield Park Road and the Sarival Water Reclamation Facility (SWRF) located at Sarival Avenue and McDowell Road. PVWRF can treat up to 6.9 million gallons per day (MGD) of wastewater and the SWRF can treat up to 4.0 million gallons per day (MGD), collectively "Facilities." The Facilities are owned and operated by Liberty Utilities and serve the Litchfield Park and Goodyear communities. Liberty Utilities can regulate discharges from IUs for potential contaminants of concern to minimize impact on its POTW/WRF under Liberty Utilities' Industrial Pretreatment Program Tariff.

The discharge of toxic and other harmful pollutants from IUs can be effectively controlled through a local pretreatment program that is based on these regulations, structured to address specific local concerns, and enforced through Liberty Utilities Industrial Pretreatment Program and Tariff.

Applies to all **WASTEWATER** service areas

PART SIXTEEN
INDUSTRIAL PRETREATMENT PROGRAM AND TARIFF

The objective of a Pretreatment Program (the General Pretreatment Regulations of the Clean Water Act (40 CFR, Part 403)) is to:

a. comply with the Liberty Utilities PVWRF and SWRF AZPDES discharge requirements.
b. protect the integrity of wastewater conveyance, treatment, reuse and disposal infrastructure.
c. reduce the level of pollutants discharged by industry and other non-domestic wastewater sources into municipal sewer systems.
d. reduce the amount of pollutants released into the environment through wastewater.

The objectives of the Pretreatment Program are:

- to promote consistent application of pretreatment requirements among customers and to maintain the integrity of Liberty Utilities - PVWRF and SWRF so that the continuity of safe and reliable service to all customers and the protection of the environment are preserved.
- to prevent the introduction of pollutants into the POTW/WRF that will interfere with its operation.
- to prevent the introduction of inadequately treated pollutants into the collection systems that will pass through the POTW/WRF into the receiving waters, the atmosphere, and landfills, or otherwise be incompatible with the POTW/WRF.
- to protect both POTW/WRF personnel who may be affected by wastewater and sludge in the course of their employment and the general public.
- to promote reuse and recycling of industrial wastewater and sludge from the POTW/WRF.
- to provide fees for the apportionment of the costs of operation, maintenance, and improvement of the POTW/WRF.
- to enable Liberty Utilities to comply with its AZPDES conditions, sludge use and disposal requirements, and any other Federal or State laws to which the POTW/WRF is subject.

The Pretreatment Program and tariff document (collectively, Tariff) shall apply to all IUs Liberty Utilities receiving service from Liberty Utilities. The Pretreatment Program sets forth uniform requirements for industrial discharges into the WRFs, and also establishes a separate industrial discharge permit requirement IUs. The Pretreatment Program includes the issuance of individual wastewater discharge permits; provides monitoring, compliance, and enforcement activities; establishes administrative review procedures; requires IUs reporting; and provides for the setting of fees for the apportionment of costs resulting from the program established herein.

Applies to all **WASTEWATER** service areas

PART SIXTEEN
INDUSTRIAL PRETREATMENT PROGRAM AND TARIFF

1.1 ADMINISTRATION

Except as otherwise provided herein, Liberty Utilities shall administer, implement, and enforce the provisions of this Pretreatment Program. Any powers granted to, or duties imposed upon, Liberty Utilities may be delegated by Liberty Utilities to a duly authorized employee of Liberty Utilities.

1.2 ABBREVIATIONS

The following abbreviations, when used in this document shall have the designated meanings:

AAC	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
APP	Aquifer Protection Permit
ARS	Arizona Revised Statute
AZPDES	Arizona Pollutant Discharge Elimination System
APP	Arizona Aquifer Protection Permit
AZPDES	Arizona Pollutant Discharge Elimination System
BOD	Biochemical Oxygen Demand (mg/l, typically 5-day equivalent)
BMP	Best Management Practice
BMR	Baseline Monitoring Report
CFR	Code of Federal Regulations
CIU	Categorical Industrial User
COD	Chemical Oxygen Demand (mg/l)
COP	Code of Practice
EPA	U.S. Environmental Protection Agency
GPD	Gallons per day
IU	Industrial User
mg/L	milligrams per liter
NPDES	National Pollutant Discharge Elimination System
POTW	Publicly Owned Treatment Works
RCRA	Resource Conservation and Recovery Act
SIU	Significant Industrial User
SNC	Significant Noncompliance
TSS	Total Suspended Solids (mg/l)
TRC	Technical Review Criteria
U.S.C.	United States Code
WRF	Water Reclamation Facility
U.S.C.	United States Code

Applies to all **WASTEWATER** service areas

PART SIXTEEN
INDUSTRIAL PRETREATMENT PROGRAM AND TARIFF

1.3 APPLICABILITY

These Pretreatment Standards and Program requirements apply to any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes, and other conveyances of wastewater to the Facilities.

The Pretreatment Program is applicable as follows:

1. IUs or users subject to the National Categorical Pretreatment Standards. Any IU, as defined herein, or user subject to the National Categorical Pretreatment Standards (40 CFR Chapter I, Subchapter N - Effluent Guidelines and Standards) shall meet the Pretreatment Standards and the requirements of the Pretreatment Program including applicable categorical standards.

2. All Non-Residential Dischargers. Any Non-Residential Discharger irrespective of their designation as an IU, shall meet the Pretreatment Standards as described herein for:
    a) Specific Limitations (Section 3.0).
    b) Local Regulatory Limits based on concentrations and daily flow.
        i. Prohibited Waste (Section 3.1)
        ii. Restricted Waste (Section 3.2)
        iii. Specified Waste (Section 3.2)

3. This application extends to Non-Residential Dischargers, IUs, users subject to the National Categorical Pretreatment Standards and Residential Dischargers who operate practices, or systems from a residence, that changes the constituent nature of the wastewater produced by the customer.

4. This application extends to PART SIXTEEN of the Tariff 'Code of Practice'.

1.4 DEFINITIONS

A. Act or "the Act." The Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. section 1251 et seq.

B. Approval Authority. Arizona Department of Environmental Quality, Arizona. *See* Arizona Administrative Code R18-9-A905(A)(8).

Applies to all **WASTEWATER** service areas

PART FIFTEEN
INDUSTRIAL PRETREATMENT PROGRAM AND TARIFF

C. Authorized or Duly Authorized Representative of the IU.

1. If the IU is a corporation:
   a. The president, secretary, treasurer, or a vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation.

   b. The manager of one or more manufacturing, production, or operating facilities, provided the manager is (i) authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiate and direct other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; (ii) can ensure that the necessary systems are established or actions taken to gather complete and accurate information for individual wastewater discharge permit requirements; and (iii) where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

2. If the IU is a partnership or sole proprietorship: a general partner or proprietor, respectively.

3. If the IU is a Federal, State, or local governmental facility: a director or highest official appointed or designated to oversee the operation and performance of the activities of the government facility, or their designee.

4. The individuals described in paragraphs 1 through 3, above, may designate a Duly Authorized Representative if the authorization is in writing, the authorization specifies the individual or position responsible for the overall operation of the facility from which the discharge originates or having overall responsibility for environmental matters for the company, and the written authorization is submitted to Liberty Utilities.

D. Biochemical Oxygen Demand or BOD. The quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedures for five (5) days at 20 degrees centigrade, usually expressed as a concentration (e.g., mg/l).

E. Best Management Practices (or BMPs). Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the prohibitions listed in 40 CFR 403.5(a)(1) and (b) and/or the Arizona Administrative Code (AAC) R18-9-A905(A)(8)(b). BMPs include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.

Applies to all **WASTEWATER** service areas

PART FIFTEEN
INDUSTRIAL PRETREATMENT PROGRAM AND TARIFF

F. Categorical Pretreatment Standard or Categorical Standard. Any regulation containing pollutant discharge limits promulgated by EPA in accordance with sections 307(b) and (c) of the Act (33 U.S.C. section 1317) that apply to a specific category of IUs and that appear in 40 CFR Chapter I, Subchapter N, Parts 405-471e.

G. Categorical Industrial User. An IU subject to a categorical Pretreatment Standard or Categorical Standard.

H. Liberty Utilities Manager. A duly authorized representative of Liberty Utilities.

I. Liberty Utilities Organizational Structure. Liberty Utilities, through a duly authorized representative, Liberty Utilities shall administer this Pretreatment Program and Tariff.

J. Chemical Oxygen Demand or COD. A measure of the oxygen (as chemical) required to oxidize all compounds, both organic and inorganic, in water.

K. Control Authority. Liberty Utilities (Liberty Utilities).

L. See BMPs.

M. Daily Maximum. The arithmetic average of all effluent samples for a pollutant collected during a calendar day. Total mass is a product of concentrations and daily total flow.

N. Daily Maximum Limit. The maximum allowable discharge limit of a pollutant during a calendar day. Where Daily Maximum Limits are expressed in units of mass, the daily discharge is the total mass discharged over the course of the day. Where Daily Maximum Limits are expressed in terms of a concentration, the daily discharge is the arithmetic average measurement of the pollutant concentration derived from all measurements taken that day

O. Environmental Protection Agency or EPA. The U.S. Environmental Protection Agency or, where appropriate, the Regional Water Management Division Director, the Regional Administrator, or other duly authorized official of said agency.

P. Existing Source. Any source of discharge that is not a "New Source.".

Q. Grab Sample. A sample that is taken from a waste stream without regard to the flow in the waste stream and over a period not to exceed fifteen (15) minutes.

R. Industrial User (IU). A customer who generates a source of Indirect Discharge (40 CFR § 403.3).

Applies to all **WASTEWATER** service areas

PART FIFTEEN
INDUSTRIAL PRETREATMENT PROGRAM AND TARIFF

S. Indirect Discharge or Discharge. The introduction of pollutants into the POTW/WRF from any nondomestic source.

T. Instantaneous Limit. The maximum concentration of a pollutant allowed to be discharged at any time, determined from the analysis of any discrete or composited sample collected independent of the industrial flow rate and the duration of the sampling event.

U. Interference. A discharge that, alone or in conjunction with a discharge or discharges from other sources, inhibits or disrupts the POTW/WRF, its treatment processes or operations or its sludge processes, use or disposal; and therefore, is a cause of a violation of Liberty Utilities's AZPDES permit or of the prevention of sewage sludge use or disposal in compliance with any of the following statutory/regulatory provisions or permits issued thereunder, or any more stringent State or local regulations: Section 405 of the Clean Water Act; the Solid Waste Disposal Act, including Title II commonly referred to as the Resource Conservation and Recovery Act (RCRA); any State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the Solid Waste Disposal Act; the Clean Air Act; the Toxic Substances Control Act; and the Marine Protection, Research, and Sanctuaries Act.

V. Local Regulatory Limit. Specific discharge limits developed and enforced by Liberty Utilities upon industrial, or commercial facilities, to implement the general and specific discharge prohibitions listed in 40 CFR 403.5(a)(1) and (b).

W. Medical Waste. Isolation wastes, infectious agents, human blood and blood products, pathological wastes, sharps, body parts, contaminated bedding, surgical wastes, potentially contaminated laboratory wastes, and dialysis wastes.

X. Monthly Average. The sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.

Y. Monthly Average Limit. The highest allowable of "daily maximum discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.

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Z. New Source

1. Any building, structure, facility, or installation from which there is (or may be) a discharge of pollutants, the construction of which commenced after the publication of proposed Pretreatment Standards under section 307(c) of the Act that will be applicable to such source if such Standards are thereafter promulgated in accordance with that section, provided that:

    a) The building, structure, facility, or installation is constructed at a site at which no other source is located; or
    b) The building, structure, facility, or installation totally replaces the process or production equipment that causes the discharge of pollutants at an Existing Source; or
    c) The production or wastewater generating processes of the building, structure, facility, or installation are substantially independent of an Existing Source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the Existing Source, should be considered.

2. Construction on a site at which an Existing Source is located and results in a modification rather than a New Source if the construction does not create a new building, structure, facility, or installation meeting the criteria of Section (1)(b) or (c) above but otherwise alters, replaces, or adds to existing process or production equipment.

3. Construction of a New Source as defined under this paragraph has commenced if the owner or operator has:

    a) Begun, or caused to begin, as part of a continuous onsite construction program:

        i. any placement, assembly, or installation of facilities or equipment; or
        ii. significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment.

    b) Entered a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design

studies do not constitute a contractual obligation under this paragraph.

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AA. Noncontact Cooling Water. Water used for cooling that does not come into direct contact with any raw material, intermediate product, waste product, or finished product.

BA. Non-Residential Discharger. A customer discharging into Liberty Utilities that is engaged in any activity that changes the constituent nature of the wastewater from typical household wastewater.

CA. Pass Through. A discharge which exits the POTW/WRF into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of Liberty Utilities's AZPDES permit, including an increase in the magnitude or duration of a violation.

DA. Person. Any individual, partnership, corporation, firm, company, corporation, association, joint stock company, trust, estate, governmental entity, or any other legal entity; or their legal representatives, agents, or assigns. This definition includes all Federal, State, and local governmental entities.

EA. pH. A measure of the acidity, or alkalinity, of a solution, expressed in standard units.

FA. Pollutant. Dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, medical waste, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, municipal, agricultural and industrial wastes, and certain characteristics of wastewater (e.g., pH, temperature, TSS, turbidity, color, BOD, COD, toxicity, or odor).

GA. Pretreatment. The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to, or in lieu of, introducing such pollutants into the POTW/WRF. This reduction or alteration can be obtained by physical, chemical, or biological processes; by process changes; or by other means, except by diluting the concentration of the pollutants unless allowed by an applicable Pretreatment Standard.

HA. Pretreatment Requirements. Any substantive, or procedural requirement, related to pretreatment imposed on an IU, other than a Pretreatment Standard.

IA. Pretreatment Standards or Pretreatment Requirements. Prohibited discharge standards, categorical Pretreatment Standards, and Local Regulatory Limits.

JA. Prohibited Discharge Standards or Prohibited Discharges. Absolute prohibitions against the discharge of certain substances. These prohibitions appear in Sections 3.1 and 14.2 and of this Pretreatment Program.

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KA. Publicly Owned Treatment Works (POTW). A treatment works, as defined by section 212 of the Act (33 U.S.C. section 1292), which is owned by a state or municipality (as defined by Section 502(4) of the Clean Water Act). This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes, and other conveyances only if they convey wastewater to a POTW. The term also means the municipality as defined in Section 502(4) of the Clean Water Act, which has jurisdiction over the Indirect Discharges to and the discharges from such a wastewater treatment plant.

LA. Septic Tank Waste. Any sewage from holding tanks such as vessels, chemical toilets, campers, trailers, and septic tanks

MA. Sewage. Human excrement and gray water (household showers, dishwashing operations, etc.).

NA. Significant Industrial User (SIU).

1. An IU subject to categorical Pretreatment Standards

2. An IU that:

a. Discharges an average of twenty-five thousand (25,000) gpd, or more of process wastewater, to the POTW/WRF (excluding sanitary, noncontact cooling and boiler blowdown wastewater);

b. Contributes a process waste stream which makes up five (5) percent or more of the average dry weather hydraulic, or organic (BOD, ammonia, and/or total nitrogen) capacity of the POTW/WRF; or

c. Is designated as such by Liberty Utilities on the basis that it has a reasonable potential for adversely affecting the POTW's/WRF's operations, or for violating any Pretreatment Standard, or Requirement.

OA. Sewage. Human excrement and gray water (household showers, dishwashing operations, etc.).

PA. Significant Industrial User (SIU).

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3. An IU subject to categorical Pretreatment Standards

4. An IU that:

   d. Discharges an average of twenty-five thousand (25,000) gpd, or more of process wastewater, to the POTW/WRF (excluding sanitary, noncontact cooling and boiler blowdown wastewater);

   e. Contributes a process waste stream which makes up five (5) percent or more of the average dry weather hydraulic, or organic (BOD, ammonia, and/or total nitrogen) capacity of the POTW/WRF; or

   f. Is designated as such by Liberty Utilities on the basis that it has a reasonable potential for adversely affecting the POTW's/WRF's operations, or for violating any Pretreatment Standard, or Requirement.

5. Liberty Utilities may determine that an IU is subject to categorical Pretreatment Standards, hereinafter referred to as a Non-Significant Categorical IU, rather than a SIU on a finding that the IU never discharges more than 100 gallons per day (gpd) of total categorical wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater, unless specifically included in the Pretreatment Standard) and the following conditions are met:

   a. The IU, prior to Liberty Utilities' finding, has consistently complied with all applicable categorical Pretreatment Standards and Requirements.

   b. The IU annually submits the certification statement required in Section 7.7.14, together with any additional information necessary to support the certification statement.

   c. The IU never discharges any untreated concentrated wastewater.

6. Upon a finding that an IU meeting the criteria in Subsection (2) of this part has no reasonable potential for adversely affecting the POTW's/WRF's operation or for violating any Pretreatment Standard or Requirement, Liberty Utilities may at any time, on its own initiative or in response to a petition received from an IU, and in accordance with procedures in 40 CFR 403.8(f)(6), determine that such IU should not be considered a SIU.

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QA. Slug Load or Slug Discharge. Any discharge at a flow rate or concentration could cause a violation of the prohibited discharge standards in Section 14.2 and 15.0 of the Pretreatment Program. A Slug Discharge is any Discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch Discharge, which has a reasonable potential to cause Interference or Pass Through, or in any other way violate the POTW's/WRF's regulations, Local Limits or Permit conditions.

RA. Storm Water: Any flow occurring during, or following any form of natural precipitation, and resulting from such precipitation, including snowmelt.

SA. Total Suspended Solids or Suspended Solids. The total suspended matter that floats on the surface of, or is suspended in, water, wastewater, or other liquid, and that is removable by laboratory filtering.

TA. User or Industrial User. A source of indirect discharge.

UA. Wastewater. Liquid and water-carried industrial wastes and sewage from residential dwellings, commercial buildings, industrial and manufacturing facilities, and institutions, whether treated or untreated, which are contributed to the POTWWRF.

VA. Wastewater Treatment Plant or Treatment Plant. That portion of the POTW/WRF which is designed to provide treatment of municipal sewage and industrial waste.

WA. Water Reclamation Facility (WRF). A treatment works, as defined by section 212 of the Act (33 U.S.C. section 1292), which is owned by Liberty Utilities. This definition includes any devices or systems used in the collection, storage, treatment, recycling, and reclamation of sewage, or industrial wastes, of a liquid nature and any conveyances, which convey wastewater to a treatment plant.

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SECTION 2

2.0 AUTHORITY

Pretreatment Requirements apply to POTWs/WRFs

Regulations under the Federal Water Pollution Control Act (also known as the Clean Water Act), require POTWs/WRFs to develop a pretreatment program for any POTW/WRF (or combination of POTWs operated by the same authority) with a total design flow greater than 5 million gallons per day (MGD) within a single collection system and receive wastewater from Industrial Users pollutants which Pass Through or may Interfere with the operation of the WRF, or are otherwise subject to Pretreatment Standards.

Liberty Utilities is a Water Management Utility Under Section 502(4) of the Clean Water Act

Section 208 of the Clean Water Act devolves regional water quality management Designated Planning Agencies, or DPAs. In this case, the DPA is the Maricopa Association of Governments (MAG), and MAG maintains a Section 208 Area-wide Water Quality Management Plan (the MAG 208 Plan) detailing the management of wastewater, recycled water and biosolids within Maricopa County.

DPAs engage other agencies for the management and execution of the short- and long-term strategies of the DPA. These agencies are Designated Management Agencies (DMAs) and Wastewater Management Utilities (WMUs). While a DMA and a WMU perform the same functions, they are organizationally different: DMAs are governmental entities; WMUs are public service corporations.

A DMA is defined as "a local government subdivision that is certified by ADEQ as having adequate resources and capabilities to design, operate, and maintain wastewater facilities and the desire to implement portions of the MAG 208 Plan." A WMU is "a privately-owned centralized wastewater treatment facility and a collection system that provides services to multiple properties. To be a WMU, ADEQ must certify that the entity has the resources, capability, and desire to function as a DMA." In addition, to be established as a WMU, the private entity must provide a 20-year future growth plan and coordinate with neighboring DMAs and other WMUs that will implement other strategies in the MAG 208 Plan.

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Liberty Utilities – Responsibilities as a WMU

Pursuant to Section 208(c)(2) of the Clean Water Act, a DMA or designated WMU must be able to:

- Carry out appropriate portions of a regional 208 Plan.
- Manage effectively waste treatment facilities and related facilities in conformance with the 208 Plan.
- Design, construct, operate, and maintain new and existing wastewater treatment facilities, directly or by contract, as required by any plan established to fulfill Section 208 planning requirements.
- Accept and utilize grants or other funds from any source for waste treatment management purposes.
- Raise revenues, including assessment of waste treatment changes.
- Incur short-term and long-term indebtedness.
- Assure in the implementation of the regional 208 Plan that each participating community pays its proportionate share of treatment costs.
- Refuse to receive any waste from any municipality or subdivision which does not comply with any provisions of an approved plan established to fulfill Section 208 planning requirements.
- Accept industrial waste for treatment.

Liberty Utilities has an approved 208 Plan Amendments, approved by the applicable governmental authority for each of the Liberty Utilities.

Pretreatment Requirements apply to Non-Domestic Sources of Wastewater

Under 40 CFR 403.1(b), pretreatment requirements apply to:

(1) Pollutants from non-domestic sources covered by Pretreatment Standards which are indirectly discharged into or transported by truck or rail or otherwise introduced into POTW/WRF as defined in 40 CFR § 403.3.

(2) POTW/WRF which receives wastewater from sources subject to National Pretreatment Standards.

(3) States which have or are applying for National Pollutant Discharge Elimination System (NPDES) programs approved in accordance with section 402 of the Act.

(4) Any new or existing source subject to Pretreatment Standards. National Pretreatment Standards do not apply to sources which Discharge to a sewer which is not connected to a POTW/WRF.

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In Arizona, the requirements of the federal pretreatment standards have been incorporated by reference as AAC R18-9-A905(A)(8)(b).

The Pretreatment Standards and Pretreatment Program are Approved ACC Tariffs

Liberty Utilities - Pretreatment Standards and the Pretreatment Program have been adopted in the Corporation's Terms and Conditions of Service and are approved Tariffs.

SECTION 3

3.0 PRETREATMENT STANDARDS

Liberty Utilities enforces pretreatment standards by limiting the discharges as described below and will review pretreatment prior to approval of any industrial non-domestic discharge into its wastewater systems.

A. **General Prohibitions.** No IU or non-residential discharger shall introduce or cause to be introduced into the POTW/WRF any pollutant or wastewater which causes Pass Through or Interference. These general prohibitions apply to all IUs and non-residential dischargers of the POTW/WRF whether or not they are subject to categorical Pretreatment Standards or any other National, State, or local Pretreatment Standards or Requirement.

In addition to those pollutants classified as Prohibited Waste (Section 3.1), the following are prohibited from discharge into the Liberty Utilities POTW/WRF:

- § Discharge of any substances which will inhibit the operation or performance of the Liberty Utilities - PVWRF and SWRF or pass through the system and cause Liberty Utilities - PVWRF and SWRF to violate any requirements of any operating or discharge permit issued by the county, state or federal government, or any WMU discharge permit limits.

- § Discharge of any substance which may cause the Liberty Utilities - PVWRF and SWRF reclaimed water or treatment residues, biosolids or scum to be unsuitable for reclamation, reuse, or disposal or which may interfere with such reclamation, reuse, or disposal processes.

- § Discharge of any wastewater which causes the Liberty Utilities - PVWRF and SWRF effluent to exhibit toxicity to test organisms in a standard biological toxicity test as defined by local, state, or federal requirements, or which the

Company determines would be toxic to or impede the treatment capabilities of the biological processes in the Liberty Utilities - PVWRF and SWRF

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§ Discharge of any substance which may cause the Liberty Utilities - PVWRF and SWRF to be in a noncompliance with biosolids use or disposal criteria, guidelines or regulations developed under Section 405 of the Clean Water Act, any criteria, guidelines or regulations affecting biosolids uses or disposal developed pursuant to the Solid Waste Disposal Act, the Clean Air Act, the Toxic Substances Control Act or state or local standards applicable to the biosolids management method adopted by Liberty Utilities and/or local and state authorities.

§ Discharge of any wastewater containing hazardous substances, toxic, conventional, or non-conventional pollutants in sufficient quantity, either singly or by interaction, which could injure or interfere with any wastewater treatment process, constitutes a health or safety hazard to humans or animals, or exceed the limitations set forth in the Local Regulatory Limits (Section 4.4) or the categorical pretreatment standards appropriate for the specific industrial user is prohibited. Hazardous substances, toxic, conventional or non-conventional pollutants will include, but not be limited to, any pollutant identified in 40 CFR Part 122, Appendix D - Tables II, III, IV, and V (AZPDES Permit Limits that are applicable), or substances alone or in combination with other constituents that are determined to be toxic by the toxicity test as defined in 40 CFR Part 136 for wastewater or the toxicity characteristic leaching procedure test as defined in 40 CFR Part 261 for biosolids.

B. Local Regulatory Limits

No industrial user of the Liberty Utilities - PVWRF and SWRF shall discharge wastes or wastewaters included in this Section and having concentrations of pollutants higher than those listed in this Section.

The Local Regulatory Limits apply at the point where the wastewater is discharged to the POTW/WRF.

All concentrations for metallic substances are for total metal unless indicated otherwise. Liberty Utilities may impose mass limitations in addition to the concentration-based limitations herein.

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3.1 PROHIBITED WASTE

Prohibited Waste means material or waste streams that shall not be discharged to any of the collection systems operated by Liberty Utilities – PVWRF and SWRF.

This includes any waste, other than sanitary waste, which by itself or in combination with another substance either:

1. constitutes or may constitute a significant health or safety hazard to any person;
2. may interfere with any sewer or sewage treatment process;
3. may cause a discharge from a sewage facility to contravene any requirements of or under any ADEQ APP, AZPDES discharge permit, Reuse permit, direct or indirect potable water reuse, or any other act, or any other law or regulation governing the quality of the discharge, or may cause the discharge to result in a hazard to people, animals, property or vegetation; or
4. may cause biosolids to fail criteria for beneficial land application

Prohibited Wastes include;

Non-Sanitary Wastewater

Discharge of storm water, surface water, ground water, artesian well water, roof runoff, or subsurface drainage.

Air Contaminant Waste

Any waste other than sanitary waste which, by itself or in combination with another substance, is capable of creating, causing or introducing an air contaminant outside any sewer or sewage facility or is capable of creating, causing or introducing an air contaminant within any sewer or sewage facility which would prevent safe entry by authorized personnel.

Flammable or Explosive Waste or High Temperature Wastes

A high temperature waste is any waste which, by itself or in combination with another substance, will create heat in amounts which will interfere with the operation and maintenance of a sewer or sewage facility or with the treatment of waste in a sewage facility.

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Discharge of any waste streams with a closed cup flash point of less than 140 degrees Fahrenheit (60 degrees Celsius) using the test methods specified in federal regulations, 40 CFR § 261.21.

Wastewater having a temperature greater than 100 degrees F, or which will inhibit biological activity in the POTW/WRF resulting in interference.

In addition, any waste which, by itself or in combination with another substance, is capable of causing or contributing to an explosion or supporting combustion in any sewer or sewage facility including, but not limited to gasoline, naphtha, propane, diesel, fuel oil, kerosene or alcohol.

Discharge of any liquids, solids or gases that by reason of their nature or quantity are, or may be, sufficient either alone or by interaction to cause fire or explosion or be injurious in any other way to either:

- the operation of the Liberty Utilities wastewater collection system or the Liberty Utilities – PVWRF and/or SWRF.
- the integrity of the sewer system or cause a danger to the public health or safety.

Reactive Waste

Any waste which, by itself, or in combination with another substance, is capable of causing or contributing to an undesirable physical or chemical reaction when introduced to sanitary sewer systems, including endothermic reactions, exothermic reactions, precipitation, etc.

Odorous Waste

Discharge of any noxious or malodorous liquids, gases or solids which, either singly or by interaction, can create a public nuisance or hazard to life or are sufficient to prevent entry into the sewers without specialized hazardous material protective equipment or clothing for sewer maintenance or repair.

pH Waste

Any non-domestic waste which, at the point of discharge into a sewer, has a pH lower than 5.5 or higher than 9.0, as determined by either a grab or a composite sample.

Slug Loads

Discharge of any slug load as defined in Sections 5.2, 14.2 and 15 of this Tariff including oxygen demanding pollutants (BOD, etc.), released in a single extraordinary discharge episode of such volume or strength as to cause interference to Liberty Utilities – PVWRF or SWRF.

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Obstructive Waste

Discharge of any solid or viscous substances that will or may cause obstruction to the flow in a sewer or other interference with the operation of the wastewater system.

This includes any waste which, by itself or in combination with another substance, is capable of obstructing the flow of, or interfering with, the operation or performance of any sewer or sewage facility including, but not limited to: earth, sand, sweepings, gardening or agricultural waste, ash, chemicals, paint, metal, glass, sharps, rags, cloth, tar, asphalt, cement-based products, plastic, wood, waste portions of animals, fish or fowl, and solidified fat.

Corrosive Waste

Any waste with corrosive properties which, by itself or in combination with any other substance, may cause damage or hazard to any sewer or sewage facility or structure, interference with operations or which may prevent safe entry by authorized personnel.

Radioactive Waste

Discharge of any wastewater containing any radioactive wastes or isotopes of such half-life or concentration as to exceed limits established by the local, state or federal regulations.

Oily Waste

Discharge of any petroleum oil, non-biodegradable cutting oil or products of mineral oil origin that will cause Interference or Pass Through the Liberty Utilities – PVWRF or SWRF.

Biomedical Waste

Any of the following categories of biomedical waste: human or animal anatomical waste, animal waste, untreated microbiological waste, waste sharps and untreated human or animal blood and body fluids.

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Miscellaneous Prohibited Wastes

Any of the following wastes:

a. Seawater
b. Polychlorinated biphenyl compounds (PCBs)
c. chlorinated phenols
d. pesticides
e. tetrachloroethylene
f. 4,4' - DOE
g. 4,4' -DDT
h. Aldrin
i. BHC-Alpha
j. BHC-Gamma (Lindane)
k. Heptachlor
l. Heptachlor Epoxide
m. Per- and polyfluoroalkyl substances – known as PFAS

Pollutants which result in the presence of toxic gases, vapors, or fumes within the WRF/POTW in a quantity that may cause acute worker health and safety problems.

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3.2 RESTRICTED WASTE

Restricted waste means waste that may be permitted to be discharged to collection systems operated by Liberty Utilities but have specific criteria which must be met prior to that discharge.

These include:

Non-Residential Wastewater

Condensate, non-contact cooling water and industrial or commercial wastewater unless specifically authorized by the Liberty Utilities in the Pretreatment Program.

Food Waste

Any non-domestic waste from cooking and handling of food that, at the point of discharge into a sewer, contains particles larger than 0.5 centimeters in any dimension.

Trucked or Hauled Waste

Discharge of any trucked or hauled pollutants, unless the hauler has first obtained written approval from Liberty Utilities in accordance with the Pretreatment Program (Section 4.0).

Detergent Waste

Discharge of detergents, surface active agents, or other substances which might cause excessive foaming in the POTW/WRF.

Sludges & Residue

Sludges, screenings, and other residues from the pretreatment of industrial wastes or from the cleaning of interceptors or sewer collection systems.

Dyes and Coloring Material

Discharge of any substance with objectionable color not removed in the treatment process, such as, but not limited to, dye wastes and vegetable tanning solutions, where the dye is used by Liberty Utilities, or one or more of its agents, as a tracer. Discharge of portable toilet contents utilizing dyes is strictly prohibited.

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Petroleum Oil

Nonbiodegradable cutting oil, or products of mineral oil origin, in amounts that will cause Interference or Pass Through.

Other Pollutants

Other pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems.

3.3 State Pretreatment Standards

IUs must comply with AAC R18-9-A905(A)(8) – Effluent guidelines and standards.

3.4 Local Limits

Liberty Utilities is authorized to establish Local Limits pursuant to 40 CFR 403.5(c). Any waste which, at the point of discharge into a sewer, contains any contaminant at a concentration in excess of the limits set out Title 18, Chapter 4 of the Arizona Administrative Code, or as more specifically defined in the tables below. All concentrations are expressed as total concentrations which includes all forms of contaminants, whether dissolved or undissolved. The concentration limits apply to both grab and composite samples. Contaminant definitions and methods of analysis are outlined in standard methods.

A. The following pollutant limits are established to protect against Pass Through and Interference. No person shall discharge wastewater containing in excess of the following Daily Maximum Limits:

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CONVENTIONAL POLLUTANTS [mg/L]		
	Monthly Average	Daily Maximum
Biochemical Oxygen Demand (BOD)	350	525
Chemical Oxygen Demand (COD)	1000	1500
Ammonia	55	80
Total Nitrogen- as NO3	100	150
Oil and Grease'	64	96
Suspended Solids	350	525

ORGANIC CONTAMINANTS (Daily Maximum)	
Benzene	Reserved
Ethyl Benzene	Reserved
Toluene	Reserved
Xylenes	Reserved
Reserved	Reserved
Chloroform	Reserved
Total Oil and Grease (hydrocarbons)	96

ISSUED BY:
Moses Thompson, President
Liberty Utilities (LITCHFIELD PARK Water & Sewer) Corp.
14920 W Camelback Rd
Litchfield Park, AZ 85340
Decision No. XXXX

Perfluoroalkyl Substances (PFAS)	4 parts per trillion

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TRACE METALS	
PARAMETER	Daily Average Effluent Limitation (mg/L)
Antimony (Sb)	0.0048
Arsenic (As)	0.008
Beryllium (Be)	0.008
Cadmium (Cd)	0.012
Chloride (Cl)	Reserved
Chromium (Cr)	0.0238
Cobalt (Co)	Reserved
Copper (Cu)	Reserved
Cyanide (CN)	Reserved
Fluoride (F)	3.00
Iron (Fe)	Reserved
Lead (Pb)	0.13
Manganese (Mn)	Reserved
Mercury (Hg)	0.005
Molybdenum (Mo)	Reserved

Nitrate (NO3)	100

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Nickel (Ni)	0.242
Selenium (Se)	0.142
Silver (Ag)	Reserved
Sulfate (SO4)	Reserved
Sulfide (S)	N/A
Thallium (TI)	0.005
Zinc (Zn)	Reserved

The above limits apply at the point where the wastewater is discharged to the POTW/WRF. All concentrations for metallic substances are for total metal unless indicated otherwise. Liberty Utilities may impose mass limitations in addition to the concentration-based limitations above.

Liberty Utilities may accept certain pollutants which are compatible with the Liberty Utilities – PVWRF or SWRF treatment processes; however, the IU shall pay a surcharge, established based on quantity, to cover the costs of such treatment. Any surcharge shall be at cost.

3.5 Corporation Right of Revision

Liberty Utilities reserves the right to establish, by agreement or in individual wastewater discharge permits, more stringent Pretreatment Standards or Requirements on discharges to the POTW/WRF consistent with the purpose of this Tariff.

3.6 Dilution

No IU shall ever increase the use of process water, or in any way attempt to dilute a discharge, as a partial or complete substitute for adequate treatment to achieve compliance with a discharge limitation unless expressly authorized by an applicable Pretreatment Standard or Requirement. Liberty Utilities may impose mass limitations on IU who are using dilution to meet applicable Pretreatment Standards or Requirements, or in other cases when the imposition of mass limitations is appropriate.

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SECTION 4 - PRETREATMENT PROGRAM

This Pretreatment Program shall apply to all Non-Residential Dischargers, IUs, or users subject to the National Categorical Pretreatment Standards discharging to the Liberty Utilities – PVWRF and SWRF.

4.1 Administration

Except as otherwise provided herein, Liberty Utilities shall administer, implement, and enforce the provisions of the Pretreatment Program. Liberty Utilities may delegate some or all these duties to duly authorized Liberty Utilities employees.

4.2 National Categorical Pretreatment Standards

IUs must comply with the categorical Pretreatment Standards found in 40 CFR Chapter I, Subchapter N, Parts 405-471.

A. Where a categorical Pretreatment Standard is expressed only in terms of either the mass or the concentration of a pollutant in wastewater, Liberty Utilities may impose equivalent concentration or mass limits.

B. When the limits in a categorical Pretreatment Standard are expressed only in terms of mass of pollutant per unit of production, the Liberty Utilities may convert the limits to equivalent limitations expressed either as mass of pollutant discharged per day or effluent concentration for purposes of calculating effluent limitations applicable to individual IUs.

C. When wastewater subject to a categorical Pretreatment Standard is mixed with wastewater not regulated by the same Standard, Liberty Utilities shall impose an alternate limit in accordance with 40 CFR § 403.6(e).

D. A user may obtain a net/gross adjustment to a categorical pretreatment standard in accordance with 40 CFR § 403.15.

E. All users subject to a categorical pretreatment standard shall comply with all requirements of such standard and shall also comply with any limitations and prohibitions contained in this article. Where the same pollutant is limited by more than one pretreatment standard, the limitations which are more stringent shall prevail. Compliance with categorical pretreatment standards for existing sources shall be within the timeframe specified in the applicable categorical pretreatment standard. Compliance with categorical pretreatment standards for new sources shall be upon commencement of discharge.

F. Liberty Utilities may establish more stringent pretreatment standards, or additional Liberty Utilities, site specific effluent limits, when, in its judgment, such limitations are necessary to implement the objectives of the Pretreatment Program.

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4.3 State Pretreatment Standards

In addition to the requirements of this Pretreatment Program, IUs must comply with AAC R18-9-A906.

4.4 Local Regulatory Limits

A. Liberty Utilities is authorized to establish Local Regulatory Limits pursuant to 40 CFR § 403.5(c).

B. Section 3.3 Pretreatment Standards establishes the Local regulatory Limits.

C. Liberty Utilities may develop BMPs for any significant industrial user or other user, as needed, to implement this Pretreatment Program.

D. These COPs are Pretreatment Standards.

4.4.1 Right of Revision

Liberty Utilities reserves the right to establish, by tariff, and subsequently in individual wastewater discharge permits, more stringent Standards or Requirements on discharges to the POTW consistent with the purpose of this Pretreatment Program.

4.5 Waste Discharge Permits

A waste discharge permit, as set forth in Section 6, is required for industrial and non-domestic wastewater generators for the following conditions:

a) Any discharge subject to National Categorical Pretreatment Standards.

b) Any Significant Industrial discharge as defined by Liberty Utilities.

c) Any discharger whose discharge would be in violation with Local Regulatory Limits detailed in the Pretreatment Standards.

d) Any discharger required by the State Pretreatment Standards to obtain a permit.

e) Any other discharger directed by Liberty Utilities to apply for a permit.

Permit applications and fees, violations and enforcement, and specific penalties are subject to the terms of the approved Tariff.

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SECTION 5

5.0 Pretreatment Facilities

IUs shall provide wastewater treatment as necessary to comply with this Pretreatment Program and shall achieve compliance with all categorical Pretreatment Standards, Local Limits, and the prohibitions set out in Section 3.0 of this Pretreatment Program within the time limitations specified by EPA, the State, or Liberty Utilities, whichever is more stringent. Any facilities necessary for compliance shall be provided, operated, and maintained at the IU's expense. Detailed plans describing such facilities and operating procedures shall be submitted to Liberty Utilities for review and shall be acceptable to Liberty Utilities before such facilities are constructed. The review of such plans and operating procedures shall in no way relieve the IU from the responsibility of modifying such facilities as necessary to produce a discharge acceptable to Liberty Utilities under the provisions of this Tariff. The IU shall be responsible for all costs incurred by Liberty Utilities in connection with reviewing the plans and operating procedures set forth in this Section and any specialty inspections that may be required at the sole discretion of Liberty Utilities.

5.1 Additional Pretreatment Measures

A. Whenever deemed necessary, Liberty Utilities may require IUs to restrict their discharge during peak flow periods, designate that certain wastewater be discharged only into specific sewers, relocate and/or consolidate points of discharge, separate sewage waste streams from industrial waste streams, and such other conditions as may be necessary to protect the POTW/WRF and determine the IU's compliance with the requirements of this Pretreatment Program.

B. Liberty Utilities may require any person discharging into the POTW/WRF to install and maintain, on their property and at their expense, a suitable storage and flow control facility to ensure equalization of flow. An individual wastewater discharge permit may be issued solely for flow equalization.

C. Grease, oil, and sand interceptors shall be provided when Liberty Utilities claims them necessary for the proper handling of wastewater containing excessive amounts of grease and oil, or sand; except that such interceptors shall not be required for residential users. All interception units shall be of a type and capacity approved by Liberty Utilities, shall be so located to be easily accessible for cleaning and inspection. Such interceptors shall be inspected, cleaned, and repaired by the IU at their expense.

D. IUs with the potential to discharge flammable substances may be required to install and maintain an approved combustible gas detection meter.

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5.2 Accidental Discharge/Slug Discharge Control Plans

Liberty Utilities shall evaluate whether each SIU needs an accidental discharge/slug discharge control plan or other action to control Slug Discharges. Liberty Utilities may require any IU to develop, submit for approval, and implement such a plan or take such other action that may be necessary to control Slug Discharges. Alternatively, Liberty Utilities may develop such a plan for any IU. An accidental discharge/slug discharge control plan shall address, at a minimum, the following:

A. Description of discharge practices, including non-routine batch discharges

B. Description of stored chemicals

C. Procedures for immediately notifying Liberty Utilities of any accidental or Slug Discharge, as required by Sections 5.2, 14.2 and 15 of this Pretreatment Program

D. Procedures to prevent adverse impact from any accidental or Slug Discharge. Such procedures include, but are not limited to, inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site runoff, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants, including solvents, and/or measures and equipment for emergency response.

5.3 Hauled Wastewater

A. Septic tank waste may be introduced into the POTW/WRF only at locations designated by Liberty Utilities, and at such times as are established by Liberty Utilities. Such waste shall not violate Section 3 of this Pretreatment Program, or any other requirements established by Liberty Utilities. Liberty Utilities may require septic tank waste haulers to obtain individual wastewater discharge permits.

B. Industrial Waste:

a. Liberty Utilities will require haulers of industrial waste to obtain individual wastewater discharge permits.
b. Liberty Utilities will require generators of hauled industrial waste to obtain individual wastewater discharge permits.
c. Liberty Utilities also may prohibit the disposal of hauled industrial waste. The discharge of hauled industrial waste is subject to all other requirements of the Pretreatment Program.
d. Industrial waste haulers may discharge loads only at locations designated by Liberty Utilities. No load may be discharged without prior consent of Liberty

Utilities.

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e. Liberty Utilities may collect samples of each hauled load to ensure compliance with applicable Pretreatment Standards.

f. Liberty Utilities may require the industrial waste hauler to provide a waste analysis of any load prior to discharge.

g. Industrial waste haulers must provide a waste tracking form for every load. This form shall include, at a minimum, the name and address of the industrial waste hauler, permit number, truck identification, names and addresses of sources of waste, and volume and characteristics of waste. The form shall identify the type of industry, known or suspected waste constituents, and whether any wastes are RCRA hazardous wastes.

SECTION 6 - INDIVIDUAL WASTEWATER DISCHARGE PERMITS

6.1 Wastewater Analysis

When requested by Liberty Utilities, an IU must submit information on the nature and characteristics of its wastewater within 30 days of the request. Liberty Utilities is authorized to prepare a form for this purpose and may periodically require IUs to update this information.

6.2 Individual Wastewater Discharge Permit Requirement

A. No SIU shall discharge wastewater into the POTW/WRF without first obtaining an individual wastewater discharge permit from Liberty Utilities, except that a SIU that has filed a timely application pursuant to Sections 3.0 and 3.1 of this Tariff may continue to discharge for the time period specified therein.

B. Liberty Utilities may require other IUs to obtain individual wastewater discharge permits as necessary to carry out the purposes of this Tariff.

C. Any violation of the terms and conditions of an individual wastewater discharge permit shall be deemed a violation of this Tariff and subjects the wastewater discharge permittee to the sanctions set out in the Pretreatment Program. Obtaining an individual wastewater discharge permit does not relieve a permittee of its obligation to comply with all Federal

D. and State Pretreatment Standards or Requirements or with any other requirements of Federal, State, and local law.

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6.3 Individual Wastewater Discharge Permitting: Existing Connections

Any IU required to obtain an individual wastewater discharge permit who was discharging wastewater into the POTW/WRF prior to the effective date of this Pretreatment Program and who wishes to continue such discharges in the future, shall, within 90 days after said date, apply to Liberty Utilities for an individual wastewater discharge permit in accordance with Section 6.5 of this Pretreatment Program, and shall not cause or allow discharges to the POTW/WRF to continue after 30 days of the effective date of this Tariff except in accordance with an individual wastewater discharge permit issued by Liberty Utilities.

6.4 Individual Wastewater Discharge Permitting: New Connections

Any IU required to obtain an individual wastewater discharge permit who proposes to begin or recommence discharging into the POTW/WRF must obtain such permit prior to the beginning or recommencing of such discharge. An application for this individual wastewater discharge permit, in accordance with Section 6.5 of this Tariff, must be filed at least 90 days prior to the date upon which any discharge will begin or recommence.

6.5 Individual Wastewater Discharge Permit Application Contents

A. All IUs required to obtain an individual wastewater discharge permit must submit a permit application. Liberty Utilities may require IUs to submit all, or some of the following applicable information as part of a permit application:

1. Identifying Information.
    a. The name and address of the facility, including the name of the operator and owner.
    b. Contact information, description of activities, facilities, and plant production processes on the premises.

2. Environmental Permits. A list of any environmental control permits held by or for the facility. For permits that are required or currently pending, a description of the status of each permit.
3. Description of Operations.

    a. A brief description of the nature, average rate of production (including each product produced by type, amount, processes, and rate of production), and standard industrial classifications of the operation(s) carried out by such IU. This description should include a schematic process diagram, which indicates points of discharge to the POTW/WRF from the regulated processes.

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b. Types of waste generated, and a list of all raw materials and chemicals used, or stored at the facility, which are, or could accidentally or intentionally be, discharged to the POTW/WRF.

c. Number and type of employees, hours of operation, and proposed or actual hours of operation.

d. Type and number of raw materials processed (average and maximum per day).

e. Site plans, floor plans, mechanical and plumbing plans, and details to show all sewers, floor drains, and appurtenances by size, location, and elevation, and all points of discharge.

4. Time and duration of discharges.

5. The location for monitoring all waste covered by the permit.

6. Flow Measurement. Information showing the measured average daily and maximum daily flow, in gallons per day, to the POTW/WRF from regulated process streams and other streams, as necessary, to allow use of the combined waste stream formula set out in 40 CFR 403.6(e).

7. Measurement of Pollutants.
   a. The categorical Pretreatment Standards applicable to each regulated process and any new categorically regulated processes for Existing Sources.
   b. The results of sampling and analysis identifying the nature and concentration, and/or mass, where required by the Standard or by Liberty Utilities, of the regulated pollutants in the discharge from each regulated process.
   c. Instantaneous, Daily Maximum, and long-term average concentrations, or mass, where required, shall be reported.

   d. The sample shall be representative of daily operations and shall be analyzed in accordance with procedures set out in Sections 7.7.8, 7.7.10, 7.711, 8.1, and 9.0 of this Tariff. Where the Standard requires compliance with a BMP, COP, or pollution prevention alternative, the IU shall submit documentation as required by Liberty Utilities, or the applicable Standards to determine compliance with the Standard.

   e. Sampling must be performed in accordance with procedures set out in Sections 7.7.8, 7.7.10, 7.711, 8.1, and 9.0 of this Tariff of the Pretreatment Program.

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8. Any other information may be deemed necessary by Liberty Utilities to evaluate the permit application.

9. Incomplete, or inaccurate applications, will not be processed and will be returned to the IU for revision.

6.6 Application Signatories and reports

A. All wastewater discharge permit applications, IU reports and certification statements must be signed by an Authorized Representative of the IU and contain the certification statement in Section 7.7.14.

B. If the designation of an Authorized Representative is no longer accurate because a different individual or position has responsibility for the overall operation of the facility or overall responsibility for environmental matters for the company, a new written authorization satisfying the requirements of this Section must be submitted to Liberty Utilities prior to, or together with, any reports to be signed by an Authorized Representative.

6.7 Individual Wastewater Discharge Permit Decisions

Liberty Utilities will evaluate the data furnished by the IU and may require additional information, if necessary. Within 30 days of receipt of a complete permit application, Liberty Utilities will determine whether to issue an individual wastewater discharge permit. Liberty Utilities may deny any application for an individual wastewater discharge permit.

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SECTION 7 - INDIVIDUAL WASTEWATER DISCHARGE PERMIT ISSUANCE

7.1 Individual Wastewater Discharge Permit Duration

An individual wastewater discharge permit shall be issued for a specified time period, not to exceed five (5) years from the effective date of the permit. An individual wastewater discharge permit may be issued for a period less than five (5) years, at the discretion of Liberty Utilities. Each individual wastewater discharge permit will indicate a specific date upon which it will expire.

7.2 Individual Wastewater Discharge Permit Contents

An individual wastewater discharge permit shall include such conditions as are deemed reasonably necessary by Liberty Utilities to prevent Pass Through, or Interference, protect the quality of the water body receiving the POTW/WRF effluent, protect worker health and safety, facilitate sludge management and disposal, and protect against damage to the POTW/WRF.

A. Individual wastewater discharge permits must contain:

1. A statement that indicates the wastewater discharge permit issuance date, expiration date and effective date.

2. A statement that the wastewater discharge permit is nontransferable.

3. Effluent limits, including Best Management Practices, based on applicable Pretreatment Standards.

4. Self-monitoring, sampling, reporting, notification, and record-keeping requirements. These requirements shall include an identification of pollutants (or best management practice) to be monitored, sampling location, sampling frequency, and sample type based on Federal, State, and local law.

5. A statement of applicable civil and criminal penalties for violation of the Pretreatment Standards and Requirements, and any applicable compliance schedule. Such a schedule may not extend the time for compliance beyond that required by applicable Federal, State, or local law.

6. Requirements to control Slug Discharge, if determined by Liberty Utilities to be necessary.

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B. Individual wastewater discharge permits may contain, but need not be limited to, the following conditions:

1. Limits on the average and/or maximum rate of discharge, time of discharge, and/or requirements for flow regulation and equalization.

2. Requirements for the installation of pretreatment technology, pollution control, or construction of appropriate containment devices, designed to reduce, eliminate, or prevent the introduction of pollutants into the treatment works.

3. Requirements for the development and implementation of spill control plans or other special conditions including management practices necessary to adequately prevent accidental, unanticipated, or non-routine discharges.

4. Development and implementation of waste minimization plans to reduce the amount of pollutants discharged to the POTW/WRF for the term of the individual wastewater discharge permit.

5. The unit charge or schedule of IU charges and fees for the management of the wastewater discharged to the POTW/WRF.

6. Requirements for installation and maintenance of inspection and sampling facilities and equipment, including flow measurement devices.

7. A statement that compliance with the individual wastewater discharge permit does not relieve the permittee of responsibility for compliance with all applicable Federal and State Pretreatment Standards, including those which become effective during the term of the individual wastewater discharge permit.

8. Other conditions as deemed appropriate by Liberty Utilities to ensure compliance with this Pretreatment Program, and State and Federal laws, rules, and regulations.

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7.3 Permit Modification

Liberty Utilities may modify an individual wastewater discharge permit for good cause, including, but not limited to, the following reasons:

A. To incorporate any new or revised Federal, State, or local Pretreatment Standards or Requirements.

B. To address significant alterations, or additions to the IU's operation, processes, or wastewater volume or character since the time of the individual wastewater discharge permit issuance

C. A change in the POTW/WRF that requires either a temporary or permanent reduction or elimination of the authorized discharge.

D. Information indicating that the permitted discharge poses a threat to a Liberty Utilities POTW/WRF, Liberty Utilities personnel, or the receiving waters.

E. Violation of any terms or conditions of the individual wastewater discharge permit.

F. Misrepresentations, or failure to fully disclose all relevant facts, in the wastewater discharge permit application or in any required reporting.

G. Revision of, or a grant of variance, from categorical Pretreatment Standards pursuant to 40 CFR 403.13.

H. To correct typographical, or other errors in the individual wastewater discharge permit.

I. To reflect a transfer of the facility ownership or operation to a new owner or operator were requested in accordance with Section 6.7.

7.4 Individual Wastewater Discharge Permit Transfer

Individual wastewater discharge permits may be not be transferred. New owner or operator shall apply for a new discharge permit 60 days prior to the date of facility transfer. Failure of new owner or operator to apply for a new discharge permit will render the existing individual wastewater permit void as of the date of facility transfer.

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7.5 Individual Wastewater Discharge Permit Revocation

Liberty Utilities may revoke an individual wastewater discharge permit for good cause, including, but not limited to, the following reasons:

A. Failure to notify Liberty Utilities of significant changes to the wastewater prior to the changed discharge.

B. Failure to provide prior notification to Liberty Utilities of changed conditions pursuant to Section 6.3 of this Document.

C. Misrepresentation or failure to fully disclose all relevant facts in the wastewater discharge permit application.

D. Falsifying self-monitoring reports and certification statements.

E. Tampering with monitoring equipment.

F. Refusing to allow Liberty Utilities timely access to the facility premises and records.

G. Failure to meet effluent limitations.

H. Failure to pay fines.

I. Failure to pay sewer charges.

J. Failure to meet compliance schedules.

K. Failure to complete a wastewater survey or the wastewater discharge permit application.

L. Failure to provide advance notice of the transfer of business ownership of a permitted facility.

M. Violation of any Pretreatment Standard or Requirement, or any terms of the wastewater discharge permit or this Pretreatment Program.

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Individual wastewater discharge permits will be voidable upon cessation of operations or transfer of business ownership. All individual wastewater discharge permits issued to an IU are void upon the issuance of a new individual wastewater discharge permit to that IU.

7.6 Individual Wastewater Discharge Permit Reissuance

An IU with an expiring individual wastewater discharge permit shall apply for individual wastewater discharge permit reissuance by submitting a complete permit application, in accordance with Section 6.5 of this Pretreatment Program, a minimum of 90 days prior to the expiration of the IU's existing individual wastewater discharge permit.

7.7 Reporting Requirements

7.7.1 Metering

If required by the individual wastewater permit approved by Liberty Utilities, the IU shall install a metering device of a form and at a location acceptable to Liberty Utilities.

Unless designated to the IU in the individual wastewater permit, Liberty Utilities will be responsible for the reading of water and/or wastewater meters when installed in discharger's establishment.

Meters will always be accessible to Liberty Utilities and/or the applicable Liberty Utilities' representatives.

7.7.2 Baseline Monitoring Reports

Within either one hundred eighty (180) days after the effective date of a categorical Pretreatment Standard, or the final administrative decision on a category determination under 40 CFR 403.6(a)(4), whichever is later, existing Categorical IUs currently discharging to or scheduled to discharge to the POTW/WRF shall submit to Liberty Utilities a report which contains the information listed in paragraph B, below. At least ninety (90) days prior to commencement of their discharge, New Sources, and sources that become Categorical IUs subsequent to the promulgation of an applicable categorical Standard, shall submit to Liberty Utilities a report which contains the information listed in paragraph B, below. A New Source shall report on the method of pretreatment it intends to use to meet applicable categorical Standards. A New Source also shall give estimates of its anticipated flow and quantity of pollutants to be discharged.

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A. IUs described above shall submit the information set forth below:

1. All information required in Section 4.5 (a), Section 4.5 b, Section c, and Section 4.5d.

2. Measurement of pollutants.

   a. The IU shall provide the information required in Section 6.5.

   b. The IU shall take a minimum of one representative sample to compile that data necessary to comply with the requirements of this paragraph.

   c. Samples should be taken immediately downstream from pretreatment facilities (POTW/WRF) if such exist or immediately downstream from the regulated process if no pretreatment exists. If other wastewaters are mixed with the regulated wastewater prior to pretreatment the IU should measure the flows and concentrations necessary to allow use of the combined waste stream formula in 40 CFR 403.6(e) to evaluate compliance with the Pretreatment Standards.

   d. Where an alternate concentration or mass limit has been calculated in accordance with 40 CFR 403.6(e) this adjusted limit along with supporting data shall be submitted to Liberty Utilities.

   e. Sampling and analysis shall be performed in accordance with Sections 7.7.8, 7.7.10, 7.711, 8.1, and 9.0.

   f. Liberty Utilities may allow the submission of a baseline report which utilizes only historical data so long as the data provides information sufficient to determine the need for industrial pretreatment measures.

   g. The baseline report shall indicate the time, date and place of sampling and methods of analysis, and shall certify that such sampling and analysis is representative of normal work cycles and expected pollutant Discharges to the POTW/WRF.

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3. Compliance Certification: A statement, reviewed by the IU's Authorized Representative as defined in Section 1.4.C and certified by a qualified professional, indicating whether Pretreatment Standards are being met on a consistent basis, and, if not, whether additional operation and maintenance (O&M) and/or additional pretreatment is required to meet the Pretreatment Standards and Requirements.

4. Compliance Schedule: If additional pretreatment and/or O&M will be required to meet the Pretreatment Standards, the shortest schedule by which the IU will provide such additional pretreatment and/or O&M must be provided. The completion date in this schedule shall not be later than the compliance date established for the applicable Pretreatment Standard. A compliance schedule pursuant to this Section must meet the requirements set out in Section 6.2 of this Pretreatment Program.

5. Signature and Report Certification: All baseline monitoring reports must be certified in accordance with Section 7.7.14 of this Document and signed by an Authorized Representative as defined in Section 1.4.C.

7.7.3 Compliance Schedule Progress Reports

The following conditions shall apply to the compliance schedule required this Pretreatment Program:

A. The schedule shall contain progress increments in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the IU to meet the applicable Pretreatment Standards (such events include, but are not limited to, hiring an engineer, completing preliminary and final plans, executing contracts for major components, commencing and completing construction, and beginning and conducting routine operation).

B. No increment referred to above shall exceed nine (9) months.

C. The IU shall submit a progress report to Liberty Utilities no later than fourteen (14) days following each date in the schedule and the final date of compliance including, as a minimum, whether it complied with the increment of progress, the reason for any delay, and, if appropriate, the steps being taken by the IU to return to the established schedule.

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D. In no event shall more than nine (9) months elapse between such progress reports to Liberty Utilities and Categorical Pretreatment Standard Deadlines. Within ninety (90) days following the date for final compliance with applicable categorical Pretreatment Standards, or in the case of a New Source following commencement of the introduction of wastewater into the POT/WRF, any IU subject to such Pretreatment Standards and Requirements shall submit to Liberty Utilities a report containing the information described in Section 7.0 of this Pretreatment Program. For IUs subject to equivalent mass or concentration limits established in accordance with the procedures in Section 3.0, this report shall contain a reasonable measure of the IU's long term production rate. For all other IUs subject to categorical Pretreatment Standards expressed in terms of allowable pollutant discharge per unit of production (or other measure of operation), this report shall include the IU's actual production during the appropriate sampling period. All compliance reports must be signed and certified in accordance with Section 8 of this Pretreatment Program. All sampling will be done in conformance with 7.7.8, 7.7.10, 7.711, 8.1, and 9.0.

7.7.4 Periodic Compliance Reports

Except as specified in Section 8, all IUs must, at a frequency determined by Liberty Utilities, submit no less than once per year (January 31) a report indicating the nature and concentration of pollutants in the discharge which are limited by Pretreatment Standards and the measured or estimated average and maximum daily flows for the reporting period. In cases where the Pretreatment Standard requires compliance with a BMP, or pollution prevention alternative, the IU must submit documentation required by Liberty Utilities or the Pretreatment Standard necessary to determine the compliance status of the IU.

A. Pursuant to 40 CFR 403.12(e)(2), Liberty Utilities may authorize an IU subject to a categorical Pretreatment Standard to forego sampling of a pollutant regulated by a categorical Pretreatment Standard if the IU has demonstrated through sampling and other technical factors that the pollutant is neither present nor expected to be present in the Discharge or is present only at background levels from intake water and without any increase in the pollutant due to activities of the IU. This authorization is subject to the following conditions:

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1. The waiver may be authorized where a pollutant is determined to be present solely due to sanitary wastewater discharged from the facility provided that the sanitary wastewater is not regulated by an applicable categorical Standard and otherwise includes no process wastewater.

2. The monitoring waiver is valid only for the duration of the effective period of the individual wastewater discharge permit, but in no case longer than five (5) years. The IU must submit a new request for the waiver before the waiver can be granted for each subsequent individual wastewater discharge permit.

3. In making a demonstration that a pollutant is not present, the IU must provide data from at least one sampling of the facility's process wastewater prior to any treatment present at the facility that is representative of all wastewaters from all processes.

4. The request for a monitoring waiver must be signed in accordance with Section 1.4(C) and include the certification statement in 7.7.14 (40 CFR 403.6(a)(2)(ii)).

5. Non-detectable sample results may be used only as a demonstration that a pollutant is not present if the EPA approved method from 40 CFR Part 136 with the lowest minimum detection level for that pollutant was used in the analysis.

6. Any grant of the monitoring waiver by Liberty Utilities must be included as a condition in the IU's permit. The reasons supporting the waiver and any information submitted by the IU in its request for the waiver must be maintained by Liberty Utilities for 3 years after expiration of the waiver.

7. Upon approval of the monitoring waiver and revision of the IU's permit by Liberty Utilities, the IU must certify on each report with the statement in Section 8.0 below, that there has been no increase in the pollutant in its waste stream due to activities of the IU.

8. In the event that a waived pollutant is found to be present or is expected to be present because of changes that occur in the IU's operations, the IU must immediately comply with the monitoring requirements of Section 7.1.4, or other more frequent monitoring requirements imposed by Liberty Utilities, and notify Liberty Utilities.

9. This provision does not supersede certification processes and requirements established in categorical Pretreatment Standards, except as otherwise specified in the categorical Pretreatment Standard.

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B. Reduced reporting is not available to IUs that have in the last two (2) years been in Significant Noncompliance, as defined in Section 10 of this Pretreatment Program. In addition, reduced reporting is not available to an IU with daily flow rates, production levels, or pollutant levels that vary so significantly that, in the opinion of Liberty Utilities, decreasing the reporting requirement for this IU would result in data that are not representative of conditions occurring during the reporting period.

C. All periodic compliance reports must be signed and certified in accordance with Section 7.1.14 of this Pretreatment Program.

D. All wastewater samples must be representative of the IU's discharge. Wastewater monitoring and flow measurement facilities shall be properly operated, kept clean, and always maintained in good working order. The failure of an IU to keep its monitoring facility in good working order shall not be grounds for the IU to claim that sample results are unrepresentative of its discharge.

E. Pursuant to 40 CFR 403.12(g)(6), if an IU subject to the reporting requirement in this Section 7 monitors any regulated pollutant at the appropriate sampling location more frequently than required by Liberty Utilities, using the procedures prescribed in 7.7.8, 7.7.10, 7.711, 8.1, and 9.0 of this Pretreatment Program, the results of this monitoring shall be included in the report.

7.7.5 Reports of Changed Conditions

Each IU must notify Liberty Utilities of any significant changes to the IU's operations or system which might alter the nature, quality, or volume of its wastewater at least ninety (90) days before the change.

A. Liberty Utilities may require the IU to submit such information as may be deemed necessary to evaluate the changed condition, including the submission of a wastewater discharge permit application under Section 4.5 of this Pretreatment Program.

B. Liberty Utilities may issue an individual wastewater discharge permit under Section 6.5 of this Pretreatment Program or modify an existing wastewater discharge permit under Section 6 of this Pretreatment Program in response to changed conditions or anticipated changed conditions.

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7.7.6 Reports of Potential Problems

A. In the case of any Discharge, including, but not limited to, accidental discharges, discharges of a non-routine, episodic nature, a non-customary batch discharge, a Slug Discharge, or Slug Load, that might cause potential problems for the POTW/WRF, the IU shall telephone and notify Liberty Utilities within two hours of the incident. This notification shall include the location of the discharge, type of waste, concentration and volume, if known, and corrective actions taken by the IU.

Within five (5) days following such Discharge, the IU shall, unless waived by Liberty Utilities, submit a detailed written report describing the cause(s) of the discharge and the measures to be taken by the IU to prevent similar future occurrences. Such notification shall not relieve the IU of any expense, loss, damage, or other liability which might be incurred as a result of damage to the POTW/WRF, natural resources, or any other damage to person or property; nor shall such notification relieve the IU of any fines, penalties, or other liability which may be imposed pursuant to this Pretreatment Program.

B. A notice shall be permanently posted on the IU's bulletin board or other prominent place advising employees who to call in the event of a discharge described in paragraph A, above. Employers shall ensure that all employees who could cause such a discharge to occur, are advised of the emergency notification procedure.

C. SIUs are required to notify Liberty Utilities immediately of any changes at its facility affecting the potential for a Slug Discharge.

7.7.7 Reports from Unpermitted IUs

All IUs not required to obtain an individual wastewater discharge permit shall provide reports required under this Tariff at Liberty Utilities' request.

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7.7.8 Notice of Violation/Repeat Sampling and Reporting

If sampling performed by an IU indicates a violation, the IU must notify Liberty Utilities within twenty-four (24) hours of becoming aware of the violation. The IU shall also repeat the sampling and analysis and submit the results of the repeat analysis to Liberty Utilities within thirty (30) days after becoming aware of the violation. Resampling by the IU is not required if Liberty Utilities performs sampling at the IU's facility at least once a month, or if Liberty Utilities performs sampling at the IU between the time when the initial sampling was conducted and the time when the IU or Liberty Utilities receives the results of this sampling, or if Liberty Utilities has performed the sampling and analysis in lieu of the IU.

7.7.9 Notification of the Discharge of Hazardous Waste

A. Any IU who commences the discharge of hazardous waste shall notify Liberty Utilities, the EPA Regional Waste Management Division Director, and State hazardous waste authorities, in writing, of any discharge into the POTW/WRF of a substance which, if otherwise disposed of, would be a hazardous waste under 40 CFR Part 261. Such notification must include the name of the hazardous waste as set forth in 40 CFR Part 261, the EPA hazardous waste number, and the type of discharge (continuous, batch, or other). If the IU discharges more than one hundred (100) kilograms of such waste per calendar month to the POTW/WRF, the notification also shall contain the following information to the extent such information is known and readily available to the IU: an identification of the hazardous constituents contained in the wastes, an estimation of the mass and concentration of such constituents in the waste stream discharged during that calendar month, and an estimation of the mass of constituents in the waste stream expected to be discharged during the following twelve (12) months. All notifications must take place no later than one hundred and eighty (180) days after the discharge commences. Any notification under this paragraph needs to be submitted only once for each hazardous waste discharged. However, notifications of changed conditions must be submitted under Section 6.5 of this Pretreatment Program. The notification requirement in this Section does not apply to pollutants already reported by IUs subject to categorical Pretreatment Standards under the self-monitoring requirements of Section 7.7.13 of this Pretreatment Program.

B. Dischargers are exempt from the requirements of paragraph A, above, during a calendar month in which they discharge no more than fifteen (15) kilograms of hazardous wastes, unless the wastes are acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e). Discharge of more than fifteen (15) kilograms of non-acute hazardous wastes in a calendar month, or of any quantity of acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e), requires a onetime notification.

Subsequent months during which the IU discharges more than such quantities of any hazardous waste do not require additional notification.

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C. In the case of any new regulations under section 3001 of RCRA identifying additional characteristics of hazardous waste or listing any additional substance as a hazardous waste, the IU must notify Liberty Utilities, the EPA Regional Waste Management Waste Division Director, and State hazardous waste authorities of the discharge of such substance within ninety (90) days of the effective date of such regulations.

D. In the case of any notification made under this Section, the IU shall certify that it has a program in place to reduce the volume and toxicity of hazardous wastes generated to the degree it has determined to be economically practical.

E. This provision does not create a right to discharge any substance not otherwise permitted to be discharged by this Pretreatment Program, a permit issued thereunder, or any applicable Federal or State law.

7.7.10 Analytical Requirements

All pollutant analyses, including sampling techniques, to be submitted as part of a wastewater discharge permit application or report shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto, unless otherwise specified in an applicable categorical Pretreatment Standard. If 40 CFR Part 136 does not contain sampling or analytical techniques for the pollutant in question, or where the EPA determines that the Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analyses shall be performed by using validated analytical methods at a State of Arizona certified lab or any other applicable sampling and analytical procedures, including procedures suggested by Liberty Utilities, or other parties approved by EPA.

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7.7.11 Sample Collection

Samples collected to satisfy reporting requirements must be based on data obtained through appropriate sampling and analysis performed during the period covered by the report, based on data that is representative of conditions occurring during the reporting period.

A. Except as indicated in Section B and C below, the IU must collect wastewater samples using 24-hour flow proportional composite sampling techniques, unless time proportional composite sampling or grab sampling is authorized by Liberty Utilities. Where time proportional composite sampling or grab sampling is authorized by Liberty Utilities, the samples must be representative of the discharge. Using protocols (including appropriate preservation) specified in 40 CFR Part 136 and appropriate EPA guidance, multiple grab samples collected during a 24-hour period may be composited prior to the analysis as follows: for cyanide, total phenols, and sulfides the samples may be composited in the laboratory or in the field; for volatile organics and oil and grease, the samples may be composited in the laboratory. Composite samples for other parameters unaffected by the compositing procedures as documented in approved EPA methodologies may be authorized by Liberty Utilities, as appropriate. In addition, grab samples may be required to show compliance with Local Limits.

B. Samples for oil and grease, temperature, pH, cyanide, total phenols, sulfides, and volatile organic compounds must be obtained using grab collection techniques.

C. For sampling required in support of baseline monitoring and 90 day compliance reports required in Sections 6.3, 6.4, 6.5 of the Pretreatment Program (40 CFR 403.12(b) and (d)), a minimum of four (4) grab samples must be used for pH, cyanide, total phenols, oil and grease, sulfide and volatile organic compounds for facilities for which historical sampling data do not exist; for facilities for which historical sampling data are available, Liberty Utilities may authorize a lower minimum. For the response required by paragraphs Section 6.4 (40 CFR 403.12(e) and 403.12(h)), the IU is required to collect the number of grab samples necessary to assess and assure compliance with applicable Pretreatment Standards and Requirements.

7.7.12 Date of Receipt of Reports

Written reports will be deemed to have been submitted on the date postmarked or if hand delivered, date received by Liberty Utilities.

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7.7.13 Recordkeeping

IUs subject to the reporting requirements of this Pretreatment Program shall retain, and make available for inspection and copying, all records of information obtained pursuant to any monitoring activities required by this Pretreatment Program, any additional records of information obtained pursuant to monitoring activities undertaken by the IU independent of such requirements, and documentation associated with Best Management Practices established under Sections 1.4 (4) and 7.2. Records shall include the date, exact place, method, and time of sampling, and the name(s) of the person(s) taking the samples; the dates analyses were performed; who performed the analyses; the analytical techniques or methods used; and the results of such analyses. These records shall remain available for a period of at least three (3) years. This period shall be automatically extended for the duration of any litigation concerning the IU or Liberty Utilities, or where the IU has been specifically notified of a longer retention period by Liberty Utilities.

7.7.14 Certification Statements

A. Certification of Permit Applications, IU Reports and Initial Monitoring Waiver. The following certification statement is required to be signed and submitted by: (i) IUs submitting permit applications in accordance with Section 4.5; (ii) IUs submitting baseline monitoring reports under Section 8; (iii) IUs submitting reports on compliance with the categorical Pretreatment Standard deadlines under Section 4.0; (iv) IUs submitting periodic compliance reports required by Section 7.7.4; and (v) IUs submitting an initial request to forego sampling of a pollutant on the basis of Section 6.2. The following certification statement must be signed by an Authorized Representative as defined in Section 1.4(C):

   a. I certify under penalty of law that this document and all attachments were prepared under my direction, or supervision, in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons, who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

B. Annual Certification for Non-Significant Categorical IUs. A facility determined to be a Non-Significant Categorical IU by Liberty Utilities pursuant to Section 1.4.NA.3 and 40 CFR 403.3(v)(2) must annually submit the following certification statement signed in accordance with the signatory requirements in Section 1.3.C and 40 CFR 403.12. The following certification must accompany an alternative report required by

Liberty Utilities:

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Based on my inquiry of the person or persons directly responsible for managing compliance with the categorical Pretreatment Standards under 40 CFR _____, I certify that, to the best of my knowledge and belief that during the period from _____, _____ to _____, _____ [months, days, year]:

a) The facility described as _____ [facility name] met the definition of a Non-Significant Categorical IU a as described in Section 1.4.NA.3 of Liberty Utilities' Pretreatment Program and Tariff and 40 CFR 403.3(v)(2); and

b) The facility complied with all applicable Pretreatment Standards and requirements during this reporting period; and the facility never discharged more than 100 gallons of total categorical wastewater on any given day during this reporting period.

This compliance certification is based on the following information.

_____

_____

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SECTION 8 - COMPLIANCE MONITORING

8.1 Right of Entry: Inspection and Sampling

Liberty Utilities shall have the right to enter the premises of any IU to determine whether the IU is complying with all requirements of this Pretreatment Program and any individual wastewater discharge permit or order issued hereunder. IUs shall allow Liberty Utilities ready access to all parts of the premises for the purposes of inspection, sampling, records examination and copying, and the performance of any additional duties.

A. Where an IU has security measures in force which require proper identification and clearance before entry into its premises, the IU shall make necessary arrangements with its security guards so that, upon presentation of suitable identification, Liberty Utilities shall be permitted to enter without delay for the purposes of performing specific responsibilities.

B. Liberty Utilities shall have the right to set up on the IU's property or require installation of such devices as are necessary to conduct sampling and/or metering of the IU's operations.

   Liberty Utilities may require the IU to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the IU at its own expense. All devices used to measure wastewater flow and quality shall be calibrated no less than annually to ensure their accuracy.

C. Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the IU at the written or verbal request of Liberty Utilities and shall not be replaced. The costs of clearing such access shall be borne by the IU.

D. Unreasonable delays in allowing Liberty Utilities access to the IU's premises shall be a violation of this Pretreatment Program.

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8.2 Compliance with Pretreatment Program as a Term of Service

The Pretreatment Program is an approved Tariff under the ACC rules and regulations and is included as part of the Terms of Service for customers. Under AAC R14-2-609 and this Tariff, Liberty Utilities may terminate service for failure of the customer to provide the utility reasonable access to its equipment and property; a breach of a written contract for service, if there is the existence of an obvious hazard to the safety or health of the consumer or the general population, or for noncompliance with this tariff.

If Liberty Utilities has been refused access to a building, structure, or property, or any part thereof, and is able to demonstrate probable cause to believe that there may be a violation of the Pretreatment Program, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with the Pretreatment Program or any permit issued hereunder, or to protect the overall public health, safety and welfare of the community. These remedies are cumulative, and Liberty Utilities may elect to terminate service without recourse to the courts.

SECTION 9 - CONFIDENTIAL INFORMATION

Information and data on an IU obtained from reports, surveys, wastewater discharge permit applications, individual wastewater discharge permits, monitoring programs, and Liberty Utilities inspection and sampling activities, shall be available to the public without restriction, unless the IU specifically requests, and is able to demonstrate to the satisfaction of Liberty Utilities, that the release of such information would divulge information, processes, or methods of production entitled to protection as trade secrets under applicable State law. Any such request must be asserted at the time of submission of the information or data. When requested and demonstrated by the IU furnishing a report that such information should be held confidential, the portions of a report which might disclose trade secrets or secret processes shall not be made available for inspection by the public but shall be made available immediately upon request to governmental agencies for uses related to the NPDES program or pretreatment program, and in enforcement proceedings involving the person furnishing the report. Wastewater constituents and characteristics and other effluent data, as defined at 40 CFR 2.302 shall not be recognized as confidential information and shall be available to the public without restriction.

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SECTION 10 - PUBLICATION OF IUS IN SIGNIFICANT NONCOMPLIANCE

Liberty Utilities shall publish annually, in a newspaper of general circulation that provides meaningful public notice within the jurisdictions served by Liberty Utilities, a list of the IUs which, at any time during the previous twelve (12) months, were in Significant Noncompliance with applicable Pretreatment Standards and Requirements. The term Significant Noncompliance shall be applicable to all Significant IUs (or any other IU that violates paragraphs (C), (D) or (H) of this Section) and shall mean:

A. Chronic violations of wastewater discharge limits, defined here as those in which sixty six percent (66%) or more of all the measurements taken for the same pollutant parameter taken during a six (6) month period exceed (by any magnitude) a numeric Pretreatment Standard or Requirement, including Instantaneous Limits as defined in Sections 1.4.(T) and 6.6.7.c.

B. Technical Review Criteria (TRC) violations, defined in 40 CFR § 403.8(f)(vii)(B) as those in which thirty three percent (33%) or more of wastewater measurements taken for each pollutant parameter during a six (6) month period equals or exceeds the product of the numeric Pretreatment Standard or Requirement including Instantaneous Limits, as defined by Sections 1.4(T) and 6.6.7.cmultiplied by the applicable criteria (1.4 for BOD, TSS, fats, oils and grease, and 1.2 for all other pollutants except pH).

C. Any other violation of a Pretreatment Standard or Requirement as defined by Sections 4.5(e) and 7.7.14 and (Daily Maximum, long term average, Instantaneous Limit, or narrative standard) that Liberty Utilities determines has caused, alone or in combination with other discharges, Interference or Pass Through, including endangering the health of POTW/WRF personnel or the general public.

D. Any discharge of a pollutant that has caused imminent endangerment to the public or to the environment or has resulted in Liberty Utilities exercise of its emergency authority to halt or prevent such a discharge.

E. Failure to meet, within ninety (90) days of the scheduled date, a compliance schedule milestone contained in an individual wastewater discharge permit or enforcement order for starting construction, completing construction, or attaining final compliance.

F. Failure to provide within forty-five (45) days after the due date, any required reports, including baseline monitoring reports, reports on compliance with categorical Pretreatment Standard deadlines, periodic self-monitoring reports, and reports on compliance with compliance schedules.

G. Failure to accurately report noncompliance.

H. Any other violation(s), which may include a violation of BMP or COP, which Liberty Utilities

determines will adversely affect the operation or implementation of the local pretreatment program.

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SECTION 11- ENFORCEMENT REMEDIES AND GUIDELINES

11.1 Utility Right to Shut off and Terminate Service.

The purpose of this Tariff is to is to prevent the introduction of pollutants into Liberty Utilities' WRF or a POTW that will interfere with its operation, including interference with its use or disposal of sludge, prevent the introduction of pollutants into a WRF/POTW that could adversely impact the treatment works or otherwise be incompatible with it, and to obtain compliance with all applicable laws and regulations by those regulated dischargers into the WRF/POTW.

11.2 Liberty Utilities will have sole and complete discretion to shut off wastewater services to any IU for any violation of any provision in this Tariff, or for any violation of any provision in the waste discharge permit in accordance with the terms and conditions of the waste discharge permit between an IU and Liberty Utilities.

11.3 Violation of this Tariff or of any provision of a waste discharge permit is cause for shutting off of or termination of service at Liberty Utilities' discretion. Liberty Utilities will notify the Arizona Corporation Commission at least two business days before it terminates service to any IU.

11.4 Shutting off of services for any violation of this Tariff or a wastewater discharge permit between an IU and Liberty Utilities will be in accordance with the terms of the wastewater discharge permit between an IU and Liberty Utilities. The wastewater discharge permit will provide for the suspension of wastewater flows from any IU for a violation of this Tariff or the applicable wastewater discharge permit. This is to ensure the integrity of Liberty Utilities' wastewater operations and avoid adverse impacts to the provision of safe and reliable service to other customers.

A. IU will provide contact information (including name, service address, contact address (if different), telephone number and email address as part of IU's request for service);
B. Liberty Utilities will contact IU with a written notification of non-compliance, whereby IU has five (5) calendar days to respond with a written plan for satisfactory correction and prevention of future violations;
C. Upon providing response, IU will then have 72 hours to implement plan and come into compliance, provided the plan is to Liberty Utilities' satisfaction;
D. Failure to come into compliance could then result in Liberty Utilities shutting off service to IU at Liberty Utilities' sole and complete discretion;
E. Under no circumstances can IU dispute the Liberty Utilities notification until after response and implementation of plan occurs and compliance is achieved.

Service will not be restored to IU until IU has resolved all outstanding violations and penalties to Liberty Utilities' satisfaction.

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11.5 IU must provide information to Liberty Utilities describing maximum average and peak wastewater flows discharged from IU's facility that IU is requesting Liberty Utilities collect and treat during a 24-hour period. Any exceedance of such wastewater flows may be considered a Slug Discharge/Load and a violation of this Tariff for purposes of enforcement and shutting off of services in Liberty Utilities' sole discretion.

11.6 Liberty Utilities will install metering and vault, and other equipment as necessary, so that it has the ability to shut off Indirect Discharge into it's the WRF/POTW when a violation by an IU has occurred in Liberty Utilities sole discretion. Design standards for the discharge point for IU facilities must include plans for the discharge of Indirect Discharge.

11.7 IU is liable to the extent any violation results in any damage to Liberty Utilities WRF or any facilities used in the provision of wastewater service to any Liberty Utilities customers, as well as to the extent such violation causes any harm to any persons, and the waste discharge permit will include a provision that IU will indemnify Liberty Utilities in accordance with this provision.

11.8 Should vault and haul services be necessary due to the violation by IU, then IU will be fully and solely responsible for the costs against any IU, to the extent the vault and haul services are due to the violation by the IU.

11.9 Violation of this rule could result in enforcement or other legal action against the IU by interconnected municipalities, the Arizona Department of Environmental Quality and/or the U.S. Environmental Protection Agency. These entities are authorized by law to impose monetary penalties of up to $37,500 per day per violation.

11.10 An effluent parameter exceedance charge may be assessed for any exceedance of the waste discharge permit requirements, when deemed necessary by Liberty Utilities.

11.11 In addition to or instead of any other remedies currently set forth, Liberty Utilities may, in its full discretion, impose the following penalties for the listed violations as set forth in the following table:

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Violations	Nature of Violations	Fine/Action	Notifications (Timeframe to Address)
Exceedance of Local Limit, Permit Limit or Federal Standard	A pattern of exceedances will constitute one violation. For purposes of this violation, a pattern will mean exceedances that (1) occur once per day (i.e., a 24-hour period) over three consecutive days or (2) occur more than twice in any specific day.	$25,000 per each violation.	Discharger will have up to five (5) days from receipt of notification to address before commencement of fines.
Failure to Report	Failure to provide correct information, or provision of missing or incomplete information after notification by Liberty Utilities that information is incorrect, missing or incomplete.	Up to $5,000 per day per violation (i.e. each piece of incorrect, missing or incomplete information).	Three days from the time of notification of incomplete or missing information to address before commencement of fines.
Failure to Monitor Correctly	Failure to Monitor All Pollutants as set forth in this Tariff or a waste discharge permit (if applicable).	Up to $5,000 per day per violation	Three days from the time of notification that discharger is failing to monitor as required.
Failure to install monitoring equipment.	Delay of 30 days or more after notification by Liberty Utilities.	Up to $5,000 per day per violation	Three days after expiration of the 30day period and notification by Liberty Utilities.
Denial of Entry onto Dischargers property for verification of compliance with this Tariff and a waste discharge permit.	Entry Denied or Consent Withdrawn. Liberty Utilities request for copies of records pertinent this Tariff or a waste discharge permit is denied	Up to $1,000 per day per violation	Commencement of fines can begin 24 hours after denial of entry.

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11.12 The proceeds of any fine(s) will be used towards making additional investments as needed in the Liberty Utilities wastewater infrastructure.

11.13 Liberty Utilities may recover the cost of damages caused by any violation of this Tariff or the waste discharge permit by an IU.

11.14 The remedies provided for in this Pretreatment Program are not exclusive. Liberty Utilities may take any, all, or any combination of these actions against a noncompliant IU when the circumstances warrant. Enforcement of pretreatment violations will generally be in accordance with Liberty Utilities' enforcement response plan. Further, Liberty Utilities is empowered to take more than one enforcement action against any noncompliant IU.

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SECTION 12-SUPPLEMENTAL ENFORCEMENT ACTION

12.1 Penalties for Late Reports

A penalty of $250 shall be assessed to any IU for each day that a report required by this Pretreatment Program, a permit or order issued hereunder is late, beginning five days after the date the report is due. Increased penalties may also be assessed where reports are more than 30-45 days late. Actions taken by Liberty Utilities to collect late reporting penalties shall not limit Liberty Utilities' authority to initiate other enforcement actions that may include penalties for late reporting violations.

12.2 Performance Bonds or Letter of Credit

Liberty Utilities may decline to issue or reissue an individual wastewater discharge permit to any IU who has failed to comply with any provision of this Pretreatment Program, a previous individual wastewater discharge permit, or any other Pretreatment Standard or Requirement, unless such IU first files a satisfactory bond or letter of credit, payable to Corporation, in a sum not to exceed a value determined by Liberty Utilities to be necessary to achieve consistent compliance.

12.3 Liability Insurance

Liberty Utilities may decline to issue or reissue an individual wastewater discharge to any IU who has failed to comply with any provision of this Pretreatment Program, a previous individual wastewater discharge permit, or order issued hereunder, or any other Pretreatment Standard or Requirement, unless the IU first submits proof that it has obtained financial assurances sufficient to restore or repair damage to the POTW/WRF caused by its discharge.

12.4 Payment of Outstanding Fees and Penalties

Liberty Utilities may decline to issue or reissue an individual wastewater discharge permit to any IU who has failed to pay any outstanding fees, fines or penalties incurred as a result of any provision of this Pretreatment Program, a previous individual wastewater discharge permit, or order issued hereunder.

12.5 Water and Wastewater Supply Severance

Whenever an IU has violated or continues to violate any provision of this Pretreatment Program, an individual wastewater discharge permit, or order issued hereunder, or any other Pretreatment Standard or Requirement, wastewater and/or water service to the IU may be severed. Service will recommence, at the IU's expense, only after the IU has satisfactorily demonstrated its ability to comply.

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SECTION 13-PROHIBITED BYPASS

13.1 Bypass

A. For the purposes of this Section,

(1) Bypass means the intentional diversion of waste streams from any portion of an IU's treatment facility.

(2) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

B. An IU may allow any bypass to occur which does not cause Pretreatment Standards or Requirements to be violated, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provision of paragraphs (C) and (D) of this Section.

C. Bypass Notifications

(1) If an IU knows in advance of the need for a bypass, it shall submit prior notice to Liberty Utilities, at least ten (10) days before the date of the bypass.

(2) An IU shall submit oral notice to Liberty Utilities of an unanticipated bypass that exceeds applicable Pretreatment Standards within twenty-four (24) hours from the time it becomes aware of the bypass. A written submission shall also be provided within five (5) days of the time the IU becomes aware of the bypass. The written submission shall contain a description of the bypass and its cause; the duration of the bypass, including exact dates and times, and, if the bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass. Liberty Utilities may waive the written report on a case-by-case basis if the oral report has been received within twenty-four (24) hours.

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D. Bypass

(1) Bypass is prohibited, and Liberty Utilities may take an enforcement action against an IU for a bypass, unless:

(a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage.

(b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance.

(c) The IU submitted notices as required under paragraph C of this section. Liberty Utilities may approve an anticipated bypass, after considering its adverse effects, if Liberty Utilities determines compliance with Section 14.

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SECTION 14 – PROHIBITED DISCHARGE STANDARDS

14.1 Declining to Issue Individual Wastewater Discharge Permit

Liberty Utilities may decline to issue or reissue an individual wastewater discharge permit to any IU who has failed to comply with any provision of the Pretreatment Program, a previous individual wastewater discharge permit, or any other Pretreatment Standard or requirement, unless such IU first files a satisfactory bond, payable to Liberty Utilities, in a sum not to exceed a value determined by Liberty Utilities to be necessary to achieve consistent compliance.

14.2 Emergency Shutdown

A. For the purposes of this Section,

a. Emergency shut down means the intentional diversion of waste streams from any portion of an IU's treatment facility. Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of an emergency shut down. Severe property damage does not mean economic loss caused by delays in production.

B. An IU may allow any bypass to occur which does not cause Pretreatment Standards or Requirements to be violated, but only if it also is for essential maintenance to assure efficient operation. These emergency shutdowns are not subject to the provision of paragraphs (C) and (D) of this Section.

C. Shut Down Notifications

a. If an IU knows in advance of the need for a bypass, it shall submit prior notice to Liberty Utilities at least ten (10) days before the date of the emergency shut down, if possible.

b. An IU shall submit oral notice to Liberty Utilities of an unanticipated emergency shutdown that exceeds applicable Pretreatment Standards within twenty-four (24) hours from the time it becomes aware of the emergency shut down. A written submission shall also be provided within five (5) days of the time the IU becomes aware of the emergency shut down. The written submission shall contain a description of the emergency shut down; its cause; the duration of the bypass, including exact dates and times, and, if the emergency shut down has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the emergency shut down. Liberty Utilities may waive the written report on a case-by-case basis if the oral report has been received within twenty-four (24) hours.

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D. Emergency Shutdown

a. Emergency shut down is prohibited, and Liberty Utilities may take an enforcement action against an IU for a bypass, unless:

i. Emergency shut down was unavoidable to prevent loss of life, personal injury, or severe property damage.

ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance.

iii. The IU submitted notice as required under paragraph C of this Section.

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PART SIXTEEN
CODE OF PRACTICE

EXECUTIVE SUMMARY

Liberty Utilities (Litchfield Park Water & Sewer) Corp. ("Corporation") hereby declares that the following Code of Practice has been prepared and adopted to provide for pretreatment standards in the maintenance and operation of wastewater treatment at the Palm Valley Water Reclamation Facility ("PVWRF") and the Sarival Water Reclamation Facility ("SWRF"). This Code of Practice shall be filed with the Arizona Corporation Commission and made part of Corporation's Wastewater Service Tariff, Part Four, Section LB [Waste Limitations].

Corporation hereby expressly reserves the right to make any lawful addition and/or revisions in this Code of Practice when and as they may become advisable to properly manage the WRF and to promote the peace, health, safety and welfare of the customers that will be served. This Code of Practice is supplementary to, and are not to be construed as, any abridgement of any lawful rights of the Company as outlined in the Arizona Revised Statutes governing Public Utilities (Title 40) and the Arizona Administrative Corporation Commission Rules on Sewer (Title 14, Article 6), including the right to disconnect or to refuse permission to connect a customer to the Company's wastewater system for violation of this Code of Practice or any other applicable law of the State of Arizona.

This Code of Practice incorporates pretreatment standards per 40 CFR 403, A.A.C. Title 12, Article 4, and A.A.C. Title 18, Chapter 9, Article 3. This Code of Practice is enforceable per the authority granted to wastewater utilities established under A.A.C. Title 14, Chapter 2, Article 6 of the Arizona Administrative Code.

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE

(LPSCO-CP-01-001)
SECTION 1 – DEFINITIONS

A. PROHIBITED WASTE

Prohibited waste means:

1. Air Contaminant Waste

Any waste other than sanitary waste which, by itself or in combination with another substance, is capable of creating, causing or introducing an air contaminant outside any sewer or sewage facility or is capable of creating, causing or introducing an air contaminant within any sewer or sewage facility which would prevent safe entry by authorized personnel.

2. Flammable **or** Explosive Waste

any pollutants which create a fire or explosion hazard to the sewer or any waste other than sanitary waste which, which by itself or in combination with another substance, is capable of causing or contributing to an explosion or supporting combustion in any sewer or sewage facility including, but not limited to gasoline, naphtha, propane, diesel, fuel oil, kerosene or alcohol.

3. Obstructive Waste

Any waste other than sanitary waste which, by itself or in combination with another substance, is capable of obstructing the flow of, or interfering with, the operation or performance of any sewer or sewage facility including, but not limited to: earth, sand, sweepings, gardening or agricultural waste, ash, chemicals, paint, metal, glass, sharps, rags, cloth, tar, asphalt, cement-based products, plastic, wood, waste portions of animals, fish or fowl and solidified fat.

4. Corrosive Waste

Any waste other than sanitary waste which, with corrosive properties which, by itself or in combination with any other substance, may cause damage to any sewer or sewage facility or which may prevent safe entry by authorized personnel.

5. High Temperature Waste

Any waste other than sanitary waste which, by itself or in combination with another substance, will create heat in amounts which will **interfere** with the operation and maintenance of a sewer or sewage facility or with the treatment of waste in a sewage facility;

Any waste other than sanitary waste which, will raise the temperature of waste entering any sewage facility to 38 degrees Celsius (100 degrees Fahrenheit) or more; or any non-domestic waste with a temperature of 65 degrees Celsius (150 degrees Fahrenheit) or more.

Applies to all **WASTEWATER** service areas

PART SIXTEEN

CODE OF PRACTICE (LPSCO-CP-01-001)

SECTION 1 - DEFINITIONS

6. Biomedical Waste

Any of the following categories of biomedical waste: human anatomical waste, animal waste, untreated microbiological waste, waste sharps, medical products, and untreated human blood and body fluids known to contain viruses and agents.

7. Miscellaneous Wastes

Any storm water, surface water, groundwater, roof runoff, or surface drainage is prohibited.

8. Dilution Wastes

Any discharge that has been in any way, been diluted as a substitute for pretreatment, for the purposes of obtain1ng compliance with any categorical standard or pretreatment requirement or any other requirement imposed by this article except where dilution is expressly authorized by a categorical standard.

9. Other Discharge Limitations.

Any discharge that is transported from the point of generation to the sewer by any hauler, unless the hauler has first:

a. Obtained authorization to discharge from the Company.

b. Disclosed the nature, origin, and volume of the discharge.

Any waste, other than sanitary waste, which by itself or in combination with another substance:

a. constitutes or may constitute a significant health or safety hazard to any person;
b. Any waste other than sanitary waste which may interfere with any sewer or sewage treatment process;
c. may cause a discharge from a sewage facility to contravene any requirements by or under any ADEQ or AZPDES discharge permit or any other act, approved Waste Minimization Plan (WMP), or any other law or regulation governing the quality of the discharge, or may cause the discharge to result in a hazard to people, animals, property or vegetation;
d. may cause bio-solid to fail criteria for beneficial land application.

Applies to all **WASTEWATER** service areas

PART SIXTEEN

CODE OF PRACTICE (LPSCO-CP-01-001)

SECTION 1 - DEFINITIONS

B. RESTRICTED WASTE (LPSCO-CP-01-001)

Restricted waste means:

1. Specified Waste

Any waste other than sanitary waste which, at the point of discharge into a sewer, contains any contaminant at a concentration in excess of the Limits set out below. All concentrations are expressed as total concentrations which includes all forms of the contaminant, whether dissolved or un-dissolved. The concentration limits apply to both grab and composite samples. Contaminant definitions and methods of analysis are outlined in standard methods.

CONVENTIONAL CONTAMINANTS (mg/L)	
Biochemical Oxygen Demand (BOD)	350
Chemical Oxygen Demand (COD)	1000
Ammonia	55
Total Nitrogen- as NO3	100
Oil and Grease	64
Suspended Solids	350

ORGANIC CONTAMINANTS (mg / L)	
Benzene	Reserved
Ethyl Benzene	Reserved
Toluene	Reserved
Xylenes	Reserved
Reserved	Reserved
Chloroform	Reserved
Total Oil and Grease (hydrocarbons)	96
Perfluoroalkyl Substances (PFAS)	4 parts per trillion

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-001)
SECTION 1 - DEFINITIONS

TRACE METALS	
PARAMETER	DAILY AVERAGE (mg/L)
Antimony (Sb)	0.0048
Arsenic	0.008
Beryllium	0.008
Cadmium (Cd)	0.012
Chloride (Cl)	Reserved
Chromium (Cr)	0.238
Cobalt (Co)	Reserved
Copper (Cu)	Reserved
Cyanide (CN)	Reserved
Fluoride	3.00
Iron (Fe)	Reserved
Lead (Pb)	0.13
Manganese (Mn)	Reserved
Mercury (Hg)	0.0050
Nitrate	100
Molybdenum (Mo)	Reserved
Nickel (Ni)	0.242
Selenium (Se)	0.142
Silver (Ag)	Reserved
Sulfate (SQ4)	Reserved
Sulfide (S)	N/A
Thallium	0.005
Zinc (Zn)	Reserved

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-001)
SECTION 1 - DEFINITIONS

2. Food Waste

Any solid or viscous pollutants, animal fats, oil, and grease (FOG) in amounts that may cause obstruction to the flow io sewers or pass through or other interference or damage to the sewer collection system. Any pollutant, including oxygen demanding pollutants (BOD, COD, TOC, etc.) released in a discharge flow at a rate and/or pollutant concentration which may cause interference with the sewer collection system or wastewater treatment process. This also includes petroleum oil, non-biodegradable cutting oil, or other products of mineral oil origin in amounts that may cause interference or pass through at the wastewater treatment facility.

3. Radioactive Waste

Any discharge containing a toxic, radioactive, poisonous or other substances in which sufficient quantity to cause or have the potential to cause injury or damage to a person or property or interference with any sewage treatment process, cause corrosive structural damage, constitute a hazard to humans or create any hazard to the sewer system or the effluent of the sewer system. All such wastes shall be subject to compliance with Nuclear Regulatory Commission standards for sewer disposal including the Unity Equation. Radioactive waste industrial users shall be treated in accordance with applicable federal and state regulations and guidelines, including section 40 of the Code of Federal Regulations.

4. pH Waste

Any discharge with a pH less than 5.5 standard units (SU) or greater than 9.5 SU as determined by either a grab or a composite sample.

5. Dyes and Coloring: Material

Dyes or coloring materials which may pass through a sewage facility and discolor the effluent from a sewage facility except where the dye is used by the Sewer Company, or one or more of its agents, as a tracer.

6. Miscellaneous us Restricted Wastes Any of the following wastes:

a. 4,4' - DOE
b. 4,4' - DDT
c. Aldrin
d. BHC-Alpha
e. BHC-Beta
f. BHC- Gamma(Lindane)
g. Heptachlo

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-001)
SECTION 1 - DEFINITIONS

h. Heptachlor epoxide,
i. Polychlorinated biphenyl compounds (PCB's)
j. chlorinated phenols[11]
k. pesticides
l. herbicides
m. tetrachloroethylene
n. polynuclear aromatic hydrocarbons (PAH' s)[12]

7. Temperature

Any waste other than sanitary waste which, will raise the temperature of waste entering any sewage facility to 38 degrees Celsius (100 degrees Fahrenheit) or more; or any non-domestic waste with a temperature of 65 degrees Celsius (150 degrees Fahrenheit) or more.

[11] include: chlorophenol l (ortho, meta, para); dichlorophenol (2,3, 2,4-, 2,5-, 2,6-, 3,4-, 3,5-); trichlorophenol (2,3,4-, 2,3,5-, 2,3,6-, 2,4,5-, 2,4,6-, 3,4,5-); tetrachlorophenol (2,3,4,5-, 2,3,4,6-, 2,3,5,6-); pentachloro phenol

[12] includes: naphthalene benzo(a) anthracene; acenaphthylene chrysene; acenaphthene benzo(k)fluoranthene; fluorene benzo(k)fluoranthene; phenanthrene benzo(a)pyrene; anthracene dibenzo(a,h)anthracene fluoranthene indeno(1,2,3-cd)pyrene; pyrene benzo(g,h,i)perylene

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-002)
SECTION 2 - DENTAL OPERATIONS

I. APPLICATION

This code of practice for dental operations defines mandatory requirements for managing non-domestic waste discharged directly or indirectly into a sewer connected to a sewage facility.

This code of practice applies to dental operations.

II. DISCHARGE REGULATIONS

An operator of a dental operation must not discharge waste which, at the point of discharge into a sewer, contains;

a. prohibited waste, special waste, or storm water; or
b. restricted waste with the exception of mercury measured at the point of discharge from a certified amalgam separator.

An operator of a dental operation that produces liquid waste from photographic imaging containing silver shall comply with the requirements of LPSCO-CP-01-001.

An operator of a dental operation that produces wastewater containing dental amalgam must either:

a. collect and transport the wastewater from the dental operation for off-site waste management; or
b. treat the wastewater at the dental operation site prior to discharge to the sewer using a certified amalgam separator.

An operator of a dental operation must install and maintain the amalgam separator according to the manufacturer's or supplier's recommendations in order that the amalgam separator functions correctly. Such separator must be certified for use by the manufacturer.

An operator of a dental operation who installs an amalgam separator must ensure that:

a. all dental operation wastewater that contains dental amalgam is treated using the amalgam separator;
b. a monitoring point is installed at the outlet of the amalgam separator or downstream of the amalgam separator at a location upstream of any discharge of other waste;
c. the monitoring point must be installed in such a manner that the total flow from the amalgam separator may be intercepted and sampled; and
d. the monitoring point shall be readily and easily accessible at all times for inspection.

Applies to all **WASTEWATER** service areas

PART SIXTEEN

CODE OF PRACTICE (LPSCO-CP-01-002)

SECTION 2 - DENTAL OPERATIONS

If the amalgam separator is located downstream of a wet vacuum system, an operator of a dental operation must ensure that:

a. the wet vacuum system is fitted with an internal flow control fitting; or
b. a flow control fitting is installed on the water supply line to the wet vacuum system.

The flow control fitting must be sized to limit the flow to a rate that is no more than the maximum inlet flow rate of the amalgam separator as stated by the manufacturer of the amalgam separator.

An operator of a dental operation must locate an amalgam separator in such a manner that an accidental spill, leak or collecting container failure will not result in waste containing amalgam entering any sewer. If a location is not available, an operator of a dental operation must do one of the following:

a. install spill containment to contain spills or leaks from the amalgam separator; or
b. cap all floor drains into which liquid spilled from the amalgam separator would normally flow.

An operator of a dental operation must replace the amalgam separator's collecting container when any one of the following occurs:

a. the manufacturer's or supplier's recommended expiry date, as shown on the amalgam separator, has been reached; or
b. the warning level specified by the manufacturer has been reached; or
c. analytical data obtained using a method of analysis outlined in standard methods, or an alternative method of analysis approved by the manager, having a method detection limit of 0.0000005 mg/L or lower, indicates that the total concentration of mercury in the discharge from the amalgam separator is greater than, or equal to 0.005 mg/ L.

An operator of a dental operation shall not dispose of dental amalgam collected in an amalgam separator, a collecting container, or any other device, to a sewer.

III. RECORD KEEPING AND RETENTION

An operator of a dental operation that uses an amalgam separator must keep at the site of installation of the amalgam separator, an operation and maintenance manual containing instructions for installation, use, maintenance and service of the amalgam separator installed.

An operator of a dental operation that uses an amalgam separator must post, at the site of installation of the amalgam separator, a copy of the manufactures standard test report pertaining to the amalgam separator installed.

Applies to all **WASTEWATER** service areas

PART SIXTEEN

CODE OF PRACTICE (LPSCO-CP-01-002)

SECTION 2 - DENTAL OPERATIONS

An operator of a dental operation that uses an amalgam separator must keep a record book at the dental operation site that includes the following information pertaining to the amalgam separator installed:

a. date of installation of the amalgam separator and name of the installation service provider;
b. serial number and expiry date of the amalgam separator and/or its components;
c. maximum recommended flow rate through the amalgam separator, where applicable;
d. dates of inspection, maintenance, cleaning and replacement of any amalgam separation equipment or components;
e. dates and descriptions of all operational problems, spills, leaks or collecting container failures associated with the amalgam separator and remedial actions taken;
f. name, address and telephone number of any person or company who performs any maintenance or disposal services related to the operation of the amalgam separator; and
g. dates of pick-up of the collecting container for o ff-site disposal, volume of waste disposed and the location of disposal.

The records must be retained for a period of two years and must be available on request by an company representative.

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-003)
SECTION 3 – DRY-CLEANING OPERATIONS

I. APPLICATION

This code of practice for Dry Cleaning operations defines the requirements for managing waste discharged directly or indirectly into a sewer connected to a sewage facility from dry cleaning businesses, or other facilities employing solvent or chemical cleaning routines.
Definitions are included in LPSCO-CP-01-DEF.

II. DISCHARGE REGULATIONS

An operator of a dry-cleaning operation must not discharge waste, which at the point of discharge into a sewer contains;

a. Tetrachloroethylene and Perchloroethylene is prohibited;
b. Petroleum solvent in a concentration that is in excess of 15 milligrams per liter as analyzed in a grab sample; and
c. Prohibited waste, restricted waste, special waste, storm water, or contaminated water.

An operator of a dry-cleaning operation that generates wastewater containing petroleum solvent shall either;

a. Collect and transport the wastewater from the dry-cleaning operation for offsite waste management; or
b. Install and maintain a solvent/water separator and holding tank in accordance with this code of practice.

Solvent Water Separators and Holding Tanks

Solvent/water separator and holding tank installations must conform to the requirements of this code of practice.

An operator of a dry-cleaning operation shall not directly discharge wastewater from the solvent/water separator to a sewage facility

a. An operator of a dry-cleaning operation must;
b. Collect the wastewater discharged from a solvent/water separator into a transparent, solvent-compatible, holding tank with a containment capacity 25% larger than the total volume of the solvent/water separator; and
c. Allow the wastewater to stand undisturbed for a period of not less than 12 hours following each operating date.

An operator of a dry-cleaning operation must check the contents of the holding tank after the specified period of time has elapsed to determine whether the wastewater contains any visible residual solvent. If there is no visible residual solvent in the holding tank, the contents may be discharged to the sewer.

Applies to all **WASTEWATER** service areas

PART SIXTEEN

CODE OF PRACTICE (LPSCO-CP-01-003)

SECTION 3 – DRY-CLEANING OPERATIONS

If the holding tank contains any visible tetrachloroethylene or petroleum solvent after the specified period of time, then the tetrachloroethylene or petroleum solvent must be separated and returned to the solvent recovery system. After the removal of all visible solvent, the wastewater may be discharged to the sanitary sewer.

Visual Inspections

An operator of a dry-cleaning operation must:

a. Visually inspect the solvent/water separator on a daily basis and
b. Clean the solvent/water separator at least once every seven (7) days to manufacturer's standards.

Spills and Leaks

An operator of a dry-cleaning operation must install spill containment facilities in all chemical storage areas and around all dry-cleaning machines.

An operator of a dry-cleaning operation must block off all sewer drains within the containment area for chemical storage and dry-cleaning equipment to prevent any accidental discharge of solvent to a sewer.

An operator of a dry-cleaning operation must inspect all dry-cleaning equipment for liquid leaks at least once per day.

An operator of a dry-cleaning operation must keep all equipment clean to ensure that leaks are visible. The following areas and items are to be checked for leaks:

a. hose connections, unions, couplings and valves
b. machine door gasket and seating
c. filter head gasket and seating
d. pumps
e. base tanks and storage
f. solvent/water separators
g. filter sludge recovery
h. distillation unit
i. diverter valves
j. saturated lint in lint baskets
k. holding tanks
l. cartridge filters

Applies to all **WASTEWATER** service areas

PART SIXTEEN

CODE OF PRACTICE (LPSCO-CP-01-003)

SECTION 3 – DRY-CLEANING OPERATIONS

An operator of a dry-cleaning operation who detects any liquid leak from dry cleaning equipment or chemical storage must repair the leak within 72 hours and must immediately prevent any discharge of contaminants to a sewer.

III. RECORD KEEPING AND RETENTION

Every dry-cleaning operation must keep a record book on site for inspection with records from the previous two years.

Th e following information shall be recorded in the record book:

a. record of all inspections done by the operator, employees or other hired personnel;
b. record of any liquid leaks detected and remedial action taken;
c. record of solvent/water separator cleaning;
d. record of holding tank cleaning and solvent transfer; and
e. record of all other equipment maintenance and repair.

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-004)
SECTION 4 – FOOD SERVICE OPERATIONS

I. APPLICATION

This code of practice for Food Service operations defines the requirements for managing waste discharged directly or indirectly into a sewer connected to a sewage facility from restaurants, or other facilities employing food service (such as food preparation services) as a primary or secondary business operation. Traps, interceptors and separators shall be provided to prevent the discharge of oil, grease, sand and other substances harmful or hazardous to the building drainage system, the collection system the private sewage disposal system or the sewage treatment plant or processes.

Traps, interceptors and separators shall be installed:

a. operators of a food services operation that adds kitchen equipment that discharges oil and grease;
b. operators of a food services operation that discharges non-domestic waste to sewer that exceeds any of the restricted waste criteria specified in LPSCO-CP-01-DEF; or
c. any food service operation, as determined by Corporation's wastewater operations group.
d. at new facilities
e. at existing food service facilities, not equipped with a trap, interceptor or separator, when additions, alterations or remodel are done which Increase servicing volume, seating capacity, etc.
f. at existing food service facilities, equipped with a trap, interceptor or separator, when additions, alterations or remodel are done which increase servicing volume, seating capacity, changes to the menu, etc.
g. at any non-food facilities when additions, alterations, or remodeling is proposed for the purpose of food preparation and service.
h. at existing facilities not equipped with a trap, interceptor or separator, which is proposed for the purpose of food preparation and service.

Definitions are included in LPSCO-CP-01-DEF.

II. DISCHARGE REGULATIONS

An operator of a Food Service Operation must not discharge waste, which at the point of discharge into a sewer, contains:

1. oil and grease in a concentration that is in excess of 100 milligrams per liter as analyzed in a grab sample;
2. suspended solids in a concentration that is in excess of 350 milligrams per liter as analyzed in a grab sample;
3. 5-day biochemical oxygen demand (BOD 5) in a concentration that is in excess of 350 milligrams per liter in a grab sample;
4. prohibited waste, restricted waste, special waste, storm water, or contaminated water.

Applies to all **WASTEWATER** service areas

PART SIXTEEN

CODE OF PRACTICE (LPSCO-CP-01-004)

SECTION 4 – FOOD SERVICE OPERATIONS

III. GREASE INTERCEPTORS

Grease interceptors are required to be installed and maintained by the Owner of food service operations within the collection system of Corporation facilities. Grease interceptor installations shall conform to the requirements of th.is code of practice.

Interceptors, such as grease, oil, or sand shall be provided by laundries, restaurants, service stations, auto repair shops, carwashes and other industrial use.rs when, in the opinion of Corporation, interceptors are necessary for the proper handling of wastewater containing oil and grease or sand or any flammable wastes. Such interceptors shall not be required for domestic users.

Construction:

All traps, interceptors and separators shall be constructed of impervious materials capable of withstanding abrupt and extreme changes in temperature. New or upgraded grease device shall have a three-lid manhole, properly sized per Table 1. Traps, interceptors and separators shall be watertight and equipped with easily removable covers. Covers shall be gastight and watertight.

Cleaning and Maintenance:

Cleaning and maintenance must be performed when total volume of captured oil, grease and solids material displaces more than twenty-five (25) percent of the total volume of the trap, interceptor or separator or when the pH of a sample taken from the effluent side of the interceptor drops below 5.0 or when odor generation becomes a health issue or when the Company inspection determines a cleaning is necessary.

Maintenance Records:

All traps, interceptors and separators shall be maintained by the user in efficient operating condition at all times. Written records and documentation of all cleaning, repair, calibration, and maintenance shall be maintained at the facility for a minimum of three (3) years and be made available upon request.

Maintenance Inspection:

All traps, interceptors and separators shall be inspected by Corporation representative during normal working bouts. Inspection results shall be made available to person, firm or corporation in reasonable charge of the traps, interceptors and separators. Corporation representative shall require correction in order to enforce Corporation pretreatment code of practices.

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-004)
SECTION 4 – FOOD SERVICE OPERATIONS

Skimming:
Skimming, decanting or discharging of removed waste or wastewater back into any traps, interceptors and separators or any appurtenance of the wastewater collection system is strictly prohibited.

Pumping:
All oil, sand and grease interceptors shall be pumped out or cleaned out completely not less than once every ninety (90) calendar days. Grease traps must be cleaned out completely not less than once every thirty (30) calendar days. Traps and interceptors shall be cleaned more frequently when necessary or required.

Bacteria as a Substitute:
The use of bacteria additives as a supplement to maintenance may be authorized by Corporation when a written request is made to the Corporation which includes material safety data sheets. The addition of emulsifiers, de- emulsifiers, surface active agents, enzymes, or degreasers directly or into any drain leading to any grease removal device is strictly prohibited unless approved by the Corporation.

Use:
Traps, interceptors and separators shall be single user only. When an interceptor can be safely used by multiple users (e.g., food courts), multiple users may be allowed when approved by Corporation. Multiple facilities operated by the same person, firm or corporation may be allowed to connect to a single interceptor with approval from Corporation. The person, firm or corporation in reasonable charge of the trap, interceptor or separator shall take any and all steps necessary to assure adequacy which includes repair, modification or replacement.

Alternate Devices and Technology:
Alternative devices and technologies shall be submitted to Corporation for approval before any such device is installed. The service facility will be required to furnish analytical data demonstrating the effluent discharge concentration to Corporation wastewater collection system will not exceed those listed in LPSCO-CP-01-001.

Sizing:
All traps, interceptors and separators shall be properly sized per Tab le 1. When an interceptor is sized less than five hundred (500) gallons or more than two thousand five hundred (2,500) gallons, the person, firm or corporation making the permit application shall first meet with the Corporation to verify the reduced or increased size has been correctly calculated and that no other options are available.

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-004)
SECTION 4 – FOOD SERVICE OPERATIONS

Size Modification:
Modifying the size of any trap or interceptor shall only be done when sizing per Table 1 allows the modification. Modifying the size of any trap or interceptor shall not be done without the approval of Corporation.

Domestic Wastewater:
Domestic wastewater shall not be discharged to the interceptor.

Minimization Plan:
All facilities required to install and operate a trap, interceptor or separator shall develop and implement a Waste Minimization Plan pertaining to the disposal of grease, oils, and food bearing wastes.

Best Management:
All establishments requiring a trap, interceptor or separator shall adopt BMP's (Best Management Practices) for handling sources of floatable oils, fat or grease originating within their facility. Proof of employee training in BMP's shall be shown to Corporation upon request.

Other Fixtures:
Toilets, urinals, and other similar fixtures shall not discharge through a grease interceptor.

Minimization Program:
The applicant shall establish and submit a written waste minimization plan (maintenance program) outlying specific methods (Best Management Practices) that the facility will use on a daily basis to reduce the discharge of oil and grease as well as solids from entering the interception device and ultimately, the Corporation sewer system. This plan shall be acceptable to and approved by the Corporation. The approved document shall accompany the permit application.

Discharge Permit:
This document will be used in lieu of a discharge permit to assist with enforcing all Corporation codes of practices.

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-004)
SECTION 4 – FOOD SERVICE OPERATIONS

Grease interceptors automatic grease removal requited:

A grease interceptor or automatic grease removal device shall be required to receive the drainage from fixtures and equipment with grease-laden waste located in food preparation areas, such as in restaurants, hotel kitchens, hospitals, school kitchens, bars, factory cafeterias, caterers, nursing homes, day care center, churches and clubs. Fixtures and equipment shall include pot sinks, pre-rinse sinks; soup kettles or similar devices; workstations; floor drains or sinks into which kettles are drained; automatic hood wash units and dishwashers without pre-rinse sinks. Grease interceptors and automatic grease removal devices shall receive waste only from fixtures and equipment that allow fats, oils or grease to be discharged. Interceptors, such as grease, oil or sand shall be provided at laundries, restaurants, service stations, auto repair shops, carwashes and other industrial users when the proper handling of wastewater containing oil and grease or sand or any flammable wastes is necessary.

Location:

All Interceptors shall be approved and shall be located to be readily and easily accessible for cleaning and inspection.

Food waste grinder:

Where food waste grinders connect to grease interceptors, a solids interceptor shall separate the discharge before connecting to the grease interceptor. Solids interceptors and grease interceptors shall be sized and rated for the discharge of the food waste grinder. Emulsifiers, chemicals, enzymes and bacteria shall not discharge into the food waste grinder. Corporation shall require any user to cease operation of a garbage grinder and permanently remove such equipment when it is determined that the grinder is imposing any adverse effect on interceptor function.

Grease interceptor capacity:

Grease interceptors shall have the grease retention capacity indicated in Table 1 for the flow-through rates indicated. Corporation shall make determinations of interceptor adequacy and need, based on review of all relevant information regarding interceptor performance, facility site and building plan review and to require repairs to, modifications, or replacement of such traps.

Applies to all **WASTEWATER** service areas

PART SIXTEEN

CODE OF PRACTICE (LPSCO-CP-01-004)

SECTION 4 – FOOD SERVICE OPERATIONS

TABLE 1 - CAPACITY OF GREASE INTERCEPTO RS - E PA-2 Model

A Determine maximum drainage flow from fixtures:					
Type of Fixture	Total Fixtures		Flow Rate		Amount
Restaurant kitchen sink		X	15 gpm	=	
Single compartment sink		X	20gpm	=	
Double compartment sink		X	25gpm	=	
2, single compartment sinks		X	25 gpm	=	
2, double compartment sinks		X	35gpm	=	
Triple sink 1.5 inch drain		X	35 gpm	=	
Triple sink 2 inch drain		X	50gpm	=	
30gallon dishwasher		X	15gpm	=	
50gallon dishwasher		X	25gpm	=	
50--100gallon dishwasher		X	40gpm	=	
B. Total	Number of fixtures			--	gpm
C. Loading Factors					
Restaurant type	Fast food-paper delivery			=	.50
	Low volume			=	.50
	Medium volume			=	.75
	High Volume			=	1.0
D. Bx C = D, subtotal					
E. D x 60 = Subtotal x 60 minutes = E, maximum flow for one (1) hour, in gallons					
F. Ex 2 = maximum flow for one hour times two (2) hours retention time (based on restaurant volume) = F, volume of trap in gallons =					

ISSUED BY:
Moses Thompson, President
Liberty Utilities (LITCHFIELD PARK Water & Sewer) Corp.
14920 W Camelback Rd
Litchfield Park, AZ 85340
Decision No. XXXX

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-004)
SECTION 4 – FOOD SERVICE OPERATIONS

Access and maintenance of traps, interceptors, and separators:

Complete access shall be provided to each interceptor and separator for service, maintenance and inspection of the inner chamber(s) and viewing and sampling of effluent wastewater discharged to the sewer. Interceptors and separators shall be maintained by periodic removal of accumulated grease, scum, oil, or other floating substances and solids deposited in the interceptor or separator.

Periodic Inspection:

All traps, inceptors and separators shall be subject to periodic inspections by Corporation during normal operating hours. These inspections can be based on an annual inspection or when a complaint is registered with Corporation regarding a grease-removal device. Should the inspection of any trap, interceptor or separator indicate a violation of any item in (1) thru (3) below, the person, firm or corporation in reasonable charge shall bring the device into compliance within the timeframe noted on the notice of violation, but not longer than fourteen (14) calendar days.

If twenty-five (25) percent of the interceptor is full; both surface (oil and grease) and bottom (solids).

When OSHA (Occupational, Safety and Health Administration) atmospheric levels of Hydrogen Sulfide limits have been exceeded - "Short Term Exposure Limit" (STEL) of fifteen (15) ppm over a fifteen-minute time-weighted average. When the "Immediately Dangerous to Life and Health" (IDLH) level is 100 ppm or above, immediate action shall be performed to return the level of Hydrogen Sulfide to safe and acceptable limits. If the violation cannot be immediately resolved, all use of the Trap, Interceptor or Separator shall cease until compliance is obtained.

When pH in the effluent chamber falls below 5.0 - which is an unhealthy anaerobic interceptor condition.

Maintenance:

Any trap, interceptor or separator not adequately maintained to prevent floatable oils, fat or grease from entering the sewerage system or produce excessive odors shall be in violation of Corporation codes of practice.

Clearing Obstructions:

Corporation shall take appropriate action to clear any obstruction of the Corporation sewer that causes a sewer overflow. When the obstruction is found to be caused by an overburdened or non-maintained trap, interceptor or separator, the person, firm or corporation in reasonable charge of the trap, interceptor or separator reimbursement of Corporation costs associated with clean-up efforts including any fines leveled against Corporation. Any establishments that continuously violate Corporation code of practice shall be subject to having sewer service discontinued.

Contain and/or Clean Up:

Should Corporation find it necessary to contain and/or clean up a private sanitary sewer overflow caused by blockage of private or public sewer lateral or system, all associated cost shall be the responsibility of the person, firm or corporation in reasonable charge of the property.

Applies to all **WASTEWATER** service areas

PART SIXTEEN

CODE OF PRACTICE (LPSCO-CP-01-004)

SECTION 4 – FOOD SERVICE OPERATIONS

Repairs or Replacements:

When repairs or replacements are necessary to a trap, interceptor or separator, all repairs or replacements shall be completed within the time frame stated on the notice to comply. Corporation may authorize a time extension, not to exceed thirty (30) days, for justifiable cause.

Grease Removal:

The person, fi.cm or corporation in reasonable charge shall remove and dispose of grease at a facility permitted to receive and process such waste. Cleaning frequencies shall be dependent on the amount of oil, grease or solids generated at each operation, the size of the grease trap or interceptor, and the approved written waste minimization program, but not to exceed thirty-day intervals for traps and ninety-day intervals for interceptors. Traps and interceptors shall be cleaned by a license d contractor.

Interference, Operation and Odors:

Any facility whose effluent discharge into the sewerage system causes interference in the conveyance system, operation of the sewerage system, or emits excessive odors shall be required to sample the discharge from the trap, interceptor or separator and have it analyzed for oil and grease and sulfides, total and dissolved. Results of the analysis shall be immediately reported. Corporation may sample the grease interception device at any time, utilizing Corporation representatives. The person, firm or corporation in reasonable charge shall be responsible for any and all associated cost of such testing or sampling.

IV. RECORD KEEPING AND RETENTION

An operator of a food services operation must keep a record at the food services operation of all grease interceptor inspection and maintenance activities including:

a. the date of inspection or maintenance;
b. the maintenance conducted;
c. the type and quantity of material removed from the grease interceptor; and
d. the location of disposal of the material removed from the grease interceptor.

The records shall be reta1r.ed for a period of three years, and shall be available on request by an company· representative.

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-005)
SECTION 5 - PHOTOGRAPHIC IMAGING OPERATIONS

I. APPLICATION

This code of practice for photographic imaging operations defines mandatory requirements for managing non - domestic waste discharged directly or indirectly into a sewer connected to a sewage facility.

This code of practice applies to photographic imaging operations. Definitions are included in LPSCO-CP-01-DEF.

II. DISCHARGE REGULATIONS

An operator of a photographic imaging operation must not discharge waste which, at the point of discharge into a sewer, contains:

a. silver in a concentration that is in excess of prescribed local limit analyzed in a grab sample; or,
b. prohibited waste, restricted waste, special waste, storm water, or contaminated water as defined in LPSCO-CP-01-DEF.

An operator of a photographic imaging operation that produces liquid waste containing silver must either:

a. collect and transport the waste from the photographic imaging operation for off-site waste management; or
b. treat the waste at the photographic imaging operation site prior to discharge to the sewer using one of the following silver recovery technologies:
   i. two chemical recovery cartridges connected in a series;
   ii. an electrolytic recovery unit followed by two chemical recovery cartridges connected in series; or
   iii. any other silver recovery technology, or combination of technologies, capable of reducing the concentration of silver in the waste to 1.2 mg/L or less where valid analytical test data has been submitted to, and accepted by, the Corporation wastewater group.

An operator of a photographic imaging operation must install and maintain silver recovery technology according to the manufacturer's or supplier's recommendations.

An operator of a photographic imaging operation must collect all liquid waste containing silver in a holding tank and must deliver this waste to the chemical recovery cartridges using a metering pump.

An operator of a photographic imaging operation must calibrate the metering pump at least once per year.

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-005)
SECTION 5 - PHOTOGRAPHIC IMAGING OPERATIONS

Spill/ Leak Prevention

An operator of a photographic imaging operation must locate the silver recovery system in such a manner that an accidental spill, leak or container failure will not result in liquid waste containing silver in concentrations greater than 1.2 mg/L entering any sewer.

If a location referred to above is not available, an operator of a photographic imaging operation must do one of the following:

a. install spill containment to contain spills or leaks from the silver recovery system; or
b. cap all floor drains into which liquid spilled from the silver recovery system would normally flow.

Testing:

When using two separate chemical recovery cartridges, an operator of a photographic imaging operation must test the discharge from the first cartridge for silver content at least once per month using either silver test paper or a portable silver test kit.

When the discharge from the first chemical recovery cartridge referred to above cannot be sampled, an operator of a photographic imaging operation must:

c. install a cumulative flow meter on the silver recovery system; and
d. test the discharge from the second chemical recovery cartridge once per week using silver test paper or a silver test kit.

Cartridge Replacement

An operator of a photographic imaging operation must replace the chemical recovery cartridges when any one of the following occurs:

a. the manufacturer's or supplier's recommended expiry date, as shown on each cartridge, has been reached;
b. eighty percent (80%) of the manufacturer's or supplier's maximum recommended capacity, or total cumulative flow, for each cartridge has been reached;
c. test data, using silver test paper or a silver test kit, indicates that the discharge from the first cartridge is greater than 1000 mg/L; or
d. analytical data using a method of analysis outlined in standard methods, or an alternative method of analysis approved by the manager, having a method detection limit of 0.5 mg/ L silver or lower, indicates that the concentration of silver in the discharge from the silver recovery system is greater than, or equal to, 1.2 mg/ L.

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-005)
SECTION 5 - PHOTOGRAPHIC IMAGING OPERATIONS

I. RECORD KEEPING AND RETENTION

An operator of a photographic imaging operation that uses a silver recovery system must keep, at the photographic imaging operation site, an operation and maintenance manual pertaining to all equipment used in the silver recovery system.

An operator of a photographic imaging operation that uses two chemical recovery cartridges connected in series must keep a record book at the photographic imaging operation site which includes the following information recorded for the previous two years:

a. serial number of each chemical recovery cartridge used;
b. installation date of each chemical recovery cartridge used;
c. expiry date of each chemical recovery cartridge used (where provided by manufacturers or suppliers);
d. maximum recommended capacity, or total cumulative flow, of each chemical recovery cartridge used;
e. dates of all metering pump calibrations;
f. monthly silver test results on the discharge from the first chemical recovery cartridge; or where the discharge from the first cartridge cannot be sampled, weekly silver test results on the discharge from the second chemical recovery[13] cartridge and weekly cumulative flows thro ugh the silver recovery system; and
g. dates and descriptions of all operational problems associated with the chemical recovery cartridges and remedial actions taken.

Both chemical recovery cartridges used following an electrolytic recovery unit must be replaced by the operator of the photographic imaging operation when one of the events referred to above occurs if this is recommended by the manufacturer or supplier of the cartridges.

An operator of a photographic imaging operation that uses an electrolytic recovery unit in addition to two chemical recovery cartridges connected in series must keep a record book at the photographic imaging operation site which includes the following information recorded for the previous two years:

a. all information specified above;
b. date of each removal of silver from the electrolytic recovery unit;
c. date of each maintenance check on the electrolytic recovery unit;
d. dates and descriptions of all operational problems associated with the electrolytic recovery unit anti remedial actions taken.

[13] If treatment of liquid waste with two chemical recovery cartridges connected io series is the only silver recovery technology being used, then the owner of the photographic imaging operation must replace both chemical recovery cartridges when one of the events referred to occurs.

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-006)
SECTION 6 – RV PARK OPERATIONS

I. APPLICATION

This code of practice for RV park operations defines the requirements for managing waste discharged directly or indirectly into a sewer connected to a sewage facility from RVs, mobile homes, trailers, watercraft and other sources which employ storage, chemical disinfection/stabilization and discharge as a waste disposal mechanism.

This code of practice applies to all RV park operations. Definitions are included in LPSCO-CP-01-DEF.

II. DISCHARGE REGULATIONS

An operator of an RV park operation must not discharge waste, which at the point of discharge into a sewer, contains:

a. oil and grease in a concentration that is in excess of 100 milligrams per liter as analyzed in a grab sample;
b. suspended solids in a concentration that is in excess of 350 milligrams per liter as analyzed in a grab sample;
c. 5-day biochemical oxygen demand (BOD_5) in a concentration that is in excess of 350 milligrams per liter in a grab sample;
d. total nitrogen in excess of 100 mg/l;
e. prohibited waste, restricted waste, special waste, storm water, or contaminated water.

If the RV park operation accepts RV customers with the intention of providing sewerage hook-ups, that practice is only acceptable if one of the following conditions is met:

1. If the RV park operation has a dedicated pre-treatment facility, that facility must be used for the disposal of the first discharge of wastewater from any entering RVs. The facility must be maintained as per manufacturer's or engineer's operating instructions. Discharge from that facility which is directed to a sewer connected to a sewerage facility shall be metered such that large slugs of waste are not introduced to the sewer instantaneously. Discharges from such facilities to sewers are limited to 10% of the average daily sewerage flow (in USGPM) experienced in the sewer.
2. In the absence of a dedicated pre-treatment facility, the RV park operation shall require incoming RVs to certify that, prior to connection to a sewer, that the holding tanks of the RV have been discharged at an approved facility.

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-006)
SECTION 6 – RV PARK OPERATIONS

III. RECORD KEEPING AND RETENTION

An operator of an RV park operation must keep a record at the RV park operation of:

a. all disposals of RV waste into a dedicated pre-treatment facility;
b. Pre-treatment facility inspection and maintenance activities including:
    1. the date of inspection or maintenance;
    2. the maintenance conducted; and
    3. the type and quantity of material removed from the facility;
c. Certifications of waste disposal prior to hook up of RVs to sewer services.

The records shall be retained for a period of two years and shall be available on request by Corporation representative.

Applies to all **WASTEWATER** service areas

PART SIXTEEN

CODE OF PRACTICE (LPSCO-CP-01-007)

SECTION 7 - PRETREATMENT/ INDUSTRIALWASTE CONTROL

Reference **PART FIFTEEN** Liberty Utilities (Litchfield Park Water and Sewer) Corp. **Industrial Pretreatment Program and Tariff.**

Applies to all **WASTEWATER** service areas

PART SIXTEEN
CODE OF PRACTICE (LPSCO-CP-01-008)
SECTION 8 - NONCOMPLIANCE / ENFORCEMENT

I. NOTICE OF VIOLATIONS

Whenever the Company determines that any customer has violated or is violating any provision of this Code, or any directives, orders, or permits issued or approved to which the Company is bound, the Company may serve upon such customer a written notice ("Notice") stating the nature of the violations(s) in accordance with A.A.C. R.14-2-609.C, and requiring that the customer correct the violation(s) within a specified period of time; perform such tasks as the Company determines are necessary for the customer to correct the violations; or perform such tasks and submit such information as is necessary for the Company to evaluate the extent of noncompliance or to determine appropriate enforcement actions to be taken in conjunction with the applicable regulatory agencies. A copy of the Notice shall also be provided to the Director of the Utilities Division of the Arizona Corporation Commission.

II. SUSPENSION OF SERVICE

If the customer does not cure the violation, or present a satisfactory plan of remediation to Company, within the time specified in the Notice, then Company may suspend or disconnect wastewater treatment service in accordance with A.A.C. R.14-2-609.C.

In addition, the Company may suspend wastewater treatment service, in accordance with A.A.C. R.14-2-609.B (without notice), when such suspension is necessary, in the opinion of the Company, in order to stop an actual or threatened discharge which presents or may present an imminent or substantial endangerment to the health or welfare of persons, to the environment, or causes the Company to violate any condition of its aquifer protection permit, AZPDES discharge permit, or any applicable sludge disposal regulations.

Any customer notified of an immediate suspension of the wastewater treatment service shall immediately stop or eliminate the discharge. In the event of a failure of the customer to comply voluntarily with the cease-and-desist request, the Company shall take such steps as deemed necessary, including immediate severance of the sewer connection and/or immediate disconnection of the water service, to prevent or minimize damage to the company's wastewater system or endangerment to any individuals or the environment. Any action that results in the immediate suspension of service, or disconnection, of a customer shall be reported to the Director of the Utilities Division of the Arizona Corporation Commission and Maricopa County Environmental Services Department (MCESD) within twenty-four (24) hours of the suspension or disconnection. Any reconnection of the affected customer shall be in accordance with the Company's Tariff for which the customer must pay the cost of disconnection and reconnection, plus the cost of parts and installation of an Elder valve (or similar equipment) to allow for easier disconnection in the event of a repeated discharge offense by customer.

DIRECT TESTIMONY OF PETER EICHLER

ON BEHALF OF LIBERTY UTILITIES (LITCHFIELD PARK WATER & SEWER) CORP.

June 30, 2025

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I. INTRODUCTION AND PURPOSE OF TESTIMONY

Q. Please state your name and business address.

A. My name is Peter Eichler and my business address is 354 Davis Road, Oakville, Ontario, Canada.

Q. On whose behalf are you testifying in this proceeding?

A. I am testifying on behalf of Liberty Utilities (Litchfield Park Water & Sewer) Corp. ("Liberty Litchfield Park" or "Company").

Q. By whom are you employed and in what capacity?

A. I am Senior Vice President, Business & Financial Planning for Liberty Utilities (Canada) Corp. ("LUCC"), which is a subsidiary of Algonquin Power & Utilities Corp. ("APUC"). APUC owns Liberty Utilities Co. ("Liberty"), which owns and operates 26 regulated electric, natural gas, water, and wastewater utilities in 13 states – Arizona, Arkansas, California, Iowa, Illinois, Georgia, Massachusetts, Missouri, Kansas, New Hampshire, New York, Oklahoma, and Texas.

Q. Please describe your responsibilities as Senior Vice President, Business & Financial Planning.

A. I am currently responsible for financial planning and analysis for the Liberty family of companies. My overall mandate includes budgeting, forecasting, capital expenditure approval, and analysis of the financial performance of the utility companies operated by Liberty.

Q. Please describe your educational and professional background.

A. I am a designated accountant, having received the Certified Management Accountant ("CMA") designation in Canada, which is now referred to as a Chartered Professional Accountant ("CPA"). That designation is similar to a Certified Public Accountant designation in the United States. In addition, I hold a Master of Business Administration degree from the University of Windsor in

Ontario, Canada, and I have a Bachelor of Commerce degree with a specialization in Finance from Ryerson University in Toronto, Canada. I have been employed by LUCC in various capacities since 2009, including most recently as the Senior Vice President of Regulatory Strategy and Central Services, and have also served in other roles such as the President of Liberty's gas distribution business in Massachusetts, a utility which serves approximately 58,000 customers. Before joining Liberty, I spent four years at regulated electric utilities in Ontario, Canada, working in the areas of corporate finance, ratemaking, and regulatory affairs.

Q. Have you previously testified before this Commission or any other regulatory agency?

A. Yes. I have testified before the Arizona Corporation Commission ("ACC") in several rate cases, including Docket Nos. W-02465A-15-0367 and WS-02676A-15-0368. In those cases, I testified on matters of corporate allocation methodologies and costs. I have also previously testified before many other commissions on various issues pertaining to regulated utilities operations, planning, finance, ratemaking, and others. These include the Arkansas Public Service Commission, California Public Utilities Commission, Georgia Public Service Commission, Illinois Commerce Commission, Iowa Utilities Board, Kansas Corporation Commission, Kentucky Public Service Commission, Massachusetts Department of Public Utilities, Missouri Public Service Commission, New Hampshire Public Utilities Commission, Oklahoma Corporation Commission, and the Texas Commission on Environmental Quality.

Q. What is the purpose of this testimony?

A. The purpose of this testimony is to support the APUC Cost Allocation Manual ("CAM") and the corporate shared services costs allocated to Liberty Litchfield

Park, as well as the capitalization derived from the corporate shared services costs and recorded in the Company's rate base.

II. THE APUC/LIBERTY SHARED SERVICES AND COST ALLOCATION MODEL

A. Corporate Structure

Q. Please describe APUC and its major subsidiaries.

A. APUC is a publicly traded utility holding company that serves as the overall corporate parent of a portfolio of utility assets. APUC is traded on the New York and Toronto stock exchanges. APUC has two major operating units in North America – its regulated utilities ("Liberty Utilities") and its unregulated renewable power generation facilities ("Liberty Power").

Figure 1: Simplified APUC Corporate Structure

Liberty Utilities owns and operates regulated water, wastewater, natural gas, and electric utilities in 13 states and one Canadian province. Liberty Utilities is organized into three regional divisions: East, Central, and West. Liberty Power provides renewable power generation, with numerous facilities throughout the

United States and Canada. In addition to APUC's two major operating units in North America, APUC also owns a water and wastewater utility in Chile and an electric utility in Bermuda.

In January 2025, APUC sold Liberty Power, excluding its hydro portfolio, to a wholly-owned subsidiary of LS Power. With the sale of Liberty Power, APUC is transitioning to pure-play regulated utility operations.

Q. How would you characterize the complexity of APUC/Liberty's corporate structure?

A. I do not believe our organizational structure is unnecessarily complex given that we operate gas, water, wastewater, and electric utilities in multiple jurisdictions. Only a few corporate entities are involved in providing shared services. My goal in this rate case is to show that our cost allocation process is understandable, rational, beneficial, consistent, and verifiable through regulatory inspections and audits. Therefore, Liberty's structure does not interfere with the setting of rates that provide for recovery of the Company's reasonable and necessary costs of service.

Q. How are APUC's regulated and unregulated entities managed and operated?

A. APUC's operating units are managed and operated with shared corporate and business support services, combined with decentralized local management and operational control of day-to-day utility operations. The result is that each regulated utility (run by local management and operators) benefits from access to a wide variety of corporate and business support services and essential access to capital for infrastructure investment, all at a reasonable cost. This business model provides substantial benefits to our regulated utilities and their customers through shared corporate services while leaving local management with control over operations.

Q. Who is the immediate corporate parent of Liberty Litchfield Park?

A. The immediate parent company for Liberty Litchfield Park is Liberty Utilities (Sub) Corp. ("Liberty Sub Corp"). Liberty Sub Corp, a direct subsidiary of Liberty Utilities Co. ("LUCo"), is the parent company for the eight individual operating utilities in Arizona and Texas. [1] As such, Liberty Sub Corp functions as a local, shared services company with shared assets and costs recorded on its books.

B. <u>Introduction to Shared Services</u>

Q. What are shared services?

A. Shared services are corporate administrative, financial, accounting, human resources, and other business support services provided to and paid for by more than one entity or division within an entity.

Q. Are shared services models like this common in the utility industry?

A. Yes, the use of service companies and shared services models is common in the utility industry, as well as in business generally. Through shared services models, a broad array of corporate and business support services are seamlessly provided to multiple entities across the entire organization. This corporate structure is not only prevalent, but crucial to achieving economies of scale and improving the quality of products and services.

Q. How do shared services provide those benefits?

A. For Liberty, shared services allow the regulated utilities access to a greater range of business support at a lower cost than most utilities could obtain in providing similar services and incurring those costs separately. For example, treasury, information technology, insurance, and risk management are provided centrally, which provides the benefits that naturally flow from the reliance on service

[1] The other Arizona utilities are Liberty Utilities (Black Mountain Sewer) Corp., Liberty Utilities (Gold Canyon Sewer) Corp., Liberty Utilities (Rio Rico Water & Sewer) Corp. The three regulated Texas utilities are Liberty Utilities (Silverleaf Water) LLC, Liberty Utilities (Tall Timbers Sewer) Corp. and Liberty Utilities (Woodmark Sewer) Corp. The unregulated Texas utility is Liberty Utilities (Seaside Water) LLC.

groups with broad experience and facilitates the standardization of these activities. The benefits of this type of shared services model to the customers are through economies of scale and empowerment of local operations with access to in-house experts providing shared services. Put simply, under Liberty's shared services model, service companies, and corporate affiliates provide a broad array of corporate and business support functions to all of Liberty's regulated utility subsidiaries. These services are delivered across the organization to achieve economies of scale, cost efficiency, and standardization—benefits that would be difficult or costly for each utility to replicate independently. This model allows smaller or regionally dispersed utilities—such as our utilities in Arizona—to access high-quality support functions that would otherwise be unaffordable or inefficient to maintain on a standalone basis.

Q. Are all shared services provided by affiliated entities within the APUC corporate organization?

A. Yes. As discussed above, all shared services are provided by affiliated entities within the APUC corporate structure. The depth, experience, and scope of the corporate support and services provided within APUC/Liberty would be difficult and impractical to replicate through unaffiliated third parties. That is why enterprises like APUC build their own corporate support centers that are tailor-made to meet their unique and ever-changing needs regardless of size or geography. This model is common across the utility industry and is considered essential for modern utility holding companies to operate effectively.

Q. Can you expand on your discussion of the support services provided by the Company's affiliates?

A. Yes. Overall, there are three primary legal entities that that provide support services – APUC, LUCC, and Liberty Utilities Service Corp. ("LUSC").

1. **APUC** -- APUC provides overall strategic management, corporate governance, financial management, and administrative and support services to all of its subsidiaries. In addition, as a publicly traded holding company, APUC also maintains access to the capital markets through the issuance of long-term debt and equity, as well as access to short-term credit facilities. Access to capital is of substantial benefit to regulated utilities that often need large sums for infrastructure investment.
2. **LUCC** -- LUCC employs personnel that provide various corporate and business support services including executive, regulatory strategy, energy procurement, operations, utility planning, administration, and customer experience. Additional shared services are provided by Liberty Algonquin Business Services ("LABS"), a business unit of LUCC. LABS includes the following departments: information technology; human resources; training; environment, health, safety and security; procurement; executive and strategic management; technical services; risk management; financial reporting; planning and administration; treasury; internal audit; external communications; legal; and compliance.
3. **LUSC** -- LUSC is the legal entity employing most of Liberty's U.S.-based employees who provide support to the regulated utilities. LUSC employees generally can be placed into four categories: (1) utility dedicated employees, (2) employees who provide shared services to Liberty Power and Liberty Utilities, (3) employees who provide corporate support to all Liberty Utilities' operating utilities, and (4) regional employees who provide shared services to support the utilities within one of the operating regions (East, Central, or West). Under LUSC, administration of payroll costs is streamlined and shared across APUC's

U.S.-based utility companies. LUSC also provides a variety of other shared services to Liberty's regulated utilities.

Q. Please describe the services provided on a regional basis?

A. As described previously, the various operating utilities are organized under a regional structure. This provides a more effective management and reporting hierarchy that allows local utilities to engage with knowledgeable regional managers for specific functions. For example, our regional structure allows state presidents, such as Mr. Thompson, to focus on local utility operations, state utility commission proceedings, customer satisfaction, and community relations. Similarly, this organizational structure allows regional employees to share their expertise among regulated utilities in nearby states and provide for common support functions that would be too cumbersome to provide at a national corporate level and too costly to support at an individual state/utility level. The regional structure also provides for a manageable span of control for the number of individuals reporting to a single manager.

Q. Does Liberty Sub Corp. also provide shared services?

A. No personnel are employed by Liberty Sub Corp. But there are employees of LUSC that provide services for the regulated water and wastewater utilities in Arizona and Texas that are owned by Liberty Sub Corp. Those employees assign and charge time and costs to Liberty Sub Corp. departments that are allocated to the regulated utilities in Arizona and Texas. For example, some of the LUSC Engineering and Operations department employees provide direct support to the Arizona and Texas utilities and are assigned to Liberty Sub Corp. in the human resources information system. Their costs are recorded on Liberty Sub Corp.'s books in their respective departments and may be directly billed to the appropriate utilities such as Liberty Litchfield Park or allocated based on the local four-factor methodology to all the Arizona and/or Texas utilities.

Q. How are the costs of shared services allocated among the operating utilities?

A. Costs are pooled and allocated in accordance with the APUC CAM, which I will explain in greater detail in the next subsection of my testimony.

C. Cost Allocation and the CAM

Q. Please describe the CAM.

A. The CAM is a written manual intended to govern affiliate transactions and cost allocations within the APUC organization. The CAM describes the services provided by APUC, LUCC, and LUSC and sets forth the methods used to apportion the costs for those services among the benefiting entities. Costs allocated include both direct charges to specific entities and the allocation of indirect costs for services that benefit more than one entity within the organization. The CAM is based on the National Association of Regulatory Utility Commissions ("NARUC") Guidelines for Cost Allocations and Affiliate Transactions. The NARUC Guidelines are attached as Appendix 1 to the CAM. The CAM is attached to my testimony as Appendix PE_Dir.1. The fundamental premise of the CAM is to direct charge costs to the greatest possible extent and to use rational, consistent and verifiable processes, procedures, and methodologies to determine, define, and assign indirect common costs to all benefitting entities. The CAM is also designed to prevent regulated utilities from subsidizing unregulated operations.

Q. Explain how the CAM is based on NARUC guidelines.

A. NARUC has recommended specific guidelines regarding transactions between affiliates. The following NARUC principles are embodied in the CAM:

1. To the maximum extent practicable, costs should be directly assigned (NARUC Guidelines at 2, § B.1).
2. The general method for charging indirect costs should be on a fully allocated cost basis (NARUC Guidelines at 2, § B.2).

3. To the extent possible, all direct and allocated costs should be traceable on the books of the applicable regulated utility to the applicable Uniform System of Accounts and documentation should be available to the appropriate regulatory authority upon request (NARUC Guidelines at 2, § B.3).

4. Allocation methodologies should prevent subsidization and ensure equitable cost sharing among regulated and unregulated affiliates (NARUC Guidelines at 2-3, § B.4).

5. All costs should be classified as regulated, non-regulated, or common to both (NARUC Guidelines at 3, § B.5).

6. The primary cost driver of common costs should be identified and used to allocate the cost between regulated and non-regulated affiliates (NARUC Guidelines at 3, § B.6).

7. The indirect costs of each business unit, including the allocated costs of shared services, should be spread using relevant cost allocators (NARUC Guidelines at 3, § B.7).

Q. How is the CAM used to assign and allocate costs to regulated utilities such as Liberty Litchfield Park?

A. Under the CAM, a utility incurs costs in two ways: (1) Assigned/Direct costs—costs incurred for the exclusive benefit of one or more other companies, and which are directly charged to the company or companies that specifically benefited; and (2) Allocated/Indirect costs—costs incurred that benefit multiple companies, but cannot be directly identified and assigned. The CAM sets forth the methodology and logical allocation factors that establish a reasonable link between the cost causer(s) and cost recovery.

Q. Can you provide examples?

A. Yes.

i. Costs that are incurred by APUC, LUCC or LUSC for the exclusive benefit of any utility's operations are directly assigned to that utility in accordance with the CAM.

ii. Costs that are incurred by APUC, LUCC or LUSC that benefit multiple companies within the APUC corporate family are allocated using defined allocation methodologies described in the CAM.

iii. Regional costs that benefit the entities within the West Region are either directly assigned to the utility within the region or allocated using the Regional Four-Factor Methodology.

iv. Liberty Sub Corp. incurs costs for the benefit of the Arizona and Texas utilities that are allocated based on a local four-factor methodology.

It is important to note that costs that are incurred by Liberty Litchfield Park as part of providing utility services in its service area are direct costs, and thus are neither assigned nor allocated under the CAM.

Q. When was the CAM last updated and what significant changes were made to it?

A. The CAM was last updated in January 2017. With this update, the Utility Four-Factor weightings were updated, and the regional operating structure and allocation methodology was established. Liberty updates the CAM allocation factors annually based on recorded data to account for any changes in the organization structure, including acquisitions and divestitures.

Q. Has the CAM been independently reviewed?

A. Yes. In April 2021, Liberty engaged PricewaterhouseCoopers LLP ("PwC") to assess the processes for capturing, assigning, and allocating holding/service company costs incurred as described in the CAM and to assess the CAM's compliance with guidance provided by NARUC and Federal Energy Regulatory Commission ("FERC"). PwC also assessed whether the allocations described in the CAM are based on cost-causative factors (e.g., direct charging, indirect

attribution) or a multi-factor general allocator that are designed to prevent cross-subsidization (e.g., regulated versus unregulated affiliates, regulated electric versus regulated gas versus regulated water or wastewater, United States versus Canada). In addition, PwC reviewed the cost allocation workbooks to determine if the costs were actually allocated in accordance with the process stated in the CAM. In July 2021, PwC issued their report, which is attached as Appendix PE_Dir.2. PwC concluded that the methodologies for capturing and allocating parent and shared services costs to affiliates are reasonable, supportable and consistent with NARUC and FERC guidance, and that the results of the transaction testing found that the mechanics of the allocation process are working as designed.

D. Prior Regulatory Treatment of Shared Services Costs and CAM

Q. Has the Commission previously reviewed the shared services model and CAM?

A. Yes. There have already been more than 10 previous rate cases in Arizona involving allocated costs from affiliated transactions. I have attached a list of these cases to my direct testimony as Appendix PE_Dir.4.

Q. Do those cases involve a similar CAM and shared service model to what the Company is requesting in this case?

A. Generally, yes. While the CAM has been updated a few times, and we are continuing to make refinements and improvements in the allocation process and methodologies, the general CAM approach has remained consistent for Liberty's regulated operations in the U.S. for many years.

Q. Have other Public Utility Commissions evaluated the CAM?

A. Yes. Liberty currently operates in 13 states across the U.S. and one Canadian province. The APUC/Liberty CAM and corporate shared services model has been reviewed by regulators as part of rate proceedings in our various jurisdictions.

Q. What has been the general reception of the CAM in other jurisdictions?

A. There have been no material disallowances of corporate shared services costs in rate cases across Liberty's footprint related to the shared services model and allocation methodologies. Our regulators have consistently recognized the need for and benefits of Liberty's shared services model.

E. Capitalized Overhead

Q. What is capitalized overhead?

A. Capitalized overhead refers to the portion of administration and general ("A&G") costs that support capital projects and are therefore capitalized under NARUC and FERC accounting standards.

Q. Why aren't costs associated with capital projects capitalized directly?

A. Shared services departments perform many tasks that are essential to support capital and construction projects. To the extent that a task can be directly identified to a capital or construction project, it is directly charged to the capital work order in accordance with the CAM. However, there are many shared services that are indirectly performed in support of capital projects and recorded as A&G costs. NARUC recognizes the importance of including an appropriate portion of the A&G costs as indirect overhead on capital projects to recognize the total cost of the project. [2]

Q. Does NARUC support capitalization of overheard costs?

A. Yes. According to NARUC USOA Account Instruction 20(A):

> All overhead construction costs, such as engineering, supervision, general office salaries and expenses, construction engineering and supervision by others than the accounting utility, legal expenses, insurance, injuries and damages, relief and pensions, taxes and allowances for funds used during construction shall be charged to

[2] *See* NARUC Guidelines for Cost Allocations and Affiliate Transactions.

particular jobs or units on the basis of the amounts of such overheads reasonably applicable thereto, so that each job or unit shall bear its equitable proportion of such costs and that the entire costs of the unit, both direct and overhead, shall be deducted from the plant accounts at the time the property is retired.

Instruction 20(B) further provides:

> As far as practicable, the determination of payroll charges includible in construction overheads shall be based on time card distribution thereof. Where this procedure is impractical, special studies shall be made periodically of the time of supervisory employees devoted to construction activities so that only such overhead costs as have a definite relation to construction shall be capitalized. The addition to direct construction costs of arbitrary percentages or amounts to cover assumed overhead costs is not permitted.

Q. Are the Company's practices consistent with NARUC's instructions?

A. Yes. Whenever possible shared services costs are directly charged to capital projects and capitalized as a direct cost of the project. Because it is not always practical for shared services employees to directly charge to capital projects that their activities support, Liberty Utilities has used special studies to determine an appropriate capitalization rate for the shared services performed in support of capital projects.

Q. How is capitalized overhead incorporated into Liberty Litchfield Park's rates?

A. The costs of shared services are allocated according to the CAM. A portion of those allocated costs are capitalized as described below. That capitalized overhead has generally been referred to as Indirect Overhead or "INDOH" in Arizona, even though that is not a term widely used at APUC or its subsidiaries.

Directly assigned and indirectly allocated shared services costs are initially recorded as A&G expenses. A capitalization rate is applied to the A&G costs to determine the amount of A&G costs that are capitalized. The capitalized A&G costs are reduced from A&G expenses and apportioned, as a debit amount, to the open Arizona and Texas utilities' capital projects. When the construction projects are completed and placed into service, the capitalized overhead becomes part of the asset costs on the Company's books and included as part of rate base. All of this is standard utility accounting, as required by the NARUC Instructions discussed above. The key point is that a portion of costs such as legal and accounting costs, relate to capital projects and should therefore be capitalized rather than expensed.

Q. Has the Company met with Staff and RUCO to explain its methodology for calculating and applying capitalized overhead?

A. Yes. Liberty Litchfield Park recognizes that capitalized overhead has been a contentious issue in several rate cases. However, we've made progress on this front as evidenced by Decision No. 81361 (June 18, 2025), in which the parties entered a settlement on all issues including capitalized overhead.[3] Appendix PE Dir.3 is a presentation providing an overview of the capitalized overhead process that was provided to Staff and RUCO for use in a prior matter.

Q. What capitalization rate is Liberty Litchfield Park proposing and why?

A. Consistent with the Settlement Agreement adopted in Decision No. 81361 (June 18, 2025), Liberty Litchfield Park is using a capitalization rate of 14 percent to calculate the capitalized overhead related to allocated shared service costs from corporate shared services (APUC, LUCC, LUSC), and a capitalization rate of 21 percent for regional shared services. These rates were used to determine the

3 The parties to the settlement were: Liberty Utilities Beardsley Water, Bella Vista Water, Cordes Lakes Water, and Rio Rico Water & Sewer; Commission Staff; RUCO; North Copper Canyon Community Association; Courtland Homes, Inc.; and Austin Ranch LLC.

capitalized overhead in rate base from May 2022 onward, consistent with the test year applicable for Docket Nos. 23-0337 et al.

F. Applicants' Shared Services Costs

Q. What amount of corporate shared service costs were allocated to Liberty Litchfield Park during the test year?

A. During the test year, APUC, LUCC and LUSC allocated approximately $1.27M and $1.72M to Liberty Litchfield Park's water division and Liberty Litchfield Park's wastewater division, respectively.

Q. Do any of the affiliates' profit from the services provided to the Company?

A. No. All charges reflect the actual cost of providing that service or product. Affiliates are not charging or seeking a profit margin or any other form of affiliated profit.

Q. Is it possible that Liberty Litchfield Park could potentially be subsidizing non-regulated affiliates?

A. No. The CAM is designed to prevent cross subsidizations in this manner. Additionally, as previously mentioned, our corporate services are provided at cost, which is determined by prevailing wages/benefits and actual incurred expenses.

Q. Does this conclude your testimony?

A. Yes.

APUC Cost Allocation Manual (CAM)

ALGONQUIN POWER & UTILITIES CORP.

COST ALLOCATION MANUAL

V2017 Effective: January 1st, 2017

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1. INTRODUCTION

The purpose of this manual is to provide a detailed explanation of services provided by Algonquin Power & Utilities Corp ("APUC") and its affiliates to other entities within the APUC family of businesses and to describe the Direct Charge[1] and Indirect Charge[2] Methodologies used for those services. The following organization chart identifies, at a high level, the corporate structure of APUC.

Figure 1: Simplified APUC Corporate Structure

This Cost Allocation Manual ("CAM") has been completed in accordance and conformance with the *NARUC Guidelines for Cost Allocations and Affiliate Transactions* ("NARUC Guidelines"). More specifically, the founding principles of this Cost Allocation Manual are to a) directly charge as much as possible to the entity that procures any specific service, and b)

[1] Direct charges (sometimes referred to as assigned costs) are costs incurred by one company for the exclusive benefit of, or specifically identified with, one or more other companies, and which are directly charged (or assigned) to the company or companies that specifically benefited. Under the NARUC Guidelines, "Direct Costs" are defined as "costs which can be specifically identified with a specific service or product."

[2] Indirect charges (sometimes referred to as allocated costs) are costs incurred by one company that are for the benefit of either (a) all of the APUC companies or (b) all of the regulated companies, and which are charged to the benefited companies using a methodology and set of logical allocation factors that establish a reasonable link between cost causation and cost recovery. Under the NARUC Guidelines, "Indirect Costs" are defined as "costs that cannot be identified with a particular service or product. This includes but not limited to overhead costs, administrative, general, and taxes."

[3] As of April 2017, Algonquin Power Co. (APCo) is doing business under the name Liberty Power. All Liberty Power employees in Canada will become employed by Liberty Utilities (Canada) Corp. in 2017. Liberty Power employees in the United States will remain employed by Algonquin Power Fund (America) Inc.

to ensure that unauthorized subsidization of unregulated activities by regulated activities, and vice versa, does not occur. For ease of reference, the NARUC Guidelines are attached as Appendix 1.

Costs allocated can take the form of: direct labor, direct material, direct purchased services and indirect charges (as described in Tables 1, 4a and 4b in this CAM). These costs are charged by the providing party to the receiving part at fully distributed costs.

2. THE APUC CORPORATE STRUCTURE

APUC owns a widely diversified portfolio of independent power production facilities and regulated utilities[4] consisting of water distribution, wastewater treatment, electric and gas distribution utilities. While power production facilities are located in both Canada and the United States, regulated distribution utility operations are located in the United States.[5] APUC is publicly traded on the New York Stock Exchange and the Toronto Stock Exchange[6]. APUC's structure as a publicly traded holding company provides substantial benefits to its regulated utilities through access to capital markets.

APUC is the ultimate corporate parent that provides financial and strategic management, corporate governance, and oversight of administrative and support services to Liberty Utilities (Canada) Corp. ("LUC") and its subsidiaries as well as to Algonquin Power Co. ("APCo") d/b/a Liberty Power and its subsidiaries. The services provided by APUC are necessary for all affiliates, including LUC and the regulated utility subsidiaries of Liberty Utilities Co. (referred to as "Liberty Utilities"), to have access to capital markets for capital projects and operations. These services are expensed at APUC and are performed for the benefit of Liberty Power and Liberty Utilities and their respective businesses.

APUC and its affiliates benefit from APUC's expertise and access to the capital markets through the use of certain shared services, which maximizes economies of scale and minimizes redundancy. In short, it provides for maximum expertise at lower costs. Further,

[4] All distribution and transmission utilities are owned, either directly or indirectly, by Liberty Utilities Co., which is itself indirectly owned by Liberty Utilities (Canada) Corp.

[5] Algonquin Tinker Gen Co. owns transmission assets in New Brunswick, Canada, which are subject to regulation by the New Brunswick Energy and Utilities Board.

[6] Common shares, preferred shares, and instalment receipts of APUC are traded on the Toronto Stock Exchange under the symbols AQN, AQN.PR.A, AQN.PR.D, and AQN.IR. APUC's common shares are also listed on the New York Stock Exchange under the symbol AQN. Additional corporate information can be found at the company's website, algonquinpower.com.

the use of shared expertise allows each of the entities to receive a benefit it may not be able to achieve on a stand-alone basis such as strategic management advice and access to capital at more competitive rates.

3. SCOPE OF SERVICES FROM APUC AND HOW THOSE COSTS ARE DISTRIBUTED

This section provides an overview of the services provided from APUC, and method used to distribute the associated costs for these services throughout the organization.

3.1 Services and Cost Allocation from APUC to Liberty Utilities and Liberty Power

3.1.1 Description of APUC Services and Costs

APUC provides benefits to its subsidiaries by providing financing, financial control, legal, executive and strategic management and related services. APUC charges labor rates for these shared services at cost, which is the dollar hourly rate per employee as recorded in APUC's payroll systems, grossed up for burdens such as payroll taxes, health benefits, retirement plans, other insurance provided to employees, and other employee benefits. These labor costs are charged directly to the entity incurring these costs based on timesheets to the extent possible. If labor is for the benefit of all subsidiaries then the allocation methodologies used for indirect costs are applied. See Appendix 2 for a more detailed discussion of the costs incurred by APUC.

APUC also charges non-labor services which includes Financing Services. Financing Services means the selling of units to public investors in order to generate the funding and capital necessary (be it short term or long term funding, including equity and debt) for the entire organization, including subsidiaries of Liberty Utilities and Liberty Power, as well as providing legal services and other associated costs in connection with the issuance of debt and equity.

In connection with the provision of Financing Services, APUC incurs the following types of costs: (i) strategic management costs (board of director, third-party legal services, accounting services, tax planning and filings, insurance, and required auditing); (ii) capital access costs (communications, investor relations, trustee fees, escrow and transfer agent fees); (iii) financial control costs (audit and tax expenses); and (iv) other administrative costs (examples: rent, depreciation, general office costs).

The capital raised by APUC is used by Liberty Utilities (and its regulated subsidiaries) and Liberty Power for current and future capital investments. The services provided by APUC are critical and necessary to Liberty Utilities and its regulated subsidiaries and Liberty Power because without those services they would not have a readily available source of capital funding. Further, relatively small utilities may have difficulty attracting capital on a stand-alone basis.

Indirect costs from APUC, excluding corporate capital, are pooled and allocated to LUC (and subsequently, to LUC's subsidiaries) and Liberty Power using the method summarized in Table 1. Each corporate cost type, or function, has been reviewed to properly identify the factors driving those costs. Each function or cost type is typically driven by more than one factor and each has been assigned an appropriate weighting. Table 1 includes a brief commentary on the rationale for each cost driver and weighting, along with examples for each cost type.

The services provided by APUC optimize the performance of the utilities, keeping rates low for customers while ensuring access to capital is available. If the utilities did not have access to the services provided by APUC, they would be forced to incur associated costs for financing, capital investment, audits, taxes and other similar services on a stand-alone basis, which would substantially increase such costs. Simply put, without incurring these costs, APUC would not be able to invest capital in its subsidiaries, including the regulated utilities.

Table 1: Summary of Corporate Allocation Method of APUC Indirect Costs

Type of Cost	Allocation Methodology		Rationale	Examples
Legal Costs	Net Plant Number of Employees O&M	33.3% 33.3% 33.3%	This function is driven by factors which include Net Plant, as typically the higher the value of plant, the more legal work it attracts; similarly, a greater number of	Employee labor and related administration and programs; Third party legal services

			employees are typically more indicative of larger facilities that require greater levels of attention; and O&M costs tend to be a third factor indicative of size and legal complexity.	
Tax Services	Revenue O&M Net Plant	33.3% 33.3% 33.3%	This function is driven by a variety of factors that influence the size and relative tax complexity, including Revenues, O&M and Net Plant. Tax activity can be driven by each of these factors.	Employee labor and related administration and programs, including Third party tax advice and services
Audit	Revenue O&M Net Plant	33.3% 33.3% 33.3%	This function is driven by a variety of factors that influence the size and complexity of Audit, including Revenues, O&M and Net Plant. Audit activity can be driven by each of these factors.	Employee labor and related administration and programs, including third party accounting and audit services
Investor Relations	Revenue O&M Net Plant	33.3% 33.3% 33.3%	This function is driven by factors which reflect the relative size and	Employee labor and related administration and programs,

			scope of each affiliate - Revenues, Net Plant and O&M costs.	including third party Investor day communications and materials
Director Fees and Insurance	Revenue O&M Net Plant	33.3% 33.3% 33.3%	This function is driven by factors which reflect the relative size and scope of each affiliate - Revenues, Net Plant and O&M costs.	Board of Director fees, insurance and administration
Licenses, Fees and Permits	Revenue O&M Net Plant	33.3% 33.3% 33.3%	This function is driven by factors which reflect the relative size and scope of each affiliate - Revenues, Net Plant and O&M costs.	Third party costs
Escrow and Transfer Agent Fees	Revenue O&M Net Plant	33.3% 33.3% 33.3%	This function is driven by factors which reflect the relative size and scope of each affiliate - Revenues, Net Plant and O&M costs.	Third party costs
Other Professional Services	Revenue O&M Net Plant	33.3% 33.3% 33.3%	This function is driven by factors which reflect the relative size and scope of each affiliate - Revenues, Net Plant and O&M costs.	Third party costs

Other Administration Costs	Oakville Employees 50% Total Employees 50%	This function is driven by factors which are indicative of number of employees.	Office administration costs. Employee labor and related administration
Executive and Strategic Management	Revenue 33.3% O&M 33.3% Net Plant 33.3%	This function is driven by factors which reflect the relative size and scope of each affiliate - Revenues, Net Plant and O&M costs.	Employee labor and related administration that is not directly attributable to any entity

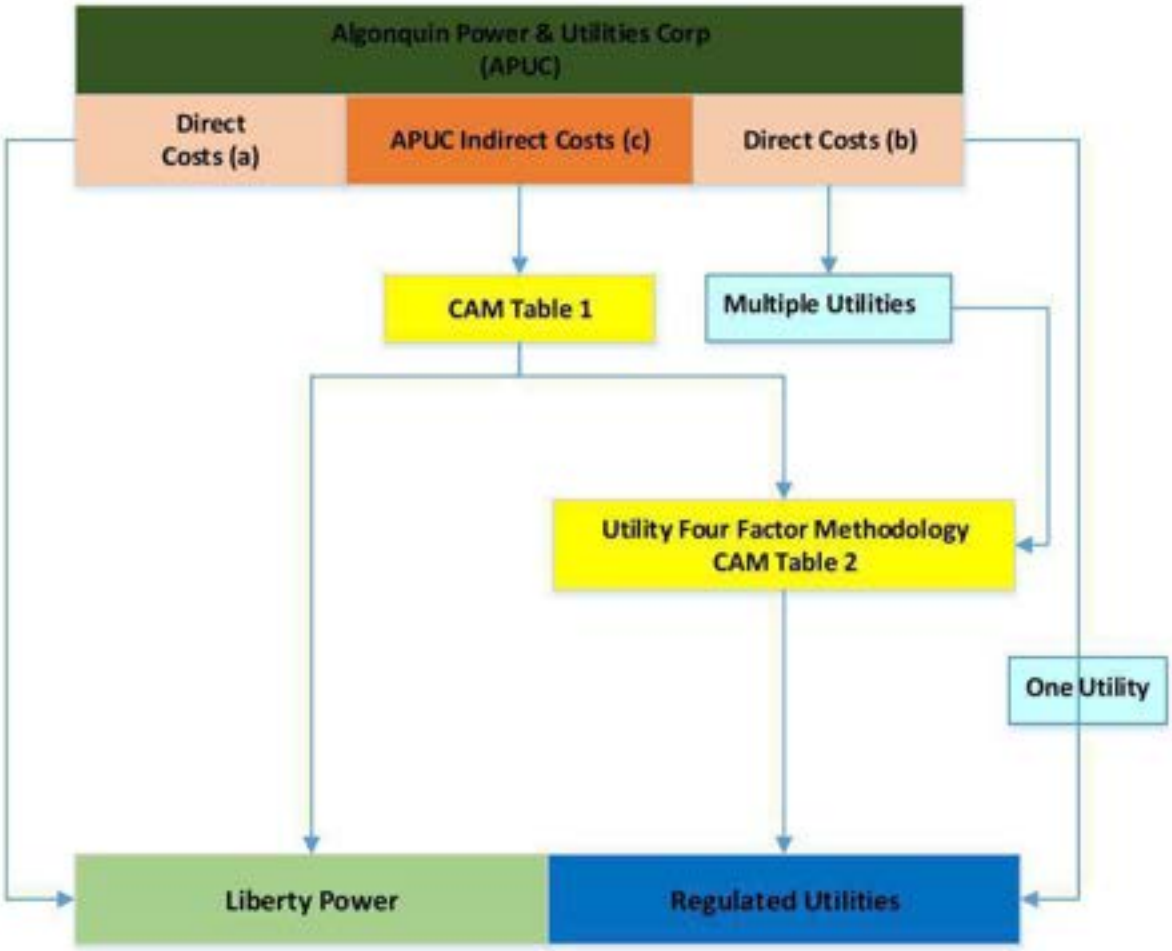
Notwithstanding the above, if a charge is related either solely to the regulated utility business or to the power generation business Liberty Power, then all of those costs will be direct charged, or assigned, to the business segment for which they are incurred. If a cost can be directly attributable to a specific entity, it will be directly charged to that entity.

In the event that organizational realignments occur, resulting in certain other services or costs to come from APUC, any allocations (if any) will be done as per the "Executive and Strategic Management" line in Table 1 above until the CAM is updated.

3.1.2 Description of the APUC Cost Flows

Please refer to Figure 2 for a diagram of the various flows of costs from APUC.

Figure 2: Illustration of APUC Corporate Cost Distributions



(a) Costs that are directly assignable to unregulated companies.
(b) Costs that are directly assignable to one regulated company, or that benefit all regulated operations.
(c) Costs that benefit both unregulated and regulated operations.

As illustrated in Figure 2 and as described above, APUC incurs three types of costs that are passed on to its direct and indirect subsidiaries. The first type is APUC's costs that directly benefit a particular specific unregulated company, which are directly assigned to that unregulated company (i.e., Liberty Power or one of its subsidiaries). The second type is APUC's costs that directly benefit a particular regulated company, which are directly assigned to that regulated company[7]. The third type are APUC's remaining costs that benefit the entire

[7] This could be directly to LUC (which would subsequently be allocated over utility subsidiaries of LUC) or to a specific utility for which the service was necessary.

enterprise (both regulated and unregulated), which are allocated between regulated and unregulated company groups pursuant to CAM Table 1. Information within Table 1 includes: (a) each type of cost incurred by APUC that is to be allocated between regulated and unregulated parts of the business; (b) the factors used to allocate each type of cost between regulated and unregulated activity; (c) the rationale for selecting the factors that are used for allocation; and (d) examples of the specific allocated costs. The costs allocated to the regulated companies as a group are then reallocated to individual utility companies using the Utility Four-Factor allocation methodology set forth in CAM Table 2 (described below), resulting in utility-specific allocated charges from APUC.

For an example of how an APUC invoice would be assigned or allocated, please see Appendix 3.

Certain costs, which are incurred for the benefit of APUC's businesses, are not allocated to any utility subsidiary. These costs include certain corporate travel and certain overheads.

4. SCOPE OF SERVICES PROVIDED BY LUC AND HOW COSTS ARE DISTRIBUTED

This section provides an overview of the services and the cost methodology for LUC.

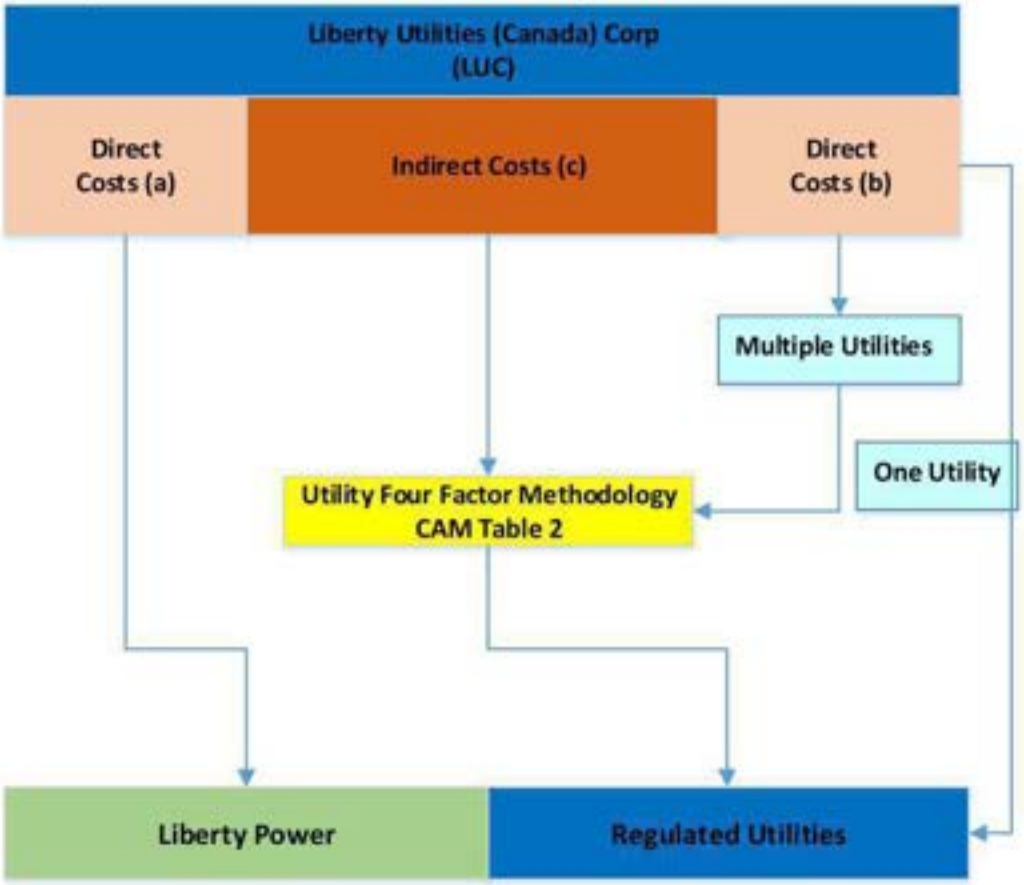
4.1 Overview of LUC Services and Costs

Various services and methods of cost distribution arise from LUC and can be categorized as those provided: (a) specifically to regulated utilities, (b) specifically to Liberty Power, or (c) to the entire organization (under the business unit of Liberty Algonquin Business Services ("LABS")). Figure 3 identifies the flow of costs from dedicated utility support and dedicated Liberty Power staff within LUC. Figure 4 identifies the flow of costs from the shared business and corporate services staff and functions ("LABS") within LUC. Both Figures 3 and 4 are depicted below in this section.

As illustrated in Figure 3, LUC incurs three types of costs. The first type is an LUC cost that directly benefits a particular Liberty Utilities affiliate (i.e., regulated company), which is directly assigned to that regulated company. The second type is an LUC cost that benefits all of the Liberty Utilities regulated companies, and which is allocated using the Utility Four-Factor Methodology described in CAM Table 2. The third type is a cost that only benefits and is directly charged to Liberty Power. All three of these cost types are described in section 4.2 below.

As illustrated in Figure 4, shared services costs arising from LUC are those from shared services[8] that benefit both the regulated group of companies and the unregulated group of companies within the APUC family; which are allocated between the two groups pursuant to the methodology described in section 4.3 and as set forth in CAM Table 4.

Figure 3: Illustration of LUC Corporate Cost Distributions

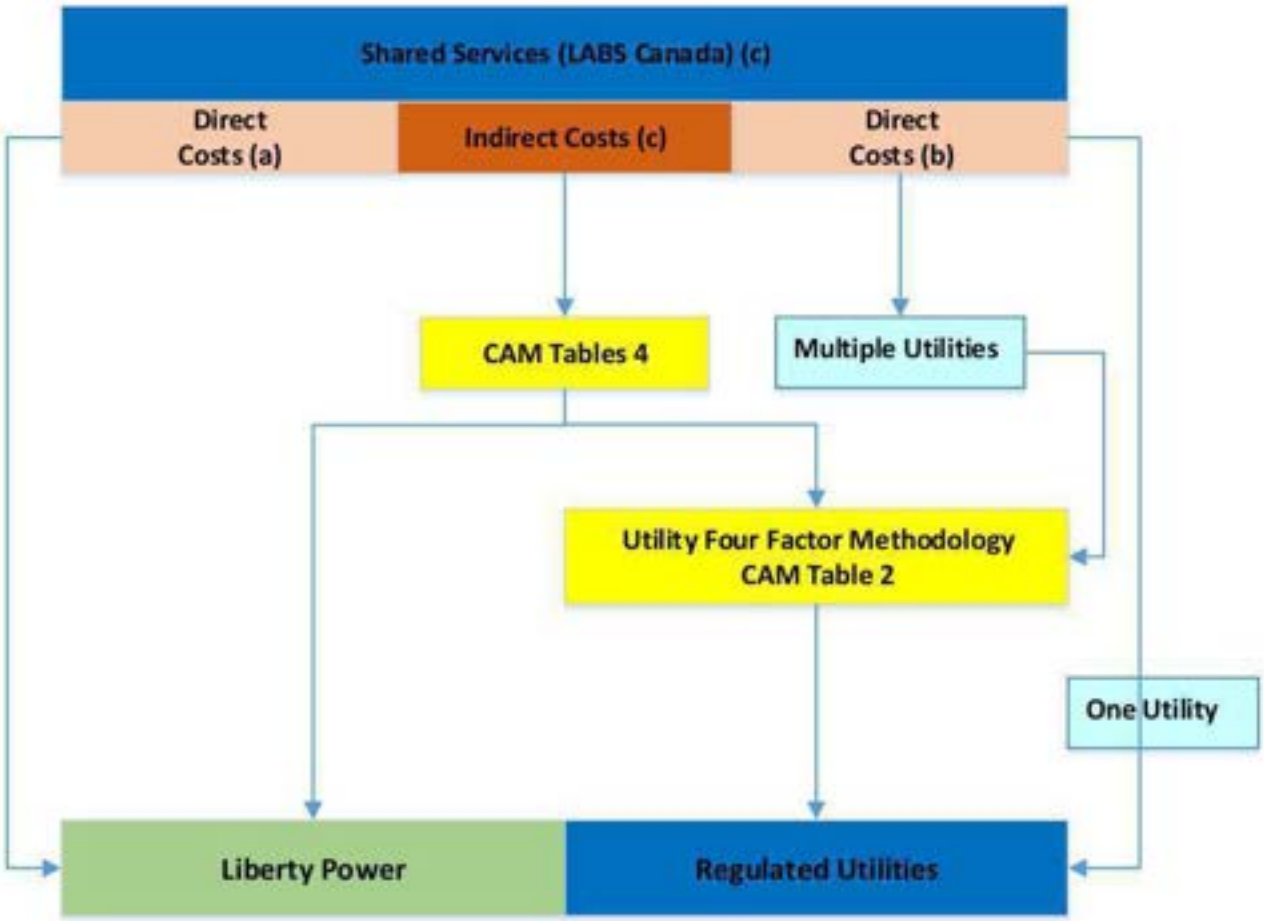


Notes:

(a) Costs that are directly assignable to unregulated companies
(b) Costs that are directly assignable to one or more specific regulated companies.
(c) Costs that benefit all regulated operations.

[8] As discussed later, shared support services that benefit both regulated and unregulated businesses within APUC are provided within Liberty Algonquin Business Services ("LABS"), which is a business unit with staff employed within LUC and LUSC. Shared services staff serve both regulated and unregulated entities. LABS staff within the corporate office in Canada are employed within LUC; LABS staff in the US are employed within LUSC. As new U.S.-based utilities are added to the Liberty-Algonquin organization, there could be a transitionary period in which some of these shared services staff and functions may also remain employed within the new utility until such time that they may be transitioned to become an employee of Liberty Utilities Service Corp. ("LUSC").

Figure 4: Illustration of LUC Shared Services Cost Distributions



Notes:
(a) Costs that are directly assignable to unregulated companies.
(b) Costs that are directly assignable to one or more regulated companies.
(c) Costs that benefit both unregulated and regulated operations.

4.2 LUC Services and Costs Provided to Liberty Utilities and Liberty Power

4.2.1 Services to Liberty Utilities

LUC provides services to Liberty Utilities such as: executive, regulatory strategy, energy procurement, operations, utility planning, administration, and customer experience.

LUC will assign costs that can be directly attributable to a specific utility. These include direct labor and direct non-labor costs. However, because the indirect LUC costs cannot be directly attributed to an individual utility, LUC allocates its indirect labor and indirect non-labor costs, including capital costs, to its regulated utilities using a Utility Four-Factor Methodology[9]. LUC uses the Utility Four-Factor Methodology to allocate costs incurred for the benefit of all of its regulated assets ("System-Wide Costs") to all of its utilities.

The Utility Four-Factor Methodology allocates costs by relative size and scope of the utilities. The methodology used by LUC involves four allocating factors, or drivers: (1) Utility Net Plant; (2) Total Customers; (3) Non-Labor Expenses; and (4) Labor Expenses, with each factor assigned an equal weight, as shown in Table 2 below.

Table 2: Utility Four-Factor Methodology Factors and Weightings

Factor	Weight
Customer Count	40%
Utility Net Plant	20%
Non-Labor Expenses	20%
Labor Expenses	20%
Total	**100%**

LUC uses the Utility Four-Factor Methodology to allocate to its regulated utilities the system-wide indirect labor and indirect non-labor costs within LUC (from its utility-dedicated staff, and from the shared services functions within LUC).

Table 3 provides a simplified hypothetical example to demonstrate how the Utility Four-Factor Methodology would be calculated based on ownership of only two hypothetical utilities.

[9] Please note, indirect costs sent to utilities via the 4-factor will consist of 1) indirect costs from LUC's utility-dedicated staff and services, plus 2) the indirect costs from APUC, 3) the indirect costs retained within LUC from LABS (the shared services staff and services within LUC), and 4) the indirect costs allocated from LUSC.

Table 3: Utility Four-Factor Methodology Example

Factor	Utility 1	Utility 2	Total All Utilities	Utility 1 % of Total	Factor Weight	Utility 1 Allocation
Utility Net Plant ($)	727	371	1098	66%	20%	13%
Customer Count (#)	6000	2000	8000	75%	40%	30%
Labor Expenses ($)	57	32	89	64%	20%	13%
Non-Labor Expenses ($)	108	41	149	72%	20%	14%
Total Allocation						71%

As can be seen from these hypothetical numbers in Table 3, Utility 1 would be allocated 71% of the total indirect costs incurred by LUC, based on its relative size and application of the Utility Four-Factor Methodology. Utility 2 would be allocated the remaining 29%. LUC has developed and utilized this methodology to better allocate costs, recognizing that larger utilities require more time and management attention and incur greater costs than smaller ones.

On occasion there may be costs which are incurred for the benefit of two or more utilities, but not all of the utilities. These costs are directly assigned to utilities as per the vendor invoice, or, if the invoice doesn't specify a share for each utility, the Utility Four-Factor Methodology is used. In this situation, the weighting is determined by only including the utilities that benefited from the service and excluding the utilities that did not receive the service. For an example of how an LUC invoice would be assigned or allocated, please see Appendix 4.

4.2.2 LUC Services to Liberty Power.

A sub-set of LUC employees provide dedicated services to Liberty Power such as: executive, energy services, asset management, business development, and operations. All costs (labor and non-labor) incurred for these services will be directly charged to Liberty Power (no

indirect costs are allocated from this group). Labor costs are tracked through timesheets and directly charged to Liberty Power.

4.3 Shared Services from LUC

The last type of costs arising from LUC are those from shared services[10] that benefit both the regulated group of subsidiary companies owned by Liberty Utilities and Liberty Power.

Consistent with the organization practices described earlier, shared services and costs (within LUC[11]) are assigned when they are directly attributable to a specific affiliate company (such as a specific distribution utility) or business unit[12] (such as Liberty Utilities or Liberty Power). Labor charges for LUC shared services staff are assigned using timesheets that depict the amount of time that is to be direct charged to either Liberty Utilities or Liberty Power (or a specific subsidiary within Liberty Utilities. or Liberty Power).

Please refer to Figure 4 above for a diagram of the various flows of costs that may arise from the shared services staff and functions within LUC[13].

Indirect costs for services from the shared services functions that cannot be directly assigned are allocated between the regulated and unregulated business units, Liberty Utilities and Liberty Power, pursuant to the methodology set forth in CAM Tables 4a and 4b. Similar to Table 1, Tables 4a and 4b include: (a) each type of cost incurred by shared services functions within LUC that is to be allocated between regulated and unregulated parts of the business; (b) the factors used to allocate each type of cost between regulated and unregulated activity; (c) the rationale for selecting the factors that are used for allocation; and (d) examples of the specific allocated costs. The costs allocated to the regulated companies as a group are then reallocated to individual companies using the Utility Four-Factor Methodology set forth in CAM Table 2, resulting in utility-specific allocated charges from LUC.

[10] Liberty Algonquin Business Services ("LABS") is a business unit found organizationally within LUC and LUSC that serves both regulated and unregulated entities. The LABS business unit provides shared services throughout the organization. LABS employees and functions provided from Canada are employed within LUC; LABS employees and functions located in the U.S. are typically employed within LUSC.

[11] As will be discussed further in section 5, shared services to the entire APUC organization are also provided from staff within LUSC.

[12] To clarify, if a LABS service is for only one specific organization, such as the unregulated generation business, Liberty Power, the cost will be directly charged to that business unit.

[13] Sometimes referred to as "LABS Canada."

For an example of how an invoice or cost within LUC's shared services (LABS) would be assigned or allocated, please see Appendix 5.

4.3.1 Business Services and Corporate Services

LUC shared services that would be provided to the entire company, i.e., Liberty Power and Liberty Utilities, are internally referenced under two names - Business Services and Corporate Services. The services and functions within each category are shown in the tables below[14]. Indirect costs from Business Services and Corporate Services are allocated using the following methodology shown in Tables 4a and 4b, respectively, which are designed to closely align the costs with the driver of the activity.

Table 4a: Summary of Corporate Allocation Method of LUC[15] Business Services Indirect Costs

Type of Cost	Allocation Methodology	Rationale	Examples
Information Technology	Number of Employees 90% O&M 10%	IT function is driven by factors which include number of employees and O&M. The larger the number of employees, the more support, software and IT infrastructure is required.	Enterprise wide support, architecture, etc. Third party fees
Human Resources	Number of Employees 100%	HR function is driven by number of employees. A greater number of employees requires	HR policies, payroll processing, benefits,

[15] And LUSC shared services functions.

		additional HR support	employee surveys
Training	Number of Employees 100%	Training is directly proportional to the number of employees per function	Courses, lectures, in house training sessions by third party providers
Facilities and Building Rent	Oakville Employees 100%	Office space occupied by employees accurately reflects space requirements of each subsidiary	Corporate office building
Environment, Health, Safety and Security	Number of Employees 100%	EHSS training, etc. is directly proportional to the number of employees per function	Enterprise wide programs, employee labor and related administration
Procurement	O&M 50% Capital Expenditures 50%	Procurement function is based on typical proportion of expenditures	Enterprise wide support and related administration
Executive and Strategic Management	Revenue 33.3% O&M 33.3% Net Plant 33.3%	This function is driven by factors which reflect the relative size and scope of each affiliate - Revenues, Net Plant and O&M costs.	Employee labor and related administration that is not directly attributable to any entity

Technical Services	Net Plant 33.3% Revenue 33.3% O&M 33.3%	This function is driven by factors which reflect the relative size and scope of each affiliate-Revenues, Net Plant and O&M costs.	Employee labor and related administration that is not directly attributable to any entity
Utility Planning	Net Plant 33.3% Revenue 33.3% O&M 33.3%	This function is driven by factors which reflect the scope of each affiliate Management - Revenues, Net Plant and O&M costs.	Employee labor and related administration that is not directly attributable to any entity

Table 4b: Summary of Corporate Allocation Method of LUC[16] Corporate Services Indirect Costs

Risk Management	Net Plant 33.3% Revenue 33.3% O&M 33.3%	This function is driven by factors which reflect the relative size and complexity of Risk Management - Revenues, Net Plant and O&M costs.	Employee labor and related administration, Software platform, fees and administration

[16] And LUSC shared services functions.

Financial Reporting, Planning and Administration	Revenue 33.3% O&M 33.3% Net Plant 33.3%	This function is driven by factors which reflect the relative size and complexity of Financial Reporting and Admin. - Revenues, Net Plant and O&M costs.	Employee labor and related administration and third party fees
Treasury	Capital Expenditures 25% O&M 50% Net Plant 25%	Treasury activity is typically guided by the amount of necessary capex/plant for each utility, and operating costs/cash flow	Third party financing, employee labor and related administration and programs
Internal Audit	Net Plant 25% O&M 75%	This function is driven by factors which reflect the relative size and complexity of Internal audit activity. Larger Plant and operating costs of a given facility drive more activity from IA.	Third party fees, employee labor and related administration and programs
External Communications	Total Employees 100%	Communications cost is directly proportional to the number of employees	Enterprise wide support and related administration
Legal Costs	Net Plant 33.3%	This function is driven by factors	Employee labor and related

	Number of Employees 33.3% O&M 33.3%	which include Net Plant, as typically the higher the value of plant, the more legal work it attracts; similarly, a greater number of employees are typically more indicative of larger facilities that require greater levels of attention; and O&M costs tend to be a third factor indicative of size and legal complexity.	administration and programs, including third party legal
Compliance	Revenue 33.3% O&M 33.3% Net Plant 33.3%	This function is driven by factors which reflect the relative size and scope of each affiliate - Revenues, Net Plant and O&M costs.	Employee labor and related administration that is not directly attributable to any entity

5. LIBERTY UTILITIES SERVICE CORP.

This section provides an overview of some of the services (as outlined in Table 5) and the cost methodology for Liberty Utilities Service Corp. ("LUSC").

Most U.S.-based utility employees are employed by LUSC and are dedicated to serve particular utilities. All employees' labor costs, such as salaries, and associated labor costs, such as benefits, insurance etc. are to be paid by LUSC and direct charged to the company to which the employee is dedicated and performs work. Services provided by employees within LUSC

to each regulated utility shall be distributed on a time sheet basis to the extent possible. In infrequent instances where time sheeting may not be possible, the allocation factors shown in Tables 4a and 4b are to be used, as will be explained below.

5.1 Shared Services from LUSC

LUSC employs some individuals who provide shared services (listed in Table 5 below). Costs distributed by LUSC will include those from shared services employees: (a) where the function benefits both Liberty Utilities and Liberty Power businesses and (b) where the function benefits some or all of the regulated utilities within Liberty Utilities (e.g., energy procurement services).

Consistent with the organizational shared services practices described earlier, shared services and costs (within LUSC) are assigned when they are directly attributable to a specific affiliate company (such as a specific distribution utility, for example) or business unit (such as Liberty Utilities or Liberty Power). Labor charges for LUSC shared services staff are assigned using timesheets that depict the amount of time that is to be direct charged to either Liberty Utilities or Liberty Power (or a specific subsidiary within Liberty Utilities or Liberty Power).

The type of U.S. shared services that benefits both Liberty Utilities and Liberty Power businesses is referred to as LABS U.S. The LABS U.S. indirect costs for services from the shared services staff and functions within LUSC that cannot be directly assigned are allocated between the regulated and unregulated business units, Liberty Utilities and Liberty Power, and are distributed in the same manner per CAM Tables 4a and 4b described for shared services staff and functions within LUC. Consistent with the practices within LUC, the costs allocated from LUSC to the regulated companies as a group (i.e. to Liberty Utilities) are then reallocated to individual utility companies within the Liberty Utilities structure using the Utility Four-Factor Methodology set forth in CAM Table 2, resulting in utility-specific allocated charges from LUSC.

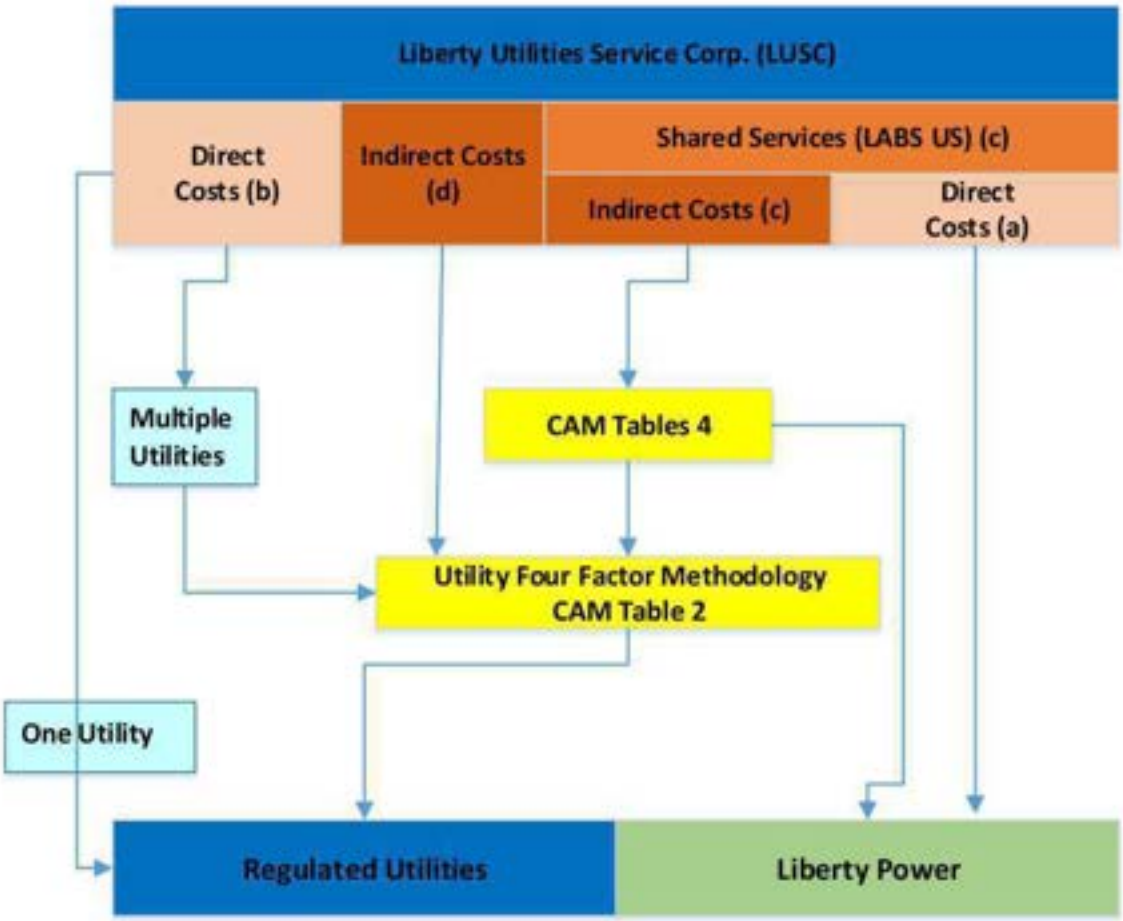
The indirect costs from the U.S. shared services that only benefit the regulated utilities are distributed using the Utility Four-Factor Methodology set forth in CAM Table 2, resulting in utility-specific allocated charges from LUSC.

Figure 5 below depicts the various flows of costs from LUCS.

Table 5 – List of Shared Services provided by Liberty Utilities Service Corp.

Customer Care and Billing
IT/Tech Support
Human Resources
Gas Control
Legal
Compliance
Regulatory & Government Relations
Environmental, Health, Safety and Security
Procurement
Operations
Engineering; Dispatch and Control
Outage Management
GIS/Mapping
Vegetation Management
Energy Procurement
Accounting and Finance
Managerial
Utility Planning
Customer Communication

Figure 5: Illustration of LUSC Cost Distributions



Notes:

(a) Costs that are directly assignable to unregulated companies.
(b) Costs that are directly assignable to regulated companies.
(c) Costs that benefit both unregulated and regulated operations.

The allocation methodology may be adjusted based on the number of participating utilities. For example, Customer Service representatives who serve only the New Hampshire utilities will only have their indirect costs allocated, if any, to the two utilities within New Hampshire. Labor costs associated with energy procurement are directly billed to the utilities requiring energy procurement services using timesheets.

6. COST DISTRIBUTION AT THE REGIONAL OR STATE UTILITY LEVEL

Within the Liberty Utilities organization, the organizational structure and reporting relationships may evolve as the organization grows and develops. Costs and services provided to the regional or state utility level from other corporate entities are directly assigned to the extent possible and distributed over the utilities within the state or region for which they are provided. Any services and costs which cannot be directly assigned will be allocated to the utilities within the region or state using the Regional Four-Factor Methodology (25% weighting for the factors of: customer count, utility net plan, non-labor expenses, and labor expenses), unless another method of allocation is legally required.

In addition, each of the regulated entities will distribute costs amongst their affiliated entities in accordance with applicable laws/rules and affiliated service agreements. These cost allocation methods are consistent with the principles of this CAM.

7. CORPORATE CAPITAL

APUC or LUC will make capital investments such as corporate headquarters, IT systems, etc. that benefit the various operating businesses. The costs of these investments may be distributed monthly in the form of an intercompany operating expense charge, that captures the depreciation expense and cost of capital associated with the particular assets, or an alternate method of capital allocation based on the particular needs of the project. All costs associated to service the investment will be allocated to Liberty Power and Liberty Utilities, if applicable, typically based on the allocation method from which the capital investment is made. For example, if the capital investment is made in Human Resources then the allocation methodology used for Human Resources to allocate non-capital indirect costs as shown in Table 4a will be used to allocate the charge associated with the corporate capital expenditures, including the cost of capital, depreciation, and all other associated costs. From time to time, the distribution of costs associated with a corporate capital investment may use an alternate

method. Any corporate capital charges allocated or assigned to LUC are then reallocated to individual Liberty Utilities distribution utilities, or a sub-set of one or multiple distribution utilities, using the Utility Four-Factor Methodology set forth in CAM Table 2.

8. CAM TEAM AND TRAINING

The oversight of the CAM is the responsibility of the corporate Regulatory Department. Any updates or revisions are coordinated and completed by this Department. A CAM Team will be created consisting of trained employees to oversee the operations and management of the CAM principles throughout the organization.

The CAM, and any support material, is available to all employees via the Company intranet. Employee training on the CAM will be provided via the Company's Learning Management System.

9. AUDIT, RECORD KEEPING & AFFILIATE TRANSACTION RULES

Records of each company will be maintained such that all affiliate transactions are auditable. The records will document the cost of transactions, the methods used to distribute the costs, and descriptions of the services provided. The records will be retained for a minimum of three years or as required by law or regulation. The regulator will have access to records, consistent with applicable laws, regarding transactions between the regulated utility and its affiliates. All companies subject to affiliate transaction rules, whether state or federal, will comply with such requirements.

10. UPDATING ALLOCATIONS

Allocation percentages[17] are updated annually. These annual updates to the allocation percentages are based on the most recent audited financial statements and other actual, year-end information. The updated percentages come into effect each April 1st and are valid through to the following March 31st. The Utility Four-Factor Methodology allocation percentages are also updated as an entity is either acquired or sold.

[17] To clarify, the factors and weightings are expected to remain constant. It is the underlying information used to calculate the allocation percentages that is updated annually, such as the most recent net plant figures, or the most recent numbers of employees, for example.

11. APPENDICES

APPENDIX 1 - NARUC GUIDELINES FOR COST ALLOCATIONS

Guidelines for Cost Allocations and Affiliate Transactions:

The following Guidelines for Cost Allocations and Affiliate Transactions (Guidelines) are intended to provide guidance to jurisdictional regulatory authorities and regulated utilities and their affiliates in the development of procedures and recording of transactions for services and products between a regulated entity and affiliates. The prevailing premise of these Guidelines is that allocation methods should not result in subsidization of non-regulated services or products by regulated entities unless authorized by the jurisdictional regulatory authority. These Guidelines are not intended to be rules or regulations prescribing how cost allocations and affiliate transactions are to be handled. They are intended to provide a framework for regulated entities and regulatory authorities in the development of their own policies and procedures for cost allocations and affiliated transactions. Variation in regulatory environment may justify different cost allocation methods than those embodied in the Guidelines.

The Guidelines acknowledge and reference the use of several different practices and methods. It is intended that there be latitude in the application of these guidelines, subject to regulatory oversight. The implementation and compliance with these cost allocations and affiliate transaction guidelines, by regulated utilities under the authority of jurisdictional regulatory commissions, is subject to Federal and state law. Each state or Federal regulatory commission may have unique situations and circumstances that govern affiliate transactions, cost allocations, and/or service or product pricing standards. For example, The Public Utility Holding Company Act of 1935 requires registered holding company systems to price "at cost" the sale of goods and services and the undertaking of construction contracts between affiliate companies.

The Guidelines were developed by the NARUC Staff Subcommittee on Accounts in compliance with the Resolution passed on March 3, 1998 entitled "Resolution Regarding Cost Allocation for the Energy Industry" which directed the Staff Subcommittee on Accounts together with the Staff Subcommittees on Strategic Issues and Gas to prepare for NARUC's consideration, "Guidelines for Energy Cost Allocations." In addition, input was requested from other industry parties. Various levels of input were obtained in the development of the Guidelines from the Edison Electric Institute, American Gas Association, Securities and Exchange Commission, the Federal Energy Regulatory Commission, Rural Utilities Service

and the National Rural Electric Cooperatives Association as well as staff of various state public utility commissions.

In some instances, non-structural safeguards as contained in these guidelines may not be sufficient to prevent market power problems in strategic markets such as the generation market. Problems arise when a firm has the ability to raise prices above market for a sustained period and/or impede output of a product or service. Such concerns have led some states to develop codes of conduct to govern relationships between the regulated utility and its non-regulated affiliates. Consideration should be given to any "unique" advantages an incumbent utility would have over competitors in an emerging market such as the retail energy market. A code of conduct should be used in conjunction with guidelines on cost allocations and affiliate transactions.

A. DEFINITIONS

1. Affiliates - companies that are related to each other due to common ownership or control.

2. Attestation Engagement - one in which a certified public accountant who is in the practice of public accounting is contracted to issue a written communication that expresses a conclusion about the reliability of a written assertion that is the responsibility of another party.

3. Cost Allocation Manual (CAM) - an indexed compilation and documentation of a company's cost allocation policies and related procedures.

4. Cost Allocations - the methods or ratios used to apportion costs. A cost allocator can be based on the origin of costs, as in the case of cost drivers; cost-causative linkage of an indirect nature; or one or more overall factors (also known as general allocators).

5. Common Costs - costs associated with services or products that are of joint benefit between regulated and non-regulated business units.

6. Cost Driver - a measurable event or quantity which influences the level of costs incurred and which can be directly traced to the origin of the costs themselves.

7. Direct Costs - costs which can be specifically identified with a particular service or product.

8. Fully Allocated costs - the sum of the direct costs plus an appropriate share of indirect costs.
9. Incremental pricing - pricing services or products on a basis of only the additional costs added by their operations while one or more pre-existing services or products support the fixed costs.

10. Indirect Costs - costs that cannot be identified with a particular service or product. This includes but not limited to overhead costs, administrative and general, and taxes.

11. Non-regulated - that which is not subject to regulation by regulatory authorities.

12. Prevailing Market Pricing - a generally accepted market value that can be substantiated by clearly comparable transactions, auction or appraisal.

13. Regulated - that which is subject to regulation by regulatory authorities.

14. Subsidization - the recovery of costs from one class of customers or business unit that are attributable to another.

B. COST ALLOCATION PRINCIPLES

The following allocation principles should be used whenever products or services are provided between a regulated utility and its non-regulated affiliate or division.

1. To the maximum extent practicable, in consideration of administrative costs, costs should be collected and classified on a direct basis for each asset, service or product provided.

2. The general method for charging indirect costs should be on a fully allocated cost basis. Under appropriate circumstances, regulatory authorities may consider incremental cost, prevailing market pricing or other methods for allocating costs and pricing transactions among affiliates.

3. To the extent possible, all direct and allocated costs between regulated and non-regulated services and products should be traceable on the books of the applicable regulated utility to the applicable Uniform System of Accounts. Documentation should be made available to the appropriate regulatory authority upon request regarding transactions between the regulated utility and its affiliates.

4. The allocation methods should apply to the regulated entity's affiliates in order to prevent subsidization from, and ensure equitable cost sharing among the regulated entity and its affiliates, and vice versa.

5. All costs should be classified to services or products which, by their very nature, are either regulated, non-regulated, or common to both.

6. The primary cost driver of common costs, or a relevant proxy in the absence of a primary cost driver, should be identified and used to allocate the cost between regulated and non-regulated services or products.

7. The indirect costs of each business unit, including the allocated costs of shared services, should be spread to the services or products to which they relate using relevant cost allocators.

C. COST ALLOCATION MANUAL (NOT TARIFFED)

Each entity that provides both regulated and non-regulated services or products should maintain a cost allocation manual (CAM) or its equivalent and notify the jurisdictional regulatory authorities of the CAM's existence. The determination of what, if any, information should be held confidential should be based on the statutes and rules of the regulatory agency that requires the information. Any entity required to provide notification of a CAM(s) should make arrangements as necessary and appropriate to ensure competitively sensitive information derived therefrom be kept confidential by the regulator. At a minimum, the CAM should contain the following:

1. An organization chart of the holding company, depicting all affiliates, and regulated entities.

2. A description of all assets, services and products provided to and from the regulated entity and each of its affiliates.

3. A description of all assets, services and products provided by the regulated entity to non-affiliates.

4. A description of the cost allocators and methods used by the regulated entity and the cost allocators and methods used by its affiliates related to the regulated services and products provided to the regulated entity.

D. AFFILIATE TRANSACTIONS (NOT TARIFFED)

The affiliate transactions pricing guidelines are based on two assumptions. First, affiliate transactions raise the concern of self-dealing where market forces do not necessarily drive prices. Second, utilities have a natural business incentive to shift costs from non-regulated competitive operations to regulated monopoly operations since recovery is more certain with captive ratepayers. Too much flexibility will lead to subsidization. However, if the affiliate transaction pricing guidelines are too rigid, economic transactions may be discouraged.

The objective of the affiliate transactions' guidelines is to lessen the possibility of subsidization in order to protect monopoly ratepayers and to help establish and preserve competition in the electric generation and the electric and gas supply markets. It provides ample flexibility to accommodate exceptions where the outcome is in the best interest of the utility, its ratepayers and competition. As with any transactions, the burden of proof for any exception from
the general rule rests with the proponent of the exception.

1. Generally, the price for services, products and the use of assets provided by a regulated entity to its non-regulated affiliates should be at the higher of fully allocated costs or prevailing market prices. Under appropriate circumstances, prices could be based on incremental cost, or other pricing mechanisms as determined by the regulator.

2. Generally, the price for services, products and the use of assets provided by a non-regulated affiliate to a regulated affiliate should be at the lower of fully allocated cost or prevailing market prices. Under appropriate circumstances, prices could be based on incremental cost, or other pricing mechanisms as determined by the regulator.

3. Generally, transfer of a capital asset from the utility to its non-regulated affiliate should be at the greater of prevailing market price or net book value, except as otherwise required by law or regulation. Generally, transfer of assets from an affiliate to the utility should be at the lower of prevailing market price or net book value, except as otherwise required by law or regulation. To determine prevailing market value, an appraisal should be required at certain value thresholds as determined by regulators.

4. Entities should maintain all information underlying affiliate transactions with the affiliated utility for a minimum of three years, or as required by law or regulation.

E. AUDIT REQUIREMENTS

1. An audit trail should exist with respect to all transactions between the regulated entity and its affiliates that relate to regulated services and products. The regulator should have complete access to all affiliate records necessary to ensure that cost allocations and affiliate transactions are conducted in accordance with the guidelines. Regulators should have complete access to affiliate records, consistent with state statutes, to ensure that the regulator has access to all relevant information necessary to evaluate whether subsidization exists. The auditors, not the audited utilities, should determine what information is relevant for a particular audit objective. Limitations on access would compromise the audit process and impair audit independence.

2. Each regulated entity's cost allocation documentation should be made available to the company's internal auditors for periodic review of the allocation policy and process and to any jurisdictional regulatory authority when appropriate and upon request.

3. Any jurisdictional regulatory authority may request an independent attestation engagement of the CAM. The cost of any independent attestation engagement associated with the CAM, should be shared between regulated and non-regulated operations consistent with the allocation of similar common costs.

4. Any audit of the CAM should not otherwise limit or restrict the authority of state regulatory authorities to have access to the books and records of and audit the operations of jurisdictional utilities.

5. Any entity required to provide access to its books and records should make arrangements as necessary and appropriate to ensure that competitively sensitive information derived therefrom be kept confidential by the regulator.

F. REPORTING REQUIREMENTS

1. The regulated entity should report annually the dollar amount of non-tariffed transactions associated with the provision of each service or product and the use or sale of each asset for the following:

a. Those provided to each non-regulated affiliate.
b. Those received from each non-regulated affiliate.
c. Those provided to non-affiliated entities.

2. Any additional information needed to assure compliance with these Guidelines, such as cost of service data necessary to evaluate subsidization issues, should be provided.

Source:
http://www.naruc.org/Publications/Guidelines%20for%20Cost%20Allocations%20and%20Affiliate%20Transactions.pdf

APPENDIX 2 – DETAILED EXPLANATION OF APUC COSTS

1. APUC Strategic Management Costs

Strategic management decisions are critical for any public utility. The need for strategic management is even more pronounced for APUC as a publicly traded company, which depends on access to capital funding through public sales of units. APUC seeks to hire talented strategic managers that aid in running each facility owned by the company as efficiently and effectively as possible. This ensures the long term health of each utility and ensures that rates are kept as low as possible without compromising the level of service. It also facilitates each regulated utility's access to necessary capital funding at reduced costs. The costs included in Strategic Management Costs fall into the following categories.

a. Board of Directors

The Board of Directors provides strategic oversight on all company affairs including high level approvals of strategy, operation and maintenance budgets, capital budgets, etc. In addition, the Board of Directors provides corporate governance and ensures that capital and costs are incurred prudently, which ultimately protects ratepayers.

b. General Legal Services

General legal services involve legal matters not specific to any single facility, including review of audited financial statements, annual information filings, Sedar filings, review of contracts with credit facilities, incorporation, tax issues of a legal nature, market compliance, and other similar legal costs. These legal services are required in order for APUC to provide capital funding to individual utilities, without which the utilities could not provide adequate service. Additionally, the services ensure that APUC's subsidiaries remain compliant in all aspects of operations and prevent those entities from being exposed to unnecessary risks.

c. Professional Services

Professional Services including strategic plan reviews, capital market advisory services, ERP System maintenance, benefits consulting, and other similar professional services. By providing these services at a parent level, the subsidiaries are able to benefit from economies of scale. Additionally, some of these services improve APUC's access to capital which benefits all of its subsidiaries.

2. Access to Capital Markets

One of APUC's primary functions is to ensure its subsidiaries have access to quality capital. APUC is listed on the New York Stock Exchange ("NYSE") and the Toronto Stock Exchange ("TSX"), leading financial markets. In order to allow its subsidiaries to have continued access to those capital markets, APUC incurs the following costs. These services and costs are a prerequisite to the subsidiaries continued access to those capital markets.

a. License and Permit Fees

In connection with APUC's participation in the NYSE and the TSX, APUC incurs certain license and permit fees such as Sedar fees, annual filing fees, licensing fees, etc. These licensing and permit fees are required in order to sell units on the NYSE and the TSX, which in turn provides funding for utility operations.

b. Escrow Fees

In connection with the payment of dividends to unit holders, APUC incurs escrow fees. Escrow fees are incurred to ensure continued access to capital and ensure continuing and ongoing investments by shareholders. Without such escrow fees, APUC's subsidiaries would not have a readily available source of capital funding.

c. Unit Holder Communications

Unit holder communication costs are incurred to comply with filing and regulatory requirements of the NYSE and the TSX and meet the expectations of shareholders. These costs include items such as news releases and unit holder conference calls. In the absence of shareholder communication costs, investors would not invest in the units of APUC, and in turn, APUC would not have capital to invest in its subsidiaries. With such communications services, the subsidiaries would not have a readily available source of capital funding.

3. APUC Financial Controls

Financial control costs incurred by APUC include costs for audit services and tax services. These costs are necessary to ensure that the subsidiaries are operating in a manner that meets audit standards and regulatory requirements, which have strong financial and operational controls, and financial transactions are recorded accurately and prudently. Without these services, the regulated utilities would not have a readily available source of capital funding.

a. Audit Fees

Audits are done on a yearly basis and reviews are performed quarterly on all facilities owned by APUC on an aggregate level. These corporate parent level audits reduce the cost of the stand-alone audits significantly for utilities which must perform its own separate audits. Where stand-alone audits are not required, ratepayers receive benefits of additional financial rigor, as well as access to capital, and financial soundness checks by third parties. Finally, during rate cases, the existence of audits provides staff and intervenors additional reliance on the company records, thus reducing overall rate case costs. The aggregate audit is necessary for the regulated utilities to have continued access to capital markets and unit holders.

b. Tax Services

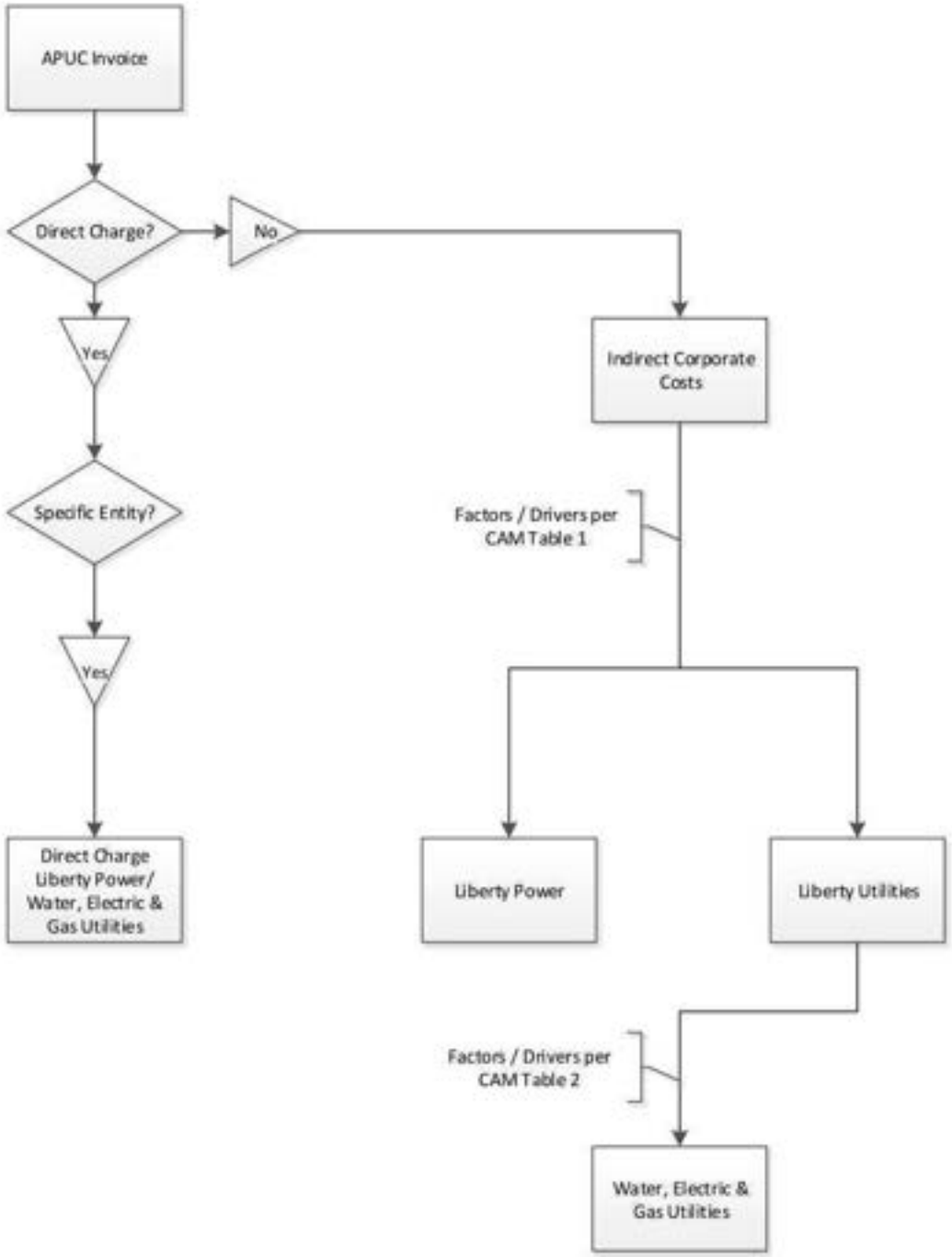
Taxes are paid on behalf of the regulated utilities at the parent level as part of a consolidated United States tax return. Tax services such as planning and filing are provided by third parties. Filing tax returns on a consolidated basis benefits each regulated utility by reducing the costs that otherwise would be incurred by such utility in filing its own separate tax return.

4. APUC Administrative Costs

Finally, administrative costs incurred by APUC, in some cases via other corporate entities, such as rent, depreciation of office furniture, depreciation of computers, and general office costs are required to house all the services mentioned above. Without these administrative costs, the employees throughout the APUC organization could not perform their work and provide the necessary services to the regulated utilities. These administrative costs also include training for corporate employees.

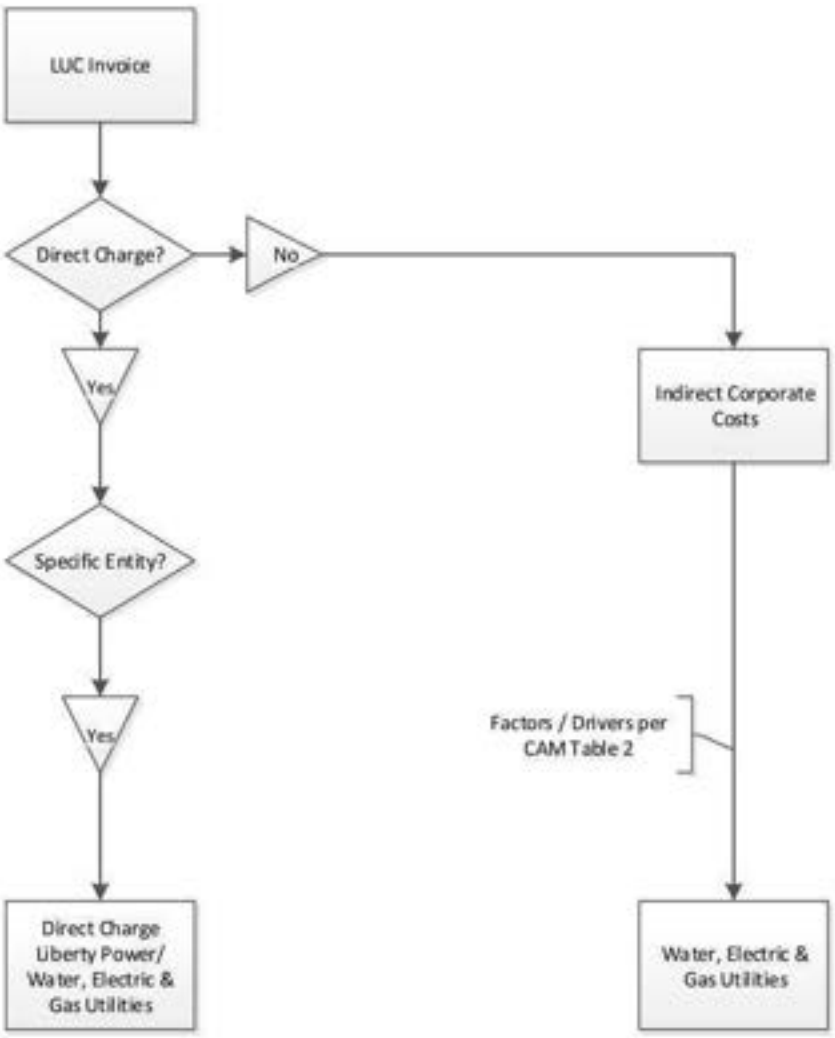
APPENDIX 3 – LIFE OF AN APUC INVOICE

A schematic is provided below showing the trail of an invoice received by APUC for services to be charged to its subsidiaries. The schematic is intended to visually explain the distribution of charges from APUC to Liberty Power and Liberty Utilities companies.



APPENDIX 4 – LIFE OF A LIBERTY UTILITIES INVOICE

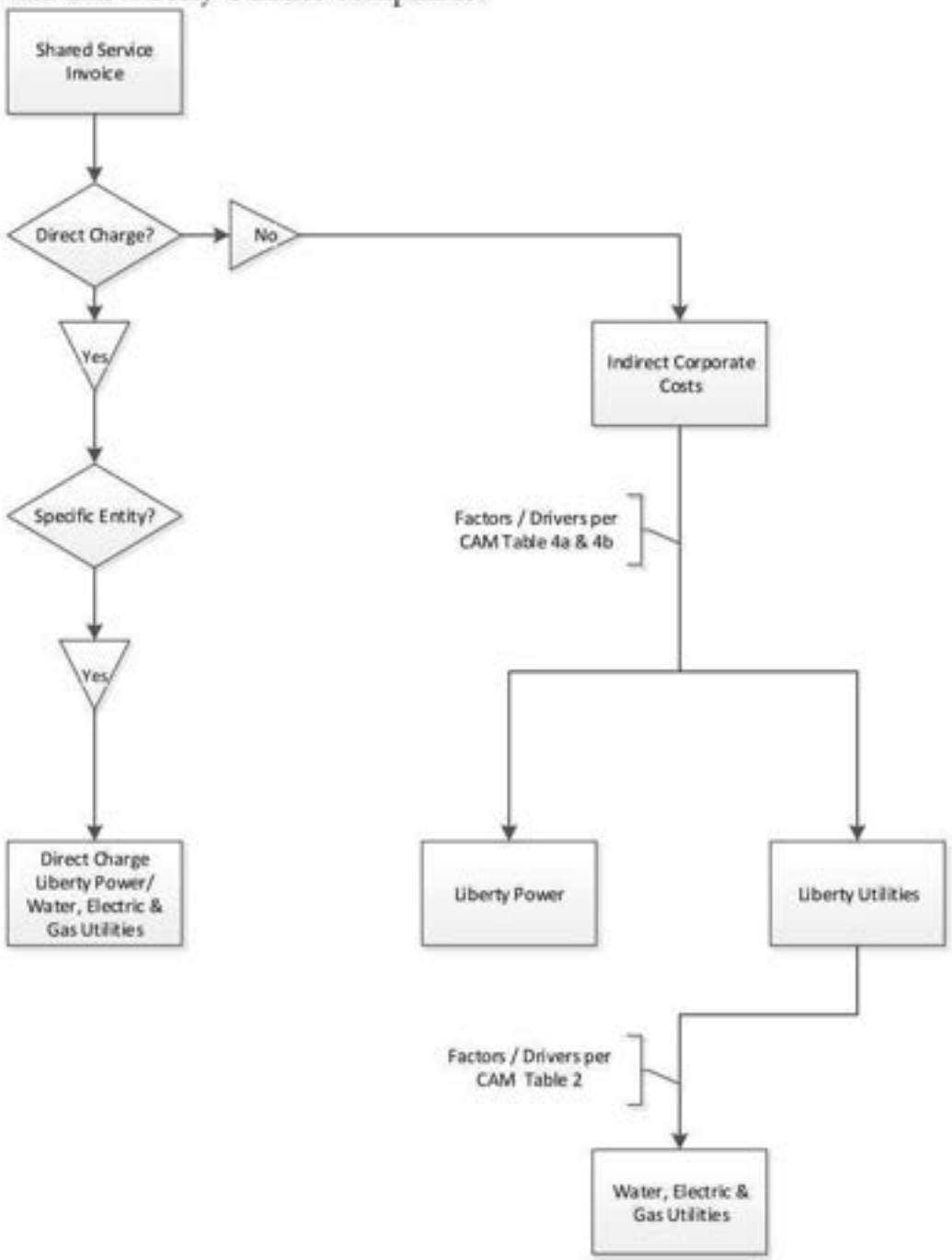
A schematic is provided below showing the trail of an invoice received by Liberty Utilities (LUC) for services to be charged to its utility subsidiaries[18]. The schematic is intended to visually explain the distribution of charges from LUC to Liberty Utilities companies.



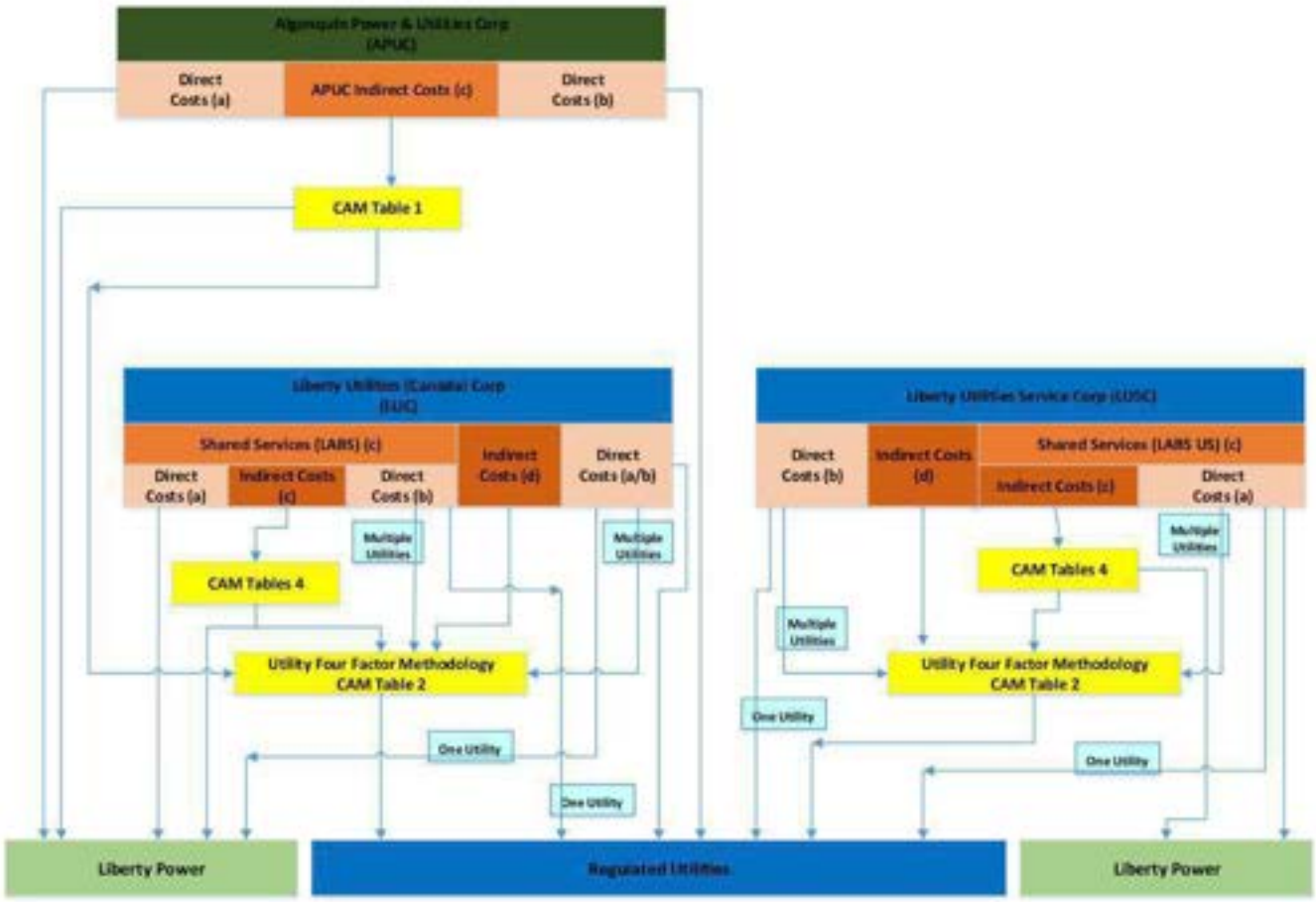
[18] This is for utility-dedicated LUC staff and services (not shared services staff).

APPENDIX 5 – LIFE OF A SHARED SERVICES INVOICE

A schematic is provided below showing the trail of an invoice for shared services provided within Liberty Utilities or LUSC for services to be charged to affiliates and subsidiaries. The schematic is intended to visually explain the distribution of charges from shared services to Liberty Power and Liberty Utilities companies.



APPENDIX 6 – COMPOSITE ILLUSTRATION OF ORGANIZATIONAL COST DISTRIBUTION



Notes:

(a) Costs that are directly assignable to unregulated companies.
(b) Costs that are directly assignable to regulated companies.
(c) Costs that benefit both unregulated and regulated operations
(d) Costs that benefit all regulated operations.

APPENDIX 7 – GLOSSARY OF TERMS

Algonquin Power & Utilities Corp. ("APUC")- is a publicly traded company and the ultimate corporate parent of Liberty Utilities and Liberty Power subsidiaries. It provides financial and strategic management, corporate governance, and oversight of administrative and support services to all its subsidiaries.

Algonquin Power Co. ("Liberty Power")- is a subsidiary of APUC whose primary business is in energy generation through renewal (solar and wind) sources and thermal generating facilities.

Cost Allocation Manual (CAM) – a document that explains how service company costs are assigned to affiliate companies and explains the nature of the services to be provided between affiliates.

Direct Costs- (sometimes referred to as assigned costs)- costs incurred by one company for the exclusive benefit of, or specifically identified with, one or more other companies, and which are directly charged (or assigned) to the company or companies that specifically benefited.

Fully Distributed Cost (FDC)– means a methodology that examines all costs of an enterprise in relation to all the goods and services that are produced. FDC requires recognition of all costs incurred directly or indirectly used to produce a good or service. Costs are assigned either through a direct or allocated approach. Costs that cannot be directly assigned or indirectly allocated (e.g. general and administrative) must also be included in the FDC calculation through a general allocation.

Indirect Costs- costs that cannot be identified with a particular service or product. This includes but not limited to overhead costs, administrative, general, and taxes.

Liberty Utilities Co.- is a subsidiary of APUC and the direct or indirect owner of regulated utilities.

Liberty Utilities (Canada) Corp. ("LUC") - is a subsidiary of APUC and employs Canadian-based employees.

Liberty Utilities Service Corp. ("LUSC")-is a subsidiary of APUC and employs U.S.-based distribution utility employees and those U.S. based employees providing shared services.

Liberty Algonquin Business Services ("LABS")- is a business unit with staff employed within LUC and LUSC. These employees provide shared services to both the utility and non-utility businesses within APUC.

NARUC – National Association of Regulatory Utility Commissioners.

Service Agreement – a written agreement specifying the terms and conditions upon which services are provided to and from affiliated entities.
Utility Four-Factor – is an allocation methodology used to allocate indirect costs to regulated utilities based on the following factors: Utility Net Plant, Customer Count, Non-Labor expenses, and labor expenses.

APPENDIX 8 - VERSION LOG

1. Base Year- January 1 2014
2. V2014, July 1, 2015
3. V2017, January 1 2017 (Includes April 2017 Updates)

PWC Report on Independent Review of Company's CAM

Appendix PE_Dir.2

Assessment of cost allocation manual

Algonquin Power and Utilities Corporation

July 16, 2021

pwc

pwc

July 16, 2021

Ms. Jill Schwartz
Director, Regulatory Shared Services
602 S Joplin Avenue
Joplin, Missouri 64818

Dear Ms. Schwartz:

Thank you for the opportunity to work with you and your team on this project to review the cost allocation manual and allocation process.

We have completed our interviews and meetings with your management team and have prepared this report to summarize observations arising from our meetings.

Please find enclosed our report assessing Algonquin Power and Utilities Corporation's methods for accumulating and allocating holding/service company costs.

Please do not hesitate to contact me ((802) 730-3364) or Alan Felsenthal ((312) 405-9581) should you have any questions or comments on this report.

Very truly yours,

Sean P. Riley
Partner

Alan D. Felsenthal
Managing Director

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Scope of the report

At the request of Algonquin Power and Utilities Corporation ("APUC"), we have prepared this report to assess the processes used to capture and allocate holding/service company costs to its regulated and unregulated affiliates.

APUC's processes are included in their Cost Allocation Manual, V2017 Effective: January 1st, 2017 ("CAM").

Our process for completing this assessment included the following procedures:

1. Interviewing various APUC management representatives to obtain an understanding of the various activities performed, including the methodology utilized for excluding certain costs from allocation (primarily business development/acquisition activities) and the method of charging/allocating holding/service company costs to the individual affiliates.

2. Comparing the Company's allocation methodology to allocation methodologies of other United States utility holding/service companies as reported in their annual report to the Federal Energy Regulatory Commission ("FERC") on Form 60.

3. Reviewing documents and other available support issued by the various regulatory jurisdictions (Canada and United States) relating to allocated costs and recovery of such costs in the ratemaking process.

4. Testing a sample of transactions to determine that the allocation methodology set forth in the CAM was operating as described.

This report includes:

5. A description of the current process used to capture, assign and allocate APUC costs affiliates.

6. An assessment of the current process compared to the guidance provided by National Association of Regulatory Utility Commissioners ("NARUC") and FERC.

7. An assessment as to whether the processes for allocating holding/service company costs as described in the CAM are being followed.

Limitations & assumptions

Our work was performed on the basis that information provided to us was accurate and complete. Additionally, our engagement cannot be relied upon to disclose errors, irregularities, or illegal acts, including fraud that may exist.

Our Services were performed, and this Deliverable was prepared for the sole use and benefit of, and pursuant to a client relationship exclusively with, Liberty Utilities ("the Company"). PwC is providing no opinion, attestation or other form of assurance and disclaims any contractual or other responsibility to others based on their access to or use of the Deliverable. Accordingly, the information in this Deliverable may not be relied upon by anyone other than Client.

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Qualifications of PwC

PricewaterhouseCoopers, which was formed in 1998 from a merger between Price Waterhouse and Coopers & Lybrand, has a long history in client services that dates back to the nineteenth century. Both firms originated in London during the mid-1800s. Today, we serve 26 industries, including the Power & Utilities industry. Our industry-focused services in the fields of assurance, tax, human resources, transactions, performance improvement, information technology and crisis management have helped resolve complex client and stakeholder issues worldwide. We also bring our knowledge and talent to help educational institutions, the federal government, non-profits, and international relief agencies to address their unique business issues.

Our U.S. firm, comprised of over 55,000 professionals, is organized around three core lines of service:

Assurance and Audit: Providing innovative, high quality, independent, and cost-effective services related to an organizations' financial control, regulatory reporting, shareholder value and technology needs;

Tax: Providing a wide range of innovative specialists' resources in three main areas: tax structuring, tax compliance and human resources; and

Advisory: Providing advice and assistance related to transactions, performance improvement, and crisis management based on long-term quality relationships with clients.

As a global network of firms, we share common standards, values, and policies, applying the same processes, systems, and approaches around the world.

PwC's power & utilities practice:

Nationally and globally, we are a leading provider of services in the utility industry. Our philosophy in serving the utility industry is to employ dedicated resources who focus on utility industry clients. This integrated practice demonstrates our commitment to the convergence of the utility industry and enables us to provide worldwide access to information through a variety of local resources. Our depth of resources and range of experience is enhanced by our strong base of utility clients. In the United States, we are the public accountants or consultants for more than 400 clients in the electric, gas, water, and renewable (clean) energy sectors.

Our power and utilities practice provides professional services to companies of many sizes, across many segments of the industry. We serve the needs of utility clients by employing more than 4,500 dedicated resources around the world. This provides our teams with an understanding of regulated and unregulated utility operations and services.

Our U.S. practice consists of more than 1,400 professionals serving clients in the electric, gas, water, and renewable energy sectors, including a dedicated utilities team within our National Office.

Complex accounting and regulatory support practice:

Within our Power and Utilities industry team, we have a highly specialized group, the Complex Accounting and Regulatory Solutions practice (CARS). Our CARS practice is dedicated to helping regulated companies in the energy and utilities industries manage their regulatory risk and solve complex accounting problems. Our seasoned team has deep experience working with regulated entities. The individuals in our CARS practice have many years of experience serving rate regulated entities (electric utilities, gas utilities, water utilities).

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Executive summary

We were engaged to assess the company's process for capturing, assigning and allocating holding/service company costs incurred as described in the CAM as well as assess the CAM's compliance with guidance provided by the NARUC and the FERC. Our assessment addressed whether the allocations described in the CAM are based on cost-causative factors (direct charging, indirect attribution) or a multi-factor general allocator that are designed to prevent cross- subsidization (regulated versus unregulated affiliates, regulated electric versus regulated gas versus regulated water, United States versus Canada). In addition, we reviewed management's cost allocation workbooks to determine if the costs were allocated in accordance with the process stated in the CAM.

Based on completing these procedures and analyses, we determined the methodology for capturing holding/service company costs and allocating such costs to the Company's affiliates is reasonable, supportable and consistent with guidance promulgated by NARUC and FERC. The results of transaction testing found that the mechanics of the allocation process are working as designed.

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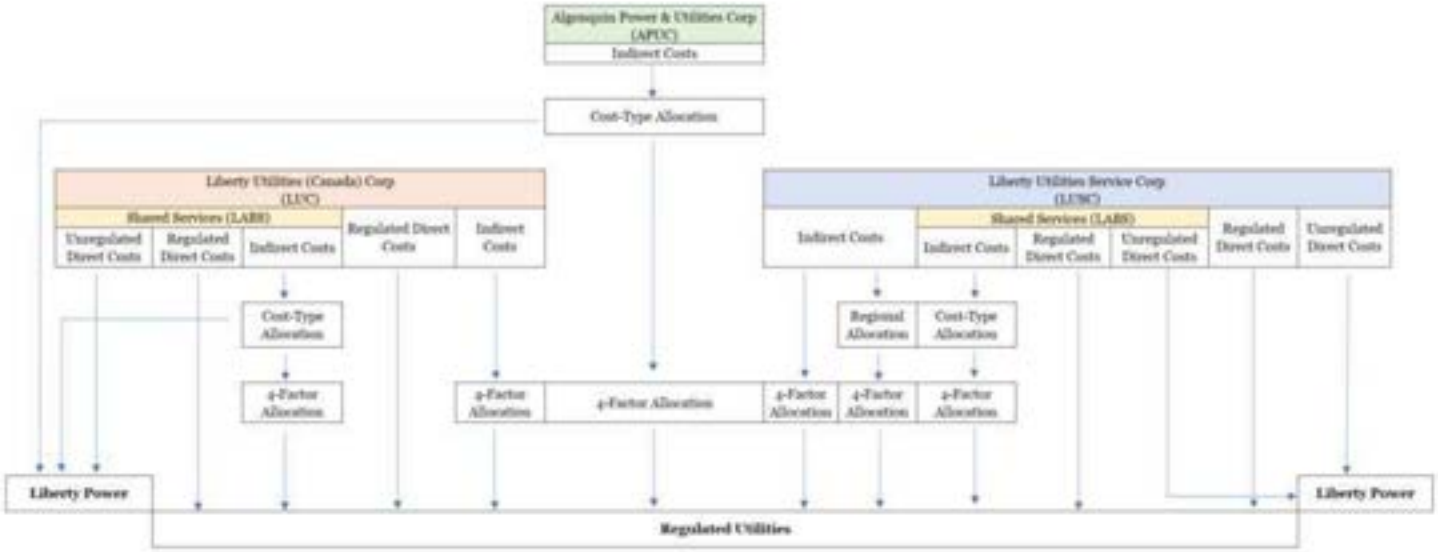
Procedures and observations

Background

Algonquin Power and Utilities Corporation ("APUC") is the ultimate parent holding company with both regulated and non-regulated entities. APUC is further organized into Liberty Utilities (Canada) Corporation ("LUC") and Liberty Utilities Service Corporation ("LUSC"). The primary distinction between LUC and LUSC is the geographical location of the related employees. Specifically, employees reporting to LUC are located in Canada and LUSC employees reside in the United States of America. The employee's location does not drive function and as such, these indirect costs are pooled for allocation to relevant entities. Both LUC and LUSC are further supported by a shared service company, Liberty Algonquin Business Services ("LABS").

As recommended by NARUC and FERC guidance, holding/service company costs are first directly charged to individual regulated or unregulated affiliates when an activity can be identified as relating to a specific affiliate or group of affiliates. Such direct-charged costs are removed from the indirect allocation pool.[1]

The majority of the remaining costs are allocated in two tiers. The first allocation is performed to divide the costs between regulated and nonregulated entities. This is performed based on the nature of the cost and allocated by cost-causative drivers or the modified Massachusetts method (weighting of several factors described in more detail in the Allocation Factors section). The second allocation is performed to further allocate the regulated costs among the regulated entities. At this point, these regulated costs are accumulated into one cost pool and allocated based on a modified Massachusetts Method general allocator as described in more detail within the Allocation Factors section. Note that both LUC and LUSC services are specific to regulated entities only so their costs are allocated through the general allocator only. Refer to the simplified corporate structure and visual allocation mapping below:



[1] See Guidelines for Cost Allocations and Affiliate Transactions, issued by the National Association of Regulatory Utility Commissioners and FERC Order 667, Repeal of the Public Utility Holding Company Act of 1935 and Enactment of the Public Utility Holding Company Act of 2005, 113 FERC ¶ 61,248.

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Additionally, to provide background on each of the service companies, refer to the breakout of the fiscal 2020 direct charges and indirect charges as shown in the table below:

Company	Direct - regulated	Direct - unregulated	Indirect - regulated	Indirect - unregulated	Total costs
APUC	$ -	$ -	$ 18,049,595	$ 5,532,927	$ 23,582,521
LUC	$ 9,417,230	$ -	$ 5,766,158	$ -	$ 15,183,388
LUSC[2]	$ 16,461,390	$ 192,333	$ 23,730,840	$ -	$ 40,384,563
LABS[3]	$ 56,303,561	$ 5,007,501	$ 22,707,695	$ 4,394,112	$ 88,412,869
Total	**$ 82,182,181**	**$ 5,199,834**	**$ 70,254,288**	**9,927,039**	**$ 167,563,341**
% of Total Costs	**49%**	**3%**	**42%**	**6%**	**100%**

As noted above, costs are directly and indirectly charged at each company level to both the regulated business and unregulated business. In total, 52% of 2020 holding/service company costs were direct charged and 48% of 2020 allocable costs were indirectly charged. Of the $87,382,014 of direct charged costs, 94% were directly charged to the regulated business. Of the $80,181,327 of indirect costs, 88% were allocated to the regulated affiliates. Further, of the indirect shared services provided for the enterprise (APUC & LABS), 80% is allocated to the regulated utilities. LUC and LUSC do not allocate indirect costs to LP.

Management reviews the CAM on at least an annual basis to identify any needed updates. If there are changes in the business structure or other material events that impact allocation of costs, management will consider if updates to the CAM or the underlying allocation structure are necessary more frequently.

Reasonableness of cost pool to allocate

To assess the reasonableness of the cost pool to allocate, we performed various procedures to determine peer comparability and the necessity and benefit of such costs to the entity receiving such allocation.

Peer Comparability

We performed a preliminary analysis over peer comparability to assess how APUC, LUC and LUSC compare to other affiliate companies in terms of their percentage of direct vs. indirect billing of holding company/service company costs. Refer to Exhibit 1 for detailed analysis. We conducted interviews with holding/service company representatives to understand how both labor and non-labor costs are billed. Through these discussions, we understand that labor costs are recorded through employees charging their time. Employees are instructed to charge time to specific time codes set up for projects or entities. They understand that only time that cannot be directly billed is recorded to the general charge-code. Employees' time is also then subject to review by their supervisor who further assesses the appropriateness of the time charged. Non-labor costs are directed to the main billing contact who is responsible for assessing the charge for applicability to specific entities' or for general allocation. Again, the billing contact is instructed to direct charge where applicable.

As shown in the previous table, the three business units comprising the consolidated holding/service company allocation pool (APUC, LUC, LUSC) direct charged approximately 52% of the holding/service company pool in fiscal year 2020. To focus on the shared service companies, we also considered the percentage of direct cost charging from LUC and LUSC, calculating that over 60% of costs are direct charged. We observe that this is comparable with other U.S. companies as further discussed below. The percentage of direct charging varies each year depending on the specific activities

[2] LUSC includes costs from the East, Central and West regions as well as Libcorp cost pools.
[3] LABS includes employees in both Canada and the United States.

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performed for/requested by the affiliates.

Peer data for fiscal year 2020 was not yet available. However, we were able to review the FERC Form 60's filed with the FERC for fiscal year 2019 (the most recent year that a full population is available as of the date of this report). The FERC Form 60 is the "Annual Report of Centralized Service Companies" required to be filed by all centralized utility service companies in the U.S. (that have not been granted a waiver), and although we recognize that APUC is not a service company, the distinction between holding company and service company activities is typically not significant and the FERC Form 60 data is the most widely representative data available to provide a sample of allocation methodologies that have been adopted across U.S. utilities. Each FERC Form 60 is required to include a schedule, "Schedule XVII - Analysis of Billing - Associate Companies," reporting direct billed and indirect billed costs. Through this analysis we determined that the mean of the percentage of direct cost charges as a percentage of total cost is 63% and the median is 67%. In fiscal year 2019, LUC and LUSC reported percentages greater than these amounts at 72% and 91%, respectively, suggesting a more comprehensive process for direct cost charging.

APUC's percentage was 25%, which is below the mean and median, but consistent with our understanding of the cost pool at the APUC level as it is the holding company and not a shared service company. Given the three companies consolidate into APUC, we also performed a calculation combining the three APUC business units and calculated direct billings of 81%, which is also higher than both the mean and median of other FERC Form 60 filers in 2019, suggesting more cost causative direct billing and smaller cost pools from which to indirectly allocate.

Necessity and Benefit

To elaborate on the Background section above, APUC is the ultimate corporate parent that provides financial and strategic management, corporate governance, and oversight of administrative and support services. The activities in this cost pool are a necessary part of being a publicly traded business, and are designed to complement, rather than duplicate, costs incurred at the subsidiaries. We noted in a review of the fiscal year 2019 reports of 44 utility service companies and past communications by the FERC and the NARUC that it is a common and widely accepted practice for North American utilities to allocate costs to regulated and non-regulated subsidiaries that are of a "corporate overhead" nature. Such costs include, but are not limited to, executive management, investor relations, internal audit and legal. In reviewing the CAM against the NARUC guidelines, we observed the nature of costs in the allocated pools follow this guidance.

LUC and LUSC also provide services to Liberty Utilities. As noted previously, both LUC and LUSC are supported by a centralized shared service company known as LABS that also provides business and corporate support services to the Company and its affiliates. It should be noted that LUC and LUSC only differ in their employee's geography with LUC employees residing in Canada and LUSC employees residing in the United States. Cost pools at LUC, LUSC and LABS relate to the following areas: information technology, human resources, training, facilities and building rent, environment, health, safety and security, procurement, executive and strategic management, technical services, utility planning as well as corporate services including: risk management, financial reporting, planning and administration, treasury, internal audit, external communications, legal costs and compliance.

Whether the costs are incurred by a service company or holding company does not affect the NARUC or FERC allocation guidance and, as a result, the approaches to identify allocable cost pools used by utility service companies such as LUC, LUSC and LABS are generally valid for APUC as well.

In understanding the types of costs included in each cost pool, we then considered the following qualitative and quantitative factors in assessing the reasonableness of the costs that are allocated to its subsidiaries:

1. Are the activities performed necessary for the Company's subsidiaries, and do they provide demonstrated benefits?
2. Are the costs duplicative in nature?
3. Are the costs similar in nature to costs that other utility holding companies have successfully recovered through rate cases in the U.S. and Canada?

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To assess these questions, we conducted interviews with certain employees with knowledge of cost types making up each pool. We used a risk-based approach to determine which departments to interview, focusing primarily on the cost pools with larger balances. For those pools where interviews were not performed, we subjected such cost pools to our selection testing of source documents as well as comparative procedures against other companies filing FERC Form 60s. We also obtained the detailed listing of costs included within each company cost pool (APUC, LUC and, LUSC) and scanned the expenses making up those balances against the descriptions included within the CAM. Our primary observation is historically allocated costs are costs required to satisfy responsibilities to customers, shareholders, and regulators, and to enable effective corporate oversight.

For a selection of individual costs within each of the companies' pools, we requested the underlying source documents to review the related invoice(s) and/or calculation spreadsheet to further validate the appropriateness of its inclusion in the cost pool for allocation as well as the appropriate cost-type coding to the extent it is allocated by cost-type. Through these procedures, it was observed that the cost pools are reasonable and consistent with other U.S. companies.

In addition to assessing the costs included in the cost pool, our interviews with members of management also suggest that the Company has appropriately identified specific costs to exclude from the allocable cost pool (e.g., business development costs, retirement costs, meals and entertainment, foreign exchange gains and losses, and donations). Through interviews as well as review of the monthly allocations, we also noted that these costs are either processed through the allocation or removed from the pool prior to allocation to prevent the likelihood of subsidization by certain entities. During the fiscal year 2020, approximately $58M in costs were originally included within the cost pool for allocation, as they were not direct charged, and subsequently excluded and removed from the cost pool prior to allocation.

Beyond the cost pool exclusions, there is another process by which affiliates may challenge a charge that does not seem to directly benefit the entity. Two examples of this would be if a Canadian entity erroneously received a United States regulatory fee or if a gas company received an electric charge in error. In both cases, the receiving entity may challenge that billing to ensure necessity and benefit of costs allocated. In those instances, management has noted that these costs have historically been removed from those entities suggesting effective internal controls for identification and resolution of costs billed inappropriately.

A necessity and benefit analysis is summarized within Exhibit 2. In analyzing the cost pools that APUC, LUC and LUSC and its subsidiaries have historically allocated to its subsidiaries, we considered information obtained through interviews with management, review of internal records, and review of published data relating to other utility service/holding companies.

Role Clarity

APUC's services allow for access to the capital markets and provide for maximum expertise at lower costs. If the utilities did not have access to the services provided by APUC, LUC and LUSC they would be forced to incur associated costs for financing, capital investment, audits, taxes and other similar services on a stand-alone basis, which would substantially increase such costs. One overriding rationale supporting a service/holding company concept is the scope and scale; that is, rather than each affiliate having a certain individual or group provide services to the individual entity, a service/holding company can provide such services to a number of affiliates with the individual receiving an allocated portion of the service/holding company cost. Costs that may appear to overlap across APUC, LUC, LUSC and the local entity were further reviewed with findings summarized within Exhibit 4. Functions included within this analysis were reviewed based on higher cost balances and discussed with management to assess overlap and functionality. The costs included in the exhibit represent the largest balances with the potential for duplication. While, finance, legal and human resources are cost types for which services are both allocated and performed directly at the local entity, we did not identify any instances of redundancy through this exercise.

Allocation methodology

In addition to assessing the cost pool, we also reviewed the associated allocation factors as well as reperformed management allocation calculation to verify its compliance with the CAM.

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Allocation factors

In past decisions and written communications, the regulators in the Company's jurisdictions have expressed the view that direct charging of service/holding company costs to specific entities, where supportable, is preferred. After direct charging, utility service/holding companies should first allocate costs by cost drivers with a cost-causative linkage to the respective cost pool where possible, and finally allocate the remainder of costs using a general factor. The percentage of direct charging will vary from year to year depending on the nature and size of projects and responses to requests from affiliates. As previously stated, the combined APUC, LUC and LUSC directly charged more than half of the holding/service company costs in fiscal year 2020 (more than 60% by the LUC and LUSC service companies) and, in 2019 (where peer information is available) at a higher level than its peers in fiscal year 2019. NARUC's cost allocation principles state that the general method for charging indirect costs should be on a fully allocated cost basis.

APUC

When APUC cannot identify indirect cost drivers for any of its functional areas, a "relevant proxy" as a general allocator for corporate overhead type costs is used. A general allocator is an acceptable approach under NARUC and FERC in order to fully distribute the costs in the cost pools. APUC's costs are organized into cost pools and are weighted through two levels of multi-factored allocations to ensure allocations across entities is appropriate.

Services at APUC are provided to both regulated and non-regulated companies. To first divide between the two, APUC allocates by cost-type and a related cost causative driver or a general allocator to avoid subsidization between regulated and non-regulated companies. The regulated cost pool is then subject to a four-factor general allocator, allocating costs based on a weighting of 40% customer count, 20% utility net plant, 20% non-labor expenses, and 20% labor expenses. This weighting has been determined by management to be most appropriate as to avoid vertically integrated utilities, owning their own generation facilities, from receiving exorbitant allocation. As such, the higher weighting on customer count results in a more equitable and representative distribution of the shared services costs.

LUC and LUSC

At LUC, indirect costs are allocated directly through the general allocator as costs are incurred in support of all regulated entities. At LUSC, costs are recorded based on the various region/group (East, Central, West, Libcorp, and LABS) and then subject to the four-factor methodology. Costs within the East, Central, and West regions are allocated only to the specific utilities within those regions. For example, in the East region costs are only allocated to Granite State, EnergyNorth, Georgia, New England Gas, New Brunswick Gas, St. Lawrence Gas, and Tinker Transmission. Costs within Libcorp are allocated to all utilities following the four-factor methodology with a nuance for energy procurement related costs. Any Libcorp costs related to Energy Procurement are not allocated to water companies. Costs within LABS are first allocated between regulated and nonregulated entities by cost pool percentage as shown in Exhibit 2, and then to the local utilities using the four-factor method.

Although FERC and U.S. state regulators do not have a specific set of rules on the development of a general allocation factor, they have been clear that they prefer a general allocator that incorporates the weighting of multiple factors. Additionally, Canadian regulators appear to also prefer a general allocator that weights multiple factors. This approach recognizes that there is not one perfect allocator and using a combination of factors reduces the subjectivity of using one individual measure as the basis for allocation. The Massachusetts method (or modified Massachusetts method) is the most widely used method of allocating corporate general costs that cannot be assigned a specific cost driver, and it has been widely accepted by the FERC, U.S. state and Canadian regulators. The original Massachusetts method involved the equal weighting of three factors: plant, revenues, and labor. The modified Massachusetts method includes variations of approach (e.g., gross margin as a substitute for revenue, O&M expense as a substitute for labor, etc.). In any event, a general allocation factor that includes some indicator of operations (expense) and capital investment (assets) is often accepted.

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We also examined whether the costs are similar in nature to costs that other utility holding companies and/or service companies have historically allocated to their subsidiaries, see Exhibit 3. To aid in this analysis, we reviewed the fiscal year 2019 FERC Form 60s as noted above. Each FERC Form 60 is required to include a schedule, "Schedule XXI – Methods of Allocation," that specifies all functions for which the service company is allocating costs, and a description of the method of allocation (we discuss methods of allocation later in this report). We analyzed the allocation factors within the FERC Form 60s of APUC's peers based on the "comparator group" reported within the 2020 and 2019 Management Information Circular posted on the Company's website. Through this exercise, we compared both the general allocator as well as cost causative factors by cost pools used by APUC allocators that have been accepted by the FERC and the New Brunswick Energy and Utilities Board, noting that the Company's allocation methodology of utilizing a general allocator is consistent with its peers and there were no cost pools identified that would suggest the Company is an outlier.

Given the costs subject to this pool do not have an obvious cost-causative driver to allocate, this weighting is considered appropriate because, as stated above, to not weigh any one factor more than another. From analysis of the FERC Form 60s filed in 2019, we further verified that the use of a general allocator is common among the Company's peers.

Mathematical accuracy

We obtained the monthly allocation files for each month during the fiscal year 2020 for each company (APUC, LUC, LUSC and LABS) and reviewed the files for consistency in calculations. Further, we selected two months at random to perform a detailed recalculation from the cost pool detail through the relevant allocations down to the final entity. Through these procedures, for the two-months subject to testing, we determined the costs are being allocated in accordance with the company's CAM. Refer to the illustrative example below for further detail on the procedures performed.

Illustrative example - Cost allocator

Cost allocation factors are updated annually, and periodically throughout the year when changes to the business occur. The cost allocator calculation is completed for all four business units (APUC, LABS, LUC, and LUSC) within a single manual spreadsheet. During 2020, cost allocation factors were updated in April, June, and November. As such, in accordance with audit testing methodology for attribute testing, we determined it appropriate to test two months (April and November) of allocators and complete the procedures for all business units. Refer to the screenshot below for PwC's testing over the APUC cost allocator for April:

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APUC
April 2020 - March 2021 Allocation
as at April 01, 2020

	All Employees Headcount	%	O&M USD	%	Revenue USD	%	Net Plant USD	%	Oakville Employees Headcount	%
LP (APCO)	176	7%	75,209	15%	240,692	20%	2,444,382	34%	90	29%
LU	2,266	93%	412,456	85%	980,770	80%	4,754,373	66%	219	71%
Total	2,442	100%	487,665	100%	1,221,462	100%	7,198,755	100%	309	100%
	-		-		-		-		-	
Legal Costs		33.333%		33.333%				33.333%		
Tax Services				33.333%		33.333%		33.333%		
Audit				33.333%		33.333%		33.333%		
Investor Relations				33.333%		33.333%		33.333%		
Director Fee & Insurance				33.333%		33.333%		33.333%		
Licenses, Fees, and Permits				33.333%		33.333%		33.333%		
Escrow & transfer Agent Fees				33.333%		33.333%		33.333%		
Other Professional Services				33.333%		33.333%		33.333%		
Office Administration Costs		50.00%								50.00%
Travel- CAM category is Other Other Professional Services.				33.333%		33.333%		33.333%		
Executive Salaries and Strategic Management				33.333%		33.333%		33.333%		

2020 Percentages			
Summary	APCO	LU	Total
Legal Costs	18.9%	81.1%	100.00%
Tax Services	23.0%	77.0%	100.00%
Audit	23.0%	77.0%	100.00%
Investor Relations	23.0%	77.0%	100.00%
Director Fee & Insurance	23.0%	77.0%	100.00%
Licenses, Fees, and Permits	23.0%	77.0%	100.00%
Escrow & transfer Agent Fees	23.0%	77.0%	100.00%
Other Professional Services	23.0%	77.0%	100.00%
Office Administration Costs	18.2%	81.8%	100.00%
Travel- CAM category is Other Other Professional Services.	23.0%	77.0%	100.00%
Executive and Strategic Management	23.0%	77.0%	100.00%

2019 Percentages			
Summary	APCO	LU	Total
Legal Costs	17.9%	82.1%	100.00%
Tax Services	21.5%	78.5%	100.00%
Audit	21.5%	78.5%	100.00%
Investor Relations	21.5%	78.5%	100.00%
Director Fee & Insurance	21.5%	78.5%	100.00%
Licenses & Fees	21.5%	78.5%	100.00%
Escrow transfer Agent	21.5%	78.5%	100.00%
Other Professional	21.5%	78.5%	100.00%
Office Administration	17.4%	82.6%	100.00%
Travel	21.5%	78.5%	100.00%
Executive Salaries	21.5%	78.5%	100.00%

LU Comparison
-1.0%
-1.5%
-1.5%
-1.5%
-1.5%
-1.5%
-1.5%
-1.5%
-0.8%
-1.5%
-1.5%

As noted in the screenshot above, first we traced and agreed all inputs to the allocations to the original source data. Second, we recalculated the allocation percentage between the regulated and non- regulated business based on the initial inputs. Third, we traced and agreed the cost pool allocation to the CAM guidance. Finally, we recalculated the distinct cost pool allocator by applying the three-factor method as described in the methodology. We completed the same tie out and recalculation procedures on the cost allocator calculations for LABS, LUC, and LUSC, determining that the allocation factors are mathematically accurate.

Illustrative example - Cost pool calculation

Each month the cost allocators, calculated above, are applied to their cost pools to appropriately calculate their allocations. To determine if costs are allocated in accordance with the CAM, we recalculated the allocation of costs to all entities for two months. Refer to the screenshot below for our recalculation over APUC cost pool calculations and final allocation:

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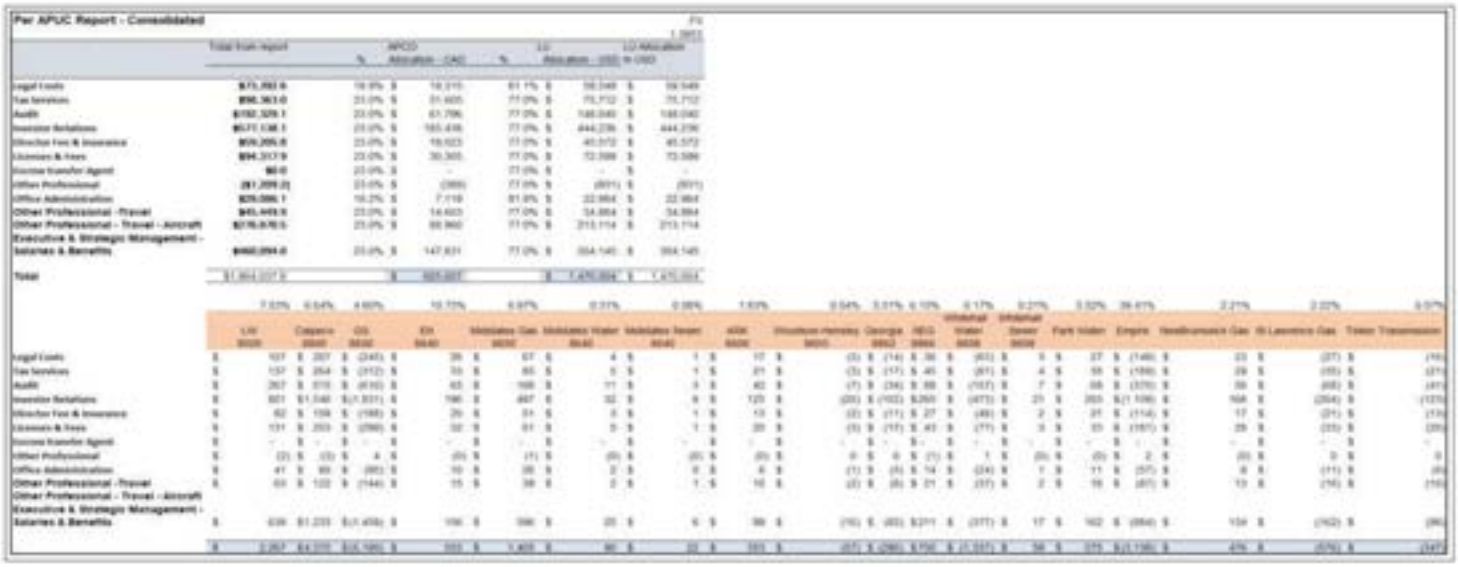

As noted in the screenshot above, first we traced and agreed the cost pool bucketing to the source files. To assess the cost pool bucketing, we inspected 64 selections across the four business units and confirmed the cost pool was appropriate and that the expenditure was necessary and beneficial to each business unit for which it was ultimately allocated. Second, we traced and agreed the regulated vs. unregulated allocation percentages to the cost allocator described above. Third, we recalculated the dollar amount allocated to regulated vs. unregulated by applying the percentage to the cost pool buckets. Fourth, we traced and agreed the utility specific allocation to the four-factor methodology within the CAM. Finally, we recalculated the dollar amount allocated to each utility by applying the appropriate four factor allocation to each regulated cost pool bucket. We completed the same tie out and recalculation procedures on the cost pool calculations for LABS, LUC, and LUSC, determining that costs are allocated in accordance with the CAM.

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Exhibit 1 – FERC Form 60 analysis – Direct charging percentages

Schedule XVII – Analysis of billing – Associate companies (Account 457)[4]

Company	Direct charges	Indirect charges	Total	% Direct
Allegheny Energy Service Corporation	(3,478,868)	0	(3,478,868)	100%
ATC Management Inc.	114,256,597	0	114,256,597	100%
Avangrid Service Company	215,445,184	0	215,445,184	100%
Columbia Pipeline Group Service Company	12,927,828	0	12,927,828	100%
National Grid Engineering & Survey, Inc.	62,724,377	111,955	62,836,332	100%
National Grid USA Service Company Inc.	2,679,362,707	39,549,266	2,718,911,973	99%
Entergy Nuclear Operations, Inc.	538,316,287	11,945,559	550,261,846	98%
Entergy Operations, Inc.	592,825,726	14,157,781	606,983,507	98%
Entergy Enterprises, Inc.	137,526,565	5,436,297	142,962,862	96%
Entergy Services, LLC	1,493,373,708	82,312,730	1,575,686,438	95%
Liberty Utilities Service Corp	**185,577,826**	**19,236,654**	**204,814,480**	**91%**
Ameren Services Company	438,304,912	66,277,755	504,582,667	87%
Southern Company Services, Inc.	1,641,635,744	266,203,999	1,907,839,743	86%
Southern Nuclear Operating Company, Inc.	872,884,799	150,090,430	1,022,975,229	85%
American Electric Power Service Corporation	1,395,321,358	263,838,026	1,659,159,384	84%
PPL EU Services Corporation	118,378,939	36,711,919	155,090,858	76%
Dominion Energy Southeast Services, Inc.	321,131,139	118,588,606	439,719,745	73%
Liberty Utilities (Canada) Corp.	**62,489,175**	**23,992,759**	**86,481,934**	**72%**
Alliant Energy Corporate Services, Inc.	219,475,201	98,350,743	317,825,944	69%
Duke Energy Business Services, LLC	2,492,153,525	1,242,623,655	3,734,777,180	67%
AES U.S. Services, LLC	82,321,803	41,619,490	123,941,293	66%
CenterPoint Energy Service Company, LLC	423,258,832	216,453,598	639,712,430	66%
Dominion Energy Services, Inc.	518,940,004	326,727,735	845,667,739	61%

[4] Source: "Schedule XVII - Analysis of Billing" - Associate Companies per the FERC Form 60's filed with the FERC for fiscal year 2019

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Company	Direct charges	Indirect charges	Total	% Direct
GridLiance Management, LLC	12,085,046	9,419,192	21,504,238	56%
Xcel Energy Services Inc.	754,303,916	619,273,619	1,373,577,535	55%
Eversource Energy Service Company	417,811,235	464,890,694	882,701,929	47%
Unitil Service Corporation	28,680,426	33,453,185	62,133,611	46%
Exelon Business Services Company, LLC	840,951,644	1,063,651,695	1,904,603,339	44%
NiSource Corporate Services Company	198,658,714	265,830,801	464,489,515	43%
PPL Services Corporation	51,763,704	89,118,515	140,882,219	37%
FirstEnergy Service Company	318,454,007	591,305,053	909,759,060	35%
WEC Business Services LLC	186,529,804	464,906,991	651,436,795	29%
PHI Service Company	105,727,868	289,546,938	395,274,806	27%
LG&E and KU Services Company	91,447,624	252,903,989	344,351,613	27%
TECO Services, Inc.	22,150,108	65,564,577	87,714,685	25%
Algonquin Power & Utilities Corp.	**4,774,034**	**14,491,067**	**19,265,101**	**25%**
Sempra North American Infrastructure, LLC	29,809,865	92,018,710	121,828,575	24%
PNMR Services Company	32,978,879	102,332,822	135,311,701	24%
Black Hills Service Company, LLC	69,693,105	275,855,498	345,548,603	20%
Sempra Services Corporation	0	5,737,848	5,737,848	0%
Grand Total	**17,780,973,347**	**7,724,530,151**	**25,505,503,498**	**70%**
Mean				**63%**
Median				**67%**
APUC Consolidated	**252,841,035**	**57,720,480**	**310,561,515**	**81%**

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Exhibit 2 – Necessity and benefits analysis of company costs

Necessity attributes:	Benefit attributes
1. Corporate governance	1. Reduce risk or avoid risk
2. Regulatory mandate	2. Increase employee productivity
3. Legal compliance	3. Provide management information
4. Management oversight	4. Enhance corporate performance
5. Corporate Operational execution	5. Increase reliability
6. Strategic planning	

Business Unit	Cost type	Are the activities performed necessary for theenterprise?	Do the activities provide demonstrated benefits?	Allocation methodology
APUC	Legal Costs[5]	1, 2, 3	1	Net Plant 33.3% Number of Employees 33.3% O&M 33.3%
APUC	Tax Services	3	1	Revenue 33.3% O&M 33.3% Net Plant 33.3%
APUC	Audit	2, 3	1, 5	Revenue 33.3% O&M 33.3% Net Plant 33.3%
APUC	Investor Relations	1, 6	1, 5	Revenue 33.3% O&M 33.3% Net Plant 33.3%
APUC	Director Fees and Insurance	1, 3, 4, 5, 6	1, 4, 5	Revenue 33.3% O&M 33.3% Net Plant 33.3%
APUC	Licenses, Fees and Permits	2, 3, 5	1, 5	Revenue 33.3% O&M 33.3% Net Plant 33.3%
APUC	Escrow and Transfer Agent Fees	3, 5	1, 5	Revenue 33.3% O&M 33.3%

[5] Refer to Exhibit 4 for analysis of costs that may appear to overlap across APUC, LUC, LUSC and the local entity

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Business Unit	Cost type	Are the activities performed necessary for the enterprise?	Do the activities provide demonstrated benefits?	Allocation methodology
				Net Plant 33.3%
APUC	Other Professional Services	5, 6	4	Revenue 33.3% O&M 33.3% Net Plant 33.3%
APUC	Other Administration Costs	5	2	Oakville Employees 50% Total Employees 50%
APUC	Executive and Strategic Management	5, 6	1, 4	Revenue 33.3% O&M 33.3% Net Plant 33.3%
LABS	Information Technology	5	2, 3, 4, 5	Number of Employees 90% O&M 10%
LABS	Human Resources[5]	5	1, 3, 4, 5	Number of Employees 100%
LABS	Training	1, 2, 3, 5	1, 2, 4, 5	Number of Employees 100%
LABS	Facilities and Building Rent	5	4	Oakville Employees 100%
LABS	Environment, Health, Safety and Security	2, 3, 5	1, 5	Number of Employees 100%
LABS	Procurement	2, 5	1, 4, 5	O&M 50% Capital Expenditures 50%
LABS	Executive and Strategic Management	5, 6	1, 4	Revenue 33.3% O&M 33.3% Net Plant 33.3%
LABS	Technical Services	5	4	Net Plant 33.3% Revenue 33.3% O&M 33.3%
LABS	Utility Planning	2, 5	1, 4, 5	Net Plant 33.3% Revenue 33.3% O&M 33.3%
LABS	Risk Management	5	1, 5	Net Plant 33.3% Revenue 33.3% O&M 33.3%
LABS	Financial Reporting, Planning and Administration[5]	2, 3, 5, 6	1, 3, 4	Revenue 33.3% O&M 33.3% Net Plant 33.3%
LABS	Treasury[5]	3, 5, 6	1, 3, 4	Capital Expenditures 25% O&M 50% Net Plant 25%

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Business Unit	Cost type	Are the activities performed necessary for the enterprise?	Do the activities provide demonstrated benefits?	Allocation methodology
LABS	Internal Audit	2, 3, 4	1, 3, 5	Net Plant 25% O&M 75%
LABS	External Communications			Total Employees 100%
LABS	Legal Costs[5]	3	1, 5	Net Plant 33.3% Number of Employees 33.3% O&M 33.3%
LABS	Compliance	1, 2, 3, 4	1, 3, 5	Revenue 33.3% O&M 33.3% Net Plant 33.3%
LUSC/LUC	Customer Care and Billing	5	4, 5	Four Factor Allocator
LUSC/LUC	IT/Tech Support	5	2, 3, 4, 5	Four Factor Allocator
LUSC/LUC	Human Resources[5]	5	1, 3, 4, 5	Four Factor Allocator
LUSC/LUC	Gas Control	2, 5	1, 3, 5	Four Factor Allocator
LUSC/LUC	Legal[5]	1, 2, 3	1	Four Factor Allocator
LUSC/LUC	Compliance	1, 2, 3, 4	1, 3, 5	Four Factor Allocator
LUSC/LUC	Regulatory & Government Relations	1, 2, 3	1, 5	Four Factor Allocator
LUSC/LUC	Environmental, Health, Safety and Security	2, 3, 5	1, 5	Four Factor Allocator
LUSC/LUC	Procurement	2, 5	1, 4, 5	Four Factor Allocator
LUSC/LUC	Operations	5	2, 4, 5	Four Factor Allocator
LUSC/LUC	Engineering; Dispatch and Control	5	2, 4, 5	Four Factor Allocator
LUSC/LUC	Outage Management	5	1, 2, 4, 5	Four Factor Allocator
LUSC/LUC	GIS/Mapping	5	3, 4, 5	Four Factor Allocator
LUSC/LUC	Vegetation Management	5	1, 5	Four Factor Allocator
LUSC/LUC	Energy Procurement	2, 5	1, 4, 5	Four Factor Allocator
LUSC/LUC	Accounting and Finance[5]	2, 3, 5, 6	1, 3, 4	Four Factor Allocator
LUSC/LUC	Managerial	1, 5, 6	1, 4, 5	Four Factor Allocator
LUSC/LUC	Utility Planning	2, 5	1, 4, 5	Four Factor Allocator
LUSC/LUC	Customer Communication	5	1, 5	Four Factor Allocator

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Exhibit 3 – FERC form 60 analysis – General allocator methodology

Schedule XXI – Methods of allocation[6]

	Algonquin power & utilities Corp.	Liberty utilities (Canada) Corp.	Alliant energy corporate services, Inc.	CenterPoint energy service company, LLC	PNMR services company	Black hills corporation
4 Factor	Utilities (40% customer count, 20% utility net plant, 20% non-labor exp, 20% labor exp)	Utilities (40% customer count, 20% utility net plant, 20% non-labor exp, 20% labor exp)				
3 Factor	Legal Costs (33% Plant, 33% # of employees, 33% OM) Tax Services (33% Rev, 33% OM, 33% Plant) Audit (33% Rev, 33% OM, 33% Plant) Investor Relations (33% Rev, 33% OM, 33% Plant) Director Fees and Insurance (33% Rev, 33% OM, 33% Plant) Escrow and transfer Agent Fees (33% Rev, 33% OM, 33% Plant) Other Professional Services (33% Rev, 33% OM, 33% Plant) Executive and Strategic Management (33% Rev, 33% OM, 33% Plant)	Executive and Strategic Management (33% Rev, 33% OM, 33% Plant) Technical Services (33% Rev, 33% OM, 33% Plant) Utility Planning (33% Rev, 33% OM, 33% Plant) Risk Management (33% Rev, 33% OM, 33% Plant) Financial Reporting, Planning, and Administration (33% Rev, 33% OM, 33% Plant) Treasury (25% capex, 50% OM, 25% Plant) Legal Costs (33% # of employees, 33% OM, 33% Plant) Compliance (33% Rev, 33% OM, 33% Plant)	Legal costs (33% # of employees, 33% total assets, 33% op. revs) Taxes (33% # of employees, 33% total assets, 33% op. revs) Benefits (33% # of employees, 33% total assets, 33% op. revs) Planning (33% # of employees, 33% total assets, 33% op. revs) Materials management (materials, supplies, and services)	Asset Ratio Corporate Governance Costs (40% assets, 40% gross margin, 20% head count)	Utility Shared Services (Massachusetts methods)	Blended ratio (33% gross margin, 33% asset cost, 33%, payroll)

[6] Source: "Schedule XXI – Methods of Allocation" per the FERC Form 60's filed with the FERC for fiscal year 2019

Appendix PE_Dir.2

	Algonquin power & utilities Corp.	Liberty utilities (Canada) Corp.	Alliant energy corporate services, Inc.	CenterPoint energy service company, LLC	PNMR services company	Black hills corporation
2 Factor		IT (90% # of employees, 10% OM) Procurement (50% OM, 50% capex) Internal Audit (25% net plant, 75% OM)	Engineering and Construction (utility type and function)	Operating Expense ratio	Facilities and Building (Sq. footage and occupancy)	
1 Factor	Other Admin Costs (# of employees)	Human Resources (# of employees) Training (# of employees) Facilities and Building Rent (# of employees) Environment, Health, Safety, and Security (# of employees) External Communications (# of employees)	IT (# of employees) Transportation (# of employees) Human Resources (# of employees) Facilities and Building (# of employees) Power planning (volumes) Electric production admin (volumes) Electric and gas delivery admin (# of customers) Environmental affairs (volumes) Customer billing/payment processing (# of bills) Customer Service, Customer Assistance and Customer Relations (# of customers) Public and Community Affairs (# of employees or customers) Rates (# of customers) Electric System Maintenance (miles of distribution lines) Investor Relations (total assets) Insurance and Risk Management (Total assets) Internal audit (Op. Revs) Real Estate and Right of way (gross plant) Fuel (volumes) Gas Acquisition and dispatch (volumes) Accounting (Op. Revs) Other Admin (Op. Revs) Finance (Op. Revs)	Head Count Ratio w/retirees Head Count Ratio w/o retirees Head Count Ratio w/retirees and inactive employees Union Head Count Ratio Wellness Head Count Ratio Direct Labor Ratio Client Unit Usage Ratio Sq. Footage Ratio Cross-Charges	IT (# of employee's) Financial Systems (volume of transactions) A/P Admin and Maintenance (volume of transactions) Depreciation, Asset Retirement, clearing completed construction projects to plant, fixed asset software maintenance (depreciable assets) Work management system (transaction count) Benefits (# of employee's) Ethics (# of employee's) Governance (# of employee's) Payroll (# of employee's) People Services (# of employee's) Communications (# of employee's)	

Exhibit 4 – Delineation of roles and responsibilities

This exhibit shows our analysis of costs that may appear to overlap across APUC, LUC, LUSC and the local entity. As shown below, we did not identify any instances of redundancy through this exercise.

Cost pool	Shared service role (costs allocated from APUC, LUC, LUSC or LABS)	Local utility role
Finance	The Finance/Treasury organization ensures that regulated utilities meet audit standards and regulatory requirements, have strong financial and operational controls, and are recording financial transactions accurately and prudently. They receive inputs from the utilities to consolidate and manage intercompany billings. Finance/Treasury also coordinates financing for capital projects for the regulated utilities along with capital planning and related services.	Finance focuses on specific entity performance and reports to the centralized finance group.
Legal	Legal services oversees all general legal matters pertaining to all entities. These legal services include review of audited financial statements, annual information filings, Sedar filings, review of contracts, incorporation, tax issues of a legal nature, market compliance, and other legal issues.	Legal departments at the local utility level focus on specific rate cases or items relevant to the entity's jurisdictions.
Human Resources	The Human Resources functions include the management and oversight of training and development of employees, ensuring employees are provided healthy and safe work environments, and receive competitive salaries and benefits.	Human resource functions at the utility level are focused on activities such as hiring and employee- related matters specific to that entity.

Thank you

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Overview of Process Used to Capitalize Overhead

LOCATION: Arizona Corporation Commission, 1200 W. Washington Street, Phoenix, AZ 85007

MEETING DATE: August 23, 2023

ATTENDEES:

Alexander Igwe (ACC)	Lori Harris (ACC)
Bentley Erdwurm (RUCO)	Luke Hutchison (ACC)
Brent Cheng (ACC)	Manasa Rao (Liberty)
Briton Baxter (ACC)	Nick Liu (Liberty)
Crystal Brown (RUCO)	Ranelle Paladino (ACC)
Cynthia Zwick (RUCO)	Regina Wise (Liberty)
Gerald Becker (ACC)	Ryan Witt (ACC)
Jeffrey Michlik (RUCO)	Teresa Hunsaker (ACC)
Jill Schwarz (Liberty)	

PURPOSE: For Commission's Utilities Division Staff ("Staff"), the Residential Utility Consumer Office ("RUCO") and Liberty Utilities ("Liberty" or the "Company") to discuss Liberty's indirect overhead ("INDOH") methodology, per Decision No. 78871 (dated March 16, 2023).

TOPICS DISCUSSED

- Liberty's presentation on INDOH by Jill Schwartz (see Attachment A for the PowerPoint presentation slides):
  - Clarification of INDOH
    - INDOH refers to the portion of administration and general costs that support capital projects and are in turn capitalized (Decision No. 78871, paragraph 110)
    - INDOH is not the pool of indirect costs allocated from affiliates
  - Overview of Liberty's INDOH methodology
    - Derivation of INDOH
    - Apportionment of INDOH to open Construction Work in Progress ("CWIP")
  - Capitalization rate and time studies.

- Staff indicated that it did not have issues or questions about the allocation methodologies used to allocate costs from affiliates or the apportionment of INDOH to open CWIP projects, but did raise the following issues/requests:
  - Liberty's capitalization rate/time studies above the State/West Region level.
  - Liberty to provide timely response and supporting documentation for its next rate case, particularly detailed receipts/invoices to support expense reports.
  - Liberty to explain and detail the "mark-up" (i.e., "burden rate") on direct labor charges.
  - Staff had questions about the INDOH on CWIP and whether the cost pools are adjusted between rate cases. Staff also indicated that the data requests will be similar to previous cases.

- RUCO prepared and shared a copy of an INDOH Issues Matrix (see Attachment B) and raised the following issues/requests:
  - Capitalization Rate
  - Liberty to present written documentation including a flow chart identifying the processes along with written procedures, and work instructions of its INDOH allocation methodology for the purpose of training and knowledge sharing among Staff and RUCO.
  - Methodology
  - Liberty's time studies did not break down the participant's time spent on capital related activities by types of utilities (e.g., electric, gas, thermal, solar, wind, nuclear, water, and wastewater, etc.).

        - Liberty explained that before applying the capitalization rate, the Shared Service costs are first allocated using the Utility Four-Factor Methodology, which reflects the various types of utilities.
        - RUCO explained, among other things, that if a capital budgeting meeting did not include any projects related to water or wastewater utilities, then none of the time that the employees spent attending the meeting should be included in the time study.
    - RUCO's access to all of the supporting documentation of the time studies.

- This meeting summary has incorporated Staff and RUCO's suggested edits made on September 14, 2023.

- RUCO requested a second meeting to be held on or before Friday, December 1, 2023 to further discuss the remaining disputed issues.

Attachment A

Liberty Arizona-ACC Staff-RUCO Indirect Overhead Meeting

August 23, 2023

Liberty™

Agenda

1. Introductions
2. Safety Moment
3. Liberty's Indirect Overhead ("INDOH") Methodology
4. Clarification of INDOH-related Questions in Prior Cases
5. Questions and Comments
6. Next Steps

Introductions

Liberty

- Regina Wise – Senior Analyst, Rates and Regulatory Affairs, Arizona/Texas
- Nick Liu – Senior Manager, Rates and Regulatory Affairs, Arizona/Texas
- Manasa Rao – Director, Rates and Regulatory Affairs, West Region
- Jill Schwartz – Senior Director, Regulatory Policy and Strategy

Safety Moment

Clarification of INDOH

- **What is "INDOH"?**
  - Decision No. 78871, paragraph 110: "Indirect Overhead Allocation ("INDOH") refers to the portion of administration and general costs that support capital projects and are in turn capitalized."
- **What "INDOH" isn't**
  - "INDOH" is not the pool of indirect costs
  - "INDOH" is not allocated from affiliate cost pools

Overview of Liberty's INDOH Methodology

Regulated Utility	Utility Four-Factor	x	Total Affiliate Cost Pool	=	Total Allocation	x	Capitalization Rate	=	Indirect Overhead
Utility 1 (MA)	36%	x		=	$ 36,000	x		=	$ 11,520
Utility 2 (AZ)	36%	x	$ 100,000	=	$ 36,000	x	32%	=	$ 11,520
Utility 3 (GA)	28%	x		=	$ 28,000	x		=	$ 8,960
	100%				$ 100,000				

Simplified Apportionment of INDOH to Open CWIP

Appendix PE Dr.3

Utility 1 (MA)	Direct CapEx	% Total CapEx	x	Indirect Overhead Pool	=	Indirect Overhead Apportionment
CWIP 1	$ 40,000	53%	x	$ 11,520	=	$ 6,144
CWIP 2	$ 20,000	27%	x		=	$ 3,072
CWIP 3	$ 10,000	13%	x		=	$ 1,536
CWIP 4	$ 5,000	7%	x		=	$ 768
	$ 75,000	100%				$ 11,520

Utility 2 (AZ) Utility 2A	Direct CapEx	% Total CapEx	x	Indirect Overhead Pool	=	Indirect Overhead Apportionment
CWIP 1	$ 10,000	13%	x	$ 11,520	=	$ 1,536
CWIP 2	$ 6,000	8%	x		=	$ 922
CWIP 3	$ 20,000	27%	x		=	$ 3,072
CWIP 4	$ 4,000	5%	x		=	$ 614
	$ 40,000					$ 6,144
Utility 2B						
CWIP A	$ 15,000	20%	x		=	$ 2,304
CWIP B	$ 5,000	7%	x		=	$ 768
	$ 20,000					$ 3,072
Utility 2C						
CWIP X	$ 7,000	9%	x		=	$ 1,075
CWIP Y	$ 8,000	11%	x		=	$ 1,229
	$ 15,000					$ 2,304
Utility 2 (AZ)						
Total CWIP	$ 75,000	100%				$ 11,520

Utility 3 (GA)	Direct CapEx	% Total CapEx	x	Indirect Overhead Pool	=	Indirect Overhead Apportionment
CWIP 1	$ 100	100%	x	$ 8,960	=	$ 8,960
	$ 100	100%				$ 8,960
						$ 32,000

A&G Overhead Calculation

A&G Overhead Calculation Example
Based on RUCO's Recommendation of Southwest Gas's Calculation

Work Order Number			2A CWIP 1	2A CWIP 2	2A CWIP 3	2A CWIP 4	2B CWIP A	2B CWIP B	2C CWIP X	2C CWIP Y	MA CWIP 1	MA CWIP 2	MA CWIP 3	MA CWIP 4	GA CWIP 1	Total
Current month's direct charges			$ 10,000	$ 5,000	$ 20,000	$ 4,000	$ 15,000	$ 5,000	$ 7,000	$ 8,500	$ 40,000	$ 20,000	$ 10,000	$ 5,000	$ 100	$ 150,100
Administrative & General expenses			$ 100,000													
Total current month's direct charges on all eligible work orders			$ 150,100													
Utility 1 (MA)		$75,000														
Utility 2 (AZ)		$75,000														
Utility 3 (GA)		$ 100														
A&G capitalization rate (determined from time study)			32%													
A&G Amount to be Allocated to the Eligible Work Orders																
$ 100,000 x 32% = $32,000																
Allocation Factor Calculation																
$ 10,000 / $150,100 = 6.7%				4.0%	13.3%	2.7%	10.0%	3.3%	4.7%	5.3%	26.6%	13.3%	6.7%	3.3%	0.1%	100.0%
Allocation of the A&G Overhead to the Work Order																
7% x $ 32,000 = $ 2,132				$ 1,279	$ 4,264	$ 853	$ 3,198	$ 1,066	$ 1,492	$ 1,705	$ 8,528	$ 4,264	$ 2,132	$ 1,066	$ 21	$ 32,000
General Ledger Journal Entry Created																
Debit CWIP 1	$ 2,132															
Credit Account 922		$ 2,132														

A&G Overhead Calculation

Utility 1 (MA)	Direct CapEx		% Total CapEx	x	Indirect Overhead Pool	=	Indirect Overhead Apportionment	SWG Calculation	Difference
CWIP 1	$	40,000	53%	x	$ 11,520	=	$ 6,144	$ 8,528	$ 2,384
CWIP 2	$	20,000	27%	x		=	$ 3,072	$ 4,264	$ 1,192
CWIP 3	$	10,000	13%	x		=	$ 1,536	$ 2,132	$ 596
CWIP 4	$	5,000	7%	x		=	$ 768	$ 1,066	$ 298
	$	75,000	100%				$ 11,520	$ 15,989	$ 4,469

Utility 2 (AZ) Utility 2A	Direct CapEx		% Total CapEx	x	Indirect Overhead Pool	=	Indirect Overhead Apportionment		
CWIP 1	$	10,000	13%	x	$ 11,520	=	$ 1,536	$ 2,132	$ 596
CWIP 2	$	6,000	8%	x		=	$ 922	$ 1,279	$ 358
CWIP 3	$	20,000	27%	x		=	$ 3,072	$ 4,264	$ 1,192
CWIP 4	$	4,000	5%	x		=	$ 614	$ 852	$ 238
	$	40,000					$ 6,144	$ 8,528	$ 2,384
Utility 2B									
CWIP A	$	15,000	20%	x		=	$ 2,304	$ 3,198	$ 894
CWIP B	$	5,000	7%	x		=	$ 768	$ 1,066	$ 298
	$	20,000					$ 3,072	$ 4,264	$ 1,192
Utility 2C									
CWIP X	$	7,000	9%	x		=	$ 1,075	$ 1,492	$ 417
CWIP Y	$	8,000	11%	x		=	$ 1,229	$ 1,706	$ 477
	$	15,000					$ 2,304	$ 3,198	$ 894
Utility 2 (AZ) Total CWIP	$	75,000	100%				$ 11,520	$ 15,989	$ 4,469

Utility 3 (GA)	Direct CapEx		% Total CapEx	x	Indirect Overhead Pool	=	Indirect Overhead Apportionment		
CWIP 1	$	100	100%	x	$ 8,960	=	$ 8,960	$ 21	$ (8,939)
	$	100	100%				$ 8,960		
							$ 32,000	$ 32,000	$ -

Capitalization Rate

Studies support ~32% capitalization rate

- 2018 – internal time study
- 2019 – PA Consulting study
- 2021 – PwC study

Questions, Comments, Next Steps

Thank you!

Attachment B

RUCO
INDOH Issues Matrix
Docket No. SW-04316A-21-0325, ET AL.

Date: 8/23/2023

Purpose:

Liberty Black Mountain Decision No. 78017, page 45, at line 12 stated " . . we believe that RUCO's arguments merit attention and should encourage the parties to meet in advance of Liberty Black Mountain's next rate case to develop parameters around INDOH."

Liberty Gold Canyon Decision No. 78871, page 18, at line 6 stated ". . . it is reasonable and appropriate to require Staff and representatives from Liberty Gold Canyon or its affiliates, with input from RUCO, to file periodic joint status reports to discuss the progress made in accomplishing the agreement set forth above and in minimizing the disputed issues between the parties regarding the INDOH methodology."

Issue Type	Issue	RUCO Rationale	RUCO Recommended Resolution
Capitalization Rate	32% Company proposed capitalization rate	Staff performed a study and determined that certain costs proposed by the Company should not be allocated. Staff recommended a 3.66% capitalization rate.	The 3.66% capitalization rate was determined by Staff based upon its analysis and is consistent with past Commission decisions. The 3.66% capitalization rate has been utilized by the Commission to set the rates for at least 2 Liberty utilities The 3.66% capitalization rate is reasonable and should be utilized for all Liberty utilities in Arizona on a going forward basis

RUCO
INDOH Issues Matrix
Docket No. SW-04316A-21-0325, ET AL.

Issue Type	Issue	RUCO Rationale	RUCO Recommended Resolution
Documentation	No written policies, procedures, work instructions, examples, or flowcharts on how INDOH is **allocated to individual plant** accounts (RUCO DR 7.03)	The INDOH allocation to individual plant accounts is convoluted. Furthermore, when Commission Decision No. 78017 described the INDOH allocation process, the Company on page 24, at line 22 and page 25, at line 3 of Ms. Schwartz's Rebuttal testimony in the Gold Canyon rate case (21-0325), disagreed with the Decision's description of the INDOH process. Therefore, in order to have a clear, complete, accurate, concise, and verifiable record of the actual INDOH process and to follow Best Practices for documenting the INDOH process; the INDOH process, including the procedures and work instructions, must be documented in writing. This documentation will provide the Commission with the proper understanding of the INDOH process. It will also provide the auditor with the basis needed to assess the reasonableness of the process and to verify the amount and reasonableness of the INDOH allocated to the individual plant accounts.	In order to facilitate the verification of the INDOH allocated to plant accounts, RUCO recommends that the Company be required to provide written documentation that includes, but is not limited to, the following: 1. How often INDOH is calculated (e.g. daily, weekly, monthly, etc.) 2. A list of the names, titles, physical work location addresses for all of the people who are involved in the calculation and the recording of the INDOH. Along with a narrative of what they do and how they do it. 3. Provide a list of accounting systems, documents, files, etc. used and where obtained 4. What reconcilations are performed, when, by whom, what reports are produced 5. Provide a list of all reports or documents created during the process 6. Provide a flowchart showing what is done and who does it

RUCO
INDOH Issues Matrix
Docket No. SW-04316A-21-0325, ET AL.

Issue Type	Issue	RUCO Rationale	RUCO Recommended Resolution
Methodology	The Company's current methodology does not fairly allocate the INDOH to individual plant accounts	• The level of INDOH that is added to plant is not related to the level of the plant cost. • Not uniformly allocated to the individual plant accounts • Methodology results in Arizona utilities paying higher amounts of INDOH	• Use a methodology that uses direct charges rather than open CWIP orders similar to the Southwest Gas methodology • Use a methodology similar to the methodology that RUCO used in the Gold Canyon rate case
Methodology	RUCO cannot verify that the same INDOH allocation process is used for all of APUC's regulated and unregulated utilities	In order to compare and/or reconcile INDOH amounts, RUCO needs to obtain the allocation amounts and allocation percentages for each regulated utility along with the total capital expenditures.	The Company should provide the actual total amount of INDOH added to plant for all regulated utilities along with the actual plant added during the same year.
Time Study	The Time Study does not break down the participant's time spent on capital related activities by type of utility (e.g., electric, gas, thermal, solar, wind, nuclear, water, wastewater, etc.)	The amount of time that the participants spend on capital related activities for water and wastewater utilities is likely much less than the Company spends on the other types of utilities., RUCO needs to know how much time was actually spent on water and wastewater utilities. The capitalization rate should reflect the	The Time Study should include a section where the participant can indicate the type of capital related activity and the supporting documentation should be retained

RUCO
INDOH Issues Matrix
Docket No. SW-04316A-21-0325, ET AL.

Issue Type	Issue	RUCO Rationale	RUCO Recommended Resolution
Time Study	The Time Study uses estimates for management employees	Estimates are inaccurate and subject to errors and bias. Since the Company can allocate millions of dollars in INDOH over a period of years, then, in order to protect customers, it is reasonable that actual rather than estimated time be used.	Time study should use actual time for all participants
Time Study	Restricted access to the supporting documentation of the Time Study.	RUCO needs to independently verify the conclusions and results of the Time Study.	• Unredacted access to all capital budgets • Unredacted access to all consultant workpapers including documentation obtained or produced

Previous Arizona Rate Cases Involving Allocated Costs

Arizona Rate Cases Involving Allocated Costs from Affiliated Transactions

1. *Liberty Utilities (Black Mountain Sewer) Corp.*, Docket No. SW-02361A-05-0657, Decision No. 69164 (December 5, 2006) **Pre-CAM**

2. *Liberty Utilities (Gold Canyon Sewer) Corp.*, Docket No. SW-02519A-06-0015, Decision No. 69664 (June 28, 2007) **Pre-CAM**

3. *Liberty Utilities (Black Mountain Sewer) Corp.*, Docket No. SW-02361A-08-0609, Decision No. 71865 (September 1, 2010) **Pre-CAM**

4. *Liberty Utilities (Litchfield Park Water & Sewer) Corp.*, Docket No. SW-01428A-090103, *et al.*, Decision No. 72026 (December 10, 2010) **SETTLED**

5. *Liberty Utilities (Rio Rico Water & Sewer) Corp.*, Docket No. WS-02676A-09-0257, Decision No. 72059 (January 6, 2011) **SETTLED**

6. *Liberty Utilities (Bella Vista Water) Corp.*, Docket No. W-02465A-09-0411, *et al.*, Decision No. 72251 (April 7, 2011) **SETTLED**

7. *Liberty Utilities (Rio Rico Water & Sewer) Corp.*, Docket No. WS-02676A-12-0196, Decision No. 73996 (July 30, 2013) **SETTLED**

8. *Liberty Utilities (Litchfield Park Water & Sewer) Corp.*, Docket No. SW-01428A-130042, Decision No. 74437 (April 18, 2014) **SETTLED**

9. *Liberty Utilities (Black Mountain Sewer) Corp.*, Docket No. SW-02361A-15-0206, *et al.*, Decision No. 75510 (April 22, 2016) **SETTLED**

10. *Liberty Utilities (Bella Vista Water) Corp. and Liberty Utilities (Rio Rico Water & Sewer) Corp.*, Docket No. W-02465A-15-0367, *et al.*, Decision No. 75809 (November 21, 2016) **SETTLED**

11. *Liberty Utilities (Entrada Del Oro Sewer) Corp.*, Docket No. SW-04316A-16-0085, *et al.*, Decision No. 76019 (March 22, 2017) **SETTLED**

12. *Liberty Utilities (Litchfield Park Water & Sewer) Corp.*, Docket No. SW-01428A-17-0058, *et al.*, Decision No. 76799 (August 15, 2018) **SETTLED**

13. *Liberty Utilities (Black Mountain Sewer) Corp.*, Docket No. SW-02361A-19-0139, Decision No. 78017 (May 18, 2021) **SETTLED**

14. *Liberty Utilities (Entrada del Oro Sewer) Corp. and (Gold Canyon Sewer) Corp.*, Docket No. SW-04316A-21-0325, *et al.*, Decision No. 78871 (March 16, 2023) **SETTLED**

15. *Liberty Utilities (Bella Vista Water) Corp. and Liberty Utilities (Rio Rico Water & Sewer) Corp.*, Docket No. W-02465A-23-0338, *et al.*, Decision No. 81361 (February 21, 2025) **SETTLED**

16. *Liberty Utilities (Beardsley Water) Corp. and Liberty Utilities (Rio Rico Water & Sewer) Corp.*, Docket No. W-02074A-23-0337, *et al.*, Decision No. 81361 (February 21, 2025) **SETTLED**

17. *Liberty Utilities (Cordes Lakes Water) Corp. and Liberty Utilities (Rio Rico Water & Sewer) Corp.*, Docket No. W-02060A-23-0339, *et al.*, Decision No. 81361 (February 21, 2025) **SETTLED**

18. *Liberty Utilities (Rio Rico Water & Sewer) Corp.*, Docket No. WS-02676A-23-0340, Decision No. 81361 (February 21, 2025) **SETTLED**

DIRECT TESTIMONY OF
THOMAS J. BOURASSA

COST OF CAPITAL

June 30, 2025

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I. INTRODUCTION.

Q. Please state your name and business address.

A. My name is Thomas J. Bourassa. My business address is 139 W. Wood Drive, Phoenix, Arizona 85029.

Q. What is the purpose of this direct testimony?

A. In this volume of my testimony, I will testify in support of the proposed capital structure and rate of return on Applicant Liberty Utilities (Litchfield Park Water and Sewer) Corp. ("Liberty Litchfield Park" or "Company") fair value rate base ("FVRB"). In connection with this testimony, I am sponsoring the attached D schedules, along with 14 tables and four exhibits, TJB-COC-DT1, TJB-COC-DT2, TJB-COC-DT3, and Exhibit TJB-COC-DT4. Exhibit TJB-COC-DT1 contains my work summary. TJB-COC-DT2 contains my size premium study. TJB-COC-DT3 contains my comparative risk study. Exhibit TJB-COC-DT4 contains my analysis comparing the proxy group Small-cap and Large-Cap excess returns over the returns predicted by the CAPM.

II. SUMMARY OF TESTIMONY AND THE PROPOSED COST OF CAPITAL

Q. Please describe how your testimony is organized.

A. In this Section II, a summary of my analysis and my approach is presented. In Section III, I discuss the meaning of just and reasonable rates. In Section IV, I provide an overview of the risk and expected return on investment. In Section V, I discuss the sample of seven publicly traded water utilities in my sample group and provide a comparison to Liberty Litchfield Park. I also discuss recent developments in the water utility industry and the impacts on investment. In Section VI, I provide an overview of each of the methods, Discounted Cash Flow ("DCF") and Risk

Premium ("RP") including the Capital Asset Pricing Model ("CAPM"), that I employ in my analysis. In Section VII, I discuss the additional business risks faced by Liberty Litchfield Park, my comparative risk study, and my recommended risk premium for Liberty Litchfield Park. Finally, in Section VIII, I summarize my testimony and present a summary of the equity costs of the proxy group and Liberty Litchfield Park.

Q. Please summarize your findings concerning Liberty Litchfield Park's cost of common equity and cost of capital.

A. I have determined that the cost of equity for the publicly traded water utilities falls in the range of 10.20% to 11.40% with an average of 10.80%. After considering differences in financial risk and business risk between Liberty Litchfield Park and the publicly traded water utilities, I am recommending the adoption of a return on equity ("ROE") of 10.80% for Liberty Litchfield Park which recognizes an 40-basis point risk premium for business risk and a downward 40 basis point financial risk adjustment for an investment in Liberty Litchfield Park.

My recommendation is based on consideration of (i) cost of equity estimates using a DCF and three RP methods (CAPM is one of the RP methods) using a sample group of publicly traded water utilities, (ii) the economic conditions expected to prevail during the period in which new rates will be in effect, (iii) the risks associated with relatively small utilities like Liberty Litchfield Park that are not captured by typical cost of capital analyses and market data of publicly traded water utilities, (iv) the financial risk associated with the level of debt in Liberty Litchfield Park's recommended capital structure, and (v) additional, specific business and operational risks faced by Liberty Litchfield Park.

The results of the DCF and RP methodologies were adjusted upward by 40 basis points to account for Liberty Litchfield Park higher than average business risk compared to the proxy group and then adjusted downward by 40 basis point for lower than average financial risk for a net zero adjustment..

Q. What is the recommended capital structure for Liberty Litchfield Park for ratemaking purposes?

A. Liberty Litchfield Park is recommending a capital structure consisting of 46% debt and 54% equity, which is the proforma capital structure which reflects the Company's expected debt financing to bring the capital structure to 46% debt and 54% equity from 30% debt and 70% equity.[1]

Q. What is the proposed weighted cost of debt?

A. The proposed weighted cost of debt is 5.68%.[2]

Q. What is the recommendation for the weighted average cost of capital?

A. Based upon the proposed capital structure of 46% debt and 54% equity, a cost of debt of 5.69%, and a cost of equity of 10.80%, the weighted average cost of capital ("WACC") is 8.45% (rounded) as shown in Figure 1.

Figure 1

	Ratio	Rate	Weighted Cost
Debt	46.00%	5.69%	2.62%
Equity	54.00%	10.80%	5.83%
Weighted Average			8.45%

Q. Please summarize the approach you used to estimate the cost of equity for Liberty Litchfield Park.

A. The cost of equity for Liberty Litchfield Park cannot be estimated directly because

[1] The Company is concurrently seeking financing approval to rebalance its capital structure.
[2] *See* Schedule D-1.

there is no market data for Liberty Litchfield Park's equity as it is not publicly traded. Instead, I have assessed the market-based common equity cost rates of entities with comparable, but not necessarily the same, risk for insight into Liberty Litchfield Park's cost of equity. No proxy group can be selected to be identical in risk to Liberty Litchfield Park and the proxy group's results must be adjusted to reflect the unique, relative financial and/or business risks of Liberty Litchfield Park, as I will discuss in detail.

III. MEANING OF "JUST AND REASONABLE" RATE OF RETURN

Q. Have the courts set forth any criteria that govern the rate of return that a utility's rates should produce?

A. Yes. In 1923, the U.S. Supreme Court set forth the following criteria for determining whether a rate of return is reasonable *in Bluefield Water Works and Improvement Co. v. Public Service Commission of West Virginia*, 262 U.S. 679, 692-93 (1923):

> A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties … The return should be reasonably sufficient to assure confidence in the financial soundness of the utility, and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market, and business conditions generally.

Then, in *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944), the U.S. Supreme Court stated the following regarding the return to owners of an entity:

> [T]he return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.

In summary, under *Hope and Bluefield*:

(1) The rate of return should be similar to the return in businesses with similar or comparable risks;

(2) The return should be sufficient to ensure the confidence in the financial integrity of the utility; and

(3) The return should be sufficient to maintain and support the utility's credit.

Q. Have these criteria been applied in regulatory proceedings?

A. Yes, but the application of the "reasonableness" criteria is controversial. The typical method of computing the overall cost of capital is quite straightforward; it is the composite, weighted cost of the various classes of capital (debt, preferred stock, and common equity) used by the utility. Calculating the proportion that each class of capital bears to total capital does the weighting. However, there is no consensus regarding the best method of estimating the cost of equity capital.

Q. Don't actual investors factor that into their decisions about infrastructure investment?

A. Yes. The cost of capital is based on the concept of opportunity cost, i.e., the prospective return to investors must be comparable to investments of similar risk. If a utility's return is less than the returns on investments with similar risk, investors can and will invest elsewhere. As explained by Dr. Roger Morin in his book, *New Regulatory Finance*:

> The concept of cost of capital is firmly anchored in the

> opportunity cost notion of economics. The cost of a specific source of capital is basically determined by the riskiness of that investment in light of alternative opportunities and equals investor's current opportunity cost of investing in the securities of that utility. A rational investor is maximizing the performance of his or her portfolio only if returns expected on investor investments of comparable risk are the same. If not, the investor will switch out of those investments yielding low returns at a given risk level in favor of those investments offering higher returns for the same degree of risk. This implies that a utility will be unable to attract capital unless it can offer returns to capital suppliers comparable to those achieved on alternate competing investments of similar risk. [3]

The *Bluefield* decision suggests that opportunity cost is an appropriate measure of the actual cost of common equity for a utility. This necessarily involves the direct observation of ROEs earned by entities with comparable risk to ensure that the authorized rate of return is equivalent to the returns those entities are earning.

IV. OVERVIEW OF THE RELATIONSHIP BETWEEN RISK AND THE EXPECTED RETURN ON INVESTMENT

Q. How is the cost of equity analyzed?

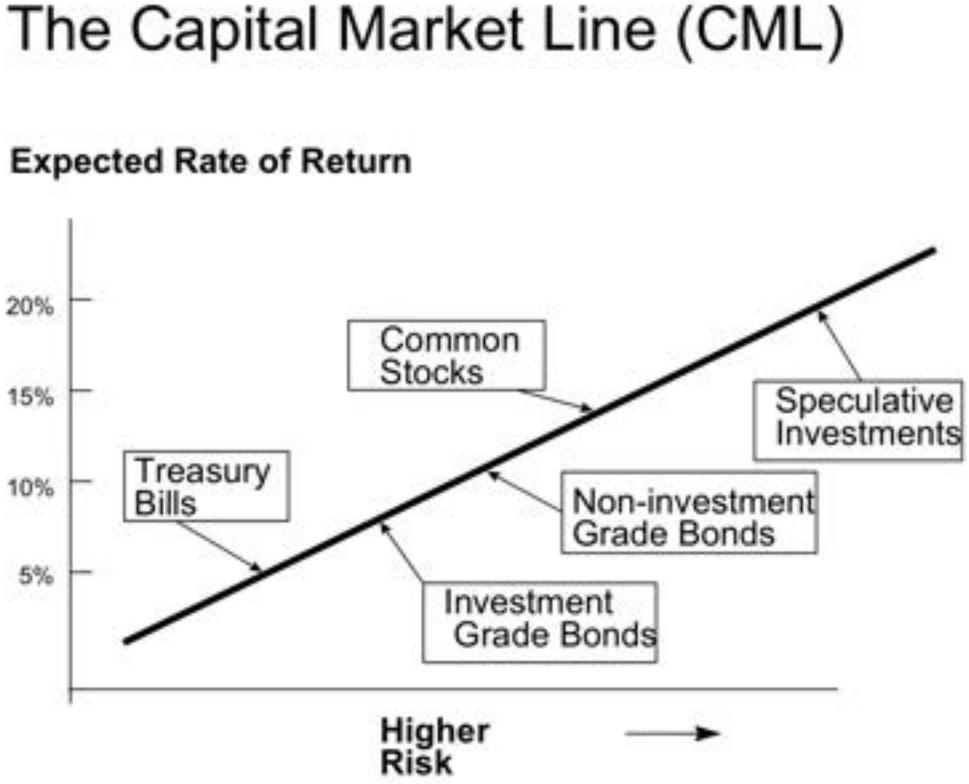
A. The cost of equity is the rate of return that equity investors expect to receive on their investment. Investors can choose from numerous investment options, not simply publicly traded stocks. Investments have varying degrees of risk, ranging from relatively low risk assets such as Treasury securities to somewhat higher risk corporate bonds to even higher risk common stocks. As the level of risk increases, investors require higher returns on their investment. Finance models used to estimate the cost of equity often rely on this basic concept.

[3] Morin, Roger A., *New Regulatory Finance*, (Vienna, Virginia, Public Utility Reports, Inc. 2006) ("Morin"), pp. 21-22.

Q. Can you illustrate the capital market risk-return concept?

A. Yes. The following graph depicts the risk-return relationship that has become widely known as the Capital Market Line ("CML"). The CML illustrates in a general way the risk-return relationship.

The CML can be viewed as a continuum of the available investment opportunities



for investors. Investment risk increases move upward and to the right along the CML. Again, the return required by investors increases with the risk.

Q. How does the risk-return trade off concept work in the capital market?

A. As shown by the CML, the allocation of capital in a free-market economy is based upon the relative risk of, and expected return from, an investment. Investors rank investment opportunities in the order of their relative risks. Investment alternatives in which the expected return is commensurate with the perceived risk become viable

investment options. If all other factors remain equal, the greater the risk, the higher the rate of return investors will require to compensate them for the possibility of loss of either the principal amount invested or the expected annual income from such investment.

Short-term Treasury bills provide a high degree of certainty and in nominal terms (after considering inflation) are considered virtually risk free. Long-term bonds and preferred stocks, having priority claims to assets and fixed income payments, are relatively low risk, but are not risk free. The market values of long-term bonds often fluctuate when government policies or other factors cause interest rates to change. Common stocks are higher and to the right on the CML continuum because they have greater investment risk. Common stock risk is impacted by the nature of the underlying business and the financial strength of the issuing corporation and market-wide factors, such as general changes in capital costs.

Q. Please continue.

A. The capital markets reflect investor expectations and requirements each day through market prices. Prices for stocks and bonds change to reflect investor expectations and the relative attractiveness of one investment relative to others. While the example provided above seems straightforward, returns on common stocks are not directly observable in advance as compared to debt or preferred stocks with fixed payment terms. This means that these returns must be estimated from market data. Estimating the cost of equity capital is not an exact science. Nevertheless, it should be a matter of informed judgment about the relative risk of the business in question and the expected rate of return characteristics of other alternative investments.

Q. How is the cost of equity determined for a particular utility?

A. Estimating a particular utility's cost of equity is complex. It requires an analysis of

the factors influencing the cost of various types of capital, such as interest on long-term debt, dividends on preferred stock, and earnings on common equity. The data for such an analysis comes from highly competitive capital markets, where the firm raises funds by issuing common stock, selling bonds, and by borrowing (both long-term and short-term) from banks and other financial institutions. In the capital markets, the cost of capital, whether the capital is in the form of debt or equity, is determined by two important factors:

(1) The pure or real rate of interest, often called the risk-free rate of interest, and

(2) The uncertainty or risk premium (or the compensation the investor requires, over and above the real or pure rate of interest for subjecting his or her capital to additional risk).

Q. Please discuss these factors in greater detail.

A. The pure rate of interest essentially reflects both the time preference for and the productivity of capital. From the standpoint of the individual, it is the rate of interest required to induce the individual to forgo present consumption and offer the funds, thus saved, to others for a specified length of time. Moreover, the pure rate of interest concept assumes that no uncertainty affects the investment undertaken by the individual, i.e., there is no doubt that the periodic interest payments will be made, and the principal returned at the end of the period. In reality, investments without any risk do not exist. Every commitment of funds involves some degree of uncertainty.

Concerning the second factor, it is generally accepted that the higher the degree of uncertainty, the higher the cost of capital. Investors are regarded as risk averse and require that the rate of return increase as the risks and uncertainty associated with an

investment increase.

Q. Can you provide some perspective on your previous discussion with respect to returns on common stocks?

A. Yes. Conceptually, the required return on common stocks can be quantified by the following equation:

[1] Required Return for Common Stocks = Return on a risk-free asset + Risk Premium

The risk premium investors require for common stocks will be higher than the risk premium they require for investment grade bonds. This relationship is depicted in the graph of the CML above. As I will discuss later in this testimony, this concept is the basis of risk premium methods, such as the CAPM, that are used to estimate the cost of equity.

Q. How does all this impact the risk on capital costs in a proceeding like this general rate case?

A. With reference to specific utilities, risk is often discussed as consisting of two separate types of risk: business risk and financial risk.

Business risk, the basic risk associated with any business undertaking, is the uncertainty associated with the enterprise's day-to-day operations. In essence, it is a function of the normal day-to-day business environment, both locally and nationally. Business risks include the condition of the economy and capital markets, the state of labor markets, regional stability, government regulation, technological obsolescence, and other similar factors that may impact demand for the business' products or services and its cost of production. For utilities, business risk also includes the volatility of revenues arising from abnormal weather conditions, degrees of operational leverage, regulation, and regulatory climate. Regulation, for example, can compound the business risk if it is unpredictable in reacting to cost increases, both in terms of the time lag and magnitude for recovery of such increases.

Financial risk, on the other hand, concerns the distribution of business risk to the various capital investors in the utility. Permanent capital is normally divided into three categories: long-term debt, preferred stock, and common equity. Because common equity owners have only a residual claim on earnings after debt and preferred stockholders are paid, financial risk tends to be concentrated in that element of the firm's capital. Thus, a decision by management to raise additional capital by issuing additional debt concentrates even more of the financial risk of the utility on the common equity owners.

Q. What are the determinants of the risk-free rate from equation [1]?

A. The risk-free rate can be disaggregated into a "real" rate of interest and an inflation premium (i.e., expected future inflation).

Q. What are the determinants of the required risk premium from equation [1] above?

A. The risk premium can be disaggregated into five general components: (1) Interest Rate Risk; (2) Business Risk; (3) Regulatory Risk; (4) Financial Risk; and (5) Liquidity Risk.

Interest Rate Risk refers to the variability in return caused by subsequent changes in interest rates and stems from the inverse relationship between interest rates and asset prices. For example, bond prices fall when interest rates rise and vice versa. As discussed earlier, business risk is the basic risk associated with any business undertaking.

Regulatory risk refers to the quality and consistency of regulation applied to a given regulated utility. Regulatory jurisdictions are evaluated on the basis of three major factors: (1) earnable return on equity, (2) regulatory quality, and (3) regulatory practices. Collectively, these three factors influence a utility's ability to earn its authorized return. The type of test year employed (historical or future), capital structure and rate base issues, and the length of regulatory lag are among the reasons a utility may or may not have a reasonable opportunity to earn its authorized return.

As detailed above, financial risk concerns the distribution of business risk to the various capital investors in the utility. It relates to the additional variability imparted to income available to common shareholders stemming from the entity's method of financing its capital needs.

Q. What about construction risk?

A. Construction risk is an important component of financial risk. Construction risk is the risk of tying up capital in projects that are not earning returns, or not having sufficient capital to build the assets needed to keep generating returns. If an entity

has a large construction budget relative to internally generated cash flows, it will require external financing, which will result in greater financial risk. It is essential that such entities have access to capital funds on reasonable terms and conditions.

Utilities are highly susceptible to construction risk for two reasons. First, water and wastewater utilities generally have high capital requirements to build plants to serve customers. Second, utilities have a mandated obligation to serve, leaving less flexibility both in the timing and discretion of scheduling capital projects. This is compounded by the limited ability to wait for more favorable market conditions to raise the capital necessary to fund the capital projects, and then the lag between when capital is invested and when rates can be approved to provide returns on and of that capital. It is imperative that the utility maintain access to needed capital and on reasonable terms and conditions. But the return allowed on common equity plays a critical role in determining those terms and conditions.

Q. You also mentioned business risk and liquidity risk?

A. Yes, thank you. Although often discussed separately, business and financial risk are interrelated. A study by Scott and Martin found statistically significant results for unregulated firms in twelve industries that "smaller equity ratios (higher leverage use) are generally associated with larger companies."[4] While unregulated enterprises would be expected to seek the optimal balance between debt and equity to achieve the lowest overall cost of capital, the findings of Scott and Martin suggest smaller firms found it prudent to offset higher business risks related to being small by reducing financial risk. This evidence suggests the lowest cost equity ratio for smaller utilities may be higher than the average equity ratio for the benchmark proxy

[4] Scott, D.F. and Martin, J.D., "Industry Influence on Financial Structure," *Financial Management*, Spring 1975, pp. 67-71.

group.

Liquidity Risk refers to the ability to readily convert an investment into cash without sustaining a loss. Capital market theory generally assumes that investments are liquid and observations about risk and return are drawn from information about liquid investments. Non-publicly traded or privately held investments possess little liquidity and have high liquidity risk.

Q. Is investment risk impacted by firm size?

A. Yes. Investment risk bears a direct relationship to size and increases as firm size decreases. Investment liquidity may be a significant factor in explaining this relationship. However, the illiquidity of smaller stocks does not capture the size effect completely. Size may be a proxy for one or more true unknown factors correlated with size.[5] This should be common business sense, in my opinion. Size matters.

V. THE PUBLICLY TRADED UTILITIES THAT COMPRISE THE SAMPLE GROUP USED TO ESTIMATE THE COST OF EQUITY

Q. Which publicly traded companies comprise your proxy group?

A. There are six water utilities and nine gas utilities in my sample. The water utilities include American States Water ("AWR"), American Water Works ("AWK"), Essential Utilities ("WTRG"), California Water Company ("CWT"), Middlesex Water ("MSEX"), and York Water Company ("YORW"). The gas utilities include

[5] Rolf W. Banz, "The Relationship Between Return and Market Value of Common Stocks," *Journal of Financial Economics*, March 1981, pp. 3-18.

Atmos Energy Corp. ("ATO"), Chesapeake Utilities Corp. ("CPK"), New Jersey Resources Corp. ("NJR"), NiSource Inc. ("NI"), Northwest Natural Holding Co. ("NWN"), One Gas Inc. ("OGS"), Southwest Gas Holdings ("SWX"), Spire Inc. ("SR"), and UGI Corp. ("UGI").

These water and gas companies were selected by meeting the following criteria: (1) they are followed by the *Value Line* Investment Survey; (2) they have at least ten years of historical financial and market information; (3) they have a *Value Line* adjusted beta; (4) they have not cut or omitted their common dividends during the five years ending 2024 or through the time of the preparation of this testimony (mid-June 2025); (5) they have operating revenues primarily from regulated operations; and (6) at the time of the preparation of this testimony, they had not publicly announced that they were involved in any major merger or acquisition activity.

Q. But aren't you using these proxy utilities knowing they are not really comparable to Liberty Litchfield Park?

A. Yes, it is true that none of the sample utilities is directly comparable to Liberty Litchfield Park. But *Value Line* does not follow Liberty Litchfield Park; it has no historical or market information and we must give it an adjusted *beta* in this rate case. The proxies are utilities for which market data is available. All of them primarily provide water service (although some provide both water and wastewater services) and their primary source of revenues is from regulated services. In other words, the use of financial models to estimate the cost of equity needs to start somewhere and the proxies are among seven or so utility firms typically used in this way.

Q. Please describe the utilities in the proxy group.

A. Table 2 lists the percentages of regulated revenues, operating revenues, net plant, the number of customers or population served, *Value Line* financial strength, *Value Line* betas, market capitalization, and market size category for the sixteen utilities. Comparative data for Liberty Litchfield Park (where available) is also shown in Table 2. The utilities in the proxy group consist of Micro-Cap to Large-Cap companies. The market capitalizations range from about $506 million to over $28.6 billion with an average of approximately $8.16 billion. Operating revenues range from about $75 million to nearly $7.2 billion with an average of over $2.6 billion. Net plant ranges from $533 million to over $28 billion, with an average of over $8.9 billion. Most of these entities operate in multiple jurisdictions.

Q. How does Liberty Litchfield Park compare the utilities in the proxy group?

A. Liberty Litchfield Park has substantially fewer customers and far less revenue and net plant serving a small and limited service territory. At the end of 2024, Liberty Litchfield Park had approximately 22,000 water connections and 24,000 sewer connections, whereas the average of the proxy group entities was nearly 1.4 million connections. Liberty Litchfield Park's revenues totaled approximately $4.8 million, and net plant-in-service was approximately $27 million. The average revenues of the entities in the proxy group are over 253 times greater than Liberty Litchfield Park, and those entities have on average over 255 times the net plant of Liberty Litchfield Park. In other words, other than being in the same business, Liberty Litchfield Park is not directly comparable to the entities in the proxy group. The utilities in the proxy group are much larger and, according to the empirical financial data, they are less risky than Liberty Litchfield Park. This is why using financial models to estimate the cost of equity should be a matter of informed judgment, including accepting the inherent limits of using models in this manner and the need to adjust the inputs and/or results in order to reach a just and reasonable result.

Q. Can you provide a summary of the recent events that have impacted the capital markets and interest rates?

A. Over the past few years, the capital markets experienced unprecedented levels of uncertainty due to the impact of the COVID-19 pandemic on the global economy and US economy. To mitigate the impact on the economy, the Federal Reserve cut its policy rate to 0 to 0.25% in March 2020 and announced unlimited quantitative easing and emergency liquidity programs.[6] In 2020, the U.S. passed several large spending programs including the $2.2 trillion CARES Act (March 2020), which was then the largest economic stimulus package in U.S. history. Despite these efforts in 2020, the U.S. economy contracted and entered a technical recession by mid-2020.[7] To help mitigate this situation, the U.S. government then passed a $1.7 trillion American Rescue Plan of 2021 (March 2021) which was intended to further stimulate the economy.[8] Despite the passage of significant stimulus packages by the U.S. government, the U.S. entered a "technical" recession by the 2nd quarter of 2022.[9] From 2022-2024, annual GDP growth has been at or below 3.0%.

Because the annualized inflation rate rose to 7.0% by the end of 2021, the Federal Reserve began raising interest rates in March 2022 in attempt to tame inflation.[10] Since March 2022 and through July 2023, the Federal Reserve has increased the

[6] U.S. Federal Reserve, "Federal Reserve Announces Extensive New Measures to Support the Economy," Press Release, March 23, 2020.

[7] *See* https://www.bea.gov/news/2020/gross-domestic-product-third-estimate-corporate-profits-revised-and-gdp-industry-annual. In the 1st and 2nd Quarter of 2020, real GDP decreased by an annualized rate of 5.0% and 31.4%, respectively.

[8] *See, e.g.*, https://en.wikipedia.org/wiki/American_Rescue_Plan_Act_of_2021 (signed into law in March 2021).

[9] *See* https://www.bea.gov/news/2022/gross-domestic-product-third-estimate-gdp-industry-and-corporate-profits-revised-first and https://www.bea.gov/news/2022/gross-domestic-product-third-estimate-gdp-industry-and-corporate-profits-revised-2nd. In the 1st and 2nd Quarter of 2022, real GDP decreased by an annualized rate of 1.6% and 0.6%, respectively.

[10] *See* https://cpiinflationcalculator.com/2021-cpi-and-inflation-rate-for-the-united-states/.

federal funds rate by 525 basis points to a target rate of 5.25 to 5.50%, which has put pressure on long-term Treasury bond yields.[11] Meanwhile, inflation has remained stubbornly high peaking at over 9.0% in June 2022. Throughout 2023 2024, and through April of 2025, the annualized inflation rate has remained above the Federal Reserve's targeted 2.0% inflation rate.[12] *Value Line* notes that inflation outlook continues to improve, although the global trade situation remains unsettled, particularly with respect to tariff policies of the current administration.[13] Inflation remains above the 2.0% inflation rate and the Fed has not wavered on their restrictive monetary policy.

As of May 2025, the federal funds rate was maintained at a range of 4.25% to 4.50%, which is down a full percentage point from its post-pandemic peak of 5.25-5.5 percent. However, the federal funds rate remains the highest since 2007.[14] There remains uncertainty about inflation and when the Fed will begin easing interest rates. With respect to longer-term interest rates, rates have increased significantly over the past several years. The recent monthly average 20-year and 30-year U.S. Treasury bond yields reached peaks of 4.92% and 4.90%, respectively, in May 2025, both significantly higher than they were just three years ago when they were 3.26% and 3.07%, respectively.

Q. What are current spot yields on the long-term U.S. treasuries?

A. The 20-year and 30-year U.S. bond spot yields on May 30, 2025, were 4.93% and 4.92%, respectively.

Q. What are the expectations for interest rates moving forward?

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[11] *See* https://www.bankrate.com/banking/federal-reserve/history-of-federal-funds-rate.
[12] *See* https://www.usinflationcalculator.com/inflation/historical-inflation-rates/.
[13] *Value Line Investment Survey*, Selection and Opinion, Issue 6, May 30, 2025.
[14] *See* https://www.bankrate.com/banking/federal-reserve/history-of-federal-funds-rate/

A. *Blue Chip Finance Forecasts* long-range forecasts from June-2024 projects that long-term treasuries will average 4.4% of the 2026-28 period; when new rates are expected to be in effect.[15]

Q. What quantitative measures can be used to help identify differences in business risk?

A. There are several fundamental accounting-based business risk measures that can be used to assess the relative differences between firms. Those include: (1) the co-efficient of variance of ROE; (2) the co-efficient of variance of operating income; (3) the co-efficient of variance of operating margin; and (4) Operating Leverage. The first three reflect the distributions of earnings. These are meaningful when measured against the distribution of earnings of alternative investments, like the water utilities in my proxy group. The fourth business risk measure reflects the impact of sales fluctuations and the impact of fixed operating costs on earnings.

The coefficient of variance of ROE can be quantified using the following equation:

[2] Coefficient of Variance of ROE = Standard Deviation of ROE/Mean of ROE

The coefficient of variance of operating income can be quantified using a relatively simple equation:

[3] Coefficient of Variance of Operating Income = Standard Deviation of Operating Income/Mean of Operating Income

The co-efficient of variance of operating margin can be quantified using the following equation:

[15] *Blue Chip Financial Forecasts*, Vol. 44, No. 6, June 2, 2025.

[4] Coefficient of Variance of Operating Margin = Standard Deviation of Operating Margin/Mean of Operating Margin

The Operating Leverage formula is expressed as:

[5] Operating Leverage = Percentage Change in Operating Income/Percentage Change in Sales

Using the business risk measures expressed in equations [2], [3], and [4], the greater the co-efficient of variation or Operating Leverage, the greater the risk to investors of not receiving expected returns.[16] Below are the computed co-efficient of variation for ROE, Operating Income, and Operating Margin, as well as Operating Leverage using the five most recent years of historical data for the proxy group and Liberty Litchfield Park:

Company	Business Risk Co-efficient of Variance of ROE	Business Risk Co-efficient of Variance of Operating Income	Business Risk Co-efficient of Variance of Operating Margin	Operating Leverage
Water Proxy Group	0.1849	0.2100	0.1564	1.35
Liberty Litchfield Park	0.3303	0.2798	0.3056	4.36
Relative Risk of Liberty Litchfield Park to Water Proxy Group	1.79	1.33	1.95	3.23

These metrics, found in Exhibit TJB-COC-DT2, pages 1 and 2, show that Liberty Litchfield Park is riskier than the average proxy group companies.

Q. Can metrics like those you have discussed be used with market data to develop

[16] Tuller, Lawrence W., *The Small Business Valuation* (Avon, MA: Adams Media Corporation, 1994), p. 89.

a risk premium over and above the proxy group?

A. Yes. *Kroll* (formerly *Duff & Phelps*) publishes comparative risk characteristics using market data that provides a nexus between a market beta and the metrics operating margin, the coefficient of variation in operating margin, and the coefficient of variation in return on equity.[17] This information can be used to develop implied betas for Liberty Litchfield Park for use in the CAPM.[18] By comparing the results of the CAPM for the proxy group with the CAPM for Liberty Litchfield Park using the implied betas, informed risk premiums can be developed. As one would expect, the implied beta for Liberty Litchfield Park is higher than the beta of the proxy group. As stated, a risk premium of 30 to 40 basis points over the cost of equity of the proxy group is indicated for Liberty Litchfield Park.[19] I will discuss the indicated risk premiums and implied betas in more detail in Section VI of this direct testimony.

Q. Did you determine the relative risk premium for Liberty Litchfield Park over the proxy group based strictly on size?

A. Yes. Using the previously discussed metrics along with size characteristics such as book equity, total assets, earnings before taxes, interest, depreciation and amortization ("EBITDA"), and sales, an adjusted risk premium can be developed based upon size. This adjusted risk premium is discussed later in my testimony and is presented in Exhibit TJB-COC-DT3. Using market data-based regression equations provided by Kroll, I estimate the adjusted size premium for the proxy group is 199 basis points (used in the modified CAPM discussed later in my testimony), the risk premium for Liberty Litchfield Park is 366 basis points, and a

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[17] Duff & Phelps, LLC, *2017 Valuation Handbook: U.S. Guide to Cost of Capital*. Hoboken, NJ: John Wiley and Sons, 2017 ("*Duff & Phelps*"), Chapter 4, p. 17. *See also* online at www.kroll.com: *Kroll* Cost of Capital Navigator platform ("*Kroll Cost of Capital Navigator*").

[18] *See* Exhibit TJB-COC-DT2, page 3.

[19] *See* Exhibit TJB-COC-DT2, page 4.

relative risk premium of 167 basis points (3.66 minus 1.99) compared to the proxy group.[20]

Q. Have you prepared an exhibit showing that smaller utilities have experienced higher returns than larger utilities predicted by the CAPM using BETA?

A. Yes. In Exhibit TJB-COC-DT4, I present evidence that the smaller proxy group utilities experienced higher excess returns over the returns predicted by the traditional CAPM compared to the larger proxy water utilities. In the first part of my analysis, I examined the proxy water utilities. As shown in the exhibit, Small-Cap water utilities experienced an average 173 basis point excess return over the returns predicted by the traditional CAPM compared to the Large-Cap water utilities. The analysis also shows that the "true" beta[21] for the Small-Cap water utilities 0.23 higher than the Large-Cap water utilities.

In the second part of my analysis, I expanded the sample of utilities to include gas utilities along with water utilities. As shown in the exhibit, the small-cap water and gas distribution utilities experienced an average 223 basis point excess return over the returns predicted by the traditional CAPM compared to the Large-Cap water and gas distribution utilities. These greater excess returns are the returns not explained by beta.[22] In other words, the "true" beta is higher for the smaller utilities. Again, the analysis also shows that the "true" beta[23] for the Small-Cap water and gas utilities is 0.25 higher than the Large-Cap water and gas utilities. These results are not surprising given the empirical evidence found by Kroll and others.[24] My analysis

[20] *See* Exhibit TJB-COC-DT3, page 2.
[21] The average beta required to account for total return including excess return.
[22] *See* pages 40,42,46 *supra.*
[23] The beta required to account for total return including excess return.
[24] Bourassa COC DT at 20, 41.

provides clear evidence that water and gas distribution utilities are not exempt from the findings of experts; small companies are more risky than large companies.

Q. Is there a relationship between a company's capital structure and its cost of equity?

A. Yes. Generally, when an entity engages in debt financing, it exposes itself to greater risk. As debt grows relative to the total capital structure, the risk increases in a geometric fashion compared to the linear percentage increase in the debt ratio itself. This risk is illustrated by considering the effect of leverage on net earnings. For example, as leverage increases, the equity ratio falls. This creates two adverse effects. First, equity earnings decline rapidly and may even disappear. Second, the "cushion" of equity protection for debt falls. A decline in the protection afforded to debt holders, or the possibility of a serious decline in debt protection, will act to increase the cost of debt financing. Therefore, one may conclude that each new financing, whether through debt or equity, impacts the marginal cost of future financing by any alternative method.

For an entity already perceived as being over-leveraged, this additional borrowing would cause the marginal costs of both equity and debt to increase. On the other hand, if the same entity instead successfully employed equity funding, this could reduce the real marginal cost of additional borrowing, even if the equity issuance occurred at a higher unit cost than an equivalent amount of debt.

Q. How do the capital structures of the proxy group compare to the recommended capital structure for Liberty Litchfield Park?

A. Table 3 shows the debt and equity capital structure used to develop the cost of capital for Liberty Litchfield Park. This structure contains approximately 54% equity and 46% debt, compared to the average of the proxy group of approximately 49.3%

equity and 50.7% debt for the proxy group. Having less debt in its capital structure implies that the Company has lower financial risk than those in the proxy group. I have considered the lower financial risk of Liberty Litchfield Park compared to the proxy group using the Hamada method, which I will discuss later. That said, I believe the 46% level of debt for Liberty Litchfield Park is appropriate for Liberty Litchfield Park.[25]

VI. OVERVIEW OF THE DCF AND RISK PREMIUM METHODS

Q. Please explain the general approaches to estimating the cost of capital.

A. There are two broad approaches:

(1) identify comparable-risk sample companies and estimate the cost of capital directly, or

(2) find the location on the CML and estimate the relative risk of the entity, which jointly determines the cost of capital.

The DCF method falls into the first approach. It is a direct method but uses only a subset of the total capital market evidence available. The DCF rests on the premise that the fundamental value of an asset (i.e., stock) is its ability to generate future cash flows to the owner of that asset. The DCF is simply the sum of a stock's expected dividend yield and the expected long-term growth rate. Dividend yields are readily available, but long-term growth estimates are not. I will explain the DCF in greater detail later.

[25] Smaller firms tend to offset higher business risk with lower financial risk. *See* Scott, D.F. and Martin, J.D., "Industry Influence on Financial Structure," *Financial Management*, Spring 1975, pp. 67-71.

The RP methods fall into the second approach. An equity risk premium is established by determining the relationship between the cost of equity and an interest rate over time. The CAPM method falls into the category of RP methods. To implement, it is generally assumed that the past correlation will continue. The RP generally uses a small subset of the capital market evidence whereas the CAPM uses information on all securities, rather than a small subset. I will explain the RP methods in more detail later. For now, the RP methods reflect a risk-return relationship, often depicted graphically as the CML.

Each of these methods seeks to or should seek to measure investor expectations. In the final analysis, I will repeat my expert opinion that ROE estimates are subjective and should be based on sound, informed judgment supported by competent evidence. I have applied one version of the DCF and three versions of the RP methods, including the CAPM as one of the RP methods. I believe these methods provide the foundation for evaluating the fair cost of equity capital for the publicly traded utilities in my proxy group. I then added a risk premium to the results of these models to account for the differences in risk (business, regulatory, liquidity, size) between the proxy group and Liberty Litchfield Park.

A. Overview of the DCF and RP Methods

Q. Please explain the DCF method of estimating the cost of equity.

A. As mentioned, the DCF model is based on the concept that the current price of a share of stock is equal to the present value of future cash flows from the purchase of the stock. In other words, the DCF model seeks to replicate the market valuation

process that sets the price investors are willing to pay for a share of an entity's stock. It rests on the assumption that investors rely on the expected returns (i.e., cash flow they expect to receive) to set the price of a security. The DCF model in its most general form is:

[6] $P_0 = CF_1/(1+k) + CF_2/(1+k)^2 + \ldots + CF_n/(1+k)^n$

where k is the cost of equity; n is the number of years; P_0 is the current stock price; and CF_1 through CF_n are the future cash flows expected to be received in periods 1 through n.

Equation [6] can be written to show that the current price (P_0) is also equal to

[7] $P_0 = CF_1/(1+k) + CF_2/(1+k)^2 + \ldots + P_t/(1+k)^t$

where P_t is the price expected to be received at the end of the period t. If the future price (P_t) included a premium (an expected increase in the stock price or capital gain), the price the investor would pay today (in anticipation of receiving that premium) would increase. In other words, by estimating the cash flows from the purchase of a stock in the form of dividends and capital gains, we can calculate the investor's required rate of return, which is the rate of return an investor presumptively used in bidding the current price to the stock (P_0) to its current level.

Equation [7] is a Market Price version of the DCF model. As with the general form of the DCF model in equation [6], the current stock price (P_0) is the present value of the expected cash inflows in the Market Price approach. The cash flows are comprised of dividends and the final selling price of the stock. The estimated cost of equity (k) is the rate of return investors expect if they bought the stock at today's price, held the stock and received dividends through the transition period, and then sold it for price in period t (P_t).

Q. Can you provide an example to illustrate the market price version of the DCF

model?

A. Yes. Assume an investor buys a share of common stock for $40. If the expected dividend during the coming year is $2.00, then the expected dividend yield is 5% ($2.00/$40 = 5.0%). If the stock price is also expected to increase to $43.00 after one year, this $3.00 expected gain adds an additional 7.5% to the expected total rate of return ($3.00/$40 = 7.5%). This means the investor buying the stock at $40 per share expects a total return of 12.5% (5% dividend yield plus 7.5% price appreciation). The total return of 12.5% is the appropriate measure of the cost of capital because this is the rate of return that caused the investor to commit $40 of capital by purchasing the stock.

Q. Please continue with your description of the DCF model.

A. Under the assumption that future cash flow is expected to grow at a constant rate ("g"), equation [6] can be solved for k and rearranged into the simple form:

[8] $k = CF_1/P_0 + g$

where CF_1/P_0 is the expected dividend yield (also expressed as D_0/P_0) and g is the expected long-term dividend (price) growth rate. The expected dividend yield is computed as the ratio of next period's expected dividend (D_1) divided by the current stock price (P_0).

This form of the DCF model is known as the "constant growth" DCF model and recognizes that investors expect to receive a portion of their total return in the form of current dividends and the remainder through future dividends and capital (i.e., price) appreciation. A key assumption of this form of the model is that investors expect that same rate of return (k) every year and that market price grows at the same rate as dividends. As already discussed, this has not been historically true for the proxy group entities as shown by the data in Table 4.

Q. Do you have any concerns about applying the DCF model to utility stocks?

A. Yes, I have several concerns. First, as mentioned previously, non-publicly traded utilities do not have a stock market price. Using the stock prices from a proxy group assumes that the stock of Liberty Litchfield Park would be similarly priced and have a similar dividend yield as the publicly traded water companies. Second, the stock price and dividend yield components may be unduly influenced by structural changes in the industry, such as mergers and acquisitions, which influence investor expectations. Third, the DCF model is based on several assumptions that may not be realistic given the current capital market environment.

Q. What are these "assumptions"?

A. The traditional DCF model assumes that the market price per share ("MPPS"), book value per share ("BVPS), earnings per share ("EPS"), and dividends per share ("DPS"), all grow at the same rate. But the evidence contradicts the assumption. Table 4 shows that over the past five years the average MPPS growth has significantly exceeded the average BVPS, EPS, and DPS. As such, the expected equity returns suggested by the market-based DCF model do not line up with recent experience in the markets. As Dr. Morin notes:

> To the extent that increases (decreases) in relative market valuation are anticipated by investors, especially myopic investors with short-term investment horizons, the standard DCF model will understate (overstate) the cost of equity.[26]

Another way of stating this point is that the DCF model does not account for the ebb and flow of investor sentiments over the course of the business cycle.

[26] Morin, p. 433.

Q. Please continue discussing your concerns with the use of the DCF model in this context.

A. Fourth, the application of the DCF model produces estimates of the cost of equity that are consistent with investor expectations *only when* the market price of a stock and the stock's book value are approximately the same. The DCF model will understate the cost of equity when the market-to-book ratio exceeds 1.0 and overstate the cost of equity when the market-to-book ratio is less than 1.0. This happens because market-derived return produced by the DCF is often applied to book value rate base by regulators.

Fifth, the assumption of a constant growth rate may be unrealistic, and there may be difficulty in finding an adequate proxy for the growth rate. Historical growth rates can be downward biased because of the impact of anemic historical growth rates in earnings, mergers and acquisitions, restructuring, unfavorable regulatory decisions, and even abnormal weather patterns.

To be clear, I am not saying the DCF cannot be used due to these concerns with the use of the DCF model. However, a process that fails to account for these shortcomings will, in my opinion, typically underestimate the utility's ROE.

Q. What data have you used to compute the expected dividend yield (D_1/P_0) in the DCF model?

A. First, I computed a current dividend yield (D_0/P_0). The time value of money should be considered when determining dividend yields. This adjustment is required because the basic model assumes dividends are paid once a year while investors receive quarterly dividend payments. Prices they pay for the stock (P_0), would reflect the anticipated payment and potential re-investment of quarterly dividends.

To approximate the time value of money and the payment of quarterly dividends, I computed expected dividend yield (D_1/P_0) as the current dividend yield (D_0/P_0) times one plus the growth rate (g) divided by two. I used the spot price for each of the stocks of the utilities in the sample group as reported by the *Value Line* Investment Analyzer on May 28, 2025, for P_0. The current dividend (D_0) is the current indicated dividend as reported by *Value Line*. In my tables, the current dividend yield is denoted as (D_0/P_0), where D_0 is the current dividend and P_0 is the spot stock price. (D_1/P_0) is used to denote the expected dividend yield in the tables.

Q. What measures of growth ("G") have you used?

A. My estimates of growth are based upon analysts' estimates of growth. For my forecast growth estimate, I have used the growth forecasts from *Value Line*, *Zacks Investment Research*, and *Yahoo Finance* as reported in Table 4.

Q. Why did you use forecasted growth rates for your growth estimates?

A. The empirical evidence indicates that analyst estimates of EPS growth are the best measure of growth for use in the DCF for utility stocks.[27] The DCF model requires estimates of growth that investors expect in the future and not past estimates of growth that have already occurred. Logically, in estimating future growth, financial

[27] Gordon, David A., Gordon, Myron J. and Gould, Lawrence I., "Choice Among Methods of Estimating Share Yield," *Journal of Portfolio Management*, Spring 1989 ("Gordon, Gordon, and Gould"), pp. 50-55. Gordon, Gordon and Gould found that a consensus of analysts' forecasts of earnings per share growth for the next five years provides a more accurate estimate of growth required in the DCF model than three different historical measures of growth (historical EPS, historical DPS, and historical retention growth). They explain that this result makes sense because analysts would take into account such past growth as indicators of future growth as well as any new information. Other studies confirm the superiority of analysts' estimates such as Vander Weide, James H. and Carleton, Willard T., "Investor Growth Expectations: Analysts vs. History," *Journal of Portfolio Management*, Spring 1988, pp. 78-87; Brown, Lawrence D. and Rozeff, Michael S., "The Superiority of Analyst Forecasts as Measures of Expectations: Evidence from Earnings," *Journal of Finance*, March 1978, pp. 1-16; and Timme, Stephen G. and Eisemann, Peter C., "On the Use of Consensus Forecasts of Growth in the Constant Growth Model: The Case for Electric Utilities," *Journal of Financial Management*, Winter 1989, pp. 23-35. A 2004 study by the Kentucky Public Service Commission Advance Research Center updated the study by Vander Weide and Carleton (1988) and confirmed the superiority of analyst estimates over historical averages.

institutions and analysts have considered all relevant historical information on an entity, as well as other more recent information.[28] To the extent that past results provide useful indications of future growth prospects, analysts' forecasts would already incorporate that information. In addition, the current price of a stock reflects known historical information on that entity, including its past earnings history. Any further recognition of the past will double count what has already occurred, which is why forward-looking growth rates should be used.

Q. Did you apply a reasonableness test to the individual results of the DCF?

A. Yes. DCF results that are less than the forecast Baa investment grade bond yield plus 100 basis points or 7.0% are excluded. An indicated return of 7.0% is the minimum plausible expected cost of equity. The test of reasonableness approach is a matter of informed judgment and consistent with methods used by the Federal Energy Regulatory Commission ("FERC").[29]

Q. Please summarize the equity cost estimates from the DCF.

A. In Table 6, my DCF estimate for the proxy group cost of equity is 10.20%. My DCF estimate for Liberty Litchfield Park is 10.20% as shown in Table 1.

B. <u>Explanation of the RP Method and its Inputs</u>

Q. Please explain the RP methodology for estimating the cost of equity.

A. The RP method is widely used by analysts and investors and sometimes referred to as the "bond yield plus risk premium method." The general approach is to determine the spread between the return on debt and the return on equity and then add this spread to the current debt yield to derive an estimate of the cost of equity. To

[28] Gordon, Gordon, and Gould, p.54.

[29] In its 2008 Order for Southern California Edison, 122 FERC ¶61236 at p. 25, the FERC lists screens which included exclusion of any company whose low-end ROE fails to exceed the average bond yield by about 100 basis points or more.

implement the RP, it is assumed that the past relationship will continue.

The RP formula provides a formal risk-return relationship and is stated as:

[9] $k = K_d +$ bond-equity spread

where k is the expected return on equity and K_d is the cost of debt or debt yield.

Q. How many different risk premium analyses have you performed?

A. I performed two risk premium analyses in addition to the CAPM. My first analysis is presented in Table 8. It is an updated and modified version of the risk premium analysis used in a prior California Public Utility Commission rate case. In that case, the Public Advocates Office ("Cal Advocates") presented in San Jose Water Company's general rate case (A.06-02-014) in June 2006. Cal Advocates adopted annual averages of actual returns on average equity for water utilities in its sample as proxies for the costs of equity for the period 1996 to 2005, subtracted contemporaneous Treasury rates from those equity cost proxies to determine annual average risk premiums, then added five-year and 10-year averages of those risk premiums to forecasts of the respective Treasury rates to determine an equity cost range. Table 8 adopts annual averages of available DCF equity costs for utilities in the sample as the annual proxies for the costs of equity. This analysis was based on data for the period 2015 to 2024.[30] Current dividend yields are annual averages of yields for the water utilities sample in the various years as reported by *Value Line*. Growth rates are averages of EPS growth rates forecasted by *Value Line*. This RP analysis is based on actual returns of comparable companies, thus meeting the comparable earnings criterion. This analysis indicates a cost of equity of 11.15% for the proxy group. For Liberty Litchfield Park, the indicated cost of equity is 11.15% as shown in Table 1.

[30] *See* Table 9.

Q. Please explain your second RP analysis.

A. The second RP analysis is analysis is presented in Table 9. For the period 1977 to 2024 (48 years), I subtracted average annual long-term US. Treasury yields from total returns of the S&P 500 Utility Index to determine the annual risk premium for each year. The average risk premium over the period adjusted to reflect the estimated impact on the risk premium due to the difference between the average interest rate over the period and the current forecast estimate for interest rates. This adjustment is necessary because the risk premium varies inversely with interest rates. The adjusted risk premium is then added to the average expected long-term U.S. Treasury yield (2026-2028) of 4.4% from Table 7 to estimate the cost of equity. This RP analysis indicates a cost of equity of 11.40% for the proxy group. For Liberty Litchfield Park, the indicated cost of equity is 11.40% as shown in Table 1.

Q. **Should analyses using historic risk premiums rely on arithmetic average returns or on geometric average returns?**

A. Yes, in my opinion. Whenever relying on historical risk premiums, only arithmetic average returns over long periods are appropriate for forecasting and estimating the cost of capital, and geometric average returns are not. As various finance experts have explained, an arithmetic mean is the correct approach to use in estimating the cost of capital, particularly for a risk premium model. [31] As Dr. Morin states:

> Because valuation is forward-looking, the appropriate average is the one that most accurately approximates the expected future rate of return. The best estimate of the expected returns over a future holding period is the arithmetic average. Only arithmetic means are correct for forecasting purposes and for estimating the cost of capital. There is no theoretical or empirical justification for the use of geometric rates of return as a measure of the appropriate discount rate in computing the

[31] Zvi Bode, Alex Kane, Alan J. Marcus, *Investments* (McGraw-Hill 6th ed., 2005) ("Bode"), pp. 864-865; Richard A. Brealey, Stewart C. Myers, Frankin Allen, *Principles of Corporate Finance* (McGraw-Hill 11th ed.) ("Brealey"), pp. 162-163.

cost of capital or in computing present values. [32]

The consensus among these experts makes sense. Only arithmetic mean return rates and yields are appropriate for cost of capital purposes because ex-post (historical) total returns and equity risk premiums differ in size and direction over time, providing insight into the variance and standard deviation of returns. The geometric mean of ex-post (after the fact) equity risk premiums provides no insight into the potential variance of future returns because the geometric mean relates the change over many periods to a constant rate of change, rather than the year-to-year fluctuations, or variance, which are critical to risk analysis. In short, the conclusion of these financial experts is that the geometric mean is useful in comparing what happened in the past but should not be used to determine estimates of expected future returns or market risk premiums.

Q. Are risk premiums for utilities correlated with interest rates?

A. Yes. Utility stocks are interest rate sensitive and vary inversely with interest rates. Dr. Morin found this inverse relationship between risk premiums and interest rates as discussed in Chapter 4 of his 2006 book, *New Regulatory Finance*. He stated a risk premium technique that can be used to determine the cost of equity "consists of examining the risk premiums implied in returns on equity allowed by regulatory commissions for utilities over some past period relative to the contemporaneous level of the long-term Treasury bond yield." Professor Morin reports the following statistical relationship between risk premiums (RP_m) and long-term Treasury bond yields (Yield) for the period 1987 to 2005 for electric utilities:

$$RP_m = 8.2049 - 0.4833 \times \text{Yield}, \text{ with } R^2 = .81.$$

[32] Morin, pp. 116-117.

The slope was found to be statistically significantly less than zero (i.e., the t-statistic was - 8.4). In his analysis, annual averages of allowed equity returns reported by Regulatory Research Associates were adopted as the proxies for equity costs.[33]

Q. Have others found an inverse relationship between risk premiums and interest rates?

A. Yes. Harris and Marston, "Estimating Shareholders Risk Premia Using Analysts' Growth Rates," *Financial Management*, Summer 1992. In Decision 97-12-089, which established the cost of equity for Pacific Gas & Electric Company ("PG&E"), the Commission also found that costs of equity for energy utilities move in the same direction as interest rates, but to a lesser degree. In Decision 02-11-027, an interim opinion on rates of return on equity for PG&E, Southern California Edison Company, Sierra Pacific Power Company, and San Diego Gas & Electric Company for the year 2003, the Commission confirmed that its practice is to adjust ROEs for energy utilities by one-half to two-thirds of the change in the benchmark interest rate.[34]

Q. Please explain the CAPM methodology for estimating the cost of equity.

A. The CAPM was developed by William Sharpe and John Lintner in the mid-1960s and is a common topic in college finance textbooks. Like all RP methods, the CAPM is the sum of a risk-free rate plus a risk premium. Like the RP, it quantifies the additional return required by investors for bearing incremental risk. The CAPM provides a formal risk-return relationship premised on the idea that only market risk matters, as measured by beta. The traditional version of CAPM is represented by the formula:

$$[10] \quad k = R_f + \beta(R_m - R_f)$$

[33] This risk premium method is presented by Dr. Morin in Section 4.5 of his book.

[34] D.02-11-027, p. 20.

where k is the expected return, R_f is the risk-free rate (or zero beta asset), R_m is the market return, (R_m-Rf) is the market risk premium, and β is beta.

Q. What is Beta and what does it estimate?

A. Beta is a measure of the relative risk of a security in relation to the market. This sensitivity is also known as systematic risk and is estimated by regressing a security's excess returns against a market portfolio's excess returns. The slope of the regression line is beta. Beta for the market is 1.0. A security with a beta greater than 1.0 is considered riskier than the market. A security with a beta less than 1.0 is considered less risky than the market.

Q. Do you have concerns about applying the traditional CAPM to utility stocks?

A. Yes, because mechanical application of the model may produce unreasonable results in most time periods. The traditional CAPM only captures a single measure of systematic risk (beta) but there are other forms of systematic risk priced by the market such as firm size. A size premium is necessary because the empirical evidence indicates that beta alone does not measure the risk faced by entities smaller and much smaller than the proxy group utilities.[35] There are also computational problems surrounding beta since it depends on the return data, the period used, duration, choice of market index, and whether annual, monthly, or weekly return figures are used. Finally, betas are estimated with inherent error. Based on empirical evidence, high betas will tend to have a positive error (risk is overestimated) and low betas will have a negative error (risk is underestimated). [36]

Q. Are there alternatives to the traditional CAPM?

A. Yes, alternative versions of the CAPM have been developed that provide more robust

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[35] *Duff & Phelps 2018 Valuation Handbook – U.S. Industry Cost of Capital*, Chapter 2 ("*Duff & Phelps 2018 Valuation Handbook*"), p. 7.

[36] Fama, Eugene F. and Kenneth R. French, "The Capital Asset Pricing Model: Theory and Evidence," *Journal of Economic Perspectives*, Summer 2004, pp. 25-46.

explanations of returns required by investors. A version of the CAPM called the Empirical CAPM or ECAPM was developed to recognize that estimations of Rf are higher than the return on long-term Treasuries. Dr. Roger Morin discusses ECAPM represented as follows:

[11] $k = R_f + .25(R_m\text{-}Rf) + .75\beta(R_m\text{-}R_f)$ [37]

The ECAPM was developed from the empirical findings that show the slope of the CML is flatter and the risk-free rate is at a higher point than predicted by the pure CAPM. The ECAPM has been shown to do a better job at predicting market returns.

Kroll (formerly *Duff & Phelps*) also suggests a version of the CAPM in which a size premium is included. This modified CAPM or MCAPM is represented as follows: [38]

[12] $k = R_f + \beta(R_m\text{-}R_f) + RP_s$

where k is the expected return, R_f is the risk-free rate (or zero beta asset), R_m is the market return, $(R_m\text{-}R_f)$ is the market risk premium, β is beta, and RP_s is the size premium.

Both the ECAPM and MCAPM recognize that the pure CAPM does not fully account for the higher returns necessary on smaller company stocks. In other words, the higher risks associated with smaller firms are not fully accounted for by beta.[39]

Q. Is firm size a unique or non-systematic risk?

A. Firm size is a systematic risk factor and is an adjustment to the pure CAPM.[40] Putting aside the empirical financial data, the need for a risk premium for size makes

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[37] Morin, pp. 189-191.

[38] *Duff & Phelps 2018 Valuation Handbook*, p. 14.

[39] Morningstar, *Ibbotson SBBI 2013 Valuation Yearbook* (*"Morningstar"*), pp. 85-88.

[40] Pratt, Shannon P. and Roger J. Grabowski, *Cost of Capital: Applications and Examples* (John Wiley and Sons, 4th Ed. 2010), p. 56.

sense. Firm size is a significant element of business risk for which investors expect to be compensated through greater returns. As discussed earlier, smaller companies are generally less diverse in their operations and have less financial flexibility which makes them less able to cope with significant events that impact sales, revenues, and earnings. Smaller companies face more risk exposure to business cycles and economic conditions, both nationally and locally. Additionally, the loss of revenues from a few larger customers would have a greater effect on a small entity than on a much larger entity with a larger, more diverse, customer base. smaller companies.

Q. Did you employ either of these alternative CAPMs (equations [11] and [12]) as part of your analysis?

A. Yes, I employed all three versions of the CAPM to estimate the cost of equity for the proxy group, which somewhat mitigates my concerns about the traditional CAPM.

Q. What is the Risk-Free-Rate (R_F)?

A. It is the return on an investment with no risk. The U.S. Treasury rate serves as the basis for the risk-free rate because the yields are directly observable in the market and are backed by the U.S. government. Practically speaking, short-term rates are volatile, fluctuate widely and are subject to more random disturbances than long-term rates. Long-term Treasury rates are preferred for these reasons and because long-term rates are more appropriately matched to securities with an indefinite life or long-term investment horizon.

Q. What did you use as the Risk-Free Rate (R_F)?

A. I used the expected U.S. Long-term Treasury rate for 2026-2028 as the basis for the risk-free rate. Since the cost of capital is an opportunity cost and is prospective, it necessarily requires the use of a forward-looking bond yield. Economists expect the

30-year U.S. Treasury yields average 4.4% in the 2026-2028 period.[41]

Q. What do you use as the proxy of the beta in the CAPM?

A. For the CAPM and ECAPM, I used the average beta of the sample utilities. These betas were obtained from *Value Line* Investment Analyzer (weekly data as of May 21, 2025). I regularly employ *Value Line* as the source for estimated betas. The average *Value Line* beta for my proxy group as shown on Table 2 is 0.82.

For the MCAPM, I use sum beta. Sum beta is an alternative method of computing betas. Since the *Kroll* size premiums are derived using sum beta, using sum beta is internally consistent with the size risk premiums for the proxy group derived from the *Kroll* 2025 Size Study data. I computed the sum beta over a 60-month period (five years) and used the S&P 500 as the market index. Weekly data over the five-year period is the same period used to estimate beta by *Value Line,* however, *Value Line* uses the NYSE as the market index. Sum beta for the proxy group is estimated to be 0.81.

Q. But Liberty Litchfield Park does not have a published Beta, correct?

A. Correct, Liberty Litchfield Park is not publicly traded, so it has no beta. In my expert opinion, I strongly believe Liberty Litchfield Park would have a higher *Value Line* beta and sum beta than the sample utilities if it were publicly traded. *Morningstar Ibbotson SBBI 2013 Valuation Yearbook* (Chapter 7) ("*Morningstar*") reports that when betas (a measure of market risk) are properly estimated, betas are greater for small companies than for larger companies.[42] *Morningstar* also finds that small firms require an additional risk premium over and above the added risk premium indicated by differences in beta risk, even after accounting for differences in beta

[41] *See* Table 7.

[42] *Morningstar*, Chapter 7.

risk.[43]

Q. Please explain the market risk premium.

A. The market-risk premium (R_m-R_f) is the return an investor expects to receive as compensation for market risk. It is the expected market return minus the risk-free rate. Approaches for estimating the market risk premium can be historical or prospective.

Since expected returns are not directly observable, historical realized returns are often used as a proxy for expected returns on the basis that the historical market risk premium follows what is known in statistics as a "random walk." If the historical risk premium does follow the random walk, then one should expect the risk premium to remain at its historical mean. Based on this, the best estimate of the future market risk premium is the historical mean. *Kroll* provides historical market returns for various asset classes from various historical time periods. This publication also provides market risk premiums over U.S. Treasury bonds, which makes it an excellent source for historical market risk premiums.

A current market risk premium estimation approach necessarily requires examining the returns expected from common equities and bonds. One method employs application of the DCF model to a representative market index such as the *Value Line* 1700 stocks. The expected return from the DCF is measured over many periods and then subtracted from the prevailing risk-free rate for each period to arrive at market risk premium for each period. The market risk premium that is subsequently employed in the CAPM is the average market risk premium of the overall period.

[43] *Id.*

Q. How did you estimate the market risk premium for use in the CAPM models?

A. For the traditional CAPM and ECAPM, I averaged two market risk premium estimates: an average of an historical market risk premium (1926 through 2023) and a current market risk premium. For the MCAPM, I used a historical market risk premium (1963 through 2024) and a current market risk premium.

For the historical market risk premiums, I used the average premium of the market over long-term treasury securities from 1926 through 2024 and 1963 through 2024, both of which use the S&P 500 market index (which is considered a large-cap index). The 1963-2024 period is the measurement for which *Kroll* provides data. The average historical market risk premium over long-term treasury securities is 7.31% for the 1926 to 2024 period and 6.07% for the 1963 to 2024 period.

For the current market risk premium, I derived a market risk premium by first using the DCF model to compute an expected market return for each of the past 12 months using *Value Line's* projections of the average dividend yield for the dividend yield in the DCF and an average of the median EPS, DPS and BVPS growth on the *Value Line* 1700 stocks. I then subtracted the historical monthly average 30-year Treasury yield for each month from the expected market returns to arrive at the expected market risk premiums. Finally, I averaged the computed market risk premiums to determine the current market risk premium for the last 12 months, nine months, six months, three months, and the median of the last 12-months. The data and computations are shown in Table 10. The recent 12-month average current market risk premium is 5.89%. Estimates of the current market risk premium have ranged from 5.50% to 6.31% over the past 12 months. My recommended market risk premium is based on the median estimate for the last 12 months of 5.86%.

Q. Why use two different historical risk premium estimates?

A. I have typically used an historical market risk premium (since 1926) in my CAPM and ECAPM. I concur with *Morningstar*, which recommends use of a historical market risk premium based upon the longest period practicable.[44] The *Kroll* Risk Premium Report size and risk premia are calculated from 1963 to current year, so I used the historical market risk premium for this period for the MCAPM.

Q. How did you estimate the size premium for the proxy group?

A. *Kroll's* Size Study categorizes firms by eight measures of size, breaking down the NYSE universe of entities into 25 size-ranked portfolios.[45] The Size Study provides two ways to match a firm's size (or risk) characteristics to the appropriate size (or risk) premium – a guideline portfolio method and a regression equation method. I used the regression equation method to find the CAPM size risk premium for each of the publicly traded utilities in the proxy group for six measures of size (namely, market value of equity, book equity, market value of invested capital, five-year average of net income, total assets, and earnings before interest, taxes, depreciation and amortization).[46] I determined the average size premium of all size measures for the proxy group to be 3.09%. I then adjusted the average size premium to reflect the lower risk of the proxy group compared to the companies that make up the respective size-ranked portfolios.[47] This comparative risk study uses the fundamental measures of company risk (operating margin, coefficient of variation in operating income, and coefficient of variation in return on book equity) to gauge how alike or different the

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[44] *Morningstar*, p. 59.

[45] The size measures include: (1) Market Capitalization; (2) Book Value of Equity; (3) Five-year Average Net Income; (4) Market Value of Invested Capital; (5) Total Assets; (6) Five-year Average Earnings Before Interest, Taxes, Depreciation and Amortization ("EBITDA"); (7) Sales; and (8) Number of Employees. *See Duff & Phelps 2018 Valuation Handbook*, p. 6.

[46] *Kroll Cost of Capital Navigator*, 2025 Supplementary Size Study data and 2025 Supplementary Data Regression Equations.

[47] *See* Exhibit TJB-COC-DT3, page 5 of 5.

proxy group is compared to the companies that make up the size-ranked portfolios in the *Kroll* Size Study. In the instant case, the estimated reduction in risk is -1.10%. Thus, the market risk premium for size for the proxy group is 1.99% (3.09% - 1.10%) (rounded).[48]

Q. What are the results of your CAPM analyses?

A. In Table 11, the traditional CAPM produces an indicated cost of equity of 9.80%. The ECAPM produces an indicated cost of equity of 10.10%. The MCAPM produces an indicated cost of equity of 11.20%. The average of these three methods is 10.40%. The CAPM estimate for Liberty Litchfield Park is 10.40%.[49]

VII. THE REQUIRED RISK PREMIUM FOR LIBERTY LITCHFIELD PARK

Q. Please discuss your recommended risk premium for Liberty Litchfield Park..

A. As I testified earlier, Liberty Litchfield Park is not directly comparable to the publicly traded water utilities in my proxy group. Liberty Litchfield Park is the local coffee shop and is not directly comparable to Starbucks. Comparing Liberty Litchfield Park to the sample utilities illustrates all the risks associated with small size – lack of diversification, limited revenue and cash flow, relatively small customer base, lack of investment liquidity, and earnings volatility. In my opinion, the risk faced by smaller water and wastewater utilities over the risk associated with the proxy group utilities must be accounted for in the determination of the cost of equity for that cost to be just and reasonable.

[48] *See* Exhibit TJB-COC-DT3, p. 2 of 5.

[49] *See* Table 1.

Q. Is there evidence to support your opinion that investment risk increases as the firm size decreases, all else remaining constant?

A. Yes. *Morningstar* reports that smaller companies have experienced market higher returns that are not fully explainable by their higher betas, and that beta is inversely related to firm size. The *Kroll* data and studies confirm this. In other words, smaller companies not only have higher betas, but also higher market returns than larger ones. This follows from the fact that even after accounting for differences in beta risk, small companies require an additional risk premium over and above the added risk premium indicated by differences in beta risk. Somewhere this is being recognized.

Dr. Thomas M. Zepp also reported evidence that the investment in stocks of small water or wastewater utilities are riskier than the stocks of larger water utilities, such as those in the utilities sample.[50] Additionally, the CPUC published a study that showed smaller water utilities are more risky than larger ones.[51] Based on the evidence, investors require higher returns on small company stocks than on large company stocks and are receiving such returns, albeit not in Arizona. Unfortunately, regulators here have generally refused to account for the size differences between the utility being regulated and the proxy group utilities.

[50] Zepp, Thomas M., "Utility Stocks and the Size Effect – Revisited," *The Quarterly Review Economics and Finance*, Vol. 43, Issue 3, Autumn 2003, pp. 578-582.

[51] Staff Report on Issues Related to Small Water Utilities, June 10, 1991 and CPUC Decision 92-03-093.

Q. Please explain the comparative risk study you prepared.

A. The risk study I prepared for Liberty Litchfield Park is attached as Exhibit TJB-COC-DT2. I started by computing the five-year historical operating margin, coefficient of variation of operating margin, and coefficient of variation of ROE for Liberty Litchfield Park. Operating margin is a measure of profitability. The coefficient of variation of operating margin and ROE are measures of earnings variability. All three of these metrics are highly correlated with size and risk.[52]

Next, I cross-referenced these metrics with data from *Kroll Cost of Capital Navigator* Supplementary Data – Risk Study and identified the corresponding market portfolio beta for Liberty Litchfield Park and for the proxy group.[53] I then computed the relative difference in betas between Liberty Litchfield Park and the proxy group. Assuming that the relative difference in the market portfolio beta for the publicly traded companies is the same for publicly traded water utilities, I then computed implied betas for Liberty Litchfield Park using the difference in portfolio betas.[54] Finally, I used the CAPM methods to compute the indicated cost of equity for each utility and compared the results to the CAPM results for the proxy group. Based upon this analysis, I conclude that required risk premium for Liberty Litchfield Park is in the range of 50 to 70 basis.[55]

Q. Is there another method that provides useful information about the risk premium for Liberty Litchfield Park?

A. Yes. I found that Liberty Litchfield Park' size premium over the proxy group is 167

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[52] *See* pages 19-20, *supra*.

[53] Kroll *Cost of Capital Navigator*, 2025 Supplementary Data Risk Study.

[54] *See* Exhibit TJB-COC-DT2, page 3.

[55] *See* Exhibit TJB-COC-DT2, page 4.

basis points based upon my analysis of the size risk premium.[56]

Q. What risk premium over the proxy group results do you recommend?

A. I recommend a minimum of 40 basis points risk premium based upon the facts and circumstances in this case.

Q. Are you also recommending a financial risk adjustment to account for differences in leverage between your water proxy group and Liberty Litchfield Park?

A. Yes.[57] I have included a downward financial risk adjustment to the cost of equity of 40 basis points based upon the Hamada method[58] to account for the difference in financial risk between Liberty Litchfield Park and the proxy group.[59]

VIII. SUMMARY AND CONCLUSIONS

Q. Please provide an overview of your recommendations.

A. I recommend the Commission adopt the three-step method I presented above to determine the ROE for Liberty Litchfield Park.

In the first step, an average of costs of equity for a sample of seven utilities is determined with the DCF model and several RP models including variations of the CAPM.

In the second step, a risk premium for Liberty Litchfield Park is determined to reflect

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[56] *See* Exhibit TJB-COC-DT3, p. 2, line 41.

[57] *See* Table 12, Table 13 and Table 14.

[58] Hamada, Robert S., "Effects of the Firm's Capital Structure on Systematic Risk of Common Stock," *Journal of Finance*, Vol. 27 No. 2 (May 1972) pp. 435 – 453.

[59] *See* Tables 12, 13,and 14.

the Company's higher risks. Quantitative evidence based on differences in Liberty Litchfield Park's business risk metrics compared to the benchmark proxy group justifies a risk premium in the range of 50 to 70 basis points. Based upon the facts and circumstances of this case, I recommend no less than a 40-basis point risk premium for Liberty Litchfield Park. I also determined a downward financial risk adjustment of 40 basis points for the Liberty Litchfield Park's lower debt leverage compared to the proxy group using the Hamada method. Combined, these adjustments result in a net 0 basis points (40 basis points-40 basis points) adjustment to the estimated cost of equity for Liberty Litchfield Park.

In the third step, equity costs from step one and the risk premiums from step two are combined to determine a fair ROE of 10.80%. I recommend the Commission adopt an ROE for Liberty Litchfield Park of no less than 10.80%.

Q. Please summarize the equity cost estimates you made in step one.

A. I made four equity cost estimates for the proxy group as summarized in Table 1. Where data was available, the equity cost estimates were based on data for the seven utilities listed in Table 2. The first equity cost estimate was derived with the DCF model. Using the DCF model to estimate growth, the indicated equity cost for the proxy group is 10.20%. Next, I determined three risk premium estimates including the CAPM method. The first RP approach was based on ten annual DCF estimates of the cost of equity for the proxy group. This approach shows an indicated cost of equity for the proxy group of 11.15%. The second RP approach was based on a 48-year comparison of total returns on the S&P utility index to the annual yields on long-term U.S. Treasury bonds. This approach shows an indicated cost of equity for the proxy group of 11.40%. Finally, I established a range of CAPM estimates using a long horizon estimate of the market risk premium as well as a current of the market

risk premium which produced a cost of equity for the proxy group of 9.80% to 11.20% with an average of 10.40%. I gave the DCF, the RP estimates, and the CAPM estimates equal weight to establish a cost of equity for the proxy group of 10.80%.

Q. Please summarize your estimate of the risk premium determined in step two.

A. I prepared a comparative risk study using commonly used business risk metrics and data from Kroll *Cost of Capital Navigator* 2025 Supplementary Data – Risk Study. Based upon this study, I concluded that risk premium for Liberty Litchfield Park is in the range of 50 to 70 basis points. I also examined differences in the size premium between Liberty Litchfield Park and the proxy group utilities based upon the Kroll *Cost of Capital Navigator* 2025 Supplementary Data – Size Study and Risk Study. Based upon this analysis, I conclude that the risk premium for Liberty Litchfield Park is 167 basis points over the proxy group. I also considered the differences in financial risk between the proxy group and Liberty Litchfield Park. Based upon analysis using the Hamda method, I determined that a 40 basis points downward adjustment for financial risk is indicated.

Based on my consideration of that testimony and my judgment, I recommend a risk premium for Liberty Litchfield Park of no less than 40 basis points at this time and a downward financial risk adjustment of 40 basis points – a net risk adjustment of 0 basis points over the proxy group.

Q. Given the results of your equity cost analyses, is an ROE of 10.80% for Liberty Litchfield Park reasonable?

A. Yes.

Q. Does this conclude your cost of capital direct testimony?

A. Yes.

Liberty Utilities (Litchfield Park Water & Sewer), Corp.
Table 1
Summary of Results

Line No.		Indicated Cost of Equity for Proxy Group		Indicated Cost of Equity for Company[1]
1	DCF Constant Growth - Table 6	10.20%		10.20%
2	Risk Premium - Table 8	11.15%		11.15%
3	Risk Premium - Table 9	11.40%		11.40%
4	CAPM - Table 10	10.40%		10.40%
5	Average (rounded)	10.80%		10.80%
6	Cost of Equity Recommendation		10.80% [2]	

Notes:
[1] Estimates include an equity risk premium of 40 basis points. See testimony.
and a financial risk adjustment of -40 basis points. See testimony.
[2] See testimony.

Liberty Utilities (Litchfield Park Water & Sewer), Corp.
Table 2
Selected Characteristics of Sample Group of Water Utilities

Line No.	Company	Symbol	Operating Revenues (millions)[1]	Net Plant (millions)[1]	S&P Bond Rating[2]	Moody's Bond Rating[2]	Number of Customers[3]	Value Line Beta[1]	Sum Beta[4]	Market Capitalization1 (millions)	Size Decile
1	American States Water	AWR	595.5	2,100	A	A2	287,970	0.75	0.80	$ 3,094.4	Low-Cap
2	American Water Works	AWK	4,684.0	28,038	A	Baa1	3,449,000	0.85	0.80	28,655.2	Large-Cap
3	Essential Utilities	WTRG	2,086.1	13,144	A-	Baa2	1,851,586	0.85	0.80	11,303.5	Mid-Cap
4	California Water	CWT	1,036.8	4,135	A+	NR	553,000	0.85	0.85	3,012.9	Low-Cap
5	Middlesex	MSEX	191.9	1,067	A	NR	124,200	0.75	0.77	1,129.0	Low-Cap
6	York Water Company	YORW	75.0	533	A-	NR	76,731	0.75	0.80	506.4	Micro-Cap
7	Atmos Energy	ATO	4,165.2	22,204	A-	A2	3,300,000	0.75	0.79	25,496.2	Large-Cap
8	Chesapeake Utilities	CPK	670.6	2,456	NR	Baa3	450,000	0.75	0.71	2,998.5	Low-Cap
9	New Jersey Resources	NJR	1,796.5	5,403	NR	NR	583,000	0.85	0.88	4,903.3	Mid-Cap
10	NiSource Inc.	NI	5,505.4	22,275	NR	Baa2	3,792,690	0.85	0.81	18,252.9	Mid-Cap
11	Northwest Natural	NWN	1,197.5	3,358	A+	NR	800,000	0.80	0.74	1,729.2	Low-Cap
12	ONE Gas Inc.	OGS	2,083.6	6,646	A-	A3	2,000,000	0.80	0.79	4,700.9	Mid-Cap
13	Southwest Gas	SWX	5,434.0	7,518	BBB	Baa2	2,300,000	0.80	0.78	5,180.3	Mid-Cap
14	Spire Inc.	SR	2,593.0	6,243	BBB+	NR	1,700,000	0.80	0.82	4,462.3	Mid-Cap
15	UGI Corp.	UGI	7,210.0	8,763	NR	A3	1,500,000	1.10	1.01	7,042.5	Mid-Cap
16	Average		$ 2,621.7	$ 8,925.5			1,377,498	0.82	0.81	$ 8,164.5	
17	Liberty Utilities (Litchfield Park Water & Sewer), Corp.		$ 37.5	$ 296.9			46,565	Implied[5] 0.92	Implied[5] 0.91	N/A	

Notes:
[1] Value Line Analyzer Data (Weekly as of May 21, 2025)
[2] S&P and/or Moody's Website
[3] Most recent annual report or 10-K or Value Line Rating and Reports
[4] See workpapers.
[5] See Exhibit TJB-COC-DT3

Liberty Utilities (Litchfield Park Water & Sewer), Corp.
Table 3
Capital Structures

Line No.	Company	Symbol	Book Value[1] Long-Term Debt	Book Value[1] Common Equity	Market Value[1] Long-Term Debt	Market Value[1] Common Equity
1	American States Water	AWR	46.6%	53.4%	20.7%	79.3%
2	American Water Works	AWK	54.8%	45.2%	30.4%	69.6%
3	Essential Utilities	WTRG	54.3%	45.7%	39.5%	60.5%
4	California Water	CWT	40.3%	59.7%	26.8%	73.2%
5	Middlesex	MSEX	44.2%	55.8%	23.8%	76.2%
6	York Water Company	YORW	47.0%	53.0%	28.9%	71.1%
7	Atmos Energy	ATO	39.3%	60.7%	23.6%	76.4%
8	Chesapeake Utilities	CPK	48.8%	51.2%	28.4%	71.6%
9	New Jersey Resources	NJR	56.7%	43.3%	37.0%	63.0%
10	NiSource Inc.	NI	58.7%	41.3%	37.7%	62.3%
11	Northwest Natural	NWN	52.6%	47.4%	45.2%	54.8%
12	ONE Gas Inc.	OGS	43.4%	56.6%	33.7%	66.3%
13	Southwest Gas	SWX	58.2%	41.8%	47.1%	52.9%
14	Spire Inc.	SR	55.3%	44.7%	45.4%	54.6%
15	UGI Corp.	UGI	59.7%	40.3%	47.8%	52.2%
16	Average		50.7%	49.3%	34.4%	65.6%
17	Liberty Utilities (Litchfield Park Water & Sewer), Corp.		46.0%	54.0%	N/A	N/A

[1] Value Line Analyzer Data (Weekly as of May 21, 2025)

Liberty Utilities (Litchfield Park Water & Sewer), Corp.
Table 4
Comparisons of Past and Future Estimates of Growth

Five-year historical annual changes

Line No.	Company	Symbol	[1] Stock Price[1]	[2] Book Value[2]	[3] EPS[2]	[4] DPS[2]	[5] Historical Average Growth Col. 1-4
1	American States Water	AWR	-0.45%	7.00%	8.00%	9.00%	5.89%
2	American Water Works	AWK	-4.10%	8.50%	10.50%	9.50%	6.10%
3	Essential Utilities	WTRG	-5.14%	10.00%	11.00%	7.00%	5.71%
4	California Water	CWT	-3.45%	10.50%	8.00%	7.00%	5.51%
5	Middlesex	MSEX	-6.20%	8.50%	4.50%	6.50%	3.33%
6	York Water Company	YORW	-6.83%	9.50%	7.00%	4.00%	3.42%
7	Atmos Energy	ATO	4.48%	11.50%	9.00%	9.00%	8.50%
8	Chesapeake Utilities	CPK	4.84%	10.50%	10.00%	10.00%	8.83%
9	New Jersey Resources	NJR	0.92%	5.00%	5.00%	7.00%	4.48%
10	NiSource Inc.	NI	5.72%	3.50%	10.50%	6.00%	6.43%
11	Northwest Natural	NWN	-11.71%	3.50%	25.00%	0.50%	4.32%
12	ONE Gas Inc.	OGS	-5.84%	5.00%	4.50%	7.00%	2.66%
13	Southwest Gas	SWX	-1.42%	4.00%	-25.50%	4.50%	-4.61%
14	Spire Inc.	SR	-4.03%	3.00%	1.00%	5.00%	1.24%
15	UGI Corp.	UGI	-8.97%	3.50%	4.00%	7.00%	1.38%
16	GROUP AVERAGE		-2.81%	6.90%	6.17%	6.60%	4.21%

Ten-year historical average annual changes

	Company	Symbol	[1] Stock Price[1]	[2] Book Value[2]	[3] EPS[2]	[4] DPS[2]	[5] Historical Average Growth Col. 1-4
17	American States Water	AWR	6.74%	5.50%	8.50%	6.50%	6.81%
18	American Water Works	AWK	7.51%	6.50%	10.00%	8.50%	8.13%
19	Essential Utilities	WTRG	2.11%	9.50%	7.50%	6.00%	6.28%
20	California Water	CWT	6.95%	7.50%	5.00%	6.50%	6.49%
21	Middlesex	MSEX	7.25%	7.00%	5.00%	8.00%	6.81%
22	York Water Company	YORW	2.83%	7.00%	4.00%	6.50%	5.08%
23	Atmos Energy	ATO	9.59%	10.00%	7.50%	9.50%	9.15%
24	Chesapeake Utilities	CPK	9.35%	10.50%	8.00%	9.00%	9.21%
25	New Jersey Resources	NJR	4.31%	7.00%	7.00%	5.50%	5.95%
26	NiSource Inc.	NI	8.23%	-2.00%	0.00%	1.00%	1.81%
27	Northwest Natural	NWN	-2.30%	2.00%	1.00%	1.00%	0.43%
28	ONE Gas Inc.	OGS	5.32%	0.00%	0.00%	0.00%	1.33%
29	Southwest Gas	SWX	1.35%	5.00%	7.50%	-11.50%	0.59%
30	Spire Inc.	SR	2.46%	5.00%	5.50%	5.50%	4.61%
31	UGI Corp.	UGI	-2.92%	4.50%	7.00%	6.50%	3.77%
31	GROUP AVERAGE		4.59%	5.67%	5.57%	4.57%	5.10%

	Company	Symbol	[1] Value Line Projected EPS Growth[2]	[2] Zack's Projected EPS Growth[3]	[3] Yahoo Finance Projected EPS Growth[4]	[4] Average Projected Growth
32	American States Water	AWR	7.00%	5.65%	5.73%	6.13%
33	American Water Works	AWK	7.00%	7.40%	7.23%	7.21%
34	Essential Utilities	WTRG	6.00%	5.18%	6.38%	5.85%
35	California Water	CWT	9.50%	8.78%	10.25%	9.51%
36	Middlesex	MSEX	7.50%	6.10%	8.38%	7.33%
37	York Water Company	YORW	ND	ND	ND	ND
38	Atmos Energy	ATO	6.00%	7.19%	7.38%	6.86%
39	Chesapeake Utilities	CPK	5.00%	ND	8.17%	6.59%
40	New Jersey Resources	NJR	6.50%	ND	NM	6.50%
41	NiSource Inc.	NI	8.00%	7.88%	7.45%	7.78%
42	Northwest Natural	NWN	4.50%	ND	4.69%	4.60%
43	ONE Gas Inc.	OGS	4.00%	5.56%	4.88%	4.81%
44	Southwest Gas	SWX	NM	9.87%	12.51%	11.19%
45	Spire Inc.	SR	4.50%	6.54%	12.74%	7.93%
46	UGI Corp.	UGI	2.50%	5.20%	0.16%	2.62%
38	GROUP AVERAGE		6.00%	6.85%	7.38%	6.78%

Notes:
[1] Growth in stock prices ending December 31 through 2024. Data from Yahoo Finance website.
[2] Value Line Analyzer, weekly as of May 21, 2025.
[3] Zack's Investment Research website May 28, 2025.
[4] Yahoo Finance website May 28, 2025. 1 year forward looking estimates.

Liberty Utilities (Litchfield Park Water & Sewer), Corp.
Table 5
Current Dividend Yields for Water Utility Sample Group

Line No.	Company	Symbol	[1] Stock Price (P_0)[1]	[2] Current Dividend (D_0)[1]	[3] Current Dividend Yield (D_0/P_0)	[4] Average Annual Dividend Yield (D_0/P_0)[1,2]
1	American States Water	AWR	77.98	1.79	2.30%	2.30%
2	American Water Works	AWK	140.87	3.00	2.13%	2.28%
3	Essential Utilities	WTRG	38.12	1.26	3.31%	3.34%
4	California Water	CWT	46.43	1.12	2.41%	2.25%
5	Middlesex	MSEX	57.44	1.32	2.30%	2.26%
6	York Water Company	YORW	32.26	0.85	2.63%	2.32%
7	Atmos Energy	ATO	153.72	3.22	2.09%	2.73%
8	Chesapeake Utilities	CPK	120.33	2.25	1.87%	1.96%
9	New Jersey Resources	NJR	45.30	1.71	3.77%	3.94%
10	NiSource Inc.	NI	38.75	1.00	2.58%	3.71%
11	Northwest Natural	NWN	40.96	1.94	4.74%	4.51%
12	ONE Gas Inc.	OGS	73.54	2.64	3.59%	3.97%
13	Southwest Gas	SWX	71.00	2.48	3.49%	4.01%
14	Spire Inc.	SR	73.74	3.02	4.10%	4.93%
15	UGI Corp.	UGI	35.61	1.50	4.21%	6.35%
16	GROUP AVERAGE				3.03%	3.39%

Notes:
[1] Stock prices as of May 28, 2025. Indicated dividend from Value Line Analyzer weekly as of May 21, 2025.
[2] Average Annual Dividend is dividends declared per share for a year divided by the average annual price of the stock in the same year, expressed as a percentage. As report by Value Line Analyzer software. For comparison purposes only.

Liberty Utilities (Litchfield Park Water & Sewer), Corp.
Table 6
Discounted Cash Flow Analysis
DCF Constant Growth

Line No.	Company	Symbol	[1] Dividend Yield (D_0/P_0)[1]	[2] Expected Dividend Yield (D_1/P_0)[2]		[3] Average Projected Growth (g)[3]		[4] Indicated Cost of ROE k=Div Yld + g (Cols 2+3)	[5] Adjusted Indicated Cost of Equity (COE)[4] k=Div Yld + g (Cols 2+3)
1	American States Water	AWR	2.30%	2.37%	+	6.13%	=	8.49%	8.5%
2	American Water Works	AWK	2.13%	2.21%	+	7.21%	=	9.42%	9.4%
3	Essential Utilities	WTRG	3.31%	3.40%	+	5.85%	=	9.26%	9.3%
4	California Water	CWT	2.41%	2.53%	+	9.51%	=	12.04%	12.0%
5	Middlesex	MSEX	2.30%	2.38%	+	7.33%	=	9.71%	9.7%
6	York Water Company	YORW	2.63%	NM	+	ND	=	NM	NM
7	Atmos Energy	ATO	2.09%	2.17%	+	6.86%	=	9.02%	9.0%
8	Chesapeake Utilities	CPK	1.87%	1.93%	+	6.59%	=	8.52%	8.5%
9	New Jersey Resources	NJR	3.77%	3.90%	+	6.50%	=	10.40%	10.4%
10	NiSource Inc.	NI	2.58%	2.68%	+	7.78%	=	10.46%	10.5%
11	Northwest Natural	NWN	4.74%	4.85%	+	4.60%	=	9.44%	9.4%
12	ONE Gas Inc.	OGS	3.59%	3.68%	+	4.81%	=	8.49%	8.5%
13	Southwest Gas	SWX	3.49%	3.69%	+	11.19%	=	14.88%	14.9%
14	Spire Inc.	SR	4.10%	4.26%	+	7.93%	=	12.18%	12.2%
15	UGI Corp.	UGI	4.21%	4.27%	+	2.62%	=	6.89%	
16	Average		3.03%	3.16%		6.78%		9.90%	
17	Adjusted Average[4]								10.20%

Notes:

[1] Spot Dividend Yield = D_0/P_0. Source Table 5.

[2] Expected Dividend Yield = $D_1/P_0 = D_0/P_0 * (1+g/2)$.

[3] Average Analyst Growth rate (g). Source Table 4.

[4] Excluded because results are less than projected Baa bond yields p 100 basis points or 7.00% . See Testimony.

Liberty Utilities (Litchfield Park Water & Sewer), Corp.
Table 7
Forecasts of Long-Term Interest Rates

Line No.		2026	2027	2028	3-year Average
1	Long-term Treasury Rates				
2	Blue Chip Consensus Forecasts[1]	4.5%	4.4%	4.4%	
3					
4	Average	4.5%	4.4%	4.4%	4.4%
5	Aaa Corporate Bonds				
6	Blue Chip Consensus Forecasts[1]	5.2%	5.2%	5.2%	
7					
8	Average	5.2%	5.2%	5.2%	5.2%
9	Baa Corporate Bonds				
10	Blue Chip Consensus Forecasts[1]	6.0%	6.0%	6.0%	
11					
12	Average	6.0%	6.0%	6.0%	6.0%

Notes:
[1] Blue Chip Consensus Forecasts (June 2025).

NA = Not Available

Liberty Utilities (Litchfield Park Water & Sewer), Corp.
Table 8
Risk Premium Analysis Based on Averages of
Annual DCF Equity Cost Estimates 2015-2024

Line No.	Year	Dividend Yield (D_0/P_0)[1]	Average Projected Growth (g)[2]	DCF Expected Dividend Yield (D_1/P_0)[3]	DCF Equity Cost Estimate	30-Yr Treasury Rate	Risk Premium
1	2015	2.67%	5.73%	2.75%	8.48%	2.84%	5.64%
2	2016	2.51%	5.79%	2.59%	8.37%	2.59%	5.78%
3	2017	2.18%	7.64%	2.27%	9.91%	2.90%	7.01%
4	2018	2.55%	11.64%	2.70%	14.35%	3.11%	11.23%
5	2019	2.28%	9.36%	2.39%	11.74%	2.58%	9.16%
6	2020	2.88%	9.18%	3.01%	12.19%	1.56%	10.63%
7	2021	2.80%	6.18%	2.89%	9.06%	2.06%	7.00%
8	2022	2.70%	5.64%	2.78%	8.42%	3.11%	5.31%
9	2023	3.68%	5.25%	3.77%	9.02%	4.09%	4.93%
10	2024	3.42%	5.06%	3.51%	8.56%	4.41%	4.15%
10				5-year Average			6.41%
11				10-Year Average			7.09%
12				Average of 5 and 10-year RPs			6.75%
13				Average of Forecast Treasury Rates[4]			4.40%
14				Projected Return on Equity			11.15%

Liberty Utilities (Litchfield Park Water & Sewer), Corp.
Table 9
Risk Premium Analysis Based on Total Returns

Line No.		S&P 500 Utility Index Total Return[1]	LT Treasury Bond Yield[2]	Risk Premium
1	1977	8.64%	7.75%	0.89%
2	1978	-3.71%	8.49%	-12.20%
3	1979	13.58%	9.28%	4.30%
4	1980	15.08%	11.27%	3.81%
5	1981	11.74%	13.45%	-1.71%
6	1982	26.52%	12.76%	13.76%
7	1983	20.01%	11.18%	8.83%
8	1984	26.04%	12.41%	13.63%
9	1985	33.05%	10.79%	22.26%
10	1986	28.53%	7.78%	20.75%
11	1987	-2.92%	8.59%	-11.51%
12	1988	18.27%	8.96%	9.31%
13	1989	47.80%	8.45%	39.35%
14	1990	-2.57%	8.61%	-11.18%
15	1991	14.61%	8.14%	6.47%
16	1992	8.10%	7.67%	0.43%
17	1993	14.41%	6.59%	7.82%
18	1994	-7.94%	7.37%	-15.31%
19	1995	42.15%	6.88%	35.27%
20	1996	3.14%	6.71%	-3.57%
21	1997	24.69%	6.61%	18.08%
22	1998	14.82%	5.58%	9.24%
23	1999	-8.85%	5.87%	-14.72%
24	2000	59.70%	5.94%	53.76%
25	2001	-30.41%	5.49%	-35.90%
26	2002	-30.04%	5.43%	-35.47%
27	2003	26.11%	5.05%	21.06%
28	2004	24.22%	5.12%	19.10%
29	2005	16.79%	4.56%	12.23%
30	2006	20.95%	4.91%	16.04%
31	2007	19.36%	4.84%	14.52%
32	2008	-28.99%	4.28%	-33.27%
33	2009	11.91%	4.08%	7.83%
34	2010	5.46%	4.25%	1.21%
35	2011	19.91%	3.91%	16.00%
36	2012	1.29%	2.92%	-1.63%
37	2013	13.21%	3.45%	9.76%
38	2014	28.98%	3.34%	25.64%
39	2015	-4.85%	2.84%	-7.69%
40	2016	16.29%	2.59%	13.70%
41	2017	12.11%	2.90%	9.22%
42	2018	4.11%	3.11%	1.00%
43	2019	26.35%	2.58%	23.77%
44	2020	0.48%	1.56%	-1.08%
45	2021	17.67%	2.06%	15.61%
46	2022	1.57%	3.11%	-1.54%
47	2023	-8.83%	4.09%	-12.92%
48	2024	23.43%	4.41%	19.02%
49	Average over 48 years	12.3%	6.2%	6.1%
50		Expected Long-term Treasury Bond Rate[3]		4.4%
51		Estimate of Current Risk Premium[4]		7.0%
52		Projected Returns on Equity for Sample		11.40%

Notes:

[1] Total Returns from various sources.

[2] Average annual 30 Yr. U.S. Treasury Bond yields as reported by the Federal Reserve. Proxy for yields from 2003-2005 are based upon 20-year U.S. Treasury yield.

[3] Forecast LT U.S. Treasury Rate. Source Table 7.

[4] As explained in testimony, adjustment assumes risk premiums change by 50% as much as interest rates.

Liberty Utilities (Litchfield Park Water & Sewer), Corp.
Table 10
Estimation of Current Market Risk Premium
Using DCF Analysis

Line No.	Month	Dividend Yield (D_0/P_0)[1]	Expected Dividend Yield (D_1/P_0)[2]	+	Expected Growth (g)[3]	=	Expected Market Return (k)	-	Monthly Average 30 Year Treasury Rate[4]	=	Expected Market Risk Premium (MRP)
1	Jan 2024	2.76%	2.98%	+	7.83%	=	10.81%		4.26%	=	6.55%
2	Feb	2.75%	2.97%	+	7.83%	=	10.80%		4.38%	=	6.42%
3	Mar	2.64%	2.84%	+	7.50%	=	10.34%		4.36%	=	5.98%
4	Apr	2.75%	2.96%	+	7.50%	=	10.46%		4.66%	=	5.80%
5	May	2.75%	2.96%	+	7.50%	=	10.46%		4.62%	=	5.84%
6	Jun	2.75%	2.96%	+	7.50%	=	10.46%		4.44%	=	6.02%
7	July	2.75%	2.96%	+	7.50%	=	10.46%		4.46%	=	6.00%
8	Aug	2.75%	2.96%	+	7.50%	=	10.46%		4.15%	=	6.31%
9	Sep	2.58%	2.77%	+	7.50%	=	10.27%		4.04%	=	6.23%
10	Oct	2.61%	2.80%	+	7.50%	=	10.30%		4.38%	=	5.92%
11	Nov	2.48%	2.67%	+	7.50%	=	10.17%		4.54%	=	5.63%
12	Dec	2.68%	2.88%	+	7.50%	=	10.38%		4.58%	=	5.80%
13	Jan 2025	2.65%	2.85%	+	7.50%	=	10.35%		4.85%	=	5.50%
14	Feb	2.77%	2.98%	+	7.50%	=	10.48%		4.68%	=	5.80%
15	Mar	2.77%	2.98%	+	7.50%	=	10.48%		4.60%	=	5.88%
16	Apr	2.93%	3.14%	+	7.33%	=	10.47%		4.71%	=	5.76%
13	Recommended	2.75%	2.96%	+	7.50%	=	10.46%	-	4.56%	=	5.86%
14	Short-term Trends										
15	Recent Twelve Months Avg	2.71%	2.91%	+	7.49%	=	10.39%	-	4.50%	=	5.89%
16	Recent Nine Months Avg	2.69%	2.89%	+	7.48%	=	10.37%	-	4.50%	=	5.87%
17	Recent Six Months Avg	2.71%	2.91%	+	7.47%	=	10.39%	-	4.66%	=	5.73%
18	Recent Three Months Avg	2.82%	3.03%	+	7.44%	=	10.47%	-	4.66%	=	5.81%
19	Median 12 months	2.75%	2.96%	+	7.50%	=	10.46%	-	4.56%	=	5.86%

Notes:

[1] Average Dividend Yield (D_0/P_0) of dividend paying stocks. Data from Value Line Investment Analyzer Software Data - Value Line 1700 Stocks

[2] Expected Dividend Yield (D_1/P_0) equals current average dividend yield (D_0/P_0) times one plus growth rate(g).

[3] Median of Projected EPS and Projected DPS Growth for VL 1700 stocks. Data from Value Line Investment Analyzer Software.

[4] Monthly average 30 year U.S. Treasury as reported by Federal Reserve.

Liberty Utilities (Park Water), Corp.
Table 11
Capital Asset Pricing Model (CAPM, ECAPM, and MCAPM)

Line No.		R_f[1]	+ (	(beta[2]	x	RP_M[4])			=	k
1	Traditional CAPM	4.4%	+ (	0.82	x	6.58%)			=	9.80%
2										
3		R_f[1]		RP_M[4] x .25	+ (	(beta[2]	x	RP_M[4]) x .75		
4	Empirical CAPM (ECAPM)	4.4%	+	6.58%	x .25 + (	0.82	x	6.58%) x .75	=	10.10%
5										
6		R_f[1]	+ (	beta[3]	x	RP_M[5]) +		RP_s[6]		
7	Modified CAPM (MCAPM)	4.4%	+ (	0.81	x	5.96%) +		1.99%	=	11.20%
8										
9										
10	Average (rounded)									10.40%

Notes:

[1] Forecasts of long-term treasury yields. Source Table 7.

[2] Average VL Beta of Water Proxy Group. Source is Table 2.

[3] Average Sum Beta of Water Proxy Group. Source is Table 2.

[4] Estimate of Market Risk Premium (MRP):

Historical MRP (1926-2024)	7.31%	Source is Duff & Phelps ERP Supplementary Exhibits
Current MRP	5.86%	Source is Table 10
Average MRP	6.58%	

[5] Estimate of MRP

Historical MRP (1963-2024)	6.07%	Source is Duff & Phelps ERP Supplementary Exhibits
Current MRP	5.86%	Source is Table 10
Average MRP	5.96%	

[6] Average proxy group adjusted size risk premium based upon Kroll Size Study data and Risk Study data. See See Exhibit TJB-COC-DT2

Liberty Utilities (Litchfield Park Water & Sewer), Corp.
Financial Risk Computation
Unlevered Beta
Table 12

Line No.	Company	VL Beta β_L [1]	Raw Beta Raw β_L [2]	Tax Rate t [3]	MV Debt D [4]	MV Equity E [4]	Unlevered Raw Beta β_u [5]
1							
2							
3							
4							
5	American States	0.75	0.63	25.0%	20.7%	79.3%	0.53
6	American Water Works	0.85	0.78	21.1%	30.4%	69.6%	0.58
7	Essential Utilities	0.85	0.78	0.0%	39.5%	60.5%	0.47
8	California Water	0.85	0.78	0.0%	26.8%	73.2%	0.57
9	Middlesex	0.75	0.63	3.2%	23.8%	76.2%	0.48
10	York Water	0.75	0.63	0.1%	28.9%	71.1%	0.45
11	Atmos Energy	0.75	0.63	11.4%	23.6%	76.4%	0.49
12	Chesapeake Utilities	0.75	0.63	24.4%	28.4%	71.6%	0.48
13	New Jersey Resources	0.85	0.78	15.9%	37.0%	63.0%	0.52
14	NiSource Inc.	0.85	0.78	17.8%	37.7%	62.3%	0.52
15	Northwest Natural	0.80	0.70	25.6%	45.2%	54.8%	0.43
16	ONE Gas Inc.	0.80	0.70	14.9%	33.7%	66.3%	0.49
17	Southwest Gas	0.80	0.70	23.6%	47.1%	52.9%	0.42
18	Spire Inc.	0.80	0.70	21.2%	45.4%	54.6%	0.42
19	UGI Corp.	1.10	1.15	15.1%	47.8%	52.2%	0.65
20							
21	Sample Water Utilities			14.6%	34.4%	65.6%	0.50
22							
23							
24							
25		Sum Beta β_L [6]	Raw Beta Raw β_L [2]	Tax Rate t [3]	MV Debt D [4]	MV Equity E [4]	Unlevered Raw Beta β_u [5]
26							
27	Company						
28	American States	0.80	0.70	25.0%	20.7%	79.3%	0.59
29	American Water Works	0.80	0.70	21.1%	30.4%	69.6%	0.52
30	Essential Utilities	0.80	0.70	0.0%	39.5%	60.5%	0.42
31	California Water	0.85	0.77	0.0%	26.8%	73.2%	0.56
32	Middlesex	0.77	0.66	3.2%	23.8%	76.2%	0.51
33	York Water	0.80	0.70	0.1%	28.9%	71.1%	0.50
34	Atmos Energy	0.79	0.69	11.4%	23.6%	76.4%	0.54
35	Chesapeake Utilities	0.71	0.56	24.4%	28.4%	71.6%	0.43
36	New Jersey Resources	0.88	0.82	15.9%	37.0%	63.0%	0.55
37	NiSource Inc.	0.81	0.72	17.8%	37.7%	62.3%	0.48
38	Northwest Natural	0.74	0.61	25.6%	45.2%	54.8%	0.38
39	ONE Gas Inc.	0.79	0.69	14.9%	33.7%	66.3%	0.48
40	Southwest Gas	0.78	0.67	23.6%	47.1%	52.9%	0.40
41	Spire Inc.	0.82	0.74	21.2%	45.4%	54.6%	0.45
42	UGI Corp.	1.01	1.01	15.1%	47.8%	52.2%	0.57
43							
44	Sample Water Utilities	80.9%	71.6%	14.6%	34.4%	65.6%	0.49
45							
46							
47							
48							
49							

50 [1] Value Line Investment Analyzer data.
51 Value Line uses the historical data of the stock, but assumes that a security's beta moves toward the market average over time. The formula is as follows:
52 Adjusted beta = .33 + (.67) * Raw beta
53 [2] Raw Beta = (VL beta - .33)/(.67)
54 [3] Effective tax rates for year ended December 31, 2023.
55 [4] See Table 2.
56 [5] Raw B_u = Raw B_l/ (1+ (1-t)*D/E)
57
58
59
60

Liberty Utilities (Litchfield Park Water & Sewer), Corp.
Financial Risk Computation
Relevered Beta
Table 13

Line No.		Unlevered Raw Beta β_U[1]	MV Book Debt BD[2]	MV Equity Capital EC[2]	Tax Rate t[3]	Relevered Raw Beta $\beta_{RL}=\beta_U (1+(1-t)BD/EC))$ β_{RL}	VL Adjusted Relevered Beta .33 + .67(Raw Beta) β_{RL}
1							
2							
3							
4							
5	Liberty Utilities (Litchfield Park Wat Using VL Beta	0.50	27.3%	72.7%	24.87%	0.64	0.76
6							
7	Liberty Utilities (Litchfield Park Wat Using Sum Beta	0.49	27.3%	72.7%	24.87%	0.63	0.75
8							
9							
10							
11							
12							

[1] Unlevered Beta fron Unlevered Beta. See Table 12

[2] Proforma Capital Structure of Company per Sehdule D-1

		Company (in Thousands)			MV (in Thousands)	MV %
15						
16						
17	Long-term Debt	$ 46.0	1.00		$ 46	27.30%
18	Preferred Stock	$ -	1.00		-	0.0%
19	Common Stock	$ 54.0	2.26	(a)	122	72.7%
20	Total Capital	$ 100			$ 168	100.0%

(a) Current market-to-book ratio of sample water utilities adjusted for small vs large cap M/B ratios. See work papers.

[3] Current Tax rate based on test year. See Schedule C-3.

Liberty Utilities (Litchfield Park Water & Sewer), Corp.
Traditional Capital Asset Pricing Model (CAPM)
Table 14

Line No.												
		R_f[1]	+ (	beta[2]	x	RP_M[3]	)				=	k
1	Traditional CAPM	4.4%	+ (	0.82	x	6.58%	)				=	9.8%
2												
3		R_f[1]		RP_M[3]	x .25 + (	beta[2]	x	RP_M[3]	) x .75		=	k
4	Empirical CAPM	4.4%	+	6.58%	x .25 + (	0.82	x	6.58%	) x .75		=	10.1%
5												
6		R_f[1]	+ (	beta[2]	x	RP_M[4]	) +	RP_s[5]			=	k
7	Modified CAPM	4.4%	+ (	0.81	x	5.96%	) +	1.99%			=	11.2%
8												
9												
10	Average											10.4%
11												
12				Relevered								
13		R_f[1]	+ (	beta[6]	x	RP_M[3]	)				=	k
14	Traditional CAPM	4.4%	+ (	0.76	x	6.58%	)				=	9.4%
15												
16						Relevered						
17		R_f[1]		RP_M[3]	x .25 + (	beta[6]	x	RP_M[3]	) x .75		=	k
18	Empirical CAPM	4.4%	+	6.58%	x .25 + (	0.76	x	6.58%	) x .75		=	9.8%
19												
20				Relevered								
21		R_f[1]	+ (	beta[6]	x	RP_M[4]	) +	RP_s[5]			=	k
22	Modified CAPM	4.4%	+ (	0.75	x	5.96%	) +	1.99%			=	10.9%
23												
24												
25	Average											10.0%
26												
27	Indicated Financial Risk Adjustment											**-0.4%**

Notes:

[1] Forecasts of long-term treasury yields. See Table 7

[2] Average Beta or Water Proxy Group. See Table 2

[3] See Table 11.

[4] See Table 11.

[5] See Table 11.

[6] Relevered Betas. See Table 13.

RESUME OF THOMAS J. BOURASSA, CPA

EDUCATIONAL BACKGROUND

B.S. Northern Arizona University Chemistry/Accounting (1980)
M.B.A. University of Phoenix with Emphasis in Finance (1991)
C.P.A. State of Arizona (1995)
Continuing Professional Education – In areas of tax, accounting, management, economics, finance, business valuation, consulting, and ethics (80 hrs every two years)

MEMBERSHIPS

Arizona Society of CPAs
Water Utilities Association of Arizona
American Water Works Association

EMPLOYMENT EXPERIENCE

1995 – Present	CPA - Self Employed Consultant to utilities on regulatory matters including all aspects of rate applications (rate base, income statement, cost of capital, cost of service, and rate design), rate reviews, certificates of convenience and necessity (CC&N), CC&N extensions, financing applications, accounting order applications, and off-site facilities hook-up fee applications. Provide expert testimony as required. Consult on various aspects of business, financial and accounting matters including best business practices, generally accepted accounting principles, generally accepted ratemaking principles, project analysis, cash flow analysis, regulatory treatment of certain expenditures and investments, business valuations, and rate reviews. Litigation support services.
1992-1995	Employed by High-Tech Institute, Phoenix, Arizona as Controller and C.F.O.
1989-1992	Employed by Alta Technical School, a division of University of Phoenix as Division Controller.
1985-1989	Employed by M.L.R. Builders, Tampa and Pensacola, Florida as Operations/Accounting Manager
1982-1985	Employed by and part owner in Area Sand and Clay Company, Pensacola, Florida.

1981-1982	Employed by Purdue University, West Lafayette, Indiana as Teaching Assistant.

SUMMARY OF REGULATORY WORK EXPERIENCE AS SELF-EMPLOYED CONSULTANT

COMPANY/CLIENT	FUNCTION
Salome Water Company ACC Docket No. W-01084A-25-0118	Permanent Rate Application –Water. Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design
Joshua Valley Utility Company ACC Docket No. W-02023A-25-0087	Permanent Rate Application –Water. Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design
Picacho Water Company ACC Docket No. W-03528A-25-0056	Permanent Rate Application –Water. Prepared schedules on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service, Rate Design, and Cost of Capital.
Picacho Sewer Company ACC Docket No. SW-03709A-25-057	Permanent Rate Application –Water. Prepared schedules on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service, Rate Design, and Cost of Capital.
Verde Lakes Water Corporation ACC Docket No. W-02372A-24-0266	Permanent Rate Application –Water. Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design
Coldwater Canyon Water Company ACC Docket No. W-01559A-24-0262	Permanent Rate Application –Water. Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design
Thim Water Corporation Thim Utility Company Consolidation ACC Docket No. W-02372A-24-0266	Permanent Rate Application –Water. Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design
Thim Utility Co. ACC Docket No. W-03293A-23-0296	Permanent Rate Application –Water. Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design

COMPANY/CLIENT	FUNCTION
Community Water Company of Green Valley ACC Docket No. W-02304A-24-0187	Permanent Rate Application –Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Sahuarita Water Company ACC Docket No. W-03718A-24-0172	Permanent Rate Application –Water. Prepared financing application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service Study, Rate Design, and Cost of Capital.
Global Water – Farmers Water Company ACC Docket No. W-01654A-24-0108	Permanent Rate Application –Water. Prepared schedules on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service, and Rate Design
Liberty Utilities (Bella Vista Water) Corp. ACC Docket No. W-02465A-23-0338 Liberty Utilities (Beardsley Water) Corp. ACC Docket No. W-02074A-23-0337 Liberty Utilities (Rio Rico Water & Sewer) Corp. ACC Docket No. WS-02676A-23-0340 Liberty Utilities (Cordes lakes Water) Corp. ACC Docket No. WS-02060A-23-0339	Permanent Rate Application –Water and Wastewater. Prepared financing application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service Study, Rate Design, and Cost of Capital.
Cedar Grove Water, Inc. ACC Docket No. W-20541A-24-0002	Permanent Rate Application –Water. Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design
Thim Utility Co. ACC Docket No. W-03293A-23-0296	Permanent Rate Application –Water. Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design
Navajo Water Company ACC Docket No. W-03511A-23-0260	Permanent Rate Application –Water. Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design

COMPANY/CLIENT	FUNCTION
Sonoita Valley Water ACC Docket No. W-020435A-23-214	Permanent Rate Application –Water. Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design
Liberty Utilities (Park Water and Apple Valley) Corp. CPUC Docket A.23-05-004	Cost of Capital. Prepared Cost of Capital analysis and testimony.
Links at Coyote Wash ACC Docket No. SW-04210A-23-0084	Permanent Rate Application –Sewer. Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design
Truxton Canyon Water Company ACC Docket No. W-02168A-22-0302	Permanent Rate Application –Water. Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design
Pima County v. City of Tucson, et. al. Maricopa County Superior Court Case No. CV2022-01141	Expert Witness for Pima County of City on Tucson Water Cost of Service Study and Differential Rates.
Tonto Basin Water Company ACC Docket No. W-03515A-22-0266	Permanent Rate Application –Water. Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design
East Slope Water Company ACC Docket No. W-01906A-22-0289	Permanent Rate Application –Water. Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design
Sunrise Vistas Utilities ACC Docket No. WS-03586A-22-0068	Permanent Rate Application –Water and Wastewater. Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Liberty Utilities (Gold Canyon Sewer) Corp. Liberty Utilities (Entrada Del Oro Sewer) Corp.	Permanent Rate Application –Wastewater. Prepared financing application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service Study, Rate

COMPANY/CLIENT	FUNCTION
ACC Docket No. SW-02519A-21-0361 ACC Docket No. SW-04316A-21-0359	Design, and Cost of Capital.
Navajo Water Company ACC Docket No. W-03511A-21-0124	Permanent Rate Application – Water. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.
Bensch Ranch Utilities, LLC. ACC Docket No. SW-04026A-21-0225	Permanent Rate Application –Water Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Cerbat Water Company ACC Docket No. W-02391A-21-0290	Permanent Rate Application –Water Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Liberty Utilities (Calpeco Electric, LLC) Corp. CPUC Docket A.21-05-017	Cost of Capital. Prepared Cost of Capital analysis and testimony. Assisted in tax depreciation projections and determination of projected accumulated deferred income taxes.
Double R Water Distributors, Inc. ACC Docket No. W-02821A-21-0047	Permanent Rate Application –Water Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Pine Meadows Utilities, LLC. ACC Docket No. SW-03962A-20-0079	Permanent Rate Application –Water Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Coronado Utilities, Inc. ACC Docket No. SW-04305A-20-0346	Permanent Rate Application – Wastewater Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
SaddleBrooke Utility Company ACC Docket No. SW-02849A-20-0262	Permanent Rate Application – Wastewater Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.

COMPANY/CLIENT	FUNCTION
Pine Meadows Utilities ACC Docket No. SW-03926A-20-0079	Permanent Rate Application –Wastewater Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
EPCOR Arizona (Johnson Utilities) ACC Docket No. WS-02987A-20-0025	Permanent Rate Application. Water and Wastewater. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design and Cost of Service.
Beardsley Water Company ACC Docket No. W-02074A-19-0312	Permanent Rate Application –Water Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Oak Creek Water Company No. 1 ACC Docket No. W-01392A-19-0216	Permanent Rate Application –Water Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Alliant Gas ACC Docket No. G-20889A-19-0200	Permanent Rate Application – Gas Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service Study, Rate Design, and Cost of Capital.
Utility Source, LLC. ACC Docket No. WS-04235A-19-0232 ACC Docket No. WS-04235A-19-0233	Permanent Rate Application – Water and Wastewater. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Liberty Utilities (Black Mountain Sewer) Corp. ACC Docket No. SW-02361A-19-0139	Permanent Rate Application –Wastewater. Prepared financing application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service Study, Rate Design, and Cost of Capital.
Pueblo Del Sol Water Company ACC Docket No. SW-02208A- 19-0140	Permanent Rate Application –Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue

COMPANY/CLIENT	FUNCTION
	Requirement, and Rate Design.
DS Water Company ACC Docket No. W-04049A-18-0142	Permanent Rate Application –Water Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Liberty Utilities (CalPeco Electric) LLC CPUC Application 18-12-001.	Cost of Capital. Prepared Cost of Capital analysis and testimony.
Liberty Utilities (Park Water) Corp. and Liberty Utilities (Apple Valley Ranchos Water) Corp. CPUC Applications 18-05-001, et al.	Cost of Capital. Prepared Cost of Capital analysis and testimony.
Truxton Water Company ACC W-02168A-18-308	Permanent Rate Application –Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Payson Water Company ACC W-03514A-18-0230	Permanent Rate Application – Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Farmers Water Company ACC W-01654A-18-0083	Permanent Rate Application – Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Liberty Utilities (Silverleaf Water) Corp. SOAH DOCKET NO. 473-18-3006.WS Texas P.U.C. DOCKET NO. 47976	Permanent Rate Application – Water and Wastewater. Prepared financing application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Generic Proceeding - Income Tax "Savings" from reduction in Federal Income Tax Rate ACC AU-0000A-17-0379 ACC various dockets	Prepared computations of tax "savings" from the reduction in federal income tax rates and proposal for passing savings to rate payers through bill credits.

COMPANY/CLIENT	FUNCTION
Liberty Utilities (Woodmark Sewer) Corp. Liberty Utilities (Tall Timbers Sewer) Corp. SOAH DOCKET NO. 473-17-1641.WS Texas P.U.C. DOCKET NO. 46256	Develop wastewater rates based upon water usage.
Cerbat Water Company ACC W-02391A-18-0018	Permanent Rate Application –Water. Prepared financing application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Ajo Improvement Company ACC Docket No. WS-01025A-17-0361	Permanent Rate Application – Water, Wastewater, and Electric. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design,
East Slope Water Company ACC Docket No. W-02031A-17-317	Permanent Rate Application –Water Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Kachina Village Improvement District Flagstaff, Arizona	Prepared rate studies and rate designs. Participated in Board work sessions, customer work sessions, and open houses.
Liberty Utilities (Litchfield Park Water & Sewer) Corp. ACC Docket No. W-01428AA-17-0059 ACC Docket No. SW-01428AA-17-0058	Permanent Rate Application – Water and Wastewater. Prepared financing application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service, Rate Design, and Cost of Capital.
Pima Utility Company ACC Docket No. W-02199A-16-0421 ACC Docket No. SW-02199A-16-0422	Permanent Rate Application – Water and Wastewater. Prepared financing application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Valley Pioneers Water Company ACC Docket No. W-02033-16-0412	Permanent Rate Application –Water. Prepared financing application. Prepared schedules and testified on Rate Base,

COMPANY/CLIENT	FUNCTION
	Plant, Income Statement, Revenue Requirement, and Rate Design.
Yarnell Water Co-Op ACC Docket No. W-02255A-16-0153	Permanent Rate Application –Water Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Oak Creek Water Company No. 1 ACC Docket No. W-01392A-16-0161	Permanent Rate Application –Water Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Epcor Water Arizona ACC Docket No. W-01303A-16-0145	Permanent Rate Application – Wastewater. Prepared Reconstruction Cost New Less Depreciation Plant for use in determining fair value rate base.
Mountain Water Company Montana PUC Docket No. D2016.2.15	Testified in the matter investigating whether Mountain Water Company's rates are just and reasonable.
Turner Ranches Water and Sanitation Company ACC Docket No. W-01677A-16-0076	Permanent Rate Application –Water Prepared short-form schedules on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Liberty Utilities (Entrada Del Oro Sewer) Corp. ACC Docket No. W-04316A-16-0078 ACC Docket No. W-04316A-16-0085	Permanent Rate Application –Wastewater. Prepared financing application. Prepared schedules and testified on Rate Base, Original Cost Less Depreciation Plant, Reconstruction Cost New less Depreciation Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Liberty Utilities (Rio Rico Water and Sewer) Corp. ACC Docket No. WS-02676A-15-0368 ACC Docket No. WS-02676A-15-0371	Permanent Rate Application – Water and Wastewater. Prepared financing application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Liberty Utilities (Bella Vista Water) Corp.	Permanent Rate Application – Water. Prepared financing application. Prepared

COMPANY/CLIENT	FUNCTION
ACC Docket No. W-02465A-15-0367 ACC Docket No. W-02465A-15-0370	schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Community Water of Green Valley ACC Docket No. W-02304A-15-0263	Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Sahuarita Water Company ACC Docket No. W-03718A-15-0213	Permanent Rate Application –Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Liberty Utilities (Black Mountain Sewer) Corp. ACC Docket No. SW-0236 1A- 15-0206 ACC Docket No. SW-0236 1A- 15-0207	Permanent Rate Application –Wastewater. Prepared financing application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service Study, Rate Design, and Cost of Capital.
Tierra Buena Water Company ACC Docket No. W-02076A-15-013	Permanent Rate Application – Water. Assisted in preparation of short-form schedules.
Red Rock Utilities, LLC ACC Docket No. W-04245A-14-0295	Permanent Rate Application – Water and Wastewater. Prepared short-form schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Quail Creek Water Company ACC Docket No. W-02514A-14-0370	Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Tonto Basin Water Company ACC Docket No. W-03515A-14-0310	Permanent Rate Application – Water. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.

COMPANY/CLIENT	FUNCTION
Navajo Water Company ACC Docket No. W-03511A-14-304	Permanent Rate Application – Water. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.
Alaska Power Company Regulatory Commission of Alaska Docket No. U-14-002	Prepared schedules and testified on cost of capital.
Anchorage Municipal Light & Power Regulatory Commission of Alaska Docket No. U-13-184	Prepared schedules and testified on cost of capital.
Liberty Utilities (Pine Bluff) Inc. Arkansas Public Service Commission Docket No. 14-020-U	Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service, Rate Design, and Cost of Capital.
Abra Water Company ACC Docket No. W-01782A-14-0084	Permanent Rate Application – Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
EPCOR Water Arizona, Inc. ACC Docket No. W-01303A-14-0010	Permanent Rate Application – Prepared rate designs and cost of Service studies for Mohave Water District, Mohave Wastewater District, Paradise Valley Water District, Tubac Water District, and Sun City Water District.
Liberty Utilities (Midstates Natural Gas), Inc. Missouri Public Service Commission Case No. GR-2014-0152	Permanent Rate Application – Assist in preparing required rate application schedules for Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Hydro Resources, LLC. ACC Docket No. W-20770A-13-0313	Certificate of Convenience and Necessity – Water. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, and initial rates.
Little Park Water Company	Permanent Rate Application – Water.

COMPANY/CLIENT	FUNCTION
ACC Docket No. W-02192A-13-0336	Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.
Utility Source, LLC. ACC Docket No. WS-04235A-13-0331	Permanent Rate Application – Water and Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Payson Water Company ACC Docket No. W-03514A-13-0111 ACC Docket No. W-03514A-13-0142	Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital. Financing Application. Prepared financial ratios and debt surcharge mechanism.
Goodman Water Company	Valuation
Verde Santa Fe Wastewater ACC Docket No. SW-03437A-13-0292	Permanent Rate Application – Wastewater. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Lago Del Oro Water Company ACC Docket No. W-01944A-13-0215	Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service, Rate Design, and Cost of Capital.
Chaparral City Water Company ACC Docket No. W-02113A-13-0118	Permanent Rate Application – Prepared and testified on cost of service study.
Las Quintas Serenas Water Company ACC Docket No. W-01583A-13-0117	Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Southwest Environmental Utilities. Inc. ACC Docket No. WS-20878A-13-0065	Certificate of Convenience and Necessity – Water and Wastewater. Prepared pro-forma balance sheets, income statements,

COMPANY/CLIENT	FUNCTION
	plant schedules, rate base, and initial rates.
Litchfield park Service Company ACC Docket No. SW-01428A-13-0043 ACC Docket No. W-01428A-13-0042	Permanent Rate Application – Water and Wastewater. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, Cost of Service, and Cost of Capital.
Beaver Dam Water Company ACC Docket No. WS-03067A-12-0232	Permanent Rate Application. Prepared schedules on Plant, Income Statement, Revenue Requirement, and Rate Design.
Rio Rico Utilities ACC Docket No. WS-02676A-12-0196	Permanent Rate Application – Water and Wastewater. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service, Rate Design, and Cost of Capital.
Vail Water Company ACC Docket No. W-01651B-12-0339	Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service, Rate Design, and Cost of Capital.
Avra Water Co-Op. ACC Docket No. W-02126A-11-0480	Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service, Rate Design, and Cost of Capital.
Pima Utility Company ACC Docket No. W-02199A-11-0329 ACC Docket No. SW-02199A-11-0330	Permanent Rate Application – Water and Wastewater. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Cost of Service, Rate Design, and Cost of Capital. Work on financing application.
Liberty Utilities (CALPECO Electric), LLC) Docket No. 11202020	Work on preparation of permanent rate application. Prepared schedules on Rate Base, Plant, Income Statement, Revenue Requirement.
Livco Water Company	Permanent Rate Application – Water and

COMPANY/CLIENT	FUNCTION
ACC Docket No. SW-02563A-11-0213	Wastewater. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.
Orange Grove Water Company ACC Docket No. W-02237A-11-0180	Permanent Rate Application. Prepared schedules on Plant, Income Statement, Revenue Requirement, and Rate Design.
Goodman Water Company ACC Docket No. W-02500A-10-0382	Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Doney Park Water ACC Docket No. W-01416A-10-0450	Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Grimmelmann, et. al. v. Pulte Home Corporation, et. al., case no. CV-08-1878-PHX-FJM, the United States District Court for the District of Arizona.	Consultant to defendant and expert witness for defendant on rates and ratemaking.
Southern Arizona Home Builders Association	Consultant on ratemaking aspects to line extension policies (electric).
H2O Water Company	Valuation
Tierra Linda HOA Water Company	Valuation
Las Quintas Serenas Water Company ACC Docket No. W-01583A-09-0589	Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Coronado Utilities ACC Docket No. SW-04305A-09-0291	Permanent Rate Application – Wastewater. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Little Park Water Company ACC Docket No. W-02192A-09-0531	Permanent Rate Application. Prepared schedules on Plant, Income Statement,

COMPANY/CLIENT	FUNCTION
	Revenue Requirement, and Rate Design.
Sahuarita Water Company ACC Docket No. W-03718A-09-0359	Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, Cost of Service, and Cost of Capital.
Bella Vista Water Company Southern Sunrise Water Company Northern Sunrise Water Company ACC Docket No. W-02465A-09-0414 ACC Docket No. W-02453A-09-0414 ACC Docket No. W-02454A-09-0414	Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, Cost of Service, and Cost of Capital.
Rio Rico Utilities, Inc ACC Docket No. WS-02676A-09-0257	Permanent Rate Application – Water and Wastewater. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Litchfield park Service Company ACC Docket No. SW-01428A-09-0103 ACC Docket No. W-01428A-09-0104	Permanent Rate Application – Water and Wastewater. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, Cost of Service, and Cost of Capital.
Town of Thatcher v. City of Safford, CV 2007-240, Superior Court of Arizona	Consultant to plaintiff on ratemaking and cost of service.
Valencia Water Company California Public Utility Commission Case No. 09-05-002	Cost of Capital
Valley Utilities ACC Docket No. W-01412A-08-0586	Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Black Mountain Sewer Company ACC Docket No. SW-02361A-08-0609	Permanent Rate Application – Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of

COMPANY/CLIENT	FUNCTION
	Capital.
Far West Water and Sewer Company ACC Docket No. WS-03478A-08-0608	Interim Rate Application (Emergency Rates)
Farmers Water Company ACC Docket No. W-01654A-08-0502	Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Far West Water and Sewer Company ACC Docket No. WS-03478A-08-0454	Permanent Rate Application. Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design and Cost of Capital.
Ridgeline Water Company, LLC ACC Docket No. W-20589A-08-0173	Certificate of Convenience and Necessity – Water. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, financing, and intitial rates.
Sacramento Utilities, Inc. ACC Docket No. SW-20576A-08-0067	Certificate of Convenience and Necessity – Wastewater. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, and financing.
Johnson Utilities ACC Docket No. WS-02987A-08-0180	Permanent Rate Application. Water and Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design and Cost of Capital. Participate in 40-252 proceeding.
Orange Grove Water Company ACC Docket No. W-02237A-08-0455	Permanent Rate Application. Prepared schedules on Plant, Income Statement, Revenue Requirement, and Rate Design.
Far West Water and Sewer Company ACC Docket No. WS-03478A-07-0442	Financing Application. Prepare schedules to support application.
Oak Creek Water No.1 ACC Docket No. W-01392A-07-0679	Permanent Rate Application. Prepared schedules and testified on Rate Base,

COMPANY/CLIENT	FUNCTION
	Plant, Income Statement, Revenue Requirement, and Rate Design.
ICR Water Users Association Docket W-02824-07-0388	Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Johnson Utilities	Valuation consultant in the matter of the sale of Johnson Utilities assets to the Town of Florence.
H2O, Inc ACC Docket No. W-02234A-07-0550	Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Chaparral City Water Company ACC Docket No. W-02113A-07-0551	Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Valley Utilities ACC Docket No. W-01412A-07-0561	Financing Application. Prepare schedules to support application.
Valley Utilities ACC Docket No. W-01412A-07-280	Emergency Rate Application. Prepare schedules to support application.
Valley Utilities ACC Docket No. W-01412A-07-0278	Accounting Order. Assist in preparing definition and scope of costs for deferral for future regulatory consideration and treatment.
Litchfield Park Service Company ACC Docket No. W-01427A-06-0807	Accounting Order. Assist in preparing definition and scope of costs for deferral for future regulatory consideration and treatment.
Golden Shores Water Company ACC Docket No. W-01815A-07-0117	Permanent Rate Application. Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of

COMPANY/CLIENT	FUNCTION
	Capital.
Diablo Village Water Company ACC Docket No. W-02309A-07-0140	Off-site facilities hook-up fee application. Prepare schedules to support application.
Diablo Village Water Company ACC Docket No. W-02309A-07-0399	Permanent Rate Application (Class C). Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Sahuarita Water Company (Rancho Sahuarita Water Co.) ACC Docket No. W-03718A-07-0687	Extension Certificate of Convenience and Necessity – Water. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, and financing.
Utility Source, L.L.C. ACC Docket No. WS-04235A-06-0303	Permanent Rate Application- Water and Wastewater. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Tierra Buena Water Company	Valuation of Tierra Buena Water Company for estate purposes.
Goodman Water Company ACC Docket No. W-02500A-06-0281	Permanent Rate Application (Class C). Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, and Cost of Capital.
Links at Coyote Wash Utilities ACC Docket No. SW-04210A-06-0220	Certificate of Convenience and Necessity – Sewer. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, financing, and initial rate design.
New River Utilities ACC Docket No. W-0173A-06-0171	Extension Certificate of Convenience and Necessity – Water. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, and financing.
Johnson Utilities ACC Docket No. WS-02987A-04-0501 Docket WS-02987A-04-0177	Extension of Certificate of Convenience and Necessity – Sewer. Prepared pro-forma balance sheets, income statements,

COMPANY/CLIENT	FUNCTION
	plant schedules, rate base, financing, and initial rate design.
Bachmann Springs Utility ACC Docket No. WS-03953A-07-0073	Permanent Rate Application – Water and Sewer. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.
Avra Water Cooperative ACC Docket No. W-02126A-06-0234	Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Gold Canyon Sewer Company ACC Docket No. SW-025191A-06-0015	Permanent Rate Application – Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
State of Arizona v. Far West Water and Sewer, No. 1 CA-CR 06-0160	Expert witness on behalf of defendant in penalty phase of case.
Far West Water and Sewer Company ACC Docket No. WS-03478A-05-0801	Permanent Rate Application – Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Black Mountain Sewer Company ACC Docket No. SW-02361A-05-0657	Permanent Rate Application – Sewer. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, Rate Design, and Cost of Capital.
Balterra Sewer Company ACC Docket No. SW-02304A-05-0586	Certificate of Convenience and Necessity – Sewer. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, financing, and initial rate design.
Community Water Company of Green Valley ACC Docket No. W-02304A-05-0830	Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.

COMPANY/CLIENT	FUNCTION
McClain Water Systems Northern Sunrise Water Southern Sunrise Water ACC Docket No. W-020453A-06-0251	Certificate of Convenience and Necessity – Water. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, financing, and initial rate design.
Valley Utilities Water Company ACC Docket No. W-01412A-04-0376	Off-site facilities hook-up fee application. Prepare schedules to support application.
Valley Utilities Water Company ACC Docket No. W-01412A-04-0376	Permanent Rate Application – Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, and Revenue Requirement. Assisted in preparation of Rate Design.
Beardsley Water Company ACC Docket No. W-02074A-04-0358	Permanent Rate Application – Water. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.
Pine Water Company, Inc. ACC Docket No. W-03512A-03-0279	Interim and Permanent Rate Application, Financing Application - Water. Prepared schedules and testified on Rate Base, Plant, Income Statement, Cost of Capital, and Rate Design.
Chaparral City Water Company ACC Docket No. W-02113A-04-0616	Permanent Rate Application. Prepared schedules and testified on Rate Base, Plant, and Income Statement. Assisted in preparation Rate Design.
Tierra Linda Home Owners Association ACC Docket No. W-0423A-04-0075	Certificate of Convenience and Necessity – Water. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, financing, and initial rate design.
Diamond Ventures - Red Rock Utilities ACC Docket No. WS-04245A-04-0184	Certificate of Convenience and Necessity – Water and Sewer. Prepared pro-forma balance sheets, income statements, plant schedules, rate base, financing, and initial rate design.

COMPANY/CLIENT	FUNCTION
Arizona-American Water Company, Inc. ACC Docket No. WS-01303A-02-0867 ACC Docket No. WS-01303A-02-0868 ACC Docket No. WS-01303A-02-0869 ACC Docket No. WS-01303A-02-0870 ACC Docket No. WS-01303A-02-0908	Permanent Rate Application Water and Sewer (10 divisions). Prepared schedules and testimony on Rate Base, Plant, Income Statement, and Revenue Requirement. Assisted in preparation of Rate Design.
Bella Vista Water Company, Inc. ACC Docket No. W-02465A-01-0776	Permanent Rate Application - Water. Prepared schedules and testimony on Rate Base, Plant, Income Statement, and Revenue Requirement. Assisted in preparation of Cost of Capital and Rate Design.
Green Valley Water Company Docket (2000 Not Filed)	Permanent Rate Application. Prepared schedules and testimony on Rate Base, Plant, Income Statement, and Revenue Requirement. Assisted in preparation of Cost of Capital and Rate Design.
Gold Canyon Sewer Company ACC Docket No. SW-02519A-00-0638	Permanent Rate Application - Sewer. Prepared schedules and testimony on Rate Base, Plant, Revenue Requirement, and Income Statement. Assisted in preparation of Cost of Capital and Rate Design.
Rio Verde Utilities, Inc. ACC Docket No. WS-02156A-00-0321	Permanent Rate Application – Water and Sewer. Prepared schedules and testimony on Rate Base, Plant, Revenue Requirement, and Income Statement. Assisted in preparation of Cost of Capital and Rate Design.
Livco Water Company Livco Sewer Company ACC Docket No. SW-02563A-05-0820	Permanent Rate Application – Water. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.
Livco Water Company ACC Docket No. SW-02563A-07-0506	Permanent Rate Application – Water and Sewer. Prepared short-form schedules for Rate Base, Income Statement, Plant, Bill Counts, and Rate Design.

COMPANY/CLIENT	FUNCTION
Cave Creek Sewer Company	Revenue Requirement, Rate Adjustment and Rate Design - Sewer.
Avra Water Cooperative ACC Docket No. W-02126A-00-0269	Permanent Rate Application – Water. Assisted in preparation of Rate Base, Plant, Income Statement, Revenue Requirement, and Rate Design.
Town of Oro Valley	Revenue Requirements, Water Rate Adjustments and Rate Design.
Far West Water Company ACC Docket No. WS-03478A-99-0144	Permanent Rate Application – Water. Assisted in preparation of schedules for Rate Base, Income Statement, Revenue Requirement, Lead-Lag Study, Cost of Capital, and Rate Design.
MHC Operating Limited Partnership Sedona Venture Wastewater ACC Docket No. W-	Permanent Rate Application – Sewer. Assisted in preparation of schedules for Rate Base, Plant, Income Statement, and Rate Design.
Vail Water Company ACC Docket No. W-01651B-99-0406	Permanent Rate Application. Assisted in preparation of schedules for Rate Base, Plant, Income Statement, and Rate Design.
E&T Water Company ACC Docket No. W-01409A-95-0440	Permanent Rate Application - Water. Assisted in preparation of schedules for Rate Base, Plant, Income Statement, and Rate Design.
New River Utility ACC Docket No. W-01737A-99-0633	Permanent Rate Application - Water. Assisted in preparation of schedules for Rate Base, Plant, Income Statement, and Rate Design.
Golden Shores Water ACC Docket No. W-01815A-98-0645	Permanent Rate Application – Water. Assisted in preparation of schedules for Rate Base, Plant, Income Statement, and Rate Design.
Ponderosa Utility Company ACC Docket No. W-01717A-99-0572	Permanent Rate Application – Water. Assisted in preparation of schedules for Rate Base, Plant, Income Statement, and Rate Design.

COMPANY/CLIENT	FUNCTION

Line No.										
1	Operating Income EBIT ($ in millions)							5-Year	Std	Co-efficient of variation
2			2023	2022	2021	2020	2019	Average	Dev.	of Operating Income
3	Company[1]	Symbol								
4	American States Water	AWR	196.74	126.63	140.98	130.50	133.35	145.64	29.046	0.1994
5	American Water Works	AWK	1,812.00	1,273.00	1,196.00	1,248.00	1,170.00	1,339.80	267.101	0.1994
6	Essential Utilities	WTRG	704.27	752.20	602.71	443.43	365.56	573.63	165.865	0.2891
7	California Water	CWT	117.24	182.16	162.06	206.16	144.48	162.42	34.154	0.2103
8	Middlesex	MSEX	57.97	64.75	48.36	52.33	49.90	54.66	6.718	0.1229
9	York Water Company	YORW	25.86	24.68	25.63	24.98	23.66	24.96	0.870	0.0349
10	Atmos Energy	ATO	1,453.95	1,273.18	1,217.77	1,102.85	1,021.24	1,213.80	166.285	0.1370
11	Chesapeake Utilities	CPK	189.78	168.55	155.27	134.50	126.16	154.85	25.716	0.1661
12	New Jersey Resources	NJR	407.00	406.47	378.15	218.71	159.39	313.94	116.511	0.3711
13	NiSource Inc.	NI	1,629.60	1,429.90	1,302.90	1,260.60	1,602.00	1,445.00	168.189	0.1164
14	Northwest Natural	NWN	298.29	266.34	163.12	148.35	143.47	203.91	72.816	0.3571
15	ONE Gas Inc.	OGS	449.25	418.17	376.68	366.83	355.23	393.23	39.291	0.0999
16	Southwest Gas	SWX	578.31	NM	369.55	423.00	371.81	435.67	98.246	0.2255
17	Spire Inc.	SR	633.10	587.70	610.30	503.40	302.30	527.36	135.025	0.2560
18	UGI Corp.	UGI	553.00	1,164.00	1,512.00	1,044.00	773.80	1,009.36	367.938	0.3645
19	Proxy Group						Average	533.22	112.918	0.2100
								5-year	Std	Co-efficient of variation
			2024	2023	2022	2021	2020	Average	Dev.	of Operating Income
20	Liberty Utilities (Litchfield Park Water & Sewer), Corp		5.95	13.77	13.23	13.43	12.12	11.70	3.274	0.2798
21	**Risk relative to the average risk of the proxy group**									**1.33**
22	Sales ($ in millions)							5-year		
			2023	2022	2021	2020	2019	Average		
23	Company[1]	Symbol								
24	American States Water	AWR	595.70	491.53	498.85	488.24	473.87	509.64		
25	American Water Works	AWK	4,234.00	3,792.00	3,920.00	3,777.00	3,610.00	3,866.60		
26	Essential Utilities	WTRG	2,053.82	2,288.03	1,878.14	1,462.70	889.69	1,714.48		
27	California Water	CWT	794.63	846.43	790.91	794.31	714.56	788.17		
28	Middlesex	MSEX	166.27	162.43	143.14	141.59	134.60	149.61		
29	York Water Company	YORW	60.06	55.12	53.85	51.58	48.44	53.81		
30	Atmos Energy	ATO	4,275.36	4,201.66	3,407.49	2,821.14	2,901.85	3,521.50		
31	Chesapeake Utilities	CPK	670.60	680.70	569.97	488.20	479.60	577.82		
32	New Jersey Resources	NJR	1,962.99	2,905.98	2,156.61	1,953.67	2,592.04	2,314.26		
33	NiSource Inc.	NI	5,505.40	5,850.60	4,899.60	4,681.70	5,208.90	5,229.24		
34	Northwest Natural	NWN	1,197.48	1,037.35	860.40	773.68	746.37	923.06		
35	ONE Gas Inc.	OGS	2,371.99	2,578.00	1,808.60	1,530.27	1,652.73	1,988.32		
36	Southwest Gas	SWX	5,433.97	4,960.01	3,680.45	3,298.87	3,119.92	4,098.64		
37	Spire Inc.	SR	2,666.30	2,198.50	2,235.50	1,855.40	1,952.40	2,181.62		
38	UGI Corp.	UGI	8,928.00	10,106.00	7,447.00	6,559.00	7,320.40	8,072.08		
								5-year		
			2024	2023	2022	2021	2020	Average		
39	Liberty Utilities (Litchfield Park Water & Sewer), Corp		37.46	38.83	33.81	32.72	30.59	34.68		
40	Operating Margin (%)									
								5-year	Std	Co-efficient of variation
41	Company[1]	Symbol	2023	2022	2021	2020	2019	Average	Dev.	of Operating Margin
42	American States Water	AWR	33.03%	25.76%	28.26%	26.73%	28.14%	28.38%	0.0279	0.0985
43	American Water Works	AWK	42.80%	33.57%	30.51%	33.04%	32.41%	34.47%	0.0480	0.1392
44	Essential Utilities	WTRG	34.29%	32.88%	32.09%	30.32%	41.09%	34.13%	0.0415	0.1214
45	California Water	CWT	14.75%	21.52%	20.49%	25.95%	20.22%	20.59%	0.0400	0.1941
46	Middlesex	MSEX	34.86%	39.86%	33.78%	36.96%	37.07%	36.51%	0.0234	0.0641
47	York Water Company	YORW	43.06%	44.78%	47.59%	48.43%	48.85%	46.54%	0.0251	0.0540
48	Atmos Energy	ATO	34.01%	30.30%	35.74%	39.09%	35.19%	34.87%	0.0317	0.0910
49	Chesapeake Utilities	CPK	28.30%	24.76%	27.24%	27.55%	26.31%	26.83%	0.0136	0.0507
50	New Jersey Resources	NJR	20.73%	13.99%	17.53%	11.19%	6.15%	13.92%	0.0564	0.4053
51	NiSource Inc.	NI	29.60%	24.44%	26.59%	26.93%	30.76%	27.66%	0.0252	0.0911
52	Northwest Natural	NWN	24.91%	25.67%	18.96%	19.17%	19.22%	21.59%	0.0339	0.1572
53	ONE Gas Inc.	OGS	18.94%	16.22%	20.83%	23.97%	21.49%	20.29%	0.0290	0.1430
54	Southwest Gas	SWX	10.64%	NM	10.04%	12.82%	11.92%	11.36%	0.0125	0.1103
55	Spire Inc.	SR	23.74%	26.73%	27.30%	27.13%	15.48%	24.08%	0.0502	0.2084
56	UGI Corp.	UGI	6.19%	11.52%	20.30%	15.92%	10.57%	12.90%	0.0539	0.4178
57	Proxy Group						Average	26.27%	0.0342	0.1564
								5-year	Std	Co-efficient of variation
			2024	2023	2022	2021	2020	Average	Dev.	of Operating Margin
58	Liberty Utilities (Litchfield Park Water & Sewer), Corp		15.89%	35.47%	39.13%	41.06%	39.64%	34.24%	0.1046	0.3056
59	**Risk relative to the average risk of the proxy group**									**1.95**

[1] Based on information from Value Line Investment Analyzer weekly ended May 21, 2025.

Line No.	Return on Equity (ROE)[1]							5-year	Std	Co-efficient of variation
2			2023	2022	2021	2020	2019	Average	Dev.	of ROE
3	Company[1]	Symbol								
4	American States Water	AWR	16.1%	11.0%	13.8%	13.5%	14.0%	13.68%	0.0180	0.1314
5	American Water Works	AWK	9.6%	10.7%	17.3%	11.0%	10.1%	11.75%	0.0315	0.2681
6	Essential Utilities	WTRG	8.5%	8.7%	8.3%	6.1%	5.8%	7.46%	0.0140	0.1878
7	California Water	CWT	3.6%	7.3%	8.6%	10.5%	8.1%	7.62%	0.0252	0.3310
8	Middlesex	MSEX	7.4%	10.6%	9.9%	11.1%	10.4%	9.88%	0.0143	0.1452
9	York Water Company	YORW	9.5%	11.1%	11.6%	10.7%	10.6%	10.70%	0.0080	0.0745
10	Atmos Energy	ATO	8.1%	8.2%	8.4%	8.5%	8.9%	8.45%	0.0030	0.0350
11	Chesapeake Utilities	CPK	7.0%	10.6%	10.8%	10.1%	10.9%	9.88%	0.0164	0.1658
12	New Jersey Resources	NJR	13.3%	13.2%	12.7%	10.6%	11.3%	12.23%	0.0121	0.0987
13	NiSource Inc.	NI	9.2%	10.8%	10.6%	10.4%	9.7%	10.12%	0.0066	0.0656
14	Northwest Natural	NWN	7.3%	7.3%	8.4%	7.9%	7.5%	7.70%	0.0046	0.0600
15	ONE Gas Inc.	OGS	8.4%	8.6%	8.6%	8.8%	8.8%	8.66%	0.0019	0.0218
16	Southwest Gas	SWX	4.6%	NM	6.8%	8.7%	8.5%	7.14%	0.0193	0.2695
17	Spire Inc.	SR	7.6%	8.0%	10.6%	3.2%	7.9%	7.46%	0.0266	0.3569
18	UGI Corp.	UGI	12.1%	13.7%	31.5%	21.9%	6.8%	17.19%	0.0968	0.5629
19	Proxy Group		8.8%	10.0%	11.9%	10.2%	9.3%	10.00%	0.0199	0.1849

							5-year	Std	Co-efficient of variation
		2024	2023	2022	2021	2020	Average	Dev.	of ROE
20	Company	4.17%	10.14%	10.72%	11.78%	12.07%	9.77%	0.0323	0.3303
21	**Risk relative to the average risk of the proxy group**								**1.79**

[1] Based on information from Value Line Investment Analyzer weekly ended February 8, 2023.

1 Operating Leverage = Percent Change in Operating Income/Percent Change in Sales
2 (also a measure of business risk)

							5-year
4	Company[1]	Symbol	2024	2023	2022	2021	2020	Average
5	American States Water	AWR	2.61	6.93	3.70	(0.70)	2.38	2.98
6	American Water Works	AWK	3.63	(1.97)	(1.10)	1.44	(0.61)	0.28
7	Essential Utilities	WTRG	0.62	1.14	1.26	0.33	0.96	0.86
8	California Water	CWT	5.82	1.77	50.00	3.83	14.48	15.18
9	Middlesex	MSEX	(4.43)	2.51	(6.93)	0.94	(1.25)	(1.83)
10	York Water Company	YORW	0.53	(1.58)	0.59	0.86	(0.23)	0.04
11	Atmos Energy	ATO	8.10	0.20	0.50	(2.87)	(0.28)	1.13
12	Chesapeake Utilities	CPK	(8.49)	0.44	0.92	3.69	0.89	(0.51)
13	New Jersey Resources	NJR	(0.00)	0.22	7.02	(1.51)	0.82	1.31
14	NiSource Inc.	NI	(2.37)	0.50	0.72	2.11	3.56	0.90
15	Northwest Natural	NWN	0.78	3.08	0.89	0.93	0.86	1.31
16	ONE Gas Inc.	OGS	(0.93)	0.26	0.15	(0.44)	(0.02)	(0.20)
17	Southwest Gas	SWX	NM	NM	(1.09)	2.40	0.66	0.65
18	Spire Inc.	SR	0.36	2.24	1.04	(13.39)	(2.65)	(2.48)
19	UGI Corp.	UGI	4.50	(0.64)	3.31	(3.36)	(0.45)	0.67
20	Average		1.47	1.47	7.92	1.11	2.62	1.35

							5-year
		2024	2023	2022	2021	2020	Average
21	Liberty Utilities (Litchfield Park Water & Sewer), Corp	16.08	0.28	(0.45)	1.55	NM	4.36
22	**Risk relative to the average risk of the proxy group**						**3.23**

[1] Based on information from Value Line Investment Analyzer weekly ended May 21, 2025.

Liberty Utilities (Litchfield Park Water & Sewer), Corp.
Comparative Risk Study
Beta Estimate Using Duff and Phelps Risk Study Portfolio Information

A. Beta Estimates for Water Sample Group and Company[1]

Line No.		Portfolio	Operating Margin	Portfolio	CV (Operating Margin)[1]	Portfolio	CV (ROE)[1]
1	Company	2	34.24%	8	30.56%	16	33.03%
2	Proxy Group	3	26.27%	15	15.64%	21	18.49%

		Portfolio Sum Beta[2]	Portfolio Sum Beta[3]	Portfolio Sum Beta[4]	Average
3	Company	0.90	1.24	1.10	
4	Proxy Group	0.84	1.09	0.95	
5	Percentage Difference	7.1%	13.8%	15.8%	**12.2%**

B. Assume percentage difference is the same for water utilities as companies in general

		Value Line Beta	Sum Beta
6	Proxy Group[5]	0.82	0.81
7	Implied Beta for Company[6]	0.92	0.91

Notes:
[1] CV stands for Coefficient of Variation,
[2] Source is Kroll, 2025 Supplementary Risk Study, Companies Ranked by Operating Margin.
[3] Source is Kroll 2025, Supplementary Risk Study, Companies Ranked by CV (Operating Margin).
[4] Source is Kroll 2025, Supplementrary Risk Study, Companies Ranked by CV (Operating Margin).
[5] Source is Table 2.
[6] Calculated by multiplying (1+ percentage difference in risk study betas) times average beta for the proxy group.

Liberty Utilities (Litchfield Park Water & Sewer), Corp.
Capital Asset Pricing Model (CAPM)

Line No.		R_f[1]	+ (	(beta[2]	x	RP_M[4])			=	k	CAPM Results From Table 10	Difference
1	Traditional CAPM	4.4%	+ (	0.92	x	6.58%)			=	10.50%	9.80%	0.70%
2												
3		R_f[1]		RP_M[4] x .25	+ (	(beta[2]	x	RP_M[4]) x .75				
4	Empirical CAPM	4.4%	+	6.58%	x .25 + (	0.92	x	6.58%) x .75	=	10.60%	10.10%	0.50%
5												
6		R_f[1]	+ (	beta[3]	x	RP_M[5]) +	RPs[6]					
7	Modified CAPM	4.4%	+ (	0.91	x	5.96%) +	1.99%		=	11.80%	11.20%	0.60%
8												
9												
10	Average									11.00%	10.40%	0.60%

Notes:

[1] Source Table 8.

[2] Implied VL Beta of Company. Source is page 3.

[3] Implied Sum Beta of Company. Source is page 3.

[4] Estimate of Market Risk Premium (MRP):

Historical MRP (1926-2023)	7.31%	Source is Kroll 2025 Supplementary Exhibits. Through 2024.
Current MRP	5.86%	Source is Table 11
Average MRP	6.58%	

[5] Estimate of MRP

Historical MRP (1963-2023)	6.07%	Source is Kroll 2025 Supplementary Exhibits. Through 2024.
Current MRP	5.86%	Source is Table 11
Average MRP	5.96%	

[6] Size Premium. Sources Exhibit TJB-COC-DT2, page 2.

Liberty Utilities (Litchfield Park Water & Sewer), Corp.
Risk Premium Estimates for Use In Modified CAPM
Based on *Kroll Cost of Capital Navigator Supplementary Data* Risk Study and Regression Data Equations

			Measures of size (Millions)						
Line No.	Company	Symbol	MV Equity[1]	Book Equity[1]	MVIC[1]	5 Yr Avg. Net Income[1]	Total Assets[1]	5 Yr Avg. EBITDA[1]	Sales
1	American States Water	AWR	$ 3,094	$ 921	$ 3,900	$ 94	$ 2,246	$ 185	$ 492
2	American Water Works	AWK	$ 28,655	$ 10,332	$ 41,173	$ 3,867	$ 30,298	$ 1,975	$ 3,792
3	Essential Utilities	WTRG	$ 11,304	$ 6,199	$ 18,672	$ 381	$ 16,841	$ 849	$ 2,288
4	California Water	CWT	$ 3,013	$ 1,636	$ 4,118	$ 82	$ 4,596	$ 269	$ 846
5	Middlesex	MSEX	$ 1,129	$ 446	$ 1,482	$ 37	$ 1,236	$ 76	$ 162
6	York Water Company	YORW	$ 506	$ 231	$ 712	$ 16	$ 511	$ 33	$ 55
7	Atmos Energy	ATO	$ 25,496	$ 12,162	$ 33,357	$ 684	$ 22,517	$ 1,702	$ 4,202
8	Chesapeake Utilities	CPK	$ 2,999	$ 1,244	$ 4,186	$ 78	$ 3,305	$ 215	$ 681
9	New Jersey Resources	NJR	$ 4,903	$ 2,201	$ 7,783	$ 217	$ 6,538	$ 435	$ 2,906
10	NiSource Inc.	NI	$ 18,253	$ 7,785	$ 29,308	$ 640	$ 31,077	$ 2,229	$ 5,851
11	Northwest Natural	NWN	$ 1,729	$ 1,283	$ 3,155	$ 79	$ 4,867	$ 314	$ 1,037
12	ONE Gas Inc.	OGS	$ 4,701	$ 3,106	$ 7,086	$ 209	$ 7,771	$ 611	$ 2,578
13	Southwest Gas	SWX	$ 5,180	$ 3,312	$ 9,790	$ 119	$ 11,870	$ 727	$ 4,960
14	Spire Inc.	SR	$ 4,462	$ 2,991	$ 8,167	$ 197	$ 10,314	$ 744	$ 2,199
15	UGI Corp.	UGI	$ 7,043	$ 4,344	$ 13,486	$ 568	$ 15,401	$ 1,506	$ 10,106
16	Liberty Utilities (Litchfield Park Water & Sewer), Corp.		N/A	$ 114.0	N/A	$ 9.6	$ 301.2	$ 18.5	$ 21.4

[1] From Value Line Investment Anlayzer data weekly as of May 21, 2025.

Net Income Data ($ millions)

	Company	Symbol	2023	2022	2021	2020	2019	Average
17	American States Water	AWR	$ 124.9	$ 78.4	$ 94.4	$ 86.4	$ 84.3	$ 93.7
18	American Water Works	AWK	$ 4,234.0	$ 3,792.0	$ 3,920.0	$ 3,777.0	$ 3,610.0	$ 3,866.6
19	Essential Utilities	WTRG	$ 498.2	$ 465.2	$ 431.6	$ 284.9	$ 224.5	$ 380.9
20	California Water	CWT	$ 51.9	$ 96.0	$ 101.1	$ 96.8	$ 63.1	$ 81.8
21	Middlesex	MSEX	$ 31.5	$ 42.4	$ 36.5	$ 38.4	$ 33.9	$ 36.6
22	York Water Company	YORW	$ 19.6	$ 17.0	$ 16.6	$ 14.4	$ 13.4	$ 16.2
23	Atmos Energy	ATO	$ 885.9	$ 774.4	$ 665.6	$ 580.5	$ 511.4	$ 683.5
24	Chesapeake Utilities	CPK	$ 87.2	$ 88.4	$ 83.5	$ 70.6	$ 61.1	$ 78.2
25	New Jersey Resources	NJR	$ 264.7	$ 240.3	$ 207.7	$ 196.2	$ 175.0	$ 216.8
26	NiSource Inc.	NI	$ 759.1	$ 703.3	$ 626.3	$ 562.6	$ 549.8	$ 640.2
27	Northwest Natural	NWN	$ 93.9	$ 86.3	$ 78.7	$ 70.3	$ 65.3	$ 78.9
28	ONE Gas Inc.	OGS	$ 231.2	$ 221.7	$ 206.4	$ 196.4	$ 186.8	$ 208.5
29	Southwest Gas	SWX	$ 150.9	$ (203.3)	$ 200.8	$ 232.3	$ 213.9	$ 118.9
30	Spire Inc.	SR	$ 217.5	$ 220.8	$ 271.7	$ 88.6	$ 184.6	$ 196.6
31	UGI Corp.	UGI	$ 613.0	$ 626.0	$ 629.0	$ 561.0	$ 412.9	$ 568.4

		2023	2022	2021	2020	2019	Average
32	Liberty Utilities (Litchfield Park Water & Sewer), Corp.	$ 6.0	$ 11.7	$ 10.4	$ 10.5	$ 9.6	$ 9.6

Liberty Utilities (Litchfield Park Water & Sewer), Corp.
Risk Premium Estimates for Use In Modified CAPM
Based on *Kroll Cost of Capital Navigator Supplementary Data* Risk Study and Regression Data Equations

Line No.	EBITDA Data ($ millions) Company	Symbol	2023	2022	2021	2020	2019	Average
1	American States Water	AWR	$ 240	$ 168	$ 181	$ 167	$ 169	$ 185
2	American Water Works	AWK	$ 2,516	$ 1,922	$ 1,832	$ 1,852	$ 1,752	$ 1,975
3	Essential Utilities	WTRG	$ 1,048	$ 1,073	$ 901	$ 700	$ 522	$ 849
4	California Water	CWT	$ 240	$ 297	$ 271	$ 305	$ 234	$ 269
5	Middlesex	MSEX	$ 87	$ 88	$ 69	$ 71	$ 67	$ 76
6	York Water Company	YORW	$ 34	$ 36	$ 34	$ 33	$ 31	$ 33
7	Atmos Energy	ATO	$ 2,058	$ 1,809	$ 1,696	$ 1,533	$ 1,413	$ 1,702
8	Chesapeake Utilities	CPK	$ 255	$ 238	$ 218	$ 193	$ 172	$ 215
9	New Jersey Resources	NJR	$ 560	$ 536	$ 490	$ 339	$ 251	$ 435
10	NiSource Inc.	NI	$ 2,538	$ 2,251	$ 2,051	$ 1,987	$ 2,319	$ 2,229
11	Northwest Natural	NWN	$ 424	$ 383	$ 277	$ 252	$ 235	$ 314
12	ONE Gas Inc.	OGS	$ 729	$ 647	$ 584	$ 562	$ 536	$ 611
13	Southwest Gas	SWX	$ 1,019	$ 446	$ 741	$ 755	$ 675	$ 727
14	Spire Inc.	SR	$ 888	$ 825	$ 823	$ 701	$ 484	$ 744
15	UGI Corp.	UGI	$ 1,085	$ 1,682	$ 2,014	$ 1,528	$ 1,222	$ 1,506
16	Liberty Utilities (Litchfield Park Water & Sewer), Corp.		$ 17.6	$ 20.0	$ 18.9	$ 18.5	$ 17.5	$ 18.5

	Regression Equation	MV Equity	Book Equity	MVIC	5 Yr Avg. Net Income	Total Assets	5 Yr Avg. EBITDA	Sales
17	Constant	9.046%	6.458%	8.770%	5.617%	7.975%	6.323%	7.251%
18	X Coefficient(s)	-1.746%	-1.153%	-1.614%	-1.201%	-1.429%	-1.266%	-1.209%

RP_s (levered)

	Company	Symbol	MV Equity	Book Equity	MVIC	5 Yr Avg. Net Income	Total Assets	5 Yr Avg. EBITDA	Sales	Average	
19	American States Water	AWR	2.95%	3.04%	2.97%	3.25%	3.19%	3.45%	4.00%	3.26%	
20	American Water Works	AWK	1.26%	1.83%	1.32%	1.31%	1.57%	2.15%	2.92%	1.77%	
21	Essential Utilities	WTRG	1.97%	2.09%	1.88%	2.52%	1.94%	2.62%	3.19%	2.31%	
22	California Water	CWT	2.97%	2.75%	2.94%	3.32%	2.74%	3.25%	3.71%	3.10%	
23	Middlesex	MSEX	3.72%	3.40%	3.65%	3.74%	3.56%	3.94%	4.58%	3.80%	
24	York Water Company	YORW	4.32%	3.73%	4.17%	4.16%	4.11%	4.40%	5.15%	4.29%	
25	Atmos Energy	ATO	1.35%	1.75%	1.47%	2.21%	1.76%	2.23%	2.87%	1.95%	
26	Chesapeake Utilities	CPK	2.98%	2.89%	2.92%	3.34%	2.95%	3.37%	3.83%	3.18%	
27	New Jersey Resources	NJR	2.60%	2.60%	2.49%	2.81%	2.52%	2.98%	3.06%	2.73%	
28	NiSource Inc.	NI	1.61%	1.97%	1.56%	2.25%	1.56%	2.09%	2.70%	1.96%	
29	Northwest Natural	NWN	3.39%	2.87%	3.12%	3.34%	2.71%	3.16%	3.60%	3.17%	
30	ONE Gas Inc.	OGS	2.64%	2.43%	2.56%	2.83%	2.42%	2.80%	3.13%	2.68%	
31	Southwest Gas	SWX	2.56%	2.40%	2.33%	3.12%	2.15%	2.70%	2.78%	2.58%	
32	Spire Inc.	SR	2.67%	2.45%	2.46%	2.86%	2.24%	2.69%	3.21%	2.65%	
33	UGI Corp.	UGI	2.33%	2.26%	2.10%	2.31%	1.99%	2.30%	2.41%	2.24%	
34	Average		2.87%	2.81%	2.82%	3.05%	2.85%	3.30%	3.92%	3.09%	[A]
35	Comparative Risk Study Risk Premium Adjustment									-1.10%	[B]
35	Adjusted Risk Premium - Size (RP_s)									**1.99%**	[C] = [A]-[B]
36											
36	Liberty Utilities (Litchfield Park Water & Sewer), Corp.		N/A	4.09%	N/A	4.44%	4.43%	4.72%	5.64%	4.66%	[D]
37	Comparative Risk Study Risk Premium Adjustment									-1.00%	[E]
38	Adjusted Risk Premium - Size (RP_s)									3.66%	[F] = [D]+[E]
39	Adjusted Risk Premium - Size (RP_s) for	Liberty Utilities (Litchfield Park Water & Sewer), Corp.								3.66%	[F]
40	Adjusted Risk Premium - Size (RP_s) for Water Proxy Group									1.99%	[G]
41	Indicated Risk Premium Over Proxy Group									**1.67%**	[H] = [F]-[G]

Liberty Utilities (Litchfield Park Water & Sewer), Corp.
Comparative Risk Study - Adjustment to Size Premium
Based on *Kroll Cost of Capital Navigator Supplementary Data* Risk Study and Regression Data Equations

Step 1 - Identify the equivalent C exhibit for the B exhibits used to compute the size premium.
Step 2 - Indentify the fundamental risk characteristics of the companies of the equivalent portfolio in the C- exhibit.
Step 3 - Indentify the guideline portfolio in the D exhibit which has the most simliar fundamental risk characteristic found in Step 2 and find the smoothed average risk premium.
Step 4 - Indentify the guideline portfolio in the D exhibit which has the most simliar fundamental risk characteristic to the Company and find the smoothed average risk premium.
Step 5 - The diffence in smoothed average risk premiums is the maxmium indicated risk adjustment. The range of adjustments may be 0 or at the maximum depending on the circumstances.

Measures of size
(Millions)

Line No.	Company	Symbol	MV Equity[1]	Book Equity[1]	MV/IC[1]	5 Yr Avg. Net Income[1]	Total Assets[1]	5 Yr Avg. EBITDA[1]	Sales
1	American States Water	AWR	$ 3,094	$ 921	$ 3,900	$ 94	$ 2,246	$ 185	$ 492
2	American Water Works	AWK	$ 28,655	$ 10,332	$ 41,173	$ 3,867	$ 30,298	$ 1,975	$ 3,792
3	Essential Utilities	WTRG	$ 11,304	$ 6,199	$ 18,672	$ 381	$ 16,841	$ 849	$ 2,288
4	California Water	CWT	$ 3,013	$ 1,636	$ 4,118	$ 82	$ 4,596	$ 269	$ 846
5	Middlesex	MSEX	$ 1,129	$ 446	$ 1,482	$ 37	$ 1,236	$ 76	$ 162
6	York Water Company	YORW	$ 506	$ 231	$ 712	$ 16	$ 511	$ 33	$ 55
7	Atmos Energy	ATO	$ 25,496	$ 12,162	$ 33,357	$ 684	$ 22,517	$ 1,702	$ 4,202
8	Chesapeake Utilities	CPK	$ 2,999	$ 1,244	$ 4,186	$ 78	$ 3,305	$ 215	$ 681
9	New Jersey Resources	NJR	$ 4,903	$ 2,201	$ 7,783	$ 217	$ 6,538	$ 435	$ 2,906
10	NiSource Inc.	NI	$ 18,253	$ 7,785	$ 29,308	$ 640	$ 31,077	$ 2,229	$ 5,851
11	Northwest Natural	NWN	$ 1,729	$ 1,283	$ 3,155	$ 79	$ 4,867	$ 314	$ 1,037
12	ONE Gas Inc.	OGS	$ 4,701	$ 3,106	$ 7,086	$ 209	$ 7,771	$ 611	$ 2,578
13	Southwest Gas	SWX	$ 5,180	$ 3,312	$ 9,790	$ 119	$ 11,870	$ 727	$ 4,960
14	Spire Inc.	SR	$ 4,462	$ 2,991	$ 8,167	$ 197	$ 10,314	$ 744	$ 2,199
15	UGI Corp.	UGI	$ 7,043	$ 4,344	$ 13,486	$ 568	$ 15,401	$ 1,506	$ 10,106

Equivalent C Exhibit Portfolio Operating Margin

	Company	Symbol	MV Equity (Table C-1)	Book Equity (Table C-2)	MV/IC (Table C-4)	5 Yr Avg. Net Income (Table C-3)	Total Assets (Table C-5)	5 Yr Avg. EBITDA (Table C-6)	Sales (Table C-7)	
16	American States Water	AWR	9.40%	9.10%	9.19%	9.59%	8.97%	8.78%	8.83%	
17	American Water Works	AWK	13.30%	12.39%	13.14%	13.75%	12.64%	12.46%	10.21%	
18	Essential Utilities	WTRG	11.86%	12.15%	12.14%	11.59%	11.95%	11.24%	9.70%	
19	California Water	CWT	9.32%	10.01%	9.32%	9.30%	10.28%	9.61%	9.13%	
20	Middlesex	MSEX	7.84%	8.24%	7.96%	8.03%	8.44%	7.61%	8.77%	
21	York Water Company	YORW	6.59%	7.43%	6.85%	6.08%	7.41%	6.63%	8.77%	
22	Atmos Energy	ATO	13.25%	12.66%	13.00%	12.30%	11.97%	12.38%	10.34%	
23	Chesapeake Utilities	CPK	9.31%	9.47%	9.36%	9.20%	9.80%	9.08%	8.95%	
24	New Jersey Resources	NJR	10.40%	10.95%	10.57%	10.78%	10.40%	10.33%	9.84%	
25	NiSource Inc.	NI	12.55%	12.31%	12.83%	12.40%	12.62%	12.57%	10.04%	
26	Northwest Natural	NWN	8.53%	9.56%	8.87%	9.22%	10.25%	9.58%	9.35%	
27	ONE Gas Inc.	OGS	10.28%	11.37%	10.29%	10.79%	10.93%	10.62%	9.76%	
28	Southwest Gas	SWX	10.57%	11.62%	10.75%	9.64%	11.50%	10.85%	10.04%	
29	Spire Inc.	SR	10.18%	11.30%	10.57%	10.81%	11.42%	10.90%	9.69%	
30	UGI Corp.	UGI	10.97%	11.84%	11.46%	12.46%	11.70%	12.07%	9.93%	
22	Proxy Group Average		10.29%	10.69%	10.42%	10.40%	10.68%	10.31%	9.56%	10.34%
23	Smoothed Average Risk Premium based upon OM									10.83%

Liberty Utilities (Litchfield Park Water & Sewer), Corp.
Comparative Risk Study - Adjustment to Size Premium
Based on *Kroll Cost of Capital Navigator Supplementary Data* Risk Study and Regression Data Equations

Line No.	Equivalent C Exhibit Portfolio CV(Operating Margin) Company	Symbol	MV Equity (Table C-1)	Book Equity (Table C-2)	MVIC (Table C-4)	5 Yr Avg. Net Income (Table C-3)	Total Assets (Table C-5)	5 Yr Avg. EBITDA (Table C-6)	Sales (Table C-7)	
1	American States Water	AWR	21.86%	22.14%	21.83%	21.35%	22.16%	24.14%	39.06%	
2	American Water Works	AWK	13.44%	14.07%	13.68%	11.79%	13.25%	13.60%	17.59%	
3	Essential Utilities	WTRG	14.90%	15.20%	14.56%	15.13%	14.30%	15.52%	20.54%	
4	California Water	CWT	22.11%	18.84%	21.55%	22.82%	17.39%	20.03%	28.46%	
5	Middlesex	MSEX	28.76%	28.04%	28.45%	29.74%	26.43%	33.10%	42.96%	
6	York Water Company	YORW	40.93%	38.26%	40.28%	51.09%	39.83%	47.22%	42.98%	
7	Atmos Energy	ATO	13.57%	13.67%	13.71%	13.76%	14.52%	14.22%	16.88%	
8	Chesapeake Utilities	CPK	22.13%	19.47%	21.46%	23.27%	19.05%	22.32%	31.64%	
9	New Jersey Resources	NJR	18.67%	16.41%	17.19%	16.86%	16.75%	17.64%	19.46%	
10	NiSource Inc.	NI	13.58%	14.46%	13.23%	13.86%	13.15%	13.92%	16.85%	
11	Northwest Natural	NWN	25.29%	19.46%	23.62%	23.18%	17.07%	19.29%	26.04%	
12	ONE Gas Inc.	OGS	19.12%	14.27%	18.08%	17.07%	15.88%	16.46%	19.76%	
13	Southwest Gas	SWX	18.05%	14.18%	16.74%	19.71%	15.64%	16.24%	17.05%	
14	Spire Inc.	SR	19.33%	14.59%	17.07%	17.36%	15.82%	16.30%	20.91%	
15	UGI Corp.	UGI	16.83%	15.37%	15.26%	14.14%	14.85%	14.74%	16.12%	
16	Proxy Group Average		20.57%	18.56%	19.78%	20.74%	18.41%	20.32%	25.09%	20.49%
17	Smoothed Average Risk Premium based upon CV (OM)									10.11%

	Equivalent C Exhibit Portfolio CV(ROE) Company	Symbol	MV Equity (Table C-1)	Book Equity (Table C-2)	MVIC (Table C-4)	5 Yr Avg. Net Income (Table C-3)	Total Assets (Table C-5)	5 Yr Avg. EBITDA (Table C-6)	Sales (Table C-7)	
18	American States Water	AWR	35.56%	35.37%	36.10%	33.06%	36.86%	38.42%	54.98%	
19	American Water Works	AWK	24.51%	26.95%	25.60%	22.36%	27.19%	25.49%	30.25%	
20	Essential Utilities	WTRG	26.33%	28.38%	26.26%	26.20%	28.13%	28.76%	36.32%	
21	California Water	CWT	36.00%	31.29%	35.55%	35.60%	30.51%	32.39%	44.64%	
22	Middlesex	MSEX	46.40%	44.23%	45.30%	48.58%	41.84%	48.70%	58.55%	
23	York Water Company	YORW	62.41%	57.29%	58.56%	85.00%	55.41%	65.69%	58.55%	
24	Atmos Energy	ATO	24.62%	26.76%	25.43%	25.21%	30.12%	26.54%	29.27%	
25	Chesapeake Utilities	CPK	36.08%	34.31%	35.37%	36.41%	31.78%	35.65%	48.21%	
26	New Jersey Resources	NJR	31.43%	27.89%	28.55%	27.55%	28.81%	30.67%	33.24%	
27	NiSource Inc.	NI	25.15%	27.96%	24.95%	25.44%	27.07%	25.94%	28.79%	
28	Northwest Natural	NWN	41.76%	34.18%	39.07%	36.25%	30.11%	30.86%	41.83%	
29	ONE Gas Inc.	OGS	32.02%	24.64%	31.30%	28.05%	27.99%	26.97%	35.14%	
30	Southwest Gas	SWX	30.62%	25.17%	28.83%	31.69%	29.11%	27.59%	29.11%	
31	Spire Inc.	SR	31.97%	25.17%	28.88%	28.76%	28.54%	28.13%	36.55%	
32	UGI Corp.	UGI	27.96%	26.81%	27.78%	25.71%	28.49%	26.68%	29.33%	
33	Proxy Group Average		34.19%	31.76%	33.17%	34.39%	32.13%	33.23%	39.65%	34.07%
34	Smoothed Average Risk Premium based upon CV (ROE)									9.89%

Liberty Utilities (Litchfield Park Water & Sewer), Corp.
Comparative Risk Study - Adjustment to Size Premium
Based on *Kroll Cost of Capital Navigator Supplementary Data* Risk Study and Regression Data Equations

Line No.	**Estimate of Risk Premium Adjustment**					
1				5 -Year Historical		
2	Company	Symbol	OM	CV (OM)	CV(ROE)	
2	American States Water	AWR	28.38%	9.85%	13.14%	
3	American Water Works	AWK	34.47%	13.92%	26.81%	
3	Essential Utilities	WTRG	34.13%	12.14%	18.78%	
4	California Water	CWT	20.59%	19.41%	33.10%	
5	Middlesex	MSEX	36.51%	6.41%	14.52%	
6	York Water Company	YORW	46.54%	5.40%	7.45%	
7	Atmos Energy	ATO	34.87%	9.10%	3.50%	
8	Chesapeake Utilities	CPK	26.83%	5.07%	16.58%	
9	New Jersey Resources	NJR	13.92%	40.53%	9.87%	
10	NiSource Inc.	NI	27.66%	9.11%	6.56%	
11	Northwest Natural	NWN	21.59%	15.72%	6.00%	
12	ONE Gas Inc.	OGS	20.29%	14.30%	2.18%	
13	Southwest Gas	SWX	11.36%	11.03%	26.95%	
14	Spire Inc.	SR	24.08%	20.84%	35.69%	
15	UGI Corp.	UGI	12.90%	41.78%	56.29%	
16	Proxy Group Average		26.27%	15.64%	18.49%	
	Proxy Group Risk Differences					
						Average
17	Smoothed Average Risk Premium From Equivalent D Exhibit		8.20%	9.84%	9.48%	9.17%
18	Smoothed Average Risk Premium From Equivalent C Exhibit		10.83%	10.11%	9.89%	10.27%
19	**Indicated Risk Adjustment**		-2.63%	-0.27%	-0.40%	-1.10%
						Recommended
20	Possible Risk Adjustment		0.00%	to	-1.10%	-1.10%
				5 -Year Historical		
			OM	CV (OM)	CV(ROE)	
21	Liberty Utilities (Litchfield Park Water & Sewer), Corp.		34.24%	30.56%	33.03%	
						Average
22	Smoothed Average Risk Premium From Equivalent D Exhibit		7.45%	10.51%	9.87%	9.27%
23	Smoothed Average Risk Premium From Equivalent C Exhibit		10.83%	10.11%	9.89%	10.27%
24	Indicated Risk Adjustment		-3.38%	0.40%	-0.02%	-1.00%
						Recommended
25	Possible Risk Adjustment		0.00%	to	-1.00%	-1.00%

Sahuarita Water Company
Excess Returns Over Returns Predicted by the CAPM
Over a 10-year Period (2014-2023)[1]

Exhibit
TJB-COC-DT4

	Category	Company	Symbol	Industry	Average Excess Return	Average "True" Beta[2]
1	Low-Cap	American States Water	AWR	Water	6.66%	1.64
2	Large-Cap	American Water Works	AWK	Water	7.96%	1.83
3	Mid-Cap	Essential Utilities	WTRG	Water	0.48%	0.85
4	Low-Cap	California Water	CWT	Water	4.62%	1.36
5	Low-Cap	Middlesex	MSEX	Water	10.67%	2.24
6	Low-Cap	SJW Corp.	SJW	Water	5.48%	1.53
7	Micro-Cap	York Water Company	YORW	Water	2.32%	1.08
8	Large-Cap	Atmos Energy	ATO	Gas Distr	5.05%	1.46
9	Low-Cap	Chesapeake Utilities	CPK	Gas Distr	5.55%	1.50
10	Mid-Cap	New Jersey Resources	NJR	Gas Distr	2.84%	1.21
11	Mid-Cap	NiSource Inc.	NI	Gas Distr	3.50%	1.27
12	Low-Cap	Northwest Natural	NWN	Gas Distr	-3.40%	0.24
13	Mid-Cap	Southwest Gas	SWX	Gas Distr	-3.14%	0.38
14	Mid-Cap	Spire Inc.	SR	Gas Distr	6.37%	1.64
15	Mid-Cap	UGI Corp.	UGI	Gas Distr	-4.42%	0.31
				Water Only		
				Low-Cap/Micro-Cap (Small-Cap)	5.95%	1.57
				Large-Cap/Mid-Cap (Large-Cap)	4.22%	1.34
				Excess Small-Cap over Large-Cap	1.73%	0.23
				Water and Gas Distr		
				Low-Cap/Micro-Cap (Small-Cap)	4.56%	1.37
				Large-Cap/Mid-Cap (Large-Cap)	2.33%	1.12
				Excess Small-Cap over Large-Cap	2.23%	0.25

[1] Analysis compares annual total returns (2014-2023) with those predicted by the CAPM using beta available at the beginning of each year (Value Line beta in December of the prior year), a proxy for the risk -free rate (monthly average of 30-year US Treasury for December of the prior year), and a MRP available at the beginning of each year.

[2] The beta required to account for the total return including the excess.

DIRECT TESTIMONY OF THOMAS BOURASSA

ON BEHALF OF LIBERTY UTILITIES (LITCHFIELD PARK WATER & SEWER) CORP.

June 30, 2025

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I. INTRODUCTION AND QUALIFICATIONS

Q. Please state your name and address.

A. My name is Thomas J. Bourassa. My business address is 139 W. Wood Drive, Phoenix, Arizona 85029.

Q. What is your profession and background?

A. I am a Certified Public Accountant and am self-employed, providing consulting services to utility companies as well as general accounting services. I have a B.S. in Chemistry and Accounting from Northern Arizona University (1980) and an M.B.A. with an emphasis in Finance from the University of Phoenix (1991).

Q. Could you briefly summarize your prior work and regulatory experience?

A. Yes. Prior to becoming a private consultant, I was employed by High-Tech Institute, Inc., and served as controller and chief financial officer. Prior to working for High-Tech Institute, I worked as a division controller for the Apollo Group, Inc. Before joining the Apollo Group, I was employed at Kozoman & Kermode, CPAs. In that position, I prepared compilations and other write-up work for water and wastewater utilities, as well as tax returns.

In my private practice, I have prepared and/or assisted in the preparation of several water and wastewater utility rate applications before the Arizona Corporation Commission ("Commission").

Q. On whose behalf are you testifying in this proceeding?

A. I am testifying in this proceeding on behalf of the applicant, Liberty Utilities (Litchfield Park Water and Sewer) Corp. ("Liberty Litchfield Park" or the "Company"). Liberty Litchfield Park is seeking a determination of its fair value rate base and the setting of rates and charges for water and wastewater based on that finding.

II. OVERVIEW OF THE COMPANY'S REQUEST FOR RATE RELIEF

Q. What is the purpose of your direct testimony?

A. I will testify in support of the Company's proposed adjustments to its rates and charges for water and wastewater utility service. I am sponsoring the direct schedules, which are filed concurrently in support of the Company's application. I was responsible for the preparation of these schedules based on my investigation and review of Liberty Litchfield Park's relevant books and records.

For convenience, the two volumes of my direct testimony, each with the relevant schedules attached, are being filed separately in this case. In this volume of my direct testimony, I address the rate bases, income statements (revenue and operating expenses), required increases in revenue, and rate designs and proposed rates and charges for service for the Company's water and wastewater division. Schedules A through C, E-G and H, labeled separately as "Water Division" and "Wastewater Division," are attached to this portion of my direct testimony. The Company has prepared cost of service studies (G schedules) for both divisions.

In the second volume of my direct testimony, to which the D schedules are attached, I address cost of capital. Liberty Litchfield Park is requesting a return on common equity of 10.80 percent and a weighted average cost of debt of 5.69 percent. As shown on Schedule D-1, the Company's capital structure for ratemaking purposes consists of 54 percent equity and 46 percent debt. The weighted cost of capital is 8.45 percent.

Q. Please Summarize the Company's application.

A. The Company is seeking a revenue increase of 38.40 percent for the water division and a revenue increase of 53.76 percent for its wastewater division. The test year used by Liberty Litchfield Park is the 12-month period ending December 31, 2024.

The Company is requesting an 8.45 percent return on its fair value rate base ("FVRB"). The Company is using its original cost rate base as its FVRB. The Company has also proposed certain pro forma adjustments to reflect known and measurable changes to rate base, expenses and revenues for each division. These pro forma adjustments are consistent with normal ratemaking and are contemplated by the Commission's rules and regulations governing rate applications. See R14-2-103. These adjustments are necessary to obtain a normal or realistic relationship between revenues, expenses and rate base on a forward basis.

The Company's fair value rate base for the water division is $69,765,704. The increase in revenues to provide for recovery of operating expenses and an 8.45 percent return on rate base is approximately $6,203,028, an increase of approximately 38.40 percent over the adjusted and annualized test year revenues.

The Company's fair value rate base for the wastewater division is $133,887,159. The increase in revenues to provide for recovery of operating expenses and an 8.45 percent return on rate base is approximately $11,596,379, an increase of approximately 53.76 percent over the adjusted and annualized test year revenues.

Q. Why is the Company filing for new rate at this time?

A. For the water division, Liberty Litchfield Park is no longer earning a return on the fair value of its water plant devoted to service. While Liberty Litchfield Park has added over $67 million of new plant investments necessary to serve water customers since the last rate case which used a test year ended December 31, 2016 (Decision 76799, August 15, 2018), rate base for the water division has increased by nearly $29 million.

The primary drivers of the rate increase Liberty Litchfield Park requests for water

service are an increase in rate base as well as an increase in operating expenses since the prior rate case. Notably, with respect to rate base, the Company is seeking approximately $8.28 million of post-test year plant for the water division. With respect to operating expenses, some of the operating expenses that have increased significantly since the last rate case are depreciation expense, property tax expense, purchased power, property taxes, and contractual services. While the number of customers has increased by nearly 4,000 since the last test year, revenues have not kept pace with the increase in expenses. Due to the increased rate base and operating expenses, the Company's current rate of return for the water division, based on the adjusted test year results, is only 1.91 percent.

Liberty Litchfield Park is also no longer earning a reasonable return on the fair value of its wastewater plant devoted to service for the wastewater division. This is in part due to the Company's substantial plant investments (approximately $157 million) since the last rate case and a corresponding increase in rate base of nearly $89.75 million. Operating expenses have also increased since the last rate case. The primary drivers for increased operating expenses are increases in depreciation expense, purchased power, property taxes, and contractual services. With increases in operating expenses since the last rate case, all this has resulted in only a 2.03 percent current rate of return for the wastewater division based on the adjusted test year results.

III. SUMMARY OF "A", "E" AND "F" SCHEDULES

Q. Describe the schedules labeled as "A", "E", AND "F".

A. I will describe each of the schedules individually, starting with the "A" Schedules. Each division, water and wastewater, will have its own corresponding schedule. First is Schedule A-1, which is a summary of the rate base, adjusted operating

income, current rate of return, required operating income, operating income deficiency, and the increase in gross revenue. Revenues at present and proposed rates and customer classifications are also shown on this schedule.

Q. Describe the other "A" Schedules.

A. Schedule A-2 is a summary of results of operations for the test year, prior two years, and a projected year at present rates and proposed rates. Schedule A-3 contains the Company's capital structure for the test year and the two prior years. Schedule A-4 contains the plant construction, and plant in service for the test year and prior two years. The projected plant additions are also shown on this schedule. Schedule A-5 is the summary of Liberty Litchfield Park's statement of cash flow for the prior two years, the test year at present rates, and a projected year at present and proposed rates.

Q. Describe the "E" Schedules.

A. The "E" Schedules are based on Liberty Litchfield Park's actual operating results, as reported in annual reports filed with the Commission. Schedule E-1 contains the comparative balance sheets for the years 2022, 2023, and 2024, ending on December 31. Schedule E-2, page 1, contains the income statement for the years 2022, 2023, and 2024, ending on December 31. Schedule E-3 contains a statement of changes in the Company's financial position for the test year and the two prior years. Schedule E-4 provides the changes in stockholder's equity for the test year and the two prior years. Schedule E-5 contains Liberty Litchfield Park's plant in service at the end of the test year, and one year prior to the end of the test year and the associated change in plant additions, reclassifications or retirement for the test year. Schedule E-6, which provides department financial results, has been omitted as Liberty Litchfield Park does not have departments and the other E schedules are provided by division. Schedule E-7 contains operating statistics for the years 2022, 2023, and 2024, ending on December 31. Schedule E-8 contains the taxes charged to operations for the years 2022, 2023, and 2024, ending on December 31.

The notes to the financial statements and the financial assumptions used in preparing the rate filing schedules are shown on Schedules E-9 and F-4, respectively, in accordance with the Commission's standard filing requirements. Audited financial statements have not been prepared for Liberty Litchfield Park.

Q. Describe the "F" Schedules.

A. Schedule F-1 contains the results of operations at the present rates (actual and adjusted), and at proposed rates. Schedule F-2 contains the summary of changes in financial position (cash flow) for the prior two years, the test year at present rates, and a projected year at present and proposed rates. Schedule F-3 shows the Company's projected construction requirements for 2025, 2026, and 2027. Schedule F-4 contains the assumptions used in developing the adjustments and projections contained in the rate filing.

IV. SUMMARY OF RATE BASE ("B" SCHEDULES)

Q. Explain the Rate Base schedules, which are labeled as the "B" Schedules.

A. Each division will have its own corresponding schedule. I will start with Schedule B-5, which is the working capital allowance. The cash working capital allowance is based upon a lead lag study which determines the revenue and expense lags which are then applied (on a weighted basis) to the Company's proposed operating expenses.

Q. Did you prepare Schedules B-3 and B-4?

A. No, I did not prepare these schedules because the original cost rate base ("OCRB") is requested to be used as its fair value rate base ("FVRB"). Thus, these schedules are unnecessary.

Q. Have you prepared schedules showing adjustments to OCRB?

A. Yes. Schedule B-2, page 2 shows adjustments to OCRB proposed by the Company. Schedule B-2, pages 3 through 8 for the water division, Schedule B-2, pages 3 through 10 for the wastewater division, and Schedule B-5, contain the supporting information. There are seven adjustments shown on Schedule B-2, page 2 for the water division and eight for the wastewater division.

Q. Describe Adjustment number 1.

A. Adjustment number 1, as shown on Schedule B-2, page 2, adjusts plant-in-service ("PIS"). There are five PIS adjustments included in Adjustment 1. These are shown on Schedule B-2, page 3, and are labeled as adjustments "A", "B", "C", "D", and "E".

Adjustment 1-A of B-2 adjustment number 1 reflects corporate plant allocated to Liberty Litchfield Park. The details of the allocation are shown on Schedule B-2, page 3.1.

Adjustment 1-B of B-2 adjustment number 1 reflects the Company's proposed post-test year plant ("PTYP"). PTYP reflects plant revenue neutral plant necessary to serve the year-end number of customers and is expected to be placed into service within 12 months of the end of the test-year. The details of the allocation are shown on Schedule B-2, page 3.2.

Adjustment 1-C of B-2 adjustment number 1 reflects Liberty Litchfield Park's proposed capitalized overhead related adjustments consistent with Decision No. 81361. Consistent with the Company's last rate case, a 21 percent capitalized overhead rate related to allocated corporate shared services was utilized for rate base additions from 2017 through April 2022. From May 2022 onward, Liberty Litchfield Park utilized overhead capitalization rates consistent with Decision No. 81361. The details of the allocation are shown on Schedule B-2, page 3.3.

Adjustment 1-D of B-2 adjustment number 1 reflects transfers of used and useful plant as of December 31, 2024, from Construction Work-In-Process to PIS. The details of the allocation are shown on Schedule B-2, page 3.4.

Adjustment 1-E of B-2 adjustment number 1 adjusts PIS to reflect the reconciliation of the Company's PIS detail to the amount recorded at the end of the test year as reflected on the E-1 schedule. The details of the allocation are shown on Schedule B-2, page 3.5. Reconstruction of the PIS balance is found on Schedule B-2, pages 3.6 through 3.10.

Q. What is the purpose of Adjustment number 2 on Schedule B-2 regarding Accumulated Depreciation?

A. Adjustment 2 on Schedule B-2, page 2, adjusts accumulated depreciation ("A/D"). There are five adjustments to A/D. These adjustments are shown on Schedule B-2, page 4, and are labeled as adjustments "A", "B", "C", "D", and "E".

Adjustment 2-A of B-2 adjustment number 2 reflects the corporate plant A/D allocated to Liberty Litchfield Park. The details of the allocation are shown on Schedule B-2, page 4.1.

Adjustment 2-B of B-2 adjustment number 2 reflects A/D associated with the Company's proposed PTYP. A/D on PTYP reflects a half-year of depreciation in accordance with the depreciation computation using half-year convention of depreciation on new plant added to PIS in a year. The details of the allocation are shown on Schedule B-2, page 4.2.

Adjustment 2-C of B-2 adjustment number 2 adjusts A/D associated with the Company's proposed adjustments to capitalized overhead in rate base since the last rate case. The details of the allocation are shown on Schedule B-2, page 4.3.

Adjustment 2-D of B-2 adjustment number 1 adjusts A/D associated with transfers of used and useful plant as at December 31, 2024, from Construction Work-In-Process to PIS. The details of the allocation are shown on Schedule B-2, page 4.4.

Adjustment 2-E of B-2 adjustment number 2 adjusts A/D to reflect the reconciliation of the Company's PIS detail to A/D amount recorded at the end of the test year as reflected on the E-1 schedule. The details of the allocation are shown on Schedule B-2, page 4.5. Reconstruction of the A/D balance is found on Schedule B-2, page 3.6 through 3.10.

Q. Do the Plant in Service and Accumulated Depreciation balances shown on Schedule B-2 reflect the last Commission Rate Order for Liberty Litchfield Park?

A. Yes. Reconstruction of the PIS balance started with the PIS balance approved by the Commission in Decision 76799 (August 15, 2018). Reconciliation to the starting balances for PIS and accumulated depreciation are shown on Schedule B-2, page 3.5. Plant additions and retirements have been added to and deducted from total plant shown on Schedule B-2, pages 3.6 to 3.10 for the water and wastewater division. These schedules also show the details for the accumulated depreciation, from the end of the last test year through the end of the current test year, using the half-year convention for depreciation. A vintage-year procedure was used to reconstruct the PIS and A/D balances.

Q. Please describe Adjustment number 3 on Schedule B-2.

A. Adjustment number 3 adjusts Contributions-in-aid of Construction ("CIAC") and Accumulated Amortization ("A.A.") to reflect reconciled balances of CIAC and A.A. as shown on Schedule B-2, page 5. Details of CIAC activity since the prior test year are shown on Schedule B-2, pages 5.1 to 5.3.

Q. Please describe Adjustment number 4 on Schedule B-2.

A. Adjustment number 4 adjusts Advances-in-aid of Construction ("AIAC") to reflect reconciled balance of AIAC as shown on Schedule B-2, page 6. Details of AIAC activity since the prior test year are shown on Schedule B-2, pages 6.1 to 6.3.

Q. Please describe Adjustment number 5 on Schedule B-2.

A. Adjustment number 5 reflects the adjustment to accumulated deferred income taxes ("ADIT") (for ratemaking purposes) based upon the timing differences between book and tax depreciation through December 31, 2024. The ADIT computation considers the Company's proposed adjustments to PIS, A/D, AIAC, and CIAC.

Q. Please describe Adjustment number 6 on Schedule B-2.

A. Adjustment number 6 adjusts excess accumulated deferred income taxes ("EADIT") to reflect reconciled balances of EADIT. Details of EADIT activity since the prior test year are shown on Schedule B-2, page 8.1.

Q. Please describe Adjustment number 7 on Schedule B-2.

A. Adjustment number 7 reflects the adjustment to Cash Working Capital. The details of Cash Working Capital are shown in Schedule B-5.

Q. Please describe Adjustment number 8 on Schedule B-2.

A. Adjustment number 8 is only used for the Wastewater decision. Adjustment 8 for the wastewater division reflects the rate base adjustment related to the deferred debit approved in the Sarival Accounting Order in Decision No. 80122 (March 20, 2025). The details of adjustment 8 are shown in Schedule B-2, page 9. This adjustment is discussed in Company Witness Manasa Rao's testimony.

Q. How was the proposed "Fair Value" Rate Base shown on Schedule A-1 determined?

A. The FVRB shown on Schedule A-1 for each division is based on OCRB.

V. SUMMARY OF INCOME STATEMENT ("C" SCHEDULES)

Q. Explain the adjustments you are proposing to the income statement as shown on Schedules C-1 AND C-2.

A. The following is a summary of adjustments shown on each division's Schedule C-1, pages 2.2. And 2.3:

Adjustment 1 annualizes depreciation expense. The proposed depreciation rate for each component of utility plant is shown on Schedule C-2, page 2. The depreciation rates approved in Liberty Litchfield Park's last rate case were account-specific rates for the water and wastewater divisions. Continuation with account specific depreciation rates is proposed.

Adjustment 2 increases the property taxes based on proposed revenues. The details of the computation are shown on Schedule C-2, page 3.

Adjustment 3 reflects an adjustment to remove test-year rate case expense. See Schedule C-2, page 4. The Company proposes recovery of rate case expense incurred for this case via a separate surcharge. The estimated rate case expense is provided by Company witness Manasa Rao.

Q. Please continue with your discussion of the income statement adjustments.

A. Adjustment 4 annualizes revenues to the year-end number of customers for the water and wastewater divisions. The annualization for the water and wastewater divisions is based on the number of customers at the end of the test year, compared to the actual number of customers during each month of the test year. Average revenues by month were computed for the test year. The average revenues were then multiplied by the increase (or decrease) in the number of customers for each month of the test year. Adjustment number 4 also increases purchased power

expense and chemicals expense based on the expected additional gallons to be sold or treated from the revenue annualization. Miscellaneous expense (postage) is also increased to reflect additional billings from the revenue annualization.

Adjustment 5 is intentionally left blank for the water and wastewater division.

Adjustment 6 adjusts revenues to correct estimated revenue accruals booked at the end of the test year for the water division. Adjustment 6 for the wastewater division is intentionally left blank. This adjustment is necessary to reconcile the actual customer billings and revenues for the test year. See Schedule C-2, page 7.

Adjustment 7 adjusted bad debt expense based upon a normalization of bad debt expense using a 3-year historical average rate. See Schedule C-2, page 8.

Adjustment 8 increases contract service – management for additional operating costs expected from Corporate shared service allocations See Schedule C-2, page 9.

Adjustment 9 is intentionally left blank for the water and wastewater division.

For the water division, Adjustment 10 corrects discrepancies in the test year water conservation program-related expenses for the water division, which reflect either the non-recoverability of an expense, the miscoding of expense, or the duplication of expense. For the wastewater division, Adjustment 10 is intentionally left blank. See Schedule C-2, page 11.

Adjustment 11 reduces several operating expenses which reflect either the non-recoverability of an expense, the allocation of expense between the water and

sewer divisions, or the duplication of expense. Operating expenses that are adjusted for the water division include purchased power, chemicals, and advertising expense. See Schedule C-2, page 12.

Adjustment 12 increases contractual services – management for expected increase in allocated labor costs from salary and wages implemented after the end of the test year. See Schedule C-2, page 13.

Adjustment number 13 synchronizes interest expense with rate base. See Schedule C-2, page 14. The synchronized interest expense is reflected as a deduction in the computation of the income tax allowance.

Finally, Adjustment 14 adjusts income taxes to a level based upon the Company's adjusted test year revenues and expenses. See Schedule C-2, page 15.

Q. Are there any other revenue and/or expense adjustments?

A. No.

VI. SUMMARY OF COST OF SERVICE STUDY ("G" SCHEDULES)

A. Overview of Cost of Service Study ("COSS")

Q. What exactly is a cost of service study?

A. A cost of service study is an analysis to determine the adequacy of revenues by each customer classification to support the revenue requirements including costs and return of and on investments under both existing and proposed rates. The study begins with an allocation of utility plant and expenses into cost and asset functions, which are then allocated to customer classifications. The study attempts to trace the costs associated with meeting the customers' service requirements. Ideally, the revenues received from each customer class should equal the cost of

providing service to that customer class. The cost to provide service includes the operating and maintenance expenses and the capital costs. Operating and maintenance expenses include the costs of operating the system and the costs of maintaining system facilities and equipment. Capital costs include investment-related cash requirements such as debt service, contributions to debt service reserves, and capital requirements not financed by debt. Capital costs also include depreciation expense and either a return on rate base (for-profit utilities) or an operating margin as well as incomes taxes and other taxes, if applicable.

Q. What is the purpose of a cost of service study?

A. Typically, the purpose of preparing a cost of service study is to offer guidance in setting rates to be charged for utility service. Again, the basic premise in establishing rates for the various classes of customers that are both adequate and equitable is that rates should reflect the cost of providing utility service. Cost-based rates can also be used to send an appropriate price signal to customers because the amount paid for service approximates the cost to provide the service. In other words, subsidies between customer classes are minimized.

There are many factors at play when rates are set that can result in rates that are not adequate and/or equitable between the various classes of customers. Non-economic factors may be at play when rates are set. For example, the regulatory body may favor subsidizing one class of customers by shifting costs to other classes of customers or shifting revenues within one class of customers to subsidize members within that class. Lifeline or discounted rates, which are sometimes used to assist low-income customers in areas with high utility costs, are prime examples of subsidization of a class of customers by other customers. If possible, lifeline rates (low-income rates or customer assistance rates) should not apply to an entire customer class. If lifeline rates are needed, they should be offered only to customers meeting some income test. Another example is the goal

of keeping the rate design simple and easier to understand. There may also be goals on promoting conservation (in the case of water utilities) or other social or economic goals. Thus, public policy may have a significant impact on rate design. In the end, though, the goal in setting new rates remains that the utility be able to recover its revenue requirement.

Q. What method of cost allocation was used in your cost of service study in this case?

A. The Commodity Demand Method which is described in AWWA Manual M1, "Principles of Water Rates, Fees and Charges", Seventh Edition published in 2017 and prior additions of the manual was used in this case. This method is consistent with Schedule G of the Commission filing requirements. The commodity demand method allocates each item of the cost of providing water service to the several cost functions - commodity, and demand, which is further separated into customer, meter and services functions. These functional costs are then allocated to the several customer classifications served by the system.

Q. How is the cost of service study organized?

A. The cost of service study used the test year revenue requirements developed in Schedules A through F and H. Costs were allocated to each of the cost functions described earlier and then to the customer classifications.

The cost of service study contains schedules G-1 through G-7. The standard filing requirements call for Schedules G-1 through G-7 and these schedules are included with my testimony.

G Schedules with higher numbers (i.e., 5, 6 and 7) contain the allocation factors and actual allocations to functions. These functions are then carried forward to the summary G schedules 1, 2, 3 and 4, which allocate expenses and plant (by

function) to classes of customers. I will start my analysis using Schedule G-7 and end with Schedules G-2 and G-1.

Q. What is a "Function"?

A. Functions refer to the plant and the expenses needed to provide the basic utility service. For example, for water, the functions associated with supply, treatment, and delivery water are typically commodity, demand, and customer (and/or services). For wastewater, the functions associated with collection, treatment, and disposal of wastewater are typically commodity, demand, and customer (and/or services).

Commodity refers to the volume of the commodity sold. The commodity function is used to derive the commodity rate, or the rate charged per unit of measurement, gallons. Demand refers to how the system is sized to meet customer demand. Hence, the system is built to be able to provide the utility service (the commodity), as well as the demand placed on the system when peak demand occurs. The customer (and/or service) function can also be used to develop the monthly minimum rates charged to each class of customer. Demand and customer functions refer to the transmission/collection and treatment of water/wastewater. The costs associated with demand, and customer functions are incurred whether the customer uses 0 gallons of water or 50,000 gallons of water, or, in case of wastewater service, generates 0 gallons for wastewater flows or 50,000 gallons of wastewater flows.

Q. After costs are allocated to functions, how are expenses and assets then allocated to the individual classes of customers?

A. After the expenses and assets are allocated to the commodity, demand, and customer functions, the values for the functions are then allocated to various customer classes. Customer classes are typically broken down into residential, commercial, industrial, irrigation, and public authority.

B. Explanation of Cost of Service Study Schedules

Q. Briefly summarize the G Schedules.

A. The G schedules are summarized as follows:

Schedule G-1 is the cost of service summary showing the results by customer class at present rates.

Schedule G-2 is the cost of service summary showing the results by customer class at proposed rates.

Schedule G-3 shows the rate base allocation details by customer class.

Schedule G-4a shows the revenues and expense allocation by customer class at present revenues.

Schedule G-4b shows the revenues and expense allocations by customer class at proposed revenues.

Schedule G-5 shows the functionalization of rate base into the functions commodity, demand, customer accounts, customer meters, and customer services.

Schedule G-6a shows the functionalization of expenses into the functions commodity, demand, customer accounts, customer meters, and customer services, at present revenues.

Schedule G-6b shows the functionalization of expenses into the functions - commodity, demand, customer accounts, customer meters, and customer services at proposed revenues.

Schedule G-7a shows the development of the allocation factors by function.

Schedule G-7b shows the development of the allocation factors by customer class.

Q. Please describe and explain in more detail the schedules that comprise the cost of service study, noting how the various functions were developed as you do.

A. The allocations for the development of the class allocation factors are shown on Schedule G-7b, pages 1 and 2. Allocation factors for expenses were determined by examining the causal relationships of each expense to the various functions, which may include an examination of the recorded amounts during the test year and the use of professional judgment.

The operation and maintenance expense allocation to functions (commodity, demand, customer accounts, meters and services) are shown on Schedule G-6a, page 1 (adjusted test year at present rates) and Schedule G-6b, page 2 (adjusted test year at proposed rates).

The depreciation expense allocations are shown on Schedule G-6a, pages 3 and 4 (adjusted test year at present rates) and Schedule 6b pages 3 and 4, which apply the function allocation factors shown on Schedule G-7b, page 1 and 2 (adjusted test year at proposed rates). Depreciation expense was computed using the Company's proposed depreciation rates in this rate case.

On Schedule G-5, pages 1 and 2, net plant and other rate base items are allocated to each customer class using the function allocation factors set forth in Schedule G-7a, pages 1 and 2.

Schedule G-4 allocates the commodity, demand, and customer expenses developed on Schedule G-6a and Schedule G-6b to customer classes using the allocation factors developed on Schedule G-7b, pages 1 and 2 Schedule G-4a shows the allocated costs at present rates. Schedule G-4b shows the allocated costs at proposed rates.

Schedule G-3 allocates the rate bases for commodity, demand, and customer functions to the customer classes.

Schedules G-1 and G-2 derive the return on rate base by customer classes at present and proposed rates, respectively. The returns on rate base are computed by dividing the operating income for the customer class by the rate base for that customer class.

C. Cost of Service Study Results

Q. What are the returns for the customer classes at present rates and proposed rates?

A. As shown on schedules G-1 and G-2, the returns vary between the customer classes at the present and proposed rates. Table 1 below summarizes the returns for the water division. Table 2 below summarizes the returns for the wastewater division.

Table 1

Water Division Returns

Customer Class	Rate of Return Under Current Rates	Rate of Return Under Proposed Rates
RESIDENTIAL	-1.29%	4.71%
RESIDENTIAL MF	9.55%	18.48%
COMMERCIAL	8.88%	17.09%
IRRIGATION	5.52%	12.15%
RESALE BULK	-0.97%	2.42%
STANDPIPE/CONSTR.	18.90%	45.04%
PRIVATE FIRE	-7.48%	-0.20%

Table 2

Wastewater Division Returns

Customer Class	Operating Margin Under Present Rates	Rate of Return Under Proposed Rates
RESIDENTIAL	0.05%	5.40%
RESIDENTIAL – MULTI-UNIT	11.71%	22.64%
COMMERCIAL	9.91%	21.06%
WIGWAM RESORT	3.47%	10.52%
SCHOOLS	-5.42%	-3.88%

Q. What is the indicated cost of service study distribution of revenues by class and the revenue distribution as a result of the proposed rates?

A. Table 3 (water division) and Table 4 (wastewater division) below present the distribution of revenues by class suggested by the cost of service study and the revenue distribution at the proposed rates.

Table 3

Comparison of Revenue Distributions – Water Division

Customer Class	Indicated COSS Revenues	% of COSS Revenues	Revenues as Proposed	% of Proposed Revenues
RESIDENTIAL	$14,334,141	64.12%	$12,265,879	54.87%
RESIDENTIAL MF	809,157	3.62%	1,179,265	5.28%
COMMERCIAL	2,120,487	9.49%	2,968,589	13.28%
IRRIGATION	4,722,537	21.13%	5,553,590	24.84%
RESALE BULK	218,370	0.98%	156,423	0.70%
STANDPIPE/CONSTR.	65,161	0.29%	163,828	0.73%
PRIVATE FIRE	85,186	0.38%	67,664	0.30%
TOTAL	$22,355,039	100.00%	$22,355,039	100.00%

Table 4

Comparison of Revenue Distributions – Wastewater Division

Customer Class	Indicated COSS Revenues	% of COSS Revenues	Revenues as Proposed	% of Proposed Revenues
RESIDENTIAL	$25,150,652	75.91%	$21,114,591	63.66%

RESIDENTIAL MULTI_UNIT	2,063,936	6.20%	3,758,635	11.33%
COMMERCIAL	4,425,650	13.30%	7,631,083	23.01%
WIGWAM RESPORT	273,447	0.82%	306,119	0.92%
SCHOOLS	1,251,780	3.76%	355,036	1.07%
TOTAL	$33,165,465	100.00%	$33,165,465	100.00%

Q. Does the information contained in Table 1 – 4 indicate that the proposed rate designs do not produce the recovery of revenues exactly as suggested by the cost of service study? Please comment.

A. No. As already suggested, while the cost of service study is a useful tool in designing rates, other considerations are factored into the design of rates, as I discussed previously.

VII. RATE DESIGN ("H" SCHEDULES)

Q. Please summarize the H Schedules.

A. Schedule H-1 shows a summary of revenues at present and proposed rates by meter size and customer class. Schedule H-2, pages 1 through 4, shows the present and proposed customer bills at the average monthly and median monthly water usages, respectively. Schedule H-3 shows the present and proposed rates. Schedule H-4 shows the bill comparisons at present and proposed rates at various usage levels for all meter sizes and customer classifications. Schedule H-5 shows the test year bill counts.

A. Water Division

Q. What are Liberty Litchfield Park's present rates for water service?

A. The present rates for all customer classes are set forth on Schedule H-3, pages 1 through 2.

Q. What are the proposed rates for water service for Liberty Litchfield Park?

A. The proposed rates for all customer classes are set forth on Schedule H-3, pages 1 through 2.

Q. Are you proposing changes to the basic rate design?

A. No. The Company's current rate design is a conservation oriented design with an inclining 4-tier rate design for the 5/8x3/4 inch, ¾ Inch, and 1 inch metered residential customers (all classes) and an inclining 2-tier rate design for the 5/8x3/4 inch and ¾ inch and larger metered non-residential customers (except bulk and hydrant classes). The bulk and hydrant customer classes have a single commodity rate for all gallons.

With respect to the break-over points, the Company proposes to continue the break-over points adopted in the last decision.

Q. What is the impact of the proposed rates on an average 3/4 inch metered residential customer?

A. The present monthly bill for a 3/4-inch metered residential customer, the largest customer class, using an average of 8,150 gallons is $24.16. The proposed monthly bill for a 3/4-inch metered residential customer using an average of 8,150 gallons is $34.60, an increase of $10.43 or 43.18 percent over the present bill.

Q. Do these reflect the estimated rate case expense surcharge?

A. No. The estimated monthly surcharge per customer per bill is $0.44. The bill impacts including the rate case expense surcharge are found in Schedule H-3, page 2.

Q. Are there any proposed changes to the miscellaneous service charges for the water division of Liberty Litchfield Park?

A. Yes. Liberty Litchfield Park is proposing increases to the establishment, meter test, meter reread, and after-hours service call charge. See Schedule H-3, page. The Company also proposes a new charge for failed final inspections on new connections for water and wastewater of $75.00. This is addressed in the Direct Testimony of Regina Wise.

Q. Are there any proposed changes to the meter and service line installation charges?

A. No. See Schedule H-3, page 3.

Q. Are there any proposed changes to the off-site facilities hook-up fees for the water division?

A. Yes. There is a request for a change in rates for the water division fees, these are presented on schedule H-3, Page 5. This is addressed in the Direct Testimonies of Matthew Garlick and Regina Wise.

B. <u>Wastewater Division</u>

Q. What are Liberty Litchfield Park's present and proposed rates for wastewater service?

A. The present rates are set forth on Schedule H-3, page 1.

Q. Are you proposing any changes to the basic rate design for wastewater service?

A. No.

Q. What is the impact of the proposed rates on a wastewater residential customer?

A. The present monthly bill for a residential customer, the largest customer class, is $45.23. The proposed monthly bill for a residential customer is $69.72, an increase of $24.49, or 54.14% over the present bill.

Q. Are there any proposed changes to the off-site facilities hook-up fees?

A. Yes. For wastewater, there is proposal to update content in the tariff to address Large Users. For water, the hook-up fees are updated for all customer classes. This is addressed in the Direct Testimonies of Matthew Garlick and Regina Wise.

Q. Are there any proposed changes to the miscellaneous service charges?

A. Yes. Liberty Litchfield Park is proposing increases to the establishment, disconnection, and after-hours service call charges. The Company also proposes a new charge for failed final inspection for new connections on water and wastewater customers of $75.00. See Schedule H-3, page 2. This new charge is addressed in the Direct Testimony of Regina Wise.

Q. Does that conclude your direct testimony?

A. Yes.

Rate Schedules

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Computation of Increase in Gross Revenue
Requirements As Adjusted

Exhibit
Schedule A-1
Page 1
Witness: Bourassa

Line No.		
1	Fair Value Rate Base	$ 133,887,159
2		
3	Adjusted Operating Income	$ 2,722,232
4		
5	Current Rate of Return	2.03%
6		
7	Required Operating Income	$ 11,309,783
8		
9	Required Rate of Return on Fair Value Rate Base	8.45%
10		
11	Operating Income Deficiency	$ 8,587,551
12		
13	Gross Revenue Conversion Factor	1.3504
14		
15	Increase in Gross Revenue	
16	Requirement	$ 11,596,379
17		
18	Adjusted Test Year Revenues	$ 21,569,086
19	Increase in Gross Revenue Revenue Requirement	$ 11,596,379
20	Proposed Revenue Requirement	$ 33,165,465
21	% Increase	53.76%
22		

23	**Customer**	**Present**	**Proposed**	**Dollar**	**Percent**
24	**Classification**	**Rates**	**Rates**	**Increase**	**Increase**
25	Residential	$ 12,706,853	$ 19,586,343	$ 6,879,490	54.14%
26	Residential HOA 133	72,191	111,275	39,084	54.14%
27	Residential HOA 134	72,734	112,112	39,378	54.14%
28	Residential HOA 138	74,905	115,458	40,553	54.14%
29	Residential HOA 160	86,846	133,865	47,018	54.14%
30	Residential HOA 520	282,250	435,060	152,810	54.14%
31	Subtotal	$ 13,295,778	$ 20,494,112	$ 7,198,334	54.14%
32					
33	Multi Unit Housing	$ 2,405,004	$ 3,707,073	$ 1,302,069	54.14%
34					
35	Small Commercial	$ 93,479.383	$ 144,089.121	$ 50,610	54.14%
36	Measured Service:				
37	Regular Domestic	$ 1,871,984	$ 2,999,950	$ 1,127,965	60.26%
38	Regular Domestic - Influent	2,122,889	3,412,131	1,289,242	60.73%
39	Restaurant, Motels, Grocery, Dry Cleaning	531,541	851,005	319,464	60.10%
40	Subtotal	$ 4,526,414	$ 7,263,086	$ 2,736,671	60.46%
41					
42	Wigwam Resort - Per Room	$ 166,795	$ 267,105	$ 100,310	60.14%
43	Wigwam Resort - Main	19,956	31,957	12,001	60.14%
44	Subtotal	$ 186,750	$ 299,062	$ 112,312	60.14%
45					
46	Elementary Schools	$ 81,418	$ 130,383	$ 48,965	60.14%
47	Middle and High Schools	95,787	153,393	57,606	60.14%
48	Community College	24,745	39,627	14,882	60.14%
49	Subtotal	$ 201,950	$ 323,402	$ 121,453	60.14%
50					
51					
52	Total Revenues Before Revenues Annualization	$ 20,709,376	$ 32,230,824	$ 11,521,448	55.63%
53					
54	Revenue Annualization	135,122	212,830	77,708	57.51%
55	**Subtotal**	$ 20,844,497	$ 32,443,653	$ 11,599,156	55.65%
56					
57	Effluent Revenues	$ 59,035	$ 59,035	-	0.00%
58	Other Wastewater Revenues	663,170	663,170	-	0.00%
59	Reconciling Amount	2,384	(393)	(2,777)	-116.48%
60	Rounding	-	-	-	0.00%
61	**Total of Water Revenues**	$ 21,569,086	$ 33,165,465	$ 11,596,379	53.76%
62					
63					
64					
65	SUPPORTING SCHEDULES:				
66	B-1				
67	C-1				
68	C-3				
69	H-1				

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Summary of Results of Operations

Exhibit
Schedule A-2
Page 1
Witness: Bourassa

Line No.	Description	Prior Years Ended 12/31/2022	Prior Years Ended 12/31/2023	Test Year Actual 12/31/2024	Test Year Adjusted 12/31/2024	Projected Year Present Rates 12/31/2025	Projected Year Proposed Rates 12/31/2025
1	Gross Revenues	$ 18,928,017	$ 23,417,997	$ 21,417,214	$ 21,569,086	$ 21,569,086	$ 33,165,465
2							
3	Revenue Deductions and	11,176,917	15,998,491	18,090,125	18,846,854	18,846,854	21,855,682
4	Operating Expenses						
5							
6	Operating Income	$ 7,751,101	$ 7,419,506	$ 3,327,089	$ 2,722,232	$ 2,722,232	$ 11,309,783
7							
8	Other Income and	(63,410)	2,532,450	883,666	883,666	883,666	883,666
9	Deductions						
10							
11	Interest Expense	-	(4,874)	(121,750)	(3,623,234)	(3,623,234)	(3,623,234)
12							
13	Net Income	$ 7,687,691	$ 9,947,082	$ 4,089,005	$ (17,336)	$ (17,336)	$ 8,570,215
14							
15	Common Shares	7,820	7,820	7,820	7,820	7,820	7,820
16							
17	Earned Per Average						
18	Common Share	983.08	1,272.01	522.89	(2.22)	(2.22)	1,095.94
19							
20	Dividends Paid	-	-	-	-	4,000,000	4,000,000
21							
22	Dividends Per						
23	Common Share	-	-	-	-	511.51	511.51
24							
25	Payout Ratio	-	-	-	-	(230.73)	0.47
26							
27	Return on Average						
28	Invested Capital	5.34%	5.76%	2.02%	-0.01%	-0.01%	3.92%
29							
30	Return on Year End						
31	Capital	5.00%	5.19%	1.92%	-0.01%	-0.01%	3.82%
32							
33	Return on Average						
34	Common Equity	13.74%	15.36%	5.70%	-0.02%	-0.03%	13.38%
35							
36	Return on Year End						
37	Common Equity	12.86%	14.26%	5.54%	-0.02%	-0.03%	15.78%
38							
39	Times Bond Interest Earned						
40	Before Income Taxes	-	1,955.65	33.83	0.69	0.69	3.84
41							
42	Times Total Interest and						
43	Preferred Dividends Earned						
44	After Income Taxes	-	2,040.94	33.59	(0.00)	(0.00)	2.37
45							
46							
47							
48							
49							
50	SUPPORTING SCHEDULES						
51	C-1						
52	E-2						
53	F-1						
54							

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Summary of Capital Structure

Exhibit
Schedule A-3
Page 1
Witness: Bourassa

Line No.	Description:	Prior Years Ended 12/31/2022	Prior Years Ended 12/31/2023	Test Year 12/31/2024	Projected Year 12/31/2025
1					
2					
3	Short-Term Debt	-	-	-	-
4					
5	Long-Term Debt	-	-	17,100,000	42,311,858
6					
7	Total Debt	$ -	$ -	$ 17,100,000	$ 42,311,858
8					
9					
10	Preferred Stock	-	-	-	-
11					
12	Common Equity	59,800,797	69,747,879	73,836,884	49,670,443
13					
14					
15	Total Capital & Debt	$ 59,800,797	$ 69,747,879	$ 90,936,884	$ 91,982,301
16					
17					
18	Capitalization Ratios:				
19					
20	Long-Term Debt	0.00%	0.00%	18.80%	46.00%
21					
22	Total Debt	0.00%	0.00%	18.80%	46.00%
23					
24					
25	Preferred Stock	-	-	-	-
26					
27	Common Equity	100.00%	100.00%	81.20%	54.00%
28					
29					
30	Total Capital	100.00%	100.00%	100.00%	100.00%
31					
32					
33	Weighted Cost of				
34	Senior Capital	0.00%	0.00%	1.01%	2.62%
35					
36					
37					
38					
39					
40					
41					
42					
43					
44					
45					
46	SUPPORTING SCHEDULES:				
47	E-1				
48	D-1				
49					
50					
51					

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Construction Expenditures
and Gross Utility Plant in Service

Exhibit
Schedule A-4
Page 1
Witness: Bourassa

Line No.		Construction Expenditures	Net Plant Placed in Service	Gross Utility Plant in Service
1				
2				
3				
4	Prior Year Ended 12/31/2022	30,524,400	30,524,400	140,582,818
5				
6	Prior Year Ended 12/31/2023	69,421,720	11,505,280	152,088,098
7				
8	Test Year Ended 12/31/2024	27,180,281	107,348,793	259,436,891
9				
10	Projected Year Ended 12/31/2025	960,283	960,283	260,397,175
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34	SUPPORTING SCHEDULES:			
35	B-2			
36	E-5			
37	F-3			
38				
39				
40				

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Summary Statements of Cash Flows

Exhibit
Schedule A-5
Page 1
Witness: Bourassa

Line No.		Prior Year Ended 12/31/2022	Prior Year Ended 12/31/2023	Test Year Ended 12/31/2024	Projected Year Present Rates 12/31/2025	Projected Year Proposed Rates 12/31/2025
1	Cash Flows from Operating Activities					
2	Net Income	$ 7,687,691	$ 9,947,082	$ 4,089,005	$ (17,336)	$ 8,570,215
3	Adjustments to reconcile net income to net cash provided by operating activities:					
4	Depreciation and Amortization	3,811,584	4,018,860	6,867,781	8,288,470	8,288,470
5	Other -Adjustments	(368,299)	5,839,386	(4,531,836)	(481,343)	(481,343)
6	Changes in Certain Assets and Liabilities:				-	-
7	Accounts Receivable	412,316	444,253	(1,038,879)	-	-
8	Unbilled Revenues	(7,363,861)	11,744,451	5,713,447	-	-
9	Materials and Supplies Inventory	-	-	-	-	-
10	Prepaid Expenses	(34,314)	100,841	(7,312)	-	-
11	Deferred Charges	2,218,611	(10,485,714)	(7,005,688)	-	-
12	Notes Receivable	16,154,983	46,043,430	(22,809,266)	-	-
13	Accounts Payable	10,041	171,648	22,375	-	-
14	Intercompany payable	-	-	603,225	-	-
15	Customer Meter Deposits	-	134,658	(135,592)	-	-
16	Taxes Payable	2,239,277	8,060,636	(8,563,323)	-	-
17	Other assets and liabilities	7,575,113	(10,222,747)	(709,574)	257,559	257,559
18	Rounding	-	-	2	-	
19	Net Cash Flow provided by Operating Activities	$ 32,343,141	$ 65,796,783	$ (27,505,636)	$ 8,047,350	$ 16,634,900
20	Cash Flow From Investing Activities:					
21	Capital Expenditures	(30,524,400)	(69,421,720)	(27,180,281)	(9,296,120)	(9,296,120)
22	Plant Held for Future Use	-	-	-		
23	Changes in debt reserve fund	-	-	-		
24	Net Cash Flows from Investing Activities	$ (30,524,400)	$ (69,421,720)	$ (27,180,281)	$ (9,296,120)	$ (9,296,120)
25	Cash Flow From Financing Activities					
26	Change in Restricted Cash	-	-	-	-	-
27	Proceeds from Long-Term Debt	-	-	17,100,000	-	-
28	Net receipt of contributions in aid of construction	(1,653,264)	3,532,641	25,717,436	5,263,416	5,263,416
29	Net receipts of advances in aid of construction	115,392	(9,858)	11,833,728	-	-
30	Net Proceeds of Long-Term Debt	-	-	-	25,211,858	29,161,935
31	Dividends Paid	-	-	-	(4,000,000)	(4,000,000)
32	Net Distributions to Rebalance Capital Structure				(21,140,654)	(25,090,730)
33	Deferred Financing Costs	-	-	(143,964)	-	-
34	Paid in Capital	-	-	-	-	-
35	Net Cash Flows Provided by Financing Activities	$ (1,537,872)	$ 3,522,783	$ 54,507,200	$ 5,334,620	$ 5,334,620
36	Increase(decrease) in Cash and Cash Equivalents	280,870	(102,153)	(178,717)	4,085,850	12,673,401
37	Cash and Cash Equivalents at Beginning of Year	0	280,870	178,717	(0)	(0)
38	Cash and Cash Equivalents at End of Year	$ 280,870	$ 178,717	$ (0)	$ 4,085,850	$ 12,673,401
39						
40						
41						
42						
43	SUPPORTING SCHEDULES:					
44	E-3					
45	F-2					
46						
47						

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Summary of Rate Base

Exhibit
Schedule B-1
Page 1
Witness: Bourassa

Line No.		Original Cost Rate base	Fair Value Rate Base
1			
2	Gross Utility Plant in Service	$ 273,971,889	$ 273,971,889
3	Less: Accumulated Depreciation	62,157,853	62,157,853
4			
5	Net Utility Plant in Service	$ 211,814,036	$ 211,814,036
6			
7	Less:		
8	Advances in Aid of Construction	11,726,776	11,726,776
9			
10	Contributions in Aid of Construction	89,687,625	89,687,625
11			
12	Accumulated Amortization of CIAC	(20,279,742)	(20,279,742)
13			
14	Customer Meter Deposits	-	-
15	Customer Security Deposits	-	-
16	Accumulated Deferred Income Tax	228,048	228,048
17	Excess Accumulated Deferred Income Taxes (EADIT)	1,612,052	1,612,052
18			
19	Plus:		
20	Sarival Depreciation Deferral Accounting Order	5,204,310	5,204,310
21	Unamortized Finance		
22	Charges	143,964	143,964
23	Prepayments	(42,101)	(42,101)
24	Materials and Supplies	-	-
25	Cash Working capital	(258,291)	(258,291)
26			
27	Total Rate Base	$ 133,887,159	$ 133,887,159
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			
41			
42	SUPPORTING SCHEDULES:		
43	B-2		
44	B-3		
45	B-5		
46	E-1		
47			
48			
49			
50			
51			

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Original Cost Rate Base Proforma Adjustments

Exhibit
Schedule B-2
Page 1
Witness: Bourassa

Line No.		Actual at End of Test Year	Proforma Adjustment	Adjusted at end of Test Year
1	Gross Utility			
2	Plant in Service	$ 259,436,891	14,534,998	$ 273,971,889
3				
4	**Less:**			
5	Accumulated			
6	Depreciation	60,763,856	1,393,997	62,157,853
7				
8				
9	Net Utility Plant			
10	in Service	$ 198,673,035		$ 211,814,036
11				
12	**Less:**			
13	Advances in Aid of			
14	Construction	11,658,616	68,161	11,726,776
15				
16	Contributions in Aid of			
17	Construction - Gross	84,492,370	5,195,255	89,687,625
18				
19	Accumulated Amortization of CIAC	(18,404,402)	(1,875,340)	(20,279,742)
20				
21	Customer Meter Deposits	-	-	-
22	Customer Security Deposits	-	-	-
23	Accumulated Deferred Income Tax	(29,511)	257,559	228,048
24	Excess Accumulated Deferred Income Taxes (EADIT)	1,612,052	0	1,612,052
25				
26				
27	**Plus:**			
28	Sarival Depreciation Deferral Accounting Order	-	5,204,310	5,204,310
29	Unamortized Finance			
30	Charges	143,964		143,964
31	Prepayments	(42,101)		(42,101)
32	Materials and Supplies	-		-
33	Working capital	-	(258,291)	(258,291)
34				-
35				
36	Total	$ 119,445,773		$ 133,887,159
37				
38				
39				
40				
41				
42				
43				
44				
45				
46				
47	SUPPORTING SCHEDULES:			RECAP SCHEDULES:
48	B-2, pages 2			B-1
49	E-1			
50				
51				
52				

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Original Cost Rate Base Proforma Adjustments

Exhibit
Schedule B-2
Page 2
Witness: Bourassa

Line No.		Actual at End of Test Year	Proforma Adjustments 1 Plant-in-Service	2 Accumulated Depreciation	3 CIAC	4 AIAC	5 ADIT	6 EADIT	7 Cash Working Capital	8 Sarival Accounting Order	Adjusted at end of Test Year
1	Gross Utility										
2	Plant in Service	$ 259,436,891	14,534,998								$ 273,971,889
3											
4	**Less:**										
5	Accumulated										
6	Depreciation	60,763,856		1,393,997							62,157,853
7											
8											
9	Net Utility Plant										
10	in Service	$ 198,673,035	$ 14,534,998	$ (1,393,997)	$ -	$ -	$ -	$ -	$ -	$ -	$ 211,814,036
11											
12	**Less:**										
13	Advances in Aid of										
14	Construction	11,658,616				68,161					11,726,776
15											
16	Contributions in Aid of										
17	Construction (CIAC)	84,492,370			5,195,255						89,687,625
18											
19	Accumulated Amort of CIAC	(18,404,402)			(1,875,340)						(20,279,742)
20											
21	Customer Meter Deposits	-									-
22	Customer Security Deposits	-									-
23	Accumulated Deferred Income Taxes	(29,511)					257,559				228,048
24	Excess Accum. Def. Inc. Taxes (EADIT)	1,612,052						$ 0			1,612,052
25											
26	**Plus:**										
27	Sarival Depreciation Deferral Accounting Order	-								5,204,310	5,204,310
28	Unamortized Finance										
29	Charges	143,964									143,964
30	Prepayments	(42,101)									(42,101)
31	Materials and Supplies	-									-
32	Allowance for Cash Working Capital	-							(258,291)		(258,291)
33											
34	Total	$ 119,445,773	$ 14,534,998	$ (1,393,997)	$ (3,319,915)	$ (68,161)	$ (257,559)	$ (0)	$ (258,291)	$ 5,204,310	$ 133,887,159
35											
36											
37											
38	SUPPORTING SCHEDULES:					RECAP SCHEDULES:					
39	B-2, pages 3-8					B-1					
40	E-1										
41											
42											

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Original Cost Rate Base Proforma Adjustments
Adjustment Number 1

Exhibit
Schedule B-2
Page 3
Witness: Bourassa

Plant-in-Service

Line No.	Acct. No.	Description	Actual Orginal Cost	Adjustments A Corporate Allocated Plant	B PTY Plant	C Capitalized Overhead Adjustment	D CWIP Transfers	E Adjustments to Reconcile Plant to Reconstruction	Adjusted Original Cost
1	106	Construction Compl. Not Class.	$ 9,576,774		$ -	$ -	$ -	$ (9,576,774)	$ -
2	351	Organization	-		-	-	-	(3,211)	(3,211)
3	352	Franchise	-		-	(0)	-	29,596	29,596
4	353	Land	4,228,265		-	(7,702)	-	(35,271)	4,185,292
5	354	Structures & Improvements	83,209,869		-	(196,859)	187,379	1,651,259	84,851,648
6	355	Power Generation	5,380,603		-	(52,458)	-	-	5,328,145
7	355.1	Solar Generation				-	-	-	-
8	360	Collection Sewer Forced	12,626,949		-	(401,319)	1,061,426	23,480	13,310,536
9	361	Collection Sewers Gravity	45,119,730		274,583	(187,649)	300,580	9,412,736	54,919,980
10	362	Special Collecting Structures	-		-	-	-	-	-
11	363	Customer Services	1,294,375		41,250	(30,716)	262,707	(80,005)	1,487,610
12	364	Flow Measuring Devices	172,506		-	(421)	-	40	172,125
13	365	Flow Measuring Installations				-	-	-	-
14	366	Reuse Services	4,121,326		-	(2,216)	-	34,369	4,153,479
15	367	Reuse Meters And Installation	220,798		-	(1,396)	-	78	219,481
16	370	Receiving Wells	1,085,896		-	(13,139)	-	-	1,072,757
17	371	Pumping Equipment	8,457,521		-	(54,313)	29,430	236,279	8,668,916
18	374	Reuse Distribution Reservoirs	1,735,620		256,437	(43,945)	-	(249,177)	1,698,934
19	375	Reuse Trans. and Dist. System	1,428,037		-	(16,405)	-	1,407	1,413,040
20	380	Treatment & Disposal Equipment	47,335,631		-	(181,565)	720,219	(1,162,628)	46,711,657
21	380.1	Odor Control GAC	-		214,812	-	-	(214,812)	-
22	381	Plant Sewers	22,554,305		-	(10,848)	-	4,837	22,548,293
23	382	Outfall Sewer Lines	343,681		-	-	-	-	343,681
24	389	Other Sewer Plant. & Equipment	842,986		-	-	-	(3,236)	839,750
25	390	Office Furniture & Equipment	990,855		-	(8,406)	91,758	(557,590)	516,616
26	390.1	Computers and Software	-		-	(20,899)	-	477,996	457,098
27	391	Transportation Equipment	404,481		-	(1,088)	-	61	403,454
28	392	Stores Equipment	8,968		-	-	-	-	8,968
29	393	Tools, Shop And Garage Equip	597,630		-	(5,859)	-	65,614	657,385
30	394	Laboratory Equip	223,550		13,200	(1,330)	8,784	(18,889)	225,315
31	395	Power Operated Equipment	538,791		-	(38,687)	-	98	500,203
32	396	Communication Equip	6,126,329		-	(6,200)	-	177,124	6,297,253
33	397	Miscellaenous Equip.	699,563		160,000	(4,952)	-	(478,629)	375,982
34	397.1	Misc Equipment CNG	-		-	(151)	-	318,677	318,526
35	398	Other Tangible Plant	111,854		-	(2,782)	-	(30,044)	79,028
36									
37		SUBTOTAL	$ 259,436,891	$ -	$ 960,283	$ (1,291,306)	$ 2,662,283	$ 23,383	$ 261,791,535
38									-
39	903	Land and Land Rights		$ 37,777	$ -				$ 37,777
40	904	Structures and Improvments		1,355,038	-				1,355,038
41	940	Office Furniture and Fixtures		361,396	-				361,396
42	940.1	Computers and Software		1,435,188	339,845				1,775,034
43	940.2	Customer First		8,482,495	-				8,482,495
44	955	Power Generation		1,014	-				1,014
45	995	Power Operated Equipment		167,601	-				167,601
46									-
47		TOTALS	$ 259,436,891	$ 11,840,509	$ 1,300,129	$ (1,291,306)	$ 2,662,283	$ 23,383	$ 273,971,889
48									
49	Plant-in-Service per Books								$ 259,436,891
50									
51	Increase (decrease) in Plant-in-Service								$ 14,534,998
52									
53	Adjustment to Plant-in-Service								$ 14,534,998
54									
55	SUPPORTING SCHEDULES							RECAP SCHEDULES:	
56	B-2, pages 3.1 to 3.5							B-2, page 2	

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Original Cost Rate Base Proforma Adjustments
Adjustment Number 1 - A

Exhibit
Schedule B-2
Page 3.1
Witness: Bourassa

Line No.				[1]	[2]	[3]	[4] = [1]x[2]x[3]
1	Corporate Plant						
2							
3					Liberty		Allocated
4	Acct.			Original	Utilities		Original
5	No.	Description		Cost	Factor	Factor	Cost
6	903	Land and Land Rights	$	1,364,008	6.6567%	30.2279%	$ 27,446
7	904	Structures and Improvements		11,557,420	6.6567%	30.2279%	232,555
8							
9							
10							
11							
12	LU Sub-Corp. Plant (8020)						
13							
14	903	Land and Land Rights	$	58,167	51.39%	34.5602%	$ 10,330
15	904	Structures and Improvements		6,320,249	51.39%	34.5602%	1,122,483
16	940	Office Furniture and Equipment		2,034,874	51.39%	34.5602%	361,396
17	940.1	Computers and Software		4,785,331	86.78%	34.5602%	1,435,188
18	940.2	Customer First		28,283,077	86.78%	34.5602%	8,482,495
19	955	Power Generation		5,710	51.39%	34.5602%	1,014
20	995	Power Operated Equipment		943,696	51.39%	34.5602%	167,601
21							
22	Totals						
23							
24	903	Land and Land Rights	$	1,422,174			$ 37,777
25	904	Structures and Improvements		17,877,670			1,355,038
26	940	Office Furniture and Equipment		2,034,874			361,396
27	940.1	Computers and Software		4,785,331			1,435,188
28	940.2	Customer First		28,283,077			8,482,495
29	955	Power Generation		5,710			1,014
30	995	Power Operated Equipment		943,696			167,601
31	997	Miscellaenous Equipment		-			-
32				55,352,531			11,840,509
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							

47 SUPPORTING SCHEDULE
48 Work papers
49 Testimony

RECAP SCHEDULES:
B-2, page 3

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Original Cost Rate Base Proforma Adjustments
Adjustment Number 1 - B

Exhibit
Schedule B-2
Page 3.2
Witness: Bourassa

Line No.	Acct. No.	Description	Orginal Cost
1		Post-Test Year Plant	
2			
3			
6	106	Construction Completed Not Classified	$ -
7	351	Organization	-
8	352	Franchise	-
9	353	Land	-
10	354	Structures & Improvements	-
11	355	Power Generation	-
12	355.1	Solar Generation	-
13	360	Collection Sewer Forced	-
14	361	Collection Sewers Gravity	274,583
15	362	Special Collecting Structures	-
16	363	Customer Services	41,250
17	364	Flow Measuring Devices	-
18	365	Flow Measuring Installations	-
19	366	Reuse Services	-
20	367	Reuse Meters And Installation	-
21	370	Receiving Wells	-
22	371	Pumping Equipment	256,437
23	374	Reuse Distribution Reservoirs	-
24	375	Reuse Trans. and Dist. System	-
25	380	Treatment & Disposal Equipment	214,812
26	380.1	Odor Control GAC	-
27	381	Plant Sewers	-
28	382	Outfall Sewer Lines	-
29	389	Other Sewer Plant & Equipment	-
30	390	Office Furniture & Equipment	-
31	390.1	Computers and Software	-
32	391	Transportation Equipment	-
33	392	Stores Equipment	-
34	393	Tools, Shop And Garage Equip	13,200
35	394	Laboratory Equip	-
36	395	Power Operated Equipment	-
37	396	Communication Equip	160,000
38	397	Miscellaenous Equip.	-
39	397.1	Misc Equipment CNG	-
40	398	Other Tangible Plant	-
41			
42			
43			
44			
45		Subtotal	$ 960,283
46			
47	903	Land and Land Rights	$ -
48	904	Structures and Improvments	-
49	940	Office Furniture and Fixtures	-
50	940.1	Computers and Software	339,845
51	940.2	Customer First	-
52	955	Power Generation	-
53	995	Power Operated Equipment	-
54	997	Miscellaenous Equipment	-
55		Subtotal	$ 339,845
56			
57		Total	$ 1,300,129
58			
59			
60		SUPPORTING SCHEDULE	RECAP SCHEDULES:
61		Work Papers	B-2, page 3
62			

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Original Cost Rate Base Proforma Adjustments
Adjustment Number 1 - C

Exhibit
Schedule B-2
Page 3.3
Witness: Bourassa

Capitalized Overhead Adjustments

Line No.	Acct. No.	Description	2017	2018	2019	2020	2021	2022	2023	2024	Total
6	106	Construction Completed Not Classified	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
7	351	Organization	-	-	-	-	-	-	-	-	-
8	352	Franchise	-	-	-	-	-	-	-	(0)	(0)
9	353	Land	-	-	(473)	(146)	(659)	(3,083)	(1,857)	(1,484)	(7,702)
10	354	Structures & Improvements	-	(3,044)	(2,782)	(8,512)	(36,452)	(119,667)	(13,707)	(12,695)	(196,859)
11	355	Power Generation	-	(320)	(34,723)	-	(10,946)	(5,531)	-	(938)	(52,458)
12	355.1	Solar Generation	-	-	-	-	-	-	-	-	-
13	360	Collection Sewer Forced	-	(15)	(458)	(9,153)	(15,242)	(6,741)	(223,928)	(145,782)	(401,319)
14	361	Collection Sewers Gravity	-	(39,942)	(115,069)	(20,935)	(28,767)	(7,836)	(6,163)	31,062	(187,649)
15	362	Special Collecting Structures	-	-	-	-	-	-	-	-	-
16	363	Customer Services	-	(802)	(2,685)	(2,472)	(2,794)	(3,321)	(10,624)	(8,017)	(30,716)
17	364	Flow Measuring Devices	-	-	-	-	(10)	(411)	-	-	(421)
18	365	Flow Measuring Installations	-	-	-	-	-	-	-	-	-
19	366	Reuse Services	-	-	-	-	(8)	(914)	(1,071)	(223)	(2,216)
20	367	Reuse Meters And Installation	-	-	-	-	(1,268)	(123)	(5)	-	(1,396)
21	370	Receiving Wells	-	(9,347)	(2,069)	-	(445)	(1,123)	(138)	(18)	(13,139)
22	371	Pumping Equipment	-	(3,325)	(9,086)	(4,179)	(11,326)	(18,436)	(7,960)	(0)	(54,313)
23	374	Reuse Distribution Reservoirs	-	-	-	(10,329)	(10,475)	(16,377)	(1,237)	(5,527)	(43,945)
24	375	Reuse Trans. and Dist. System	-	-	-	(8,859)	(6,302)	(1,100)	(2)	(142)	(16,405)
25	380	Treatment & Disposal Equipment	-	(12,525)	(8,542)	(7,341)	(13,159)	(13,623)	(10,739)	(115,636)	(181,565)
26	380.1	Odor Control GAC	-	-	-	-	-	-	-	-	-
27	381	Plant Sewers	-	-	(4,424)	(4,361)	(288)	(379)	(853)	(544)	(10,848)
28	382	Outfall Sewer Lines	-	-	-	-	-	-	-	-	-
29	389	Other Sewer Plant & Equipment	-	-	-	-	-	-	-	-	-
30	390	Office Furniture & Equipment	-	(62)	(386)	(378)	(13)	(83)	(7,457)	(27)	(8,406)
31	390.1	Computers and Software	-	(247)	(489)	(4,705)	(591)	(10,955)	(3,911)	-	(20,899)
32	391	Transportation Equipment	-	-	-	-	-	(1,088)	-	-	(1,088)
33	392	Stores Equipment	-	-	-	-	-	-	-	-	-
34	393	Tools, Shop And Garage Equip	-	(328)	(1,203)	(1,055)	(418)	(2,849)	-	(6)	(5,859)
35	394	Laboratory Equip	-	(196)	(52)	(125)	(1)	(697)	(4)	(252)	(1,330)
36	395	Power Operated Equipment	-	(38,686)	(1)	-	-	-	-	-	(38,687)
37	396	Communication Equip	-	(181)	(2,369)	(526)	(1,376)	(1,192)	(557)	-	(6,200)
38	397	Miscellaneous Equip.	-	-	-	(2,919)	(3)	-	-	(2,030)	(4,952)
39	397.1	Misc. Equipment CNG	-	(151)	-	-	-	-	-	-	(151)
40	398	Other Tangible Plant	-	(1,700)	-	-	-	-	(1)	(1,081)	(2,782)
41											-
42		TOTALS	$ -	$ (110,873)	$ (184,812)	$ (85,996)	$ (140,543)	$ (215,528)	$ (290,215)	$ (263,340)	$ (1,291,306)

SUPPORTING SCHEDULE
Work papers

RECAP SCHEDULES:
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Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Original Cost Rate Base Proforma Adjustments
Adjustment Number 1 - D

Exhibit
Schedule B-2
Page 3.4
Witness: Bourassa

Line No.				
1	CWIP Transfers			
2				
3				
4	Acct.			Orginal
5	No.	Description		Cost
6	106	Construction Completed Not Classified	$	-
7	351	Organization		-
8	352	Franchise		-
9	353	Land		-
10	354	Structures & Improvements		187,379
11	355	Power Generation		-
12	355.1	Solar Generation		-
13	360	Collection Sewer Forced		1,061,426
14	361	Collection Sewers Gravity		300,580
15	362	Special Collecting Structures		-
16	363	Customer Services		262,707
17	364	Flow Measuring Devices		-
18	365	Flow Measuring Installations		-
19	366	Reuse Services		-
20	367	Reuse Meters And Installation		-
21	370	Receiving Wells		-
22	371	Pumping Equipment		29,430
23	374	Reuse Distribution Reservoirs		-
24	375	Reuse Trans. and Dist. System		-
25	380	Treatment & Disposal Equipment		720,219
26	380.1	Odor Control GAC		-
27	381	Plant Sewers		-
28	382	Outfall Sewer Lines		-
29	389	Other Sewer Plant & Equipment		-
30	390	Office Furniture & Equipment		91,758
31	390.1	Computers and Software		-
32	391	Transportation Equipment		-
33	392	Stores Equipment		-
34	393	Tools, Shop And Garage Equip		-
35	394	Laboratory Equip		8,784
36	395	Power Operated Equipment		-
37	396	Communication Equip		-
38	397	Miscellaenous Equip.		-
39	397.1	Misc Equipment CNG		-
40	398	Other Tangible Plant		-
41				
42				
43				
44				
45				
46		TOTALS	$ -	$ 2,662,283
47				
48				
49	SUPPORTING SCHEDULE			RECAP SCHEDULES:
50	Work papers			B-2, page 3
51				

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
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Original Cost Rate Base Proforma Adjustments
Adjustment Number 1 - E

Exhibit
Schedule B-2
Page 3.5
Witness: Bourassa

Reconciliation of Plant to Plant Reconstruction

Line No.	Acct. No.	Description	Orginal Cost	B-2 Adjustments	Adjusted Orginal Cost	Plant Per Reconstruction	Difference
6	106	Construction Completed Not Classified	$ 9,576,774	$ -	$ 9,576,774	$ -	$ (9,576,774)
7	351	Organization	-	$ -	-	(3,211)	(3,211)
8	352	Franchise	-	$ (0)	(0)	29,596	29,596
9	353	Land	4,228,265	$ (7,702)	4,220,563	4,185,292	(35,271)
10	354	Structures & Improvements	83,209,869	$ (9,480)	83,200,389	84,851,648	1,651,259
11	355	Power Generation	5,380,603	$ (52,458)	5,328,145	5,328,145	-
12	355.1	Solar Generation		$ -		-	
13	360	Collection Sewer Forced	12,626,949	$ 660,107	13,287,056	13,310,536	23,480
14	361	Collection Sewers Gravity	45,119,730	$ 387,513	45,507,244	54,919,980	9,412,736
15	362	Special Collecting Structures	-	$ -	-	-	-
16	363	Customer Services	1,294,375	$ 273,241	1,567,615	1,487,610	(80,005)
17	364	Flow Measuring Devices	172,506	$ (421)	172,085	172,125	40
18	365	Flow Measuring Installations		$ -		-	
19	366	Reuse Services	4,121,326	$ (2,216)	4,119,110	4,153,479	34,369
20	367	Reuse Meters And Installation	220,798	$ (1,396)	219,403	219,481	78
21	370	Receiving Wells	1,085,896	$ (13,139)	1,072,757	1,072,757	-
22	371	Pumping Equipment	8,457,521	$ (24,884)	8,432,637	8,668,916	236,279
23	374	Reuse Distribution Reservoirs	1,735,620	$ 212,492	1,948,112	1,698,934	(249,177)
24	375	Reuse Trans. and Dist. System	1,428,037	$ (16,405)	1,411,632	1,413,040	1,407
25	380	Treatment & Disposal Equipment	47,335,631	$ 538,655	47,874,285	46,711,657	(1,162,628)
26	380.1	Odor Control GAC	-	$ 214,812	214,812	-	(214,812)
27	381	Plant Sewers	22,554,305	$ (10,848)	22,543,457	22,548,293	4,837
28	382	Outfall Sewer Lines	343,681	$ -	343,681	343,681	-
29	389	Other Sewer Plant & Equipment	842,986	$ -	842,986	839,750	(3,236)
30	390	Office Furniture & Equipment	990,855	$ 83,351	1,074,206	516,616	(557,590)
31	390.1	Computers and Software	-	$ (20,899)	(20,899)	457,098	477,996
32	391	Transportation Equipment	404,481	$ (1,088)	403,393	403,454	61
33	392	Stores Equipment	8,968	$ -	8,968	8,968	-
34	393	Tools, Shop And Garage Equip	597,630	$ (5,859)	591,771	657,385	65,614
35	394	Laboratory Equip	223,550	$ 20,654	244,204	225,315	(18,889)
36	395	Power Operated Equipment	538,791	$ (38,687)	500,105	500,203	98
37	396	Communication Equip	6,126,329	$ (6,200)	6,120,129	6,297,253	177,124
38	397	Miscellaenous Equip.	699,563	$ 155,048	854,611	375,982	(478,629)
39	397.1	Misc Equipment CNG	-	$ (151)	(151)	318,526	318,677
40	398	Other Tangible Plant	111,854	$ (2,782)	109,072	79,028	(30,044)
46		TOTALS	$ 259,436,891	$ 2,331,260	$ 261,768,152	$ 261,791,535	$ 23,383

SUPPORTING SCHEDULE
B-2, pages 3.1 through 3.4
B-2, pages 3.6 through 3.10

RECAP SCHEDULES:
B-2, page 3

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Plant Additions and Retirements

Exhibit
Schedule B-2
Page 3.6

Line No.	NARUC Account No.	Description	Allowed Deprec. Rate	Per Prior Decision: Order Plant at 12/31/2016	PTY Plant Adjustments	PTY Retirements	PTY INDOH	Plant at 12/31/2016	Order Accum. Deprec. At 12/31/2016	PTY Retire Adjustments	PTY A/D Adjustments	PTY INDOH A/D Adjustments	Accum. Deprec. At 12/31/2016
1	351	Organization	0.00%	-	-	-	-	-	-	-	-	-	-
2	352	Franchise	0.00%	-	-	-	-	-	-	-	-	-	-
3	353	Land	0.00%	4,163,584	-	-	-	4,163,584	-	-	-	-	-
4	354	Structures & Improvements	3.33%	33,097,953	(13,087,306)	33,134	2,257	20,046,038	6,567,066	33,134	(217,904)	38	6,382,333
5	355	Power Generation	5.00%	605,351	-	-	-	605,351	343,431	-	-	-	343,431
6	355.1	Solar Generation	6.67%	-	-	-	-	-	-	-	-	-	-
7	360	Collection Sewer Forced	2.00%	1,716,700	(7,500)	-	12	1,709,212	(24,039)	-	(75)	0	(24,114)
8	361	Collection Sewers Gravity	2.00%	33,315,925	(204,455)	500	805	33,112,775	7,686,829	500	(2,045)	8	7,685,293
9	362	Special Collecting Structures	2.00%	-	-	-	-	-	-	-	-	-	-
10	363	Customer Services	2.00%	302,331	32,331	1,978	241	336,882	7,791	1,978	323	-	10,093
11	364	Flow Measuring Devices	10.00%	153,078	(4,617)	2,996	35	151,492	104,002	2,996	(231)	2	106,769
12	365	Flow Measuring Installations	10.00%	-	-	-	-	-	-	-	-	-	-
13	366	Reuse Services	2.00%	4,078,105	-	-	-	4,078,105	1,149,716	-	-	-	1,149,716
14	367	Reuse Meters And Installation	8.33%	51,431	(16,312)	8,078	78	43,275	24,686	8,078	(679)	3	32,088
15	370	Receiving Wells	3.33%	860,393	-	-	-	860,393	411,693	-	-	-	411,693
16	371	Pumping Equipment	12.50%	3,788,912	(2,078,381)	25,471	448	1,736,449	1,189,800	25,471	(129,899)	28	1,085,400
17	374	Reuse Distribution Reservoirs	2.50%	65,916	-	-	-	65,916	14,361	-	-	-	14,361
18	375	Reuse Trans. and Dist. System	2.50%	729,030	(302,979)	-	1,408	427,459	94,799	-	(3,787)	18	91,029
19	380	Treatment & Disposal Equipment	5.00%	20,915,651	(10,088,287)	32,885	1,348	10,861,597	3,926,700	32,885	(252,207)	34	3,707,412
20	380.1	Odor Control GAC		-	-	-	-	-	-	-	-	-	-
21	381	Plant Sewers	5.00%	6,816,496	(497,324)	-	2,783	6,321,955	243,715	-	(12,433)	70	231,351
22	382	Outfall Sewer Lines	3.33%	343,681	-	-	-	343,681	164,672	-	-	-	164,672
23	389	Other Sewer Plant & Equipment	6.67%	839,750	(11,690)	-	-	828,060	407,981	-	(390)	-	407,591
24	390	Office Furniture & Equipment	6.67%	331,367	(74,640)	-	492	257,219	111,392	-	(2,489)	16	108,919
25	390.1	Computers and Software	20.00%	192,129	(136,757)	-	319	55,691	21,362	-	(13,676)	32	7,718
26	391	Transportation Equipment	20.00%	331,469	(598)	-	5	330,876	87,660	-	(60)	1	87,601
27	392	Stores Equipment	4.00%	8,968	-	-	-	8,968	5,117	-	-	-	5,117
28	393	Tools, Shop And Garage Equip	5.00%	375,781	(29,474)	3,110	152	349,569	(9,580)	3,110	(737)	4	(7,203)
29	394	Laboratory Equip	10.00%	201,290	(13,766)	1,352	55	188,930	175,971	1,352	(686)	3	176,637
30	395	Power Operated Equipment	5.00%	61,831	(55,323)	-	98	6,605	2,866	-	(1,383)	2	1,485
31	396	Communication Equip	10.00%	1,429,409	(1,001,120)	10,555	1,005	439,849	433,019	10,555	(50,056)	50	393,567
32	397	Misc Equipment	10.00%	331,743	-	-	-	331,743	16,587	-	-	-	16,587
33	397.1	Misc Equipment CNG	3.33%	291,453	-	-	-	291,453	4,853	-	-	-	4,853
34	398	Other Tangible Plant	10.00%	-	-	-	-	-	-	-	-	-	-
35		Intentionally Left Blank		-	-	-	-	-	-	-	-	-	-
36		Intentionally Left Blank		-	-	-	-	-	-	-	-	-	-
37								-					-
38								-					-
39								-					-
40		TOTALS		115,399,727	(27,578,198)	120,059	11,540	87,953,128	23,162,450	120,059	(688,415)	308	22,594,401

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Div
Plant Additions and Retirements

Exhibit
Schedule B-2
Page 3.7

Line No.	NARUC Account No.	Description	Allowed Deprec. Rate	2017 Adjusted Plant Additions	2017 Adjusted Plant Retirements	2017 Depreciation (Calculated)	2017 Plant Balance	2017 Accum. Deprec.	2018 Adjusted Plant Additions	2018 Adjusted Plant Retirements	2018 Depreciation (Calculated)	2018 Plant Balance	2018 Accum. Deprec.
1	351	Organization	0.00%	-	-	-	-	-	-	-	-	-	-
2	352	Franchise	0.00%	-	-	-	-	-	-	-	-	-	-
3	353	Land	0.00%	-	-	-	4,163,584	-	-	-	-	4,163,584	-
4	354	Structures & Improvements	3.33%	13,091,784	20,653	885,167	33,117,169	7,246,848	(3,044)	6,500	1,099,649	33,107,624	8,339,997
5	355	Power Generation	5.00%	-	-	30,268	605,351	373,699	6,564	-	30,432	611,916	404,131
6	355.1	Solar Generation	6.67%	-	-	-	-	-	-	-	-	-	-
7	360	Collection Sewer Forced	2.00%	7,500	-	34,259	1,716,712	10,145	1,270	-	34,347	1,717,982	44,492
8	361	Collection Sewers Gravity	2.00%	1,973,729	20,205	681,791	35,066,299	8,346,878	306,398	500	704,385	35,372,197	9,050,763
9	362	Special Collecting Structures	2.00%	-	-	-	-	-	-	-	-	-	-
10	363	Customer Services	2.00%	156,102	-	8,299	492,964	18,391	62,381	-	10,483	555,344	28,875
11	364	Flow Measuring Devices	10.00%	4,617	2,996	15,230	153,113	119,003	-	-	15,311	153,113	134,315
12	365	Flow Measuring Installations	10.00%	-	-	-	-	-	-	-	-	-	-
13	366	Reuse Services	2.00%	-	-	81,562	4,078,105	1,231,279	-	-	81,562	4,078,105	1,312,841
14	367	Reuse Meters And Installation	8.33%	10,752	-	4,053	54,027	36,140	-	-	4,500	54,027	40,641
15	370	Receiving Wells	3.33%	-	-	28,651	860,393	440,344	(9,347)	-	19,304	851,047	459,648
16	371	Pumping Equipment	12.50%	2,451,551	40,997	367,716	4,147,003	1,412,119	357,274	14,149	481,017	4,490,128	1,878,987
17	374	Reuse Distribution Reservoirs	2.50%	-	-	1,648	65,916	16,009	-	-	1,648	65,916	17,657
18	375	Reuse Trans. and Dist. System	2.50%	303,041	-	14,474	730,500	105,504	-	-	18,263	730,500	123,766
19	380	Treatment & Disposal Equipment	5.00%	9,749,008	33,158	785,976	20,577,446	4,460,229	324,462	10,744	1,036,715	20,891,164	5,486,201
20	380.1	Odor Control GAC		-	-	-	-	-	-	-	-	-	-
21	381	Plant Sewers	5.00%	625,763	-	331,742	6,947,719	563,093	-	-	347,386	6,947,719	910,479
22	382	Outfall Sewer Lines	3.33%	-	-	11,445	343,681	176,117	-	-	11,445	343,681	187,561
23	389	Other Sewer Plant & Equipment	6.67%	11,690	-	55,621	839,750	463,213	-	-	56,011	839,750	519,224
24	390	Office Furniture & Equipment	6.67%	74,640	31,424	18,598	300,435	96,093	2,657	-	20,128	303,092	116,221
25	390.1	Computers and Software	20.00%	139,515	-	25,090	195,206	32,806	3,372	-	39,378	198,578	72,186
26	391	Transportation Equipment	20.00%	598	-	66,235	331,474	153,836	-	-	65,945	331,474	219,781
27	392	Stores Equipment	4.00%	-	-	359	8,968	5,476	-	-	359	8,968	5,834
28	393	Tools, Shop And Garage Equip	5.00%	146,503	-	21,141	496,071	13,938	22,649	1,963	25,321	516,758	37,296
29	394	Laboratory Equip	10.00%	13,766	5,745	1,789	196,952	172,682	2,221	1,352	2,234	197,821	173,564
30	395	Power Operated Equipment	5.00%	55,323	-	1,713	61,929	3,198	(38,686)	-	(35,589)	23,243	(32,391)
31	396	Communication Equip	10.00%	1,058,951	22,252	57,030	1,476,547	428,345	25,973	-	110,163	1,502,520	538,509
32	397	Misc Equipment	10.00%	-	-	33,174	331,743	49,761	-	-	33,174	331,743	82,936
33	397.1	Misc Equipment CNG	3.33%	-	-	9,705	291,453	14,558	27,073	-	10,156	318,526	24,715
34	398	Other Tangible Plant	10.00%	-	-	-	-	-	80,110	-	4,006	80,110	4,006
35		Intentionally Left Blank		-	-	-	-	-	-	-	-	-	-
36		Intentionally Left Blank		-	-	-	-	-	-	-	-	-	-
37				-	-	-	-	-	-	-	-	-	-
38				-	-	-	-	-	-	-	-	-	-
39				-	-	-	-	-	-	-	-	-	-
40		TOTALS		29,874,832	177,430	3,572,736	117,650,530	25,989,707	1,171,306	35,207	4,227,733	118,786,630	30,182,233

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Div
Plant Additions and Retirements

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Line No.	NARUC Account No.	Description	Allowed Deprec. Rate	2019 Adjusted Plant Additions	2019 Adjusted Plant Retirements	2019 Depreciation (Calculated)	2019 Plant Balance	2019 Accum. Deprec.	2020 Adjusted Plant Additions	2020 Adjusted Plant Retirements	2020 Depreciation (Calculated)	2020 Plant Balance	2020 Accum. Deprec.
1	351	Organization	0.00%	-	-	-	-	-	-	-	-	-	-
2	352	Franchise	0.00%	-	-	-	-	-	23,063	-	-	23,063	-
3	353	Land	0.00%	18,795	-	-	4,182,379	-	6,785	-	-	4,189,164	-
4	354	Structures & Improvements	3.33%	5,147	-	1,102,570	33,112,771	9,442,566	477,661	-	1,110,608	33,590,432	10,553,175
5	355	Power Generation	5.00%	2,481,889	-	92,643	3,093,805	496,774	-	-	154,690	3,093,805	651,464
6	355.1	Solar Generation	6.67%	-	-	-	-	-	-	-	-	-	-
7	360	Collection Sewer Forced	2.00%	7,484	-	34,434	1,725,466	78,926	254,659	-	37,056	1,980,124	115,982
8	361	Collection Sewers Gravity	2.00%	5,385,516	1,186	761,287	40,756,527	9,810,865	220,242	-	817,333	40,976,769	10,628,198
9	362	Special Collecting Structures	2.00%	-	-	-	-	-	-	-	-	-	-
10	363	Customer Services	2.00%	214,808	-	13,255	770,152	42,130	57,941	-	15,982	828,093	58,112
11	364	Flow Measuring Devices	10.00%	-	-	7,337	153,113	141,652	-	-	2,272	153,113	143,924
12	365	Flow Measuring Installations	10.00%	-	-	-	-	-	-	-	-	-	-
13	366	Reuse Services	2.00%	-	-	81,562	4,078,105	1,394,403	-	-	81,562	4,078,105	1,475,965
14	367	Reuse Meters And Installation	8.33%	-	-	3,561	54,027	44,201	-	-	1,134	54,027	45,335
15	370	Receiving Wells	3.33%	173,347	-	31,226	1,024,394	490,874	-	-	34,112	1,024,394	524,987
16	371	Pumping Equipment	12.50%	151,187	2,918	424,964	4,838,398	2,301,033	204,164	-	446,991	4,842,562	2,748,024
17	374	Reuse Distribution Reservoirs	2.50%	-	-	1,648	65,916	19,305	451,237	-	7,288	517,153	26,594
18	375	Reuse Trans. and Dist. System	2.50%	-	-	18,263	730,500	142,029	479,147	-	24,252	1,209,647	166,281
19	380	Treatment & Disposal Equipment	5.00%	129,705	31,717	1,047,008	20,989,152	6,501,491	105,177	-	1,052,087	21,094,329	7,553,578
20	380.1	Odor Control GAC		-	-	-	-	-	-	-	-	-	-
21	381	Plant Sewers	5.00%	(4,424)	-	342,962	6,943,295	1,253,441	264,336	-	353,773	7,207,631	1,607,214
22	382	Outfall Sewer Lines	3.33%	-	-	11,445	343,681	199,006	-	-	11,445	343,681	210,450
23	389	Other Sewer Plant & Equipment	6.67%	-	-	56,011	839,750	575,235	-	-	56,011	839,750	631,247
24	390	Office Furniture & Equipment	6.67%	935	-	20,247	304,027	136,468	16,570	-	20,831	320,597	157,299
25	390.1	Computers and Software	20.00%	16,902	3,238	41,082	212,242	110,030	217,504	-	63,666	429,746	173,697
26	391	Transportation Equipment	20.00%	-	-	65,595	331,474	285,376	-	-	40,256	331,474	325,631
27	392	Stores Equipment	4.00%	-	-	359	8,968	6,193	-	-	359	8,968	6,552
28	393	Tools, Shop And Garage Equip	5.00%	30,162	6,319	26,434	540,602	57,411	37,334	-	27,963	577,936	85,374
29	394	Laboratory Equip	10.00%	(52)	-	2,225	197,769	175,790	6,550	-	2,600	204,319	178,390
30	395	Power Operated Equipment	5.00%	476,960	-	13,086	500,203	(19,305)	-	-	25,010	500,203	5,706
31	396	Communication Equip	10.00%	26,852	1,505	112,729	1,527,867	649,733	9,631	-	114,478	1,537,498	764,211
32	397	Misc Equipment	10.00%	-	-	33,174	331,743	116,110	46,273	-	35,488	378,016	151,598
33	397.1	Misc Equipment CNG	3.33%	-	-	10,607	318,526	35,321	-	-	10,607	318,526	45,928
34	398	Other Tangible Plant	10.00%	-	-	8,011	80,110	12,017	-	-	8,011	80,110	20,028
35		Intentionally Left Blank		-	-	-	-	-	-	-	-	-	-
36		Intentionally Left Blank		-	-	-	-	-	-	-	-	-	-
37				-	-	-	-	-	-	-	-	-	-
38				-	-	-	-	-	-	-	-	-	-
39				-	-	-	-	-	-	-	-	-	-
40		TOTALS		9,115,212	46,881	4,363,725	127,854,960	34,499,077	2,878,274	-	4,555,866	130,733,233	39,054,943

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Div
Plant Additions and Retirements

Exhibit
Schedule B-2
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Line No.	NARUC Account No.	Description	Allowed Deprec. Rate	2021 Adjusted Plant Additions	2021 Adjusted Plant Retirements	2021 Depreciation (Calculated)	2021 Plant Balance	2021 Accum. Deprec.	2022 Adjusted Plant Additions	2022 Adjusted Plant Retirements	2022 Depreciation (Calculated)	2022 Plant Balance	2022 Accum. Deprec.
1	351	Organization	0.00%	-	-	-	-	-	-	-	-	-	-
2	352	Franchise	0.00%	-	-	-	23,063	-	6,533	-	-	29,596	-
3	353	Land	0.00%	(659)	-	-	4,188,505	-	(3,083)	-	-	4,185,422	-
4	354	Structures & Improvements	3.33%	78,477	-	1,119,868	33,668,909	11,673,043	1,352,336	-	1,143,691	35,021,245	12,816,734
5	355	Power Generation	5.00%	(10,946)	-	143,744	3,082,859	795,208	446,855	-	165,314	3,529,715	960,523
6	355.1	Solar Generation	6.67%	-	-	-	-	-	-	-	-	-	-
7	360	Collection Sewer Forced	2.00%	250,888	-	42,111	2,231,013	158,094	36,371	-	44,984	2,267,384	203,078
8	361	Collection Sewers Gravity	2.00%	4,689,176	-	866,427	45,665,945	11,494,625	6,015,899	-	973,478	51,681,844	12,468,103
9	362	Special Collecting Structures	2.00%	-	-	-	-	-	-	-	-	-	-
10	363	Customer Services	2.00%	241,969	-	18,982	1,070,062	77,094	132,232	-	22,724	1,202,294	99,817
11	364	Flow Measuring Devices	10.00%	(10)	-	2,262	153,103	146,185	19,022	-	3,222	172,125	149,407
12	365	Flow Measuring Installations	10.00%	-	-	-	-	-	-	-	-	-	-
13	366	Reuse Services	2.00%	(8)	-	81,554	4,078,097	1,557,519	(914)	-	80,648	4,077,183	1,638,167
14	367	Reuse Meters And Installation	8.33%	(1,268)	-	(134)	52,759	45,201	166,727	-	7,972	219,486	53,174
15	370	Receiving Wells	3.33%	(445)	-	33,667	1,023,949	558,654	(1,123)	-	32,975	1,022,826	591,629
16	371	Pumping Equipment	12.50%	546,798	-	487,273	5,389,360	3,235,297	559,427	-	547,853	5,948,787	3,783,150
17	374	Reuse Distribution Reservoirs	2.50%	(10,475)	-	2,454	506,678	29,047	725,800	-	21,739	1,232,478	50,787
18	375	Reuse Trans. and Dist. System	2.50%	(6,302)	-	23,939	1,203,345	190,220	209,838	-	32,707	1,413,183	222,927
19	380	Treatment & Disposal Equipment	5.00%	457,237	-	1,066,147	21,551,566	8,619,726	403,771	-	1,087,673	21,955,337	9,707,398
20	380.1	Odor Control GAC		-	-	-	-	-	-	-	-	-	-
21	381	Plant Sewers	5.00%	(288)	-	360,094	7,207,343	1,967,308	(379)	-	359,988	7,206,964	2,327,296
22	382	Outfall Sewer Lines	3.33%	-	-	11,445	343,681	221,895	-	-	11,445	343,681	233,340
23	389	Other Sewer Plant & Equipment	6.67%	-	-	56,011	839,750	687,258	-	-	56,011	839,750	743,269
24	390	Office Furniture & Equipment	6.67%	(13)	-	21,371	320,584	178,670	693	-	21,406	321,277	200,076
25	390.1	Computers and Software	20.00%	11,175	-	81,356	440,921	255,053	20,088	-	65,865	461,009	320,938
26	391	Transportation Equipment	20.00%	-	-	5,783	331,474	331,414	(1,088)	-	(1,028)	330,386	330,386
27	392	Stores Equipment	4.00%	-	-	359	8,968	6,910	-	-	359	8,968	7,269
28	393	Tools, Shop And Garage Equip	5.00%	11,488	-	29,184	589,424	114,558	54,767	-	30,840	644,191	145,399
29	394	Laboratory Equip	10.00%	(1)	-	2,926	204,317	181,316	12,470	-	3,551	216,787	184,866
30	395	Power Operated Equipment	5.00%	-	-	25,010	500,203	30,716	-	-	25,010	500,203	55,726
31	396	Communication Equip	10.00%	68,027	-	118,361	1,605,525	882,573	11,664	-	122,346	1,617,189	1,004,918
32	397	Misc Equipment	10.00%	(3)	-	37,798	378,012	189,396	-	-	37,801	378,012	227,196
33	397.1	Misc Equipment CNG	3.33%	-	-	10,607	318,526	56,535	-	-	10,607	318,526	67,142
34	398	Other Tangible Plant	10.00%	-	-	8,011	80,110	28,039	-	-	8,011	80,110	36,050
35		Intentionally Left Blank		-	-	-	-	-	-	-	-	-	-
36		Intentionally Left Blank		-	-	-	-	-	-	-	-	-	-
37				-	-	-	-	-	-	-	-	-	-
38				-	-	-	-	-	-	-	-	-	-
39				-	-	-	-	-	-	-	-	-	-
40		TOTALS		6,324,817	-	4,656,611	137,058,050	43,711,554	10,167,907	-	4,917,212	147,225,957	48,628,766

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Div
Plant Additions and Retirements

Exhibit
Schedule B-2
Page 3.10

Line No.	NARUC Account No.	Description	Allowed Deprec. Rate	2023 Adjusted Plant Additions	2023 Adjusted Plant Retirements	2023 Depreciation (Calculated)	2023 Plant Balance	2023 Accum. Deprec.	2024 Adjusted Plant Additions	2024 Adjusted Plant Retirements	2024 Depreciation (Calculated)	2024 Plant Balance	2024 Accum. Deprec.	Net Plant
1	351	Organization	0.00%	(1,727)	-	(1,727)	(1,727)	(1,727)	(1,484)	-	(1,484)	(3,211)	(3,211)	(0)
2	352	Franchise	0.00%	-	-	-	29,596	-	(0)	-	-	29,596	-	29,596
3	353	Land	0.00%	(130)	-	-	4,185,292	-	-	-	-	4,185,292	-	4,185,292
4	354	Structures & Improvements	3.33%	8,964	-	1,166,357	35,030,209	13,983,090	49,821,439	-	1,996,033	84,851,648	15,979,123	68,872,525
5	355	Power Generation	5.00%	-	-	176,486	3,529,715	1,137,008	1,798,431	-	221,447	5,328,145	1,358,455	3,969,690
6	355.1	Solar Generation	6.67%	-	-	-	-	-	-	-	-	-	-	-
7	360	Collection Sewer Forced	2.00%	(223,928)	-	(178,581)	2,043,456	24,497	11,267,081	-	153,540	13,310,536	178,037	13,132,500
8	361	Collection Sewers Gravity	2.00%	2,459,299	-	1,058,230	54,141,143	13,526,333	778,837	-	1,090,611	54,919,980	14,616,944	40,303,036
9	362	Special Collecting Structures	2.00%	-	-	-	-	-	-	-	-	-	-	-
10	363	Customer Services	2.00%	(10,624)	-	13,421	1,191,670	113,239	295,940	-	26,793	1,487,610	140,031	1,347,579
11	364	Flow Measuring Devices	10.00%	-	-	3,580	172,125	152,987	-	-	2,935	172,125	155,923	16,202
12	365	Flow Measuring Installations	10.00%	-	-	-	-	-	-	-	-	-	-	-
13	366	Reuse Services	2.00%	33,298	-	81,877	4,110,481	1,720,044	42,998	-	82,640	4,153,479	1,802,683	2,350,796
14	367	Reuse Meters And Installation	8.33%	(5)	-	14,912	219,481	68,085	-	-	14,916	219,481	83,001	136,479
15	370	Receiving Wells	3.33%	(138)	-	33,922	1,022,688	625,551	50,069	-	34,889	1,072,757	660,440	412,317
16	371	Pumping Equipment	12.50%	33,153	-	567,923	5,981,940	4,351,073	2,686,976	-	722,908	8,668,916	5,073,981	3,594,935
17	374	Reuse Distribution Reservoirs	2.50%	232,771	-	33,722	1,465,249	84,508	233,685	-	39,552	1,698,934	124,060	1,574,874
18	375	Reuse Trans. and Dist. System	2.50%	(2)	-	35,328	1,413,181	258,254	(142)	-	35,188	1,413,040	293,442	1,119,598
19	380	Treatment & Disposal Equipment	5.00%	222,147	-	1,103,321	22,177,484	10,810,719	24,534,173	-	1,722,229	46,711,657	12,532,947	34,178,709
20	380.1	Odor Control GAC		-	-	-	-	-	-	-	-	-	-	-
21	381	Plant Sewers	5.00%	(853)	-	359,496	7,206,111	2,686,792	15,342,182	-	743,860	22,548,293	3,430,652	19,117,642
22	382	Outfall Sewer Lines	3.33%	-	-	11,445	343,681	244,764	-	-	11,445	343,681	256,229	87,452
23	389	Other Sewer Plant & Equipment	6.67%	-	-	56,011	839,750	799,281	-	-	24,553	839,750	823,834	15,916
24	390	Office Furniture & Equipment	6.67%	(4,799)	-	16,630	316,477	216,706	200,138	-	26,168	516,616	242,874	273,742
25	390.1	Computers and Software	20.00%	(3,911)	-	49,569	457,098	370,507	-	-	50,661	457,098	421,168	35,929
26	391	Transportation Equipment	20.00%	73,067	-	7,089	403,454	337,475	-	-	14,396	403,454	351,871	51,582
27	392	Stores Equipment	4.00%	-	-	359	8,968	7,628	-	-	359	8,968	7,987	981
28	393	Tools, Shop And Garage Equip	5.00%	-	-	32,210	644,191	177,608	13,194	-	32,539	657,385	210,148	447,237
29	394	Laboratory Equip	10.00%	(4)	-	4,128	216,784	188,994	8,532	-	4,513	225,315	193,507	31,808
30	395	Power Operated Equipment	5.00%	-	-	25,010	500,203	80,736	-	-	25,010	500,203	105,746	394,457
31	396	Communication Equip	10.00%	(557)	-	122,372	1,616,632	1,127,291	4,680,621	-	356,194	6,297,253	1,483,485	4,813,768
32	397	Misc Equipment	10.00%	-	-	37,801	378,012	264,999	(2,030)	-	35,771	375,982	300,770	75,212
33	397.1	Misc Equipment CNG	3.33%	-	-	10,607	318,526	77,749	-	-	10,607	318,526	88,356	230,170
34	398	Other Tangible Plant	10.00%	(1)	-	8,010	80,110	44,060	(1,081)	-	6,930	79,028	50,990	28,039
35		Intentionally Left Blank		-	-	-	-	-	-	-	-	-	-	-
36		Intentionally Left Blank		-	-	-	-	-	-	-	-	-	-	-
37				-	-	-	-	-	-	-	-	-	-	-
38				-	-	-	-	-	-	-	-	-	-	-
39				-	-	-	-	-	-	-	-	-	-	-
40		TOTALS		2,816,021	-	4,849,505	150,041,978	53,478,271	111,749,557	-	7,485,203	261,791,535	60,963,473	200,828,062

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Original Cost Rate Base Proforma Adjustments
Adjustment Number 2

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Schedule B-2
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Witness: Bourassa

Accumulated Depreciation

Line No.	Acct. No.	Description	Per Books Accum. Depr.	A Allocated Corporate Plant	B PTY Plant A/D	Adjustments C Capitalized Overhead Adjustment	D CWIP Transfers	E Adjustments to Reconcile A/D to Reconstruction	Adjusted Accum. Depr.
6	108	A/D Not Classified	$ 262,410	$ -	$ -	$ -	$ -	$ (262,410)	$ -
7	351	Organization	-		-	-	-	-	-
8	352	Franchise	-		-	-	-	-	-
9	353	Land	-		-	-	-	(15,440,136)	(15,440,136)
10	354	Structures & Improvements	15,454,476		-	(17,551)	-	14,634,245	30,071,170
11	355	Power Generation	1,357,162		-	(12,283)	-	1,358,455	2,703,333
12	355.1	Solar Generation				-	-	(765,664)	(765,664)
13	360	Collection Sewer Forced	776,120		-	(10,456)	-	(13,738,681)	(12,973,017)
14	361	Collection Sewers Gravity	13,935,986		2,746	(22,014)	-	14,616,944	28,533,662
15	362	Special Collecting Structures	-		-	-	-	(187,425)	(187,425)
16	363	Customer Services	188,395		413	(1,383)	-	(16,887)	170,538
17	364	Flow Measuring Devices	157,025		-	(106)	-	155,923	312,842
18	365	Flow Measuring Installations				-	-	(2,097,798)	(2,097,798)
19	366	Reuse Services	2,097,879		-	(81)	-	1,725,357	3,823,155
20	367	Reuse Meters And Installation	77,722		-	(396)	-	(587,076)	(509,749)
21	370	Receiving Wells	672,632		-	(2,555)	-	(4,229,658)	(3,559,581)
22	371	Pumping Equipment	4,913,606		-	(23,508)	-	4,932,855	9,822,953
23	374	Reuse Distribution Reservoirs	141,138		3,205	(3,218)	-	(169,704)	(28,578)
24	375	Reuse Trans. and Dist. System	295,363		-	(1,619)	-	(11,876,692)	(11,582,927)
25	380	Treatment & Disposal Equipment	12,185,907		-	(15,773)	-	12,532,947	24,703,081
26	380.1	Odor Control GAC	-		-	-	-	(3,296,155)	(3,296,155)
27	381	Plant Sewers	3,298,528		-	(2,373)	-	3,175,429	6,471,583
28	382	Outfall Sewer Lines	255,223		-	-	-	(128,879)	126,344
29	389	Other Sewer Plant & Equipment	385,108		-	-	-	113,186	498,294
30	390	Office Furniture & Equipment	711,694		-	(1,046)	-	255,032	965,680
31	390.1	Computers and Software	-		-	(12,158)	-	84,326	72,168
32	391	Transportation Equipment	337,386		-	(544)	-	343,895	680,737
33	392	Stores Equipment	7,976		-	-	-	(217,437)	(209,461)
34	393	Tools, Shop And Garage Equip	226,528		-	(1,104)	-	6,539	231,962
35	394	Laboratory Equip	203,351		660	(402)	-	57,172	260,781
36	395	Power Operated Equipment	148,906		-	(12,573)	-	(1,371,952)	(1,235,617)
37	396	Communication Equip.	1,480,218		-	(2,520)	-	299,159	1,776,857
38	397	Miscellaenous Equip.	1,177,742		8,000	(1,416)	-	300,803	1,485,129
39	397.1	Misc Equipment CNG	-			(33)	-	74,162	74,129
40	398	Other Tangible Plant	15,354		-	(1,159)	-	50,990	65,184
41									
42		SUBTOTAL	60,763,856	-	15,024	(146,270)	-	330,863	60,963,473
43									
44	903	Land and Land Rights		$ -	$ -				$ -
45	904	Structures and Improvments		211,452	-				211,452
46	940	Office Furniture and Fixtures		36,158	-				36,158
47	940.1	Computers and Software		247,091	33,965				281,075
48	940.2	Customer First		636,187	-				636,187
49	955	Power Generation		177	-				177
50	995	Power Operated Equipment		29,330	-				29,330
51									-
52		TOTALS	$ 60,763,856	$ 1,160,395	$ 49,008	$ (146,270)	$ -	$ 330,863	$ 62,157,853
53									
54	Accumulated Depreciation per Books								$ 60,763,856
55									
56	Increase (decrease) in Accumulated Depreciation								$ 1,393,997
57									
58	Adjustment to Accumulated Depreciation								$ 1,393,997
59									
60	SUPPORTING SCHEDULES								
61	B-2, pages 4.1 through 4.5								
62									

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Original Cost Rate Base Proforma Adjustments
Adjustment Number 2 - A

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Line No.							
1	Corporate Plant A/D						
2			[1]	[2]	[3]	[4] = [1]x[2]x[3]	
3				Liberty		Allocated	
4	Acct.		Original	Utilities		Original	
5	No.	Description	Cost	Factor	Factor	Cost	
6	903	Land and Land Rights	$ -	6.6567%	30.2279%	$ -	
	904	Structures and Improvements	4,041,052	6.6567%	30.2279%	81,313	
7							
8							
9							
10							
11	LU Sub-Corp. Plant (8020) A/D						
12							
13	903	Land and Land Rights	$ -	51.39%	34.5602%	$ -	
14	904	Structures and Improvements	732,762	51.39%	34.5602%	130,139	
15	940	Office Furniture and Equipment	203,589	51.39%	34.5602%	36,158	
16	940.1	Computers and Software	823,872	86.78%	34.5602%	247,091	
17	940.2	Customer First	2,121,231	86.78%	34.5602%	636,187	
18	955	Power Generation	999	51.39%	34.5602%	177	
19	995	Power Operated Equipment	165,147	51.39%	34.5602%	29,330	
20							
21	Totals						
22							
23	903	Land and Land Rights	$ -			$ -	
24	904	Structures and Improvements	4,773,814			211,452	
25	940	Office Furniture and Equipment	203,589			36,158	
26	940.1	Computers and Software	823,872			247,091	
27	940.2	Customer First	2,121,231			636,187	
28	955	Power Generation	999			177	
29	995	Power Operated Equipment	165,147			29,330	
30	997	Miscellaenous Equipment	-			-	
31			$ 8,088,652			$ 1,160,395	
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46	SUPPORTING SCHEDULE					RECAP SCHEDULES:	
47	Work papers					B-2, page 4	
48							

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Original Cost Rate Base Proforma Adjustments
Adjustment Number 2 - B

Exhibit
Schedule B-2
Page 4.2
Witness: Bourassa

Post-Test Year Plant A/D

Line No.	Acct. No.	Description	Depr Rate	PTY Plant	PTYP Depreciation
6	351	Organization	0.00%	$ -	$ -
7	352	Franchise	0.00%	-	-
8	353	Land	0.00%	-	-
9	354	Structures & Improvements	3.33%	-	-
10	355	Power Generation	5.00%	-	-
11	355.1	Solar Generation	6.67%		
12	360	Collection Sewer Forced	2.00%	-	-
13	361	Collection Sewers Gravity	2.00%	274,583	2,746
14	362	Special Collecting Structures	2.00%	-	-
15	363	Customer Services	2.00%	41,250	413
16	364	Flow Measuring Devices	10.00%	-	-
17	365	Flow Measuring Installations	10.00%		
18	366	Reuse Services	2.00%	-	-
19	367	Reuse Meters And Installation	8.33%	-	-
20	370	Receiving Wells	3.33%	-	-
21	371	Pumping Equipment	12.50%	-	-
22	374	Reuse Distribution Reservoirs	2.50%	256,437	3,205
23	375	Reuse Trans. and Dist. System	2.50%	-	-
24	380	Treatment & Disposal Equipment	5.00%	-	-
25	380.1	Odor Control GAC	0.00%	214,812	-
26	381	Plant Sewers	5.00%	-	-
27	382	Outfall Sewer Lines	3.33%	-	-
28	389	Other Sewer Plant & Equipment	6.67%	-	-
29	390	Office Furniture & Equipment	6.67%	-	-
30	390.1	Computers and Software	20.00%	-	-
31	391	Transportation Equipment	20.00%	-	-
32	392	Stores Equipment	4.00%	-	-
33	393	Tools, Shop And Garage Equip	5.00%	-	-
34	394	Laboratory Equip	10.00%	13,200	660
35	395	Power Operated Equipment	5.00%	-	-
36	396	Communication Equip	10.00%	-	-
37	397	Miscellaenous Equip.	10.00%	160,000	8,000
38	397.1	Misc Equipment CNG	3.33%		
39	398	Other Tangible Plant	10.00%		
43		Subtotal		$ 960,283	$ 15,024
45	903	Land and Land Rights	0.00%	$ -	$ -
46	904	Structures and Improvments	2.56%	-	-
47	940	Office Furniture and Fixtures	4.00%	-	-
48	940.1	Computers and Software	20.00%	339,845	33,985
49	940.2	Customer First	5.00%	-	-
50	955	Power Generation	5.00%	-	-
51	995	Power Operated Equipment	5.00%	-	-
52	997	Miscellaenous Equipment	10.00%	-	-
53		Subtotal		$ 339,845	$ 33,985
55		Total		$ 1,300,129	$ 49,008

SUPPORTING SCHEDULE
Work papers

RECAP SCHEDULES:
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Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Original Cost Rate Base Proforma Adjustments
Adjustment Number 2 - C

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Page 4.3
Witness: Bourassa

Line No.	Acct. No.	Description	7.5 2017	6.5 2018	5.5 2019	4.5 2020	3.5 2021	2.5 2022	1.5 2023	0.5 2024	Total	Depr Rate	2017-2024 Capitalized Overhead Depreciation 1/2 Year Conv.	A/D Adjustment
1		A/D on Capitalized Overhead Adjustments												
2														
3		No. of years	7.5	6.5	5.5	4.5	3.5	2.5	1.5	0.5				
6	106	Construction Completed Not Classified	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0.00%	$ -	$ -
7	351	Organization	-	-	-	-	-	-	-	-	-	0.00%	-	-
8	352	Franchise	-	-	-	-	-	-	-	(0)	(0)	0.00%	-	-
9	353	Land	-	-	(473)	(146)	(659)	(3,083)	(1,857)	(1,484)	(7,702)	0.00%	-	-
10	354	Structures & Improvements	-	(3,044)	(2,782)	(8,512)	(36,452)	(119,667)	(13,707)	(12,695)	(196,859)	3.33%	(17,550.83)	(17,550.83)
11	355	Power Generation	-	(320)	(34,723)	-	(10,946)	(5,531)	-	(938)	(52,458)	5.00%	(12,283.11)	(12,283.11)
12	355.1	Solar Generation	-	-	-	-	-	-	-	-	-	6.67%	-	-
13	360	Collection Sewer Forced	-	(15)	(458)	(9,153)	(15,242)	(6,741)	(223,928)	(145,782)	(401,319)	2.00%	(10,455.78)	(10,455.78)
14	361	Collection Sewers Gravity	-	(39,942)	(115,069)	(20,935)	(28,767)	(7,836)	(6,163)	31,062	(187,649)	2.00%	(22,013.92)	(22,013.92)
15	362	Special Collecting Structures	-	-	-	-	-	-	-	-	-	2.00%	-	-
16	363	Customer Services	-	(802)	(2,685)	(2,472)	(2,794)	(3,321)	(10,624)	(8,017)	(30,716)	2.00%	(1,382.70)	(1,382.70)
17	364	Flow Measuring Devices	-	-	-	-	(10)	(411)	-	-	(421)	10.00%	(106.26)	(106.26)
18	365	Flow Measuring Installations	-	-	-	-	-	-	-	-	-	10.00%	-	-
19	366	Reuse Services	-	-	-	-	(8)	(914)	(1,071)	(223)	(2,216)	2.00%	(80.62)	(80.62)
20	367	Reuse Meters And Installation	-	-	-	-	(1,268)	(123)	(5)	-	(1,396)	8.33%	(395.86)	(395.86)
21	370	Receiving Wells	-	(9,347)	(2,069)	-	(445)	(1,123)	(138)	(18)	(13,139)	3.33%	(2,554.55)	(2,554.55)
22	371	Pumping Equipment	-	(3,325)	(9,086)	(4,179)	(11,326)	(18,436)	(7,960)	(0)	(54,313)	12.50%	(23,508.29)	(23,508.29)
23	374	Reuse Distribution Reservoirs	-	-	-	(10,329)	(10,475)	(16,377)	(1,237)	(5,527)	(43,945)	2.50%	(3,217.61)	(3,217.61)
24	375	Reuse Trans. and Dist. System	-	-	-	(8,859)	(6,302)	(1,100)	(2)	(142)	(16,405)	2.50%	(1,618.71)	(1,618.71)
25	380	Treatment & Disposal Equipment	-	(12,525)	(8,542)	(7,341)	(13,159)	(13,623)	(10,739)	(115,636)	(181,565)	5.00%	(15,773.35)	(15,773.35)
26	380.1	Odor Control GAC	-	-	-	-	-	-	-	-	-	0.00%	-	-
27	381	Plant Sewers	-	-	(4,424)	(4,361)	(288)	(379)	(853)	(544)	(10,848)	5.00%	(2,373.12)	(2,373.12)
28	382	Outfall Sewer Lines	-	-	-	-	-	-	-	-	-	3.33%	-	-
29	389	Other Sewer Plant & Equipment	-	-	-	-	-	-	-	-	-	6.67%	-	-
30	390	Office Furniture & Equipment	-	(62)	(386)	(378)	(13)	(83)	(7,457)	(27)	(8,406)	6.67%	(1,046.00)	(1,046.00)
31	390.1	Computers and Software	-	(247)	(489)	(4,705)	(591)	(10,955)	(3,911)	-	(20,899)	20.00%	(12,158.46)	(12,158.46)
32	391	Transportation Equipment	-	-	-	-	-	(1,088)	-	-	(1,088)	20.00%	(544.03)	(544.03)
33	392	Stores Equipment	-	-	-	-	-	-	-	-	-	4.00%	-	-
34	393	Tools, Shop And Garage Equip	-	(328)	(1,203)	(1,055)	(418)	(2,849)	-	(6)	(5,859)	5.00%	(1,104.10)	(1,104.10)
35	394	Laboratory Equip	-	(198)	(52)	(125)	(1)	(697)	(4)	(252)	(1,330)	10.00%	(401.62)	(401.62)
36	395	Power Operated Equipment	-	(38,686)	(1)	-	-	-	-	-	(38,687)	5.00%	(12,573.11)	(12,573.11)
37	396	Communication Equip	-	(181)	(2,369)	(526)	(1,376)	(1,192)	(557)	-	(6,200)	10.00%	(2,519.88)	(2,519.88)
38	397	Miscellaneous Equip.	-	-	-	(2,919)	(3)	-	-	(2,030)	(4,952)	10.00%	(1,415.93)	(1,415.93)
39	397.1	Misc. Equipment CNG	-	(151)	-	-	-	-	-	-	(151)	3.33%	(32.68)	(32.68)
40	398	Other Tangible Plant	-	(1,700)	-	-	-	-	(1)	(1,081)	(2,782)	10.00%	(1,159.17)	(1,159.17)
41											-			
42		TOTALS	$ -	$ (110,873)	$ (184,812)	$ (85,996)	$ (140,543)	$ (215,528)	$ (290,215)	$ (263,340)	$ (1,291,306)		$ (146,270)	$ (146,270)
43														
44														
45		SUPPORTING SCHEDULE												
46		Work papers												
47														

RECAP SCHEDULES:
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Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Original Cost Rate Base Proforma Adjustments
Adjustment Number 2 - D

Exhibit
Schedule B-2
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Witness: Bourassa

Line No.	Acct. No.	Description	Depr Rate	CWIP Transfers	CWIP Transfer Depreciation
1		CWIP Transfers A/D			
2					
3					
6	351	Organization	0.00%	$ -	$ -
7	352	Franchise	0.00%	-	-
8	353	Land	0.00%	-	-
9	354	Structures & Improvements	3.33%	187,379	3,120
10	355	Power Generation	5.00%	-	-
11	355.1	Solar Generation	6.67%	-	-
12	360	Collection Sewer Forced	2.00%	1,061,426	10,614
13	361	Collection Sewers Gravity	2.00%	300,580	3,006
14	362	Special Collecting Structures	2.00%	-	-
15	363	Customer Services	2.00%	262,707	2,627
16	364	Flow Measuring Devices	10.00%	-	-
17	365	Flow Measuring Installations	10.00%	-	-
18	366	Reuse Services	2.00%	-	-
19	367	Reuse Meters And Installation	8.33%	-	-
20	370	Receiving Wells	3.33%	-	-
21	371	Pumping Equipment	12.50%	29,430	1,839
22	374	Reuse Distribution Reservoirs	2.50%	-	-
23	375	Reuse Trans. and Dist. System	2.50%	-	-
24	380	Treatment & Disposal Equipment	5.00%	720,219	18,005
25	380.1	Odor Control GAC	0.00%	-	-
26	381	Plant Sewers	5.00%	-	-
27	382	Outfall Sewer Lines	3.33%	-	-
28	389	Other Sewer Plant & Equipment	6.67%	-	-
29	390	Office Furniture & Equipment	6.67%	91,758	3,060
30	390.1	Computers and Software	20.00%	-	-
31	391	Transportation Equipment	20.00%	-	-
32	392	Stores Equipment	4.00%	-	-
33	393	Tools, Shop And Garage Equip	5.00%	-	-
34	394	Laboratory Equip	10.00%	8,784	439
35	395	Power Operated Equipment	5.00%	-	-
36	396	Communication Equip	10.00%	-	-
37	397	Miscellaenous Equip.	10.00%	-	-
38	397.1	Misc Equipment CNG	3.33%	-	-
39	398	Other Tangible Plant	10.00%	-	-
40					
41					
42					
43		Subtotal		$ 2,662,283	$ 42,711
44					
45	903	Land and Land Rights	0.00%	$ -	$ -
46	904	Structures and Improvments	2.56%	-	-
47	940	Office Furniture and Fixtures	4.00%	-	-
48	940.1	Computers and Software	20.00%	-	-
49	940.2	Customer First	5.00%	-	-
50	955	Power Generation	5.00%	-	-
51	995	Power Operated Equipment	5.00%	-	-
52		Subtotal		$ -	$ -
53					
54		Total		$ 2,662,283	$ 42,711
55					
56					
57		SUPPORTING SCHEDULE		RECAP SCHEDULES:	
58		Work papers		B-2, page 4	
59					

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Original Cost Rate Base Proforma Adjustments
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Exhibit
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Witness: Bourassa

Reconciliation of A/D to A/D Reconstruction

Line No.	Acct. No.	Description	Orginal Cost	B-2 Adjustments	Adjusted Orginal Cost	Plant Per Reconstruction	Difference
6	108	A/D Not Classified	$ 262,410	$ -	$ 262,410	$ -	$ (262,410)
7	106	Construction Completed Not Class	-	-	-	-	-
8	351	Organization	-	-	-	-	-
9	352	Franchise	-	-	-	-	-
10	353	Land	15,454,476	(17,551)	15,436,925	(3,211)	(15,440,136)
11	354	Structures & Improvements	1,357,162	(12,283)	1,344,878	15,979,123	14,634,245
	355	Power Generation	-	-	-	1,358,455	1,358,455
12	355.1	Solar Generation	776,120	(10,456)	765,664	-	(765,664)
13	360	Collection Sewer Forced	13,935,986	(19,268)	13,916,718	178,037	(13,738,681)
14	361	Collection Sewers Gravity	-	-	-	14,616,944	14,616,944
15	362	Special Collecting Structures	188,395	(970)	187,425	-	(187,425)
16	363	Customer Services	157,025	(106)	156,919	140,031	(16,887)
	364	Flow Measuring Devices	-	-	-	155,923	155,923
17	365	Flow Measuring Installations	2,097,879	(81)	2,097,798	-	(2,097,798)
18	366	Reuse Services	77,722	(396)	77,327	1,802,683	1,725,357
19	367	Reuse Meters And Installation	672,632	(2,555)	670,077	83,001	(587,076)
20	370	Receiving Wells	4,913,606	(23,508)	4,890,098	660,440	(4,229,658)
21	371	Pumping Equipment	141,138	(12)	141,126	5,073,981	4,932,855
22	374	Reuse Distribution Reservoirs	295,383	(1,619)	293,765	124,060	(169,704)
23	375	Reuse Trans. and Dist. System	12,185,907	(15,773)	12,170,134	293,442	(11,876,692)
24	380	Treatment & Disposal Equipment	-	-	-	12,532,947	12,532,947
25	380.1	Odor Control GAC	3,298,528	(2,373)	3,296,155	-	(3,296,155)
26	381	Plant Sewers	255,223	-	255,223	3,430,652	3,175,429
27	382	Outfall Sewer Lines	385,108	-	385,108	256,229	(128,879)
28	389	Other Sewer Plant & Equipment	711,694	(1,046)	710,648	823,834	113,186
29	390	Office Furniture & Equipment	-	(12,158)	(12,158)	242,874	255,032
30	390.1	Computers and Software	337,386	(544)	336,842	421,168	84,326
31	391	Transportation Equipment	7,976	-	7,976	351,871	343,895
32	392	Stores Equipment	226,528	(1,104)	225,424	7,987	(217,437)
33	393	Tools, Shop And Garage Equip	203,351	258	203,609	210,148	6,539
34	394	Laboratory Equip	148,908	(12,573)	136,335	193,507	57,172
35	395	Power Operated Equipment	1,480,218	(2,520)	1,477,698	105,746	(1,371,952)
36	396	Communication Equip	1,177,742	6,584	1,184,326	1,483,485	299,159
37	397	Miscellaenous Equip.	-	(33)	(33)	300,770	300,803
38	397.1	Misc Equipment CNG	15,354	(1,159)	14,194	88,356	74,162
39	398	Other Tangible Plant	-	-	-	50,990	50,990
40							
41							
42							
43							-
44		TOTALS	$ 60,763,856	$ (131,246)	$ 60,632,610	$ 60,963,473	$ 330,863

SUPPORTING SCHEDULE
B-2, pages 4.1 through 4.4
B-2, pages 3.6 through 3.10

RECAP SCHEDULES:
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Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Original Cost Rate Base Proforma Adjustments
Adjustment 3

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Schedule B-2
Page 5
Witness: Bourassa

Contributions-in-Aid of Construction (CIAC) and Accumulated Amortization

Line No.		Gross CIAC	Accumulated Amortization
1			
2			
3			
4			
5	Computed balance at End of Test Year	$ 89,687,625	$ 20,279,742
6			
7	Book balance at End of Test Year	$ 84,492,370	$ 18,404,402
8			
9	Increase (decrease)	$ 5,195,255	$ 1,875,340
10			
11			
12	Adjustment to CIAC/AA CIAC	$ 5,195,255	$ (1,875,340)
13	Label	3a	3b
14			
15			
16			
17			
18			
19	SUPPORTING SCHEDULES	RECAP SCHEDULES:	
20	E-1	B-2, page 2	
21	B-2, page 5.1		
22			
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Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Original Cost Rate Base Proforma Adjustments
Contributions-in-aid of Construction and Amortization
Adjustment 3

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Schedule B-2
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Witness: Bourassa

Line No.	Plant Acct	Description	Depr'n Rate	Decision 2016 12/31/2016	2017 Activity	2017 12/31/2017	2018 Activity	2018 12/31/2018	2019 Activity	2019 12/31/2019	2020 Activity	2020 12/31/2020
1	353	Land	0.00%	1,795,220	3,416,742	5,211,962		5,211,962		5,211,962		5,211,962
2		Correction										
3												
4		Amortization										
5		Accum Amort.				-		-		-		-
6												
7	361	Collection Sewers Contributed	2.00%	26,381,179	1,209,896	27,988,951	266,400	28,255,351	1,277,027	29,532,378	2,829,653	32,362,031
8		2013 CIAC Correction			397,966							
9												
10		2013 CIAC Amortization Corr										
11		Amortization			539,722		562,443		577,877		618,944	
12		2013 CIAC Amortization Corr			35,817							
13		Accum Amort.		5,556,226		6,131,765		6,694,208		7,272,085		7,891,029
14												
15	363	Services Contributed	2.00%	2,661,083	-	2,744,547		2,744,547	169,348	2,913,894	48,601	2,962,495
16		2013 CIAC Correction			83,464							
17												
18		Amortization			53,222		54,891		56,584		58,764	
19		2013 CIAC Amortization Corr			7,512							
20		Accum Amort.		895,248		955,981		1,010,872		1,067,457		1,126,221
21												
22	352	Franchise Contributed	0.00%	12,782	-	12,782		12,782		12,782		12,782
23												
24												
25		Amortization										
26		Accum Amort.										
27												
28	354	Structures and Improvements	3.33%	444,801	-	444,801		444,801		444,801	34,229	479,030
29												
30												
31												
32		Amortization			14,812		14,812		14,812		15,382	
33												
34												
35		Accum Amort.		142,527		157,339		172,151		186,963		202,344
36												
37	360	Force Main Contributed	2.00%	3,218,290	9,774	3,228,064		3,228,064		3,228,064		3,228,064
38												
39												
40		Amortization			64,464		64,561		64,561		64,561	
41												
42		Accum Amort.		123,268		187,732		252,293		316,854		381,415
43												

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Original Cost Rate Base Proforma Adjustments
Contributions-in-aid of Construction and Amortization
Adjustment 3

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Schedule B-2
Page 5.2
Witness: Bourassa

Line No.	Plant Acct	Description	Depr'n Rate	Decision 2016 12/31/2016	2017 Activity	2017 12/31/2017	2018 Activity	2018 12/31/2018	2019 Activity	2019 12/31/2019	2020 Activity	2020 12/31/2020
44	364	Flow Measuring Devices	10.00%	39,688	-	39,688		39,688		39,688	9,760	49,448
45												
46												
47		Amortization			3,969		3,969		3,969		4,457	
48												
49		Accum Amort.		21,828		25,797		29,766		33,734		38,191
50												
51	371	Pump Equipment	12.50%	230,721	-	230,721		230,721		230,721	56,740	287,461
52												
53												
54		Amortization			28,840		28,840		28,840		32,386	
55												
56		Accum Amort.		158,621		187,461		216,301		245,141		277,528
57												
58	380	Treatment & Disposal Equipment	5.00%	9,630,936	3,562,927	8,683,988		8,683,988		8,683,988	854,856	9,538,844
59		PTYP in Prior RC Decision			(4,509,875)							
60												
61		Amortization			570,620		434,199		434,199		455,571	
62		PTYP in Prior RC Decision			(112,747)							
63		Accum Amort.		1,109,789		1,567,662		2,001,861		2,436,061		2,891,632
64												
65	381	Plant Sewers	5.00%	2,945,172	-	2,945,172		2,945,172		2,945,172	61,167	3,006,339
66												
67												
68		Amortization			147,259		147,259		147,259		148,788	
69												
70		Accum Amort.		135,809		283,068		430,326		577,585		726,373
71												
72	398	Other Tangible Plant Contributed	6.67%	13,750	-	13,750		13,750		13,750		13,750
73												
74												
75		Amortization					917		917		917	
76		Accum Amort.		3,210		3,210		4,127		5,044		5,961
77												
78		**Total CIAC Sewer**		**47,373,622**	**4,170,804**	**51,544,426**	**266,400**	**51,810,826**	**1,446,375**	**53,257,200**	**3,895,007**	**57,152,207**
79												
80												
81		**Total Accum Amort.**		**8,146,526**	**1,466,235**	**9,500,014**	**1,311,891**	**10,811,905**	**1,329,019**	**12,140,924**	**1,399,770**	**13,540,694**
82												

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Original Cost Rate Base Proforma Adjustments
Contributions-in-aid of Construction and Amortization
Adjustment 3

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Schedule B-2
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Witness: Bourassa

Line No.	Plant Acct	Description	Depr'n Rate	2021 Activity	2021 12/31/2021	2022 Activity	2022 12/31/2022	2023 Activity	2023 12/31/2023	2024 Activity	2024 12/31/2024	PTY Activity	PTY
1	353	Land	0.00%		5,211,962		5,211,962		5,211,962	-	5,211,962		5,211,962
2		Correction											
3													
4		Amortization											
5		Accum Amort.			-		-		-		-		-
6													
7	361	Collection Sewers Contributed	2.00%		32,362,031		32,362,031		32,362,031	3,735,270	36,097,301		36,097,301
8		2013 CIAC Correction											
9													
10		2013 CIAC Amortization Corr											
11		Amortization		647,241		647,241		647,241		684,593			
12		2013 CIAC Amortization Corr											
13		Accum Amort.			8,538,270		9,185,510		9,832,751		10,517,344		10,517,344
14													
15	363	Services Contributed	2.00%		2,962,495		2,962,495		2,962,495	51,531	3,014,026		3,014,026
16		2013 CIAC Correction											
17													
18		Amortization		59,250		59,250		59,250		59,765			
19		2013 CIAC Amortization Corr											
20		Accum Amort.			1,185,471		1,244,720		1,303,970		1,363,736		1,363,736
21													
22	352	Franchise Contributed	0.00%		12,782		12,782		12,782	-	12,782		12,782
23													
24													
25		Amortization											
26		Accum Amort.											
27													
28	354	Structures and Improvements	3.33%		479,030		479,030		479,030	12,047,686	12,526,716	3,406,426	15,933,143
29													
30													
31													
32		Amortization		15,952		15,952		15,952		216,946		473,857	
33													
34													
35		Accum Amort.			218,296		234,248		250,200		466,745		940,602
36													
37	360	Force Main Contributed	2.00%		3,228,064		3,228,064		3,228,064	5,194,505	8,422,569		8,422,569
38													
39													
40		Amortization		64,561		64,561		64,561		64,561			
41													
42		Accum Amort.			445,977		510,538		575,099		639,660		639,660
43													

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
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Original Cost Rate Base Proforma Adjustments
Contributions-in-aid of Construction and Amortization
Adjustment 3

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Witness: Bourassa

Line No.	Plant Acct	Description	Depr'n Rate	2021 Activity	2021 12/31/2021	2022 Activity	2022 12/31/2022	2023 Activity	2023 12/31/2023	2024 Activity	2024 12/31/2024	PTY Activity	PTY
44	364	Flow Measuring Devices	10.00%		49,448		49,448		49,448	-	49,448		49,448
45													
46													
47		Amortization		4,945		4,945		4,945		4,945			
48													
49		Accum Amort.			43,136		48,081		53,026		57,971		57,971
50													
51	371	Pump Equipment	12.50%		287,461		287,461		287,461	-	287,461		287,461
52													
53													
54		Amortization		35,933		35,933		35,933		35,933			
55													
56		Accum Amort.			313,460		349,393		385,326		421,259		421,259
57													
58	380	Treatment & Disposal Equipment	5.00%		9,538,844		9,538,844		9,538,844	8,100,000	17,638,844		17,638,844
59		PTYP in Prior RC Decision											
60													
61		Amortization		476,942		476,942		476,942		679,442			
62		PTYP in Prior RC Decision											
63		Accum Amort.			3,368,574		3,845,516		4,322,458		5,001,900		5,001,900
64													
65	381	Plant Sewers	5.00%		3,006,339		3,006,339		3,006,339	-	3,006,339		3,006,339
66													
67													
68		Amortization		150,317		150,317		150,317		150,317			
69													
70		Accum Amort.			876,690		1,027,006		1,177,323		1,327,640		1,327,640
71													
72	398	Other Tangible Plant Contributed	6.67%		13,750		13,750		13,750	-	13,750		13,750
73													
74													
75		Amortization		917		917		917		917			
76		Accum Amort.			6,879		7,796		8,713		9,630		9,630
77													
78		**Total CIAC Sewer**		-	57,152,207	-	57,152,207	-	57,152,207	29,128,992	86,281,199	3,406,426	89,687,625
79													
80													
81		**Total Accum Amort.**		1,456,057	14,996,751	1,456,057	16,452,809	1,456,057	17,908,866	1,897,019	19,805,885	473,857	20,279,742
82													

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Original Cost Rate Base Proforma Adjustments
Adjustment 4
Advances-in-Aid of Construction (AIAC)

Exhibit
Schedule B-2
Page 6
Witness: Bourassa

Line No.			
1			
2			
3			
4	Computed balance at End of Test Year	$	11,726,776
5			
6	Book balance at End of Test Year	$	11,658,616
7			
8	Increase (decrease)	$	68,161
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19	SUPPORTING SCHEDULES	RECAP SCHEDULES:	
20	E-1	B-2, page 2	
21	B-2, page 6.1		
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Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Advances-in-Aid of Construction (AIAC)

Exhibit
Schedule B-2
Page 6.1
Witness: Bourassa

Line No.		Decision (1)	2017		2018		2019		2020		2021	
1		Balance		Balance		Balance		Balance		Balance		Balance
2		12/31/2016	Additions	12/31/2010	Additions	12/31/2011	Additions	12/31/2012	Additions	4/30/2023	Additions	12/31/2019
3												
4												
5	AIAC	3,055,263	-	3,045,489	-	3,045,489	-	3,166,552	-	3,178,996	-	16,025
6	Additions						121,063		12,444			
7	Refunds		-		-		-		-		(963)	
8	AIAC to CIAC		(9,774)								(3,162,008)	
9	AIAC in Progress		-								-	
10	Developer Admin Deposit		-									
11	RC True Up											
12												
13	Total AIAC	3,055,263	(9,774)	3,045,489	-	3,045,489	121,063	3,166,552	12,444	3,178,996	(3,162,971)	16,025
14												
15												
16												
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23												
24												
25												

Liberty Utilities (Litchfield Park Water & Se
Test Year Ended December 31, 2024
Advances-in-Aid of Construction (AIAC)

Exhibit
Schedule B-2
Page 6.2
Witness: Bourassa

Line No.		2022		2023		2024		TEST Year End	
		Additions	Balance 12/31/2020	Additions	Balance 12/31/2023	Additions	Balance 12/31/2024	Additions	Balance 12/31/2024
5	AIAC	-	14,690	-	14,690	-	11,726,776	-	11,726,776
6	Additions					11,926,217			
7	Refunds	(1,335)				(214,131)			
8	AIAC to CIAC								
9	AIAC in Progress								
10	Developer Admin Deposit								
11	RC True Up								
13	Total AIAC	(1,335)	14,690	-	14,690	11,712,086	11,726,776	-	11,726,776

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Accumulated Deferred Income Taxes (ADIT)

Exhibit
Schedule B-2
Page 7.0
Witness: Bourassa

Line No.	Description	Book	Tax	Difference	Tax Rate	ADIT Impact
1	PTY Plant	$ 1,300,129	$ 1,300,129	$ -	24.87%	$ -
2	CWIP Transfers	2,662,283	2,662,283	-	24.87%	-
3	Capitalized Overhead	(1,291,306)	(1,291,306)	-	24.87%	-
4	PTY Plant A/D	15,024	90,269	75,245	24.87%	18,714
5	CWIP Transfers A/D	42,711	61,666	18,955	24.87%	4,714
6	Capitalized Overhead A/D	(146,270)	(198,310)	(52,040)	24.87%	(12,943)
7	A/D Reconciliation Adjustment	330,863	-	(330,863)	24.87%	(82,289)
8	Net CIAC Adjustment	3,319,915	-	(3,319,915)	24.87%	(825,696)
9						
10	Increase(decrease) in ADIT	$ 3,562,244	$ (46,375)	$ (3,608,618)		$ (897,499)
11						
12	Computed 2024 ADIT					$ 1,125,547
13	Increase(decrease) in ADIT from above					(897,499)
14	Adjusted ADIT					$ 228,048
15						
16						
17	Adjusted ADIT					$ 228,048
18	TY ADIT per Books					(29,511)
19	Adjustmnet to ADIT					$ 257,559
20						
21	SUPPORTING SCHEDULES					
22	B-2, Page 4.2					
23	B-2, Page 4.3					
24	B-2, Page 4.4					
25	B-2, Page 4.5					
26	B-2, Page 7.1					
27	B-2, Page 7.2					
28	B-2, page 5					
29	Work papers					
30						

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Computation of Tax Depreciation on PTY Plant and CWIP Transfers

Exhibit
Schedule B-2
Page 7.1
Witness: Bourassa

Post-Test Year Plant and CWIP Transfers A/D

Line No.	Acct. No.	Description	Life (yrs)	Method	Tax Depr Rate	PTY Plant	PTYP Depreciation	CWIP Transfers	CWIP Transfer Depreciation
6	351	Organization			0.00%	$ -	$ -	$ -	$ -
7	352	Franchise			0.00%	-	-	-	-
8	353	Land			0.00%	-	-	-	-
9	354	Structures & Improvements	25	SL	4.00%	-	-	187,379	3,748
10	355	Power Generation	25	SL	4.00%	-	-	-	-
11	355.1	Solar Generation	25	SL	4.00%			-	-
12	360	Collection Sewer Forced	25	SL	4.00%	-	-	1,061,426	21,229
13	361	Collection Sewers Gravity	25	SL	4.00%	274,583	5,492	300,580	6,012
14	362	Special Collecting Structures	25	SL	4.00%	-	-	-	-
15	363	Customer Services	25	SL	4.00%	41,250	825	262,707	5,254
16	364	Flow Measuring Devices	25	SL	4.00%	-	-	-	-
17	365	Flow Measuring Installations	25	SL	4.00%			-	-
18	366	Reuse Services	25	SL	4.00%	-	-	-	-
19	367	Reuse Meters And Installation	25	SL	4.00%	-	-	-	-
20	370	Receiving Wells	25	SL	4.00%	-	-	-	-
21	371	Pumping Equipment	25	SL	4.00%	-	-	29,430	589
22	374	Reuse Distribution Reservoirs	25	SL	4.00%	256,437	5,129	-	-
23	375	Reuse Trans. and Dist. System	25	SL	4.00%	-	-	-	-
24	380	Treatment & Disposal Equipment	25	SL	4.00%	-	-	720,219	14,404
25	380.1	Odor Control GAC	25	SL	4.00%	214,812	4,296	-	-
26	381	Plant Sewers	25	SL	4.00%	-	-	-	-
27	382	Outfall Sewer Lines	25	SL	4.00%	-	-	-	-
28	389	Other Sewer Plant & Equipment	25	SL	4.00%	-	-	-	-
29	390	Office Furniture & Equipment	5	SL	20.00%	-	-	91,758	9,176
30	390.1	Computers and Software	3	SL	33.33%	-	-	-	-
31	391	Transportation Equipment	5	SL	20.00%	-	-	-	-
32	392	Stores Equipment	7	MACRS	14.29%	-	-	-	-
33	393	Tools, Shop And Garage Equip	7	MACRS	14.29%	-	-	-	-
34	394	Laboratory Equip	7	MACRS	14.29%	13,200	1,886	8,784	1,255
35	395	Power Operated Equipment	10	MACRS	10.00%	-	-	-	-
36	396	Communication Equip	5	MACRS	20.00%	-	-	-	-
37	397	Miscellaneous Equip.	10	MACRS	10.00%	160,000	16,000	-	-
38	397.1	Misc. Equipment CNG	25	SL	4.00%			-	-
39	398	Other Tangible Plant	25	SL	4.00%			-	-
43		Subtotal				$ 960,283	$ 33,628	$ 2,662,283	$ 61,666
45	903	Land and Land Rights			0.00%	$ -	$ -	$ -	$ -
46	904	Structures and Improvements	25	SL	4.00%	-	-	-	-
47	940	Office Furniture and Fixtures	5	SL	14.29%	-	-	-	-
48	940.1	Computers and Software	3	SL	33.33%	339,845	56,641	-	-
49	940.2	Customer First	3	SL	33.33%	-	-	-	-
50	955	Power Generation	25	SL	4.00%	-	-	-	-
51	995	Power Operated Equipment	25	SL	4.00%	-	-	-	-
52	997	Miscellaneous Equipment	26	SL	3.85%	-	-	-	-
53		Subtotal				$ 339,845	$ 56,641	$ -	$ -
55		Total				$ 1,300,129	$ 90,269	$ 2,662,283	$ 61,666

SUPPORTING SCHEDULE
Work papers

RECAP SCHEDULES:
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Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Computation of Tax Depreciation on Capitalized Overhead

Exhibit
Schedule B-2
Page 7.2
Witness: Bourassa

Capitalized Overhead Adjustments

Line No.	Acct. No.	Description	7.5 2017	6.5 2018	5.5 2019	4.5 2020	3.5 2021	2.5 2022	1.5 2023	0.5 2024	Total	Life (yrs)	Method	Tax Depr Rate	2017-2024 Capitalized Overhead Depreciation 1/2 Year Conv.
6	106	Construction Completed Not Classified	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -			0.00%	$ -
7	351	Organization	-	-	-	-	-	-	-	-	-			0.00%	-
8	352	Franchise	-	-	-	-	-	-	-	(0)	(0)			0.00%	-
9	353	Land	-	-	(473)	(146)	(659)	(3,083)	(1,857)	(1,484)	(7,702)			0.00%	-
10	354	Structures & Improvements	-	(3,044)	(2,782)	(8,512)	(36,452)	(119,667)	(13,707)	(12,695)	(196,859)	25	SL	4.00%	(21,082.08)
11	355	Power Generation	-	(320)	(34,723)	-	(10,946)	(5,531)	-	(938)	(52,458)	25	SL	4.00%	(9,826.49)
12	355.1	Solar Generation	-	-	-	-	-	-	-	-	-	25	SL	4.00%	-
13	360	Collection Sewer Forced	-	(15)	(458)	(9,153)	(15,242)	(6,741)	(223,928)	(145,782)	(401,319)	25	SL	4.00%	(20,911.56)
14	361	Collection Sewers Gravity	-	(39,942)	(115,069)	(20,935)	(28,767)	(7,836)	(6,163)	31,062	(187,649)	25	SL	4.00%	(44,027.85)
15	362	Special Collecting Structures	-	-	-	-	-	-	-	-	-	25	SL	4.00%	-
16	363	Customer Services	-	(802)	(2,685)	(2,472)	(2,794)	(3,321)	(10,624)	(8,017)	(30,716)	25	SL	4.00%	(2,765.40)
17	364	Flow Measuring Devices	-	-	-	-	(10)	(411)	-	-	(421)	25	SL	4.00%	(42.51)
18	365	Flow Measuring Installations	-	-	-	-	-	-	-	-	-	25	SL	4.00%	-
19	366	Reuse Services	-	-	-	-	(8)	(914)	(1,071)	(223)	(2,216)	25	SL	4.00%	(161.25)
20	367	Reuse Meters And Installation	-	-	-	-	(1,266)	(123)	(5)	-	(1,396)	25	SL	4.00%	(190.09)
21	370	Receiving Wells	-	(9,347)	(2,069)	-	(445)	(1,123)	(138)	(18)	(13,139)	25	SL	4.00%	(3,068.53)
22	371	Pumping Equipment	-	(3,325)	(9,086)	(4,179)	(11,326)	(18,436)	(7,960)	(0)	(54,313)	25	SL	4.00%	(7,522.65)
23	374	Reuse Distribution Reservoirs	-	-	-	(10,329)	(10,475)	(16,377)	(1,237)	(5,527)	(43,945)	25	SL	4.00%	(5,148.18)
24	375	Reuse Trans. and Dist. System	-	-	-	(8,859)	(6,302)	(1,100)	(2)	(142)	(16,405)	25	SL	4.00%	(2,589.94)
25	380	Treatment & Disposal Equipment	-	(12,525)	(8,542)	(7,341)	(13,159)	(13,623)	(10,739)	(115,636)	(181,565)	25	SL	4.00%	(12,618.68)
26	380.1	Odor Control GAC	-	-	-	-	-	-	-	-	-	25	SL	4.00%	-
27	381	Plant Sewers	-	-	(4,424)	(4,361)	(288)	(379)	(853)	(544)	(10,848)	25	SL	4.00%	(1,896.50)
28	382	Outfall Sewer Lines	-	-	-	-	-	-	-	-	-	25	SL	4.00%	-
29	389	Other Sewer Plant & Equipment	-	-	-	-	-	-	-	-	-	25	SL	4.00%	-
30	390	Office Furniture & Equipment	-	(62)	(386)	(378)	(13)	(83)	(7,457)	(27)	(8,406)	5	SL	20.00%	(3,136.44)
31	390.1	Computers and Software	-	(247)	(489)	(4,705)	(591)	(10,955)	(3,911)	-	(20,899)	3	SL	33.33%	(20,264.11)
32	391	Transportation Equipment	-	-	-	-	-	(1,088)	-	-	(1,088)	5	SL	20.00%	(544.03)
33	392	Stores Equipment	-	-	-	-	-	-	-	-	-	7	MACRS		-
34	393	Tools, Shop And Garage Equip	-	(328)	(1,203)	(1,055)	(418)	(2,849)	-	(6)	(5,859)	7	MACRS		(4,065.96)
35	394	Laboratory Equip	-	(198)	(52)	(125)	(1)	(697)	(4)	(252)	(1,330)	7	MACRS		(762.18)
36	395	Power Operated Equipment	-	(38,686)	(1)	-	-	-	-	-	(38,687)	10	MACRS		(29,811.87)
37	396	Communication Equip	-	(181)	(2,369)	(526)	(1,376)	(1,192)	(557)	-	(6,200)	5	MACRS		(5,320.90)
38	397	Miscellaneous Equip.	-	-	-	(2,919)	(3)	-	-	(2,030)	(4,952)	10	MACRS		(2,047.45)
39	397.1	Misc. Equipment CNG	-	(151)	-	-	-	-	-	-	(151)	25	SL	4.00%	(39.26)
40	398	Other Tangible Plant	-	(1,700)	-	-	-	-	(1)	(1,081)	(2,782)	25	SL	4.00%	(463.67)
41											-				
42		TOTALS	$ -	$ (110,873)	$ (184,812)	$ (85,996)	$ (140,543)	$ (215,528)	$ (290,215)	$ (263,340)	$ (1,291,306)				$ (198,310)
43															
44															

SUPPORTING SCHEDULE
Work papers

RECAP SCHEDULES:
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Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Original Cost Rate Base Proforma Adjustments
Adjustment 6
Excess Accumulated Deferred Income Tax EADIT

Exhibit
Schedule B-2
Page 8
Witness: Bourassa

Line No.		
4	Accumulated Deferred Income Tax Under New Tax Rates - Asset (Liability)	$ (1,612,052)
6	Accumulated Deferred Income Tax Under New Tax Rates - Asset (Liability) Per GL	$ (1,612,052)
8	Excess Accumulated Deferred Income Tax EADIT	$ 0
10	TY EADIT Balance	$ (1,612,052)

25	SUPPORTING SCHEDULES	RECAP SCHEDULES:
26	E-1	B-2, page 2
27	Work Papers	

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Original Cost Rate Base Proforma Adjustments
Adjustment 6

Exhibit
Schedule B-2
Page 8.1
Witness: Bourassa

Line No.	Last Rate Case Decision	Water	Sewer	Total
1	EADIT Balance 12.31.2017	2,031,159	2,236,878	4,268,037
2	Amortization Period:	27.03	25.06	
3	Annual Amortization	75,145	89,261	164,406
4	Start Date:	1/1/2018	1/1/2018	
5	Tax Rate:	24.870%	24.870%	
6				

EADIT Amortization Activity

	Year	Months	Opening Balance	Amortization	Ending Balance
9	2018	12	2,236,878	89,261	2,147,617
10	2019	12	2,147,617	89,261	2,058,356
11	2020	12	2,058,356	89,261	1,969,095
12	2021	12	1,969,095	89,261	1,879,834
13	2022	12	1,879,834	89,261	1,790,574
14	2023	12	1,790,574	89,261	1,701,313
15	2024	12	1,701,313	89,261	1,612,052

RECAP SCHEDULES:
B-2, page 2

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Original Cost Rate Base Proforma Adjustments
Adjustment 8
Sarival Accounting Order

Exhibit
Schedule B-2
Page 9
Witness: Bourassa

Line No.			
1			
2			
3			
4	Net Sarival Plant Costs eligible for Deferral	$	74,106,765
5	Composite useful life rate		4.68%
6			
7	2024 Depreciation deferral		1,734,770
8			
9	2025 Depreciation deferral		3,469,540
10			
11	**Total Sarival Accounting Order deferral**	**$**	**5,204,310**
12			
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19	SUPPORTING SCHEDULES	RECAP SCHEDULES:	
20	Workpaper	B-2, page 2	
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Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2014
Cash Working Capital

Exhibit
Schedule B-5
Page 1
Witness: Bourassa

Line No.	Description	Proforma Test Year Amount[1]	Revenue Lag (Lead) Days	Expense Lag (Lead) Days	Net Lag (Lead) Days Col. C - Col. D	Lead/Lag Factor Col. E/365	Cash Working Capital Required Col. B * Col. F
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
7	OPERATING EXPENSES						
8	Salaries and Wages	$ -	44.29	-	44.29	0.12133956	$ -
9	Purchased Wastewater Treat	55,208	44.29	47.89	(3.60)	(0.00986592)	(545)
10	Sludge Removal	590,826	44.29	47.82	(3.53)	(0.00967414)	(5,716)
11	Purchased Power	1,562,153	44.29	51.34	(7.05)	(0.01931797)	(30,178)
12	Chemicals	375,969	44.29	40.06	4.23	0.01158614	4,356
13	Fuel for Power Production	-	44.29	-	44.29	0.12133956	-
14	Materials and Supplies	196,533	44.29	29.91	14.38	0.03939436	7,742
15	Contractual Services - Engineering	-	44.29	-	44.29	0.12133956	-
16	Contractual Services - Accounting	-	44.29	-	44.29	0.12133956	-
17	Contractual Services - Legal	0	44.29	70.62	(26.33)	(0.07213989)	(0)
18	Contractual Services - Management	6,117,689	44.29	35.00	9.29	0.02544915	155,690
19	Contractual Services - Testing	74,905	44.29	45.88	(1.59)	(0.00435907)	(327)
20	Contractual Services - Other	593,245	44.29	71.50	(27.21)	(0.07455085)	(44,227)
21	Rental of Building/Real Property	-	44.29	-	44.29	0.12133956	-
22	Rental of Equipment	2,236	44.29	15.81	28.48	0.07802449	174
23	Transportation Expense	43,618	44.29	42.08	2.21	0.00605189	264
24	Insurance - Vehicle	18,070	44.29	(182.50)	226.79	0.62133956	11,228
25	Insurance - General Liability	152,284	44.29	(182.50)	226.79	0.62133956	94,620
26	Advertising Expense	(0)	44.29	60.45	(16.16)	(0.04427688)	0
27	Miscellaneous	151,244	44.29	44.20	0.09	0.00024367	37
28	Customer Deposit Interest	0	44.29	184.00	(139.71)	(0.38277003)	-
31	TAXES						
32	General Taxes-Property[1]	$ 961,065	44.29	213.96	(169.67)	(0.46484765)	$ (446,749)
33	General Taxes-Other	(1,485)	44.29	-	44.29	0.12133956	(180)
34	Income Tax[1]	2,614,440	44.29	37.00	7.29	0.01996970	52,210
36	OTHER						
37	Interest expense	3,623,234	44.29	50.00	(5.71)	(0.01564674)	(56,692)
39	TOTAL	$ 17,131,234		WORKING CASH REQUIREMENT			$ (258,291)

[1]At proposed rates.

RECAP SCHEDULES:
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Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Income Statement

Exhibit
Schedule C-1
Page 1
Witness: Bourassa

Line No.		Test Year Book Results	Adjustment	Test Year Adjusted Results	Proposed Rate Increase	Adjusted with Rate Increase
1	**Revenues**					
2	Sewer Revenues	$ 20,711,759	$ 135,122	$ 20,846,881	$ 11,596,379	$ 32,443,260
3	Misc. Revenues	705,454	16,751	722,205		722,205
4	**Total Operating Revenues**	$ 21,417,214	$ 151,872	$ 21,569,086	$ 11,596,379	$ 33,165,465
5	**Operating Expenses**					
6	Salaries and Wages	$ -	-	$ -	$ -	$ -
7	Purchased Wastewater Treatment	55,016	192	55,208	-	55,208
8	Sludge Removal	596,657	(5,831)	590,826	-	590,826
9	Purchased Power	1,556,717	5,437	1,562,153	-	1,562,153
10	Chemicals	396,131	(20,162)	375,969	-	375,969
11	Fuel For Power Production	-	-	-	-	-
12	Materials and Supplies	229,078	(32,545)	196,533	-	196,533
13	Contractual Services - Engineering	-	-	-	-	-
14	Contractual Services - Accounting	-	-	-	-	-
15	Contractual Services - Legal	(40,975)	40,975	0	-	0
16	Contractual Services - Management	6,016,989	100,700	6,117,689	-	6,117,689
17	Contractual Services - Testing	74,905	-	74,905	-	74,905
18	Contractual Services - Other	593,245	-	593,245	-	593,245
19	Rental of Building/Real Property	-	-	-	-	-
20	Rental of Equipment	2,236	-	2,236	-	2,236
21	Transportation Expense	43,618	-	43,618	-	43,618
22	Insurance - Vehicle	18,070	-	18,070	-	18,070
23	Insurance - General Liability	152,284	-	152,284	-	152,284
24	Advertising Expense	(926)	926	(0)	-	(0)
25	Reg. Commission Exp. - Rate Case	-	-	-	-	-
26	Reg. Commission Exp. - Other	-	-	-	-	-
27	Bad Debt Expense	(8,726)	47,234	38,508	20,704	59,212
28	Miscellaneous	150,285	959	151,244	-	151,244
29	Depreciation & Amortization	6,867,781	1,420,689	8,288,470	-	8,288,470
30	Taxes Other Than Income	(1,485)	-	(1,485)	-	(1,485)
31	Property Taxes	598,044	217,753	815,797	145,268	961,065
32	Income Tax	791,181	(1,019,598)	(228,417)	2,842,857	2,614,440
33	Customer Deposit Interest	-	-	-	-	-
34	**Total Operating Expenses**	$ 18,090,125	$ 756,729	$ 18,846,854	$ 3,008,828	$ 21,855,682
35	**Operating Income**	$ 3,327,089	$ (604,857)	$ 2,722,232	$ 8,587,551	$ 11,309,783
36	**Other Income (Expense)**					
37	Interest and Dividend Income	-	-	-		-
38	AFUDC Income	977,226	-	977,226		977,226
39	Miscellaneous Non-Utility Expenses	(93,561)	-	(93,561)		(93,561)
40	Interest Expense	(121,750)	(3,501,484)	(3,623,234)		(3,623,234)
41						
42	**Total Other Income (Expense)**	$ 761,916	$ (3,501,484)	$ (2,739,568)	$ -	$ (2,739,568)
43	**Net Profit (Loss)**	$ 4,089,005	$ (4,106,341)	$ (17,336)	$ 8,587,551	$ 8,570,215
44						
45	SUPPORTING SCHEDULES:				RECAP SCHEDULES:	
46	C-1, page 2				A-1	
47	E-2					
48						

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
dba Liberty Utilities
Test Year Ended December 31, 2024
Income Statement

Exhibit
Schedule C-1
Page 2.1
Witness: Bourassa

Line No.		LABEL>>>>> Test Year Book Results	1 Depreciation	2 Property Taxes	3 Rate Case Expense	4 Revenue Annualization	5 Intentionally Left Blank	6 Revenue Accrual Correction	7 Bad Debt Expense	8 Shared Services Allocation Adjustment	9 Intentionally Left Blank
1	**Revenues**										
2	Sewer Revenues	$ 20,711,759				135,122	$ -	$ -			
3	Other Revenue	705,454				16,751					
4	**Total Operating Revenues**	$ 21,417,214	$ -	$ -	$ -	$ 151,872	$ -	$ -	$ -	$ -	
5	**Operating Expenses**										
6	Salaries and Wages	$ -									
7	Purchased Wastewater Treatment	55,016				192					
8	Sludge Removal Expense	596,657									
9	Purchased Power	1,556,717				5,437					
10	Chemicals	396,131				1,384					
11	Fuel For Power Production	-									
12	Materials and Supplies	229,078									
13	Contractual Services - Engineering	-									
14	Contractual Services - Accounting	-									
15	Contractual Services - Legal	(40,975)									
16	Contractual Services - Management	6,016,989								64,285	
17	Contractual Services - Testing	74,905									
18	Contractual Services - Other	593,245									
19	Rental of Building/Real Property	-									
20	Rental of Equipment	2,236									
21	Transportation Expense	43,618									
22	Insurance - Vehicle	18,070									
23	Insurance - General Liability	152,284									
24	Advertising Expense	(926)									
25	Reg. Commission Exp. - Rate Case	-									
26	Reg. Commission Exp. - Other	-									
27	Bad Debt Expense	(8,726)							47,234		
28	Miscellaneous	150,285				959					
29	Depreciation & Amortization	6,867,781	1,420,689								
30	Taxes Other Than Income	(1,485)									
31	Property Taxes	598,044		217,753							
32	Income Tax	791,181									
33	Customer Deposit Interest	-									
34	**Total Operating Expenses**	$ 18,090,125	$ 1,420,689	$ 217,753	$ -	$ 7,972	$ -	$ -	$ 47,234	$ 64,285	$ -
35	**Operating Income**	$ 3,327,089	$ (1,420,689)	$ (217,753)	$ -	$ 143,901	$ -	$ -	$ (47,234)	$ (64,285)	$ -
36	**Other Income (Expense)**										
37	Interest and Dividend Income	-									
38	AFUDC Income	977,226									
39	Miscellaneous Non-Utility Expenses	(93,561)									
40	Interest Expense	(121,750)									
41											
42	**Total Other Income (Expense)**	$ 761,916	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
43	**Net Profit (Loss)**	$ 4,089,005	$ (1,420,689)	$ (217,753)	$ -	$ 143,901	$ -	$ -	$ (47,234)	$ (64,285)	$ -
44											
45	SUPPORTING SCHEDULES:										
46	C-2										
47	E-2										

Liberty Utilities (Litchfield Park Water & Sewer) Corp.
dba Liberty Utilities
Test Year Ended December 31, 2024
Income Statement

Exhibit
Schedule C-1
Page 2.2
Witness: Bourassa

Line No.		10 Intentionally Left Blank	11 Other Expense	12 Labor Adjustment	13 Interest Synch.	14 Income Taxes	15	16	Test Year Adjusted Results	Proposed Rate Increase	Adjusted with Rate Increase
1	**Revenues**										
2	Sewer Revenues								$ 20,846,881	$ 11,596,379	$ 32,443,260
3	Other Revenue								722,205		722,205
4	**Total Operating Revenues**	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 21,569,086	$ 11,596,379	$ 33,165,465
5	**Operating Expenses**										
6	Salaries and Wages								$ -		$ -
7	Purchased Wastewater Treatment								55,208		55,208
8	Sludge Removal Expense		(5,831)						590,826		590,826
9	Purchased Power								1,562,153		1,562,153
10	Chemicals		(21,545)						375,969		375,969
11	Fuel For Power Production								-		-
12	Materials and Supplies		(32,545)						196,533		196,533
13	Contractual Services - Engineering								-		-
14	Contractual Services - Accounting								-		-
15	Contractual Services - Legal		40,975						0		0
16	Contractual Services - Management			36,414					6,117,689		6,117,689
17	Contractual Services - Testing								74,905		74,905
18	Contractual Services - Other		-						593,245		593,245
19	Rental of Building/Real Property								-		-
20	Rental of Equipment		-						2,236		2,236
21	Transportation Expense								43,618		43,618
22	Insurance - Vehicle								18,070		18,070
23	Insurance - General Liability								152,284		152,284
24	Advertising Expense		926						(0)		(0)
25	Reg. Commission Exp. - Rate Case								-		-
26	Reg. Commission Exp. - Other								-		-
27	Bad Debt Expense								38,508	20,704	59,212
28	Miscellaneous		-						151,244		151,244
29	Depreciation & Amortization								8,288,470		8,288,470
30	Taxes Other Than Income								(1,485)		(1,485)
31	Property Taxes								815,797	145,268	961,065
32	Income Tax					(1,019,598)			(228,417)	2,842,857	2,614,440
33	Customer Deposit Interest								-		-
34	**Total Operating Expenses**	$ -	$ (18,021)	$ 36,414	$ -	$ (1,019,598)	$ -	$ -	$ 18,846,854	$ 3,008,828	$ 21,855,682
35	**Operating Income**	$ -	$ 18,021	$ (36,414)	$ -	$ 1,019,598	$ -	$ -	$ 2,722,232	$ 8,587,551	$ 11,309,783
36	**Other Income (Expense)**										
37	Interest and Dividend Income								-		-
38	AFUDC Income								977,226		977,226
39	Miscellaneous Non-Utility Expenses								(93,561)		(93,561)
40	Interest Expense				(3,501,484)				(3,623,234)		(3,623,234)
41											
42	**Total Other Income (Expense)**	$ -	$ -	$ -	$ (3,501,484)	$ -	$ -	$ -	$ (2,739,568)	$ -	$ (2,739,568)
43	**Net Profit (Loss)**	$ -	$ 18,021	$ (36,414)	$ (3,501,484)	$ 1,019,598	$ -	$ -	$ (17,336)	$ 8,587,551	$ 8,570,215
44											
45	SUPPORTING SCHEDULES:										
46	C-2										
47	E-2										

RECAP SCHEDULES:
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Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Adjustments to Revenues and Expenses

Exhibit
Schedule C-2
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Witness: Bourassa

Line No.		Adjustments to Revenues and Expenses						
		1	2	3	4	5	6	Subtotal
		Depreciation	Property Taxes	Rate Case Expense	Revenue Annualization	Tax Reform Credit	Revenue Accrual Correction	
4	Revenues	-	-	-	151,872	-	-	151,872
6	Expenses	1,420,689	217,753	-	7,972	-	-	1,646,414
8	Operating Income	(1,420,689)	(217,753)	-	143,901	-	-	(1,494,542)
11	Interest Expense							-
13	Other Income / Expense							-
17	Net Income	(1,420,689)	(217,753)	-	143,901	-	-	(1,494,542)

Line No.		Adjustments to Revenues and Expenses						
		7	8	9	10	11	12	Subtotal
		Bad Debt Expense	Shared Services Allocation Adjustment	Intentionally Left Blank	Intentionally Left Blank	Other Expense	Labor Adjustment	
25	Revenues							151,872
27	Expenses	47,234	64,285	-	-	(18,021)	36,414	1,776,327
29	Operating Income	(47,234)	(64,285)	-	-	18,021	(36,414)	(1,624,455)
32	Interest Expense	-						-
34	Other Income / Expense							-
38	Net Income	(47,234)	(64,285)	-	-	18,021	(36,414)	(1,624,455)

Line No.		Adjustments to Revenues and Expenses		
		13	14	Total
		Interest Synch.	Income Taxes	
46	Revenues	-	-	151,872
48	Expenses	-	(1,019,598)	756,729
50	Operating Income	-	1,019,598	-	-	-	-	(604,857)
53	Interest Expense	(3,501,484)						(3,501,484)
55	Other Income / Expense							-
59	Net Income	(3,501,484)	1,019,598	-	-	-	-	(4,106,341)

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Adjustments to Revenues and Expenses
Adjustment Number 1

Exhibit
Schedule C-2
Page 2
Witness: Bourassa

Depreciation Expense

Line No.	Acct. No.	Description	Adjusted Original Cost	Non-Depr. or Fully Depr. Plant	Depr Original Cost	Proposed Rates	Depreciation Expense
1							
2							
3							
4							
5	101	Plant-in-Service	-	-	-	0.00%	-
6	351	Organization	(3,211)	0	(3,211)	0.00%	-
7	352	Franchise	29,596	(29,596)	-	0.00%	-
8	353	Land	4,185,292	(4,185,292)	-	0.00%	-
9	354	Structures & Improvements	84,851,648		84,851,648	3.33%	2,825,560
10	355	Power Generation	5,328,145		5,328,145	5.00%	266,407
	355.1	Solar Generation	-		-	6.67%	-
11	360	Collection Sewer Forced	13,310,536		13,310,536	2.00%	266,211
12	361	Collection Sewers Gravity	54,919,980		54,919,980	2.00%	1,098,400
13	362	Special Collecting Structures	-		-	2.00%	-
14	363	Customer Services	1,487,610		1,487,610	2.00%	29,752
15	364	Flow Measuring Devices	172,125	(143,304)	28,821	10.00%	2,882
	365	Flow Measuring Installations	-		-	10.00%	-
16	366	Reuse Services	4,153,479		4,153,479	2.00%	83,070
17	367	Reuse Meters And Installation	219,481		219,481	8.33%	18,283
18	370	Receiving Wells	1,072,757		1,072,757	3.33%	35,723
19	371	Pumping Equipment	8,668,916	(1,678,386)	6,990,530	12.50%	873,816
20	374	Reuse Distribution Reservoirs	1,698,934		1,698,934	2.50%	42,473
21	375	Reuse Trans. and Dist. System	1,413,040		1,413,040	2.50%	35,326
22	380	Treatment & Disposal Equipment	46,711,657		46,711,657	5.00%	2,335,583
23	380.1	Odor Control GAC	-		-	0.00%	-
24	381	Plant Sewers	22,548,293		22,548,293	5.00%	1,127,415
25	382	Outfall Sewer Lines	343,681		343,681	3.33%	11,445
26	389	Other Sewer Plant & Equipment	839,750	(785,285)	54,464	6.67%	3,633
27	390	Office Furniture & Equipment	516,616	(157,124)	359,492	6.67%	23,978
28	390.1	Computers and Software	457,098	(212,242)	244,855	20.00%	48,971
29	391	Transportation Equipment	403,454	(331,474)	71,979	20.00%	14,396
30	392	Stores Equipment	8,968		8,968	4.00%	359
31	393	Tools, Shop And Garage Equip	657,385		657,385	5.00%	32,869
32	394	Laboratory Equip	225,315	(175,913)	49,402	10.00%	4,940
33	395	Power Operated Equipment	500,203		500,203	5.00%	25,010
34	396	Communication Equip	6,297,253	(396,611)	5,900,641	10.00%	590,064
35	397	Miscellaneous Equip.	375,982		375,982	10.00%	37,598
36	397.1	Misc. Equipment CNG	318,526		318,526	3.33%	10,607
37	398	Other Tangible Plant	79,028		79,028	10.00%	7,903
38		SUBTOTAL	$ 261,791,535	$ (8,095,228)	$ 253,696,307		$ 9,852,673
39							
40	903	Land and Land Rights	$ 37,777	$ (37,777)	$ -	0.00%	$ -
41	904	Structures and Improvements	1,355,038		1,355,038	2.56%	34,689
42	940	Office Furniture and Fixtures	361,396		361,396	4.00%	14,456
43	940.1	Computers and Software	1,775,034		1,775,034	20.00%	355,007
44	940.2	Customer First	8,482,495		8,482,495	5.00%	424,125
45	955	Power Generation	1,014		1,014	5.00%	51
46	995	Power Operated Equipment	167,601		167,601	5.00%	8,380
47		TOTALS	$ 273,971,889	$ (8,133,004)	$ 265,838,885		$ 10,689,380
48							
49		Less: Amortization of Contributions	Gross CIAC	Non-Amort. Or Fully Amortized	Net CIAC	Amort. Rate	
	353	Land	5,211,962	(5,211,962)	-	0.0000%	-
	352	Franchise	12,782	(12,782)	-	0.0000%	-
	354	Structure and Improvements	15,933,143		15,933,143	3.3300%	(530,574)
	360	Collection Sewers Force	8,422,569		8,422,569	2.0000%	(168,451)
	361	Collection Sewers Gravity	36,097,301		36,097,301	2.0000%	(721,946)
	364	Flow Measuring Devices	49,448		49,448	10.0000%	(4,945)
	363	Customer Services	3,014,026		3,014,026	2.0000%	(60,281)
	371	Pumping Equipment	287,461		287,461	12.5000%	(35,933)
	380	Treatment and Disposal	17,638,844		17,638,844	5.0000%	(881,942)
	381	Plant Sewers	3,006,339		3,006,339	5.0000%	(150,317)
	398	Other Tangible Plant	13,750		13,750	6.6700%	(917)
50			$ 89,687,625	$ (5,224,744)	$ 84,462,881		$ (2,555,305)
51	Amortization of Excess Deferred Depreciation						
52	Less:	Amortization of EADIT	2,236,878		2,236,878	3.9904%	(89,261)
53	Add:	Sarival Depreciation Deferral Accounting Order			5,204,310	4.6818%	243,656
54							
55	Total Depreciation Expense						$ 8,288,470
56							
57	Adjusted Test Year Depreciation Expense						6,867,781
58							
59	Increase (decrease) in Depreciation Expense						1,420,689
60							
61	Adjustment to Revenues and/or Expenses						$ 1,420,689
62							
63	SUPPORTING SCHEDULE						
64	B-2, page 3						

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Adjustment to Revenues and Expenses
Adjustment Number 2

Exhibit
Schedule C-2
Page 3
Witness: Bourassa

Property Taxes

Line No.	DESCRIPTION	Test Year as adjusted	Company Recommended
1	Company Adjusted Test Year Revenues	$ 21,569,086	$ 21,569,086
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	43,138,172	43,138,172
4	Company Recommended Revenue	21,569,086	33,165,465
5	Subtotal (Line 4 + Line 5)	64,707,258	76,303,637
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	21,569,086	25,434,546
8	Department of Revenue Multiplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	43,138,172	50,869,091
10	Plus: 10% of CWIP (intentionally excluded)	-	-
11	Less: Net Book Value of Licensed Vehicles	(277,283)	(277,283)
12	Full Cash Value (Line 9 + Line 10 - Line 11)	43,415,455	51,146,375
13	Assessment Ratio	16.0%	16.0%
14	Assessment Value (Line 12 * Line 13)	6,946,473	8,183,420
15	Composite Property Tax Rate - Obtained from ADOR	11.7440%	11.7440%
16	Test Year Adjusted Property Tax Expense (Line 14 * Line 15)	$ 815,797	$ 961,065
17	Tax on Parcels	-	-
18	Total Property Taxes (Line 16 + Line 17)	$ 815,797	
19	Test Year Property Taxes	$ 598,044	
20	Adjustment to Test Year Property Taxes (Line 18 - Line 19)	**$ 217,753**	
21			
22	Property Tax on Company Recommended Revenue (Line 16 + Line 17)		$ 961,065
23	Company Test Year Adjusted Property Tax Expense (Line 18)		$ 815,797
24	Increase in Property Tax Due to Increase in Revenue Requirement		**$ 145,268**
25			
26	Increase in Property Tax Due to Increase in Revenue Requirement (Line 24)		$ 145,268
27	Increase in Revenue Requirement		$ 11,596,379
28	Increase in Property Tax Per Dollar Increase in Revenue (Line 26 / Line 27)		1.25270%
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended April 30, 2023
Adjustment to Revenues and Expenses
Adjustment Number 3

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Witness: Bourassa

Rate Case Expense

Line No.			
1			
2	Remove TY Rate Case expense	$	-
3			
4	Adjustment to Revenue and/or Expense	$	-
5			
6			
7	Proposed Rate Case Expense Surcharge		
8			
9	Estimated Rate Case Expense	$	464,550
10			
11	Estimated Amortization Period in Years		3
12			
13	Annual Rate Case Expense	$	154,850
14			
15	YE number of customers		24,205
16			
17	Monthly Surcharge	$	0.53
18			
19			
20			
21			
22	Reference		
23	Testimony		
24			
25			

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Adjustment to Revenues and Expenses
Adjustment Number 4

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Schedule C-2
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Witness: Bourassa

Revenue Annualization

Line No.			
1			
2			
3			
4	Revenue Annualization	$	135,122
5	Miscellaneous Revenue Adjustment		16,751
6	Total Revenue from Annualization	$	151,872
7			
8	Purchased WW Treatment	$	55,016
9	Gallons Treated During Test Year (in 1,000s)		2,471,440
10	Cost per 1,000 gallons	$	0.0223
11			
12	Additional Gallons Treated from Annualization (in 1,000s)		8,631
13			
14	Increase (decrease) in Purchased WW Treatment	$	192
15			
16	Purchased Power Expense	$	1,556,717
17	Gallons Treated During Test Year (in 1,000s)		2,471,440
18	Cost per 1,000 gallons	$	0.6299
19			
20	Additional Gallons Treated from Annualization (in 1,000s)		8,631
21			
22	Increase (decrease) in Purchased Power	$	5,437
23			
24	TY Chemicals Expense	$	396,131
25	Gallons Treated During Test Year (in 1,000s)		2,471,440
26	Cost per 1,000 gallons	$	0.1603
27			
28	Additional Gallons Treated from Annualization (in 1,000s)		8,631
29			
30	Increase (decrease) in Chemicals Expense	$	1,384
31			
32	Additional billings from annualization		1,453
33	Postage rate	$	0.66
34			
35	Increase (decrease) in Office Expense	$	959
36			
37			
38	Adjustment to Revenue and/or Expense	$	144,093
39			
40	SUPPORTING SCHEDULES		
41	Work papers		
42	H-1		
43			

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Adjustment to Revenues and Expenses
Adjustment Number 5

Exhibit
Schedule C-2
Page 6
Witness: Bourassa

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Line No.
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Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Adjustment to Revenues and Expenses
Adjustment Number 6

Exhibit
Schedule C-2
Page 7
Witness: Bourassa

Revenue Accrual Correction

Line No.		
1	Correct Revenue Accrual Adjustment	$ -
2		
3		
4		
5	Adjustment to Revenues	$ -
6		
7		
8	Adjustment to Revenue and/or Expense	$ -
9		
10		
11		
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19		
20	Reference	
21	Testimony	
22	H-1	
23		
24		

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Adjustment to Revenues and Expenses
Adjustment Number 7

Exhibit
Schedule C-2
Page 8
Witness: Bourassa

Bad Debt Expense

Line No.		Revenues	Bad Debt Expense	Rate	Proposed Rate
1	Bad Debt Rate 2022	$ 18,928,017	$ (2,891)	-0.015%	
2	Bad Debt Rate 2023	$ 23,417,997	$ 138,546	0.592%	
3	Bad Debt Rate 2024	$ 21,417,214	$ (8,726)	-0.041%	
4					
5	Average of three year's of bad debt expense rate			0.179%	0.179%
6					
7				Adjusted TY	Proposed
8					
9	Revenues			$ 21,569,086	$ 33,165,465
10					
11	Computed Bad Debt Expense			$ 38,508	$ 59,212
12					
13					
14	Computed Bad Debt Expense			$ 38,508	
15	Test Year Bad Debt Expense			(8,726.01)	
16	Change in Bad Debt Expense			$ 47,234	
17					
18	Bad Debt Expense on Company recommended revenue				$ 59,212
19	Company Test Year Adjusted Bad Debt Expense				$ 38,508
20	Increase in Bad Debt due to Increase in Revenue Requirement				**$ 20,704**
21					
22	Increase in Bad Debt Expense Due to Increase in Revenue Requirement				$ 20,704
23	Increase in Revenue Requirement				$ 11,596,379
24	Increase in Bad Debt Expense Per Dollar Increase in Revenue				0.17854%

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended April 30, 2023
Adjustment to Revenues and Expenses
Adjustment Number 8

Exhibit
Schedule C-2
Page 9
Witness: Bourassa

Shared Services Allocation Adjustment

Line No.			
1			
2	Corporate Allocation Adjustment		
3			
4	Adjustment to Contractual Services Management	$	64,285
5			
6			
7	Adjustment to Contractual Services Professional	$	64,285
8			
9			
10	Adjustment to Revenue and/or Expense	$	64,285
11			
12			
13			
14			
15			
16			
17			
18	Reference		
19	Testimony		
20	Work Papers		

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Adjustment to Revenues and Expenses
Adjustment Number 9

Exhibit
Schedule C-2
Page 10
Witness: Bourassa

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Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Adjustment to Revenues and Expenses
Adjustment Number 10

Exhibit
Schedule C-2
Page 11
Witness: Bourassa

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Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Adjustment to Revenues and Expenses
Other Expense Adjustments
Adjustment Number 11

Exhibit
Schedule C-2
Page 12
Witness: Bourassa

Line No.			
1	Other Expense Adjustments		
2			
3	Increase (decrease) in Sludge Removal Expense	$	(5,831)
4	Increase (decrease) in Chemicals		(21,545)
5	Increase (decrease) in Materials & Supplies		(32,545)
6	Increase (decrease) in Contractual Services - Legal		-
7	Increase (decrease) in Contractual Services - Other		-
8	Increase (decrease) in Equipment Rental		-
9	Increase (decrease) in Legal Expense		40,975
10	Increase (decrease) in Advertising Expense		926
11	Increase (decrease) in Miscellaneous Expense		-
12	Total	$	(18,021)
13			
14			
15	Adjustment to Revenue and/or Expense	$	(18,021)
16			
17			
18			
19			
20			
21			
22			
23	Reference		
24	Testimony		
25	Work Papers		

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Adjustment to Revenues and Expenses
Adjustment Number 12

Exhibit
Schedule C-2
Page 13
Witness: Bourassa

Labor Expense Adjustments

Line No.			
1	Corporate Allocation Adjustment		
2			
3			
4	Increase (decrease) in Contractual Services - Management	$	36,414
5	Increase (decrease) in Contractual Services - Other		-
6			
7			
8			
9			
10	Total	$	36,414
11			
12			
13	Adjustment to Revenue and/or Expense	$	36,414
14			
15			
16			
17			
18			
19			
20			
21	Reference		
22	Testimony		
23	Work Papers		
24			

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Adjustment to Revenues and Expenses
Adjustment Number 13

Exhibit
Schedule C-2
Page 14
Witness: Bourassa

Interest Synchronization

Line No.			
1			
2			
3			
4	Fair Value Rate Base	$ 133,887,159	
5	Weighted Cost of Debt	2.62%	
6	Interest Expense		$ 3,501,484
7			
8	Test Year Interest Expense		$ -
9			
10	Increase (decrease) in Interest Expense		3,501,484
11			
12			
13			
14	Adjustment to Revenue and/or Expense		$ (3,501,484)
15			
16			
17	Weighted Cost of Debt Computation		
18	Pro forma Capital Structure		Weighted
19		Percent	Cost	Cost
20	Debt	46.00%	5.69%	2.62%
21	Equity	54.00%	10.80%	5.83%
22	Total	100.00%		8.45%
23				
24				
25				
26				
27				
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29				
30				

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Adjustment to Revenues and/or Expenses
Adjustment Number 14

Exhibit
Schedule C-2
Page 15
Witness: Bourassa

Line No.		Test Year at Present Rates	Test Year at Proposed Rates
1	Income Taxes		
2			
3			
4	Computed Income Tax	$ (228,417)	$ 2,614,440
5	Test Year Income tax Expense	-	(228,417)
6	Adjustment to Income Tax Expense	$ (228,417)	$ 2,842,857
7			
8			
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12			
13	SUPPORTING SCHEDULE		
14	C-3, page 2		
15			
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Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Computation of Gross Revenue Conversion Factor

Exhibit
Schedule C-3
Page 1
Witness: Bourassa

Line No.	Description	Percentage of Incremental Gross Revenues
1	Combined Federal and State Effective Income Tax Rate	24.871%
2		
3	Uncollectible Factor	0.134%
4		
5	Property Tax Factor	0.941%
6		
7		
8	Total Tax Percentage	25.946%
9		
10	Operating Income % = 100% - Tax Percentage	74.054%
11		
12		
13		
14		
15	1 = Gross Revenue Conversion Factor	
16	Operating Income %	1.3504
17		
18		
19		
20		
21		
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24		
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26		
27	SUPPORTING SCHEDULES:	RECAP SCHEDULES:
28	C-3, page 2	A-1
29		
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Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024

Exhibit
Schedule C-3
Page 2
Witness: Bourassa

GROSS REVENUE CONVERSION FACTOR

Line No.	Description	(A)	(B)	(C)	(D)	(E)	(F)
	Calculation of Gross Revenue Conversion Factor:						
1	Revenue	100.0000%					
2	Uncollectible Factor (Line 11)	0.1341%					
3	Revenues (L1 - L2)	99.8659%					
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	25.8121%					
5	Subtotal (L3 - L4)	74.0537%					
6	**Revenue Conversion Factor (L1 / L5)**	1.350371					
	Calculation of Uncollectible Factor:						
7	Unity	100.0000%					
8	Combined Federal and State Tax Rate (L17)	24.8710%					
9	One Minus Combined Income Tax Rate (L7 - L8)	75.1290%					
10	Uncollectible Rate	0.1785%					
11	Uncollectible Factor (L9 * L10)		0.1341%				
	Calculation of Effective Tax Rate:						
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%					
13	Arizona State Income Tax Rate	4.9000%					
14	Federal Taxable Income (L12 - L13)	95.1000%					
15	Applicable Federal Income Tax Rate (L55, Col E)	21.0000%					
16	Effective Federal Income Tax Rate (L14 x L15)	19.9710%					
17	Combined Federal and State Income Tax Rate (L13 +L16)		24.8710%				
	Calculation of Effective Property Tax Factor						
18	Unity	100.0000%					
19	Combined Federal and State Income Tax Rate (L17)	24.8710%					
20	One Minus Combined Income Tax Rate (L18-L19)	75.1290%					
21	Property Tax Factor	1.2527%					
22	Effective Property Tax Factor (L20*L21)		0.9411%				
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			25.8121%			
24	Required Operating Income	$ 11,309,783					
25	Adjusted Test Year Operating Income (Loss)	$ 2,722,232					
26	Required Increase in Operating Income (L24 - L25)	$ 2,722,232	$ 8,587,551				
27	Income Taxes on Recommended Revenue (Col. (E), L52)	$ 2,614,440					
28	Income Taxes on Test Year Revenue (Col. (B), L54)	$ (228,417)					
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		$ 2,842,857				
30	Recommended Revenue Requirement	$ 33,165,465					
31	Uncollectible Rate (Line 10)	0.1785%					
32	Uncollectible Expense on Recommended Revenue (L24 * L25)	$ 59,212					
33	Adjusted Test Year Uncollectible Expense	$ 38,508					
34	Required Increase in Revenue to Provide for Uncollectible Exp.		$ 20,704				
35	Property Tax with Recommended Revenue	$ 961,065					
36	Property Tax on Test Year Revenue	$ 815,797					
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		$ 145,268				
38	Total Required Increase in Revenue (L26 + L29 + L37)		$ 11,596,379				

		(A)	(B)	(C)	(D)	(E)	(F)
		Test Year			Company Recommended		
		Total	Sewer		Total	Sewer	
	Calculation of Income Tax:						
39	Revenue	$ 21,569,086	$ 21,569,086		$ 33,165,465	$ 33,165,465	
40	Operating Expenses Excluding Income Taxes and EADIT amortization	$ 18,966,010	$ 18,966,010		$ 19,151,982	$ 19,151,982	
41	Synchronized Interest (L47)	$ 3,501,484	$ 3,501,484		$ 3,501,484	$ 3,501,484	
42	Arizona Taxable Income (L39 - L40 - L41)	$ (916,408)	$ (918,408)		$ 10,512,000	$ 10,512,000	
43	Arizona State Effective Income Tax Rate	4.9000%	4.9000%	4.9000%	4.9000%	4.9000%	4.9000%
44	Arizona Income Tax (L42 x L43)	$ (45,002)	$ (45,002)	$ -	$ 515,088	$ 515,088	$ -
45	Federal Taxable Income (L42- L44)	$ (873,406)	$ (873,406)	$ -	$ 9,996,912	$ 9,996,912	$ -
46	Federal Income Tax Rate	21.00%	21.00%	21.00%	21.00%	21.00%	21.00%
47	Federal Income Tax (L45xL46)	$ (183,415)	$ (183,415)	$ -	$ 2,099,352	$ 2,099,352	$ -
48	Combined Federal and State Income Tax (L35 + L42)	$ (228,417)	$ (228,417)	$ -	$ 2,614,440	$ 2,614,440	$ -
49	COMBINED Applicable Federal Income Tax Rate [Col. [D], L47 - Col. [A], L47 / [Col. [D], L45 - Col. [A], L45]				21.0000%		
50	WASTEWATER Applicable Federal Income Tax Rate [Col. [E], L47 - Col. [B], L47] / [Col. [E], L45 - Col. [B], L45]					21.0000%	
51	WATER Applicable Federal Income Tax Rate [Col. [F], L47 - Col. [C], L47] / [Col. [F], L45 - Col. [C], L45]						0.0000%

		Sewer	
	Calculation of Interest Synchronization:		
52	Rate Base	$ 133,887,159	
53	Weighted Average Cost of Debt	2.6152%	
54	Synchronized Interest (L45 X L46)	$ 3,501,484	

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Summary of Cost of Capital

Exhibit
Schedule D-1
Page 1
Witness: Bourassa

Consolidated Capital Structure of Water and Wastewater Division

Line No.	Item of Capital	Adjusted End of Test Year Dollar Amount	Adjusted End of Test Year Percent of Total	Adjusted End of Test Year Cost Rate	Adjusted End of Test Year Weighted Cost	Projected Capital Structure	Projected Capital Structure Percent of Total	Projected Capital Structure Cost Rate	Projected Capital Structure Weighted Cost
1	Long-Term Debt	30,000,000	25.80%	5.36%	1.38%	68,849,797	46.00%	5.69%	2.62%
2									
3	Stockholder's Equity	86,288,513	74.20%	10.80%	8.01%	59,578,647	54.00%	10.80%	5.83%
4									
5	Totals	116,288,513	100.00%		9.40%	128,428,444	100.00%		8.45%
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21									
22	SUPPORTING SCHEDULES:					RECAP SCHEDULES:			
23	D-3					A-3			
24	D-4								
25	E-1								
26	Testimony								
27									
28									
29									
30									

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Cost of Long Term Debt

Exhibit
Schedule D-2
Page 1
Witness: Bourassa

Line No.	Description of Debt	End of Test Year Amount Outstanding	Annual Interest	Interest Rate	Weighted Cost	End of Projected Year Amount Outstanding	Annual Interest	Interest Rate	Weighted Cost
1	Liberty Utilities - Interco Note	30,000,000	1,608,600	5.36%	5.362%	$ 30,000,000	1,608,600	5.362%	2.336%
2	Liberty Utilities - Pro Forma		-	0.00%	0.000%	38,849,797	2,305,735	5.935%	3.349%
3			-	0.00%	0.000%		-	0.00%	0.000%
4							-	0.00%	0.000%
5									
6									
7									
8									
9									
10									
11									
12									
13	Totals	$ 30,000,000	1,608,600		5.362%	$ 68,849,797	$ 3,914,335		5.685%
14									
15									
16	SUPPORTING SCHEDULES:					RECAP SCHEDULES:			
17	E-1					D-1			
18	E-2								
19	Testimony								
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Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Cost of Preferred Stock

Exhibit
Schedule D-3
Page 1
Witness: Bourassa

Line No.		End of Test Year			End of Projected Year		
1							
2							
3	Description	Shares		Dividend	Shares		Dividend
4	of Issue	Outstanding	Amount	Requirement	Outstanding	Amount	Requirement
5							
6							
7	NOT APPLICABLE, NO PREFERRED STOCK ISSUED OR OUTSTANDING						
8							
9							
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21	SUPPORTING SCHEDULES:			RECAP SCHEDULES:			
22	E-1			D-1			
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Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Cost of Common Equity

Exhibit
Schedule D-4
Page 1
Witness: Bourassa

Line No.			
1			
2	The Company is proposing a cost of common equity of	10.80%	.
3			
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17	SUPPORTING SCHEDULES:	RECAP SCHEDULES:	
18	E-1	D-1	
19	D-4.1 to D-4.16		
20			

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Comparative Balance Sheets

Exhibit
Schedule E-1
Page 1
Witness: Bourassa

Line No.		Test Year Ended 12/31/2024	Year Ended 12/31/2023	Year Ended 12/31/2022
1	**ASSETS**			
2	PLANT			
3	Plant In Service	$ 259,436,891	$ 152,088,098	$ 140,582,818
4	Non-Utility Plant	-	-	-
5	Construction Work in Progress	6,199,162	88,119,899	30,203,459
6	Property Held for Future Use	1,790,705	38,480	38,480
7	Accumulated Depreciation	(60,763,856)	(59,150,876)	(48,273,334)
8	Plant Acquisition Adjustment	-	-	-
9	Net Plant	$ 206,662,902	$ 181,095,602	$ 122,551,424
10				
11	CURRENT ASSETS			
12	Cash and Equivalents	$ -	$ 178,717	$ 280,870
13	Restricted Cash	124,838	5,838,286	17,582,736
14	Net Accounts Receivable	1,716,240	677,361	1,121,614
15	Inter-Company Receivable	-	(0)	7,758,733
16	Notes Receivable	-	-	-
17	Materials and Supplies	-	-	-
18	Prepayments	(42,101)	(49,413)	51,428
19	Accrued Utility Revenues	4,617,171	3,670,100	3,657,719
20	Other Current Assets	-	365,346	292,520
21	Total Current Assets	$ 6,416,149	$ 10,680,397	$ 30,745,620
22				
23	OTHER ASSETS			
24	Deferred Finance Costs	$ 143,964	$ -	$ -
25	Other Deferred Debits	143,987	-	327,240
26	Other Non-Current Assets	-	-	-
27	Deferred Debits	$ 287,951	$ -	$ 327,240
28				
29	TOTAL ASSETS	$ 213,367,002	$ 191,775,999	$ 153,624,284
30				
31				
32	**LIABILITIES AND STOCKHOLDER EQUITY**			
33				
34	Stockholder's Equity	$ 73,836,884	$ 69,747,879	$ 59,800,797
35				
36	Long-Term Debt	$ 17,100,000	$ -	$ -
37				
38	CURRENT LIABILITIES			
39	Accounts Payable	$ 208,050	$ 185,675	$ 14,027
40	Current Portion of Long-Term Debt	-	-	-
41	Payables to Associated Companies	18,112,125	38,921,391	636,694
42	Customer Security Deposits	-	-	-
43	Customer Meter Deposits, Current	0	134,658	-
44	Current Portion of AIAC	-	-	3,116
45	Accrued Taxes	19,846,274	28,409,597	20,348,961
46	Accrued Interest	603,225	-	-
47	Accumulated Deferred Income Taxes, Current	-	-	-
48	Other Current Liabilities	466,541	565,814	10,703,354
49	Total Current Liabilities	$ 39,236,215	$ 68,217,135	$ 31,706,151
50				
51	DEFERRED CREDITS			
52	Customer Meter Deposits, less current	$ -	$ -	$ -
53	Advances in Aid of Construction	11,658,616	4,244	10,041
54	AIAC, in progress	1,843,631	1,662,791	1,663,735
55	AIAC, gross-up	-	1,485	1,485
56	Accumulated Deferred Income Tax Credits	(29,511)	-	-
57	Contributions In Aid of Construction	84,492,370	58,896,020	55,397,608
58	CIAC, in progress	860,772	739,686	705,457
59	Accumulated Amortization	(18,404,402)	(17,127,369)	(16,108,073)
60	Accumulated Deferred Income Taxes	1,413,823	2,333,853	(1,213,802)
61	Other Deferred Credits	1,358,605	7,300,276	21,660,885
62	Total Deferred Credits	$ 83,193,904	$ 53,810,985	$ 62,117,336
63				
64	Total Liabilities & Common Equity	$ 213,367,002	$ 191,775,998	$ 153,624,284
65				
66				
67				
68	SUPPORTING SCHEDULES:		RECAP SCHEDULES:	
69			A-3	
70				
71				
72				

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Comparative Income Statements

Exhibit
Schedule E-2
Page 1
Witness: Bourassa

Line No.		Test Year Ended 12/31/2024	Prior Year Ended 12/31/2023	Prior Year Ended 12/31/2022
1	**Revenues**			
2	Sewer Revenues	$ 20,711,759	$ 18,861,574	$ 18,211,283
3	Other Revenue	705,454	4,556,423	716,734
4	**Total Operating Revenues**	$ 21,417,214	$ 23,417,997	$ 18,928,017
5	**Operating Expenses**			
6	Salaries and Wages	$ -	$ -	$ -
7	Purchased Wastewater Treatment	55,016	18,268	27,271
8	Sludge Removal Expense	596,657	551,560	541,278
9	Purchased Power	1,556,717	1,071,564	888,660
10	Chemicals	396,131	707,701	507,245
11	Fuel For Power Production	-	-	2,235
12	Materials and Supplies	229,078	164,063	159,392
13	Contractual Services - Engineering	-	3,534	-
14	Contractual Services - Accounting	-	28,802	46,345
15	Contractual Services - Legal	(40,975)	(30,809)	175,999
16	Contractual Services - Management	6,016,989	4,879,941	2,341,442
17	Contractual Services - Testing	74,905	42,345	32,291
18	Contractual Services - Other	593,245	1,005,607	1,779,696
19	Rental of Building/Real Property	-	10,979	31,140
20	Rental of Equipment	2,236	822	1,591
21	Transportation Expense	43,618	11,594	77,713
22	Insurance - Vehicle	18,070	11,847	-
23	Insurance - General Liability	152,284	163,427	137,079
24	Advertising Expense	(926)	4,738	593
25	Reg. Commission Exp. - Rate Case	-	-	-
26	Reg. Commission Exp. - Other	-	-	-
27	Bad Debt Expense	(8,726)	138,546	(2,891)
28	Miscellaneous	150,285	525,576	90,997
29	Depreciation & Amortization	6,867,781	4,018,860	3,811,584
30	Taxes Other Than Income	(1,485)	-	-
31	Property Taxes	598,044	557,632	616,514
32	Income Tax	791,181	2,111,896	(89,256)
33	Customer Deposit Interest	-	-	-
34	**Total Operating Expenses**	$ 18,090,125	$ 15,998,491	$ 11,176,917
35	**Operating Income**	$ 3,327,089	$ 7,419,506	$ 7,751,101
36	**Other Income (Expense)**			
37	Interest and Dividend Income	-	-	-
38	AFUDC Income	977,226	2,323,136	33,876
39	Miscellaneous Non-Utility Expenses	(93,561)	209,314	(97,285)
40	Interest Expense	(121,750)	(4,874)	-
41				
42	**Total Other Income (Expense)**	$ 761,916	$ 2,527,576	$ (63,410)
43	**Net Profit (Loss)**	$ 4,089,005	$ 9,947,082	$ 7,687,691
44				
45				
46				
47	SUPPORTING SCHEDULES:		RECAP SCHEDULES:	
48			A-2	
49				

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Comparative Statements of Cash Flows

Exhibit
Schedule E-3
Page 1
Witness: Bourassa

Line No.		Test Year Ended 12/31/2024	Prior Year Ended 12/31/2023	Prior Year Ended 12/31/2022
1				
2				
3	Cash Flows from Operating Activities			
4	Net Income	$ 4,089,005	$ 9,947,082	$ 7,687,691
5	Adjustments to reconcile net income to net cash			
6	provided by operating activities:			
7	Depreciation and Amortization	6,867,781	4,018,860	3,811,584
8	Depreciation and Amortization Adjustments	(4,531,836)	5,839,386	(368,299)
9	Changes in Certain Assets and Liabilities:			
10	Accounts Receivable	(1,038,879)	444,253	412,316
11	Restricted Cash	5,713,447	11,744,451	(7,363,861)
12	Materials and Supplies Inventory			
13	Prepaid Expenses	(7,312)	100,841	(34,314)
14	Deferred Charges	(7,005,688)	(10,485,714)	2,218,611
15	Receivables to Associated Co.	(22,809,266)	46,043,430	16,154,983
16	Accounts Payable	22,375	171,648	10,041
17	Interest Payable	603,225	-	-
18	Security Deposits	(135,592)	134,658	-
19	Taxes Payable	(8,563,323)	8,060,636	2,239,277
20	Other assets and liabilities	(709,574)	(10,222,747)	7,575,113
21	Rounding	2		-
22	Net Cash Flow provided by Operating Activities	$ (27,505,636)	$ 65,796,783	$ 32,343,141
23	Cash Flow From Investing Activities:			
24	Capital Expenditures	(27,180,281)	(69,421,720)	(30,524,400)
25	Plant Held for Future Use			
26	Changes in Special Funds			
27	Net Cash Flows from Investing Activities	$ (27,180,281)	$ (69,421,720)	$ (30,524,400)
28	Cash Flow From Financing Activities			
29	Proceeds from Long-Term Debt	17,100,000	-	
30	Net receipt of contributions in aid of construction	25,717,436	3,532,641	(1,653,264)
31	Net receipts of advances in aid of construction	11,833,728	(9,858)	115,392
32	Repayments of Long-Term Debt			
33	Distributions			
34	Deferred Financing Costs	(143,964)	-	
35	Paid in Capital			-
36	Net Cash Flows Provided by Financing Activities	$ 54,507,200	$ 3,522,783	$ (1,537,872)
37	Increase(decrease) in Cash and Cash Equivalents	(178,717)	(102,153)	280,870
38	Cash and Cash Equivalents at Beginning of Year	178,717	280,870	0
39	Cash and Cash Equivalents at End of Year	$ (0)	$ 178,717	$ 280,870
40				
41				
42	SUPPORTING SCHEDULES:		RECAP SCHEDULES:	
43	Workpapers		A-5	
44				

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Statement of Changes in Stockholder's Equity

Exhibit
Schedule E-4
Page 1
Witness: Bourassa

Line No.		Stockholder's Equity	Retained Earnings	Total
1				
2				
3				
4	Balance, December 31, 2021	$ 25,249,009	$ 26,864,097	$ 52,113,106
5	Addnl Paid In Capital Adjustment			-
6	Distributions		-	-
7	Rounding		-	-
8	Net Income		7,687,691	7,687,691
9				
10	Balance, December 31, 2022	$ 25,249,009	$ 34,551,788	$ 59,800,797
11	Addnl Paid In Capital Adjustment			-
12	Distributions		-	-
13	Rounding		-	-
14	Net Income		9,947,082	9,947,082
15				
16	Balance, December 31, 2023	$ 25,249,009	$ 44,498,869	$ 69,747,879
17	Addnl Paid In Capital Adjustment			-
18	Distributions		-	-
19	Rounding			-
20	Net Income		4,089,005	4,089,005
21				
22	Balance, December 31, 2024	$ 25,249,009	$ 48,587,874	$ 73,836,884
23				
24				
25				
26				
27				
28				
29	SUPPORTING SCHEDULES:		RECAP SCHEDULES:	
30			E-1	
31				
32				
33				
34				
35				
36				
37				
38				
39				
40				

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Detail of Plant in Service

Exhibit
Schedule E-5
Page 1
Witness: Bourassa

Line No.	Acct. No.	Plant Description	Plant Balance at 12/31/2023	Plant Additions, Reclass-ifications or or Retirements	Plant Balance at 12/31/2024
1	106	Construction Compl. Not Class.	$ 5,903,529	$ 3,673,245	$ 9,576,774
2	351	Organization	-	-	-
3	352	Franchise	-	-	-
4	353	Land	5,980,490	(1,752,225)	4,228,265
5	354	Structures & Improvements	35,151,457	48,058,411	83,209,869
6	355	Power Generation	3,581,234	1,799,369	5,380,603
7	355.1	Solar Generation		-	-
8	360	Collection Sewer Forced	7,381,403	5,245,546	12,626,949
9	361	Collection Sewers Gravity	43,278,167	1,841,563	45,119,730
10	362	Special Collecting Structures	-	-	-
11	363	Customer Services	1,215,825	78,550	1,294,375
12	364	Flow Measuring Devices	172,506	-	172,506
13	365	Flow Measuring Installations	4,078,105	(4,078,105)	-
14	366	Reuse Services	220,798	3,900,528	4,121,326
15	367.0	Reuse Meters And Installation	1,035,809	(815,011)	220,798
16	370.0	Receiving Wells	6,015,298	(4,929,402)	1,085,896
17	371	Pumping Equipment	1,496,407	6,961,113	8,457,521
18	374	Reuse Distribution Reservoirs	1,428,037	307,582	1,735,620
19	375.0	Reuse Trans. and Dist. System	21,770,191	(20,342,153)	1,428,037
20	380	Treatment & Disposal Equipment	-	47,335,631	47,335,631
21	380.1	Odor Control GAC		-	-
22	381	Plant Sewers	7,224,951	15,329,354	22,554,305
23	382	Outfall Sewer Lines	343,681	-	343,681
24	389	Other Sewer Plant & Equipment	842,986	-	842,986
25	390	Office Furniture & Equipment	879,790	111,065	990,855
26	390.1	Computers and Software	-	-	-
27	391	Transportation Equipment	331,413	73,067	404,481
28	392	Stores Equipment	8,968	-	8,968
29	393	Tools, Shop And Garage Equip	597,630	-	597,630
30	394	Laboratory Equip	223,550	-	223,550
31	395	Power Operated Equipment	538,791	-	538,791
32	396	Communication Equip	1,605,708	4,520,621	6,126,329
33	397	Miscellaneous Equip.	699,563	-	699,563
34	397.1	Misc. Equipment CNG	-	-	-
35	398	Other Tangible Plant	81,810	30,044	111,854
36					
37					
38					
39					
40					
41					-
42		TOTAL WASTEWATER PLANT	###########	$ 107,348,793	$ 259,436,891
43					
44		SUPPORTING SCHEDULES		RECAP SCHEDULES:	
45		Workpapers		A-4	
46				E-1	
47					

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Operating Statistics

Exhibit
Schedule E-7
Page 1
Witness: Bourassa

Line No.		Test Year Ended 12/31/2024	Prior Year Ended 12/31/2023	Prior Year Ended 12/31/2022
1	WASTEWATER STATISTICS:			
2				
3				
4				
5	Total Gallons Treated (in Thousands)	2,471,440	2,276,196	2,139,487
6				
7				
8				
9	Wastewater Revenues from Customers:[1]	$ 21,417,214	$ 23,417,997	$ 18,928,017
10				
11				
12				
13				
14	Year End Number of Customers	24,205	23,401	22,380
15				
16				
17	Annual Gallons (in Thousands)			
18	Treated Per Year End Customer	63	67	68
19				
20				
21				
22	Annual Revenue per Year End Customer	$ 884.83	$ 1,000.73	$ 845.76
23				
24	Pumping Cost Per 1,000 Gallons	$ 0.6299	$ 0.4708	$ 0.4154
25	Purchased Water Cost per 1,000 Gallons	$ 0.0223	$ 0.0080	$ 0.0127
26				
27	[1] Effective customer. An effective customer considers the number of units served for multi-unit customers.			
28				

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Taxes Charged to Operations

Exhibit
Schedule E-8
Page 1
Witness: Bourassa

Line No.	Description	Test Year Ended 12/31/2024	Prior Year Ended 12/31/2023	Prior Year Ended 12/31/2022
1				
2				
3	State Income Taxes	$ -	$ -	$ -
4	Federal Income Taxes	791,181	2,111,896	(89,256)
5	Payroll Taxes	-	-	-
6	Property Taxes	598,044	557,632	616,514
7				
8	Totals	$1,389,224	$2,669,528	$ 527,258
9				
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11				
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Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Notes To Financial Statements

Exhibit
Schedule E-9
Page 1
Witness: Bourassa

The Company does not conduct independent audits, reviews and/or compilations. Accordingly, there are no notes which are typically associated with these financial statements. Management makes the following notations to the financial statements contained herein:

Significant Accounting Policies - The Company prepares its financial statements in accordance with accounting principles generally accepted in the United States of America and the accounting records of the are are maintained in accordance with the uniform system of accounts as prescribed by the National Association of Regulatory Utility Commissioners (USOA 1996). Significant accounting policies are as follows:

Utility Plant - Property, plant and equipment is stated at cost less accumulated depreciation provided on a straight-line basis.

Depreciation rates for asset classes of utility property, plant and equipment are established by the Commission. The cost of additions, including betterments and replacements of units of utility fixed assets are charged to utility property, plant and equipment. When units of utility property are replaced, renewed or retired, their cost plus removal or disposal costs, less salvage proceeds, is charged to accumulated depreciation.

Revenue Recognition - Revenues are recognized on the accrual method. Under this method, revenue is recognized when earned rather than when collected, and expenses are recognized when incurred rather than when paid.

Contributions in Aid of Construction - Contributions in aid of construction (CIAC) are nonrefundable contributions by developers and customers for plant expansion. In addition, this amount includes the remaining balance, if any, of advances in aid of construction at the end of the repayment period. The contributions in aid of construction are being amortized at a rate equal to the rate allowed for depreciation, as a reduction of depreciation expense

Advances in Aid of Construction - Customer advances for construction are subject to refund in accordance with agreements approved by the Arizona Corporation Commission. Agreements provide for refunds which are typically equal to 10 percent of annual water revenue generated from the expansion. The repayments are for a maximum agreed upon period or until repaid in full. Any balance remaining at the end of the agreed-upon period for repayment becomes a contribution in aid of construction.

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Projected Income Statements - Present & Proposed Rates

Exhibit
Schedule F-1
Page 1
Witness: Bourassa

Line No.		Test Year Actual Results	At Present Rates Year Ended 12/31/2025	At Proposed Rates Year Ended 12/31/2025
1	**Revenues**			
2	Sewer Revenues	$ 20,711,759	$ 20,846,881	$ 32,443,260
3	Other Sewer Revenues	705,454	722,205	722,205
4		$ 21,417,214	$ 21,569,086	$ 33,165,465
5	**Operating Expenses**			
6	Salaries and Wages	$ -	$ -	$ -
7	Purchased Wastewater Treatment	$ 55,016	$ 55,208	$ 55,208
8	Sludge Removal Expense	596,657	590,826	590,826
9	Purchased Power	1,556,717	1,562,153	1,562,153
10	Chemicals	396,131	375,969	375,969
11	Fuel For Power Production	-	-	-
12	Materials and Supplies	229,078	196,533	196,533
13	Contractual Services - Engineering	-	-	-
14	Contractual Services - Accounting	-	-	-
15	Contractual Services - Legal	(40,975)	0	0
16	Contractual Services - Management	6,016,989	6,117,689	6,117,689
17	Contractual Services - Testing	74,905	74,905	74,905
18	Contractual Services - Other	593,245	593,245	593,245
19	Rental of Building/Real Property	-	-	-
20	Rental of Equipment	2,236	2,236	2,236
21	Transportation Expense	43,618	43,618	43,618
22	Insurance - Vehicle	18,070	18,070	18,070
23	Insurance - General Liability	152,284	152,284	152,284
24	Advertising Expense	(926)	(0)	(0)
25	Reg. Commission Exp. - Rate Case	-	-	-
26	Reg. Commission Exp. - Other	-	-	-
27	Bad Debt Expense	(8,726)	38,508	59,212
28	Miscellaneous	150,285	151,244	151,244
29	Depreciation & Amortization	6,867,781	8,288,470	8,288,470
30	Taxes Other Than Income	(1,485)	(1,485)	(1,485)
31	Property Taxes	598,044	815,797	961,065
32	Income Tax	791,181	(228,417)	2,614,440
33	Customer Deposit Interest	-	-	-
34	**Total Operating Expenses**	$ 18,090,125	$ 18,846,854	$ 21,855,682
35	**Operating Income**	$ 3,327,089	$ 2,722,232	$ 11,309,783
36	**Other Income (Expense)**			
37	Interest and Dividend Income	-	-	-
38	AFUDC Income	977,226	977,226	977,226
39	Miscellaneous Non-Utility Expenses	(93,561)	(93,561)	(93,561)
40	Interest Expense	(121,750)	(3,623,234)	(3,623,234)
41				
42	**Total Other Income (Expense)**	$ 761,916	$ (2,739,568)	$ (2,739,568)
43	**Net Profit (Loss)**	$ 4,089,005	$ (17,336)	$ 8,570,215
44				
45				
46	SUPPORTING SCHEDULES:			
47	C-1			
48				
49				
50				

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Projected Statements of Changes in Financial Position
Present and Proposed Rates

Exhibit
Schedule F-2
Page 1
Witness: Bourassa

Line No.		Test Year Ended 12/31/2024	At Present Rates Year Ended 12/31/2025	At Proposed Rates Year Ended 12/31/2025
5	Cash Flows from Operating Activities			
6	Net Income	$ 4,089,005	$ (17,336)	$ 8,570,215
7	Adjustments to reconcile net income to net cash			
8	provided by operating activities:			
9	Depreciation and Amortization	6,867,781	8,288,470	8,288,470
10	Depreciation Adjustments	(4,531,836)	(481,343)	(481,343)
11	Changes in Certain Assets and Liabilities:			
12	Accounts Receivable	(1,038,879)		
13	Unbilled Revenues	5,713,447		
14	Materials and Supplies Inventory	-		
15	Prepaid Expenses	(7,312)		
16	Deferred Charges	(7,005,688)		
17	Notes Receivable	(22,809,266)		
18	Accounts Payable	22,375		
19	Intercompany payable	603,225		
20	Security Deposits	(135,592)		
21	Taxes Payable	(8,563,323)		
22	Other assets and liabilities	(709,574)	257,559	257,559
23	Rounding	2		
24	Net Cash Flow provided by Operating Activities	$ (27,505,636)	$ 8,047,350	$ 16,634,900
25	Cash Flow From Investing Activities:			
26	Capital Expenditures	(27,180,281)	(9,296,120)	(9,296,120)
27	Plant Held for Future Use	-		
28	Changes in debt reserve fund	-		
29	Net Cash Flows from Investing Activities	$ (27,180,281)	$ (9,296,120)	$ (9,296,120)
30	Cash Flow From Financing Activities			
31	Change in Restricted Cash	-		
32	Change in net amounts due to parent and affiliates	17,100,000		
33	Net Receipt contributions in aid of construction	25,717,436	5,263,416	5,263,416
34	Net receipts of advances in aid of construction	11,833,728		
35	Net Proceeds of Long-term Debt of Long-Term Debt	-	25,211,858	29,161,935
36	Dividends Paid	-	(4,000,000)	(4,000,000)
37	Net Distributions to Rebalance Capital Structure		(21,140,654)	(25,090,730)
38	Deferred Financing Costs	(143,964)		
39	Paid in Capital	-		
40	Net Cash Flows Provided by Financing Activities	$ 54,507,200	$ 5,334,620	$ 5,334,620
41	Increase(decrease) in Cash and Cash Equivalents	(178,717)	4,085,850	12,673,401
42	Cash and Cash Equivalents at Beginning of Year	178,717	(0)	(0)
43	Cash and Cash Equivalents at End of Year	$ (0)	$ 4,085,850	$ 12,673,401

SUPPORTING SCHEDULES:
E-3

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Projected Construction Requirements

Exhibit
Schedule F-3
Page 1
Witness: Bourassa

Line No.	Account Number	Plant Asset:	Test Year	2025	2026	2027
1						
2						
3						
4	106	Construction Compl. Not Class.	$ 3,673,245	$ -	$ -	$ -
5	351	Organization	-	$ -	$ -	$ -
6	352	Franchise	-	-		
7	353	Land	(1,752,225)	-		
8	354	Structures & Improvements	48,058,411	-	47,909	20,831
9	355	Power Generation	1,799,369	-		
10	355.1	Solar Generation	-	-		
11	360	Collection Sewer Forced	5,245,546	-	1,891,936	2,081,130
12	361	Collection Sewers Gravity	1,841,563	274,583		
13	362	Special Collecting Structures	-	-	659,699	725,669
14	363	Customer Services	78,550	41,250		
15	364	Flow Measuring Devices	-	-		
16	365	Flow Measuring Installations	(4,078,105)	-		
17	366	Reuse Services	3,900,528	-		
18	367	Reuse Meters And Installation	(815,011)	-		
19	370	Receiving Wells	(4,929,402)	-		
20	371	Pumping Equipment	6,961,113	-	73,902	81,293
21	374	Reuse Distribution Reservoirs	307,582	256,437		
22	375	Reuse Trans. and Dist. System	(20,342,153)	-		
23	380	Treatment & Disposal Equipment	47,335,631	-	664,884	731,372
24	380.1	Odor Control GAC	-	214,812		
25	381	Plant Sewers	15,329,354	-		
26	382	Outfall Sewer Lines	-	-		
27	389	Other Sewer Plant & Equipment	-	-		
28	390	Office Furniture & Equipment	111,065	-		
29	390.1	Computers and Software	-	-		
30	391	Transportation Equipment	73,067	-		
31	392	Stores Equipment	-	-		
32	393	Tools, Shop And Garage Equip	-	-		
33	394	Laboratory Equip	-	13,200	22,058	24,264
34	395	Power Operated Equipment	-	-		
35	396	Communication Equip	4,520,621	-		
36	397	Miscellaneous Equip.	-	160,000		
37	397.1	Misc. Equipment CNG	-	-		
38	398	Other Tangible Plant	30,044	-		
39						
40						
41						
42						
43						
44						
45						
46	Total		$ 107,348,793	$ 960,283	$ 3,360,388	$ 3,664,559
47						
48						
49						

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Assumptions Used in Rate Filing

Exhibit
Schedule F-4
Page 1
Witness: Bourassa

Line No.	
1	Property Taxes were computed using the method used by the Arizona Department
2	of Revenue modified for ratemaking.
3	
4	Projected construction expenditures are shown on Schedule A-4.
5	
6	Expense adjustments are shown on Schedule C2, and are explained in the testimony.
7	
8	Income taxes were computed using statutory state and federal income tax rates.
9	
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Liberty Utilities (Lithchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Cost of Service Summary
At Present Rates

LINE NO.	DESCRIPTION	Total Company	Jurisdictional Total	Residential	Residential Multi-Unit	Commercial	Wigwam	Schools
1	RATE BASE (a)							
2	Gross Plant in Service	$ 273,971,889	$ 273,971,889	$ 203,312,068	$ 18,219,476	$ 38,905,916	$ 2,422,067	$ 11,112,362
3	Accumulated Depreciation	62,157,853	62,157,853	46,196,787	4,115,606	8,789,707	546,835	2,508,916
4	Net Plant	$ 211,814,036	$ 211,814,036	$ 157,115,280	$ 14,103,869	$ 30,116,209	$ 1,875,233	$ 8,603,446
5	Construction Work in Progress	-	-	-	-	-	-	-
6	Working Capital Assets & Misc. Other	5,047,883	5,047,883	3,744,320	336,119	717,720	44,690	205,035
7	Contributions & Advances in Aid of Construction	(82,974,760)	(82,974,760)	(61,547,398)	(5,524,965)	(11,797,543)	(734,592)	(3,370,262)
8	TOTAL RATE BASE [A]	$ 133,887,159	$ 133,887,159	$ 99,312,203	$ 8,915,022	$ 19,036,385	$ 1,185,330	$ 5,438,218
9	OPERATING REVENUES (c)							
10	Present Rate Schedules(b)	$ 20,846,881	$ 20,846,881	$ 13,361,176	$ 2,405,280	$ 4,691,679	$ 186,772	$ 201,973
11	Other Revenues	663,170	663,170	479,592	47,390	100,653	6,484	29,051
12	Effluent Revenues	59,035	59,035	42,693	4,219	8,960	577	2,586
13	TOTAL OPERATING REVENUES [A]	$ 21,569,086	$ 21,569,086	$ 13,883,462	$ 2,456,889	$ 4,801,292	$ 193,833	$ 233,611
14	OPERATING EXPENSES (c)							
15	Operations and Maintenance							
16	Collection and Pumping	$ 1,117,821	$ 1,117,821	$ 808,588	$ 79,824	$ 169,568	$ 10,897	$ 48,945
17	Treatment and Disposal	1,590,680	1,590,680	1,150,345	113,670	241,434	15,542	69,689
18	Reclaimed Water	26,128	26,128	18,894	1,867	3,968	253	1,146
19	Customer Accounts	157,778	157,778	152,719	1,196	3,765	13	85
20	Administrative and General	7,080,081	7,080,081	5,731,621	346,298	755,347	44,492	202,323
21	Total Operating and Maintenance Expense	$ 9,972,489	$ 9,972,489	$ 7,862,167	$ 542,855	$ 1,174,082	$ 71,197	$ 322,188
22	Depreciation and Amortization	8,288,470	8,288,470	6,226,267	531,552	1,137,458	70,354	322,838
23	Taxes Other Than Income	814,312	814,312	604,025	54,222	115,781	7,209	33,076
24	Income Taxes	(228,417)	(228,417)	(854,373)	284,189	487,744	3,901	(149,879)
25	TOTAL EXPENSES [A]	$ 18,846,854	$ 18,846,854	$ 13,838,087	$ 1,412,818	$ 2,915,064	$ 152,662	$ 528,223
26	OPERATING INCOME	$ 2,722,232	$ 2,722,232	$ 45,375	$ 1,044,070	$ 1,886,228	$ 41,171	$ (294,612)
27	EARNED RATE OF RETURN ON RATE BASE	2.03%	2.03%	0.05%	11.71%	9.91%	3.47%	-5.42%
28	COST OF SERVICE REQUIREMENT SUMMARY							
29	REQUIRED RATE OF RETURN GIVEN EQUAL RATES OF RETURN	8.45%	8.45%	8.45%	8.45%	8.45%	8.45%	8.45%
30	REQUIRED OPERATING INCOME (L8*L27)	$ 11,309,783	$ 11,309,783	$ 8,389,150	$ 753,074	$ 1,608,051	$ 100,128	$ 459,380
31	OPERATING INCOME DEFICIENCY/(SURPLUS) (L28-L24)	$ 8,587,551	$ 8,587,551	$ 8,343,775	$ (290,996)	$ (278,177)	$ 58,957	$ 753,992
32	REVENUE CONVERSION FACTOR(d)[A]	1.3504	1.3504	1.3504	1.3504	1.3504	1.3504	1.3504
33	REVENUE DEFICIENCY/(SURPLUS) (L29*L30)	$ 11,596,379	$ 11,596,379	$ 11,267,191	$ (392,953)	$ (375,642)	$ 79,614	$ 1,018,169
34	RATE SCHEDULE REVENUE REQUIREMENT (L10+L31)	$ 32,443,260	$ 32,443,260	$ 24,628,367	$ 2,012,328	$ 4,316,037	$ 266,386	$ 1,220,142
35	INDICATED % INCREASE ON PRESENT RATE SCHEDULE (L33/L10)	53.76%	53.76%	81.16%	-15.99%	-7.82%	41.07%	435.84%
36	TOTAL REVENUE REQUIREMENT (L12 + L31)	$ 33,165,465	$ 33,165,465	$ 25,150,652	$ 2,063,936	$ 4,425,650	$ 273,447	$ 1,251,780
37	PROPOSED RATE SCHEDULE REVENUE REQUIREMENTS							
38	REVENUE DEFICIENCY / (SURPLUS)	$ 11,596,379	$ 11,596,379	$ 7,231,129	$ 1,301,747	$ 2,829,791	$ 112,287	121,425
39	% INCREASE (L38/L10)	55.63%	55.63%	54.12%	54.12%	60.32%	60.12%	60.12%
40	COST OF SERV. RATE SCHEDULE (L10 + L38)	$ 32,443,260	$ 32,443,260	$ 20,592,306	$ 3,707,027	$ 7,521,470	$ 299,059	$ 323,399
41	COST OF SERV. REV. REQUIREMENT (L11 + L12 + L40)	$ 33,165,465	$ 33,165,465	$ 21,114,591	$ 3,758,635	$ 7,631,063	$ 306,119	$ 355,036
42	% INCREASE IN TOTAL REVENUES (L36/L13)	53.76%	53.76%	52.08%	52.98%	58.94%	57.93%	51.98%
43	EARNED RATE OF RETURN ON RATE BASE AT PROPOSED RATES(e	8.45%	8.45%	5.40%	22.64%	21.06%	10.52%	-3.68%

Supporting Schedules
(a) G-3
(b) H-1
(c) G-4a
(d) C-5
(e) G-2

Recap Schedules
[A] A-1

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Cost of Service Summary
At Proposed Rates

LINE NO.	DESCRIPTION	Total Company	Jurisdictional Total	Residential	Commercial
1	RATE BASE (a)				
2	Gross Plant in Service	$ 273,971,889	$ 273,971,889	$ 203,312,068	$ 38,905,916
3	Accumulated Depreciation	62,157,853	62,157,853	46,196,787	8,789,707
4	Net Plant	$ 211,814,036	$ 211,814,036	$ 157,115,280	$ 30,116,209
5	Construction Work in Progress	-	-	-	-
6	Working Capital Assets & Misc. Other	5,047,883	5,047,883	3,744,320	717,720
7	Contributions & Advances in Aid of Construction	(82,974,760)	(82,974,760)	(61,547,398)	(11,797,543)
8	TOTAL RATE BASE [A]	$ 133,887,159	$ 133,887,159	$ 99,312,203	$ 19,036,385
9	OPERATING REVENUES (c)				
10	Proposed Rate Schedules(b)	$ 32,443,260	$ 32,443,260	$ 20,592,306	$ 7,521,470
11	Other Revenues	663,170	663,170	479,592	100,653
12	Effluent Revenues	59,035	54,816	42,693	8,960
13	TOTAL OPERATING REVENUES [A]	$ 33,165,465	$ 33,161,247	$ 21,114,591	$ 7,631,083
14	OPERATING EXPENSES (c)				
15	Operations and Maintenance				
16	Collection and Pumping	$ 1,117,821	$ 1,117,821	$ 808,588	$ 169,568
17	Treatment and Disposal	1,590,680	1,590,680	1,150,345	241,434
18	Reclaimed Water	26,128	26,128	18,894	3,968
19	Customer Accounts	178,482	178,482	172,759	4,260
20	Administrative and General	7,080,081	7,080,081	5,731,621	755,347
21	Total Operating and Maintenance Expense	$ 9,993,193	$ 9,993,193	$ 7,882,207	$ 1,174,576
22	Depreciation and Amortization	8,288,470	8,288,470	6,226,267	1,137,458
23	Taxes Other Than Income	959,580	959,580	711,779	136,435
24	Income Taxes	2,614,439	2,614,439	929,535	1,173,411
25	TOTAL EXPENSES [A]	$ 21,855,682	$ 21,855,682	$ 15,749,788	$ 3,621,880
26	OPERATING INCOME	$ 11,309,783	$ 11,305,565	$ 5,364,803	$ 4,009,203
27	RATE OF RETURN AT PROPOSED RATES	8.45%	8.44%	5.40%	21.06%
28	Relative Ratio of Return - Proposed Rates			0.640	2.494

Supporting Schedules
(a) G-3
(b) H-1
(c) G-4b
(d) C-5

Recap Scehdules
[A] A-1
[B] G-1

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Rate Base Allocation to Rate Schedules/Classes

Line No.	Description	Total Company (a)	Jurisdictional Total (a)	Residential	Residential Multi-Unit	Commercial	Wigwam	Schools	Allocation Factor (b)
	RATE BASE								
	GROSS PLANT IN SERVICE								
	Collection Plant								
1	Commodity	$ 19,449,585	$ 19,449,585	$ 14,065,577	$ 1,389,861	$ 2,951,968	$ 190,152	$ 852,026	CBC
2	Demand - Extra Cap Max Day	74,827,080	74,827,080	54,103,893	5,348,365	11,371,678	712,957	3,290,187	CMD
3	Customer Accounts	-	-	-	-	-	-	-	CB
4	Customer Services	1,487,610	1,487,610	1,429,905	11,180	45,498	158	869	CS
5	Reuse/Effluent	-	-	-	-	-	-	-	CF
6	Total Collection Plant	$ 95,764,275	$ 95,764,275	$ 69,599,375	$ 6,749,406	$ 14,369,144	$ 903,267	$ 4,143,082	
	Pumping Plant								
7	Commodity	$ 3,108,953	$ 3,108,953	$ 2,248,337	$ 222,165	$ 471,863	$ 30,395	$ 136,194	CBC
8	Demand - Extra Cap Max Day	11,960,865	11,960,865	8,648,331	854,919	1,817,726	113,964	525,926	CMD
9	Customer Accounts	-	-	-	-	-	-	-	CB
10	Customer Services	-	-	-	-	-	-	-	CS
11	Reuse/Effluent	-	-	-	-	-	-	-	CF
12	Total Pumping Plant	$ 15,069,818	$ 15,069,818	$ 10,896,668	$ 1,077,083	$ 2,289,588	$ 144,359	$ 662,119	
	Treatment and Disposal Plant								
13	Commodity	$ 23,976,038	$ 23,976,038	$ 17,339,024	$ 1,713,320	$ 3,638,973	$ 234,406	$ 1,050,316	CBC
14	Demand - Extra Cap Max Day	92,241,400	92,241,400	66,695,358	6,593,077	14,018,180	878,882	4,055,905	CMD
15	Customer Accounts	-	-	-	-	-	-	-	CB
16	Customer Services	-	-	-	-	-	-	-	CS
17	Reuse/Effluent	-	-	-	-	-	-	-	CF
18	Total Treatment and Disposal Plant	$ 116,217,439	$ 116,217,439	$ 84,034,381	$ 8,306,397	$ 17,657,153	$ 1,113,288	$ 5,106,221	
	Reclaimed Water Plant								
19	Commodity	$ 1,544,166	$ 1,544,166	$ 1,116,712	$ 110,346	$ 234,366	$ 15,097	$ 67,645	CBC
20	Demand - Extra Cap Max Day	5,940,767	5,940,767	4,295,485	424,624	902,835	56,604	261,219	CMD
21	Customer Accounts	-	-	-	-	-	-	-	CB
22	Customer Services	-	-	-	-	-	-	-	CS
23	Reuse/Effluent	-	-	-	-	-	-	-	CF
24	Total Reclaimed Water Plant	$ 7,484,934	$ 7,484,934	$ 5,412,198	$ 534,970	$ 1,137,201	$ 71,701	$ 328,864	
	Gross Plant In Service before Intangible and General Plant								
25	Commodity	$ 48,078,742	$ 48,078,742	$ 34,769,650	$ 3,435,691	$ 7,297,170	$ 470,050	$ 2,106,181	
26	Demand - Extra Cap Max Day	184,970,113	184,970,113	133,743,067	13,220,985	28,110,418	1,762,406	8,133,236	
27	Customer Accounts	-	-	-	-	-	-	-	
28	Customer Services	1,487,610	1,487,610	1,429,905	11,180	45,498	158	869	
29	Reuse/Effluent	-	-	-	-	-	-	-	
30	Gross Plant In Service	$ 234,536,465	$ 234,536,465	$ 169,942,622	$ 16,667,856	$ 35,453,086	$ 2,232,615	$ 10,240,286	
	General Plant								
31	Commodity	$ 2,790,869	$ 2,790,869	$ 2,018,304	$ 199,435	$ 423,585	$ 27,285	$ 122,259	CBC
32	Demand - Extra Cap Max Day	10,737,121	10,737,121	7,763,500	767,450	1,631,750	102,304	472,117	CMD
33	Customer Accounts	13,614,342	13,614,342	13,177,763	103,224	324,914	1,126	7,316	CB
34	Customer Services	86,353	86,353	83,003	649	2,641	9	50	CS
35	Reuse/Effluent	-	-	-	-	-	-	-	CF
36	Total General Plant	$ 27,228,685	$ 27,228,685	$ 23,042,570	$ 1,070,757	$ 2,382,890	$ 130,724	$ 601,743	

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Rate Base Allocation to Rate Schedules/Classes

Line No.	Description	Total Company (a)	Jurisdictional Total (a)	Residential	Residential Multi-Unit	Commercial	Wigwam	Schools	Allocation Factor (b)
	Intangible Plant								
37	Commodity	$ 5,409	$ 5,409	$ 3,912	$ 387	$ 821	$ 53	$ 237	CBC
38	Demand - Extra Cap Max Day	20,809	20,809	15,046	1,487	3,162	198	915	CMD
39	Customer Accounts	-	-	-	-	-	-	-	CB
40	Customer Services	167	167	161	1	5	0	0	CS
41	Reuse/Effluent	-	-	-	-	-	-	-	CF
42	Total Intangible Plant	$ 26,385	$ 26,385	$ 19,118	$ 1,875	$ 3,988	$ 251	$ 1,152	
	Allocated Corporate Plant								
43	Commodity	$ 1,248,454	$ 1,248,454	$ 902,859	$ 89,214	$ 189,485	$ 12,206	$ 54,691	CBC
44	Demand - Extra Cap Max Day	4,803,094	4,803,094	3,472,888	343,308	729,939	45,764	211,195	CMD
45	Customer Accounts	6,090,177	6,090,177	5,894,880	46,176	145,345	504	3,273	CB
46	Customer Services	38,629	38,629	37,130	290	1,181	4	23	CS
47	Reuse/Effluent	-	-	-	-	-	-	-	CF
48	Total Allocated Corporate Plant	$ 12,180,354	$ 12,180,354	$ 10,307,757	$ 478,988	$ 1,065,951	$ 58,478	$ 269,181	
	Reconciling Amount								
49	Commodity		$ -	$ -	$ -	$ -	$ -	$ -	CBC
50	Demand - Extra Cap Max Day		-	-	-	-	-	-	CMD
51	Customer Accounts		-	-	-	-	-	-	CB
52	Customer Services		-	-	-	-	-	-	CS
53	Fire Hydrants		-	-	-	-	-	-	CF
54	Total Reconciling Amount	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
	Gross Plant In Service								
55	Commodity	$ 52,123,474	$ 52,123,474	$ 37,694,724	$ 3,724,726	$ 7,911,061	$ 509,594	$ 2,283,368	
56	Demand - Extra Cap Max Day	200,531,138	200,531,138	144,994,502	14,333,230	30,475,269	1,910,673	8,817,463	
57	Customer Accounts	19,704,520	19,704,520	19,072,643	149,400	470,259	1,629	10,589	
58	Customer Services	1,612,759	1,612,759	1,550,199	12,121	49,326	171	942	
59	Fire Hydrants	-	-	-	-	-	-	-	
60	Total Gross Plant In Service (a)(c)	$ 273,971,889	$ 273,971,889	$ 203,312,068	$ 18,219,476	$ 38,905,916	$ 2,422,067	$ 11,112,362	

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Rate Base Allocation to Rate Schedules/Classes

Line No.	Description	Total Company (a)	Jurisdictional Total (a)	Residential	Residential Multi-Unit	Commercial	Wigwam	Schools	Allocation Factor (b)
	ACCUMULATED DEPRECIATION AND AMORTIZATION								
	Source of Supply Plant								
61	Commodity	$ 4,345,902	$ 4,345,902	$ 3,142,876	$ 310,557	$ 659,601	$ 42,488	$ 190,381	CBC
62	Demand - Extra Cap Max Day	16,719,699	16,719,699	12,089,217	1,195,063	2,540,939	159,306	735,174	CMD
63	Customer Accounts	-	-	-	-	-	-	-	CB
64	Customer Services	170,538	170,538	163,922	1,282	5,216	18	100	CS
65	Fire Hydrants	-	-	-	-	-	-	-	CF
66	Total Source of Supply Plant	$ 21,236,139	$ 21,236,139	$ 15,396,015	$ 1,506,901	$ 3,205,756	$ 201,813	$ 925,654	
	Pumping Plant								
67	Commodity	$ 1,691,902	$ 1,691,902	$ 1,223,552	$ 120,903	$ 256,789	$ 16,541	$ 74,117	CBC
68	Demand - Extra Cap Max Day	6,509,140	6,509,140	4,706,449	465,249	989,212	62,019	286,210	CMD
69	Customer Accounts	-	-	-	-	-	-	-	CB
70	Customer Services	-	-	-	-	-	-	-	CS
71	Fire Hydrants	-	-	-	-	-	-	-	CF
72	Total Pumping Plant	$ 8,201,042	$ 8,201,042	$ 5,930,000	$ 586,152	$ 1,246,001	$ 78,561	$ 360,327	
	Water Treatment Plant								
73	Commodity	$ 6,433,903	$ 6,433,903	$ 4,652,878	$ 459,764	$ 976,508	$ 62,902	$ 281,849	CBC
74	Demand - Extra Cap Max Day	24,752,721	24,752,721	17,897,512	1,769,234	3,761,739	235,845	1,088,391	CMD
75	Customer Accounts	-	-	-	-	-	-	-	CB
76	Customer Services	-	-	-	-	-	-	-	CS
77	Fire Hydrants	-	-	-	-	-	-	-	CF
78	Total Water Treatment Plant	$ 31,186,624	$ 31,186,624	$ 22,550,391	$ 2,228,998	$ 4,738,247	$ 298,748	$ 1,370,240	
	Transmission and Distribution Plant								
79	Commodity	$ (1,711,925)	$ (1,711,925)	$ (1,238,032)	$ (122,334)	$ (259,828)	$ (16,737)	$ (74,994)	CBC
80	Demand - Extra Cap Max Day	(6,586,175)	(6,586,175)	(4,762,149)	(470,756)	(1,000,919)	(62,753)	(289,598)	CMD
81	Customer Accounts	-	-	-	-	-	-	-	CB
82	Customer Services	-	-	-	-	-	-	-	CS
83	Fire Hydrants	-	-	-	-	-	-	-	CF
84	Total Transmission and Distribution Plant	$ (8,298,100)	$ (8,298,100)	$ (6,000,181)	$ (593,089)	$ (1,260,747)	$ (79,490)	$ (364,592)	
85	General Plant								
86	Commodity	$ 885,349	$ 885,349	$ 640,268	$ 63,267	$ 134,374	$ 8,656	$ 38,784	CBC
87	Demand - Extra Cap Max Day	3,406,142	3,406,142	2,462,819	243,459	517,641	32,454	149,770	CMD
88	Customer Accounts	4,318,885	4,318,885	4,180,388	32,746	103,073	357	2,321	CB
89	Customer Services	27,394	27,394	26,331	206	838	3	16	CS
90	Fire Hydrants	-	-	-	-	-	-	-	CF
91	Total General Plant	$ 8,637,769	$ 8,637,769	$ 7,309,806	$ 339,677	$ 755,925	$ 41,470	$ 190,891	

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Rate Base Allocation to Rate Schedules/Classes

Line No.	Description	Total Company (a)	Jurisdictional Total (a)	Residential	Residential Multi-Unit	Commercial	Wigwam	Schools	Allocation Factor (b)
	Allocated Corporate Plant								
92	Commodity	$ 122,421	$ 122,421	$ 88,532	$ 8,748	$ 18,580	$ 1,197	$ 5,363	CBC
93	Demand - Extra Cap Max Day	470,981	470,981	340,544	33,664	71,576	4,488	20,709	CMD
94	Customer Accounts	597,190	597,190	578,039	4,528	14,252	49	321	CB
95	Customer Services	3,788	3,788	3,641	28	116	0	2	CS
96	Fire Hydrants	-	-	-	-	-	-	-	CF
97	Total Allocated Corporate Plant	$ 1,194,380	$ 1,194,380	$ 1,010,757	$ 46,969	$ 104,525	$ 5,734	$ 26,395	
	Retirement Work in Progress								
98	Commodity	$ -	$ -	$ -	$ -	$ -	$ -	$ -	CBC
99	Demand - Extra Cap Max Day	-	-	-	-	-	-	-	CMD
100	Customer Accounts	-	-	-	-	-	-	-	CB
101	Customer Services	-	-	-	-	-	-	-	CS
102	Fire Hydrants	-	-	-	-	-	-	-	CF
103	Total Retirement Work in Progress	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
	Advances in Aid of Construction								
104	Commodity	$ -	$ -	$ -	$ -	$ -	$ -	$ -	CBC
105	Demand - Extra Cap Max Day	-	-	-	-	-	-	-	CMD
106	Customer Accounts	-	-	-	-	-	-	-	CB
107	Customer Services	-	-	-	-	-	-	-	CS
108	Fire Hydrants	-	-	-	-	-	-	-	CF
109	Total Advances in Aid of Construction	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
	Accumulated Depreciation/Amortization								
110	Commodity	$ 11,767,551	$ 11,767,551	$ 8,510,074	$ 840,905	$ 1,786,025	$ 115,048	$ 515,500	
111	Demand - Extra Cap Max Day	45,272,509	45,272,509	32,734,392	3,235,913	6,880,188	431,359	1,990,657	
112	Customer Accounts	4,916,075	4,916,075	4,758,428	37,274	117,325	406	2,642	
113	Customer Services	201,719	201,719	193,894	1,516	6,170	21	118	
114	Fire Hydrants	-	-	-	-	-	-	-	
115	Total Accumulated Depreciation/Amortization (a)(c)	$ 62,157,853	$ 62,157,853	$ 46,196,787	$ 4,115,608	$ 8,789,707	$ 546,835	$ 2,508,916	

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Rate Base Allocation to Rate Schedules/Classes

Line No.	Description	Total Company (a)	Jurisdictional Total (a)	Residential	Residential Multi-Unit	Commercial	Wigwam	Schools	Allocation Factor (b)
	NET UTILITY PLANT IN SERVICE								
	Net Plant								
116	Commodity	$ 40,355,922	$ 40,355,922	$ 29,184,651	$ 2,883,821	$ 6,125,036	$ 394,547	$ 1,767,868	
117	Demand - Extra Cap Max Day	155,258,629	155,258,629	112,260,110	11,097,317	23,595,082	1,479,313	6,826,806	
118	Customer Accounts	14,788,445	14,788,445	14,314,215	112,126	352,934	1,223	7,947	
119	Customer Services	1,411,040	1,411,040	1,356,304	10,605	43,156	150	824	
120	Fire Hydrants	-	-	-	-	-	-	-	
121	Net Utility Plant in Service (a)	$ 211,814,036	$ 211,814,036	$ 157,115,280	$ 14,103,869	$ 30,116,209	$ 1,875,233	$ 8,603,446	
	CONSTRUCTION WORK IN PROGRESS								
	Construction Work in Progress								
122	Commodity	$ -	$ -	$ -	$ -	$ -	$ -	$ -	CBC
123	Demand - Extra Cap Max Day	-	-	-	-	-	-	-	CMD
124	Customer Accounts	-	-	-	-	-	-	-	CB
125	Customer Services	-	-	-	-	-	-	-	CS
126	Fire Hydrants	-	-	-	-	-	-	-	CF
127	Total Construction Work in Progress (a)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
	WORKING CAPITAL ASSETS								
	Working Capital Assets								
128	Commodity	$ 961,749	$ 961,749	$ 695,519	$ 68,726	$ 145,970	$ 9,403	$ 42,131	CBC
129	Demand - Extra Cap Max Day	3,700,073	3,700,073	2,675,346	264,468	562,310	35,255	162,694	CMD
130	Customer Accounts	352,433	352,433	341,132	2,672	8,411	29	189	CB
131	Customer Services	33,627	33,627	32,323	253	1,028	4	20	CS
132	Fire Hydrants	-	-	-	-	-	-	-	CF
133	Total Working Capital Assets (a)	$ 5,047,883	$ 5,047,883	$ 3,744,320	$ 336,119	$ 717,720	$ 44,690	$ 205,035	
	CONTRIBUTIONS & ADVANCES IN AID OF CONSTRUCTION, ADIT, OTHER								
	Contributions & Advances in Aid of Construction, ADIT, EADIT, Other								
134	Commodity	$ (15,808,787)	$ (15,808,787)	$ (11,432,620)	$ (1,129,691)	$ (2,399,385)	$ (154,557)	$ (692,534)	CBC
135	Demand - Extra Cap Max Day	(60,820,084)	(60,820,084)	(43,976,102)	(4,347,197)	(9,242,996)	(579,497)	(2,674,292)	CMD
136	Customer Accounts	(5,793,137)	(5,793,137)	(5,607,365)	(43,924)	(138,256)	(479)	(3,113)	CB
137	Customer Services	(552,752)	(552,752)	(531,311)	(4,154)	(16,906)	(59)	(323)	CS
138	Fire Hydrants	-	-	-	-	-	-	-	CF
139	Total Contributions & Advances in Aid of Construction (a)	$ (82,974,760)	$ (82,974,760)	$ (61,547,398)	$ (5,524,965)	$ (11,797,543)	$ (734,592)	$ (3,370,262)	

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Rate Base Allocation to Rate Schedules/Classes

Line No.	Description	Total Company (a)	Jurisdictional Total (a)	Residential	Residential Multi-Unit	Commercial	Wigwam	Schools	Allocation Factor (b)
	RATE BASE								
	Rate Base								
140	Commodity	$ 25,508,885	$ 25,508,885	$ 18,447,550	$ 1,822,856	$ 3,871,621	$ 249,392	$ 1,117,465	
141	Demand - Extra Cap Max Day	98,138,618	98,138,618	70,959,354	7,014,589	14,914,396	935,071	4,315,208	
142	Customer Accounts	9,347,742	9,347,742	9,047,982	70,875	223,089	773	5,023	
143	Customer Services	891,915	891,915	857,317	6,703	27,279	95	521	
144	Fire Hydrants	-	-	-	-	-	-	-	
145	**Total Rate Base [A]**	**$ 133,887,159**	**$ 133,887,159**	**$ 99,312,203**	**$ 8,915,022**	**$ 19,036,385**	**$ 1,185,330**	**$ 5,438,218**	

Supporting Schedules
(a) G-5, (b) G-7a, (c) F-1.3

Recap Schedules
[A] G-1

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Revenue and Expense Allocation to Rate Schedules at Present Revenues

Line No.s	Description	Total Company (a)	Other Jurisdictional	Jurisdictional Total (a)	Residential	Multi-Unit	Commercial	Wigwam	Schools	Alloc. Code (b)
	REVENUES									
1	Revenue Water Service (c)	$ 20,846,881	$ -	$ 20,846,881	$ 13,361,176	$ 2,405,280	$ 4,691,679	$ 186,772	$ 201,973	Direct
2	Other Revenue	663,170	-	663,170	479,592	47,390	100,653	6,484	29,051	CBC
3	Effluent Revenues	59,035	-	59,035	42,693	4,219	8,960	577	2,586	CBC
3	Total Revenue	$ 21,569,086	$ -	$ 21,569,086	$ 13,883,462	$ 2,456,889	$ 4,801,292	$ 193,833	$ 233,611	
	EXPENSES (A)									
	Collection Expenses									
	Operation									
4	Commodity	$ 354,350	$ -	$ 354,350	$ 256,259	$ 25,322	$ 53,782	$ 3,464	$ 15,523	CBC
5	Demand	36,384	-	36,384	26,308	2,601	5,529	347	1,600	CMD
6	Customer Accounts	-	-	-	-	-	-	-	-	CB
7	Customer Services	723	-	723	695	5	22	0	0	CS
8	Effluent	-	-	-	-	-	-	-	-	CF
9	Total Operation	$391,457	$ -	$ 391,457	$ 283,262	$ 27,928	$ 59,333	$ 3,811	$ 17,123	
	Maintenance									
10	Commodity	$ 30,821	$ -	$ 30,821	$ 22,289	$ 2,202	$ 4,678	$ 301	$ 1,350	CBC
11	Demand	8,447	-	8,447	6,108	604	1,284	80	371	CMD
12	Customer Accounts	-	-	-	-	-	-	-	-	CB
13	Customer Services	168	-	168	161	1	5	0	0	CS
14	Effluent	-	-	-	-	-	-	-	-	CF
15	Total Maintenance	$ 39,436	$ -	$ 39,436	$ 28,558	$ 2,807	$ 5,967	$ 382	$ 1,722	
	Total Source of Collection Expenses									
16	Commodity	$ 385,171	$ -	$ 385,171	$ 278,548	$ 27,524	$ 58,459	$ 3,766	$ 16,873	
17	Demand	44,831	-	44,831	32,415	3,204	6,813	427	1,971	
18	Customer Accounts	-	-	-	-	-	-	-	-	
19	Customer Services	891	-	891	857	7	27	0	1	
20	Effluent	-	-	-	-	-	-	-	-	
21	Total Collection Expenses	$ 430,893	$ -	$ 430,893	$ 311,820	$ 30,735	$ 65,300	$ 4,193	$ 18,845	

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Revenue and Expense Allocation to Rate Schedules at Present Revenues

Line No.s	Description	Total Company (a)	Other Jurisdictional	Jurisdictional Total (a)	Residential	Multi-Unit	Commercial	Wigwam	Schools	Alloc. Code (b)
	Pumping Expneses									
	Operation									
22	Commodity	$ 629,333	$ -	$ 629,333	$ 455,122	$ 44,972	$ 95,517	$ 6,153	$ 27,569	CBC
23	Demand	36,958	-	36,958	26,723	2,642	5,617	352	1,625	CMD
24	Customer Accounts	-	-	-	-	-	-	-	-	CB
25	Customer Services	-	-	-	-	-	-	-	-	CS
26	Effluent	-	-	-	-	-	-	-	-	CF
27	Total Operation	$ 666,291	$ -	$ 666,291	$ 481,844	$ 47,614	$ 101,134	$ 6,505	$ 29,194	
	Maintenance									
28	Commodity	$ 12,057	$ -	$ 12,057	$ 8,719	$ 862	$ 1,830	$ 118	$ 528	CBC
29	Demand	8,580	-	8,580	6,204	613	1,304	82	377	CMD
30	Customer Accounts	-	-	-	-	-	-	-	-	CB
31	Customer Services	-	-	-	-	-	-	-	-	CS
32	Effluent	-	-	-	-	-	-	-	-	CF
33	Total Maintenance	$ 20,637	$ -	$ 20,637	$ 14,923	$ 1,475	$ 3,134	$ 200	$ 905	
	Total Pumping Expenses Expenses									
34	Commodity	$ 641,390	$ -	$ 641,390	$ 463,841	$ 45,833	$ 97,347	$ 6,271	$ 28,097	
35	Demand	45,538	-	45,538	32,927	3,255	6,921	434	2,002	
36	Customer Accounts	-	-	-	-	-	-	-	-	
37	Customer Services	-	-	-	-	-	-	-	-	
38	Effluent	-	-	-	-	-	-	-	-	
39	Total Water Treatment	$ 686,928	$ -	$ 686,928	$ 496,768	$ 49,088	$ 104,268	$ 6,705	$ 30,100	
	Total Production Expenses									
40	Commodity	$ 1,026,560	$ -	$ 1,026,560	$ 742,389	$ 73,358	$ 155,807	$ 10,036	$ 44,970	
41	Demand	90,369	-	90,369	65,342	6,459	13,734	861	3,974	
42	Customer Accounts	-	-	-	-	-	-	-	-	
43	Customer Services	891	-	891	857	7	27	0	1	
44	Effluent	-	-	-	-	-	-	-	-	
45	**Total Production Expenses**	**$ 1,117,821**	**$ -**	**$ 1,117,821**	**$ 808,588**	**$ 79,824**	**$ 169,568**	**$ 10,897**	**$ 48,945**	

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Revenue and Expense Allocation to Rate Schedules at Present Revenues

Line No.s	Description	Total Company (a)	Other Jurisdictional	Jurisdictional Total (a)	Residential	Multi-Unit	Commercial	Wigwam	Schools	Alloc. Code (b)
	Treatment and Disposal Expenses									
	Operation									
46	Commodity	$ 1,539,031	$ -	$ 1,539,031	$ 1,112,998	$ 109,979	$ 233,587	$ 15,047	$ 67,420	CBC
47	Demand	31,013	-	31,013	22,424	2,217	4,713	295	1,364	CMD
48	Customer Accounts	-	-	-	-	-	-	-	-	CB
49	Customer Services	-	-	-	-	-	-	-	-	CS
50	Effluent	-	-	-	-	-	-	-	-	CF
51	Total Operation	$ 1,570,043	$ -	$ 1,570,043	$ 1,135,422	$ 112,195	$ 238,300	$ 15,342	$ 68,784	
	Maintenance									
52	Commodity	$ 12,057	$ -	$ 12,057	$ 8,719	$ 862	$ 1,830	$ 118	$ 528	CBC
53	Demand	8,580	-	8,580	6,204	613	1,304	82	377	CMD
54	Customer Accounts	-	-	-	-	-	-	-	-	CB
55	Customer Services	-	-	-	-	-	-	-	-	CS
56	Effluent	-	-	-	-	-	-	-	-	CF
57	Total Maintenance	$ 20,637	$ -	$ 20,637	$ 14,923	$ 1,475	$ 3,134	$ 200	$ 905	
	Total Treatment and Disposal Expenses									
58	Commodity	$ 1,551,087	$ -	$ 1,551,087	$ 1,121,717	$ 110,840	$ 235,417	$ 15,164	$ 67,948	
59	Demand	39,593	-	39,593	28,628	2,830	6,017	377	1,741	
60	Customer Accounts	-	-	-	-	-	-	-	-	
61	Customer Services	-	-	-	-	-	-	-	-	
62	Effluent	-	-	-	-	-	-	-	-	
63	**Total Treatment and Disposal Expenses**	**$ 1,590,680**	**$ -**	**$ 1,590,680**	**$ 1,150,345**	**$ 113,670**	**$ 241,434**	**$ 15,542**	**$ 69,689**	

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Revenue and Expense Allocation to Rate Schedules at Present Revenues

Line No.s	Description	Total Company (a)	Other Jurisdictional	Jurisdictional Total (a)	Residential	Multi-Unit	Commercial	Wigwam	Schools	Alloc. Code (b)
	Reclaimed Water Expenses									
	Operation									
64	Commodity	$ 13,865	$ -	$ 13,865	$ 10,027	$ 991	$ 2,104	$ 136	$ 607	CBC
65	Demand	5,095	-	5,095	3,684	364	774	49	224	CMD
66	Customer Accounts	-	-	-	-	-	-	-	-	CB
67	Customer Services	-	-	-	-	-	-	-	-	CS
68	Effluent	-	-	-	-	-	-	-	-	CF
69	Total Operation	$ 18,960	$ -	$ 18,960	$ 13,711	$ 1,355	$ 2,879	$ 184	$ 831	
	Maintenance									
70	Commodity	$ 2,073	$ -	$ 2,073	$ 1,499	$ 148	$ 315	$ 20	$ 91	CBC
71	Demand	5,095	-	5,095	3,684	364	774	49	224	CMD
72	Customer Accounts	-	-	-	-	-	-	-	-	CB
73	Customer Services	-	-	-	-	-	-	-	-	CS
74	Effluent	-	-	-	-	-	-	-	-	CF
75	Total Maintenance	$ 7,168	$ -	$ 7,168	$ 5,183	$ 512	$ 1,089	$ 69	$ 315	
	Total Reclaimed Water Expenses									
76	Commodity	$ 15,939	$ -	$ 15,939	$ 11,527	$ 1,139	$ 2,419	$ 156	$ 698	
77	Demand	10,190	-	10,190	7,368	728	1,549	97	448	
78	Customer Accounts	-	-	-	-	-	-	-	-	
79	Customer Services	-	-	-	-	-	-	-	-	
80	Effluent	-	-	-	-	-	-	-	-	
81	**Total Reclaimed Water Expenses**	**$ 26,128**	**$ -**	**$ 26,128**	**$ 18,894**	**$ 1,867**	**$ 3,968**	**$ 253**	**$ 1,146**	
	Customer Accounts Expenses									
82	Commodity	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	CBC
83	Demand	-	-	-	-	-	-	-	-	CMD
84	Customer Accounts	157,778	-	157,778	152,719	1,196	3,765	13	85	CB
85	Customer Services	-	-	-	-	-	-	-	-	CS
86	Effluent	-	-	-	-	-	-	-	-	CF
87	**Total Customer Accounts**	**$ 157,778**	**$ -**	**$ 157,778**	**$ 152,719**	**$ 1,196**	**$ 3,765**	**$ 13**	**$ 85**	
	O&M w/oA&G Expenses									
88	Commodity	$ 2,593,586	$ -	$ 2,593,586	$ 1,875,633	$ 185,337	$ 393,643	$ 25,357	$ 113,617	
89	Demand	140,152	-	140,152	101,337	10,018	21,299	1,335	6,163	
90	Customer Accounts	157,778	-	157,778	152,719	1,196	3,765	13	85	
91	Customer Services	891	-	891	857	7	27	0	1	
92	Effluent	-	-	-	-	-	-	-	-	
93	**Total O&M w/oA&G Expenses**	$ 2,892,408	$ -	$ 2,892,408	$ 2,130,546	$ 196,557	$ 418,735	$ 26,705	$ 119,865	

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Revenue and Expense Allocation to Rate Schedules at Present Revenues

Line No.s	Description	Total Company (a)	Other Jurisdictional	Jurisdictional Total (a)	Residential	Multi-Unit	Commercial	Wigwam	Schools	Alloc. Code (b)
	Administrative and General Expenses									
94	Commodity	$ 2,585,115	$ -	$ 2,585,115	$ 1,869,507	$ 184,731	$ 392,357	$ 25,274	$ 113,246	CBC
95	Demand	1,995,276	-	1,995,276	1,442,689	142,615	303,228	19,011	87,733	CMD
96	Customer Accounts	2,483,918	-	2,483,918	2,404,265	18,833	59,280	205	1,335	CB
97	Customer Services	15,772	-	15,772	15,161	119	482	2	9	CS
98	Effluent	-	-	-	-	-	-	-	-	CF
99	Total Administrative and General Expenses	$ 7,080,081	$ -	$ 7,080,081	$ 5,731,621	$ 346,298	$ 755,347	$ 44,492	$ 202,323	
	Total Operation and Maintenance Expenses									
100	Commodity	$ 5,178,701	$ -	$ 5,178,701	$ 3,745,140	$ 370,068	$ 785,999	$ 50,630	$ 226,863	
101	Demand	2,135,428	-	2,135,428	1,544,026	152,633	324,527	20,346	93,896	
102	Customer Accounts	2,641,696	-	2,641,696	2,556,983	20,029	63,046	218	1,420	
103	Customer Services	16,664	-	16,664	16,017	125	510	2	10	
104	Effluent	-	-	-	-	-	-	-	-	
105	**Total Operation and Maintenance Expenses**	$ 9,972,489	$ -	$ 9,972,489	$ 7,862,167	$ 542,855	$ 1,174,082	$ 71,197	$ 322,188	
	Depreciation & Amort Expense									
106	Commodity	$ 1,513,463	$ -	$ 1,513,463	$ 1,094,508	$ 108,152	$ 229,706	$ 14,797	$ 66,300	CBC
107	Demand	5,822,646	-	5,822,646	4,210,077	416,181	884,883	55,479	256,025	CMD
108	Customer Accounts	931,630	-	931,630	901,755	7,064	22,234	77	501	CB
109	Customer Services	20,730	-	20,730	19,926	156	634	2	12	CS
110	Effluent	-	-	-	-	-	-	-	-	CF
111		-	-	-	-	-	-	-	-	CF
112	Total Depreciation & Amort Expense	$ 8,288,470	$ -	$ 8,288,470	$ 6,226,267	$ 531,552	$ 1,137,458	$ 70,354	$ 322,838	
	Taxes Other Than Income									
113	Commodity	$ 155,147	$ -	$ 155,147	$ 112,199	$ 11,087	$ 23,548	$ 1,517	$ 6,797	CBC
114	Demand	596,887	-	596,887	431,580	42,663	90,711	5,687	26,245	CMD
115	Customer Accounts	56,854	-	56,854	55,031	431	1,357	5	31	CB
116	Customer Services	5,425	-	5,425	5,214	41	166	1	3	CS
117	Effluent	-	-	-	-	-	-	-	-	CF
118	Total Taxes Other Than Income	$ 814,312	$ -	$ 814,312	$ 604,025	$ 54,222	$ 115,781	$ 7,209	$ 33,076	
	O&M, Customer, A&G and Other Taxes									
119	Commodity	$ 6,847,311	$ -	$ 6,847,311	$ 4,951,848	$ 489,307	$ 1,039,253	$ 66,944	$ 299,960	
120	Demand	8,554,961	-	8,554,961	6,185,684	611,477	1,300,121	81,512	376,166	
121	Customer Accounts	3,630,180	-	3,630,180	3,513,769	27,524	86,636	300	1,951	
122	Customer Services	42,819	-	42,819	41,158	322	1,310	5	25	
123	Effluent	-	-	-	-	-	-	-	-	
124	**Total O&M, Customer, A&G and Other Taxes**	$ 19,075,271	$ -	$ 19,075,271	$ 14,692,459	$ 1,128,630	$ 2,427,320	$ 148,761	$ 678,102	
	Labor Allocator									
125	Commodity	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	CBC
126	Demand	-	-	-	-	-	-	-	-	CMD
127	Customer Accounts	-	-	-	-	-	-	-	-	CB
128	Customer Services	-	-	-	-	-	-	-	-	CS
129	Effluent	-	-	-	-	-	-	-	-	CF
130	Total Labor	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Revenue and Expense Allocation to Rate Schedules at Present Revenues

Line No.s	Description	Total Company (a)	Other Jurisdictional	Jurisdictional Total (a)	Residential	Multi-Unit	Commercial	Wigwam	Schools	Alloc. Code (b)
	OPERATING INCOME									
131	Income Before Taxes	$ 2,493,815	$ -	$ 2,493,815	$ (808,997)	$ 1,328,259	$ 2,373,972	$ 45,072	$ (444,491)	
132	State Income Tax	(45,002)	-	(45,002)	(168,326)	55,990	96,094	769	(29,529)	
133	Federal Income Tax	(183,415)	-	(183,415)	(686,047)	228,199	391,650	3,133	(120,350)	
134	Total Income Taxes	$ (228,417)	$ -	$ (228,417)	$ (854,373)	$ 284,189	$ 487,744	$ 3,901	$ (149,879)	
135	Net Income After Tax	$ 2,722,232	$ -	$ 2,722,232	$ 45,375	$ 1,044,070	$ 1,886,228	$ 41,171	$ (294,612)	
136	Present Return Rate Of Return	2.03%	0.00%	2.03%	0.05%	11.71%	9.91%	3.47%	-5.42%	
137	Present Relative Return Rate Of Return	1.00	-	1.00	0.02	5.76	4.87	1.71	(2.66)	
	State Income Tax									
138	Income Before Tax	$ 2,583,076	$ -	$ 2,583,076	$ (837,954)	$ 1,375,802	$ 2,458,943	$ 46,685	$ (460,401)	
139	Less: Interest Expense	3,501,484	-	3,501,484	2,597,262	233,150	497,849	30,999	142,223	
140	State Taxable Income	$ (918,408)	$ -	$ (918,408)	$ (3,435,216)	$ 1,142,651	$ 1,961,094	$ 15,686	$ (602,624)	
141	Pro Forma State Income Tax	$ (45,002)	$ -	$ (45,002)	$ (168,326)	$ 55,990	$ 96,094	$ 769	$ (29,529)	
142	Amortization of Flow Through Tax	0	0	0	0	0	0	0	0	
143	Subtotal State Income Tax	$ (45,002)	$ -	$ (45,002)	$ (168,326)	$ 55,990	$ 96,094	$ 769	$ (29,529)	
144	Deferred State Income Tax	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
145	**Total State Income Tax**	**$ (45,002)**	**$ -**	**$ (45,002)**	**$ (168,326)**	**$ 55,990**	**$ 96,094**	**$ 769**	**$ (29,529)**	
	Federal Income Tax									
146	Income Before Tax	$ 2,583,076	$ -	$ 2,583,076	$ (837,954)	$ 1,375,802	$ 2,458,943	$ 46,685	$ (460,401)	
147	Less: Interest Expense	3,501,484	-	3,501,484	2,597,262	233,150	497,849	30,999	142,223	
148	Less: State Income Tax	(45,002)	-	(45,002)	(168,326)	55,990	96,094	769	(29,529)	
149		-	-	-	-	-	-	-	-	
150	Federal Taxable Income	$ (873,406)	$ -	$ (873,406)	$ (3,266,891)	$ 1,086,662	$ 1,865,001	$ 14,917	$ (573,095)	
151	Pro Forma Federal Income Tax	$ (183,415)	$ -	$ (183,415)	$ (686,047)	$ 228,199	$ 391,650	$ 3,133	$ (120,350)	
152	ITC Amortization	-	-	-	-	-	-	-	-	CRB
153	Subtotal Federal Income Tax	$ (183,415)	$ -	$ (183,415)	$ (686,047)	$ 228,199	$ 391,650	$ 3,133	$ (120,350)	
154	Deferred Federal Income Tax	-	-	-	-	-	-	-	-	
155	**Total Federal Income Tax**	**(183,415)**	**-**	**(183,415)**	**(686,047)**	**228,199**	**391,650**	**3,133**	**(120,350)**	
156	**Total Income Tax**	**(228,417)**	**-**	**(228,417)**	**(854,373)**	**284,189**	**487,744**	**3,901**	**(149,879)**	

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Revenue and Expense Allocation to Rate Schedules at Present Revenues

Line No.s	Description	Total Company (a)	Other Jurisdictional	Jurisdictional Total (a)	Residential	Multi-Unit	Commercial	Wigwam	Schools	Alloc. Code (b)
PRESENT REVENUES TAXES & ROR										
	Present Revenues									
157	Revenues	$ 20,846,881		$ 20,846,881	$ 13,361,176	$ 2,405,280	$ 4,691,679	$ 186,772	$ 201,973	
158	Other Revenue	663,170	-	663,170	479,592	47,390	100,653	6,484	29,051	
159	Effluent Revenues	59,035	-	59,035	42,693	4,219	8,960	577	2,586	
160	Total Present Revenue	**$ 21,569,086**	**$ -**	**$ 21,569,086**	**$ 13,883,462**	**$ 2,456,889**	**$ 4,801,292**	**$ 193,833**	**$ 233,611**	
161	O&M, Customer, A&G and Other Taxes	$ 19,075,271	$ -	$ 19,075,271	$ 14,692,459	$ 1,128,630	$ 2,427,320	$ 148,761	$ 678,102	
162	Income Before Tax	$ 2,493,815	$ -	$ 2,493,815	$ (808,997)	$ 1,328,259	$ 2,373,972	$ 45,072	$ (444,491)	
163	Less: Interest Expense	3,501,484	-	3,501,484	2,597,262	233,150	497,849	30,999	142,223	
164	State Taxable Income	$ (1,007,669)	$ -	$ (1,007,669)	$ (3,406,260)	$ 1,095,109	$ 1,876,123	$ 14,073	$ (586,714)	
165	Pro Forma State Income Tax	$ (45,002)	$ -	$ (45,002)	$ (168,326)	$ 55,990	$ 96,094	$ 769	$ (29,529)	
166	Amortization of Flow Through Tax	-	-	-	-	-	-	-	-	
167	Subtotal State Income Tax	$ (45,002)	$ -	$ (45,002.00)	$ (168,325.59)	$ 55,989.92	$ 96,093.62	$ 768.60	$ (29,528.55)	
168	Deferred State Income Tax	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
169	**Total State Income Tax**	$ (45,002)	$ -	$ (45,002)	$ (168,326)	$ 55,990	$ 96,094	$ 769	$ (29,529)	
170	Income Before Tax	$ 2,493,815	$ -	$ 2,493,815	$ (808,997)	$ 1,328,259	$ 2,373,972	$ 45,072	$ (444,491)	
171	Less: Interest Expense	3,501,484	-	3,501,484	2,597,262	233,150	497,849	30,999	142,223	
172	Less: State Income Tax	(45,002)	-	(45,002)	(168,326)	55,990	96,094	769	(29,529)	
173		-	-	-	-	-	-	-	-	
174	Federal Taxable Income	($962,667)	0	(962,667)	(3,237,934)	1,039,119	1,780,029	13,304	(557,185)	
175	Pro Forma Federal Income Tax	$ (183,415)	0	(183,415)	(686,047)	228,199	391,650	3,133	(120,350)	
176	ITC Amortization	-	0	0	0	0	0	0	0	CRB
177	Subtotal Federal Income Tax	($183,415)	0	(183,415)	(686,047)	228,199	391,650	3,133	(120,350)	
178	**Total Federal Income Tax**	($183,415)	0	(183,415)	(686,047)	228,199	391,650	3,133	(120,350)	
179	**Total Income Tax**	($228,417)	0	(228,417)	(854,373)	284,189	487,744	3,901	(149,879)	
180	**Income After Tax**	**$2,722,232**	**$0**	**$2,722,232**	**$45,375**	**$1,044,070**	**$1,886,228**	**$41,171**	**($294,612)**	
	Present Revenues									
181	**Return Rate Of Return**	2.03%	0.00%	2.03%	0.05%	11.71%	9.91%	3.47%	-5.42%	
182	**Realtive Rate Of Return**	1.00	-	1.00	0.02	5.76	4.87	1.71	(2.66)	

Supporting Schedules
(a) C-1, (b) G-7a, (c) H-1

Recap Schedules
[A] G-1

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Revenue and Expense Allocation to Rate Schedules at Proposed Revenues

Line No.s	Description	Total Company (a)	Jurisdictional Total (a)	Residential	Residential Multi-Unit	Commercial	Wigwam	Schools	Allocation Code (b)
	REVENUES								
1	Revenue Water Service (c)	$ 32,443,260	$ 32,443,260	$ 20,592,306	$ 3,707,027	$ 7,521,470	$ 299,059	$ 323,399	Direct
2	Other Revenue	663,170	663,170	479,592	47,390	100,653	6,484	29,051	CBC
2	Effluent Revenues	59,035	59,035	42,693	4,219	8,960	577	2,586	CBC
3	Total Revenue	$ 33,165,465	$ 33,165,465	$ 21,114,591	$ 3,758,635	$ 7,631,083	$ 306,119	$ 355,036	
	EXPENSES (A)								
	Collection Expenses								
	Operation								
4	Commodity	$ 354,350	$ 354,350	$ 256,259	$ 25,322	$ 53,782	$ 3,464	$ 15,523	CBC
5	Demand	36,384	36,384	26,308	2,601	5,529	347	1,600	CMD
6	Customer Accounts	-	-	-	-	-	-	-	CB
7	Customer Services	723	723	695	5	22	0	0	CS
8	Effluent	-	-	-	-	-	-	-	CF
9	Total Operation	$391,457	$ 391,457	$ 283,262	$ 27,928	$ 59,333	$ 3,811	$ 17,123	
	Maintenance								
10	Commodity	$ 30,821	$ 30,821	$ 22,289	$ 2,202	$ 4,678	$ 301	$ 1,350	CBC
11	Demand	8,447	8,447	6,108	604	1,284	80	371	CMD
12	Customer Accounts	-	-	-	-	-	-	-	CB
13	Customer Services	168	168	161	1	5	0	0	CS
14	Effluent	-	-	-	-	-	-	-	CF
15	Total Maintenance	$ 39,436	$ 39,436	$ 28,558	$ 2,807	$ 5,967	$ 382	$ 1,722	
	Total Collection Expenses								
16	Commodity	$ 385,171	$ 385,171	$ 278,548	$ 27,524	$ 58,459	$ 3,766	$ 16,873	
17	Demand	44,831	44,831	32,415	3,204	6,813	427	1,971	
18	Customer Accounts	-	-	-	-	-	-	-	
19	Customer Services	891	891	857	7	27	0	1	
20	Effluent	-	-	-	-	-	-	-	
21	Total Collection Expenses	$ 430,893	$ 430,893	$ 311,820	$ 30,735	$ 65,300	$ 4,193	$ 18,845	

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Revenue and Expense Allocation to Rate Schedules at Proposed Revenues

Line No.s	Description	Total Company (a)	Jurisdictional Total (a)	Residential	Residential Multi-Unit	Commercial	Wigwam	Schools	Allocation Code (b)
	Pumping Expneses								
	Operation								
22	Commodity	$ 629,333	$ 629,333	$ 455,122	$ 44,972	$ 95,517	$ 6,153	$ 27,569	CBC
23	Demand	36,958	36,958	26,723	2,642	5,617	352	1,625	CMD
24	Customer Accounts	-	-	-	-	-	-	-	CB
25	Customer Services	-	-	-	-	-	-	-	CS
26	Effluent	-	-	-	-	-	-	-	CF
27	Total Operation	$ 666,291	$ 666,291	$ 481,844	$ 47,614	$ 101,134	$ 6,505	$ 29,194	
	Maintenance								
28	Commodity	$ 12,057	$ 12,057	$ 8,719	$ 862	$ 1,830	$ 118	$ 528	CBC
29	Demand	8,580	8,580	6,204	613	1,304	82	377	CMD
30	Customer Accounts	-	-	-	-	-	-	-	CB
31	Customer Services	-	-	-	-	-	-	-	CS
32	Effluent	-	-	-	-	-	-	-	CF
33	Total Maintenance	$ 20,637	$ 20,637	$ 14,923	$ 1,475	$ 3,134	$ 200	$ 905	
	Total Pumping Expenses Expenses								
34	Commodity	$ 641,390	$ 641,390	$ 463,841	$ 45,833	$ 97,347	$ 6,271	$ 28,097	
35	Demand	45,538	45,538	32,927	3,255	6,921	434	2,002	
36	Customer Accounts	-	-	-	-	-	-	-	
37	Customer Services	-	-	-	-	-	-	-	
38	Effluent	-	-	-	-	-	-	-	
39	Total Pumping Expense	$ 686,928	$ 686,928	$ 496,768	$ 49,088	$ 104,268	$ 6,705	$ 30,100	
	Total Production Expenses								
40	Commodity	$ 1,026,560	$ 1,026,560	$ 742,389	$ 73,358	$ 155,807	$ 10,036	$ 44,970	
41	Demand	90,369	90,369	65,342	6,459	13,734	861	3,974	
42	Customer Accounts	-	-	-	-	-	-	-	
43	Customer Services	891	891	857	7	27	0	1	
44	Effluent	-	-	-	-	-	-	-	
45	**Total Production Expenses**	**$ 1,117,821**	**$ 1,117,821**	**$ 808,588**	**$ 79,824**	**$ 169,568**	**$ 10,897**	**$ 48,945**	

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Revenue and Expense Allocation to Rate Schedules at Proposed Revenues

Line No.s	Description	Total Company (a)	Jurisdictional Total (a)	Residential	Residential Multi-Unit	Commercial	Wigwam	Schools	Allocation Code (b)
	Treatment and Disposal Expenses								
	Operation								
46	Commodity	$ 1,539,031	$ 1,539,031	$ 1,112,998	$ 109,979	$ 233,587	$ 15,047	$ 67,420	CBC
47	Demand	31,013	31,013	22,424	2,217	4,713	295	1,364	CMD
48	Customer Accounts	-	-	-	-	-	-	-	CB
49	Customer Services	-	-	-	-	-	-	-	CS
50	Effluent	-	-	-	-	-	-	-	CF
51	Total Operation	$ 1,570,043	$ 1,570,043	$ 1,135,422	$ 112,195	$ 238,300	$ 15,342	$ 68,784	
	Maintenance								
52	Commodity	$ 12,057	$ 12,057	$ 8,719	$ 862	$ 1,830	$ 118	$ 528	CBC
53	Demand	8,580	8,580	6,204	613	1,304	82	377	CMD
54	Customer Accounts	-	-	-	-	-	-	-	CB
55	Customer Services	-	-	-	-	-	-	-	CS
56	Effluent	-	-	-	-	-	-	-	CF
57	Total Maintenance	$ 20,637	$ 20,637	$ 14,923	$ 1,475	$ 3,134	$ 200	$ 905	
	Total Treatment and Disposal Expenses								
58	Commodity	$ 1,551,087	$ 1,551,087	$ 1,121,717	$ 110,840	$ 235,417	$ 15,164	$ 67,948	
59	Demand	39,593	39,593	28,628	2,830	6,017	377	1,741	
60	Customer Accounts	-	-	-	-	-	-	-	
61	Customer Services	-	-	-	-	-	-	-	
62	Effluent	-	-	-	-	-	-	-	
63	**Total Treatment and Disposal Expenses**	**$ 1,590,680**	**$ 1,590,680**	**$ 1,150,345**	**$ 113,670**	**$ 241,434**	**$ 15,542**	**$ 69,689**	
	Reclaimed Water Expenses								
	Operation								
64	Commodity	$ 13,865	$ 13,865	$ 10,027	$ 991	$ 2,104	$ 136	$ 607	CBC
65	Demand	5,095	5,095	3,684	364	774	49	224	CMD
66	Customer Accounts	-	-	-	-	-	-	-	CB
67	Customer Services	-	-	-	-	-	-	-	CS
68	Effluent	-	-	-	-	-	-	-	CF
69	Total Operation	$ 18,960	$ 18,960	$ 13,711	$ 1,355	$ 2,879	$ 184	$ 831	
	Maintenance								
70	Commodity	$ 2,073	$ 2,073	$ 1,499	$ 148	$ 315	$ 20	$ 91	CBC
71	Demand	5,095	5,095	3,684	364	774	49	224	CMD
72	Customer Accounts	-	-	-	-	-	-	-	CB
73	Customer Services	-	-	-	-	-	-	-	CS
74	Effluent	-	-	-	-	-	-	-	CF
75	Total Maintenance	$ 7,168	$ 7,168	$ 5,183	$ 512	$ 1,089	$ 69	$ 315	
	Total Reclaimed Water Expenses								
76	Commodity	$ 15,939	$ 15,939	$ 11,527	$ 1,139	$ 2,419	$ 156	$ 698	
77	Demand	10,190	10,190	7,368	728	1,549	97	448	
78	Customer Accounts	-	-	-	-	-	-	-	
79	Customer Services	-	-	-	-	-	-	-	
80	Effluent	-	-	-	-	-	-	-	

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Revenue and Expense Allocation to Rate Schedules at Proposed Revenues

Line No.s	Description	Total Company (a)	Jurisdictional Total (a)	Residential	Residential Multi-Unit	Commercial	Wigwam	Schools	Allocation Code (b)
81	Total Reclaimed Water Expenses	$ 26,128	$ 26,128	$ 18,894	$ 1,867	$ 3,968	$ 253	$ 1,146	

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Revenue and Expense Allocation to Rate Schedules at Proposed Revenues

Line No.s	Description	Total Company (a)	Jurisdictional Total (a)	Residential	Residential Multi-Unit	Commercial	Wigwam	Schools	Allocation Code (b)
	Customer Accounts Expenses								
82	Commodity	$ -	$ -	$ -	$ -	$ -	$ -	$ -	CBC
83	Demand	-	-	-	-	-	-	-	CMD
84	Customer Accounts	178,482	178,482	172,759	1,353	4,260	15	96	CB
85	Customer Services	-	-	-	-	-	-	-	CS
86	Effluent	-	-	-	-	-	-	-	CF
87	**Total Customer Accounts**	**$ 178,482**	**$ 178,482**	**$ 172,759**	**$ 1,353**	**$ 4,260**	**$ 15**	**$ 96**	
	O&M w/oA&G Expenses								
88	Commodity	$ 2,593,586	$ 2,593,586	$ 1,875,633	$ 185,337	$ 393,643	$ 25,357	$ 113,617	
89	Demand	140,152	140,152	101,337	10,018	21,299	1,335	6,163	
90	Customer Accounts	178,482	178,482	172,759	1,353	4,260	15	96	
91	Customer Services	891	891	857	7	27	0	1	
92	Effluent	-	-	-	-	-	-	-	
93	**Total O&M w/oA&G Expenses**	$ 2,913,112	$ 2,913,112	$ 2,150,586	$ 196,714	$ 419,229	$ 26,707	$ 119,876	

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Revenue and Expense Allocation to Rate Schedules at Proposed Revenues

Line No.s	Description	Total Company (a)	Jurisdictional Total (a)	Residential	Residential Multi-Unit	Commercial	Wigwam	Schools	Allocation Code (b)
	Administrative and General Expenses								
94	Commodity	$ 2,585,115	$ 2,585,115	$ 1,869,507	$ 184,731	$ 392,357	$ 25,274	$ 113,246	CBC
95	Demand	1,995,276	1,995,276	1,442,689	142,615	303,228	19,011	87,733	CMD
96	Customer Accounts	2,483,918	2,483,918	2,404,265	18,833	59,280	205	1,335	CB
97	Customer Services	15,772	15,772	15,161	119	482	2	9	CS
98	Effluent	-	-	-	-	-	-	-	CF
99	Total Administrative and General Expenses	$ 7,080,081	$ 7,080,081	$ 5,731,621	$ 346,298	$ 755,347	$ 44,492	$ 202,323	
	Total Operation and Maintenance Expenses								
100	Commodity	$ 5,178,701	$ 5,178,701	$ 3,745,140	$ 370,068	$ 785,999	$ 50,630	$ 226,863	
101	Demand	2,135,428	2,135,428	1,544,026	152,633	324,527	20,346	93,896	
102	Customer Accounts	2,662,400	2,662,400	2,577,023	20,186	63,540	220	1,431	
103	Customer Services	16,664	16,664	16,017	125	510	2	10	
104	Effluent	-	-	-	-	-	-	-	
105	**Total Operation and Maintenance Expenses**	$ 9,993,193	$ 9,993,193	$ 7,882,207	$ 543,012	$ 1,174,576	$ 71,199	$ 322,199	
	Depreciation & Amort Expense								
106	Commodity	$ 1,513,463	$ 1,513,463	$ 1,094,508	$ 108,152	$ 229,706	$ 14,797	$ 66,300	CBC
107	Demand	5,822,646	5,822,646	4,210,077	416,181	884,883	55,479	256,025	CMD
108	Customer Accounts	931,630	931,630	901,755	7,064	22,234	77	501	CB
109	Customer Services	20,730	20,730	19,926	156	634	2	12	CS
110	Effluent	-	-	-	-	-	-	-	CF
111		-	-	-	-	-	-	-	CF
112	Total Depreciation & Amort Expense	$ 8,288,470	$ 8,288,470	$ 6,226,267	$ 531,552	$ 1,137,458	$ 70,354	$ 322,838	
	Taxes Other Than Income								
113	Commodity	$ 182,824	$ 182,824	$ 132,215	$ 13,065	$ 27,748	$ 1,787	$ 8,009	CBC
114	Demand	703,367	703,367	508,571	50,274	106,893	6,702	30,927	CMD
115	Customer Accounts	66,996	66,996	64,848	508	1,599	6	36	CB
116	Customer Services	6,392	6,392	6,144	48	196	1	4	CS
117	Effluent	-	-	-	-	-	-	-	CF
118	Total Taxes Other Than Income	$ 959,580	$ 959,580	$ 711,779	$ 63,895	$ 136,435	$ 8,495	$ 38,976	
	O&M, Customer, A&G and Other Taxes								
119	Commodity	$ 6,874,989	$ 6,874,989	$ 4,971,864	$ 491,284	$ 1,043,454	$ 67,215	$ 301,172	
120	Demand	8,661,441	8,661,441	6,262,675	619,088	1,316,303	82,527	380,848	
121	Customer Accounts	3,661,026	3,661,026	3,543,626	27,758	87,372	303	1,967	
122	Customer Services	43,787	43,787	42,088	329	1,339	5	26	
123	Effluent	-	-	-	-	-	-	-	
124	**Total O&M, Customer, A&G and Other Taxes**	$ 19,241,243	$ 19,241,243	$ 14,820,253	$ 1,138,459	$ 2,448,469	$ 150,049	$ 684,013	
	Labor Allocator								
125	Commodity	$ -	$ -	$ -	$ -	$ -	$ -	$ -	CBC
126	Demand	-	-	-	-	-	-	-	CMD
127	Customer Accounts	-	-	-	-	-	-	-	CB
128	Customer Services	-	-	-	-	-	-	-	CS
129	Effluent	-	-	-	-	-	-	-	CF
130	Total Labor	$ -	$ -	$ -	$ -	$ -	$ -	$ -	

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Revenue and Expense Allocation to Rate Schedules at Proposed Revenues

Line No.s	Description	Total Company (a)	Jurisdictional Total (a)	Residential	Residential Multi-Unit	Commercial	Wigwam	Schools	Allocation Code (b)
	OPERATING INCOME								
131	Income Before Taxes	$ 13,924,223	$ 13,924,223	$ 6,294,339	$ 2,620,176	$ 5,182,614	$ 156,071	$ (328,977)	
132	State Income Tax	515,088	515,088	183,134	117,787	231,181	6,178	(23,192)	
133	Federal Income Tax	2,099,351	2,099,351	746,401	480,067	942,229	25,178	(94,525)	
134	Total Income Taxes	$ 2,614,439	$ 2,614,439	$ 929,535	$ 597,855	$ 1,173,411	$ 31,355	$ (117,717)	
135	Net Income After Tax	$ 11,309,783	$ 11,309,783	$ 5,364,803	$ 2,022,321	$ 4,009,203	$ 124,715	$ (211,260)	
136	Present Return Rate Of Return	8.45%	8.45%	5.40%	22.68%	21.06%	10.52%	-3.88%	
137	Present Relative Return Rate Of Return	1.00	1.00	0.64	2.69	2.49	1.25	(0.46)	
	State Income Tax								
138	Income Before Tax	$ 14,013,484	$ 14,013,484	$ 6,334,688	$ 2,636,973	$ 5,215,837	$ 157,071	$ (331,086)	
139	Less: Interest Expense	3,501,484	3,501,484	2,597,262	233,150	497,849	30,999	142,223	
140	State Taxable Income	$ 10,512,000	$ 10,512,000	$ 3,737,426	$ 2,403,823	$ 4,717,988	$ 126,072	$ (473,309)	
141	Pro Forma State Income Tax	$ 515,088	$ 515,088	$ 183,134	$ 117,787	$ 231,181	$ 6,178	$ (23,192)	
142	Amortization of Flow Through Tax	0	0	0	0	0	0	0	
143	Subtotal State Income Tax	$ 515,088	$ 515,088	$ 183,134	$ 117,787	$ 231,181	$ 6,178	$ (23,192)	
144	Deferred State Income Tax	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
145	**Total State Income Tax**	**$ 515,088**	**$ 515,088**	**$ 183,134**	**$ 117,787**	**$ 231,181**	**$ 6,178**	**$ (23,192)**	
	Federal Income Tax								
146	Income Before Tax	$ 14,013,484	$ 14,013,484	$ 6,334,688	$ 2,636,973	$ 5,215,837	$ 157,071	$ (331,086)	
147	Less: Interest Expense	3,501,484	3,501,484	2,597,262	233,150	497,849	30,999	142,223	
148	Less: State Income Tax	515,088	515,088	183,134	117,787	231,181	6,178	(23,192)	
149		-	-	-	-	-	-	-	
150	Federal Taxable Income	$ 9,996,912	$ 9,996,912	$ 3,554,292	$ 2,286,035	$ 4,486,807	$ 119,894	$ (450,117)	
151	Pro Forma Federal Income Tax	$ 2,099,351	$ 2,099,351	$ 746,401	$ 480,067	$ 942,229	$ 25,178	$ (94,525)	
152	ITC Amortization	-	-	-	-	-	-	-	CRB
153	Subtotal Federal Income Tax	$ 2,099,351	$ 2,099,351	$ 746,401	$ 480,067	$ 942,229	$ 25,178	$ (94,525)	
154	Deferred Federal Income Tax	-	-	-	-	-	-	-	
155	**Total Federal Income Tax**	**2,099,351**	**2,099,351**	**746,401**	**480,067**	**942,229**	**25,178**	**(94,525)**	
156	**Total Income Tax**	**2,614,439**	**2,614,439**	**929,535**	**597,855**	**1,173,411**	**31,355**	**(117,717)**	

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Revenue and Expense Allocation to Rate Schedules at Proposed Revenues

Line No.s	Description	Total Company (a)	Jurisdictional Total (a)	Residential	Residential Multi-Unit	Commercial	Wigwam	Schools	Allocation Code (b)
PRESENT REVENUES TAXES & ROR									
	Proposed Revenues								
157	Revenues	$ 32,443,260	$ 32,443,260	$ 20,592,306	$ 3,707,027	$ 7,521,470	$ 299,059	$ 323,399	
158	Other Revenue	663,170	663,170	479,592	47,390	100,653	6,484	29,051	
159	Total Present Revenue	**$ 33,165,465**	**$ 33,165,465**	**$ 21,114,591**	**$ 3,758,635**	**$ 7,631,083**	**$ 306,119**	**$ 355,036**	
160	O&M, Customer, A&G and Other Taxes	$ 19,241,243	$ 19,241,243	$ 14,820,253	$ 1,138,459	$ 2,448,469	$ 150,049	$ 684,013	
161	Income Before Tax	$ 13,924,223	$ 13,924,223	$ 6,294,339	$ 2,620,176	$ 5,182,614	$ 156,071	$ (328,977)	
162	Less: Interest Expense	3,501,484	3,501,484	2,597,262	233,150	497,849	30,999	142,223	
163	State Taxable Income	$ 10,422,739	$ 10,422,739	$ 3,697,076	$ 2,387,026	$ 4,684,765	$ 125,071	$ (471,200)	
164	Pro Forma State Income Tax	$ 515,088	$ 515,088	$ 183,134	$ 117,787	$ 231,181	$ 6,178	$ (23,192)	
165	Amortization of Flow Through Tax	-	-	-	-	-	-	-	
166	Subtotal State Income Tax	$ 515,088	$ 515,087.99	$ 183,133.87	$ 117,787.31	$ 231,181.43	$ 6,177.53	$ (23,192.14)	
167	Deferred State Income Tax	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
168	**Total State Income Tax**	$ 515,088	$ 515,088	$ 183,134	$ 117,787	$ 231,181	$ 6,178	$ (23,192)	
169	Income Before Tax	$ 13,924,223	$ 13,924,223	$ 6,294,339	$ 2,620,176	$ 5,182,614	$ 156,071	$ (328,977)	
170	Less: Interest Expense	3,501,484	3,501,484	2,597,262	233,150	497,849	30,999	142,223	
171	Less: State Income Tax	515,088	515,088	183,134	117,787	231,181	6,178	(23,192)	
172		-	-	-	-	-	-	-	
173	Federal Taxable Income	$9,907,651	9,907,651	3,513,942	2,269,239	4,453,584	118,894	(448,008)	
174	Pro Forma Federal Income Tax	$ 2,099,351	2,099,351	746,401	480,067	942,229	25,178	(94,525)	
175	ITC Amortization	-	0	0	0	0	0	0	CRB
176	Subtotal Federal Income Tax	$2,099,351	2,099,351	746,401	480,067	942,229	25,178	(94,525)	
177	**Total Federal Income Tax**	$2,099,351	2,099,351	746,401	480,067	942,229	25,178	(94,525)	
178	**Total Income Tax**	$2,614,439	2,614,439	929,535	597,855	1,173,411	31,355	(117,717)	
179	**Income After Tax**	**$11,309,783**	**$11,309,783**	**$5,364,803**	**$2,022,321**	**$4,009,203**	**$124,715**	**($211,260)**	
	Present Revenues								
180	**Return Rate Of Return**	8.45%	8.45%	5.40%	22.68%	21.06%	10.52%	-3.88%	
181	**Realtive Rate Of Return**	1.00	1.00	0.64	2.69	2.49	1.25	(0.46)	

Supporting Schedules
(a) C-1, (b) G-7a, (c) H-1

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Rate Base and Plant Functionalization

Line No.	Acct No.	Description	Jurisdictional Total (a)	Commodity Cost[A]	Demand[A]	Customer Accounts [A]	Customer Services[A]	Allocation Code(b)
		PLANT IN SERVICE						
1		**Collection Plant**						
2	35310	Land and Land Rights	$ 418,529	$ 86,344	$ 332,185	$ -	$ -	FCS
3	35420	Structures and Improvements	25,455,494	5,251,552	20,203,943	-	-	FCS
4	36000	Collection Mains - Force	13,310,536	2,746,007	10,564,529	-	-	FCS
5	36100	Collection Mains - Gravity	54,919,980	11,330,172	43,589,808	-	-	FCS
6	36200	Special Collection Structures	-	-	-	-	-	FCS
7	36300	Cutomer Services	1,487,610	-	-	-	1,487,610	FCSS
8	36400	Flow Measuring Devices	172,125	35,510	136,615	-	-	FCS
9	36500	Flow Measuring Installations	-	-	-	-	-	FCS
10		Total Collection Plant	$ 95,764,275	$ 19,449,585	$ 74,827,080	$ -	$ 1,487,610	
		Pumping Plant						
11	35500	Power Generation Equipment	$ 5,328,145	$ 1,099,214	$ 4,228,932	$ -	$ -	FPU
12	37000	Receiving Wells	1,072,757	221,313	851,443	-	-	FPU
13	37100	Pumping Equipment	8,668,916	1,788,426	6,880,490	-	-	FPU
14	31130	Other Pumping Equipment	-	-	-	-	-	FPU
15		Total Pumping Plant	$ 15,069,818	$ 3,108,953	$ 11,960,865	$ -	$ -	
		Treatment and Disposal Plant						
16	35150	Land and Land Rights	$ 3,348,234	$ 690,752	$ 2,657,482	$ -	$ -	FTD
17	35430	Structures and Improvements	42,425,824	8,752,586	33,673,238	-	-	FTD
18	38000	Treatment and Disposal Equipment	46,711,657	9,636,768	37,074,889	-	-	FTD
19	38001	Nogales WWTP	-	-	-	-	-	FTD
19	38100	Plant Sewers	22,548,293	4,651,787	17,896,506	-	-	FTD
20	38200	Outfall Sewer Lines	343,681	70,903	272,778	-	-	FTD
21	38930	Other Sewer Olant and Equipment	839,750	173,243	666,507	-	-	FTD
22		'Total Treatment and Disposal Plant	$ 116,217,439	$ 23,976,038	$ 92,241,400	$ -	$ -	
		Relaimed Water Plant						
23	35190	Land and Land Rights	$ -	$ -	$ -	$ -	$ -	FRW
24	35440	Structures and Improvements	-	-	-	-	-	FRW
25	36600	Reuse Services	4,153,479	856,876	3,296,603	-	-	FRW
26	36700	Reuse Meters and Installation	219,481	45,260	174,201	-	-	FRW
27	37400	Reuse Distribution Reservoirs	1,698,934	350,496	1,348,439	-	-	FRW
28	37500	Reuse Trans and Distribution System	1,413,040	291,515	1,121,525	-	-	FRW
29		Total Relcaimed Water Plant	$ 7,484,934	$ 1,544,166	$ 5,940,767	$ -	$ -	
30		**Gross Plant In Service before Intangible and Gen.**	$ 234,536,465	$ 48,078,742	$ 184,970,113	$ -	$ 1,487,610	

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Rate Base and Plant Functionalization

Line No.	Acct No.	Description	Jurisdictional Total (a)	Commodity Cost[A]	Demand[A]	Customer Accounts [A]	Customer Services[A]	Allocation Code(b)
		General Plant						
31	35380	Land and Land Rights	$ 418,529	$ 42,898	$ 165,039	$ 209,265	$ 1,327	FGPCC
32	35450	Structures and Improvements	16,970,330	1,739,414	6,691,931	8,485,165	53,819	FGPCC
33	39000	Furniture and Equipment	516,616	52,952	203,718	258,308	1,638	FGPCC
34	39010	Computer Hardware	457,098	46,851	180,248	228,549	1,450	FGPCC
35	39020	Computer Software	-	-	-	-	-	FGPCC
36	39100	Transportation Equipment	403,454	41,353	159,094	201,727	1,280	FGPCC
37	39110	Transportation Equipment Leased	-	-	-	-	-	FGPCC
38	39200	Stores Equipment	8,968	919	3,536	4,484	28	FGPCC
39	39300	Tools, Shop and Garage Equipment	657,385	67,380	259,227	328,692	2,085	FGPCC
40	39400	Laboratory Equipment	225,315	23,094	88,849	112,658	715	FGPCC
41	39500	Power Operated Equipment	500,203	51,269	197,246	250,101	1,586	FGPCC
42	39600	Communication Equipment	6,297,253	645,452	2,483,204	3,148,626	19,971	FGPCC
43	39700	Miscellaneous Equipment	375,982	38,537	148,262	187,991	1,192	FGPCC
44	39710	Miscellaneous Equipment CNG	318,526	32,648	125,605	159,263	1,010	FGPCC
45	39800	Other Tangible Property	79,028	8,100	31,163	39,514	251	FGPCC
46		Total General Plant	$ 27,228,685	$ 2,790,869	$ 10,737,121	$ 13,614,342	$ 86,353	
		Intangible Plant						
47	35110	Organization	$ (3,211)	$ (658)	$ (2,532)	$ -	$ (20)	FGPIS
48	35210	Franchise and Consents	29,596	6,067	23,341	-	188	FGPIS
49	38910	Miscellaneous Intangible Plant	-	-	-	-	-	FGPIS
50		Total Intangible Plant	$ 26,385	$ 5,409	$ 20,809	$ -	$ 167	
51		Reconciling Amount						
52		**Subotal Gross Plant In Service(c)**	$ 261,791,535	$ 50,875,019	$ 195,728,043	$ 13,614,342	$ 1,574,130	
		Allocated Coporate Plant						
53	95300	Land and Land Rights	$ 37,777	$ 3,872	$ 14,896	$ 18,888	$ 120	FGPCC
54	95400	Structures and Improvments	1,355,038	138,888	534,334	677,519	4,297	FGPCC
55	99000	Office Furniture and Fixtures	361,396	37,042	142,510	180,698	1,146	FGPCC
56	99010	Computers and Software	1,775,034	181,936	699,951	887,517	5,629	FGPCC
57	99020	Customer First	8,482,495	869,433	3,344,913	4,241,248	26,901	FGPCC
58	95500	Power Generation	1,014	104	400	507	3	FGPCC
59	99500	Power Operated Equipment	167,601	17,179	66,090	83,801	532	FGPCC
60		**Subotal Allocated Corporate Plant**	$ 12,180,354	$ 1,248,454	$ 4,803,094	$ 6,090,177	$ 38,629	
53		**Total Gross Plant In Service(c)**	**$ 273,971,889**	**$ 52,123,474**	**$ 200,531,138**	**$ 19,704,520**	**$ 1,612,759**	

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Rate Base and Plant Functionalization

Line No.	Acct No.	Description	Jurisdictional Total (a)	Commodity Cost[A]	Demand[A]	Customer Accounts [A]	Customer Services[A]	Allocation Code(b)
		ACCUMULATED DEPRECIATION AND AMORTIZATION						
		Collection Plant						
62	35310	Land and Land Rights	$ (1,544,014)	$ (318,535)	$ (1,225,479)	$ -	$ -	FCS
63	35420	Structures and Improvements	9,021,351	1,861,134	7,160,217	-	-	FCS
64	36000	Collection Mains - Gravity	(12,973,017)	(2,676,376)	(10,296,641)	-	-	FCS
65	36100	Collection Mains - Force	28,533,662	5,886,588	22,647,074	-	-	FCS
66	36200	Special Collection Structures	(187,425)	(38,666)	(148,759)	-	-	FCS
67	36300	Cutomer Services	170,538	-	-	-	170,538	FCSS
68	36400	Flow Measuring Devices	312,842	64,540	248,301	-	-	FCS
69	36500	Flow Measuring Devices	(2,097,798)	(432,783)	(1,665,016)	-	-	FCS
70		Total Collection Plant	$ 21,236,139	$ 4,345,902	$ 16,719,699	$ -	$ 170,538	
		Pumping Plant						
71	35500	Power Generation Equipment	$ 2,703,333	$ 557,707	$ 2,145,627	$ -	$ -	FPU
72	35501.0	Solar Generation	(765,664)	(157,959)	(607,705)	-	-	FPU
73	37000	Receiving Wells	(3,559,581)	(734,353)	(2,825,227)	-	-	FPU
74	37100	Pumping Equipment	9,822,953	2,026,507	7,796,446	-	-	FPU
75	31130	Other Pumping Equipment	-	-	-	-	-	FPU
76		Total Pumping Plant	$ 8,201,042	$ 1,691,902	$ 6,509,140	$ -	$ -	
		Treatment and Disposal Plant						
77	35350	Land and Land Rights	$ (12,352,108)	$ (2,548,280)	$ (9,803,828)	$ -	$ -	FTD
78	35430	Structures and Improvements	15,035,585	3,101,890	11,933,695	-	-	FTD
79	38000	Treatment and Disposal Equipment	24,703,081	5,096,327	19,606,755	-	-	FTD
80	38001	Nogales WWTP	(3,296,155)	(680,008)	(2,616,147)	-	-	FTD
80	38100	Plant Sewers	6,471,583	1,335,109	5,136,474	-	-	FTD
	38200	Outfall Sewer Lines	126,344	26,065	100,279	-	-	FTD
81	38930	Other Sewer Olant and Equipment	498,294	102,800	395,494	-	-	FTD
82		'Total Treatment and Disposal Plant	$ 31,186,624	$ 6,433,903	$ 24,752,721	$ -	$ -	
		Relaimed Water Plant						
83	35390	Land and Land Rights	$ -	$ -	$ -	$ -	$ -	FRW
84	35440	Structures and Improvements	-	-	-	-	-	FRW
85	36600	Reuse Services	3,823,155	788,729	3,034,426	-	-	FRW
86	36700	Reuse Meters and Installation	(509,749)	(105,163)	(404,586)	-	-	FRW
87	37400	Reuse Distribution Reservoirs	(28,578)	(5,896)	(22,683)	-	-	FRW
88	37500	Reuse Trans and Distribution System	(11,582,927)	(2,389,596)	(9,193,331)	-	-	FRW
89		Total Relcaimed Water Plant	$ (8,298,100)	$ (1,711,925)	$ (6,586,175)	$ -	$ -	

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Rate Base and Plant Functionalization

Line No.	Acct No.	Description	Jurisdictional Total (a)	Commodity Cost[A]	Demand[A]	Customer Accounts [A]	Customer Services[A]	Allocation Code(b)
		General Plant						
90	35380	Land and Land Rights	$ (1,544,014)	$ (158,257)	$ (608,853)	$ (772,007)	$ (4,897)	FGPCC
91	35450	Structures and Improvements	6,014,234	616,443	2,371,600	3,007,117	19,073	FGPCC
92	39000	Furniture and Equipment	965,680	98,960	380,798	482,840	3,063	FGPCC
93	39010	Computer Hardware	72,168	7,397	28,458	36,084	229	FGPCC
94	39020	Computer Software	-	-	-	-	-	FGPCC
95	39100	Transportation Equipment	680,737	69,774	268,436	340,368	2,159	FGPCC
96	39110	Transportation Equipment Leased	-	-	-	-	-	FGPCC
97	39200	Stores Equipment	(209,461)	(21,469)	(82,597)	(104,730)	(664)	FGPCC
98	39300	Tools, Shop and Garage Equipment	231,962	23,776	91,470	115,981	736	FGPCC
99	39400	Laboratory Equipment	260,781	26,729	102,834	130,391	827	FGPCC
100	39500	Power Operated Equipment	(1,235,617)	(126,647)	(487,242)	(617,808)	(3,919)	FGPCC
101	39600	Communication Equipment	1,776,857	182,123	700,670	888,428	5,635	FGPCC
102	39700	Miscellaneous Equipment	1,485,129	152,222	585,633	742,564	4,710	FGPCC
103	39710	Miscellaneous Equipment CNG	74,129	7,598	29,231	37,064	235	FGPCC
104	39800	Other Tangible Property	65,184	6,681	25,704	32,592	207	FGPCC
105		Total General Plant	$ 8,637,769	$ 885,349	$ 3,406,142	$ 4,318,885	$ 27,394	
106		Retirement Work in Progress	$ -	$ -	$ -	$ -	$ -	FPIS
107		Advances in Aid of Construction	-	-	-	-	-	FPIS
108		**Subtotal Accumulated Depreciation/Amortization(c)**	$ 60,963,473	$ 11,645,130	$ 44,801,527	$ 4,318,885	$ 197,931	
109		**Allocated Corporate Accumulated Depreciation**						
110	95300	Land and Land Rights	-	-	-	-	-	FGPCC
111	95400	Structures and Improvments	211,452	21,673	83,382	105,726	671	FGPCC
112	99000	Office Furniture and Fixtures	36,158	3,706	14,258	18,079	115	FGPCC
113	99010	Computers and Software	281,075	28,809	110,837	140,538	891	FGPCC
114	99020	Customer First	636,187	65,208	250,868	318,094	2,018	FGPCC
115	95500	Power Generation	177	18	70	89	1	FGPCC
116	99500	Power Operated Equipment	29,330	3,006	11,566	14,665	93	FGPCC
117		**Subotal Allocated Corporate Accumulated Depreciatior**	$ 1,194,380	$ 122,421	$ 470,981	$ 597,190	$ 3,788	
118		**Accumulated Depreciation/Amortization(c)**	**$ 62,157,853**	**$ 11,767,551**	**$ 45,272,509**	**$ 4,916,075**	**$ 201,719**	
119		**Net Plant**	**$ 211,814,036**	**$ 40,355,922**	**$ 155,258,629**	**$ 14,788,445**	**$ 1,411,040**	
120	10500	Construction Work In Progress	$ -	$ -	$ -	$ -	$ -	FNP
121		Plus: Regualtory Assets/Working Capital Assets/Other (net)	$ 5,047,883	$ 961,749	$ 3,700,073	$ 352,433	$ 33,627	FNPCA
122		Less:Contributions & Advances in Aid of Construction	$ (81,134,660)	$ (15,458,201)	$ (59,471,300)	$ (5,664,665)	$ (540,494)	FNP
123		Less:ADIT, EADIT, and IITC	$ (1,840,100)	$ (350,586)	$ (1,348,784)	$ (128,472)	$ (12,258)	FNPCA
124		Less:Other	$ -	$ -	$ -	$ -	$ -	FNP
125								
126		**Total Rate Base**	**$ 133,887,159**	**$ 25,508,885**	**$ 98,138,618**	**$ 9,347,742**	**$ 891,915**	

Supporting Schedules
(a) B-1, (b) G-7b, (c) B-2

Recap Schedules
[A] G-2

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
O&M Expenses, Depreciation Expenses and Income Functionalization at Present Revenues

Line No.	Acct No.	Description	Adjusted Test Year(a)	Commodity Cost[A]	Demand[A]	Customer Accounts [A]	Customer Services[A]	Alloc. Code(b)	Labor
		INCOME STATEMENT							
		Collection Expenses							
		Operation							
1	715.1	Purchased Power	234,323	234,323	-	-	-	FBC	
2	718.1	Chemicals	75,194	75,194	-	-	-	FBC	
3	720.1	Materials and Supplies	35,376	35,376	-	-	-	FBC	
4	735.1	Contractual Services - Testing	7,491	1,521	5,853	-	116	FCSP	
5	742.1	Rental of Equipment	559	114	437	-	9	FCSP	
6	750.1	Transportation Expenses	7,851	1,595	6,135	-	122	FCSP	
7	756.1	Insurance - Vehicle	3,253	661	2,541	-	51	FCSP	
8	757.1	Insurance - General Liability	27,411	5,567	21,418	-	426	FCSP	
9		Total Operation	$ 391,457	$ 354,350	$ 36,384	$ -	$ 723		
		Maintenance							
10	718.2	Chemicals	18,798	18,798	-	-	-	FBC	
11	720.2	Materials and Supplies	9,827	9,827	-	-	-	FBC	
12	742.2	Rental of Equipment	112	23	87	-	2	FCSP	
13	750.2	Transportation Expenses	2,181	443	1,704	-	34	FCSP	
14	756.2	Insurance - Vehicle	904	184	706	-	14	FCSP	
15	757.2	Insurance - General Liability	7,614	1,546	5,949	-	118	FCSP	
16		Total Maintenance	$ 39,436	$ 30,821	$ 8,447	$ -	$ 168		
17		**Total Collection Expenses**	$ 430,893	$ 385,171	$ 44,831	$ -	$ 891		
		Pumping Expense							
		Operation							
18	715.3	Purchased Power	546,754	546,754	-	-	-	FBC	
19	718.3	Chemicals	37,597	37,597	-	-	-	FBC	
20	720.3	Materials and Supplies	35,376	35,376	-	-	-	FBC	
21	735.3	Contractual Services - Testing	7,491	1,545	5,945	-	-	FPP	
22	742.3	Rental of Equipment	559	115	444	-	-	FPP	
23	750.3	Transportation Expenses	7,851	1,620	6,232	-	-	FPP	
24	756.3	Insurance - Vehicle	3,253	671	2,582	-	-	FPP	
25	757.3	Insurance - General Liability	27,411	5,655	21,756	-	-	FPP	
26		Total Operation	$ 666,291	$ 629,333	$ 36,958	$ -	$ -		
		Maintenance							
27	720.4	Materials and Supplies	9,827	9,827	-	-	-	FBC	
28	742.4	Rental of Equipment	112	23	89	-	-	FPP	
29	750.4	Transportation Expenses	2,181	450	1,731	-	-	FPP	
30	756.4	Insurance - Vehicle	904	186	717	-	-	FPP	
31	757.4	Insurance - General Liability	7,614	1,571	6,043	-	-	FPP	
32		Total Maintenance	$ 20,637	$ 12,057	$ 8,580	$ -	$ -		
33		**Total Pumping Plant**	$ 686,928	$ 641,390	$ 45,538	$ -	$ -		
34		**Total Production Expenses**	$ 1,117,821	$ 1,026,560	$ 90,369	$ -	$ 891		
		Treatment and Disposal Expenses							
		Operation							
35	710.5	Purchase WW Treatment	55,208	55,208	-	-	-	FBC	
36	711.5	Sludge Removal	590,826	590,826	-	-	-	FBC	

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
O&M Expenses, Depreciation Expenses and Income Functionalization at Present Revenues

Line No.	Acct No.	Description	Adjusted Test Year(a)	Commodity Cost[A]	Demand[A]	Customer Accounts [A]	Customer Services[A]	Alloc. Code(b)	Labor
37	715.5	Purchased Power	546,754	546,754	-	-	-	FBC	
38	718.5	Chemicals	244,380	244,380	-	-	-	FBC	
39	720.5	Materials and Supplies	35,376	35,376	-	-	-	FBC	
40	735.5	Contractual Services - Testing	58,426	58,426	-	-	-	FBC	
41	742.5	Rental of Equipment	559	115	444	-	-	FTDP	
42	750.5	Transportation Expenses	7,851	1,620	6,232	-	-	FTDP	
43	756.5	Insurance - Vehicle	3,253	671	2,582	-	-	FTDP	
44	757.5	Insurance - General Liability	27,411	5,655	21,756	-	-	FTDP	
45		Total Operation	$1,570,043	1,539,031	31,013	0	0		
		Maintenance							
46	720.6	Materials and Supplies	9,827	9,827	-	-	-	FBC	
47	742.6	Rental of Equipment	112	23	89	-	-	FTDP	
48	750.6	Transportation Expenses	2,181	450	1,731	-	-	FTDP	
49	756.6	Insurance - Vehicle	904	186	717	-	-	FTDP	
50	757.6	Insurance - General Liability	7,614	1,571	6,043	-	-	FTDP	
51		Total Maintenance	$ 20,637	$ 12,057	$ 8,580	$ -	$ -		
52		**Total Treatment and Disposal Expenses**	$ 1,590,680	$ 1,551,087	$ 39,593	$ -	$ -		
		Reclaimed Water Expenses							
		Operation							
53	720.9	Materials and Supplies	11,792	11,792	-	-	-	FBC	
54	735.9	Contractual Services - Testing	749	749	-	-	-	FBC	
55	750.9	Transportation Expenses	1,309	270	1,039	-	-	FRWP	
56	756.9	Insurance - Vehicle	542	112	430	-	-	FRWP	
57	757.9	Insurance - General Liability	4,569	943	3,626	-	-	FRWP	
58		Total Operation	$18,960	13,865	5,095	0	0		
		Maintenance							
59	735.10	Contractual Services - Testing	749	749	-	-	-	FBC	
60	750.10x	Transportation Expenses	1,309	270	1,039	-	-	FRWP	
61	756.10	Insurance - Vehicle	542	112	430	-	-	FRWP	
62	757.10	Insurance - General Liability	4,569	943	3,626	-	-	FRWP	
63		Total Maintenance	$ 7,168	$ 2,073	$ 5,095	$ -	$ -		
64		**Total Reclaimed Water Expenses**	$ 26,128	$ 15,939	$ 10,190	$ -	$ -		

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
O&M Expenses, Depreciation Expenses and Income Functionalization at Present Revenues

Line No.	Acct No.	Description	Adjusted Test Year(a)	Commodity Cost[A]	Demand[A]	Customer Accounts [A]	Customer Services[A]	Alloc. Code(b)	Labor
		Customer Accounts Expenses							
		Operation							
65	715.7	Purchased Power	78,108	-	-	78,108	-	FCC	
66	720.7	Materials and Supplies	19,653	-	-	19,653	-	FCC	
67	742.7	Rental of Equipment	112	-	-	112	-	FCC	
68	750.7	Transportation Expenses	4,362	-	-	4,362	-	FCC	
69	756.7	Insurance - Vehicle	1,807	-	-	1,807	-	FCC	
70	757.7	Insurance - General Liability	15,228	-	-	15,228	-	FCC	
71	770.7	Bad Debt Expense	38,508	-	-	38,508	-	FCC	
72		**Total Customer Accounts Expenses**	$ 157,778	$ -	$ -	$ 157,778	$ -		
73		**Total O&M w/oA&G Expenses**	$ 2,892,408	$ 2,593,586	$ 140,152	$ 157,778	$ 891		
		Administrative and General Expenses							
		Operation							
74	715.8	Purchased Power	156,215	134,106	10,370	11,674	66	FTOMWPC	
75	720.8	Materials and Supplies	29,480	10,450	8,402	10,561	66	FTOMPISCC	
76	733.8	Contractual Services - Legal	0	0	0	0	0	FTOMPISCC	
77	734.8	Contractual Services - Professional	6,117,689	2,168,644	1,743,630	2,191,620	13,795	FTOMPISCC	
78	736.8	Contractual Services - Other	593,245	210,298	169,083	212,526	1,338	FTOMPISCC	
79	742.8	Rental of Equipment	112	40	32	40	0	FTOMPISCC	
80	750.8	Transportation Expenses	6,543	2,319	1,865	2,344	15	FTOMPISCC	
81	756.8	Insurance - Vehicle	2,711	961	773	971	6	FTOMPISCC	
82	757.8	Insurance - General Liability	22,843	4,683	18,015	-	145	FGPIS	
83	760.8	Advertising	(0)	(0)	(0)	(0)	(0)	FTOMWPC	
84	775.8	Miscellaneous Expenses	151,244	53,614	43,107	54,182	341	FTOMPISCC	
85		Total Admin and General Expenses	$ 7,080,081	$ 2,585,115	$ 1,995,276	$ 2,483,918	$ 15,772		
86		**Total Administrative and General Expenses**	$ 7,080,081	$ 2,585,115	$ 1,995,276	$ 2,483,918	$ 15,772		
87		**Total Operation and Maintenance Expenses**	$ 9,972,489	$ 5,176,628	$ 2,130,333	$ 2,641,696	$ 16,664		
88		**Depreciation & Amort Expense**	$ 8,288,470	$ 1,513,463	$ 5,822,646	$ 931,630	$ 20,730		
89		**Taxes Other Than Income**	$ 814,312	$ 155,147	$ 596,887	$ 56,854	$ 5,425	FNP	
90		**Total Operating Expenses Before Income Taxes**	$ 19,075,271	$ 6,845,238	$ 8,549,866	$ 3,630,180	$ 42,819		
		Total Labor	$ -	$ -	$ -	$ -	$ -		L

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
O&M Expenses, Depreciation Expenses and Income Functionalization at Present Revenues

Line No.	Acct No.	Description	Adjusted Test Year(a)	Commodity Cost[A]	Demand[A]	Customer Accounts [A]	Customer Services[A]	Alloc. Code(b)	Labor
		Depreciation Expense							
		Collection Plant							
	35320	Land and Land Rights	$ -	$ -	$ -	$ -	$ -	FCS	
91	35420	Structures and Improvements	847,668	174,877	672,791	-	-	FCS	
92	36000	Collection Mains - Gravity	266,211	54,920	211,291	-	-	FCS	
93		Total Collection Plant	$ 2,244,913	$ 456,995	$ 1,758,166	$ -	$ 29,752		
		Pumping Plant							
94	35500	Power Generation Equipment	266,407	54,961	211,447	-	-	FPU	
95	37000	Receiving Wells	35,723	7,370	28,353	-	-	FPU	
96	37100	Pumping Equipment	873,816	180,271	693,545	-	-	FPU	
97		Total Pumping Plant	$ 1,175,946	$ 242,602	$ 933,345	$ -	$ -		
		Treatment and Disposal Plant							
98	35430	Structures and Improvements	1,412,780	291,461	1,121,319	-	-	FTD	
99	38000	Treatment and Disposal Equipment	2,335,583	481,838	1,853,744	-	-	FTD	
100	38100	Plant Sewers	1,127,415	232,589	894,825	-	-	FTD	
101	38200	Outfall Sewer Lines	11,445	2,361	9,084	-	-	FTD	
102	38930	Other Sewer Otant and Equipment	3,633	749	2,883	-	-	FTD	
103		'Total Treatment and Disposal Plant	$ 4,890,855	$ 1,008,999	$ 3,881,855	$ -	$ -		
		Relaimed Water Plant							
104	36600	Reuse Services	83,070	17,138	65,932	-	-	FRW	
105	36700	Reuse Meters and Installation	18,283	3,772	14,511	-	-	FRW	
106	37400	Reuse Distribution Reservoirs	42,473	8,762	33,711	-	-	FRW	
107	37500	Reuse Trans and Distribution System	35,326	7,288	28,038	-	-	FRW	
108		Total Relcaimed Water Plant	$ 179,152	$ 36,960	$ 142,192	$ -	$ -		
		General Plant							
109	35450	Structures and Improvements	565,112	57,922	222,841	282,556	1,792	FGPCC	
110	39000	Furniture and Equipment	23,978	2,458	9,455	11,989	76	FGPCC	
111	39010	Computer Hardware	48,971	5,019	19,311	24,486	155	FGPCC	
112	39100	Transportation Equipment	14,396	1,476	5,677	7,198	46	FGPCC	
113	39200	Stores Equipment	359	37	141	179	1	FGPCC	
114	39300	Tools, Shop and Garage Equipment	32,869	3,369	12,961	16,435	104	FGPCC	
115	39400	Laboratory Equipment	4,940	506	1,948	2,470	16	FGPCC	
116	39500	Power Operated Equipment	25,010	2,563	9,862	12,505	79	FGPCC	
117	39600	Communication Equipment	590,064	60,480	232,681	295,032	1,871	FGPCC	
118	39700	Miscellaneous Equipment	37,598	3,854	14,826	18,799	119	FGPCC	
119	39710	Miscellaneous Equipment CNG	10,607	1,087	4,183	5,303	34	FGPCC	
120	39800	Other Tangible Property	7,903	810	3,116	3,951	25	FGPCC	
121		Total General Plant	$ 1,361,807	$ 139,582	$ 537,003	$ 680,904	$ 4,319		
122		Subtotal Direct Depreciation Expense	**$ 9,852,673**	**$ 1,885,137**	**$ 7,252,561**	**$ 680,904**	**$ 34,071**		
		Amortization of Property Losses	$ -	$ -	$ -	$ -	$ -		
123	95400	Structures and Improvments	$ 34,689	3,556	13,679	17,344	110	FGPCC	
124	99000	Office Furniture and Fixtures	14,456	1,482	5,700	7,228	46	FGPCC	
125	99010	Computers and Software	355,007	36,387	139,990	177,503	1,126	FGPCC	

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
O&M Expenses, Depreciation Expenses and Income Functionalization at Present Revenues

Line No.	Acct No.	Description	Adjusted Test Year(a)	Commodity Cost[A]	Demand[A]	Customer Accounts [A]	Customer Services[A]	Alloc. Code(b)	Labor
126	99020	Customer First	424,125	43,472	167,246	212,062	1,345	FGPCC	
127	95500	Power Generation	51	5	20	25	0	FGPCC	
128	99500	Power Operated Equipment	8,380	859	3,305	4,190	27	FGPCC	
129		Subtotal Allocated Depreciation Expense	$ 836,707	$ 85,760	$ 329,940	$ 418,354	$ 2,654		
130		CIAC/AIAC Amortization - General	(2,555,305)	$ (486,850)	$ (1,873,026)	$ (178,406)	$ (17,023)	FNP	
131		Excess Deferred Depreciation	154,395	$ 29,416	$ 113,171	$ 10,780	$ 1,029	FNPCA	
132		Total Depreciation & Amortization	**$ 8,288,470**	**$ 1,513,463**	**$ 5,822,646**	**$ 931,630**	**$ 20,730**		

Supporting Schedules
(a) B-2 ; (b) G-7b

Recap Schedules
[A] G-3

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
O&M Expenses, Depreciation Expenses and Income Functionalization at Proposed Revenues

Line No.	Acct No.	Description	Adjusted Test Year(a)	Commodity Cost[A]	Demand[A]	Customer Accounts [A]	Customer Services[A]	Allocation Code(b)	Labor
		INCOME STATEMENT							
		Collection Expenses							
		Operation							
1	715.1	Purchased Power	234,323	234,323	-	-	-	FBC	
2	718.1	Chemicals	75,194	75,194	-	-	-	FBC	
3	720.1	Materials and Supplies	35,376	35,376	-	-	-	FBC	
4	735.1	Contractual Services - Testing	7,491	1,521	5,853	-	116	FCSP	
5	742.1	Rental of Equipment	559	114	437	-	9	FCSP	
6	750.1	Transportation Expenses	7,851	1,595	6,135	-	122	FCSP	
7	756.1	Insurance - Vehicle	3,253	661	2,541	-	51	FCSP	
8	757.1	Insurance - General Liability	27,411	5,567	21,418	-	426	FCSP	
9		Total Operation	$ 391,457	$ 354,350	$ 36,384	$ -	$ 723		
		Maintenance							
10	718.2	Chemicals	18,798	18,798	-	-	-	FBC	
11	720.2	Materials and Supplies	9,827	9,827	-	-	-	FBC	
12	742.2	Rental of Equipment	112	23	87	-	2	FCSP	
13	750.2	Transportation Expenses	2,181	443	1,704	-	34	FCSP	
14	756.2	Insurance - Vehicle	904	184	706	-	14	FCSP	
15	757.2	Insurance - General Liability	7,614	1,546	5,949	-	118	FCSP	
16		Total Maintenance	$ 39,436	$ 30,821	$ 8,447	$ -	$ 168		
17		**Total Collection Expenses**	$ 430,893	$ 385,171	$ 44,831	$ -	$ 891		
		Pumping Expense							
		Operation							
18	715.3	Purchased Power	546,754	546,754	-	-	-	FBC	
19	718.3	Chemicals	37,597	37,597	-	-	-	FBC	
20	720.3	Materials and Supplies	35,376	35,376	-	-	-	FBC	
21	735.3	Contractual Services - Testing	7,491	1,545	5,945	-	-	FPP	
22	742.3	Rental of Equipment	559	115	444	-	-	FPP	
23	750.3	Transportation Expenses	7,851	1,620	6,232	-	-	FPP	
24	656.3	Insurance - Vehicle	3,253	671	2,582	-	-	FPP	
25	757.3	Insurance - General Liability	27,411	5,655	21,756	-	-	FPP	
26		Total Operation	$ 666,291	$ 629,333	$ 36,958	$ -	$ -		
		Maintenance							
27	720.4	Materials and Supplies	9,827	9,827	-	-	-	FBC	
28	742.4	Rental of Equipment	112	23	89	-	-	FPP	
29	750.4	Transportation Expenses	2,181	450	1,731	-	-	FPP	
30	756.4	Insurance - Vehicle	904	186	717	-	-	FPP	
31	757.4	Insurance - General Liability	7,614	1,571	6,043	-	-	FPP	
32		Total Maintenance	$ 20,637	$ 12,057	$ 8,580	$ -	$ -		
33		**Total Water Treatment**	$ 686,928	$ 641,390	$ 45,538	$ -	$ -		
34		**Total Production Expenses**	$ 1,117,821	$ 1,026,560	$ 90,369	$ -	$ 891		
		Treatment and Disposal Expenses							
		Operation							
35	710.5	Purchease WW Treatment	55,208	55,208	-	-	-	FBC	
36	711.5	Sludge Removal Expense	590,826	590,826	-	-	-	FBC	

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
O&M Expenses, Depreciation Expenses and Income Functionalization at Proposed Revenues

Line No.	Acct No.	Description	Adjusted Test Year(a)	Commodity Cost[A]	Demand[A]	Customer Accounts [A]	Customer Services[A]	Allocation Code(b)	Labor
37	715.5	Purchased Power	546,754	546,754	-	-	-	FBC	
38	718.5	Chemicals	244,380	244,380	-	-	-	FBC	
39	720.5	Materials and Supplies	35,376	35,376	-	-	-	FBC	
40	735.5	Contractual Services - Testing	58,426	58,426	-	-	-	FBC	
41	742.5	Rental of Equipment	559	115	444	-	-	FTDP	
42	750.5	Transportation Expenses	7,851	1,620	6,232	-	-	FTDP	
43	756.5	Insurance - Vehicle	3,253	671	2,582	-	-	FTDP	
44	757.5	Insurance - General Liability	27,411	5,655	21,756	-	-	FTDP	
45		Total Operation	$1,570,043	1,539,031	31,013	0	0		
		Maintenance							
46	720.6	Materials and Supplies	9,827	9,827	-	-	-	FBC	
47	742.6	Rental of Equipment	112	23	89	-	-	FTDP	
48	750.6	Transportation Expenses	2,181	450	1,731	-	-	FTDP	
49	756.6	Insurance - Vehicle	904	186	717	-	-	FTDP	
50	757.6	Insurance - General Liability	7,614	1,571	6,043	-	-	FTDP	
51		Total Maintenance	$ 20,637	$ 12,057	$ 8,580	$ -	$ -		
52		**Total Treatment and Disposal Expenses**	$ 1,590,680	$ 1,551,087	$ 39,593	$ -	$ -		
		Reclaimed Water Expenses							
		Operation							
53	720.9	Materials and Supplies	11,792	11,792	-	-	-	FBC	
54	735.9	Contractual Services - Testing	749	749	-	-	-	FBC	
55	750.9	Transportation Expenses	1,309	270	1,039	-	-	FRWP	
56	756.9	Insurance - Vehicle	542	112	430	-	-	FRWP	
57	757.9	Insurance - General Liability	4,569	943	3,626	-	-	FRWP	
58		Total Operation	$18,960	13,865	5,095	0	0		
		Maintenance							
59	735.10	Contractual Services - Testing	749	749	-	-	-	FBC	
60	750.10	Transportation Expenses	1,309	270	1,039	-	-	FRWP	
61	756.10	Insurance - Vehicle	542	112	430	-	-	FRWP	
62	757.10	Insurance - General Liability	4,569	943	3,626	-	-	FRWP	
63		Total Maintenance	$ 7,168	$ 2,073	$ 5,095	$ -	$ -		
64		**Total Reclaimed Water Expenses**	$ 26,128	$ 15,939	$ 10,190	$ -	$ -		

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
O&M Expenses, Depreciation Expenses and Income Functionalization at Proposed Revenues

Line No.	Acct No.	Description	Adjusted Test Year(a)	Commodity Cost[A]	Demand[A]	Customer Accounts [A]	Customer Services[A]	Allocation Code(b)	Labor
		Customer Accounts Expenses							
		Operation							
65	615.7	Purchased Power	78,108	-	-	78,108	-	FCC	
66	720.7	Materials and Supplies	19,653	-	-	19,653	-	FCC	
67	742.7	Rental of Equipment	112	-	-	112	-	FCC	
68	750.7	Transportation Expenses	4,362	-	-	4,362	-	FCC	
69	756.7	Insurance - Vehicle	1,807	-	-	1,807	-	FCC	
70	757.7	Insurance - General Liability	15,228	-	-	15,228	-	FCC	
71	770.7	Bad Debt Expense	59,212	-	-	59,212	-	FCC	
72		**Total Customer Accounts Expenses**	$ 178,482	$ -	$ -	$ 178,482	$ -		
73		**Total O&M w/oA&G Expenses**	$ 2,913,112	$ 2,593,586	$ 140,152	$ 178,482	$ 891		
		Administrative and General Expenses							
		Operation							
74	715.8	Purchased Power	156,215	134,106	10,370	11,674	66	FTOMWPC	
75	720.8	Materials and Supplies	29,480	10,450	8,402	10,561	66	FTOMPISCC	
76	733.8	Contractual Services - Legal	0	0	0	0	0	FTOMPISCC	
77	734.8	Contractual Services - Management Fees	6,117,689	2,168,644	1,743,630	2,191,620	13,795	FTOMPISCC	
78	736.8	Contractual Services - Other	593,245	210,298	169,083	212,526	1,338	FTOMPISCC	
79	742.8	Rental of Equipment	112	40	32	40	0	FTOMPISCC	
80	750.8	Transportation Expenses	6,543	2,319	1,865	2,344	15	FTOMPISCC	
81	756.8	Insurance - Vehicle	2,711	961	773	971	6	FTOMPISCC	
82	757.8	Insurance - General Liability	22,843	4,683	18,015	-	145	FGPIS	
83	760.8	Advertising	(0)	(0)	(0)	(0)	(0)	FTOMWPC	
84	775.8	Miscellaneous Expenses	151,244	53,614	43,107	54,182	341	FTOMPISCC	
85		Total Operation	$ 7,080,081	$ 2,585,115	$ 1,995,276	$ 2,483,918	$ 15,772		
86		**Total Administrative and General Expenses**	$ 7,080,081	$ 2,585,115	$ 1,995,276	$ 2,483,918	$ 15,772		
87		**Total Operation and Maintenance Expenses**	$ 9,993,193	$ 5,178,701	$ 2,135,428	$ 2,662,400	$ 16,664		
88		**Depreciation & Amort Expense**	$ 8,288,470	$ 1,513,463	$ 5,822,646	$ 931,630	$ 20,730		
89		**Taxes Other Than Income**	$ 959,580	$ 182,824	$ 703,367	$ 66,996	$ 6,392	FNP	
90		**Total Operating Expenses Before Income Taxes**	$ 19,241,243	$ 6,874,989	$ 8,661,441	$ 3,661,026	$ 43,787		
		Total Labor	$ -	$ -	$ -	$ -	$ -		L

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
O&M Expenses, Depreciation Expenses and Income Functionalization at Proposed Revenues

Line No.	Acct No.	Description	Adjusted Test Year(a)	Commodity Cost[A]	Demand[A]	Customer Accounts [A]	Customer Services[A]	Allocation Code(b)	Labor
		Depreciation Expense							
		Collection Plant							
91	35420	Structures and Improvements	847,668	174,877	672,791	-	-	FCS	
92	36000	Collection Mains - Gravity	266,211	54,920	211,291	-	-	FCS	
93		Total Collection Plant	$ 2,244,913	$ 456,995	$ 1,758,166	$ -	$ 29,752		
		Pumping Plant							
94	35500	Power Generation Equipment	266,407	54,961	211,447	-	-	FPU	
95	37000	Receiving Wells	35,723	7,370	28,353	-	-	FPU	
96	37100	Pumping Equipment	873,816	180,271	693,545	-	-	FPU	
97		Total Pumping Plant	$ 1,175,946	$ 242,602	$ 933,345	$ -	$ -		
		Treatment and Disposal Plant							
98	35430	Structures and Improvements	1,412,780	291,461	1,121,319	-	-	FTD	
99	38000	Treatment and Disposal Equipment	2,335,583	481,838	1,853,744	-	-	FTD	
100	38100	Plant Sewers	1,127,415	232,589	894,825	-	-	FTD	
101	38200	Outfall Sewer Lines	11,445	2,361	9,084	-	-	FTD	
102	38930	Other Sewer Olant and Equipment	3,633	749	2,883	-	-	FTD	
103		'Total Treatment and Disposal Plant	$ 4,890,855	$ 1,008,999	$ 3,881,855	$ -	$ -		
		Relaimed Water Plant							
104	36600	Reuse Services	83,070	17,138	65,932	-	-	FRW	
105	36700	Reuse Meters and Installation	18,283	3,772	14,511	-	-	FRW	
106	37400	Reuse Distribution Reservoirs	42,473	8,762	33,711	-	-	FRW	
107	37500	Reuse Trans and Distribution System	35,326	7,288	28,038	-	-	FRW	
108		Total Relcaimed Water Plant	$ 179,152	$ 36,960	$ 142,192	$ -	$ -		
		General Plant							
109	35450	Structures and Improvements	565,112	57,922	222,841	282,556	1,792	FGPCC	
110	39000	Furniture and Equipment	23,978	2,458	9,455	11,989	76	FGPCC	
111	39010	Computer Hardware	48,971	5,019	19,311	24,486	155	FGPCC	
112	39100	Transportation Equipment	14,396	1,476	5,677	7,198	46	FGPCC	
113	39200	Stores Equipment	359	37	141	179	1	FGPCC	
114	39300	Tools, Shop and Garage Equipment	32,869	3,369	12,961	16,435	104	FGPCC	
115	39400	Laboratory Equipment	4,940	506	1,948	2,470	16	FGPCC	
116	39500	Power Operated Equipment	25,010	2,563	9,862	12,505	79	FGPCC	
117	39600	Communication Equipment	590,064	60,480	232,681	295,032	1,871	FGPCC	
118	39700	Miscellaneous Equipment	37,598	3,854	14,826	18,799	119	FGPCC	
119	39710	Miscellaneous Equipment CNG	10,607	1,087	4,183	5,303	34	FGPCC	
119	39800	Other Tangible Property	7,903	810	3,116	3,951	25	FGPCC	
120		Total General Plant	$ 1,361,807	$ 139,582	$ 537,003	$ 680,904	$ 4,319		
121		Subtotal Direct Depreciation Expense	**$ 9,852,673**	**$ 1,885,137**	**$ 7,252,561**	**$ 680,904**	**$ 34,071**		
		Amortization of Property Losses	$ -	$ -	$ -	$ -	$ -		
122	95400	Structures and Improvments	$ 34,689	3,556	13,679	17,344	110	FGPCC	
123	99000	Office Furniture and Fixtures	14,456	1,482	5,700	7,228	46	FGPCC	
124	99010	Computers and Software	355,007	36,387	139,990	177,503	1,126	FGPCC	

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
O&M Expenses, Depreciation Expenses and Income Functionalization at Proposed Revenues

Line No.	Acct No.	Description	Adjusted Test Year(a)	Commodity Cost[A]	Demand[A]	Customer Accounts [A]	Customer Services[A]	Allocation Code(b)	Labor
125	99020	Customer First	424,125	43,472	167,246	212,062	1,345	FGPCC	
126	95500	Power Generation	51	5	20	25	0	FGPCC	
127	99500	Power Operated Equipment	8,380	859	3,305	4,190	27	FGPCC	
128		Subtotal Allocated Depreciation Expense	$ 836,707	$ 85,760	$ 329,940	$ 418,354	$ 2,654		
129		CIAC/AIAC Amortization - General	(2,400,910)	(457,434)	(1,759,855)	(167,627)	(15,994)	FNP	
		Excess Deferred Depreciation	-	-	-	-	-	FNPCA	
130		Total Depreciation & Amortization	**$ 8,288,470**	**$ 1,513,463**	**$ 5,822,646**	**$ 931,630**	**$ 20,730**		

Supporting Schedules
(a) B-2 ; (b) G-7b

Recap Schedules
[A] G-3

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Development of Allocation Factors by Function

Line No		Allocation Factor	Total (1)	Commodity (2)	Demand (3)	Customer Accounts (5)	Customer Services (6)
1							
2	**ALLOCATION RATIOS**						
3							
4	**EXTERNAL FACTORS**						
5							
6	**DEMAND**						
7							
8	Commodity	FBC	100.0000%	100.0000%	0.0000%	0.0000%	0.0000%
9	Demand	FECMD	100.0000%	20.6303%	79.3697%	0.0000%	0.0000%
10							
11							
12	Pumping Plant	FPU	100.0000%	20.6303%	79.3697%	0.0000%	0.0000%
13	Treatment and Disposal	FTD	100.0000%	20.6303%	79.3697%	0.0000%	0.0000%
14	Collection System	FCS	100.0000%	20.6303%	79.3697%	0.0000%	0.0000%
15	Reclaimed Water System	FRW	100.0000%	20.6303%	79.3697%	0.0000%	0.0000%
16							
17	**CUSTOMER**						
18							
19	Customer Accounts	FCC	100.0000%	0.0000%	0.0000%	100.0000%	0.0000%
20							
21	Customer Services	FCSS	100.0000%	0.0000%	0.0000%	0.0000%	100.0000%
22							
23	**Effluent**						
24	Effluent	EFF	100.0000%	20.6303%	79.3697%	0.0000%	0.0000%
25							
26	**Purchased Power**						
27	Purchased Power	FPP	100.0000%	20.6303%	79.3697%	0.0000%	0.0000%
28							
29	**INTERNAL FACTORS**						
30							
31	Net Plant	FNP	100.0000%	19.0525%	73.2996%	6.9818%	0.6662%
32	Net Plant w/CIAC	FNPCA	100.0000%	19.0525%	73.2995%	6.9818%	0.6662%
33	Gross Plant In Service (excl Intangible and Gen.)	FGPIS	100.0000%	20.4995%	78.8662%	0.0000%	0.6343%
34	Total O&M w/oA&G Expenses	FTOM	100.0000%	89.6688%	4.8455%	5.4549%	0.0308%
35	Labor	FLA	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
36	Collection System Plant	FCSP	100.0000%	20.3099%	78.1367%	0.0000%	1.5534%
37	Pumping Plant	FPP	100.0000%	20.6303%	79.3697%	0.0000%	0.0000%
38	Treatment and Disposal Plant	FTDP	100.0000%	20.6303%	79.3697%	0.0000%	0.0000%
39	Reclaimed Water System	FRWP	100.0000%	20.6303%	79.3697%	0.0000%	0.0000%
40	General & Admin. Plant (See Note 1)	FGPCC	100.0000%	10.2497%	39.4331%	50.0000%	0.3171%
41	General & Admin Expenses (See Note 2)	FTOMPISCC	100.0000%	35.4487%	28.5014%	35.8243%	0.2255%
42	Plant In Service	FPIS	100.0000%	19.0251%	73.1941%	7.1922%	0.5887%
43	Total O&M w/oA&G Expenses w/o power & chemicals	FTOMWPC	100.0000%	85.8468%	6.6381%	7.4729%	0.0422%
44							

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Development of Allocation Factors by Function

Line No		Allocation Factor		Total (1)	Commodity (2)	Demand (3)	Customer Accounts (5)	Customer Services (6)
45	**INPUTS FOR RATIOS**							
46								
47	**EXTERNAL INPUTS**							
48								
49	DEMAND							
50								
51	Peak Day WW Flows (MGD)		8.344					
52	Annual Inflows (MG)		2,417.251					
53								

Calculation of Demand

		MGD	Ratio	Commodity	Max Day
FBC	Avg Day	6.623	1.000		1.000
FECMD	Max Day	8.344	1.260	0.206	0.794

				Commodity	Max Day
Purchased Power	FPP	100.0	100.0	20.6	79.4
Treatment and Disposal	FTD	100.0	100.0	20.6	79.4

65	**INTERNAL INPUTS**							
66								
67								
68		Schedule G3a						
69	Gross Plant In Service (excludes intangibles & Gen)	FGPIS	$ 234,536,465	$ 234,536,465	$ 48,078,742	$ 184,970,113	$ -	$ 1,487,610
70	Plant In Service	FPIS	$ 273,971,889	$ 273,971,889	$ 52,123,474	$ 200,531,138	$ 19,704,520	$ 1,612,759
71	Net Plant w/CIAC	FNPCA	$ 211,814,036	$ 211,814,036	$ 40,355,922	$ 155,258,629	$ 14,788,445	$ 1,411,040
72	Net Plant	FNP	$ 211,814,036	$ 211,814,036	$ 40,355,922	$ 155,258,629	$ 14,788,445	$ 1,411,040
73	Total O&M w/oA&G Expenses	FTOM	$ 2,892,408	$ 2,892,408	$ 2,593,586	$ 140,152	$ 157,778	$ 891
74	Labor	FLA	$ -	$ -	$ -	$ -	$ -	$ -
75	Collection System Plant	FCSP	$ 95,764,275	$ 95,764,275	$ 19,449,585	$ 74,827,080	$ -	$ 1,487,610
76	Pumping Plant	FPP	$ 15,069,818	$ 15,069,818	$ 3,108,953	$ 11,960,865	$ -	$ -
77	Treatment and Disposal Plant	FTDP	$ 116,217,439	$ 116,217,439	$ 23,976,038	$ 92,241,400	$ -	$ -
78	Reclaimed Water System	FRWP	$ 7,484,934	$ 1,544,166	$ 5,940,767	$ -	$ -	$ -
79	Total O&M w/oA&G Expenses w/o power & chemicals	FTOMWPC	$ 2,111,331	$ 2,111,331	$ 1,812,510	$ 140,152	$ 157,778	$ 891

Note 1: Based upon a two-factor formula equal weighting FCC allocation factor and the FGPIS allocation factor.
Note 2: Based upon a three-factor formula equal weighting FCC allocation factor, FGPIS, and the FTOMWPC allocation factor.

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Development of Allocation Factors by Customer Class

Line No		Allocation Factor	Total (1)	Residential (2)	Residential Multi-Unit (3)	Commercial (3)	Wigwam (4)	Schools (5)
1	**ALLOCATION RATIOS**							
2								
3	**EXTERNAL FACTORS**							
4								
5	**COMMODITY**							
6	Commodity	CBC	100.0000%	72.3181%	7.1460%	15.1775%	0.9777%	4.3807%
7								
8	**DEMAND**							
9	Demand	CMD	100.0000%	72.3052%	7.1476%	15.1973%	0.9528%	4.3971%
10								
11	**CUSTOMER**							
12	Bills	CB	100.0000%	96.7932%	0.7582%	2.3866%	0.0083%	0.0537%
13	Services	CS	100.0000%	96.1209%	0.7516%	3.0585%	0.0106%	0.0584%
14								
15	**REVENUES**							
16	Sewer Sales	CRWC	100.0000%	64.0920%	11.5378%	22.5054%	0.8959%	0.9688%
17	Sewer Sales excluding effluent	CRWXEFF	100.0000%	64.0920%	11.5378%	22.5054%	0.8959%	0.9688%
18								
19	**INTERNAL FACTORS**							
20								
21	Effluent	CF	100.0000%	96.7932%	0.7582%	2.3866%	0.0083%	0.0537%
22	Rate Base	CRB	100.0000%	74.1760%	6.6586%	14.2182%	0.8853%	4.0618%
23								
24	**INPUTS FOR RATIOS**							
25								

Liberty Utilities (Lithcfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended October 31, 2024
Development of Allocation Factors by Customer Class

Line No		Allocation Factor		Total (1)	Residential (2)	Residential Multi-Unit (3)	Commercial (3)	Wigwam (4)	Schools (5)
26	**EXTERNAL INPUTS**								
27	DEMAND AND COMMODITY			100.00%	72.32%	7.15%	15.18%	0.98%	4.38%
28	Annual Flows (MG)		2,417.251	2,417.251	1,748.111	172.736	366.879	23.633	105.892
29	Average Daily Flows (mgd)		6.715	6.715	4.856	0.480	1.019	0.066	0.294
30	Max Day Capacity Factor				1.24	1.24	1.24	1.24	1.24
31	Maximum Day Flows (mgd)		8.326	8.326	6.021	0.595	1.264	0.081	0.365
32	Maximum Day Excess		1.611	1.611	1.165	0.115	0.245	0.015	0.071
33									
34									
35	CUSTOMER								
36	Bills		290,293	290,293	280,984	2,201	6,928	24	156
37	Services				23,533	184	576	2	13
38	Cost Factor				1.00	1.00	1.30	1.30	1.10
39	Equivalent Services		24,483	24,483	23,533	184	749	3	14
40									
41	REVENUES								
42	Test Year Sewer Sales		$ 20,846,881	$ 20,846,881	$ 13,361,176	$ 2,405,280	$ 4,691,679	$ 186,772	$ 201,973
43	Test Year Sewer Sales excluding effluent		$ 20,846,881	$ 20,846,881	$ 13,361,176	$ 2,405,280	$ 4,691,679	$ 186,772	$ 201,973
44									
45									
46	Rate of Return (ROR)		8.45%						
47	Revenue Conversion Factor		1.3504						
48									
49	**TAX FACTORS**								
50	Wtd Cost of Debt		2.6152%						
51	State Tax Rate		4.90%						
52	Federal Tax Rate		21.00%						
53									
54									
55	**INTERNAL INPUTS**								
56									
57	Rate Base	CRB	$133,887,159	133,887,159	99,312,203	8,915,022	19,036,385	1,185,330	5,438,218

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Revenue Summary
With Annualized Revenues to Year End Number of Customers
Test Year Ended December 31, 2024

Exhibit
Schedule H-1
Page 1
Witness: Bourassa

Line No.	Customer Classification	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Sewer Revenues	Percent of Proposed Sewer Revenues
1	Residential	$ 12,706,853	$ 19,586,343	$ 6,879,490	54.14%	58.91%	59.06%
2	Residential HOA 133	72,191	111,275	39,084	54.14%	0.33%	0.34%
3	Residential HOA 134	72,734	112,112	39,378	54.14%	0.34%	0.34%
4	Residential HOA 138	74,905	115,458	40,553	54.14%	0.35%	0.35%
5	Residential HOA 160	86,846	133,865	47,018	54.14%	0.40%	0.40%
6	Residential HOA 520	282,250	435,060	152,810	54.14%	1.31%	1.31%
7	Subtotal	$ 13,295,778	$ 20,494,112	$ 7,198,334	54.14%	61.64%	61.79%
8							
9	Multi-Unit Housing						
10	Multi-Unit 3	$ 75,587	$ 116,509	$ 40,923	54.14%	0.35%	0.35%
11	Multi-Unit 4	22,172	34,176	12,004	54.14%	0.10%	0.10%
12	Multi-Unit 5	5,039	7,767	2,728	54.14%	0.02%	0.02%
13	Multi-Unit 7	14,110	21,748	7,639	54.14%	0.07%	0.07%
14	Multi-Unit 8	129,001	198,843	69,841	54.14%	0.60%	0.60%
15	Multi-Unit 9	4,535	6,991	2,455	54.14%	0.02%	0.02%
16	Multi-Unit 10	5,039	7,767	2,728	54.14%	0.02%	0.02%
17	Multi-Unit 14	77,602	119,616	42,014	54.14%	0.36%	0.36%
18	Multi-Unit 16	330,566	509,535	178,969	54.14%	1.53%	1.54%
19	Multi-Unit 17	8,567	13,204	4,638	54.14%	0.04%	0.04%
20	Multi-Unit 18	9,070	13,981	4,911	54.14%	0.04%	0.04%
21	Multi-Unit 21	10,582	16,311	5,729	54.14%	0.05%	0.05%
22	Multi-Unit 22	11,086	17,088	6,002	54.14%	0.05%	0.05%
23	Multi-Unit 23	11,590	17,865	6,275	54.14%	0.05%	0.05%
24	Multi-Unit 24	24,188	37,283	13,095	54.14%	0.11%	0.11%
25	Multi-Unit 45	22,676	34,953	12,277	54.14%	0.11%	0.11%
26	Multi-Unit 46	23,180	35,730	12,550	54.14%	0.11%	0.11%
27	Multi-Unit 48	24,188	37,283	13,095	54.14%	0.11%	0.11%
28	Multi-Unit 64	32,250	49,711	17,460	54.14%	0.15%	0.15%
29	Multi-Unit 83	83,649	128,937	45,288	54.14%	0.39%	0.39%
30	Multi-Unit 84	42,329	65,245	22,917	54.14%	0.20%	0.20%
31	Multi-Unit 90	136,056	209,717	73,661	54.14%	0.63%	0.63%
32	Multi-Unit 111	55,934	86,217	30,283	54.14%	0.26%	0.26%
33	Multi-Unit 125	62,969	97,091	34,102	54.14%	0.29%	0.29%
34	Multi-Unit 126	63,493	97,868	34,375	54.14%	0.29%	0.30%
35	Multi-Unit 132	199,549	307,585	108,036	54.14%	0.93%	0.93%
36	Multi-Unit 167	84,153	129,714	45,561	54.14%	0.39%	0.39%
37	Multi-Unit 184	92,720	142,918	50,198	54.14%	0.43%	0.43%
38	Multi-Unit 188	94,735	146,025	51,290	54.14%	0.44%	0.44%
39	Multi-Unit 224	112,676	173,987	61,111	54.14%	0.52%	0.52%
40	Multi-Unit 286	144,119	222,145	78,026	54.14%	0.67%	0.67%
41	Multi-Unit 304	153,189	236,126	82,937	54.14%	0.71%	0.71%
42	Multi-Unit 326	164,275	253,214	88,939	54.14%	0.76%	0.76%
43	Multi-Unit 352	73,907	113,920	40,013	54.14%	0.34%	0.34%
44							
45	Subtotal	$ 2,405,004	$ 3,707,073	$ 1,302,069	54.14%	11.15%	11.18%
46							
47	Small Commercial	$ 93,479	$ 144,089	50,610	54.14%	0.43%	0.43%
48	Measured Service:						
49	Regular Domestic	$ 1,871,984	$ 2,999,950	1,127,965	60.26%	8.88%	9.05%
50	Regular Domestic - Influent	2,122,889	3,412,131	1,289,242	60.73%	9.84%	10.29%
51	Restaurant, Motels, Grocery, Dry Cleaning	531,541	851,005	319,464	60.10%	2.48%	2.57%
52	Subtotal	$ 4,526,414	$ 7,263,086	$ 2,736,671	60.46%	20.99%	21.90%
53							
54	Wigwam Resort - Per Room	$ 166,795	$ 267,105	$ 100,310	60.14%	0.77%	0.81%
55	Wigwam Resort - Main	19,956	31,957	12,001	60.14%	0.09%	0.10%
56	Subtotal	$ 186,750	$ 299,062	$ 112,312	60.14%	0.87%	0.90%
57							
58	Elementary Schools	$ 81,418	$ 130,383	$ 48,965	60.14%	0.38%	0.39%
59	Middle and High Schools	95,787	153,393	57,606	60.14%	0.44%	0.46%
60	Community College	24,745	39,627	14,882	60.14%	0.11%	0.12%
61	Subtotal	$ 201,950	$ 323,402	$ 121,453	60.14%	0.94%	0.98%
62							
63							
64	Total Revenues Before Revenues Annualization	$ 20,709,376	$ 32,230,824	$ 11,521,448	55.63%	96.01%	97.18%

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Revenue Summary
With Annualized Revenues to Year End Number of Customers
Test Year Ended December 31, 2024

Exhibit
Schedule H-1
Page 2
Witness: Bourassa

Line No.	Customer Classification	Present Revenues	Proposed Revenues	Dollar Change	Percent Change	Percent of Present Sewer Revenues	Percent of Proposed Sewer Revenues
1							
2	Revenue Annualization						
3	Residential	$ 63,868	$ 98,446	$ 34,578	54.14%	0.30%	0.30%
4	Multi-Unit			-	0.00%	0.00%	0.00%
5	Small Commercial	1,071	1,651	580	54.14%	0.00%	0.00%
6	Measured Service:						
7	Regular Domestic	15,742	25,224	9,482	60.24%	0.07%	0.08%
8	Regular Domestic Influent	54,939	88,306	33,367	60.73%	0.25%	0.27%
9	Restaurant, Motels, Grocery, Dry Cleaning	(498)	(798)	(300)	60.17%	0.00%	0.00%
10							
11	Subtotal Revenue Annualization	$ 135,122	$ 212,830	$ 77,708	57.51%	0.63%	0.64%
12							
13	Effluent Revenues	$ 59,035	$ 59,035	-	0.00%	0.27%	0.18%
14							
15	Misc Service Revenues						
16	Adjusted Misc Revenues	$ 663,170	$ 663,170	$ -	0.00%	3.07%	2.00%
17	Reconciling Amount to C-1	2,384	(393)	(2,777)	-116.48%	0.01%	0.00%
18	Totals	$ 21,569,086	$ 33,165,465	$ 11,596,379	53.76%	100.00%	100.00%
19							
20							
21							
22							
23	Revenue Reconciliation						
24	Flat and Metered Revenues Per GL	$ 20,711,759					
25							
26							
27	Adjusted Total	$ 20,711,759					
28							
29	BC Revenue Before Annualization	$ 20,709,376					
30							
31	Difference	$ 2,383					
32							
33	% Difference	0.01%					
34							
35	**Tolerance (+/- 1/2%)**	$ 103,559					
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							

Line No.	Customer Classification	Average Number of Customers at 12/31/2024	Average Water Use	Average Bill Present Rates	Average Bill Proposed Rates	Proposed Increase Dollar Amount	Proposed Increase Percent Amount
1	Residential	23,528	N/A	$ 45.23	$ 69.72	$ 24.49	54.140%
2	Residential HOA 133	1	N/A	6,015.90	9,272.91	3,257.01	54.140%
3	Residential HOA 134	1	N/A	6,081.13	9,342.63	3,261.50	54.140%
4	Residential HOA 138	1	N/A	6,242.06	9,621.52	3,379.45	54.140%
5	Residential HOA 160	1	N/A	7,237.18	11,155.38	3,918.21	54.140%
6	Residential HOA 520	1	N/A	23,520.82	36,255.00	12,734.17	54.140%
7							
8	Multi-Unit Housing - Residential						
9	Multi-Unit 3	50	N/A	$ 125.98	$ 194.18	$ 68.20	54.140%
10	Multi-Unit 4	11	N/A	167.97	258.91	90.94	54.140%
11	Multi-Unit 5	2	N/A	209.96	323.64	113.67	54.140%
12	Multi-Unit 7	4	N/A	293.95	453.09	159.14	54.140%
13	Multi-Unit 8	32	N/A	335.94	517.82	181.88	54.140%
14	Multi-Unit 9	1	N/A	377.93	582.55	204.61	54.140%
15	Multi-Unit 10	1	N/A	419.93	647.27	227.35	54.140%
16	Multi-Unit 14	11	N/A	587.90	906.18	318.29	54.140%
17	Multi-Unit 16	41	N/A	671.88	1,035.64	363.76	54.140%
18	Multi-Unit 17	1	N/A	713.88	1,100.37	386.49	54.140%
19	Multi-Unit 18	1	N/A	755.87	1,165.09	409.23	54.140%
20	Multi-Unit 21	1	N/A	881.85	1,359.28	477.43	54.140%
21	Multi-Unit 22	1	N/A	923.84	1,424.00	500.17	54.140%
22	Multi-Unit 23	1	N/A	965.83	1,488.73	522.90	54.140%
23	Multi-Unit 24	2	N/A	1,007.82	1,553.46	545.64	54.140%
24	Multi-Unit 45	1	N/A	1,889.67	2,912.74	1,023.07	54.140%
25	Multi-Unit 46	1	N/A	1,931.66	2,977.46	1,045.80	54.140%
26	Multi-Unit 48	1	N/A	2,015.65	3,106.92	1,091.27	54.140%
27	Multi-Unit 64	1	N/A	2,687.53	4,142.56	1,455.03	54.140%
28	Multi-Unit 83	2	N/A	3,485.39	5,372.38	1,886.99	54.140%
29	Multi-Unit 84	1	N/A	3,527.38	5,437.11	1,909.73	54.140%
30	Multi-Unit 90	3	N/A	3,779.34	5,825.47	2,046.13	54.140%
31	Multi-Unit 111	1	N/A	4,661.19	7,184.75	2,523.57	54.140%
32	Multi-Unit 125	1	N/A	5,249.08	8,090.94	2,841.86	54.140%
33	Multi-Unit 128	1	N/A	5,291.08	8,155.66	2,864.59	54.140%
34	Multi-Unit 132	3	N/A	5,543.03	8,544.03	3,001.00	54.140%
35	Multi-Unit 167	1	N/A	7,012.77	10,809.49	3,796.72	54.140%
36	Multi-Unit 184	1	N/A	7,726.65	11,909.86	4,183.21	54.140%
37	Multi-Unit 188	1	N/A	7,894.62	12,168.77	4,274.15	54.140%
38	Multi-Unit 224	1	N/A	9,406.36	14,498.96	5,092.60	54.140%
39	Multi-Unit 286	1	N/A	12,009.80	18,512.06	6,502.16	54.140%
40	Multi-Unit 304	1	N/A	12,765.77	19,677.16	6,911.39	54.140%
41	Multi-Unit 328	1	N/A	13,689.61	21,101.16	7,411.55	54.140%
42	Multi-Unit 352	0	N/A	14,781.42	22,784.08	8,002.66	54.140%
43	Subotal	183					
44							
45	Small Commercial	102	N/A	$ 76.50	$ 117.91	$ 41.42	54.140%
46	Measured Service:						
47	Regular Domestic	268	144,538	$ 582.81	$ 933.98	$ 351.17	60.255%
48	Regular Domestic - Influent	6	6,393,441	29,899.84	48,058.18	18,158.34	60.731%
49	Restaurant, Motels, Grocery, Dry Cleaning	100	83,359	442.58	708.58	266.00	60.101%
50							
51	Wigwam Resort - Per Room	1	N/A	$ 13,899.57	$ 22,258.77	$ 8,359.20	60.140%
52	Wigwam Resort - Main	1	N/A	1,662.97	2,663.08	1,000.11	60.140%
53							
54	Elementary Schools	6	N/A	$ 1,130.81	$ 1,810.88	$ 680.07	60.140%
55	Middle and High Schools	6	N/A	1,330	2,130	800.08	60.140%
56	Community College	1	N/A	2,062	3,302	1,240.13	60.140%
57							
58							
59							
60							
61	Total	24,201					
62							
63							

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Analysis of Month Bill Impacts by Detailed Class
Including Rate Case Expense Surcharge

Schedule H-2
Page 1
Witness: Bourassa

Line No.	Customer Classification	Average Number of Customers at 12/31/2024	Average Water Use	Average Bill				Proposed Increase	
				Present Rates	Proposed Rates	RC Expense Surcharge	Total Prop. Rates	Dollar Amount	Percent Amount
1	Residential	23,529	N/A	$ 45.23	$ 69.72	$ 0.53	$ 70.25	$ 25.02	55.312%
2	Residential HOA 133	1	N/A	6,015.90	9,272.91	0.53	9,273.44	3,257.54	54.149%
3	Residential HOA 134	1	N/A	6,061.13	9,342.63	0.53	9,343.16	3,282.03	54.149%
4	Residential HOA 138	1	N/A	6,242.05	9,621.52	0.53	9,622.05	3,379.98	54.148%
5	Residential HOA 169	1	N/A	7,237.18	11,155.38	0.53	11,155.91	3,918.74	54.147%
6	Residential HOA 529	1	N/A	23,529.82	36,255.00	0.53	36,255.53	12,734.70	54.142%
7									
8	Multi-Unit Housing - Residential								
9	Multi-Unit 3	50	N/A	$ 125.98	$ 194.18	$ 0.53	$ 194.71	$ 68.73	54.561%
10	Multi-Unit 4	11	N/A	167.97	258.91	0.53	259.44	91.47	54.456%
11	Multi-Unit 5	2	N/A	209.96	323.64	0.53	324.17	114.20	54.392%
12	Multi-Unit 7	4	N/A	293.95	453.09	0.53	453.62	159.67	54.320%
13	Multi-Unit 8	32	N/A	335.94	517.82	0.53	518.35	182.41	54.298%
14	Multi-Unit 9	1	N/A	377.93	582.55	0.53	583.08	205.14	54.280%
15	Multi-Unit 10	1	N/A	419.93	647.27	0.53	647.80	227.88	54.266%
16	Multi-Unit 14	11	N/A	587.90	906.18	0.53	906.71	318.82	54.230%
17	Multi-Unit 16	41	N/A	671.88	1,035.64	0.53	1,036.17	364.29	54.219%
18	Multi-Unit 17	1	N/A	713.88	1,100.37	0.53	1,100.90	387.02	54.214%
19	Multi-Unit 18	1	N/A	755.87	1,165.09	0.53	1,165.62	409.76	54.210%
20	Multi-Unit 21	1	N/A	881.85	1,359.28	0.53	1,359.81	477.96	54.200%
21	Multi-Unit 22	1	N/A	923.84	1,424.00	0.53	1,424.53	500.70	54.197%
22	Multi-Unit 23	1	N/A	965.83	1,488.73	0.53	1,489.26	523.43	54.195%
23	Multi-Unit 24	2	N/A	1,007.82	1,553.46	0.53	1,553.99	546.17	54.193%
24	Multi-Unit 45	1	N/A	1,889.67	2,912.74	0.53	2,913.27	1,023.60	54.168%
25	Multi-Unit 46	1	N/A	1,931.66	2,977.46	0.53	2,977.99	1,046.33	54.167%
26	Multi-Unit 48	1	N/A	2,015.65	3,106.92	0.53	3,107.45	1,091.80	54.166%
27	Multi-Unit 64	1	N/A	2,687.53	4,142.56	0.53	4,143.09	1,455.56	54.160%
28	Multi-Unit 83	2	N/A	3,465.39	5,372.39	0.53	5,372.91	1,887.52	54.155%
29	Multi-Unit 84	1	N/A	3,527.38	5,437.11	0.53	5,437.64	1,910.26	54.155%
30	Multi-Unit 90	3	N/A	3,779.34	5,825.47	0.53	5,826.00	2,046.66	54.154%
31	Multi-Unit 111	1	N/A	4,661.19	7,184.75	0.53	7,185.28	2,524.10	54.151%
32	Multi-Unit 125	1	N/A	5,249.08	8,090.94	0.53	8,091.47	2,842.39	54.150%
33	Multi-Unit 126	1	N/A	5,291.08	8,155.66	0.53	8,156.19	2,865.12	54.150%
34	Multi-Unit 132	3	N/A	5,543.03	8,544.03	0.53	8,544.56	3,001.53	54.150%
35	Multi-Unit 167	1	N/A	7,012.77	10,809.49	0.53	10,810.02	3,797.25	54.148%
36	Multi-Unit 184	1	N/A	7,726.65	11,909.86	0.53	11,910.39	4,183.74	54.147%
37	Multi-Unit 188	1	N/A	7,894.62	12,168.77	0.53	12,169.30	4,274.68	54.147%
38	Multi-Unit 224	1	N/A	9,406.36	14,498.95	0.53	14,499.49	5,093.13	54.146%
39	Multi-Unit 288	1	N/A	12,009.90	18,512.05	0.53	18,512.59	6,502.69	54.144%
40	Multi-Unit 304	1	N/A	12,765.77	19,677.16	0.53	19,677.69	6,911.92	54.144%
41	Multi-Unit 326	1	N/A	13,689.61	21,101.16	0.53	21,101.69	7,412.08	54.144%
42	Multi-Unit 352	0	N/A	14,781.42	22,784.08	0.53	22,784.61	8,003.19	54.144%
43	Subetal	183							
44									
45	Small Commercial	102	N/A	$ 76.50	$ 117.91	$ 0.53	$ 118.44	$ 41.95	54.833%
46	Measured Service:								
47	Regular Domestic	268	144,538	$ 582.81	$ 933.98	$ 0.53	$ 934.51	$ 351.70	60.346%
48	Regular Domestic - Influent	6	6,393,441	29,899.84	48,058.18	0.53	48,058.71	18,158.87	60.732%
49	Restaurant, Motels, Grocery, Dry Cleaning	100	83,359	442.58	708.58	0.53	709.11	266.53	60.221%
50									
51	Wigwam Resort - Per Room	1	N/A	$ 13,869.57	$ 22,258.77	$ 0.53	$ 22,259.30	$ 8,389.73	60.144%
52	Wigwam Resort - Main	1	N/A	1,662.97	2,663.08	0.53	2,663.61	1,000.64	60.172%
53									
54	Elementary Schools	9	N/A	$ 1,130.81	$ 1,810.68	$ 0.53	$ 1,811.41	$ 680.60	60.187%
55	Middle and High Schools	6	N/A	1,330	2,130	0.53	2,131	800.61	60.180%
56	Community College	1	N/A	2,082	3,302	0.53	3,303	1,240.66	60.166%
57									
58									
59									
60									
61	Total	24,201							
62									
63									

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Present and Proposed Rates
Test Year Ended December 31, 2024

Exhibit
Schedule H-3
Page 1
Witness: Bourassa

Line No.	Customer Classification	Present Rates	Proposed Rates	Change	Percent Change
4	**Monthly Charge for:**				
5	Monthly Residential Service	$ 45.23	$ 69.72	$ 24.49	54.14%
7	Multi-Unit Housing - Monthly per Unit	$ 41.99	$ 64.73	$ 22.73	54.14%
9	Commercial:				
10	Small Commercial - Monthly Service	$ 76.50	$ 117.91	$ 41.42	54.14%
11	Measured Service:				
12	Regular Domestic:				
13	Monthly Service Charge	$ 42.82	$ 66.01	$ 23.18	54.14%
14	Regular Domestic per 1,000 gallons water usage[2]	$ 3.74	$ 6.01	$ 2.27	60.74%
15	Commodity Charge per 1,000 gallons measured influent[3]	$ 4.67	$ 7.51	$ 2.84	60.74%
17	Restaurant, Motels, Grocery Stores & Dry Cleaning Estab.				
18	Monthly Service Charge	$ 42.82 [1]	$ 66.01 [1]	$ 23.18	54.14%
19	Commodity Chargeper 1,000 gallons water usage[2]	$ 4.80	$ 7.71	$ 2.91	60.74%
20	Commodity Charge per 1,000 gallons measured influent[3]	$ 6.62	$ 10.64	$ 4.02	60.74%
22	Wigwam Resort:				
23	Monthly Rate - Per Room	$ 41.99	$ 67.25	$ 25.25	60.14%
24	Main Hotel Facilities - Per Month	$ 1,662.97	$ 2,663.08	$ 1,000.11	60.14%
26	Schools - Monthly Service Rates:				
27	Elementary Schools	$ 1,130.81	$ 1,810.88	$ 680.07	60.14%
28	Middle Schools	$ 1,330.37	$ 2,130.45	$ 800.08	60.14%
29	High Schools	$ 1,330.37	$ 2,130.45	$ 800.08	60.14%
30	Community College	$ 2,062.08	$ 3,302.21	$ 1,240.13	60.14%
32	Effluent[4]	Market	Market		

[1] Motels without restuarants included (elinimate multi-unit monthly rate provision)

2 For Commercial/Non-Residential Customers that are provided with water service from the Company or whose water usage is available to the the Company from another water utility, Company shall bill non-residential customers based on water usage data provided by Liberty Utilities or water usage data provided by another local water provider. If, at any point, Company is unable to obtain actual water usage data for such commercial/non-residential customers, Company shall bill non-residential customers based on the last known, most recent usage data as a proxy. Billing shall be trued up when actual data is obtained. If no water data can be obtained, a non-residential customer may be required to install an influent meter at cost and such customers shall be billed in accordance with the influent data rates set forth above.

3 For customers that are not receiving water service from the Company, and/or the Company is not receiving water usage data information from another water provider, a meter to measure influent will be installed at cost and paid by customer and such customers shall be billed in accordance with the influent data rates set forth above.

[4] Market Rate - Maximum effluent rate shall not exceed $430 per acre foot based on a potable water rate of $1.32 per thousand gallons.

NT = No Tariff

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Changes in Representative Rate Schedules
Test Year Ended December 31, 2024

Exhibit
Schedule H-3
Page 2
Witness: Bourassa

Line No.	Service Charges	Present	Proposed
1	Establishment per A.A.C. R14-2-603(D)(1)	$20.00	$30.00
2	Establishment (After Hours)	NT	NT
3	Re-Establishment of Service per A.A.C. R14-2-603(D)(1)	(a)	(a)
4	Disconnection	(b)	At Cost (b)
5	Reconnection per A.A.C. R14-2-603(D)(1)	(b)	(b)
6	NSF Check per A.A.C. R14-2-608(E)(1)	$25.00 (c)	$25.00 (c)
7	Deferred Payment (per month)	1.5%	1.5% per month
8	Late Charge	(d)	(d)
9	Service Calls - Per Hour/After Hours	$40.00 (e)	$125 (e)
10	After Hours Service Charge	NT	NT
11	Deposit Requirements	(f)	(f)
12	Deposit Interest per A.A.C. R14-2-603(B)	6.00%	6.00%
13	Service Lateral Connection Charge - All sizes	(g)	(g)
14	Main Extension, Tariff, per Rule R14-2-606B.	(h)	(h)
15	Influent Meter Installation Charge (i)	At Cost (i)	At Cost (i)
16	Wastewater Hook-Up Fee	At Cost (j)	At Cost (j)
17	Failed Final Inspection Fee	NT	$75.00

18 [1] Company's Proposed Rates were amended by the Company on November 17, 2017. The modifications to the Company's proposed tariff of
19
20 (a) Minimum charge times number of full months off the system, per Rule R14-2-603(D).
21 (b) Customer shall pay the actual cost including costs for excavation and trenching, pipeline modification, sewer block, backfill and grading,
22 road repairs and permitting. Customer will be provided copies of invoices for actual costs incurred. There shall be no charge if no work is performed.
23 (c) Liberty Litchfield Park may charge only one NSF fee when customers are billed for water and sewer services on one bill.
24 (d) Greater of $5.00 or 1.50% of unpaid balance.
25 (e) Customer shall be charged for after-hours service calls outside of normal working hours for work performed at customer's request or convenience.
26 (f) Per ACC Rules R14-2-603(B) Residential - two times the average bill by class. Non-residential - two and one-half times the customer's estimated maximum monthly bill.
27 (g) At Cost. Customer/Developer shall install or cause to be installed all Service Laterals as refundable advances-in-aid of construction.
28 (h) All Main Extensions shall be completed at cost and shall be treated as refundable advances-in-aid of construction.
29 (i) The cost of the influent meter and metering system installation shall be at the sole expense of the commercial and industrial user and not subject to refund.
30 (j) Residential and Non-residential - Customer/Developers shall pay the applicable Wastewater Hook-Up Fees per tariff.
31
32
33 In addition to the collection of regular rates, the utility will collect from its customers a proportionate share of any privilege, sales, use, and

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Residential

Exhibit
Schedule H-4
Page 1
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 45.23	$ 69.72	$ 24.49	54.14%

Present Rates:
Monthly Charge: $ 45.23

Proposed Rates:
Monthly Charge: $ 69.72

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Residential HOA - 134 Units

Exhibit
Schedule H-4
Page 2
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 6,015.90	$ 9,272.91	$ 3,257.01	54.14%

# Homes	133
Present Rates:	
Monthly Charge per Unit:	$ 45.23
Total Monthly Charge	$ 6,015.90
Proposed Rates:	
Monthly Charge per Unit:	$ 69.72
Total Monthly Charge	$ 9,272.91

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Residential HOA - 134 Units

Exhibit
Schedule H-4
Page 3
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 6,061.13	$ 9,342.63	$ 3,281.50	54.14%

# Homes	134
Present Rates:	
Monthly Charge per Unit:	$ 45.23
Total Monthly Charge	$ 6,061.13
Proposed Rates:	
Monthly Charge per Unit:	$ 69.72
Total Monthly Charge	$ 9,342.63

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Residential HOA - 134 Units

Exhibit
Schedule H-4
Page 4
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 6,242.06	$ 9,621.52	$ 3,379.45	54.14%

# Homes	138
Present Rates:	
Monthly Charge per Unit:	$ 45.23
Total Monthly Charge	$ 6,242.06
Proposed Rates:	
Monthly Charge per Unit:	$ 69.72
Total Monthly Charge	$ 9,621.52

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Residential HOA - 160 Units

Exhibit
Schedule H-4
Page 5
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 7,237.18	$ 11,155.38	$ 3,918.21	54.14%

# Homes	160
Present Rates:	
Monthly Charge per Unit:	$ 45.23
Total Monthly Charge	$ 7,237.18
Proposed Rates:	
Monthly Charge per Unit:	$ 69.72
Total Monthly Charge	$ 11,155.38

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Residential HOA - 520 Units

Exhibit
Schedule H-4
Page 6
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 23,520.82	$ 36,255.00	$ 12,734.17	54.14%

# Homes		520
Present Rates:		
Monthly Charge per Unit:	$	45.23
Total Monthly Charge	$	23,520.82
Proposed Rates:		
Monthly Charge per Unit:	$	69.72
Total Monthly Charge	$	36,255.00

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 3 Units

Exhibit
Schedule H-4
Page 7
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 125.98	$ 194.18	$ 68.20	54.14%

# Units		3
Present Rates:		
Monthly Charge per Unit:	$	41.99
Total Monthly Charge	$	125.98
Proposed Rates:		
Monthly Charge per Unit:	$	64.73
Total Monthly Charge	$	194.18

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 4 Units

Exhibit
Schedule H-4
Page 8
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 167.97	$ 258.91	$ 90.94	54.14%

# Units		4
Present Rates:		
Monthly Charge per Unit:	$	41.99
Total Monthly Charge	$	167.97
Proposed Rates:		
Monthly Charge per Unit:	$	64.73
Total Monthly Charge	$	258.91

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 5 Units

Exhibit
Schedule H-4
Page 9
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 209.96	$ 323.64	$ 113.67	54.14%

# Units		5
Present Rates:		
Monthly Charge per Unit:	$	41.99
Total Monthly Charge	$	209.96
Proposed Rates:		
Monthly Charge per Unit:	$	64.73
Total Monthly Charge	$	323.64

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 7 Units

Exhibit
Schedule H-4
Page 10
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 293.95	$ 453.09	$ 159.14	54.14%

# Units		7
Present Rates:		
Monthly Charge per Unit:	$	41.99
Total Monthly Charge	$	293.95
Proposed Rates:		
Monthly Charge per Unit:	$	64.73
Total Monthly Charge	$	453.09

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 8 Units

Exhibit
Schedule H-4
Page 11
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 335.94	$ 517.82	$ 181.88	54.14%

# Units		8
Present Rates:		
Monthly Charge per Unit:	$	41.99
Total Monthly Charge	$	335.94
Proposed Rates:		
Monthly Charge per Unit:	$	64.73
Total Monthly Charge	$	517.82

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 9 Units

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 377.93	$ 582.55	$ 204.61	54.14%

Exhibit
Schedule H-4
Page 12
Witness: Bourassa

# Units		9
Present Rates:		
Monthly Charge per Unit:	$	41.99
Total Monthly Charge	$	377.93
Proposed Rates:		
Monthly Charge per Unit:	$	64.73
Total Monthly Charge	$	582.55

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 10 Units

Exhibit
Schedule H-4
Page 13
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 419.93	$ 647.27	$ 227.35	54.14%

# Units		10
Present Rates:		
Monthly Charge per Unit:	$	41.99
Total Monthly Charge	$	419.93
Proposed Rates:		
Monthly Charge per Unit:	$	64.73
Total Monthly Charge	$	647.27

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 14 Units

Exhibit
Schedule H-4
Page 14
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 587.90	$ 906.18	$ 318.29	54.14%

# Units		14
Present Rates:		
Monthly Charge per Unit:	$	41.99
Total Monthly Charge	$	587.90
Proposed Rates:		
Monthly Charge per Unit:	$	64.73
Total Monthly Charge	$	906.18

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 16 Units

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 671.88	$ 1,035.64	$ 363.76	54.14%

Exhibit
Schedule H-4
Page 15
Witness: Bourassa

# Units	16
Present Rates:	
Monthly Charge per Unit:	$ 41.99
Total Monthly Charge	$ 671.88
Proposed Rates:	
Monthly Charge per Unit:	$ 64.73
Total Monthly Charge	$ 1,035.64

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 17 Units

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 713.88	$ 1,100.37	$ 386.49	54.14%

Exhibit
Schedule H-4
Page 16
Witness: Bourassa

# Units	17
Present Rates:	
Monthly Charge per Unit:	$ 41.99
Total Monthly Charge	$ 713.88
Proposed Rates:	
Monthly Charge per Unit:	$ 64.73
Total Monthly Charge	$ 1,100.37

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 18 Units

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 755.87	$ 1,165.09	$ 409.23	54.14%

Exhibit
Schedule H-4
Page 17
Witness: Bourassa

# Units	18
Present Rates:	
Monthly Charge per Unit:	$ 41.99
Total Monthly Charge	$ 755.87
Proposed Rates:	
Monthly Charge per Unit:	$ 64.73
Total Monthly Charge	$ 1,165.09

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 21 Units

Exhibit
Schedule H-4
Page 18
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 881.85	$ 1,359.28	$ 477.43	54.14%

# Units	21
Present Rates:	
Monthly Charge per Unit:	$ 41.99
Total Monthly Charge	$ 881.85
Proposed Rates:	
Monthly Charge per Unit:	$ 64.73
Total Monthly Charge	$ 1,359.28

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 22 Units

Exhibit
Schedule H-4
Page 19
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 923.84	$ 1,424.00	$ 500.17	54.14%

# Units	22
Present Rates:	
Monthly Charge per Unit:	$ 41.99
Total Monthly Charge	$ 923.84
Proposed Rates:	
Monthly Charge per Unit:	$ 64.73
Total Monthly Charge	$ 1,424.00

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 23 Units

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 965.83	$ 1,488.73	$ 522.90	54.14%

Exhibit
Schedule H-4
Page 20
Witness: Bourassa

# Units	23
Present Rates:	
Monthly Charge per Unit:	$ 41.99
Total Monthly Charge	$ 965.83
Proposed Rates:	
Monthly Charge per Unit:	$ 64.73
Total Monthly Charge	$ 1,488.73

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 24 Units

Exhibit:
Schedule H-4
Page 21
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 1,007.82	$ 1,553.46	$ 545.64	54.14%

# Units	24
Present Rates:	
Monthly Charge per Unit:	$ 41.99
Total Monthly Charge	$ 1,007.82
Proposed Rates:	
Monthly Charge per Unit:	$ 64.73
Total Monthly Charge	$ 1,553.46

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 45 Units

Exhibit
Schedule H-4
Page 22
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 1,889.67	$ 2,912.74	$ 1,023.07	54.14%

# Units	45
Present Rates:	
Monthly Charge per Unit:	$ 41.99
Total Monthly Charge	$ 1,889.67
Proposed Rates:	
Monthly Charge per Unit:	$ 64.73
Total Monthly Charge	$ 2,912.74

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 46 Units

Exhibit
Schedule H-4
Page 23
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 1,931.66	$ 2,977.46	$ 1,045.80	54.14%

# Units	46
Present Rates:	
Monthly Charge per Unit:	$ 41.99
Total Monthly Charge	$ 1,931.66
Proposed Rates:	
Monthly Charge per Unit:	$ 64.73
Total Monthly Charge	$ 2,977.46

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 48 Units

Exhibit
Schedule H-4
Page 24
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 2,015.65	$ 3,106.92	$ 1,091.27	54.14%

# Units	48
Present Rates:	
Monthly Charge per Unit:	$ 41.99
Total Monthly Charge	$ 2,015.65
Proposed Rates:	
Monthly Charge per Unit:	$ 64.73
Total Monthly Charge	$ 3,106.92

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 64 Units

Exhibit
Schedule H-4
Page 25
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 2,687.53	$ 4,142.56	$ 1,455.03	54.14%

# Units	64
Present Rates:	
Monthly Charge per Unit:	$ 41.99
Total Monthly Charge	$ 2,687.53
Proposed Rates:	
Monthly Charge per Unit:	$ 64.73
Total Monthly Charge	$ 4,142.56

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 83 Units

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 3,485.39	$ 5,372.38	$ 1,886.99	54.14%

Exhibit
Schedule H-4
Page 26
Witness: Bourassa

# Units		83
Present Rates:		
Monthly Charge per Unit:	$	41.99
Total Monthly Charge	$	3,485.39
Proposed Rates:		
Monthly Charge per Unit:	$	64.73
Total Monthly Charge	$	5,372.38

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 84 Units

Exhibit
Schedule H-4
Page 27
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 3,527.38	$ 5,437.11	$ 1,909.73	54.14%

# Units	84
Present Rates:	
Monthly Charge per Unit:	$ 41.99
Total Monthly Charge	$ 3,527.38
Proposed Rates:	
Monthly Charge per Unit:	$ 64.73
Total Monthly Charge	$ 5,437.11

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 90 Units

Exhibit
Schedule H-4
Page 28
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 3,779.34	$ 5,825.47	$ 2,046.13	54.14%

# Units	90
Present Rates:	
Monthly Charge per Unit:	$ 41.99
Total Monthly Charge	$ 3,779.34
Proposed Rates:	
Monthly Charge per Unit:	$ 64.73
Total Monthly Charge	$ 5,825.47

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 111 Units

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 4,661.19	$ 7,184.75	$ 2,523.57	54.14%

Exhibit
Schedule H-4
Page 29
Witness: Bourassa

# Units	111
Present Rates:	
Monthly Charge per Unit:	$ 41.99
Total Monthly Charge	$ 4,661.19
Proposed Rates:	
Monthly Charge per Unit:	$ 64.73
Total Monthly Charge	$ 7,184.75

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 125 Units

Exhibit
Schedule H-4
Page 30
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 5,249.08	$ 8,090.94	$ 2,841.85	54.14%

# Units	125
Present Rates:	
Monthly Charge per Unit:	$ 41.99
Total Monthly Charge	$ 5,249.08
Proposed Rates:	
Monthly Charge per Unit:	$ 64.73
Total Monthly Charge	$ 8,090.94

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 126 Units

Exhibit
Schedule H-4
Page 31
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 5,291.08	$ 8,155.66	$ 2,864.59	54.14%

# Units	126
Present Rates:	
Monthly Charge per Unit:	$ 41.99
Total Monthly Charge	$ 5,291.08
Proposed Rates:	
Monthly Charge per Unit:	$ 64.73
Total Monthly Charge	$ 8,155.66

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 132 Units

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 5,543.03	$ 8,544.03	$ 3,001.00	54.14%

Exhibit
Schedule H-4
Page 32
Witness: Bourassa

# Units	132
Present Rates:	
Monthly Charge per Unit:	$ 41.99
Total Monthly Charge	$ 5,543.03
Proposed Rates:	
Monthly Charge per Unit:	$ 64.73
Total Monthly Charge	$ 8,544.03

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 167 Units

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 7,012.77	$ 10,809.49	$ 3,796.72	54.14%

Exhibit
Schedule H-4
Page 33
Witness: Bourassa

# Units	167
Present Rates:	
Monthly Charge per Unit:	$ 41.99
Total Monthly Charge	$ 7,012.77
Proposed Rates:	
Monthly Charge per Unit:	$ 64.73
Total Monthly Charge	$ 10,809.49

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 184 Units

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 7,726.65	$ 11,909.86	$ 4,183.21	54.14%

Exhibit
Schedule H-4
Page 34
Witness: Bourassa

# Units	184
Present Rates:	
Monthly Charge per Unit:	$ 41.99
Total Monthly Charge	$ 7,726.65
Proposed Rates:	
Monthly Charge per Unit:	$ 64.73
Total Monthly Charge	$ 11,909.86

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 188 Units

Exhibit
Schedule H-4
Page 35
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 7,894.62	$ 12,168.77	$ 4,274.15	54.14%

# Units	188
Present Rates:	
Monthly Charge per Unit:	$ 41.99
Total Monthly Charge	$ 7,894.62
Proposed Rates:	
Monthly Charge per Unit:	$ 64.73
Total Monthly Charge	$ 12,168.77

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 224 Units

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 9,406.36	$ 14,498.96	$ 5,092.60	54.14%

Exhibit
Schedule H-4
Page 36
Witness: Bourassa

# Units	224
Present Rates:	
Monthly Charge per Unit:	$ 41.99
Total Monthly Charge	$ 9,406.36
Proposed Rates:	
Monthly Charge per Unit:	$ 64.73
Total Monthly Charge	$ 14,498.96

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 286 Units

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 12,009.90	$ 18,512.06	$ 6,502.16	54.14%

Exhibit
Schedule H-4
Page 37
Witness: Bourassa

# Units	286
Present Rates:	
Monthly Charge per Unit:	$ 41.99
Total Monthly Charge	$ 12,009.90
Proposed Rates:	
Monthly Charge per Unit:	$ 64.73
Total Monthly Charge	$ 18,512.06

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 304 Units

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 12,765.77	$ 19,677.16	$ 6,911.39	54.14%

Exhibit
Schedule H-4
Page 38
Witness: Bourassa

# Units		304
Present Rates:		
Monthly Charge per Unit:	$	41.99
Total Monthly Charge	$	12,765.77
Proposed Rates:		
Monthly Charge per Unit:	$	64.73
Total Monthly Charge	$	19,677.16

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 326 Units

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 13,689.61	$ 21,101.16	$ 7,411.55	54.14%

Exhibit
Schedule H-4
Page 39
Witness: Bourassa

# Units		326
Present Rates:		
Monthly Charge per Unit:	$	41.99
Total Monthly Charge	$	13,689.61
Proposed Rates:		
Monthly Charge per Unit:	$	64.73
Total Monthly Charge	$	21,101.16

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Multi-Unit Housing - 352 Units

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 14,781.42	$ 22,784.08	$ 8,002.66	54.14%

Exhibit
Schedule H-4
Page 40
Witness: Bourassa

# Units		352
Present Rates:		
Monthly Charge per Unit:	$	41.99
Total Monthly Charge	$	14,781.42
Proposed Rates:		
Monthly Charge per Unit:	$	64.73
Total Monthly Charge	$	22,784.08

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Small Commercial

Exhibit
Schedule H-4
Page 41
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 76.50	$ 117.91	$ 41.42	54.14%

Present Rates:
Monthly Charge: $ 76.50

Proposed Rates:
Monthly Charge: $ 117.91

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Commercial Measured Service Regular Dom. - Water Usage

Exhibit
Schedule H-4
Page 42
Witness: Bourassa

Water Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	$ 42.82	$ 66.01	$ 23.18	0.00%
1,000	46.56	72.01	25.45	54.67%
2,000	50.29	78.02	27.72	55.12%
3,000	54.03	84.02	29.99	55.51%
4,000	57.77	90.03	32.26	55.85%
5,000	61.50	96.03	34.53	56.14%
6,000	65.24	102.04	36.80	56.41%
7,000	68.97	108.04	39.07	56.64%
8,000	72.71	114.05	41.34	56.85%
9,000	76.45	120.05	43.61	57.04%
10,000	80.18	126.06	45.88	57.22%
12,000	87.65	138.07	50.41	57.52%
14,000	95.13	150.08	54.95	57.77%
16,000	102.60	162.09	59.49	57.99%
18,000	110.07	174.10	64.03	58.17%
20,000	117.54	186.11	68.57	58.34%
25,000	136.22	216.14	79.91	58.67%
30,000	154.90	246.16	91.26	58.92%
35,000	173.58	276.19	102.61	59.11%
40,000	192.26	306.21	113.95	59.27%
45,000	210.94	336.24	125.30	59.40%
50,000	229.62	366.26	136.64	59.51%
60,000	266.98	426.32	159.34	59.68%
70,000	304.34	486.37	182.03	59.81%
80,000	341.70	546.42	204.72	59.91%
90,000	379.06	606.47	227.41	59.99%
100,000	416.42	666.52	250.11	60.06%
Average Usage				
144,538	582.81	933.98	$ 351.17	60.26%
Median Usage				
17,500	108.20	171.10	$ 62.90	58.13%

Present Rates:

Monthly Service Charge	$ 42.82
Charge Per 1,000 Gallons	$ 3.74

Proposed Rates:

Monthly Service Charge	$ 66.01
Charge Per 1,000 Gallons	$ 6.01

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Commercial Measured Service Regular Dom. - Influent

Exhibit
Schedule H-4
Page 43
Witness: Bourassa

Water Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	$ 42.82	$ 66.01	$ 23.18	0.00%
1,000	47.49	73.51	26.02	54.79%
2,000	52.16	81.02	28.86	55.32%
3,000	56.83	88.53	31.69	55.77%
4,000	61.50	96.03	34.53	56.14%
5,000	66.17	103.54	37.37	56.47%
6,000	70.84	111.04	40.20	56.75%
7,000	75.51	118.55	43.04	57.00%
8,000	80.18	126.06	45.88	57.22%
9,000	84.85	133.56	48.71	57.41%
10,000	89.52	141.07	51.55	57.58%
12,000	98.86	156.08	57.22	57.88%
14,000	108.20	171.10	62.90	58.13%
16,000	117.54	186.11	68.57	58.34%
18,000	126.88	201.12	74.24	58.51%
20,000	136.22	216.14	79.91	58.67%
25,000	159.57	253.67	94.10	58.97%
30,000	182.92	291.20	106.28	59.19%
35,000	206.27	328.73	122.46	59.37%
40,000	229.62	366.26	136.64	59.51%
45,000	252.97	403.80	150.83	59.62%
50,000	276.32	441.33	165.01	59.72%
60,000	323.02	516.39	193.38	59.87%
70,000	369.72	591.46	221.74	59.98%
80,000	416.42	666.52	250.11	60.06%
90,000	463.12	741.59	278.47	60.13%
100,000	509.82	816.65	306.84	60.19%
Average Usage				
6,393,441	29,899.84	48,058.18	$ 18,158.34	60.73%
Median Usage				
50,500	278.65	445.08	$ 166.43	59.73%

Present Rates:

Monthly Service Charge	$ 42.82
Charge Per 1,000 Gallons	$ 4.67

Proposed Rates:

Monthly Service Charge	$ 66.01
Charge Per 1,000 Gallons	$ 7.51

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Measured Service Commercial (Rest., Motels, Grocery Stores & Dry Cleaning Estab.)

Exhibit
Schedule H-4
Page 44
Witness: Bourassa

Water Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	$ 42.82	$ 66.01	$ 23.18	0.00%
1,000	47.62	73.71	26.10	54.80%
2,000	52.41	81.42	29.01	55.35%
3,000	57.21	89.13	31.92	55.80%
4,000	62.00	96.84	34.84	56.18%
5,000	66.80	104.55	37.75	56.51%
6,000	71.60	112.26	40.66	56.79%
7,000	76.39	119.97	43.57	57.04%
8,000	81.19	127.67	46.49	57.26%
9,000	85.98	135.38	49.40	57.45%
10,000	90.78	143.09	52.31	57.63%
12,000	100.37	158.51	58.14	57.92%
14,000	109.96	173.93	63.96	58.17%
16,000	119.55	189.34	69.79	58.38%
18,000	129.14	204.76	75.62	58.55%
20,000	138.73	220.18	81.44	58.70%
25,000	162.71	258.72	96.01	59.00%
30,000	186.69	297.26	110.57	59.23%
35,000	210.67	335.80	125.13	59.40%
40,000	234.65	374.35	139.70	59.54%
45,000	258.63	412.89	154.26	59.65%
50,000	282.60	451.43	168.83	59.74%
60,000	330.56	528.52	197.96	59.89%
70,000	378.52	605.60	227.08	59.99%
80,000	426.47	682.69	256.21	60.08%
90,000	474.43	759.77	285.34	60.14%
100,000	522.39	836.86	314.47	60.20%
Average Usage				
83,359	442.58	708.58	$ 266.00	60.10%
Median Usage				
53,500	299.39	478.41	$ 179.02	59.80%

Present Rates:

Monthly Service Charge	$ 42.82
Charge Per 1,000 Gallons	$ 4.80

Proposed Rates:

Monthly Service Charge	$ 66.01
Charge Per 1,000 Gallons	$ 7.71

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Wigwam Resort - Per Room - 331 rooms

Exhibit
Schedule H-4
Page 45
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 13,899.57	$ 22,258.77	$ 8,359.20	60.14%

# Rooms		331
Present Rates:		
Monthly Charge per Room:	$	41.99
Total Monthly Charge	$	13,899.57
Proposed Rates:		
Monthly Charge per Room:	$	67.25
Total Monthly Charge	$	22,258.77

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Wigwam Resort - Main Hotel

Exhibit
Schedule H-4
Page 46
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 1,662.97	$ 2,663.08	$ 1,000.11	60.14%

Present Rates:
Monthly Charge: $ 1,662.97

Proposed Rates:
Monthly Charge: $ 2,663.08

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Elementary School

Exhibit
Schedule H-4
Page 47
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 1,130.81	$ 1,810.88	$ 680.07	60.14%

Present Rates:
Monthly Charge: $ 1,130.81

Proposed Rates:
Monthly Charge: $ 1,810.88

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Middle School/High School

Exhibit
Schedule H-4
Page 48
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 1,330.37	$ 2,130.45	$ 800.08	60.14%

Present Rates:
Monthly Charge: $ 1,330.37

Proposed Rates:
Monthly Charge: $ 2,130.45

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Bill Comparison
Customer Classification
Community College

Exhibit
Schedule H-4
Page 49
Witness: Bourassa

Present Bill	Proposed Bill	Dollar Increase	Percent Increase
$ 2,062.08	$ 3,302.21	$ 1,240.13	60.14%

Present Rates:
Monthly Charge: $ 2,062.08

Proposed Rates:
Monthly Charge: $ 3,302.21

Average Usage
N/A
Median Usage
N/A

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Residential

Exhibit
Schedule H-5
Page 1
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year
23,475	23,245	23,190	23,343	23,370	23,381	23,468	23,445	23,497	23,458	23,524	23,528	280,924
												-
												-
												-
												-
												-
												-
												-
												-
												-
												-
												-
23,475	23,245	23,190	23,343	23,370	23,381	23,468	23,445	23,497	23,458	23,524	23,528	280,924

Average Flow	N/A
Median Flow	N/A
Average # Customers	23,410

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Residential HOA - 134 Units

Exhibit
Schedule H-5
Page 2
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumulative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Residential HOA - 134 Units

Exhibit
Schedule H-5
Page 3
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumulative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow		N/A
Median Flow		N/A
Average # Customers		1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Residential HOA - 134 Units

Exhibit
Schedule H-5
Page 4
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumulative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Residential HOA - 160 Units

Exhibit
Schedule H-5
Page 5
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Residential HOA - 520 Units

Exhibit
Schedule H-5
Page 6
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 3 Units

Exhibit
Schedule H-5
Page 7
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumulative Billing
50	50	50	50	50	50	50	50	50	50	50	50	600	600
												-	600
												-	600
												-	600
												-	600
												-	600
												-	600
												-	600
												-	600
												-	600
												-	600
												-	600
												-	600
50	50	50	50	50	50	50	50	50	50	50	50	600	

Average Flow	N/A
Median Flow	N/A
Average # Customers	50

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 4 Units

Exhibit
Schedule H-5
Page 8
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing
11	11	11	11	11	11	11	11	11	11	11	11	132	132
												-	132
												-	132
												-	132
												-	132
												-	132
												-	132
												-	132
												-	132
												-	132
												-	132
												-	132
												-	132
11	11	11	11	11	11	11	11	11	11	11	11	132	

Average Flow	N/A
Median Flow	N/A
Average # Customers	11

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 5 Units

Exhibit
Schedule H-5
Page 9
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumulative Billing
2	2	2	2	2	2	2	2	2	2	2	2	24	24
												-	24
												-	24
												-	24
												-	24
												-	24
												-	24
												-	24
												-	24
												-	24
												-	24
												-	24
												-	24
2	2	2	2	2	2	2	2	2	2	2	2	24	

Average Flow	N/A	
Median Flow	N/A	
Average # Customers		2

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 7 Units

Exhibit
Schedule H-5
Page 10
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing
4	4	4	4	4	4	4	4	4	4	4	4	48	48
												-	48
												-	48
												-	48
												-	48
												-	48
												-	48
												-	48
												-	48
												-	48
												-	48
												-	48
												-	48
4	4	4	4	4	4	4	4	4	4	4	4	48	

Average Flow	N/A
Median Flow	N/A
Average # Customers	4

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 8 Units

Exhibit
Schedule H-5
Page 11
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing
32	32	32	32	32	32	32	32	32	32	32	32	384	384
												-	384
												-	384
												-	384
												-	384
												-	384
												-	384
												-	384
												-	384
												-	384
												-	384
												-	384
												-	384
32	32	32	32	32	32	32	32	32	32	32	32	384	

Average Flow	N/A
Median Flow	N/A
Average # Customers	32

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 9 Units

Exhibit
Schedule H-5
Page 12
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 10 Units

Exhibit
Schedule H-5
Page 13
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow		N/A
Median Flow		N/A
Average # Customers		1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 14 Units

Exhibit
Schedule H-5
Page 14
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing
11	11	11	11	11	11	11	11	11	11	11	11	132	132
												-	132
												-	132
												-	132
												-	132
												-	132
												-	132
												-	132
												-	132
												-	132
												-	132
												-	132
												-	132
11	11	11	11	11	11	11	11	11	11	11	11	132	

Average Flow		N/A
Median Flow		N/A
Average # Customers		11

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 16 Units

Exhibit
Schedule H-5
Page 15
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing
41	41	41	41	41	41	41	41	41	41	41	41	492	492
												-	492
												-	492
												-	492
												-	492
												-	492
												-	492
												-	492
												-	492
												-	492
												-	492
												-	492
												-	492
41	41	41	41	41	41	41	41	41	41	41	41	492	

Average Flow	N/A
Median Flow	N/A
Average # Customers	41

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 17 Units

Exhibit
Schedule H-5
Page 16
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumulative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 18 Units

Exhibit
Schedule H-5
Page 17
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 21 Units

Exhibit
Schedule H-5
Page 18
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumulative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow		N/A
Median Flow		N/A
Average # Customers		1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 22 Units

Exhibit
Schedule H-5
Page 19
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 23 Units

Exhibit
Schedule H-5
Page 20
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 24 Units

Exhibit
Schedule H-5
Page 21
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumulative Billing
2	2	2	2	2	2	2	2	2	2	2	2	24	24
												-	24
												-	24
												-	24
												-	24
												-	24
												-	24
												-	24
												-	24
												-	24
												-	24
												-	24
												-	24
2	2	2	2	2	2	2	2	2	2	2	2	24	

Average Flow	N/A	
Median Flow	N/A	
Average # Customers		2

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Mult-Unit Housing - 45 Units

Exhibit
Schedule H-5
Page 22
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 46 Units

Exhibit
Schedule H-5
Page 23
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 48 Units

Exhibit
Schedule H-5
Page 24
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	
1	1	1	1	1	1	1	1	1	1	1	1	12		12
												-		12
												-		12
												-		12
												-		12
												-		12
												-		12
												-		12
												-		12
												-		12
												-		12
												-		12
1	1	1	1	1	1	1	1	1	1	1	1	12		

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 64 Units

Exhibit
Schedule H-5
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Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumulative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 83 Units

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Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing
2	2	2	2	2	2	2	2	2	2	2	2	24	24
												-	24
												-	24
												-	24
												-	24
												-	24
												-	24
												-	24
												-	24
												-	24
												-	24
												-	24
												-	24
2	2	2	2	2	2	2	2	2	2	2	2	24	

Average Flow	N/A	
Median Flow	N/A	
Average # Customers		2

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 84 Units

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Schedule H-5
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Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumulative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 90 Units

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Schedule H-5
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Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumulative Billing
3	3	3	3	3	3	3	3	3	3	3	3	36	36
												-	36
												-	36
												-	36
												-	36
												-	36
												-	36
												-	36
												-	36
												-	36
												-	36
												-	36
												-	36
3	3	3	3	3	3	3	3	3	3	3	3	36	

Average Flow	N/A	
Median Flow	N/A	
Average # Customers		3

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 111 Units

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Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumulative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 125 Units

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Schedule H-5
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Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	
1	1	1	1	1	1	1	1	1	1	1	1	12		12
												-		12
												-		12
												-		12
												-		12
												-		12
												-		12
												-		12
												-		12
												-		12
												-		12
												-		12
1	1	1	1	1	1	1	1	1	1	1	1	12		

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 125 Units

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Schedule H-5
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Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 132 Units

Exhibit
Schedule H-5
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Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing
3	3	3	3	3	3	3	3	3	3	3	3	36	35
												-	35
												-	35
												-	35
												-	35
												-	35
												-	35
												-	35
												-	35
												-	35
												-	35
												-	35
												-	35
3	3	3	3	3	3	3	3	3	3	3	3	36	

Average Flow	N/A	
Median Flow	N/A	
Average # Customers		3

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 167 Units

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Schedule H-5
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Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumulative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 184 Units

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Schedule H-5
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Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 188 Units

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Schedule H-5
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Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumulative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 224 Units

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Schedule H-5
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Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumulative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 285 Units

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Schedule H-5
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Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumulative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 304 Units

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Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumulative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 326 Units

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Schedule H-5
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Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumulative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Multi-Unit Housing - 352 Units

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Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumulative Billing
0	0	0	0	0	0	0	1	1	1	1	1	5	5
												-	5
												-	5
												-	5
												-	5
												-	5
												-	5
												-	5
												-	5
												-	5
												-	5
												-	5
												-	5
-	-	-	-	-	-	-	1	1	1	1	1	5	

Average Flow	N/A	
Median Flow	N/A	
Average # Customers		0

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Small Commercial

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Schedule H-5
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Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing
100	100	102	104	101	101	103	102	102	102	102	103	1,222	1,222
												-	1,222
												-	1,222
												-	1,222
												-	1,222
												-	1,222
												-	1,222
												-	1,222
												-	1,222
												-	1,222
												-	1,222
												-	1,222
												-	1,222
100	100	102	104	101	101	103	102	102	102	102	103	1,222	

Average Flow	N/A
Median Flow	N/A
Average # Customers	102

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Commercial Measured Service Regular Dom. - Water Usage

Exhibit
Schedule H-5
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Witness: Bourassa

Water Usage From:	Water Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
-	-	18	19	16	19	15	18	18	18	13	14	22	18	208	208	
1	1,000	15	12	11	9	12	11	17	13	13	12	11	13	149	357	0
1,001	2,000	14	21	14	16	6	10	10	14	7	10	12	10	144	501	144
2,001	3,000	21	6	6	9	7	8	4	3	6	8	7	14	99	600	342
3,001	4,000	8	14	12	5	10	5	5	8	10	6	12	6	101	701	645
4,001	5,000	6	8	10	8	10	7	5	6	3	8	9	8	88	789	998
5,001	6,000	10	8	7	8	6	6	6	6	8	6	6	10	87	876	1,433
6,001	7,000	3	5	6	8	4	7	7	9	3	7	4	5	68	944	1,841
7,001	8,000	6	4	1	9	8	9	6	9	6	10	3	6	77	1,021	2,380
8,001	9,000	8	6	5	5	6	6	4	8	8	6	9	7	78	1,099	3,004
9,001	10,000	8	8	8	8	5	7	4	2	6	2	5	6	69	1,168	3,625
10,001	11,000	8	10	10	4	2	5	3	6	4	4	5	8	69	1,237	4,315
11,001	12,000	7	3	8	4	6	2	6	10	7	7	5	3	68	1,305	5,063
12,001	13,000	4	6	4	7	7	8	7	6	6	7	4	4	70	1,375	5,903
13,001	14,000	4	7	4	7	5	5	8	2	5	6	5	6	64	1,439	6,735
14,001	15,000	1	7	6	6	2	5	1	5	5	5	5	5	53	1,492	7,477
15,001	16,000	7	4	6	8	3	3	3	4	3	5	3	3	52	1,544	8,257
16,001	17,000	4	4	2	1	5	2	7	3	1	2	8	5	44	1,588	8,961
17,001	18,000	3	5	2	2	6	6	1	4	6	2	3	1	41	1,629	9,658
18,001	19,000	2	-	2	3	2	4	2	5	3	5	4	2	34	1,663	10,270
19,001	20,000	3	-	2	3	3	1	2	7	4	6	5	5	41	1,704	11,049
20,001	21,000	7	2	4	6	4	4	2	1	5	5	4	4	48	1,752	12,010
21,001	22,000	1	4	5	1	3	-	4	3	2	3	2	1	29	1,781	12,619
22,001	23,000	2	4	2	1	3	3	4	1	6	3	3	2	34	1,815	13,367
23,001	24,000	4	5	7	7	2	2	9	2	3	3	2	3	49	1,864	14,494
24,001	25,000	3	-	1	-	5	4	4	1	2	1	1	2	24	1,888	15,070
25,001	26,000	-	1	1	1	2	2	3	4	2	8	6	-	30	1,918	15,820
26,001	27,000	4	-	2	1	6	5	5	7	2	2	6	2	42	1,960	16,912
27,001	28,000	2	2	1	-	2	1	3	4	2	2	2	-	21	1,981	17,479
28,001	29,000	1	2	3	3	4	2	2	1	2	4	2	3	29	2,010	18,291
29,001	30,000	3	3	4	2	1	2	4	-	4	2	1	2	28	2,038	19,103
30,001	31,000	1	1	1	2	4	4	3	2	1	-	2	-	21	2,059	19,733
31,001	32,000	3	2	2	5	2	1	3	1	1	3	1	4	28	2,087	20,601
32,001	33,000	1	-	1	4	2	1	1	-	1	2	2	2	17	2,104	21,145
33,001	34,000	1	3	1	3	2	4	1	2	-	-	2	3	22	2,126	21,871
34,001	35,000	2	2	2	2	1	3	4	2	2	1	2	2	25	2,151	22,721
35,001	36,000	2	2	-	2	-	3	-	1	3	2	-	2	17	2,168	23,316
36,001	37,000	2	1	4	-	2	1	2	1	1	1	-	1	16	2,184	23,892
37,001	38,000	1	1	-	1	2	2	1	2	2	1	1	2	16	2,200	24,484
38,001	39,000	3	2	2	2	3	-	3	1	3	2	1	3	25	2,225	25,434
39,001	40,000	1	2	1	3	1	2	2	1	4	1	1	2	21	2,246	26,253
40,001	41,000	2	-	2	-	1	1	1	2	2	-	1	-	12	2,258	26,733
41,001	42,000	1	2	-	-	2	2	2	-	-	1	2	1	13	2,271	27,266
42,001	43,000	2	2	-	1	1	1	1	1	-	-	2	2	13	2,284	27,812
43,001	44,000	1	1	3	1	2	3	1	-	-	1	-	-	13	2,297	28,371

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Commercial Measured Service Regular Dom. - Water Usage

Exhibit
Schedule H-5
Page 42
Witness: Bourassa

Water Usage From:	Water Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
44,001	45,000	1	1	2	1	2	1	1	1	2	1	1	4	18	2,315	29,163
45,001	46,000	1	-	2	3	-	-	-	3	1	3	1	-	14	2,329	29,793
46,001	47,000	1	1	3	1	1	1	1	2	-	1	2	2	16	2,345	30,529
47,001	48,000	-	-	3	2	1	4	1	-	1	-	1	2	15	2,360	31,234
48,001	49,000	1	-	-	1	2	1	-	-	1	-	-	3	9	2,369	31,666
49,001	50,000	1	1	-	-	1	2	3	2	1	2	2	1	16	2,385	32,450
50,001	51,000	1	1	1	1	-	-	-	2	-	1	-	-	7	2,392	32,800
51,001	52,000	-	1	1	1	-	2	-	1	2	-	1	-	9	2,401	33,259
52,001	53,000	-	3	1	-	1	-	1	2	1	-	-	2	11	2,412	33,831
53,001	54,000	-	-	2	1	1	-	-	2	-	-	-	2	8	2,420	34,255
54,001	55,000	-	-	1	-	1	2	1	-	1	3	4	-	13	2,433	34,957
55,001	56,000	-	-	-	1	2	-	2	1	1	-	1	-	8	2,441	35,397
56,001	57,000	2	1	1	-	-	-	2	-	1	1	1	1	10	2,451	35,957
57,001	58,000	2	2	1	3	-	1	1	1	2	2	1	2	18	2,469	36,983
58,001	59,000	1	-	-	2	2	2	1	1	3	1	1	-	14	2,483	37,795
59,001	60,000	-	1	1	-	-	-	2	-	-	4	2	-	10	2,493	38,385
60,001	61,000	-	-	1	-	-	-	-	2	-	2	1	1	7	2,500	38,805
61,001	62,000	-	1	-	1	1	1	1	-	-	1	2	-	8	2,508	39,293
62,001	63,000	1	-	2	1	-	-	-	-	1	-	-	-	5	2,513	39,603
63,001	64,000	-	-	1	-	1	2	-	2	1	1	-	2	10	2,523	40,233
64,001	65,000	1	1	-	-	-	1	1	-	-	1	1	-	6	2,529	40,617
65,001	66,000	1	-	-	2	1	1	2	-	1	-	-	2	10	2,539	41,267
66,001	67,000	-	1	2	2	-	2	1	1	4	2	2	1	18	2,557	42,455
67,001	68,000	2	-	1	-	-	-	-	-	-	1	1	1	6	2,563	42,857
68,001	69,000	1	1	2	-	-	1	-	-	-	-	-	1	6	2,569	43,265
69,001	70,000	1	-	-	-	-	2	-	-	-	-	1	-	4	2,573	43,541
70,001	71,000	1	1	1	2	1	-	1	-	-	1	1	-	9	2,582	44,171
71,001	72,000	2	1	-	-	3	2	2	-	1	-	1	-	12	2,594	45,023
72,001	73,000	-	-	4	1	-	1	3	-	-	1	-	-	10	2,604	45,743
73,001	74,000	1	1	-	1	-	-	-	-	2	1	3	-	9	2,613	46,400
74,001	75,000	-	1	-	-	2	-	-	2	-	3	-	-	8	2,621	46,992
75,001	76,000	-	1	-	1	-	1	-	1	1	-	-	2	7	2,628	47,517
76,001	77,000	-	2	1	-	1	-	2	2	1	3	-	2	14	2,642	48,581
77,001	78,000	1	2	1	-	-	1	-	-	-	1	-	1	7	2,649	49,120
78,001	79,000	1	-	-	2	-	1	2	2	-	1	2	1	12	2,661	50,056
79,001	80,000	1	-	-	-	1	-	-	1	-	-	1	1	5	2,666	50,451
80,001	81,000	-	-	1	-	-	-	-	1	-	-	-	-	2	2,668	50,611
81,001	82,000	-	2	3	1	1	-	-	1	1	2	1	1	13	2,681	51,664
82,001	83,000	-	1	-	-	-	-	-	-	-	1	-	-	2	2,683	51,828
83,001	84,000	1	-	-	-	-	-	-	-	-	-	1	-	2	2,685	51,994
84,001	85,000	1	1	1	-	1	1	-	2	-	-	1	1	9	2,694	52,750
85,001	86,000	-	2	1	1	2	1	-	1	-	-	1	1	10	2,704	53,600
86,001	87,000	-	-	2	-	1	-	-	1	2	1	1	-	8	2,712	54,289
87,001	88,000	-	-	-	-	2	-	1	-	1	1	-	1	6	2,718	54,811
88,001	89,000	-	-	-	1	-	1	-	-	-	-	1	2	5	2,723	55,251

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
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Witness: Bourassa

Water Usage From:	Water Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
89,001	90,000	1	1	-	1	-	-	-	1	2	1	1	1	9	2,732	56,052
90,001	91,000	1	2	1	3	-	1	1	-	-	1	1	-	11	2,743	57,042
91,001	92,000	-	1	-	1	-	-	1	-	-	-	-	-	3	2,746	57,315
92,001	93,000	1	-	1	-	1	1	-	-	2	1	-	-	7	2,753	57,959
93,001	94,000	-	-	-	-	2	-	-	1	1	1	1	1	7	2,760	58,610
94,001	95,000	-	-	-	1	-	-	1	-	-	-	1	3	6	2,766	59,174
95,001	96,000	-	1	-	-	1	-	1	1	1	-	-	-	5	2,771	59,649
96,001	97,000	-	-	1	1	1	-	-	-	-	-	1	1	5	2,776	60,129
97,001	98,000	-	1	-	-	-	-	1	-	2	-	-	-	4	2,780	60,517
98,001	99,000	-	-	-	-	1	-	-	2	-	-	-	-	3	2,783	60,811
99,001	100,000	-	-	-	-	-	-	1	1	1	-	-	1	4	2,787	61,207
225,000	225,000	1	-	-	-	-	-	-	-	-	-	-	-	1	2,788	61,432
124,484	124,484	1	-	-	-	-	-	-	-	-	-	-	-	1	2,789	61,556
106,660	106,660	1	-	-	-	-	-	-	-	-	-	-	-	1	2,790	61,663
141,240	141,240	1	-	-	-	-	-	-	-	-	-	-	-	1	2,791	61,804
3,140,166	3,140,166	1	-	-	-	-	-	-	-	-	-	-	-	1	2,792	64,944
6,280,332	6,280,332	1	-	-	-	-	-	-	-	-	-	-	-	1	2,793	71,224
442,727	442,727	1	-	-	-	-	-	-	-	-	-	-	-	1	2,794	71,667
200,000	200,000	1	-	-	-	-	-	-	-	-	-	-	-	1	2,795	71,867
139,000	139,000	1	-	-	-	-	-	-	-	-	-	-	-	1	2,796	72,006
569,757	569,757	1	-	-	-	-	-	-	-	-	-	-	-	1	2,797	72,576
119,219	119,219	1	-	-	-	-	-	-	-	-	-	-	-	1	2,798	72,695
1,897,813	1,897,813	1	-	-	-	-	-	-	-	-	-	-	-	1	2,799	74,593
516,000	516,000	1	-	-	-	-	-	-	-	-	-	-	-	1	2,800	75,109
127,701	127,701	1	-	-	-	-	-	-	-	-	-	-	-	1	2,801	75,237
170,872	170,872	1	-	-	-	-	-	-	-	-	-	-	-	1	2,802	75,408
165,829	165,829	1	-	-	-	-	-	-	-	-	-	-	-	1	2,803	75,573
172,765	172,765	1	-	-	-	-	-	-	-	-	-	-	-	1	2,804	75,746
144,519	144,519	1	-	-	-	-	-	-	-	-	-	-	-	1	2,805	75,891
128,981	128,981	1	-	-	-	-	-	-	-	-	-	-	-	1	2,806	76,020
112,032	112,032	1	-	-	-	-	-	-	-	-	-	-	-	1	2,807	76,132
112,968	112,968	1	-	-	-	-	-	-	-	-	-	-	-	1	2,808	76,245
112,824	112,824	1	-	-	-	-	-	-	-	-	-	-	-	1	2,809	76,357
119,134	119,134	1	-	-	-	-	-	-	-	-	-	-	-	1	2,810	76,477
143,802	143,802	1	-	-	-	-	-	-	-	-	-	-	-	1	2,811	76,620
404,572	404,572	1	-	-	-	-	-	-	-	-	-	-	-	1	2,812	77,025
6,272,000	6,272,000	1	-	-	-	-	-	-	-	-	-	-	-	1	2,813	83,297
125,476	125,476	1	-	-	-	-	-	-	-	-	-	-	-	1	2,814	83,422
175,302	175,302	1	-	-	-	-	-	-	-	-	-	-	-	1	2,815	83,598
128,783	128,783	1	-	-	-	-	-	-	-	-	-	-	-	1	2,816	83,727
450,364	450,364	1	-	-	-	-	-	-	-	-	-	-	-	1	2,817	84,177
169,072	169,072	1	-	-	-	-	-	-	-	-	-	-	-	1	2,818	84,346
100,668	100,668	-	1	-	-	-	-	-	-	1	-	-	-	2	2,820	84,547
166,000	166,000	-	1	-	-	-	-	-	-	-	-	-	-	1	2,821	84,713
172,353	172,353	-	1	-	-	-	-	-	-	-	-	-	-	1	2,822	84,886

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
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Commercial Measured Service Regular Dom. - Water Usage

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Witness: Bourassa

Water Usage From:	Water Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
652,556	652,556	-	1	-	-	-	-	-	-	-	-	-	-	1	2,823	85,538
126,479	126,479	-	1	-	-	-	-	-	-	-	-	-	-	1	2,824	85,665
1,305,112	1,305,112	-	1	-	-	-	-	-	-	-	-	-	-	1	2,825	86,970
394,904	394,904	-	1	-	-	-	-	-	-	-	-	-	-	1	2,826	87,365
252,000	252,000	-	1	-	-	-	-	-	1	-	-	-	-	2	2,828	87,869
147,000	147,000	-	1	-	-	-	-	-	-	-	-	-	-	1	2,829	88,016
424,813	424,813	-	1	-	-	-	-	-	-	-	-	-	-	1	2,830	88,441
126,476	126,476	-	1	-	-	-	-	-	-	-	-	-	-	1	2,831	88,567
2,134,979	2,134,979	-	1	-	-	-	-	-	-	-	-	-	-	1	2,832	90,702
688,000	688,000	-	1	-	-	-	-	-	-	-	-	-	-	1	2,833	91,390
116,594	116,594	-	1	-	-	-	-	-	-	-	-	-	-	1	2,834	91,507
182,428	182,428	-	1	-	-	-	-	-	-	-	-	-	-	1	2,835	91,689
151,583	151,583	-	1	-	-	-	-	-	-	-	-	-	-	1	2,836	91,841
121,829	121,829	-	1	-	-	-	-	-	-	-	-	-	-	1	2,837	91,962
141,687	141,687	-	1	-	-	-	-	-	-	-	-	-	-	1	2,838	92,104
101,893	101,893	-	1	-	-	-	-	-	-	-	-	-	-	1	2,839	92,206
161,631	161,631	-	1	-	-	-	-	-	-	-	-	-	-	1	2,840	92,368
220,390	220,390	-	1	-	-	-	-	-	-	-	-	-	-	1	2,841	92,588
110,195	110,195	-	1	-	-	-	-	-	-	-	-	-	-	1	2,842	92,698
125,786	125,786	-	1	-	-	-	-	-	-	-	-	-	-	1	2,843	92,824
360,324	360,324	-	1	-	-	-	-	-	-	-	-	-	-	1	2,844	93,184
7,193,000	7,193,000	-	1	-	-	-	-	-	-	-	-	-	-	1	2,845	100,377
130,409	130,409	-	1	-	-	-	-	-	-	-	-	-	-	1	2,846	100,508
127,914	127,914	-	1	-	-	-	-	-	-	-	-	-	-	1	2,847	100,636
552,687	552,687	-	1	-	-	-	-	-	-	-	-	-	-	1	2,848	101,188
177,626	177,626	-	1	-	-	-	-	-	-	-	-	-	-	1	2,849	101,366
198,000	198,000	-	-	1	-	-	-	-	-	-	-	-	-	1	2,850	101,564
547,425	547,425	-	-	1	-	-	-	-	-	-	-	-	-	1	2,851	102,111
459,888	459,888	-	-	1	-	-	-	-	-	-	-	-	-	1	2,852	102,571
229,599	229,599	-	-	1	-	-	-	-	-	-	-	-	-	1	2,853	102,801
165,668	165,668	-	-	1	-	-	-	-	-	-	-	-	-	1	2,854	102,967
400,476	400,476	-	-	1	-	-	-	-	-	-	-	-	-	1	2,855	103,367
130,091	130,091	-	-	1	-	-	-	-	-	-	-	-	-	1	2,856	103,497
2,275,294	2,275,294	-	-	1	-	-	-	-	-	-	-	-	-	1	2,857	105,772
845,000	845,000	-	-	1	-	-	-	-	-	-	-	-	-	1	2,858	106,617
114,861	114,861	-	-	1	-	-	-	-	-	-	-	-	-	1	2,859	106,732
123,655	123,655	-	-	1	-	-	-	-	-	-	-	-	-	1	2,860	106,856
133,829	133,829	-	-	1	-	-	-	-	-	-	-	-	-	1	2,861	106,990
253,417	253,417	-	-	1	-	-	-	-	-	-	-	-	-	1	2,862	107,243
136,460	136,460	-	-	1	-	-	-	-	-	-	-	-	-	1	2,863	107,380
116,682	116,682	-	-	1	-	-	-	-	-	-	-	-	-	1	2,864	107,496
193,217	193,217	-	-	1	-	-	-	-	-	-	-	-	-	1	2,865	107,690
107,743	107,743	-	-	1	-	-	-	-	-	-	-	-	-	1	2,866	107,797
130,291	130,291	-	-	1	-	-	-	-	-	-	-	-	-	1	2,867	107,928
412,385	412,385	-	-	1	-	-	-	-	-	-	-	-	-	1	2,868	108,340

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
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Water Usage From:	Water Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
7,423,000	7,423,000	-	-	1	-	-	-	-	-	-	-	-	-	1	2,869	115,763
129,342	129,342	-	-	1	-	-	-	-	-	-	-	-	-	1	2,870	115,892
114,380	114,380	-	-	1	-	-	-	-	-	-	-	-	-	1	2,871	116,007
694,567	694,567	-	-	1	-	-	-	-	-	-	-	-	-	1	2,872	116,701
181,463	181,463	-	-	1	-	-	-	-	-	-	-	-	-	1	2,873	116,883
964,000	964,000	-	-	-	1	-	-	-	-	-	-	-	-	1	2,874	117,847
180,000	180,000	-	-	-	1	-	-	-	-	-	-	-	-	1	2,875	118,027
591,409	591,409	-	-	-	1	-	-	-	-	-	-	-	-	1	2,876	118,618
441,853	441,853	-	-	-	1	-	-	-	-	-	-	-	-	1	2,877	119,060
257,000	257,000	-	-	-	1	-	-	-	-	-	-	-	-	1	2,878	119,317
466,107	466,107	-	-	-	1	-	-	-	-	-	-	-	-	1	2,879	119,783
132,818	132,818	-	-	-	1	-	-	-	-	-	-	-	-	1	2,880	119,916
2,350,265	2,350,265	-	-	-	1	-	-	-	-	-	-	-	-	1	2,881	122,266
835,000	835,000	-	-	-	1	-	-	-	-	-	-	-	-	1	2,882	123,101
163,751	163,751	-	-	-	1	-	-	-	-	-	-	-	-	1	2,883	123,265
147,439	147,439	-	-	-	1	-	-	-	-	-	-	-	-	1	2,884	123,412
327,219	327,219	-	-	-	1	-	-	-	-	-	-	-	-	1	2,885	123,740
163,142	163,142	-	-	-	1	-	-	-	-	-	-	-	-	1	2,886	123,903
101,529	101,529	-	-	-	1	-	-	-	-	-	-	-	-	1	2,887	124,004
129,257	129,257	-	-	-	1	-	-	-	-	-	-	-	-	1	2,888	124,133
109,019	109,019	-	-	-	1	-	-	-	-	-	-	-	-	1	2,889	124,242
126,099	126,099	-	-	-	1	-	-	-	-	-	-	-	-	1	2,890	124,369
111,920	111,920	-	-	-	1	-	-	-	-	-	-	-	-	1	2,891	124,481
120,035	120,035	-	-	-	1	-	-	-	-	-	-	-	-	1	2,892	124,601
108,880	108,880	-	-	-	1	-	-	-	-	-	-	-	-	1	2,893	124,709
575,000	575,000	-	-	-	1	-	-	-	-	-	-	-	-	1	2,894	125,284
649,000	649,000	-	-	-	1	-	-	-	-	-	-	-	-	1	2,895	125,933
600,944	600,944	-	-	-	1	-	-	-	-	-	-	-	-	1	2,896	126,534
7,053,000	7,053,000	-	-	-	1	-	-	-	-	-	-	-	-	1	2,897	133,587
255,751	255,751	-	-	-	1	-	-	-	-	-	-	-	-	1	2,898	133,843
163,933	163,933	-	-	-	1	-	-	-	-	-	-	-	-	1	2,899	134,007
142,719	142,719	-	-	-	1	-	-	-	-	-	-	-	-	1	2,900	134,150
167,179	167,179	-	-	-	1	-	-	-	-	-	-	-	-	1	2,901	134,317
166,369	166,369	-	-	-	1	-	-	-	-	-	-	-	-	1	2,902	134,483
597,294	597,294	-	-	-	1	-	-	-	-	-	-	-	-	1	2,903	135,081
176,893	176,893	-	-	-	1	-	-	-	-	-	-	-	-	1	2,904	135,258
104,861	104,861	-	-	-	-	1	-	-	-	-	-	-	-	1	2,905	135,362
182,000	182,000	-	-	-	-	1	-	-	-	-	-	-	-	1	2,906	135,544
197,000	197,000	-	-	-	-	1	-	-	-	-	-	-	-	1	2,907	135,741
1,165,369	1,165,369	-	-	-	-	1	-	-	-	-	-	-	-	1	2,908	136,907
443,294	443,294	-	-	-	-	1	-	-	-	-	-	-	-	1	2,909	137,350
200,273	200,273	-	-	-	-	1	-	-	-	-	-	-	-	1	2,910	137,550
588,040	588,040	-	-	-	-	1	-	-	-	-	-	-	-	1	2,911	138,138
568,698	568,698	-	-	-	-	1	-	-	-	-	-	-	-	1	2,912	138,707
468,000	468,000	-	-	-	-	1	-	-	-	-	-	-	-	1	2,913	139,175

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
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Witness: Bourassa

Water Usage From:	Water Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
445,709	445,709	-	-	-	-	1	-	-	-	-	-	-	-	1	2,914	139,621
147,872	147,872	-	-	-	-	1	-	-	-	-	-	-	-	1	2,915	139,769
2,032,933	2,032,933	-	-	-	-	1	-	-	-	-	-	-	-	1	2,916	141,802
1,317,000	1,317,000	-	-	-	-	1	-	-	-	-	-	-	-	1	2,917	143,119
155,968	155,968	-	-	-	-	1	-	-	-	-	-	-	-	1	2,918	143,275
151,265	151,265	-	-	-	-	1	-	-	-	-	-	-	-	1	2,919	143,426
104,829	104,829	-	-	-	-	1	-	-	-	-	-	-	-	1	2,920	143,531
236,505	236,505	-	-	-	-	1	-	-	-	-	-	-	-	1	2,921	143,767
102,679	102,679	-	-	-	-	1	-	-	-	-	-	-	-	1	2,922	143,870
147,270	147,270	-	-	-	-	1	-	-	-	-	-	-	-	1	2,923	144,017
185,882	185,882	-	-	-	-	1	-	-	-	-	-	-	-	1	2,924	144,203
365,703	365,703	-	-	-	-	1	-	-	-	-	-	-	-	1	2,925	144,569
155,051	155,051	-	-	-	-	1	-	-	-	-	-	-	-	1	2,926	144,724
149,275	149,275	-	-	-	-	1	-	-	-	-	-	-	-	1	2,927	144,873
100,920	100,920	-	-	-	-	1	-	-	-	-	-	-	-	1	2,928	144,974
115,417	115,417	-	-	-	-	1	-	-	-	-	-	-	-	1	2,929	145,089
152,511	152,511	-	-	-	-	1	-	-	-	-	-	-	-	1	2,930	145,242
122,032	122,032	-	-	-	-	1	-	-	-	-	-	-	-	1	2,931	145,364
1,762,000	1,762,000	-	-	-	-	1	-	-	-	-	-	-	-	1	2,932	147,126
3,953,000	3,953,000	-	-	-	-	1	-	-	-	-	-	-	-	1	2,933	151,079
605,310	605,310	-	-	-	-	1	-	-	-	-	-	-	-	1	2,934	151,684
9,276,000	9,276,000	-	-	-	-	1	-	-	-	-	-	-	-	1	2,935	160,960
1,608,439	1,608,439	-	-	-	-	1	-	-	-	-	-	-	-	1	2,936	162,569
3,002,439	3,002,439	-	-	-	-	1	-	-	-	-	-	-	-	1	2,937	165,571
134,305	134,305	-	-	-	-	1	-	-	-	-	-	-	-	1	2,938	165,705
130,334	130,334	-	-	-	-	1	-	-	-	-	-	-	-	1	2,939	165,836
150,773	150,773	-	-	-	-	1	-	-	-	-	-	-	-	1	2,940	165,986
665,324	665,324	-	-	-	-	1	-	-	-	-	-	-	-	1	2,941	166,652
203,791	203,791	-	-	-	-	1	-	-	-	-	-	-	-	1	2,942	166,856
320,826	320,826	-	-	-	-	-	1	-	-	-	-	-	-	1	2,943	167,176
100,302	100,302	-	-	-	-	-	1	-	-	-	-	-	-	1	2,944	167,277
216,000	216,000	-	-	-	-	-	1	-	-	-	-	-	-	1	2,945	167,493
442,952	442,952	-	-	-	-	-	1	-	-	-	-	-	-	1	2,946	167,936
4,156,122	4,156,122	-	-	-	-	-	1	-	-	-	-	-	-	1	2,947	172,092
232,605	232,605	-	-	-	-	-	1	-	-	-	-	-	-	1	2,948	172,324
138,000	138,000	-	-	-	-	-	1	-	-	-	-	-	-	1	2,949	172,462
259,158	259,158	-	-	-	-	-	1	-	-	-	-	-	-	1	2,950	172,722
308,075	308,075	-	-	-	-	-	1	-	-	-	-	-	-	1	2,951	173,030
620,206	620,206	-	-	-	-	-	1	-	-	-	-	-	-	1	2,952	173,650
600,358	600,358	-	-	-	-	-	1	-	-	-	-	-	-	1	2,953	174,250
584,000	584,000	-	-	-	-	-	1	-	-	-	-	-	-	1	2,954	174,834
393,973	393,973	-	-	-	-	-	1	-	-	-	-	-	-	1	2,955	175,228
128,297	128,297	-	-	-	-	-	1	-	-	-	-	-	-	1	2,956	175,358
2,623,088	2,623,088	-	-	-	-	-	1	-	-	-	-	-	-	1	2,957	177,980
317,000	317,000	-	-	-	-	-	1	-	-	-	-	-	-	1	2,958	178,297

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Commercial Measured Service Regular Dom. - Water Usage

Exhibit
Schedule H-5
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Witness: Bourassa

Water Usage From:	Water Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
108,000	108,000	-	-	-	-	-	1	-	-	1	-	-	-	2	2,960	178,513
117,099	117,099	-	-	-	-	-	1	-	-	-	-	-	-	1	2,961	178,630
171,634	171,634	-	-	-	-	-	1	-	-	-	-	-	-	1	2,962	178,801
139,532	139,532	-	-	-	-	-	1	-	-	-	-	-	-	1	2,963	178,941
160,527	160,527	-	-	-	-	-	1	-	-	-	-	-	-	1	2,964	179,101
128,775	128,775	-	-	-	-	-	1	-	-	-	-	-	-	1	2,965	179,230
261,495	261,495	-	-	-	-	-	1	-	-	-	-	-	-	1	2,966	179,492
311,816	311,816	-	-	-	-	-	1	-	-	-	-	-	-	1	2,967	179,803
153,107	153,107	-	-	-	-	-	1	-	-	-	-	-	-	1	2,968	179,957
151,270	151,270	-	-	-	-	-	1	-	-	-	-	-	-	1	2,969	180,108
125,519	125,519	-	-	-	-	-	1	-	-	-	-	-	-	1	2,970	180,233
137,516	137,516	-	-	-	-	-	1	-	-	-	-	-	-	1	2,971	180,371
100,500	100,500	-	-	-	-	-	1	-	-	-	-	-	-	1	2,972	180,471
115,147	115,147	-	-	-	-	-	1	-	-	-	-	-	-	1	2,973	180,586
4,077,000	4,077,000	-	-	-	-	-	1	-	-	-	-	-	-	1	2,974	184,663
7,118,000	7,118,000	-	-	-	-	-	1	-	-	-	-	-	-	1	2,975	191,781
427,481	427,481	-	-	-	-	-	1	-	-	-	-	-	-	1	2,976	192,209
8,939,000	8,939,000	-	-	-	-	-	1	-	-	-	-	-	-	1	2,977	201,148
1,807,120	1,807,120	-	-	-	-	-	1	-	-	-	-	-	-	1	2,978	202,955
4,820,837	4,820,837	-	-	-	-	-	1	-	-	-	-	-	-	1	2,979	207,776
119,824	119,824	-	-	-	-	-	1	-	-	-	-	-	-	1	2,980	207,896
153,184	153,184	-	-	-	-	-	1	-	-	-	-	-	-	1	2,981	208,049
174,842	174,842	-	-	-	-	-	1	-	-	-	-	-	-	1	2,982	208,224
589,997	589,997	-	-	-	-	-	1	-	-	-	-	-	-	1	2,983	208,814
211,564	211,564	-	-	-	-	-	1	-	-	-	-	-	-	1	2,984	209,025
294,690	294,690	-	-	-	-	-	-	1	-	-	-	-	-	1	2,985	209,320
221,000	221,000	-	-	-	-	-	-	1	-	-	-	-	-	1	2,986	209,541
123,810	123,810	-	-	-	-	-	-	1	-	-	-	-	-	1	2,987	209,665
2,105,623	2,105,623	-	-	-	-	-	-	1	-	-	-	-	-	1	2,988	211,770
428,885	428,885	-	-	-	-	-	-	1	-	-	-	-	-	1	2,989	212,199
713,000	713,000	-	-	-	-	-	-	1	-	-	-	-	-	1	2,990	212,912
658,056	658,056	-	-	-	-	-	-	1	-	-	-	-	-	1	2,991	213,570
637,690	637,690	-	-	-	-	-	-	1	-	-	-	-	-	1	2,992	214,208
353,449	353,449	-	-	-	-	-	-	1	-	-	-	-	-	1	2,993	214,562
455,126	455,126	-	-	-	-	-	-	1	-	-	-	-	-	1	2,994	215,017
137,481	137,481	-	-	-	-	-	-	1	-	-	-	-	-	1	2,995	215,154
157,548	157,548	-	-	-	-	-	-	1	-	-	-	-	-	1	2,996	215,312
4,725,460	4,725,460	-	-	-	-	-	-	1	-	-	-	-	-	1	2,997	220,037
298,000	298,000	-	-	-	-	-	-	1	-	-	-	-	-	1	2,998	220,335
115,444	115,444	-	-	-	-	-	-	1	-	-	-	-	-	1	2,999	220,451
279,642	279,642	-	-	-	-	-	-	1	-	-	-	-	-	1	3,000	220,730
163,358	163,358	-	-	-	-	-	-	1	-	-	-	-	-	1	3,001	220,894
133,003	133,003	-	-	-	-	-	-	1	-	-	-	-	-	1	3,002	221,027
176,631	176,631	-	-	-	-	-	-	1	-	-	-	-	-	1	3,003	221,203
191,321	191,321	-	-	-	-	-	-	1	-	-	-	-	-	1	3,004	221,395

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Commercial Measured Service Regular Dom. - Water Usage

Exhibit
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Witness: Bourassa

Water Usage From:	Water Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
296,754	296,754	-	-	-	-	-	-	1	-	-	-	-	-	1	3,005	221,691
298,489	298,489	-	-	-	-	-	-	1	-	-	-	-	-	1	3,006	221,990
166,275	166,275	-	-	-	-	-	-	1	-	-	-	-	-	1	3,007	222,156
208,864	208,864	-	-	-	-	-	-	1	-	-	-	-	-	1	3,008	222,365
109,551	109,551	-	-	-	-	-	-	1	-	-	-	-	-	1	3,009	222,474
161,072	161,072	-	-	-	-	-	-	1	-	-	-	-	-	1	3,010	222,636
141,567	141,567	-	-	-	-	-	-	1	-	-	-	-	-	1	3,011	222,777
4,705,000	4,705,000	-	-	-	-	-	-	1	-	-	-	-	-	1	3,012	227,482
5,352,000	5,352,000	-	-	-	-	-	-	1	-	-	-	-	-	1	3,013	232,834
517,850	517,850	-	-	-	-	-	-	1	-	-	-	-	-	1	3,014	233,352
10,988,000	10,988,000	-	-	-	-	-	-	1	-	-	-	-	-	1	3,015	244,340
2,710,053	2,710,053	-	-	-	-	-	-	1	-	-	-	-	-	1	3,016	247,050
5,552,476	5,552,476	-	-	-	-	-	-	1	-	-	-	-	-	1	3,017	252,603
129,893	129,893	-	-	-	-	-	-	1	-	-	-	-	-	1	3,018	252,732
111,110	111,110	-	-	-	-	-	-	1	-	-	-	-	-	1	3,019	252,844
544,048	544,048	-	-	-	-	-	-	1	-	-	-	-	-	1	3,020	253,388
104,126	104,126	-	-	-	-	-	-	1	-	-	-	-	-	1	3,021	253,492
178,596	178,596	-	-	-	-	-	-	1	-	-	-	-	-	1	3,022	253,670
328,056	328,056	-	-	-	-	-	-	-	1	-	-	-	-	1	3,023	253,998
103,203	103,203	-	-	-	-	-	-	-	1	-	-	-	-	1	3,024	254,102
2,108,912	2,108,912	-	-	-	-	-	-	-	1	-	-	-	-	1	3,025	256,210
111,746	111,746	-	-	-	-	-	-	-	1	-	-	-	-	1	3,026	256,322
1,359,059	1,359,059	-	-	-	-	-	-	-	1	-	-	-	-	1	3,027	257,681
935,000	935,000	-	-	-	-	-	-	-	1	-	-	-	-	1	3,028	258,616
555,925	555,925	-	-	-	-	-	-	-	1	-	-	-	-	1	3,029	259,172
538,842	538,842	-	-	-	-	-	-	-	1	-	-	-	-	1	3,030	259,711
326,757	326,757	-	-	-	-	-	-	-	1	-	-	-	-	1	3,031	260,038
367,160	367,160	-	-	-	-	-	-	-	1	-	-	-	-	1	3,032	260,405
2,405,984	2,405,984	-	-	-	-	-	-	-	1	-	-	-	-	1	3,033	262,811
1,964,000	1,964,000	-	-	-	-	-	-	-	1	-	-	-	-	1	3,034	264,775
232,497	232,497	-	-	-	-	-	-	-	1	-	-	-	-	1	3,035	265,007
143,120	143,120	-	-	-	-	-	-	-	1	-	-	-	-	1	3,036	265,151
170,038	170,038	-	-	-	-	-	-	-	1	-	-	-	-	1	3,037	265,321
112,743	112,743	-	-	-	-	-	-	-	1	-	-	-	-	1	3,038	265,433
166,388	166,388	-	-	-	-	-	-	-	1	-	-	-	-	1	3,039	265,600
238,158	238,158	-	-	-	-	-	-	-	1	-	-	-	-	1	3,040	265,838
181,757	181,757	-	-	-	-	-	-	-	1	-	-	-	-	1	3,041	266,020
248,171	248,171	-	-	-	-	-	-	-	1	-	-	-	-	1	3,042	266,268
227,652	227,652	-	-	-	-	-	-	-	1	-	-	-	-	1	3,043	266,495
110,094	110,094	-	-	-	-	-	-	-	1	-	-	-	-	1	3,044	266,606
120,147	120,147	-	-	-	-	-	-	-	1	-	-	-	-	1	3,045	266,726
142,864	142,864	-	-	-	-	-	-	-	1	-	-	-	-	1	3,046	266,869
204,059	204,059	-	-	-	-	-	-	-	1	-	-	-	-	1	3,047	267,073
140,850	140,850	-	-	-	-	-	-	-	1	-	-	-	-	1	3,048	267,213
8,530,000	8,530,000	-	-	-	-	-	-	-	1	-	-	-	-	1	3,049	275,743

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Commercial Measured Service Regular Dom. - Water Usage

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Schedule H-5
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Witness: Bourassa

Water Usage From:	Water Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
9,084,000	9,084,000	-	-	-	-	-	-	-	1	-	-	-	-	1	3,050	284,827
422,615	422,615	-	-	-	-	-	-	-	1	-	-	-	-	1	3,051	285,250
9,655,000	9,655,000	-	-	-	-	-	-	-	1	-	-	-	-	1	3,052	294,905
2,345,374	2,345,374	-	-	-	-	-	-	-	1	-	-	-	-	1	3,053	297,250
5,102,265	5,102,265	-	-	-	-	-	-	-	1	-	-	-	-	1	3,054	302,353
119,620	119,620	-	-	-	-	-	-	-	1	-	-	-	-	1	3,055	302,472
545,957	545,957	-	-	-	-	-	-	-	1	-	-	-	-	1	3,056	303,018
554,316	554,316	-	-	-	-	-	-	-	1	-	-	-	-	1	3,057	303,573
166,532	166,532	-	-	-	-	-	-	-	1	-	-	-	-	1	3,058	303,739
394,027	394,027	-	-	-	-	-	-	-	-	1	-	-	-	1	3,059	304,133
259,000	259,000	-	-	-	-	-	-	-	-	1	-	-	-	1	3,060	304,392
165,816	165,816	-	-	-	-	-	-	-	-	1	-	-	-	1	3,061	304,558
242,000	242,000	-	-	-	-	-	-	-	-	1	-	-	-	1	3,062	304,800
2,159,893	2,159,893	-	-	-	-	-	-	-	-	1	-	-	-	1	3,063	306,960
114,580	114,580	-	-	-	-	-	-	-	-	1	-	-	-	1	3,064	307,074
1,444,963	1,444,963	-	-	-	-	-	-	-	-	1	-	-	-	1	3,065	308,519
780,000	780,000	-	-	-	-	-	-	-	-	1	-	-	-	1	3,066	309,299
644,420	644,420	-	-	-	-	-	-	-	-	1	-	-	-	1	3,067	309,944
623,428	623,428	-	-	-	-	-	-	-	-	1	-	-	-	1	3,068	310,567
351,075	351,075	-	-	-	-	-	-	-	-	1	-	-	-	1	3,069	310,918
115,266	115,266	-	-	-	-	-	-	-	-	1	-	-	-	1	3,070	311,034
414,845	414,845	-	-	-	-	-	-	-	-	1	-	-	-	1	3,071	311,448
2,862,580	2,862,580	-	-	-	-	-	-	-	-	1	-	-	-	1	3,072	314,311
3,002,000	3,002,000	-	-	-	-	-	-	-	-	1	-	-	-	1	3,073	317,313
113,334	113,334	-	-	-	-	-	-	-	-	1	-	-	-	1	3,074	317,426
130,425	130,425	-	-	-	-	-	-	-	-	1	-	-	-	1	3,075	317,557
211,754	211,754	-	-	-	-	-	-	-	-	1	-	-	-	1	3,076	317,769
157,487	157,487	-	-	-	-	-	-	-	-	1	-	-	-	1	3,077	317,926
114,612	114,612	-	-	-	-	-	-	-	-	1	-	-	-	1	3,078	318,041
116,174	116,174	-	-	-	-	-	-	-	-	1	-	-	-	1	3,079	318,157
139,024	139,024	-	-	-	-	-	-	-	-	1	-	-	-	1	3,080	318,296
110,799	110,799	-	-	-	-	-	-	-	-	1	-	-	-	1	3,081	318,407
111,939	111,939	-	-	-	-	-	-	-	-	1	-	-	-	1	3,082	318,519
169,414	169,414	-	-	-	-	-	-	-	-	1	-	-	-	1	3,083	318,688
285,155	285,155	-	-	-	-	-	-	-	-	1	-	-	-	1	3,084	318,973
284,516	284,516	-	-	-	-	-	-	-	-	1	-	-	-	1	3,085	319,258
261,757	261,757	-	-	-	-	-	-	-	-	1	-	-	-	1	3,086	319,519
181,586	181,586	-	-	-	-	-	-	-	-	1	-	-	-	1	3,087	319,701
183,155	183,155	-	-	-	-	-	-	-	-	1	-	-	-	1	3,088	319,884
178,168	178,168	-	-	-	-	-	-	-	-	1	-	-	-	1	3,089	320,062
110,086	110,086	-	-	-	-	-	-	-	-	1	-	-	-	1	3,090	320,172
142,417	142,417	-	-	-	-	-	-	-	-	1	-	-	-	1	3,091	320,315
143,532	143,532	-	-	-	-	-	-	-	-	1	-	-	-	1	3,092	320,458
131,620	131,620	-	-	-	-	-	-	-	-	1	-	-	-	1	3,093	320,590
115,976	115,976	-	-	-	-	-	-	-	-	1	-	-	-	1	3,094	320,706

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Commercial Measured Service Regular Dom. - Water Usage

Exhibit
Schedule H-5
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Witness: Bourassa

Water Usage From:	Water Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
11,133,000	11,133,000	-	-	-	-	-	-	-	-	1	-	-	-	1	3,095	331,839
7,371,000	7,371,000	-	-	-	-	-	-	-	-	1	-	-	-	1	3,096	339,210
402,837	402,837	-	-	-	-	-	-	-	-	1	-	-	-	1	3,097	339,613
11,273,000	11,273,000	-	-	-	-	-	-	-	-	1	-	-	-	1	3,098	350,886
2,497,297	2,497,297	-	-	-	-	-	-	-	-	1	-	-	-	1	3,099	353,383
5,957,211	5,957,211	-	-	-	-	-	-	-	-	1	-	-	-	1	3,100	359,340
125,588	125,588	-	-	-	-	-	-	-	-	1	-	-	-	1	3,101	359,466
112,957	112,957	-	-	-	-	-	-	-	-	1	-	-	-	1	3,102	359,579
742,799	742,799	-	-	-	-	-	-	-	-	1	-	-	-	1	3,103	360,322
204,235	204,235	-	-	-	-	-	-	-	-	1	-	-	-	1	3,104	360,526
174,436	174,436	-	-	-	-	-	-	-	-	-	1	-	-	1	3,105	360,700
201,000	201,000	-	-	-	-	-	-	-	-	-	1	-	-	1	3,106	360,901
124,291	124,291	-	-	-	-	-	-	-	-	-	1	-	-	1	3,107	361,026
204,591	204,591	-	-	-	-	-	-	-	-	-	1	-	-	1	3,108	361,230
1,452,848	1,452,848	-	-	-	-	-	-	-	-	-	1	-	-	1	3,109	362,683
2,757,529	2,757,529	-	-	-	-	-	-	-	-	-	1	-	-	1	3,110	365,441
692,000	692,000	-	-	-	-	-	-	-	-	-	1	-	-	1	3,111	366,133
567,366	567,366	-	-	-	-	-	-	-	-	-	1	-	-	1	3,112	366,700
238,037	238,037	-	-	-	-	-	-	-	-	-	1	-	-	1	3,113	366,938
585,730	585,730	-	-	-	-	-	-	-	-	-	1	-	-	1	3,114	367,524
404,957	404,957	-	-	-	-	-	-	-	-	-	1	-	-	1	3,115	367,929
1,568,545	1,568,545	-	-	-	-	-	-	-	-	-	1	-	-	1	3,116	369,497
2,100,000	2,100,000	-	-	-	-	-	-	-	-	-	1	-	-	1	3,117	371,597
101,866	101,866	-	-	-	-	-	-	-	-	-	1	-	-	1	3,118	371,699
116,770	116,770	-	-	-	-	-	-	-	-	-	1	-	-	1	3,119	371,816
135,586	135,586	-	-	-	-	-	-	-	-	-	1	-	-	1	3,120	371,951
142,545	142,545	-	-	-	-	-	-	-	-	-	1	-	-	1	3,121	372,094
107,642	107,642	-	-	-	-	-	-	-	-	-	1	-	-	1	3,122	372,202
116,096	116,096	-	-	-	-	-	-	-	-	-	1	-	-	1	3,123	372,318
166,500	166,500	-	-	-	-	-	-	-	-	-	1	-	-	1	3,124	372,484
311,698	311,698	-	-	-	-	-	-	-	-	-	1	-	-	1	3,125	372,796
263,797	263,797	-	-	-	-	-	-	-	-	-	1	-	-	1	3,126	373,060
220,439	220,439	-	-	-	-	-	-	-	-	-	1	-	-	1	3,127	373,280
168,238	168,238	-	-	-	-	-	-	-	-	-	1	-	-	1	3,128	373,448
113,310	113,310	-	-	-	-	-	-	-	-	-	1	-	-	1	3,129	373,562
101,144	101,144	-	-	-	-	-	-	-	-	-	1	-	-	1	3,130	373,663
12,639,000	12,639,000	-	-	-	-	-	-	-	-	-	1	-	-	1	3,131	386,302
3,288,000	3,288,000	-	-	-	-	-	-	-	-	-	1	-	-	1	3,132	389,590
385,468	385,468	-	-	-	-	-	-	-	-	-	1	-	-	1	3,133	389,975
8,512,000	8,512,000	-	-	-	-	-	-	-	-	-	1	-	-	1	3,134	398,487
2,287,243	2,287,243	-	-	-	-	-	-	-	-	-	1	-	-	1	3,135	400,775
5,333,104	5,333,104	-	-	-	-	-	-	-	-	-	1	-	-	1	3,136	406,108
146,262	146,262	-	-	-	-	-	-	-	-	-	1	-	-	1	3,137	406,254
433,949	433,949	-	-	-	-	-	-	-	-	-	1	-	-	1	3,138	406,688
121,682	121,682	-	-	-	-	-	-	-	-	-	1	-	-	1	3,139	406,810

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Commercial Measured Service Regular Dom. - Water Usage

Exhibit
Schedule H-5
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Witness: Bourassa

Water Usage From:	Water Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
650,492	650,492	-	-	-	-	-	-	-	-	-	1	-	-	1	3,140	407,460
162,965	162,965	-	-	-	-	-	-	-	-	-	1	-	-	1	3,141	407,623
206,775	206,775	-	-	-	-	-	-	-	-	-	-	1	-	1	3,142	407,830
238,000	238,000	-	-	-	-	-	-	-	-	-	-	1	-	1	3,143	408,068
312,572	312,572	-	-	-	-	-	-	-	-	-	-	1	-	1	3,144	408,380
1,132,353	1,132,353	-	-	-	-	-	-	-	-	-	-	1	-	1	3,145	409,513
761,487	761,487	-	-	-	-	-	-	-	-	-	-	1	-	1	3,146	410,274
393,000	393,000	-	-	-	-	-	-	-	-	-	-	1	-	1	3,147	410,667
649,324	649,324	-	-	-	-	-	-	-	-	-	-	1	-	1	3,148	411,317
608,484	608,484	-	-	-	-	-	-	-	-	-	-	1	-	1	3,149	411,925
257,433	257,433	-	-	-	-	-	-	-	-	-	-	1	-	1	3,150	412,182
325,741	325,741	-	-	-	-	-	-	-	-	-	-	1	-	1	3,151	412,508
186,904	186,904	-	-	-	-	-	-	-	-	-	-	1	-	1	3,152	412,695
1,494,198	1,494,198	-	-	-	-	-	-	-	-	-	-	1	-	1	3,153	414,189
1,700,000	1,700,000	-	-	-	-	-	-	-	-	-	-	1	-	1	3,154	415,889
121,976	121,976	-	-	-	-	-	-	-	-	-	-	1	-	1	3,155	416,011
115,484	115,484	-	-	-	-	-	-	-	-	-	-	1	-	1	3,156	416,127
165,848	165,848	-	-	-	-	-	-	-	-	-	-	1	-	1	3,157	416,293
114,227	114,227	-	-	-	-	-	-	-	-	-	-	1	-	1	3,158	416,407
102,310	102,310	-	-	-	-	-	-	-	-	-	-	1	-	1	3,159	416,509
104,019	104,019	-	-	-	-	-	-	-	-	-	-	1	-	1	3,160	416,613
149,751	149,751	-	-	-	-	-	-	-	-	-	-	1	-	1	3,161	416,763
262,725	262,725	-	-	-	-	-	-	-	-	-	-	1	-	1	3,162	417,026
258,468	258,468	-	-	-	-	-	-	-	-	-	-	1	-	1	3,163	417,284
218,115	218,115	-	-	-	-	-	-	-	-	-	-	1	-	1	3,164	417,502
107,182	107,182	-	-	-	-	-	-	-	-	-	-	1	-	1	3,165	417,609
110,877	110,877	-	-	-	-	-	-	-	-	-	-	1	-	1	3,166	417,720
174,305	174,305	-	-	-	-	-	-	-	-	-	-	1	-	1	3,167	417,895
1,936,000	1,936,000	-	-	-	-	-	-	-	-	-	-	1	-	1	3,168	419,831
1,490,000	1,490,000	-	-	-	-	-	-	-	-	-	-	1	-	1	3,169	421,321
388,920	388,920	-	-	-	-	-	-	-	-	-	-	1	-	1	3,170	421,709
7,681,000	7,681,000	-	-	-	-	-	-	-	-	-	-	1	-	1	3,171	429,390
2,130,759	2,130,759	-	-	-	-	-	-	-	-	-	-	1	-	1	3,172	431,521
4,490,492	4,490,492	-	-	-	-	-	-	-	-	-	-	1	-	1	3,173	436,012
155,235	155,235	-	-	-	-	-	-	-	-	-	-	1	-	1	3,174	436,167
210,965	210,965	-	-	-	-	-	-	-	-	-	-	1	-	1	3,175	436,378
561,754	561,754	-	-	-	-	-	-	-	-	-	-	1	-	1	3,176	436,940
195,174	195,174	-	-	-	-	-	-	-	-	-	-	1	-	1	3,177	437,135
171,000	171,000	-	-	-	-	-	-	-	-	-	-	-	1	1	3,178	437,306
169,000	169,000	-	-	-	-	-	-	-	-	-	-	-	1	1	3,179	437,475
172,898	172,898	-	-	-	-	-	-	-	-	-	-	-	1	1	3,180	437,648
1,719,096	1,719,096	-	-	-	-	-	-	-	-	-	-	-	1	1	3,181	439,367
266,028	266,028	-	-	-	-	-	-	-	-	-	-	-	1	1	3,182	439,633
300,976	300,976	-	-	-	-	-	-	-	-	-	-	-	1	1	3,183	439,934
594,527	594,527	-	-	-	-	-	-	-	-	-	-	-	1	1	3,184	440,528

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Commercial Measured Service Regular Dom. - Water Usage

Exhibit
Schedule H-5
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Witness: Bourassa

Water Usage From:	Water Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
598,316	598,316	-	-	-	-	-	-	-	-	-	-	-	1	1	3,185	441,127
304,000	304,000	-	-	-	-	-	-	-	-	-	-	-	1	1	3,186	441,431
340,861	340,861	-	-	-	-	-	-	-	-	-	-	-	1	1	3,187	441,772
350,960	350,960	-	-	-	-	-	-	-	-	-	-	-	1	1	3,188	442,123
304,532	304,532	-	-	-	-	-	-	-	-	-	-	-	1	1	3,189	442,427
1,218,383	1,218,383	-	-	-	-	-	-	-	-	-	-	-	1	1	3,190	443,645
1,145,000	1,145,000	-	-	-	-	-	-	-	-	-	-	-	1	1	3,191	444,790
123,438	123,438	-	-	-	-	-	-	-	-	-	-	-	1	1	3,192	444,914
176,433	176,433	-	-	-	-	-	-	-	-	-	-	-	1	1	3,193	445,090
131,398	131,398	-	-	-	-	-	-	-	-	-	-	-	1	1	3,194	445,222
148,748	148,748	-	-	-	-	-	-	-	-	-	-	-	1	1	3,195	445,370
127,380	127,380	-	-	-	-	-	-	-	-	-	-	-	1	1	3,196	445,498
101,139	101,139	-	-	-	-	-	-	-	-	-	-	-	1	1	3,197	445,599
154,727	154,727	-	-	-	-	-	-	-	-	-	-	-	1	1	3,198	445,754
269,080	269,080	-	-	-	-	-	-	-	-	-	-	-	1	1	3,199	446,023
284,037	284,037	-	-	-	-	-	-	-	-	-	-	-	1	1	3,200	446,307
183,500	183,500	-	-	-	-	-	-	-	-	-	-	-	1	1	3,201	446,490
102,457	102,457	-	-	-	-	-	-	-	-	-	-	-	1	1	3,202	446,593
126,497	126,497	-	-	-	-	-	-	-	-	-	-	-	1	1	3,203	446,719
108,503	108,503	-	-	-	-	-	-	-	-	-	-	-	1	1	3,204	446,828
	-													-	3,212	462,968
Totals		271	267	261	268	263	266	267	268	267	270	274	270	3,212		
													Average Water Use			144,538
													Median Water Use			17,500
													Average # Customers			268

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Commercial Measured Service Regular Dom. - Influent

Exhibit
Schedule H-5
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Witness: Bourassa

Usage From:	Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumulative Billing	Cumulative Gallons (in 1,000's)
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1	1,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,001	2,000	1	-	-	-	-	-	-	-	1	-	1	-	3	3	3
2,001	3,000	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3
3,001	4,000	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3
4,001	5,000	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3
5,001	6,000	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3
6,001	7,000	-	-	-	-	-	-	-	-	-	-	1	1	2	5	15
7,001	8,000	-	-	-	-	-	-	-	-	-	-	-	-	-	5	15
8,001	9,000	-	-	-	1	-	-	-	-	-	-	-	-	1	6	23
9,001	10,000	-	-	-	1	-	1	-	-	-	-	-	1	3	9	50
10,001	11,000	-	-	-	-	-	-	-	-	-	-	1	-	1	10	60
11,001	12,000	-	-	-	-	-	-	-	-	-	-	-	-	-	10	60
12,001	13,000	-	-	-	-	1	-	-	-	-	-	-	-	1	11	72
13,001	14,000	-	-	-	-	-	-	-	-	-	1	-	-	1	12	85
14,001	15,000	-	-	1	-	1	-	1	-	-	-	-	-	3	15	127
15,001	16,000	-	1	1	1	-	-	-	-	-	-	-	-	3	18	172
16,001	17,000	1	-	-	-	-	-	-	-	-	-	-	-	1	19	188
17,001	18,000	-	-	-	-	-	-	-	1	-	-	1	-	2	21	222
18,001	19,000	-	-	-	-	-	-	-	-	-	-	-	-	-	21	222
19,001	20,000	-	1	1	1	-	1	-	-	1	-	-	-	5	26	317
20,001	21,000	-	-	-	-	-	-	-	-	-	-	-	-	-	26	317
21,001	22,000	-	-	-	-	-	-	1	-	-	-	-	-	1	27	338
22,001	23,000	-	-	-	-	-	-	-	-	-	-	-	-	-	27	338
23,001	24,000	-	-	-	-	-	-	-	-	-	-	-	-	-	27	338
24,001	25,000	-	-	-	-	-	-	-	-	-	-	-	-	-	27	338
25,001	26,000	-	-	-	-	-	-	-	-	-	-	-	-	-	27	338
26,001	27,000	-	-	-	-	-	-	-	-	-	-	-	-	-	27	338
27,001	28,000	-	1	-	-	-	-	-	-	-	-	-	-	1	28	365
28,001	29,000	-	-	-	-	-	-	-	-	-	-	-	-	-	28	365
29,001	30,000	-	-	-	-	-	-	-	-	-	-	-	-	-	28	365
30,001	31,000	-	-	-	-	-	-	-	-	1	-	-	-	1	29	395
31,001	32,000	-	-	-	-	-	-	-	-	-	-	-	-	-	29	395
32,001	33,000	-	-	-	-	-	-	-	-	-	-	-	-	-	29	395
33,001	34,000	-	-	-	-	-	-	-	-	-	-	-	-	-	29	395
34,001	35,000	-	-	-	-	-	-	-	1	-	-	-	-	1	30	429
35,001	36,000	-	-	-	-	-	-	-	-	-	-	1	-	1	31	464
36,001	37,000	-	-	-	-	-	-	-	-	-	-	-	-	-	31	464
37,001	38,000	-	-	-	-	-	-	-	-	-	-	-	-	-	31	464
38,001	39,000	1	-	-	-	-	-	-	-	-	-	-	-	1	32	502
39,001	40,000	-	-	-	-	-	-	-	-	-	-	-	-	-	32	502
40,001	41,000	-	-	-	-	-	-	-	-	-	-	-	-	-	32	502

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Commercial Measured Service Regular Dom. - Influent

Exhibit
Schedule H-5
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Witness: Bourassa

Usage From:	Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
41,001	42,000	-	-	-	-	-	-	-	-	-	-	-	-	-	32	502
42,001	43,000	-	-	-	-	-	-	-	-	-	-	-	-	-	32	502
43,001	44,000	-	-	-	-	-	-	-	-	-	-	-	-	-	32	502
44,001	45,000	-	-	-	-	-	-	-	-	-	-	-	1	1	33	546
45,001	46,000	-	-	-	-	-	-	-	-	-	1	-	-	1	34	591
46,001	47,000	-	-	-	-	-	-	-	-	-	-	-	-	-	34	591
47,001	48,000	-	-	-	-	-	-	-	-	-	-	-	-	-	34	591
48,001	49,000	-	-	-	-	-	-	-	-	-	-	-	-	-	34	591
49,001	50,000	-	-	-	1	-	-	-	-	-	-	-	-	1	35	640
50,001	51,000	-	-	-	-	-	-	-	-	1	-	-	-	1	36	690
51,001	52,000	-	-	-	-	-	-	-	-	-	-	-	-	-	36	690
52,001	53,000	-	-	-	-	-	-	-	-	-	-	-	-	-	36	690
53,001	54,000	-	-	-	-	-	-	-	-	-	-	-	-	-	36	690
54,001	55,000	-	-	-	-	-	-	-	-	-	-	-	-	-	36	690
55,001	56,000	-	-	-	-	-	-	-	-	-	-	-	-	-	36	690
56,001	57,000	-	-	-	-	-	-	-	-	-	-	-	-	-	36	690
57,001	58,000	-	-	-	-	-	-	-	-	-	-	-	-	-	36	690
58,001	59,000	-	-	-	-	-	-	-	-	-	-	-	-	-	36	690
59,001	60,000	-	-	-	-	-	-	-	-	-	-	-	-	-	36	690
60,001	61,000	-	-	-	-	-	-	-	-	-	-	-	-	-	36	690
61,001	62,000	-	-	-	-	-	-	-	-	-	-	-	-	-	36	690
62,001	63,000	-	-	-	-	-	-	-	-	-	-	-	-	-	36	690
63,001	64,000	-	-	-	-	-	-	-	-	-	-	-	-	-	36	690
64,001	65,000	-	-	-	-	-	-	-	-	-	-	-	-	-	36	690
65,001	66,000	-	-	-	-	-	-	-	-	-	-	-	-	-	36	690
66,001	67,000	-	-	-	-	-	-	-	-	-	-	-	-	-	36	690
67,001	68,000	-	-	-	-	-	-	-	-	-	-	-	-	-	36	690
68,001	69,000	-	-	-	-	-	-	-	-	-	-	-	-	-	36	690
69,001	70,000	-	-	-	-	-	-	-	-	-	-	-	-	-	36	690
70,001	71,000	-	-	-	-	-	-	-	-	-	-	-	-	-	36	690
71,001	72,000	-	-	-	-	-	-	-	-	-	-	-	-	-	36	690
72,001	73,000	-	-	-	-	-	-	-	-	-	-	-	-	-	36	690
73,001	74,000	-	-	-	-	-	-	-	-	-	-	-	-	-	36	690
74,001	75,000	-	-	-	-	-	-	-	-	-	-	-	-	-	36	690
75,001	76,000	-	-	-	-	-	-	-	-	1	-	-	-	1	37	765
76,001	77,000	-	-	-	-	-	-	-	-	-	-	-	-	-	37	765
77,001	78,000	-	-	-	-	-	-	-	-	-	-	-	-	-	37	765
78,001	79,000	-	-	-	-	-	-	-	-	-	-	-	-	-	37	765
79,001	80,000	-	-	-	-	-	-	-	-	-	-	-	-	-	37	765
80,001	81,000	-	-	-	-	-	-	-	-	-	-	-	-	-	37	765
81,001	82,000	-	-	-	-	-	-	-	-	-	-	-	-	-	37	765
82,001	83,000	-	-	-	-	-	-	-	-	-	-	-	-	-	37	765

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Commercial Measured Service Regular Dom. - Influent

Exhibit
Schedule H-5
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Witness: Bourassa

Usage From:	Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
83,001	84,000	-	-	-	-	-	-	-	-	-	-	-	-	-	37	765
84,001	85,000	-	-	-	-	-	-	-	-	-	-	-	-	-	37	765
85,001	86,000	-	-	-	-	-	-	-	-	-	-	-	-	-	37	765
86,001	87,000	-	-	-	-	-	-	-	-	-	-	-	-	-	37	765
87,001	88,000	-	-	-	-	-	-	-	-	-	-	-	-	-	37	765
88,001	89,000	-	-	-	-	-	-	-	-	-	-	-	-	-	37	765
89,001	90,000	-	-	-	-	-	-	-	-	-	-	-	-	-	37	765
90,001	91,000	-	-	-	-	-	-	-	-	-	-	-	-	-	37	765
91,001	92,000	-	-	-	-	-	-	-	-	-	-	-	-	-	37	765
92,001	93,000	-	-	-	-	-	-	-	-	-	-	-	-	-	37	765
93,001	94,000	-	-	-	-	-	-	-	-	-	-	-	-	-	37	765
94,001	95,000	-	-	-	-	-	-	-	-	-	-	-	-	-	37	765
95,001	96,000	-	-	-	-	-	-	-	-	-	-	-	-	-	37	765
96,001	97,000	-	-	-	-	-	-	-	-	-	-	-	-	-	37	765
97,001	98,000	-	-	-	-	-	-	-	-	-	-	-	-	-	37	765
98,001	99,000	-	-	-	-	-	-	-	-	-	-	-	-	-	37	765
99,001	100,000	-	-	-	-	-	-	-	-	-	-	-	-	-	37	765
17,052,482	17,052,482	1	-	-	-	-	-	-	-	-	-	-	-	1	38	17,818
383,383	383,383	1	-	-	-	-	-	-	-	-	-	-	-	1	39	18,201
15,072,109	15,072,109	-	1	-	-	-	-	-	-	-	-	-	-	1	40	33,273
154,544	154,544	-	1	-	-	-	-	-	-	-	-	-	-	1	41	33,428
194,698,650	194,698,650	-	-	1	-	-	-	-	-	-	-	-	-	1	42	228,126
15,960,330	15,960,330	-	-	1	-	-	-	-	-	-	-	-	-	1	43	244,087
291,111	291,111	-	-	1	-	-	-	-	-	-	-	-	-	1	44	244,378
248,968	248,968	-	-	-	1	-	-	-	-	-	-	-	-	1	45	244,627
15,743,231	15,743,231	-	-	-	1	-	-	-	-	-	-	-	-	1	46	260,370
303,548	303,548	-	-	-	1	-	-	-	-	-	-	-	-	1	47	260,673
274,120	274,120	-	-	-	1	-	-	-	-	-	-	-	-	1	48	260,948
148,715	148,715	-	-	-	-	1	-	-	-	-	-	-	-	1	49	261,096
31,692,000	31,692,000	-	-	-	-	1	-	-	-	-	-	-	-	1	50	292,788
15,846,000	15,846,000	-	-	-	-	1	-	-	-	-	-	-	-	1	51	308,634
282,816	282,816	-	-	-	-	1	-	-	-	-	-	-	-	1	52	308,917
266,567	266,567	-	-	-	-	-	1	-	-	-	-	-	-	1	53	309,184
30,144,000	30,144,000	-	-	-	-	-	1	-	-	-	-	-	-	1	54	339,328
15,072,000	15,072,000	-	-	-	-	-	1	-	-	-	-	-	-	1	55	354,400
322,077	322,077	-	-	-	-	-	1	-	-	-	-	-	-	1	56	354,722
265,197	265,197	-	-	-	-	-	-	1	-	-	-	-	-	1	57	354,987
12,791,000	12,791,000	-	-	-	-	-	-	1	-	-	-	-	-	1	58	367,778
348,914	348,914	-	-	-	-	-	-	1	-	-	-	-	-	1	59	368,127
263,726	263,726	-	-	-	-	-	-	-	1	-	-	-	-	1	60	368,391
16,652,996	16,652,996	-	-	-	-	-	-	-	1	-	-	-	-	1	61	385,044
305,463	305,463	-	-	-	-	-	-	-	1	-	-	-	-	1	62	385,349

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Commercial Measured Service Regular Dom. - Influent

Exhibit
Schedule H-5
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Witness: Bourassa

Usage From:	Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
16,022,366	16,022,366	-	-	-	-	-	-	-	-	1	-	-	-	1	63	401,371
15,869,000	15,869,000	-	-	-	-	-	-	-	-	-	1	-	-	1	64	417,240
1,482,445	1,482,445	-	-	-	-	-	-	-	-	-	1	-	-	1	65	418,723
865,000	865,000	-	-	-	-	-	-	-	-	-	-	1	-	1	66	419,588
15,297,000	15,297,000	-	-	-	-	-	-	-	-	-	-	1	-	1	67	434,885
134,024	134,024	-	-	-	-	-	-	-	-	-	-	1	-	1	68	435,019
15,907,000	15,907,000	-	-	-	-	-	-	-	-	-	-	-	1	1	69	450,926
1,495,000	1,495,000	-	-	-	-	-	-	-	-	-	-	-	1	1	70	452,421
	-													-	70	452,421
	-													-	70	452,421
	-													-	71	453,916
Totals		5	5	6	9	6	6	5	5	6	4	8	6	71		

Average Water Use	6,393,441
Median Water Use	50,500
Average # Customers	6

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Measured Service Commercial (Rest., Motels, Grocery Stores & Dry Cleaning Estab.)

Exhibit
Schedule H-5
Page 44
Witness: Bourassa

Usage From:	Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
-	-	6	6	6	7	6	6	6	6	6	6	7	7	75	75	
1	1,000	3	4	4	4	5	5	5	3	3	5	2	3	46	121	0
1,001	2,000	-	-	-	-	-	-	-	-	-	-	-	-	-	121	0
2,001	3,000	-	1	-	-	-	1	1	1	1	-	-	1	6	127	12
3,001	4,000	-	-	1	1	1	-	-	-	-	-	-	-	3	130	21
4,001	5,000	-	-	-	-	-	-	1	-	-	1	1	-	3	133	33
5,001	6,000	1	-	-	-	-	-	-	-	-	-	1	1	3	136	48
6,001	7,000	-	-	-	-	-	-	-	-	-	1	1	-	2	138	60
7,001	8,000	2	2	1	-	1	-	-	1	-	-	-	-	7	145	109
8,001	9,000	2	1	1	1	1	-	-	-	-	-	-	1	7	152	165
9,001	10,000	-	-	1	1	-	1	-	-	-	-	1	-	4	156	201
10,001	11,000	1	-	-	1	-	-	2	1	1	2	-	-	8	164	281
11,001	12,000	-	2	-	-	1	-	-	1	1	-	-	1	6	170	347
12,001	13,000	1	1	1	-	-	-	-	-	-	-	-	1	4	174	395
13,001	14,000	-	1	-	-	1	2	2	-	-	-	-	-	6	180	473
14,001	15,000	1	1	1	1	1	-	-	-	-	2	1	2	10	190	613
15,001	16,000	1	-	1	3	2	1	1	1	-	-	-	-	10	200	763
16,001	17,000	2	1	1	1	-	1	-	2	2	-	1	2	13	213	971
17,001	18,000	-	2	1	1	-	1	1	1	1	-	2	-	10	223	1,141
18,001	19,000	1	5	2	2	-	3	-	1	-	-	-	1	15	238	1,411
19,001	20,000	-	-	-	2	2	3	1	-	3	2	1	1	15	253	1,696
20,001	21,000	2	1	1	-	1	1	-	1	3	1	1	4	16	269	2,016
21,001	22,000	1	-	2	-	1	-	-	1	-	2	5	3	15	284	2,331
22,001	23,000	2	-	2	1	1	1	1	1	1	-	3	3	16	300	2,683
23,001	24,000	1	3	1	1	1	-	1	2	2	3	-	-	15	315	3,028
24,001	25,000	1	3	2	-	-	1	4	-	3	2	2	1	19	334	3,484
25,001	26,000	-	-	1	1	-	1	-	2	-	2	1	1	9	343	3,709
26,001	27,000	1	1	-	3	3	3	1	4	1	1	-	-	18	361	4,177
27,001	28,000	1	-	3	1	2	-	-	1	-	2	-	-	10	371	4,447
28,001	29,000	1	-	1	-	2	1	-	1	1	-	1	2	10	381	4,727
29,001	30,000	3	1	-	1	2	1	1	-	-	-	-	1	10	391	5,017
30,001	31,000	1	1	1	2	-	2	2	1	-	1	-	1	12	403	5,377
31,001	32,000	-	-	-	2	1	2	1	3	-	1	-	1	11	414	5,718
32,001	33,000	-	-	-	-	2	1	1	1	-	2	2	-	9	423	6,006
33,001	34,000	1	-	1	-	2	2	1	-	3	-	2	2	14	437	6,468
34,001	35,000	-	3	-	1	-	-	1	2	1	-	-	-	8	445	6,740
35,001	36,000	-	1	-	1	-	-	2	-	-	-	-	2	6	451	6,950
36,001	37,000	1	-	1	-	1	1	2	-	-	1	1	1	9	460	7,274
37,001	38,000	1	-	3	1	-	-	1	1	-	-	-	1	8	468	7,570
38,001	39,000	1	1	-	1	1	-	1	-	1	1	-	-	7	475	7,836

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Measured Service Commercial (Rest., Motels, Grocery Stores & Dry Cleaning Estab.)

Exhibit
Schedule H-5
Page 44
Witness: Bourassa

Usage From:	Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
39,001	40,000	-	-	-	1	1	-	-	1	-	-	1	-	4	479	7,992
40,001	41,000	-	1	1	2	-	1	-	-	1	3	1	1	11	490	8,432
41,001	42,000	2	1	-	-	-	2	-	-	-	-	3	-	8	498	8,760
42,001	43,000	-	1	1	1	1	-	1	1	2	3	2	-	13	511	9,306
43,001	44,000	1	2	-	-	1	-	1	4	3	-	-	1	13	524	9,865
44,001	45,000	1	-	1	-	1	-	-	1	-	-	1	1	6	530	10,129
45,001	46,000	-	-	2	-	-	-	-	-	1	-	-	-	3	533	10,264
46,001	47,000	2	3	-	1	-	2	1	-	-	2	-	2	13	546	10,862
47,001	48,000	1	1	-	2	-	-	-	2	1	-	2	2	11	557	11,379
48,001	49,000	2	-	1	-	1	1	1	1	1	1	-	-	9	566	11,811
49,001	50,000	-	-	-	-	-	-	-	-	-	2	-	1	3	569	11,958
50,001	51,000	1	-	-	-	1	1	1	1	-	2	2	-	9	578	12,409
51,001	52,000	-	1	1	1	-	-	-	3	2	1	1	1	11	589	12,970
52,001	53,000	-	-	1	-	-	1	1	-	4	1	-	-	8	597	13,386
53,001	54,000	-	1	-	2	1	1	1	1	1	1	1	-	10	607	13,916
54,001	55,000	-	-	-	1	-	3	1	-	-	3	2	-	10	617	14,456
55,001	56,000	1	1	-	2	-	1	-	2	-	-	-	2	9	626	14,951
56,001	57,000	1	-	-	-	-	1	-	1	-	-	-	2	5	631	15,231
57,001	58,000	-	-	-	2	-	1	-	1	-	1	-	1	6	637	15,573
58,001	59,000	1	1	2	-	1	-	-	1	1	-	-	-	7	644	15,979
59,001	60,000	2	1	-	-	-	1	1	-	1	-	-	1	7	651	16,392
60,001	61,000	1	-	1	-	1	2	-	-	2	1	1	1	10	661	16,992
61,001	62,000	-	1	1	-	1	-	-	1	-	-	1	1	6	667	17,358
62,001	63,000	-	1	2	3	-	-	-	-	1	-	-	1	8	675	17,854
63,001	64,000	1	1	1	-	-	-	2	2	-	-	2	-	9	684	18,421
64,001	65,000	-	3	1	-	1	-	2	-	1	1	1	-	10	694	19,061
65,001	66,000	1	-	1	1	1	1	1	-	1	1	-	1	9	703	19,646
66,001	67,000	-	-	-	2	1	-	-	-	1	-	2	-	6	709	20,042
67,001	68,000	-	1	1	-	-	2	1	-	1	1	-	-	7	716	20,511
68,001	69,000	2	-	1	1	3	-	-	-	1	1	-	-	9	725	21,123
69,001	70,000	1	-	-	-	1	-	-	1	-	-	1	-	4	729	21,399
70,001	71,000	-	-	-	-	1	-	1	1	-	-	-	-	3	732	21,609
71,001	72,000	-	-	-	-	-	-	1	-	-	1	1	1	4	736	21,893
72,001	73,000	-	-	-	-	-	-	1	-	-	1	-	-	2	738	22,037
73,001	74,000	-	1	-	1	-	-	-	1	-	-	-	-	3	741	22,256
74,001	75,000	-	-	-	-	2	-	-	1	-	-	-	-	3	744	22,478
75,001	76,000	1	1	2	-	-	1	-	-	1	-	-	-	6	750	22,928
76,001	77,000	1	-	-	1	1	-	2	-	1	-	-	-	6	756	23,384
77,001	78,000	-	-	-	1	-	-	1	-	-	1	-	-	3	759	23,615
78,001	79,000	-	-	1	-	-	-	-	-	-	1	-	1	3	762	23,849

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Measured Service Commercial (Rest., Motels, Grocery Stores & Dry Cleaning Estab.)

Exhibit
Schedule H-5
Page 44
Witness: Bourassa

Usage From:	Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
79,001	80,000	-	-	-	-	-	2	-	-	-	-	-	-	2	764	24,007
80,001	81,000	-	1	-	-	-	-	1	-	-	-	1	-	3	767	24,247
81,001	82,000	1	-	-	-	1	-	-	-	-	-	1	-	3	770	24,490
82,001	83,000	-	-	-	-	-	1	-	1	-	-	-	-	2	772	24,654
83,001	84,000	1	-	-	-	-	-	-	1	-	1	-	-	3	775	24,903
84,001	85,000	-	-	1	-	-	-	-	1	-	-	-	-	2	777	25,071
85,001	86,000	-	1	-	-	-	-	-	1	1	-	-	2	5	782	25,496
86,001	87,000	-	-	-	-	-	1	1	1	-	-	-	-	3	785	25,754
87,001	88,000	1	-	2	1	-	-	-	-	-	-	2	-	6	791	26,276
88,001	89,000	1	-	-	-	1	1	-	-	-	-	-	-	3	794	26,540
89,001	90,000	1	3	-	2	-	-	1	-	1	-	1	1	10	804	27,430
90,001	91,000	3	-	-	1	1	-	-	-	-	-	1	-	6	810	27,970
91,001	92,000	2	2	-	-	1	-	-	1	-	-	-	-	6	816	28,516
92,001	93,000	1	-	-	1	-	-	-	-	-	3	-	-	5	821	28,976
93,001	94,000	-	-	-	-	-	2	2	-	-	-	-	-	4	825	29,348
94,001	95,000	-	-	2	-	1	-	1	-	-	1	-	1	6	831	29,912
95,001	96,000	3	-	1	-	-	-	-	-	-	-	-	2	6	837	30,482
96,001	97,000	-	-	-	-	-	-	-	-	-	-	-	1	1	838	30,578
97,001	98,000	1	1	1	-	-	-	-	-	-	-	1	1	5	843	31,063
98,001	99,000	-	-	-	2	-	-	-	1	1	-	1	-	5	848	31,553
99,001	100,000	-	1	-	1	-	1	-	-	-	1	-	-	4	852	31,949
170,256	170,256	-	1	-	-	1	-	-	1	2	-	-	1	6	858	32,970
149,225	149,225	1	-	-	-	-	-	-	-	-	-	-	-	1	859	33,120
127,581	127,581	1	-	-	-	-	-	-	-	-	-	-	-	1	860	33,247
111,081	111,081	1	-	-	-	-	-	-	-	-	-	-	-	1	861	33,358
135,379	135,379	1	-	-	-	-	-	-	-	-	-	-	-	1	862	33,494
135,500	135,500	1	-	-	-	-	-	-	-	-	-	-	-	1	863	33,629
173,644	173,644	1	-	-	-	-	-	-	-	-	-	-	-	1	864	33,803
135,271	135,271	1	-	-	-	-	-	-	-	-	-	-	-	1	865	33,938
170,546	170,546	1	-	-	-	-	-	-	-	-	-	-	-	1	866	34,109
240,167	240,167	1	-	-	-	-	-	-	-	-	-	-	-	1	867	34,349
121,685	121,685	1	-	-	-	-	-	-	-	-	-	-	-	1	868	34,470
118,708	118,708	1	-	-	-	-	-	-	-	-	-	-	-	1	869	34,589
248,148	248,148	1	-	-	-	-	-	-	-	-	-	-	-	1	870	34,837
149,550	149,550	1	-	-	-	-	-	-	-	-	-	-	-	1	871	34,987
220,375	220,375	1	-	-	-	-	-	-	-	-	-	-	-	1	872	35,207
123,975	123,975	1	-	-	-	-	-	-	-	-	-	-	-	1	873	35,331
155,704	155,704	1	-	-	-	-	-	-	-	-	-	-	-	1	874	35,487
104,152	104,152	1	-	-	-	-	-	-	-	-	-	-	-	1	875	35,591
151,344	151,344	1	-	-	-	-	-	-	-	-	-	-	-	1	876	35,742

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Measured Service Commercial (Rest., Motels, Grocery Stores & Dry Cleaning Estab.)

Exhibit
Schedule H-5
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Witness: Bourassa

Usage From:	Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
153,450	153,450	1	-	-	-	-	-	-	-	-	-	-	-	1	877	35,896
128,290	128,290	1	-	-	-	-	-	-	-	-	-	-	-	1	878	36,024
279,967	279,967	1	-	-	-	-	-	-	-	-	-	-	-	1	879	36,304
122,594	122,594	1	-	-	-	-	-	-	-	-	-	-	-	1	880	36,427
171,425	171,425	1	-	-	-	-	-	-	-	-	-	-	-	1	881	36,598
161,625	161,625	-	1	-	-	-	-	-	-	-	-	-	-	1	882	36,760
112,294	112,294	-	1	-	-	-	-	-	-	-	-	-	-	1	883	36,872
146,935	146,935	-	1	-	-	-	-	-	-	-	-	-	-	1	884	37,019
136,450	136,450	-	1	-	-	-	-	-	-	-	-	-	-	1	885	37,155
139,438	139,438	-	1	-	-	-	-	-	-	-	-	-	-	1	886	37,295
143,483	143,483	-	1	-	-	-	-	-	-	-	-	-	-	1	887	37,438
134,250	134,250	-	1	-	-	-	-	-	-	-	-	-	-	1	888	37,573
123,569	123,569	-	1	-	-	-	-	-	-	-	-	-	-	1	889	37,696
186,171	186,171	-	1	-	-	-	-	-	-	-	-	-	-	1	890	37,882
164,146	164,146	-	1	-	-	-	-	-	-	-	-	-	-	1	891	38,046
156,004	156,004	-	1	-	-	-	-	-	-	-	-	-	-	1	892	38,202
252,667	252,667	-	1	-	-	-	-	-	-	-	-	-	-	1	893	38,455
127,921	127,921	-	1	-	-	-	-	-	-	-	-	-	-	1	894	38,583
124,454	124,454	-	1	-	-	-	-	-	-	-	-	-	-	1	895	38,707
256,604	256,604	-	1	-	-	-	-	-	-	-	-	-	-	1	896	38,964
163,794	163,794	-	1	-	-	-	-	-	-	-	-	-	-	1	897	39,128
206,754	206,754	-	1	-	-	-	-	-	-	-	-	-	-	1	898	39,335
139,113	139,113	-	1	-	-	-	-	-	-	-	-	-	-	1	899	39,474
162,258	162,258	-	1	-	-	-	-	-	-	-	-	-	-	1	900	39,636
153,438	153,438	-	1	-	-	-	-	-	-	-	-	-	-	1	901	39,789
587,113	587,113	-	1	-	-	-	-	-	-	-	-	-	-	1	902	40,377
143,377	143,377	-	1	-	-	-	-	-	-	-	-	-	-	1	903	40,520
231,698	231,698	-	1	-	-	-	-	-	-	-	-	-	-	1	904	40,752
113,988	113,988	-	1	-	-	-	-	-	-	-	-	-	-	1	905	40,866
423,298	423,298	-	1	-	-	-	-	-	-	-	-	-	-	1	906	41,289
105,823	105,823	-	1	-	-	-	-	-	-	-	-	-	-	1	907	41,395
204,325	204,325	-	1	-	-	-	-	-	-	-	-	-	-	1	908	41,599
200,319	200,319	-	-	1	-	-	-	-	-	-	-	-	-	1	909	41,799
126,110	126,110	-	-	1	-	-	-	-	-	-	-	-	-	1	910	41,925
149,181	149,181	-	-	1	-	-	-	-	-	-	-	-	-	1	911	42,075
143,598	143,598	-	-	1	-	-	-	-	-	-	-	-	-	1	912	42,218
147,721	147,721	-	-	1	-	-	-	-	-	-	-	-	-	1	913	42,366
162,806	162,806	-	-	1	-	-	-	-	-	-	-	-	-	1	914	42,529
142,946	142,946	-	-	1	-	-	-	-	-	-	-	-	-	1	915	42,672
191,302	191,302	-	-	1	-	-	-	-	-	-	-	-	-	1	916	42,863

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
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Exhibit
Schedule H-5
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Witness: Bourassa

Usage From:	Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
176,796	176,796	-	-	1	-	-	-	-	-	-	-	-	-	1	917	43,040
151,656	151,656	-	-	1	-	-	-	-	-	-	-	-	-	1	918	43,191
300,388	300,388	-	-	1	-	-	-	-	-	-	-	-	-	1	919	43,492
132,433	132,433	-	-	1	-	-	-	-	-	-	-	-	-	1	920	43,624
128,706	128,706	-	-	1	-	-	-	-	-	-	-	-	-	1	921	43,753
248,200	248,200	-	-	1	-	-	-	-	-	-	-	-	-	1	922	44,001
145,758	145,758	-	-	1	-	-	-	-	-	-	-	-	-	1	923	44,147
105,000	105,000	-	-	1	-	-	-	-	-	-	-	-	-	1	924	44,252
203,427	203,427	-	-	1	-	-	-	-	-	-	-	-	-	1	925	44,455
127,154	127,154	-	-	1	-	-	-	-	-	-	-	-	-	1	926	44,583
152,427	152,427	-	-	1	-	-	-	-	-	-	-	-	-	1	927	44,735
153,829	153,829	-	-	1	-	-	-	-	-	-	-	-	-	1	928	44,889
105,419	105,419	-	-	1	-	-	-	-	-	-	-	-	-	1	929	44,994
378,069	378,069	-	-	1	-	-	-	-	-	-	-	-	-	1	930	45,372
145,900	145,900	-	-	1	-	-	-	-	-	-	-	-	-	1	931	45,518
226,808	226,808	-	-	1	-	-	-	-	-	-	-	-	-	1	932	45,745
117,235	117,235	-	-	1	-	-	-	-	-	-	-	-	-	1	933	45,862
107,065	107,065	-	-	1	-	-	-	-	-	-	-	-	-	1	934	45,969
254,565	254,565	-	-	1	-	-	-	-	-	-	-	-	-	1	935	46,224
117,331	117,331	-	-	1	-	-	-	-	-	-	-	-	-	1	936	46,341
216,038	216,038	-	-	1	-	-	-	-	-	-	-	-	-	1	937	46,557
262,469	262,469	-	-	-	1	-	-	-	-	-	-	-	-	1	938	46,820
102,252	102,252	-	-	-	1	-	-	-	-	-	-	-	-	1	939	46,922
151,267	151,267	-	-	-	1	-	-	-	-	-	-	-	-	1	940	47,073
123,608	123,608	-	-	-	1	-	-	-	-	-	-	-	-	1	941	47,197
125,542	125,542	-	-	-	1	-	-	-	-	-	-	-	-	1	942	47,322
160,350	160,350	-	-	-	1	-	-	-	-	-	-	-	-	1	943	47,483
127,208	127,208	-	-	-	1	-	-	-	-	-	-	-	-	1	944	47,610
183,679	183,679	-	-	-	1	-	-	-	-	-	-	-	-	1	945	47,794
159,525	159,525	-	-	-	1	-	-	-	-	-	-	-	-	1	946	47,953
151,421	151,421	-	-	-	1	-	-	-	-	-	-	-	-	1	947	48,105
325,119	325,119	-	-	-	1	-	-	-	-	-	-	-	-	1	948	48,430
138,081	138,081	-	-	-	1	-	-	-	-	-	-	-	-	1	949	48,568
142,123	142,123	-	-	-	1	-	-	-	-	-	-	-	-	1	950	48,710
244,588	244,588	-	-	-	1	-	-	-	-	-	-	-	-	1	951	48,954
161,575	161,575	-	-	-	1	-	-	-	-	-	-	-	-	1	952	49,116
266,375	266,375	-	-	-	1	-	-	-	-	-	-	-	-	1	953	49,382
143,015	143,015	-	-	-	1	-	-	-	-	-	-	-	-	1	954	49,525
207,379	207,379	-	-	-	1	-	-	-	-	-	-	-	-	1	955	49,733
210,856	210,856	-	-	-	1	-	-	-	-	-	-	-	-	1	956	49,944

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
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Customer Classification
Measured Service Commercial (Rest., Motels, Grocery Stores & Dry Cleaning Estab.)

Exhibit
Schedule H-5
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Witness: Bourassa

Usage From:	Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
389,531	389,531	-	-	-	1	-	-	-	-	-	-	-	-	1	957	50,333
178,875	178,875	-	-	-	1	-	-	-	-	-	-	-	-	1	958	50,512
291,352	291,352	-	-	-	1	-	-	-	-	-	-	-	-	1	959	50,803
101,858	101,858	-	-	-	1	-	-	-	-	-	-	-	-	1	960	50,905
101,875	101,875	-	-	-	1	-	-	-	-	-	-	-	-	1	961	51,007
250,342	250,342	-	-	-	1	-	-	-	-	-	-	-	-	1	962	51,258
266,179	266,179	-	-	-	1	-	-	-	-	-	-	-	-	1	963	51,524
103,867	103,867	-	-	-	1	-	-	-	-	-	-	-	-	1	964	51,628
184,763	184,763	-	-	-	1	-	-	-	-	-	-	-	-	1	965	51,812
245,394	245,394	-	-	-	-	1	-	-	-	-	-	-	-	1	966	52,058
149,696	149,696	-	-	-	-	1	-	-	-	-	-	-	-	1	967	52,207
113,631	113,631	-	-	-	-	1	-	-	-	-	-	-	-	1	968	52,321
202,129	202,129	-	-	-	-	1	-	-	-	-	-	-	-	1	969	52,523
119,315	119,315	-	-	-	-	1	-	-	-	-	-	-	-	1	970	52,642
119,017	119,017	-	-	-	-	1	-	-	-	-	-	-	-	1	971	52,762
116,319	116,319	-	-	-	-	1	-	-	-	-	-	-	-	1	972	52,878
130,131	130,131	-	-	-	-	1	-	-	-	-	-	-	-	1	973	53,008
192,852	192,852	-	-	-	-	1	-	-	-	-	-	-	-	1	974	53,201
173,202	173,202	-	-	-	-	1	-	-	-	-	-	-	-	1	975	53,374
237,696	237,696	-	-	-	-	1	-	-	-	-	-	-	-	1	976	53,612
100,292	100,292	-	-	-	-	1	-	-	-	-	-	-	-	1	977	53,712
198,802	198,802	-	-	-	-	1	-	-	-	-	-	-	-	1	978	53,911
142,725	142,725	-	-	-	-	1	-	-	-	-	-	-	-	1	979	54,054
411,115	411,115	-	-	-	-	1	-	-	-	-	-	-	-	1	980	54,465
157,119	157,119	-	-	-	-	1	-	-	-	-	-	-	-	1	981	54,622
151,740	151,740	-	-	-	-	1	-	-	-	-	-	-	-	1	982	54,774
309,598	309,598	-	-	-	-	1	-	-	-	-	-	-	-	1	983	55,083
186,569	186,569	-	-	-	-	1	-	-	-	-	-	-	-	1	984	55,270
268,423	268,423	-	-	-	-	1	-	-	-	-	-	-	-	1	985	55,538
143,446	143,446	-	-	-	-	1	-	-	-	-	-	-	-	1	986	55,682
202,798	202,798	-	-	-	-	1	-	-	-	-	-	-	-	1	987	55,884
101,992	101,992	-	-	-	-	1	-	-	-	-	-	-	-	1	988	55,986
376,348	376,348	-	-	-	-	1	-	-	-	-	-	-	-	1	989	56,363
109,694	109,694	-	-	-	-	1	-	-	-	-	-	-	-	1	990	56,472
105,283	105,283	-	-	-	-	1	-	-	-	-	-	-	-	1	991	56,578
453,608	453,608	-	-	-	-	1	-	-	-	-	-	-	-	1	992	57,031
204,000	204,000	-	-	-	-	1	-	-	-	-	-	-	-	1	993	57,235
280,315	280,315	-	-	-	-	1	-	-	-	-	-	-	-	1	994	57,516
117,200	117,200	-	-	-	-	1	-	-	-	-	-	-	-	1	995	57,633
119,283	119,283	-	-	-	-	1	-	-	-	-	-	-	-	1	996	57,752

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Measured Service Commercial (Rest., Motels, Grocery Stores & Dry Cleaning Estab.)

Exhibit
Schedule H-5
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Witness: Bourassa

Usage From:	Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
113,315	113,315	-	-	-	-	1	-	-	-	-	-	-	-	1	997	57,865
331,717	331,717	-	-	-	-	1	-	-	-	-	-	-	-	1	998	58,197
184,308	184,308	-	-	-	-	1	-	-	-	-	-	-	-	1	999	58,381
245,415	245,415	-	-	-	-	-	1	-	-	-	-	-	-	1	1,000	58,627
107,998	107,998	-	-	-	-	-	1	-	-	-	-	-	-	1	1,001	58,735
190,769	190,769	-	-	-	-	-	1	-	-	-	-	-	-	1	1,002	58,926
111,663	111,663	-	-	-	-	-	1	-	-	-	-	-	-	1	1,003	59,037
131,485	131,485	-	-	-	-	-	1	-	-	-	-	-	-	1	1,004	59,169
134,548	134,548	-	-	-	-	-	1	-	-	-	-	-	-	1	1,005	59,303
115,102	115,102	-	-	-	-	-	1	-	-	-	-	-	-	1	1,006	59,418
162,952	162,952	-	-	-	-	-	1	-	-	-	-	-	-	1	1,007	59,581
187,794	187,794	-	-	-	-	-	1	-	-	-	-	-	-	1	1,008	59,769
227,744	227,744	-	-	-	-	-	1	-	-	-	-	-	-	1	1,009	59,997
175,690	175,690	-	-	-	-	-	1	-	-	-	-	-	-	1	1,010	60,173
133,944	133,944	-	-	-	-	-	1	-	-	-	-	-	-	1	1,011	60,307
363,500	363,500	-	-	-	-	-	1	-	-	-	-	-	-	1	1,012	60,670
166,383	166,383	-	-	-	-	-	1	-	-	-	-	-	-	1	1,013	60,836
163,840	163,840	-	-	-	-	-	1	-	-	-	-	-	-	1	1,014	61,000
271,144	271,144	-	-	-	-	-	1	-	-	-	-	-	-	1	1,015	61,271
215,913	215,913	-	-	-	-	-	1	-	-	-	-	-	-	1	1,016	61,487
302,050	302,050	-	-	-	-	-	1	-	-	-	-	-	-	1	1,017	61,789
172,285	172,285	-	-	-	-	-	1	-	-	-	-	-	-	1	1,018	61,962
224,854	224,854	-	-	-	-	-	1	-	-	-	-	-	-	1	1,019	62,186
252,000	252,000	-	-	-	-	-	1	-	-	-	-	-	-	1	1,020	62,438
120,717	120,717	-	-	-	-	-	1	-	-	-	-	-	-	1	1,021	62,559
403,444	403,444	-	-	-	-	-	1	-	-	-	-	-	-	1	1,022	62,963
170,652	170,652	-	-	-	-	-	1	-	-	-	-	-	-	1	1,023	63,133
253,115	253,115	-	-	-	-	-	1	-	-	-	-	-	-	1	1,024	63,386
120,656	120,656	-	-	-	-	-	1	-	-	-	-	-	-	1	1,025	63,507
100,025	100,025	-	-	-	-	-	1	-	-	-	-	-	-	1	1,026	63,607
245,946	245,946	-	-	-	-	-	1	-	-	-	-	-	-	1	1,027	63,853
138,585	138,585	-	-	-	-	-	1	-	-	-	-	-	-	1	1,028	63,992
289,602	289,602	-	-	-	-	-	-	1	-	-	-	-	-	1	1,029	64,281
103,623	103,623	-	-	-	-	-	-	1	-	-	-	-	-	1	1,030	64,385
200,702	200,702	-	-	-	-	-	-	1	-	-	-	-	-	1	1,031	64,586
113,225	113,225	-	-	-	-	-	-	1	-	-	-	-	-	1	1,032	64,699
121,606	121,606	-	-	-	-	-	-	1	-	-	-	-	-	1	1,033	64,820
124,708	124,708	-	-	-	-	-	-	1	-	-	-	-	-	1	1,034	64,945
197,513	197,513	-	-	-	-	-	-	1	-	-	-	-	-	1	1,035	65,143
194,204	194,204	-	-	-	-	-	-	1	-	-	-	-	-	1	1,036	65,337

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
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Schedule H-5
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Usage From:	Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
223,773	223,773	-	-	-	-	-	-	1	-	-	-	-	-	1	1,037	65,561
304,981	304,981	-	-	-	-	-	-	1	-	-	-	-	-	1	1,038	65,866
185,527	185,527	-	-	-	-	-	-	1	-	-	-	-	-	1	1,039	66,051
192,657	192,657	-	-	-	-	-	-	1	-	-	-	-	-	1	1,040	66,244
145,331	145,331	-	-	-	-	-	-	1	-	-	-	-	-	1	1,041	66,389
371,417	371,417	-	-	-	-	-	-	1	-	-	-	-	-	1	1,042	66,760
194,796	194,796	-	-	-	-	-	-	1	-	-	-	-	-	1	1,043	66,955
191,196	191,196	-	-	-	-	-	-	1	-	-	-	-	-	1	1,044	67,146
396,802	396,802	-	-	-	-	-	-	1	-	-	-	-	-	1	1,045	67,543
199,400	199,400	-	-	-	-	-	-	1	-	-	-	-	-	1	1,046	67,743
381,019	381,019	-	-	-	-	-	-	1	-	-	-	-	-	1	1,047	68,124
222,027	222,027	-	-	-	-	-	-	1	-	-	-	-	-	1	1,048	68,346
285,383	285,383	-	-	-	-	-	-	1	-	-	-	-	-	1	1,049	68,631
301,196	301,196	-	-	-	-	-	-	1	-	-	-	-	-	1	1,050	68,932
106,696	106,696	-	-	-	-	-	-	1	-	-	-	-	-	1	1,051	69,039
100,300	100,300	-	-	-	-	-	-	1	-	-	-	-	-	1	1,052	69,139
455,288	455,288	-	-	-	-	-	-	1	-	-	-	-	-	1	1,053	69,595
136,725	136,725	-	-	-	-	-	-	1	-	-	-	-	-	1	1,054	69,731
262,819	262,819	-	-	-	-	-	-	1	-	-	-	-	-	1	1,055	69,994
120,027	120,027	-	-	-	-	-	-	1	-	-	-	-	-	1	1,056	70,114
129,517	129,517	-	-	-	-	-	-	1	-	-	-	-	-	1	1,057	70,244
105,708	105,708	-	-	-	-	-	-	1	-	-	-	-	-	1	1,058	70,349
107,996	107,996	-	-	-	-	-	-	1	-	-	-	-	-	1	1,059	70,457
259,369	259,369	-	-	-	-	-	-	1	-	-	-	-	-	1	1,060	70,717
147,860	147,860	-	-	-	-	-	-	1	-	-	-	-	-	1	1,061	70,865
193,025	193,025	-	-	-	-	-	-	-	1	-	-	-	-	1	1,062	71,058
208,033	208,033	-	-	-	-	-	-	-	1	-	-	-	-	1	1,063	71,266
122,246	122,246	-	-	-	-	-	-	-	1	-	-	-	-	1	1,064	71,388
152,423	152,423	-	-	-	-	-	-	-	1	-	-	-	-	1	1,065	71,540
162,769	162,769	-	-	-	-	-	-	-	1	-	-	-	-	1	1,066	71,703
203,281	203,281	-	-	-	-	-	-	-	1	-	-	-	-	1	1,067	71,906
234,308	234,308	-	-	-	-	-	-	-	1	-	-	-	-	1	1,068	72,141
149,054	149,054	-	-	-	-	-	-	-	1	-	-	-	-	1	1,069	72,290
129,560	129,560	-	-	-	-	-	-	-	1	-	-	-	-	1	1,070	72,419
329,523	329,523	-	-	-	-	-	-	-	1	-	-	-	-	1	1,071	72,749
162,315	162,315	-	-	-	-	-	-	-	1	-	-	-	-	1	1,072	72,911
157,960	157,960	-	-	-	-	-	-	-	1	-	-	-	-	1	1,073	73,069
334,571	334,571	-	-	-	-	-	-	-	1	-	-	-	-	1	1,074	73,404
137,779	137,779	-	-	-	-	-	-	-	1	-	-	-	-	1	1,075	73,541
341,692	341,692	-	-	-	-	-	-	-	1	-	-	-	-	1	1,076	73,883

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
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Schedule H-5
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Usage From:	Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
192,950	192,950	-	-	-	-	-	-	-	1	-	-	-	-	1	1,077	74,076
234,700	234,700	-	-	-	-	-	-	-	1	-	-	-	-	1	1,078	74,311
309,900	309,900	-	-	-	-	-	-	-	1	-	-	-	-	1	1,079	74,621
116,919	116,919	-	-	-	-	-	-	-	1	-	-	-	-	1	1,080	74,738
361,952	361,952	-	-	-	-	-	-	-	1	-	-	-	-	1	1,081	75,100
125,352	125,352	-	-	-	-	-	-	-	1	-	-	-	-	1	1,082	75,225
259,029	259,029	-	-	-	-	-	-	-	1	-	-	-	-	1	1,083	75,484
120,658	120,658	-	-	-	-	-	-	-	1	-	-	-	-	1	1,084	75,605
251,300	251,300	-	-	-	-	-	-	-	1	-	-	-	-	1	1,085	75,856
135,048	135,048	-	-	-	-	-	-	-	1	-	-	-	-	1	1,086	75,991
155,529	155,529	-	-	-	-	-	-	-	-	1	-	-	-	1	1,087	76,146
100,806	100,806	-	-	-	-	-	-	-	-	1	-	-	-	1	1,088	76,247
184,796	184,796	-	-	-	-	-	-	-	-	1	-	-	-	1	1,089	76,432
107,060	107,060	-	-	-	-	-	-	-	-	1	-	-	-	1	1,090	76,539
110,569	110,569	-	-	-	-	-	-	-	-	1	-	-	-	1	1,091	76,650
113,888	113,888	-	-	-	-	-	-	-	-	1	-	-	-	1	1,092	76,764
185,200	185,200	-	-	-	-	-	-	-	-	1	-	-	-	1	1,093	76,949
159,700	159,700	-	-	-	-	-	-	-	-	1	-	-	-	1	1,094	77,108
186,646	186,646	-	-	-	-	-	-	-	-	1	-	-	-	1	1,095	77,295
259,821	259,821	-	-	-	-	-	-	-	-	1	-	-	-	1	1,096	77,555
176,458	176,458	-	-	-	-	-	-	-	-	1	-	-	-	1	1,097	77,731
128,908	128,908	-	-	-	-	-	-	-	-	1	-	-	-	1	1,098	77,860
280,404	280,404	-	-	-	-	-	-	-	-	1	-	-	-	1	1,099	78,141
162,104	162,104	-	-	-	-	-	-	-	-	1	-	-	-	1	1,100	78,303
160,523	160,523	-	-	-	-	-	-	-	-	1	-	-	-	1	1,101	78,463
383,071	383,071	-	-	-	-	-	-	-	-	1	-	-	-	1	1,102	78,846
100,979	100,979	-	-	-	-	-	-	-	-	1	-	-	-	1	1,103	78,947
167,715	167,715	-	-	-	-	-	-	-	-	1	-	-	-	1	1,104	79,115
297,419	297,419	-	-	-	-	-	-	-	-	1	-	-	-	1	1,105	79,413
180,569	180,569	-	-	-	-	-	-	-	-	1	-	-	-	1	1,106	79,593
206,448	206,448	-	-	-	-	-	-	-	-	1	-	-	-	1	1,107	79,800
125,379	125,379	-	-	-	-	-	-	-	-	1	-	-	-	1	1,108	79,925
137,000	137,000	-	-	-	-	-	-	-	-	1	-	-	-	1	1,109	80,062
289,210	289,210	-	-	-	-	-	-	-	-	1	-	-	-	1	1,110	80,351
170,773	170,773	-	-	-	-	-	-	-	-	1	-	-	-	1	1,111	80,522
495,388	495,388	-	-	-	-	-	-	-	-	1	-	-	-	1	1,112	81,017
129,892	129,892	-	-	-	-	-	-	-	-	1	-	-	-	1	1,113	81,147
263,194	263,194	-	-	-	-	-	-	-	-	1	-	-	-	1	1,114	81,410
126,815	126,815	-	-	-	-	-	-	-	-	1	-	-	-	1	1,115	81,537
115,158	115,158	-	-	-	-	-	-	-	-	1	-	-	-	1	1,116	81,652

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
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Schedule H-5
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Witness: Bourassa

Usage From:	Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
277,702	277,702	-	-	-	-	-	-	-	-	1	-	-	-	1	1,117	81,930
151,460	151,460	-	-	-	-	-	-	-	-	1	-	-	-	1	1,118	82,082
112,431	112,431	-	-	-	-	-	-	-	-	-	1	-	-	1	1,119	82,194
146,850	146,850	-	-	-	-	-	-	-	-	-	1	-	-	1	1,120	82,341
102,952	102,952	-	-	-	-	-	-	-	-	-	1	-	-	1	1,121	82,444
104,950	104,950	-	-	-	-	-	-	-	-	-	1	-	-	1	1,122	82,549
107,494	107,494	-	-	-	-	-	-	-	-	-	1	-	-	1	1,123	82,656
158,935	158,935	-	-	-	-	-	-	-	-	-	1	-	-	1	1,124	82,815
147,804	147,804	-	-	-	-	-	-	-	-	-	1	-	-	1	1,125	82,963
154,748	154,748	-	-	-	-	-	-	-	-	-	1	-	-	1	1,126	83,118
224,540	224,540	-	-	-	-	-	-	-	-	-	1	-	-	1	1,127	83,342
173,838	173,838	-	-	-	-	-	-	-	-	-	1	-	-	1	1,128	83,516
120,413	120,413	-	-	-	-	-	-	-	-	-	1	-	-	1	1,129	83,636
151,296	151,296	-	-	-	-	-	-	-	-	-	1	-	-	1	1,130	83,788
142,621	142,621	-	-	-	-	-	-	-	-	-	1	-	-	1	1,131	83,930
311,425	311,425	-	-	-	-	-	-	-	-	-	1	-	-	1	1,132	84,242
112,329	112,329	-	-	-	-	-	-	-	-	-	1	-	-	1	1,133	84,354
296,094	296,094	-	-	-	-	-	-	-	-	-	1	-	-	1	1,134	84,650
181,315	181,315	-	-	-	-	-	-	-	-	-	1	-	-	1	1,135	84,832
165,150	165,150	-	-	-	-	-	-	-	-	-	1	-	-	1	1,136	84,997
212,415	212,415	-	-	-	-	-	-	-	-	-	1	-	-	1	1,137	85,209
120,906	120,906	-	-	-	-	-	-	-	-	-	1	-	-	1	1,138	85,330
350,919	350,919	-	-	-	-	-	-	-	-	-	1	-	-	1	1,139	85,681
125,275	125,275	-	-	-	-	-	-	-	-	-	1	-	-	1	1,140	85,806
298,777	298,777	-	-	-	-	-	-	-	-	-	1	-	-	1	1,141	86,105
117,669	117,669	-	-	-	-	-	-	-	-	-	1	-	-	1	1,142	86,223
244,042	244,042	-	-	-	-	-	-	-	-	-	1	-	-	1	1,143	86,467
165,679	165,679	-	-	-	-	-	-	-	-	-	1	-	-	1	1,144	86,632
148,629	148,629	-	-	-	-	-	-	-	-	-	-	1	-	1	1,145	86,781
111,517	111,517	-	-	-	-	-	-	-	-	-	-	1	-	1	1,146	86,893
189,879	189,879	-	-	-	-	-	-	-	-	-	-	1	-	1	1,147	87,082
107,652	107,652	-	-	-	-	-	-	-	-	-	-	1	-	1	1,148	87,190
133,315	133,315	-	-	-	-	-	-	-	-	-	-	1	-	1	1,149	87,323
136,104	136,104	-	-	-	-	-	-	-	-	-	-	1	-	1	1,150	87,459
139,358	139,358	-	-	-	-	-	-	-	-	-	-	1	-	1	1,151	87,599
156,177	156,177	-	-	-	-	-	-	-	-	-	-	1	-	1	1,152	87,755
183,231	183,231	-	-	-	-	-	-	-	-	-	-	1	-	1	1,153	87,938
195,148	195,148	-	-	-	-	-	-	-	-	-	-	1	-	1	1,154	88,133
112,498	112,498	-	-	-	-	-	-	-	-	-	-	1	-	1	1,155	88,246
136,210	136,210	-	-	-	-	-	-	-	-	-	-	1	-	1	1,156	88,382

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
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Schedule H-5
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Witness: Bourassa

Usage From:	Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
312,765	312,765	-	-	-	-	-	-	-	-	-	-	1	-	1	1,157	88,695
165,529	165,529	-	-	-	-	-	-	-	-	-	-	1	-	1	1,158	88,860
167,731	167,731	-	-	-	-	-	-	-	-	-	-	1	-	1	1,159	89,028
288,927	288,927	-	-	-	-	-	-	-	-	-	-	1	-	1	1,160	89,317
105,115	105,115	-	-	-	-	-	-	-	-	-	-	1	-	1	1,161	89,422
109,138	109,138	-	-	-	-	-	-	-	-	-	-	1	-	1	1,162	89,531
196,667	196,667	-	-	-	-	-	-	-	-	-	-	1	-	1	1,163	89,728
141,315	141,315	-	-	-	-	-	-	-	-	-	-	1	-	1	1,164	89,869
3,546,094	3,546,094	-	-	-	-	-	-	-	-	-	-	1	-	1	1,165	93,415
139,221	139,221	-	-	-	-	-	-	-	-	-	-	1	-	1	1,166	93,555
167,810	167,810	-	-	-	-	-	-	-	-	-	-	1	-	1	1,167	93,722
246,896	246,896	-	-	-	-	-	-	-	-	-	-	1	-	1	1,168	93,969
133,554	133,554	-	-	-	-	-	-	-	-	-	-	1	-	1	1,169	94,103
248,971	248,971	-	-	-	-	-	-	-	-	-	-	1	-	1	1,170	94,352
152,023	152,023	-	-	-	-	-	-	-	-	-	-	1	-	1	1,171	94,504
108,456	108,456	-	-	-	-	-	-	-	-	-	-	1	-	1	1,172	94,612
125,371	125,371	-	-	-	-	-	-	-	-	-	-	1	-	1	1,173	94,738
439,000	439,000	-	-	-	-	-	-	-	-	-	-	1	-	1	1,174	95,177
158,129	158,129	-	-	-	-	-	-	-	-	-	-	1	-	1	1,175	95,335
107,013	107,013	-	-	-	-	-	-	-	-	-	-	-	1	1	1,176	95,442
100,875	100,875	-	-	-	-	-	-	-	-	-	-	-	1	1	1,177	95,543
145,475	145,475	-	-	-	-	-	-	-	-	-	-	-	1	1	1,178	95,688
100,752	100,752	-	-	-	-	-	-	-	-	-	-	-	1	1	1,179	95,789
127,373	127,373	-	-	-	-	-	-	-	-	-	-	-	1	1	1,180	95,916
129,660	129,660	-	-	-	-	-	-	-	-	-	-	-	1	1	1,181	96,046
138,948	138,948	-	-	-	-	-	-	-	-	-	-	-	1	1	1,182	96,185
118,459	118,459	-	-	-	-	-	-	-	-	-	-	-	1	1	1,183	96,303
168,813	168,813	-	-	-	-	-	-	-	-	-	-	-	1	1	1,184	96,472
182,121	182,121	-	-	-	-	-	-	-	-	-	-	-	1	1	1,185	96,654
105,844	105,844	-	-	-	-	-	-	-	-	-	-	-	1	1	1,186	96,760
159,025	159,025	-	-	-	-	-	-	-	-	-	-	-	1	1	1,187	96,919
351,706	351,706	-	-	-	-	-	-	-	-	-	-	-	1	1	1,188	97,271
153,475	153,475	-	-	-	-	-	-	-	-	-	-	-	1	1	1,189	97,424
150,679	150,679	-	-	-	-	-	-	-	-	-	-	-	1	1	1,190	97,575
227,937	227,937	-	-	-	-	-	-	-	-	-	-	-	1	1	1,191	97,803
186,842	186,842	-	-	-	-	-	-	-	-	-	-	-	1	1	1,192	97,990
130,927	130,927	-	-	-	-	-	-	-	-	-	-	-	1	1	1,193	98,121
133,988	133,988	-	-	-	-	-	-	-	-	-	-	-	1	1	1,194	98,255
120,096	120,096	-	-	-	-	-	-	-	-	-	-	-	1	1	1,195	98,375
134,267	134,267	-	-	-	-	-	-	-	-	-	-	-	1	1	1,196	98,509

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Measured Service Commercial (Rest., Motels, Grocery Stores & Dry Cleaning Estab.)

Exhibit
Schedule H-5
Page 44
Witness: Bourassa

Usage From:	Usage To:	Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing	Cumul-ative Gallons (in 1,000's)
377,665	377,665	-	-	-	-	-	-	-	-	-	-	-	1	1	1,197	98,887
119,190	119,190	-	-	-	-	-	-	-	-	-	-	-	1	1	1,198	99,006
248,435	248,435	-	-	-	-	-	-	-	-	-	-	-	1	1	1,199	99,254
303,011	303,011	-	-	-	-	-	-	-	-	-	-	-	1	1	1,200	99,557
168,875	168,875	-	-	-	-	-	-	-	-	-	-	-	1	1	1,201	99,726
	-													-	1,201	99,726
	-													-	1,201	99,726
	-													-	1,201	99,726
Totals		100	102	98	102	102	100	100	99	99	99	100	100	1,201		
											Average Water Use			83,359		
											Median Water Use			53,500		
											Average # Customers			100		

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Wigwam Resort - Per Room - 331 rooms

Exhibit
Schedule H-5
Page 45
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Wigwam Resort - Main Hotel

Exhibit
Schedule H-5
Page 46
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Elementary School

Exhibit
Schedule H-5
Page 47
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing
6	6	6	6	6	6	6	6	6	6	6	6	72	72
												-	72
												-	72
												-	72
												-	72
												-	72
												-	72
												-	72
												-	72
												-	72
												-	72
												-	72
												-	72
6	6	6	6	6	6	6	6	6	6	6	6	72	

Average Flow	N/A	
Median Flow	N/A	
Average # Customers		6

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Middle School/High School

Exhibit
Schedule H-5
Page 48
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing
6	6	6	6	6	6	6	6	6	6	6	6	72	72
												-	72
												-	72
												-	72
												-	72
												-	72
												-	72
												-	72
												-	72
												-	72
												-	72
												-	72
												-	72
6	6	6	6	6	6	6	6	6	6	6	6	72	

Average Flow	N/A
Median Flow	N/A
Average # Customers	6

Liberty Utilities (Litchfield Park Water & Sewer) Corp. - Sewer Division
Test Year Ended December 31, 2024
Customer Classification
Community College

Exhibit
Schedule H-5
Page 49
Witness: Bourassa

Month Jan-24	Month Feb-24	Month Mar-24	Month Apr-24	Month May-24	Month Jun-24	Month Jul-24	Month Aug-24	Month Sep-24	Month Oct-24	Month Nov-24	Month Dec-24	Total Year	Cumul-ative Billing
1	1	1	1	1	1	1	1	1	1	1	1	12	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
												-	12
1	1	1	1	1	1	1	1	1	1	1	1	12	

Average Flow	N/A
Median Flow	N/A
Average # Customers	1

Supplemental Filing Materials

Liberty Utilities (Litchfield Park Water and Sewer) Corp.
Annual Report
Wastewater Flows

12/31/24

Wastewater Flows					
Month	Number of Services	Total Monthly Sewage Flow (Gallons)	Sewage Flow on Peak Day	Purchased Power Expense[1]	Purchased Power (kWh)[2]
January	24,149	200,738,000	7,438,000	$92,943	880,861
February	23,917	184,368,000	7,094,000	101,654	947,156
March	23,855	188,976,000	7,358,000	85,707	736,726
April	17,899	151,307,000	6,032,000	82,655	726,956
May	17,901	146,152,000	5,178,000	88,050	630,365
June	17,889	136,792,000	5,397,000	88,653	671,820
July	17,930	145,023,000	4,721,000	87,004	647,430
August	17,897	150,676,000	5,243,000	89,536	674,326
September	17,911	148,539,000	5,837,000	95,583	700,715
October	17,861	149,843,000	5,887,000	84,824	622,049
November	17,877	162,180,000	6,007,000	80,427	685,340
December	17,856	176,455,000	7,203,000	78,490	676,351
	Totals	**1,941,049,000**	**73,395,000**	**$1,055,526**	**8,600,095**

Provide the following information as applicable per wastewater system:

Method of Effluent Disposal	Reuse
Groundwater Permit Number	None
ADEQ Aquifer Protection Permit ("APP") Number	100310
ADEQ Reuse Permit Number	R100310
EPA NPDES Permit Number	AZ0025712
APP Effluent Treatment Requirement (Class)?	A+
Permitted Flow Rate	6.9 MGD
Permitted Organic Capacity	N/A
Hydraulic Capacity	N/A
Type of Biological Treatment	Sequenced Batch Reactor (SBR)

In the space below, list all violations within the past 12 months:

NA

Note: If you are filing for more than one system, please provide separate sheets for each system.

1 Enter the total purchased power costs for the power meters associated with this system.
2 Enter the total purchased kWh used by the power meters associated with this system.

Instructions: Fill out the Grey Cells with the relevent information. Input 0 or none if there is nothing recorded in that account or there is no applicable information to report.

Liberty Utilities (Litchfield Park Water and Sewer) Corp.
Annual Report
Wastewater Flows

12/31/24

Wastewater Flows					
Month	Number of Services	Total Monthly Sewage Flow (Gallons)	Sewage Flow on Peak Day	Purchased Power Expense[1]	Purchased Power (kWh)[2]
January	0	0	0	$8,392	40,400
February	0	0	0	18,800	116,400
March	0	0	0	22,666	178,400
April	6,121	53,442,000	1,949,000	23,216	176,800
May	6,138	56,422,000	1,937,000	26,416	175,600
June	6,162	57,439,000	2,316,000	27,870	200,000
July	6,211	57,586,000	2,035,000	28,786	203,200
August	6,221	67,618,000	2,353,000	29,373	207,600
September	6,258	64,760,000	2,391,000	30,879	216,000
October	6,272	63,393,000	2,382,000	29,125	203,600
November	6,327	57,826,000	2,228,000	26,189	204,800
December	6,350	51,905,000	2,025,000	25,705	179,600
	Totals	**530,391,000**	**19,616,000**	**$297,418**	**2,102,400**

Provide the following information as applicable per wastewater system:

Method of Effluent Disposal	Groundwater Recharge
Groundwater Permit Number	None
ADEQ Aquifer Protection Permit ("APP") Number	513981
ADEQ Reuse Permit Number	R100310
EPA NPDES Permit Number	AZ0026425
APP Effluent Treatment Requirement (Class)?	A+
Permitted Flow Rate	4.4 MGD
Permitted Organic Capacity	N/A
Hydraulic Capacity	N/A
Type of Biological Treatment	Membrane Bio Reactor (MBR)

In the space below, list all violations within the past 12 months:

NA

Note: If you are filing for more than one system, please provide separate sheets for each system.

1 Enter the total purchased power costs for the power meters associated with this system.
2 Enter the total purchased kWh used by the power meters associated with this system.

Instructions: Fill out the Grey Cells with the relevent information. Input 0 or none if there is nothing recorded in that account or there is no applicable information to report.

Liberty Utilities (Litchfield Park Water and Sewer) Corp.
Annual Report
Wastewater Utility Plant Description

12/31/24

Wastewater Utility Plant Description	
Name of System:	Liberty Utilites (Litchfield Park Water and Sewer) Corp.
Wastewater Inventory Number (if applicable):	100310
Type of Treatment	Extended Aeration
Design Capacity of Plant (Gallons per day)	6.9 MGD

LIFT STATION FACILITIES					
Location	Quantity of Pumps	Horsepower Per Pump	Rated Capacity Per Pump (GPM)	Wet Well Capacity (gals)	Year Constructed
LPSCO Lift Station No 2	2	20	350	25000	2003
LPSCO Lift Station No 4	2	7.5	472	4000	2021
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA

FORCE MAINS		
Size	Material	Length (Feet)
2 inch	PVC	581
6 inch	PVC/DIP	604
8 inch	DIP	2,693
12 Inch	PVC/DIP	5,429
16 inch	DIP	6,600
NA	NA	NA
NA	NA	NA

MANHOLES	
Type	Quantity
Standard	4,964
Drop	70

CLEANOUTS
Quantity
667
NA
NA
NA

Note: If you are filing for more than one system, please provide separate sheets for each system.

Instructions: Fill out the Grey Cells with the relevent information. Input 0 or none if there is nothing recorded in that account or there is no applicable information to report. Copy and paste this sheet as many times as is necessary.

Wastewater Utility Plant Description (Continued)

GRAVITY MAINS

Sizes (inches)	Material	Length (feet)
2	VCP/DIP/PVC	62
3	VCP/DIP/PVC	0
4	VCP/DIP/PVC	5,453
6	VCP/DIP/PVC	25,407
8	VCP/DIP/PVC	923,170
10	VCP/DIP/PVC	41,274
12	VCP/DIP/PVC	69,490
15	VCP/DIP/PVC	52,954
16	VCP/DIP/PVC	0
18	VCP/DIP/PVC	8,961
20	VCP/DIP/PVC	1,387
21	VCP/DIP/PVC	26,929
24	VCP/DIP/PVC	18,979
30	VCP/DIP/PVC	7,649
36	VCP/DIP/PVC	301
Unknow	Unknown	233

SERVICES/LATERALS

Size (inches)	Material	Quantity
4	VCP;DIP;PVC	6,569
6	VCP;DIP;PVC	44
Unknown	VCP;DIP;PVC	10,641

For the following five items, list the utility owned assets in each category for each system.

SOLIDS PROCESSING AND HANDLING FACILITIES	4 Holding Tanks / 2 Centrifuge
DISINFECTION EQUIPMENT (Chlorinator, Ultra-Violet, Etc.)	Ultra violet
FILTRATION EQUIPMENT (Rapid Sand, Slow Sand, Activated Carbon, Etc.)	Aqua Disk Filters
STRUCTURES (Buildings, Fences, Etc.)	The facility currently contains 6 steel frame buildings w/concrete masonry unit (CMU) facia on enclosed concrete tank structures. The facility is bordered by rod iron fence, block wall and gate.
Other (Laboratory Equipment, Tools, Vehicles, Standby, Power Generators, Etc.)	Standby Generator, Tools, Lab Equipment, Vac-con Truck, CCTV Trailer, Tractor and Trailer, 5 Vehicles, Trash pump, Forklift,

Note: If you are filing for more than one system, please provide separate sheets for each system.

Instructions: Fill out the Grey Cells with the relevent information. Input 0 or none if there is nothing recorded in that account or there is no applicable information to report. Copy and paste this sheet as many times as is necessary.

Liberty Utilities (Litchfield Park Water and Sewer) Corp.
Annual Report
Wastewater Utility Plant Description

12/31/24

Wastewater Utility Plant Description	
Name of System:	Liberty Utilites (Litchfield Park Water and Sewer) Corp.
Wastewater Inventory Number (if applicable):	513981
Type of Treatment	Extended Aeration
Design Capacity of Plant (Gallons per day)	4.4 MGD

LIFT STATION FACILITIES					
Location	Quantity of Pumps	Horsepower Per Pump	Rated Capacity Per Pump (GPM)	Wet Well Capacity (gals)	Year Constructed
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA

FORCE MAINS		
Size	Material	Length (Feet)
NA	NA	NA
NA	NA	NA
NA	NA	NA
NA	NA	NA
NA	NA	NA
NA	NA	NA
NA	NA	NA

MANHOLES	
Type	Quantity
Standard	1,838
Drop	0

CLEANOUTS
Quantity
106
NA
NA
NA

Note: If you are filing for more than one system, please provide separate sheets for each system.

Instructions: Fill out the Grey Cells with the relevent information. Input 0 or none if there is nothing recorded in that account or there is no applicable information to report. Copy and paste this sheet as many times as is necessary.

Wastewater Utility Plant Description (Continued)

GRAVITY MAINS

Sizes (inches)	Material	Length (feet)
2	VCP/DIP/PVC	0
3	VCP/DIP/PVC	0
4	Sewer PVC	265
6	Sewer PVC	2,469
8	PVC/DIP	331,963
10	Sewer PVC	21,255
12	Sewer PVC	31,434
15	Sewer PVC	13,158
18	Sewer PVC	13,853
21	VCP/DIP/PVC	10,224
24	PVC/DIP	22,357
30	Sewer PVC	5,384
36	Sewer PVC	1,182
NA	NA	NA
NA	NA	NA

SERVICES/LATERALS

Size (inches)	Material	Quantity
4	VCP;DIP;PVC	5,334
6	VCP;DIP;PVC	13
8	VCP;DIP;PVC	1

For the following five items, list the utility owned assets in each category for each system.

SOLIDS PROCESSING AND HANDLING FACILITIES	1 Holding Tanks / 2 Centrifuge
DISINFECTION EQUIPMENT (Chlorinator, Ultra-Violet, Etc.)	Sodium Hypochlorite
FILTRATION EQUIPMENT (Rapid Sand, Slow Sand, Activated Carbon, Etc.)	Membrane cartridges
STRUCTURES (Buildings, Fences, Etc.)	The facility currently contains 4 steel frame buildings w/concrete masonry unit (CMU) facia on enclosed concrete tank structures. The facility is bordered by rod iron fence, block wall and gate.
Other (Laboratory Equipment, Tools, Vehicles, Standby, Power Generators, Etc.)	Standby Generator, Tools, Lab Equipment, 1 Vehicles, Forklift,

Note: If you are filing for more than one system, please provide separate sheets for each system.

Instructions: Fill out the Grey Cells with the relevent information. Input 0 or none if there is nothing recorded in that account or there is no applicable information to report. Copy and paste this sheet as many times as is necessary.