

Exhibit No.: _____
Issues: Rate Design/Cost of Service
Witness: Jessica A. York
Type of Exhibit: Direct Testimony
Sponsoring Party: City of Bolivar, Missouri
Case No.: WR-2024-0104 and
SR-2024-0105
Date Testimony Prepared: September 10, 2024

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

**In the Matter of the Request of Liberty
Utilities (Missouri Water) LLC d/b/a Liberty
for Authority to Implement a General Rate
Increase for Water and Wastewater Service
Provided in its Missouri Service Areas**

)
)
) **File No. WR-2024-0104**
) **File No. SR-2024-0105**
)
)

Direct Testimony and Schedule of

Jessica A. York

On behalf of

City of Bolivar, Missouri

September 10, 2024



Project 11676

1 Residential, Commercial, and Industrial customers within the city limits of Bolivar, as
2 well as to Bolivar.

3 **Q WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?**

4 A The purpose of my direct testimony is to address the Company's proposed allocation
5 of costs to Bolivar, as well as the Company's water Class Cost of Service Study
6 ("CCOSS"), its wastewater CCOSS, and its proposed revenue apportionment across
7 the water and wastewater customer classes in Bolivar.

8 In addition, I discuss certain issues associated with the water and wastewater
9 regulatory assets resulting from the acquisition of Bolivar's water and wastewater
10 systems by Liberty.

11 **Q DOES THE FACT THAT YOU DO NOT ADDRESS EVERY ISSUE RAISED IN THE**
12 **COMPANY'S TESTIMONY MEAN THAT YOU AGREE WITH ITS TESTIMONY ON**
13 **THOSE ISSUES?**

14 A No, it merely reflects that I chose not to address all those issues in my testimony. My
15 silence on any issue should not be construed as an endorsement of, or agreement with,
16 Liberty's position on such issues.

17 **Q PLEASE SUMMARIZE YOUR CONCLUSIONS AND RECOMMENDATIONS.**

18 A My conclusions and recommendations are as follows:

19 Revenue Requirement Assigned to Bolivar

- 20 ➤ The portion of the Company's cost of service assigned to Bolivar water customers
21 is excessive and should be rejected.
- 22 ➤ The Company has not definitively confirmed that it maintained separate books and
23 records for Bolivar in compliance with the Missouri Public Service Commission's

- 1 (“Commission”) Order approving Liberty’s acquisition of the Bolivar water and
2 wastewater systems in Case No. WA-2020-0397.
- 3 ➤ The Company assigned \$9.24 million of water rate base to Bolivar, representing an
4 increase of about 66% (inclusive of the acquisition premium) relative to the rate
5 base identified in the acquisition case, despite an acknowledgment in that case that
6 only minimal upgrades were needed for the Bolivar water system.
- 7 ➤ The excessive rate base assigned to Bolivar water customers contributes to the
8 Company’s claimed revenue deficiency for Bolivar customers in excess of 100%.
9 This is in significant conflict with representations of the expected increase in 2024
10 made by Liberty to Bolivar customers prior to the acquisition.
- 11 ➤ To remedy this issue, I recommend the rate base for Bolivar water be established
12 at the level identified in the acquisition docket, plus the acquisition premium agreed
13 to between Staff and the Company if approved by the Commission. I recommend
14 the level of expenses assigned to Bolivar reflect the actual expenses associated
15 with providing service to Bolivar water customers, consistent with the Commission’s
16 Order, in Liberty’s acquisition of Bolivar.

17 Bolivar CCOSS Models and Revenue Apportionment

- 18 ➤ I generally support the use of the Base-Extra Capacity method for the allocation of
19 costs across the customer classes of water utilities. However, the Company’s water
20 CCOSS for Bolivar should be rejected. The Company has not provided support for
21 the allocation factors used to assign costs to the customer classes in Bolivar.
- 22 ➤ The Company’s proposed water revenue apportionment for Bolivar should also be
23 rejected, as it is based on an unsupported CCOSS.
- 24 ➤ Due to deficiencies in the Company’s CCOSS, I recommend that any change in
25 revenue requirement approved for Bolivar’s water customers be applied on an
26 across the board basis.
- 27 ➤ The Company’s wastewater CCOSS relies on the same unsupported assumptions
28 used in the water CCOSS. As a result, I recommend that any change in revenue
29 requirement approved for Bolivar’s wastewater customers be applied on an across
30 the board basis.
- 31 ➤ The Company recommends an alternative proposed revenue allocation for
32 wastewater customers in Bolivar, which would use the excess revenue from Bolivar
33 wastewater customers to subsidize any approved increase for non-Bolivar
34 wastewater customers. This proposal should be rejected. The Company’s CCOSS
35 shows that Bolivar wastewater customers are currently paying rates in excess of
36 Liberty’s cost of providing service. The treatment of excess revenues should
37 benefit wastewater customers in Bolivar.

1 **Q DO YOU HAVE CONCERNS ABOUT THE REVENUE REQUIREMENT ASSIGNED**
2 **TO BOLIVAR?**

3 A Yes. The Commission directed Liberty to maintain separate books and records for
4 Bolivar in its Order approving Liberty's acquisition.¹ However, it is unclear as to whether
5 the Company has complied with that Order.

6 **Q WHY DO YOU QUESTION WHETHER THE COMPANY COMPLIED WITH THE**
7 **COMMISSION'S ORDER TO MAINTAIN SEPARATE BOOKS AND RECORDS FOR**
8 **BOLIVAR?**

9 A Several factors have caused this concern. First, Bolivar issued discovery questions to
10 the Company asking for confirmation that the water CCOSS and the wastewater
11 CCOSS are predicated on Bolivar's water and sewer plant that existed at the time the
12 system was acquired by Liberty. The Company did not definitively confirm this.

13 In addition, the amount of Bolivar's water rate base reflected in the test year in
14 this case has increased drastically relative to the water rate base identified in the
15 Commission's Order approving Liberty's acquisition of Bolivar, despite the fact that only
16 minimal upgrades for the Bolivar system were necessary at the time of the acquisition.

17 Further, the water rate increase requested in this case significantly exceeds the
18 increase the Company cited when advocating for the acquisition to Bolivar residents
19 prior to the community voting on the potential acquisition.

20 These factors call into question the legitimacy of the portion of the Company's
21 cost of service that it claims is associated with Bolivar.

¹ Case No. WA-2020-0397. Order dated December 8, 2021 at page 12.

1 Q HOW DID THE COMPANY RESPOND TO THE DISCOVERY QUESTIONS
2 REGARDING WHETHER THE BOLIVAR WATER AND SEWER CCROSS MODELS
3 WERE PREDICATED ON THE WATER AND SEWER PLANT THAT EXISTED AT
4 THE TIME OF ACQUISITION?

5 A The Company responded that the CCROSS models were predicated on the plant
6 accounts at the end of the test year, with known and measureable changes.² In
7 addition, the Company was asked to provide the actual cost of providing water and
8 sewer service to Bolivar from the acquisition date to current. This included the actual
9 Operation and Maintenance (“O&M”) expenses, depreciation, and return on rate base.
10 The Company responded that the cost of service is not available for the specific period
11 requested.³ The Company reiterated that its Missouri Water Cost of Service is based
12 on the books and records of the Company for the 12-month period ending
13 December 2022, and reflects adjustments for known and measureable changes
14 through June 2024.⁴

15 Given that the Company was directed to maintain separate books and records
16 for Bolivar, it is unclear why the data associated with the actual cost of providing water
17 and wastewater service to Bolivar could not be provided.

² Liberty’s Responses to Data Request Nos. BOL-35 and BOL-38. Attached as Schedule JAY-1 at pages 1-4.

³ Liberty’s Responses to Data Request Nos. BOL-19 and BOL-21. Attached as Schedule JAY-1 at pages 5-6.

⁴ *Id.*

1 Q PLEASE ELABORATE ON HOW THE RATE BASE ASSIGNED TO BOLIVAR IN
2 THIS CASE COMPARES TO BOLIVAR'S RATE BASE AT THE TIME OF THE
3 ACQUISITION.

4 A Table JAY-2 presents a comparison of the Bolivar water and sewer rate base at the
5 time of the acquisition to the rate base assigned to Bolivar in this case.

<u>Line</u>	<u>Description</u>	<u>Acquisition¹</u> (1)	<u>Current Case²</u> (2)	<u>Percent Increase</u> (3)
1	Water	\$5,566,992	\$9,237,729	65.9%
2	Sewer	8,356,492	9,322,269	11.6%

Sources:
¹ Case No. WA-2020-0397. December 8, 2021 Order at 12.
² Liberty's Direct Schedule TO-2.

6 As shown in the table, the Company's CCROSS suggests that Bolivar's water
7 rate base has increased by about 66%. Excluding the \$1,612,758 acquisition premium
8 from Bolivar's water rate base in this case, produces a rate base of \$7,624,971. This
9 is still about \$2.1 million, or 37%, higher than the net water plant identified in the
10 acquisition docket.

11 Q WHY ARE THESE CHANGES IN WATER AND SEWER RATE BASE FOR BOLIVAR
12 QUESTIONABLE?

13 A The level of water rate base in particular is highly questionable for several reasons.
14 First, the Commission's Order in the acquisition case stated that Bolivar's drinking

1 water system required relatively minor, routine upgrades.⁵ It is unclear how minor
2 upgrades would result in a \$2.1 million, or 37%, increase in net water plant for Bolivar.
3 Instead, it appears that Bolivar has been allocated a significant share of common plant,
4 rather than maintaining separate cost of service records for Bolivar.

5 In addition, as part of its community outreach prior to the public vote regarding
6 the acquisition of Bolivar's water and wastewater systems by Liberty, the Company was
7 telling Bolivar residents that the expected monthly increase in customer bills would be
8 about 20% in 2024.⁶ In reality, the Company is requesting a system average increase
9 of about 133%⁷ for Bolivar water customers in this case, and a 13.5% decrease in the
10 sewer revenue requirement. On a combined basis, the net increase (both water and
11 sewer) is about 44.4%.⁸

12 **Q HAVE YOU INVESTIGATED THE APPROXIMATE \$2.1 MILLION UNEXPLAINED**
13 **DIFFERENCE BETWEEN BOLIVAR'S NET WATER PLANT IDENTIFIED IN THE**
14 **ACQUISITION DOCKET AND THE AMOUNT IDENTIFIED IN THIS CASE?**

15 **A** Yes. It appears the \$2.1 million difference reflects a significant allocation of common
16 plant to Bolivar, which is shown in the Company's cost of service workpapers
17 sponsored by Company witness Thomas O'Neill.

⁵ Case No. WA-2020-0397. Order dated December 8, 2021 at page 4.

⁶ Case No. WA-2020-0397. Direct Testimony of Jill Schwartz at pages 8-9.

⁷ Direct Schedule TO-3.

⁸ Calculated from Direct Schedule TO-3.

1 **Q SHOULD BOLIVAR'S WATER CUSTOMERS RECEIVE AN ALLOCATION OF**
2 **COMMON PLANT AND EXPENSES IN THIS CASE?**

3 A No. This is unjust and unreasonable for several reasons. First, as explained earlier in
4 this testimony, the Company was directed to maintain separate books and records for
5 Bolivar until the regulatory asset established pursuant to the Commission's Order in
6 the acquisition docket was recovered. Second, the significant increase in water rate
7 base for Bolivar has not been supported in light of the fact that only minor necessary
8 upgrades to the water system were identified. Third, the resulting rate increase for
9 Bolivar customers significantly exceeds the level advertised by Liberty to Bolivar
10 residents and to the Commission prior to the acquisition. Fourth, in the Liberty
11 acquisition case, the Commission in its order did not specifically recognize the
12 assignment of common plant to Bolivar. Instead, the Commission noted that the assets
13 needed to directly serve Bolivar should be included in cost of service. Bolivar
14 customers were receiving water service without the addition of the common plant prior
15 to the acquisition.

16 **Q WHAT IS YOUR RECOMMENDATION WITH RESPECT TO THE AMOUNT OF**
17 **WATER RATE BASE ASSIGNED TO BOLIVAR IN THIS CASE?**

18 A I recommend setting Bolivar's water rate base at the level identified in the acquisition
19 docket, plus the acquisition premium that was approved in that case. This amounts to
20 \$\$7,179,750 (i.e., \$5,566,992 plus \$1,612,758). Freezing water rate base at this level
21 for this case recognizes that minor necessary improvements were identified in the
22 acquisition case, while also complying with the Commission's Order to maintain
23 separate data for Bolivar until the regulatory asset is fully amortized.

III. PROPOSED REVENUE APPORTIONMENT

Q HAVE YOU REVIEWED THE COMPANY’S PROPOSED REVENUE APPORTIONMENT FOR BOLIVAR WATER CUSTOMERS?

A Yes. A comparison of the Company’s water CCOSS results to its proposed revenue apportionment for Bolivar water customers is presented in Table JAY-3.

TABLE JAY-3						
Liberty's CCOSS Results vs. Proposed Revenue Allocation for the City of Bolivar						
Line	Customer Class	Current Revenues ¹ (1)	Increase / (Decrease) to Reach Parity ²		Liberty Proposed Increase / (Decrease) ¹	
			Amount (2)	Percent (3)	Amount (4)	Percent (5)
Water						
1	Residential	\$1,275,756	\$1,553,538	121.8%	\$1,472,242	115.4%
2	Commercial	525,708	965,928	183.7%	922,517	175.5%
3	Industrial	-	-	0.0%	-	0.0%
4	Total ³	\$1,801,464	\$2,519,467	139.9%	\$2,394,759	132.9%
Sewer						
5	Residential	\$2,173,670	\$ (552,817)	-25.4%	\$ (599,868)	-27.6%
6	Commercial	584,558	249,286	42.6%	228,747	39.1%
7	Industrial	-	-	0.0%	-	0.0%
8	Total ³	\$2,758,228	\$ (303,531)	-11.0%	\$ (371,122)	-13.5%

Sources:

¹ Liberty's Direct Schedule TO-3.

² Revenue requirement from Liberty's Direct Schedule TO-2, less revenue at current rates from Direct Schedule TO-3.

³ It is unclear why there is a difference between the revenue at current rates and the claimed revenue deficiency between Direct Schedules TO-2 and TO-3. Similarly, the total proposed revenue requirement differs between the two schedules.

As shown in the table, Liberty proposes an increase in excess of 130% for Bolivar’s water customers, with an increase of 175.5% for Commercial customers, and 115.4% for Residential customers.

On the other hand, the Company acknowledges that Bolivar’s wastewater customers are paying rates in excess of the cost of service, and thus, require an overall reduction in the range of 13%, at the Company’s claimed revenue deficiency. However, the Company proposes to reduce Residential wastewater rates by 27%, while increasing Commercial rates by about 39%.

1 **Q IS THE COMPANY'S PROPOSED REVENUE APPORTIONMENT REASONABLE?**

2 A No. The Company's proposed revenue apportionment for Bolivar's water and
3 wastewater customers should be rejected, as it is based on CCOSS results that have
4 not been shown to be reasonable or accurate.

5 Instead, I recommend that any approved change in the revenue requirement for
6 Bolivar's water customers be applied to the Residential and Commercial classes on an
7 equal percentage basis. Similarly, any approved change in the revenue requirement
8 for Bolivar's wastewater customers should be applied on equal percentage basis
9 across customer classes.

10 **Q HAS LIBERTY OFFERED AN ALTERNATIVE REVENUE APPORTIONMENT FOR**
11 **BOLIVAR WASTEWATER CUSTOMERS?**

12 A Yes. Liberty has offered an alternative proposal, which would maintain the existing
13 Bolivar wastewater rates, and would use the excess revenues (i.e., \$371,122 according
14 to the Company's CCOSS) that are currently being collected from Bolivar wastewater
15 customers to reduce the proposed increase for non-Bolivar wastewater customers.⁹

16 **Q WHAT IS YOUR RESPONSE TO LIBERTY'S ALTERNATIVE WASTEWATER**
17 **REVENUE APPORTIONMENT?**

18 A Liberty's alternative wastewater revenue spread should be rejected, as it is completely
19 divorced from cost-causation principles, and is contrary to the Commission's Order
20 approving Liberty's acquisition of Bolivar's water and wastewater assets in Case
21 No. WA-2020-0397. Specifically, the Order stated that Liberty shall not consolidate
22 future rates for Bolivar with other rates until such time as the regulatory asset

⁹ Direct Testimony of Thomas O'Neill at page 21.

1 associated with the acquisition has been fully recovered from Bolivar customers.¹⁰
2 Further, the Order stated that in order to accomplish this, books and records shall be
3 separately maintained for Bolivar.¹¹

4 **Q DO YOU HAVE A DIFFERENT RECOMMENDATION REGARDING THE EXCESS**
5 **REVENUES CONTRIBUTED BY BOLIVAR'S WASTEWATER CUSTOMERS SINCE**
6 **THE ACQUISITION?**

7 A Yes. The excess revenues contributed by Bolivar's wastewater customers should be
8 used in a manner that benefits the Bolivar wastewater customers. Specifically, I
9 recommend that the excess revenues contributed by Bolivar's wastewater customers
10 from the date of the acquisition to the date that new rates take effect from this case be
11 used to offset the amount of the wastewater acquisition premium in this case.

12 The Company should be directed to calculate the revenues in excess of cost of
13 service collected from Bolivar wastewater customers from the date of acquisition to the
14 date new rates take effect from this case, and use that amount to offset the balance of
15 the regulatory asset. The Company has identified excess revenues of \$371,121
16 annually in its Bolivar wastewater CCOSS. From February 2022 through
17 September 2024, this would equate to an estimated \$990,000.¹² However, the
18 Company would need to determine the exact amount based on its actual revenues for
19 the appropriate time period as well as the approved Bolivar wastewater revenue
20 requirement resulting from this proceeding.

¹⁰ Case No. WA-2020-0397. Order dated December 8, 2021 at page 12.

¹¹ *Id.*

¹² \$371,121 / 12 months x 32 months = \$989,658.

1 **IV. LIBERTY'S WATER CCOSS FOR BOLIVAR**

2 **Q PLEASE DISCUSS THE COMPANY'S WATER CCOSS.**

3 A Liberty has conducted two water CCOSS, which are sponsored by Company witness
4 Mr. O'Neill. One CCOSS for Bolivar, and another for all non-Bolivar water customers.
5 Mr. O'Neill's CCOSS models utilize the widely accepted Base-Extra Capacity method
6 for *functionalizing, classifying, and allocating* costs to Liberty's various customer
7 classes. Investment in water utility plant and operating costs are first *functionalized*
8 according to the role they play in providing water service: water supply, pumping,
9 treatment, transmission, distribution, metering, and billing. Next, these costs are
10 *classified* into cost categories that reflect the causation of these costs: Base, or
11 average day rates of flow; Extra Capacity-Maximum Day and Extra Capacity-Maximum
12 Hour rates of flow; and Customer-related costs, such as metering and billing.

13 **Q DO YOU AGREE WITH MR. O'NEILL'S CCOSS FOR BOLIVAR?**

14 A I generally agree with the use of the Base-Extra Capacity method used in the
15 Company's CCOSS. However, I do not agree with the Company's Bolivar water
16 CCOSS. It has not been shown to accurately allocate costs to customer classes, and
17 therefore, should not be relied upon as a basis for determining how to spread the
18 claimed revenue deficiency across customer classes in this case.

19 **Q WHY DO YOU SAY THE COMPANY'S WATER CCOSS FOR BOLIVAR HAS NOT**
20 **BEEN SHOWN TO BE ACCURATE?**

21 A I state this because in discovery, the Company did not or could not provide data
22 supporting its allocation factors, particularly those related to water mains, the customer

1 class peaking factors, and the system wide maximum day to average day ratio, for
2 Bolivar.

3 **IV.A. Allocation of Plant and**
4 **Expenses Associated with Water Mains**

5 **Q PLEASE DISCUSS YOUR CONCERNS WITH RESPECT TO LIBERTY'S**
6 **ALLOCATION OF COSTS ASSOCIATED WITH WATER MAINS.**

7 A In some cases, larger volume commercial and industrial water consumers may be
8 served directly from large diameter transmission mains, and do not use the smaller
9 diameter distribution mains. In order to accurately allocate costs to cost-causers, this
10 distinction in the infrastructure used to provide service should be recognized and
11 reflected in the allocation of distribution main costs in the CCOSS. Bolivar requested
12 information from Liberty that would allow it to investigate the reasonableness of the
13 allocation of costs associated with water mains, but Liberty could not provide it, or
14 Liberty acknowledged that it did not consider the different types of mains used to serve
15 customers in the allocation of these costs.

16 **Q WHAT QUESTIONS DID BOLIVAR ASK IN DISCOVERY TO VERIFY THE**
17 **REASONABLENESS OF LIBERTY'S ALLOCATION OF TRANSMISSION AND**
18 **DISTRIBUTION MAINS TO THE BOLIVAR CUSTOMER CLASSES?**

19 A Bolivar asked several questions to investigate the reasonableness and accuracy of the
20 allocation of transmission and distribution main-related costs in the CCOSS. Examples
21 include the following:

- 22 • Bolivar asked Liberty to identify the sizes (diameters) of water mains that it
23 considers to be distribution mains.

- 1 • Bolivar asked Liberty to identify the sizes (diameters) of water mains that are
2 considered to be transmission mains.
- 3 • Bolivar asked Liberty to provide the length of distribution mains, and the length of
4 transmission mains in the Bolivar water system.
- 5 • Bolivar asked the Company to explain whether any of the Commercial customers
6 are connected directly to transmission mains, and therefore, are not served by
7 distribution mains. Bolivar requested data that would allow for adjustments to the
8 allocation factors for distribution mains, in the event any Commercial customers
9 were indeed connected directly to transmission mains.

10 The Company's response to all of the above questions was that the information
11 requested was not considered or used in the development of the CCROSS.¹³

12 **Q DO OTHER WATER UTILITIES' CCROSS MODELS RECOGNIZE THAT IN SOME**
13 **CASES LARGER WATER CONSUMERS DO NOT USE THE SMALLER**
14 **DISTRIBUTION MAINS?**

15 **A** Yes. This important distinction is commonly recognized in the industry. For example,
16 this distinction is recognized by Missouri-American Water Company ("MAWC"), as well
17 as in several other American Water jurisdictions.¹⁴ For each customer class, MAWC
18 does a calculation to estimate the percentage of water sales served to that class directly
19 from the transmission system.¹⁵ That portion of sales is not subject to an allocation of
20 distribution costs.¹⁶ It is only the distribution-level sales in each class that are allocated

¹³ Liberty's Response to Data Request No. BOL-35. Attached as Schedule JAY-1 at pages 1-3.

¹⁴ Other examples include Indiana-American Water Company (Indiana Utility Regulatory Commission Cause No. 45870), Virginia-American Water Company (Virginia State Corporation Commission Docket No. PUR-2023-00194), New Jersey-American Water Company (Docket No. WR24010056), Kentucky-American Water Company (Kentucky Public Service Commission Case No. 2023-00191), and Tennessee-American Water Company (Tennessee Public Service Commission Docket No. 24-00032).

¹⁵ Missouri Public Service Commission Docket No. WR-2024-0320. Direct Testimony of Max McClellan at pages 10-11.

¹⁶ *Id.*

1 distribution-related costs, and that relative level of sales is significantly different across
2 customer classes.¹⁷

3 However, in this case, Liberty admits that it gave absolutely no consideration to
4 this issue for Bolivar's water customers.

5 **IV.B. Customer Class Peaking Factors**

6 **Q WHAT ARE PEAKING FACTORS, OR PEAK DEMAND RATIOS?**

7 A The customer class base, maximum day and maximum hour rates of water usage for
8 customer classes serve as the basis for allocating base, maximum day and maximum
9 hour capacity costs between the Company's customer classes.

10 Maximum rates of water usage are expressed in terms of peak demand ratios,
11 or peaking factors. The maximum rate of usage, whether daily or hourly, can be
12 expressed as a percent of average annual usage (i.e., base usage). This percentage
13 relationship to the base usage is the peaking factor.

14 Typically, weather-sensitive customers whose water consumption increases
15 during the summer due to discretionary outdoor water use have higher peak demand
16 ratios than customers whose water use is relatively steady year-round.

17 **Q WHAT CUSTOMER CLASS PEAK DEMAND RATIOS HAVE BEEN USED IN THE**
18 **COMPANY'S CCROSS FOR BOLIVAR?**

19 A The maximum day and maximum hour peaking factors for each class are shown in
20 Table JAY-4.

¹⁷ *Id.*

TABLE JAY-4			
Bolivar Water			
<u>Customer Class Peaking Factors</u>			
<u>Line</u>	<u>Customer Class</u>	<u>Max Day Ratio</u> (1)	<u>Max Hour Ratio</u> (2)
1	Residential	1.60	2.70
2	Commercial	1.80	3.00

Source:
Liberty's CCOSS Schedule 6.7.

1 As shown in the table, the Company's peaking factors for the Bolivar Residential
2 class are lower than those of the Commercial class. Thus, the Company's peaking
3 factors do not reflect the expected relationships between the peaking factors of the
4 various customer classes. As noted above, given that Residential consumption tends
5 to be more weather-sensitive than customer classes that use water for process
6 purposes, one would expect the Residential peaking factors to be higher than those of
7 Commercial or Industrial customers.

8 **Q HAS THE COMPANY PROVIDED SUPPORT FOR ITS CUSTOMER CLASS**
9 **PEAKING FACTORS?**

10 **A** No. Bolivar requested the following information pertaining to the customer class
11 peaking factors used in the Company's CCOSS:

- 12 • Calculations supporting the customer class maximum day and maximum hour
13 peaking factors, as well as an explanation of how the peaking factors were derived.
- 14 • Customer class monthly water sales for several historical years.
- 15 • An indication as to whether the Company calculated a system diversity ratio to
16 check the reasonableness of its customer class maximum day and maximum hour
17 peaking factors, as recommended in the American Water Works Association's
18 ("AWWA") Manual M1.

1 Regarding the first point identified above, the Company responded that the
2 percentages used for the peaking factors are hardcoded in the CCOSS model, and
3 reflect assumptions based on the size of the Bolivar system compared to similar
4 systems, as the exact information was not available.¹⁸ Regarding the second and third
5 points above, the Company responded by stating that Liberty has not owned the Bolivar
6 system long enough to be able to respond to these questions.¹⁹

7 Thus, the peaking factors do not reflect the typical relationships between the
8 load patterns of Residential and Commercial customer classes, and the Company has
9 offered no analysis or explanation as to why its assumed customer class peaking
10 factors are reasonable and accurate.

11 **IV.C. System Wide Maximum Day** 12 **to Average Day Demand Ratio**

13 **Q PLEASE DISCUSS THE SYSTEM WIDE MAXIMUM DAY TO AVERAGE DAY RATIO**
14 **USED IN LIBERTY'S CCOSS FOR BOLIVAR.**

15 A Liberty uses a system wide maximum day to average day ratio of 1.45. This ratio is
16 used to separate costs between the base and extra-capacity demand categories. As
17 shown on the Company's CCOSS Schedule 6.6, this ratio suggests that 82.76% of
18 certain costs are associated with serving base or average water demands, and only
19 17.24% of costs are associated with serving water demand in excess of base demand.
20 In other words, a system wide peak demand ratio of 1.45 suggests a relatively high
21 system load factor.

¹⁸ Liberty's Response to Data Request No. BOL-35. Attached as Schedule JAY-1 at pages 1-3.

¹⁹ *Id.*

1 **Q DOES THE AWWA MANUAL M1 PROVIDE GUIDANCE ON THE SELECTION OF**
2 **AN APPROPRIATE SYSTEM WIDE MAXIMUM DAY TO AVERAGE DAY DEMAND**
3 **RATIO?**

4 A Yes. The AWWA Manual M1 indicates that to develop peaking factors by class, one
5 needs to identify the highest ratio of system maximum day demand to system average
6 day demand that has occurred over a representative number of recent years.²⁰ This
7 makes sense because a water system is designed to provide water during a peak event
8 during the life of the system (which could be 100 years), especially including any outlier
9 event. Outlier events are typically caused by weather events that generate large
10 increases in water demands by weather-sensitive customers. The low system peak
11 demand ratio used by Liberty may not capture the additional capacity the utility must
12 invest in to serve water demands that occur during abnormal or outlier weather periods.

13 **Q DID LIBERTY PROVIDE SUPPORT FOR ITS SYSTEM WIDE PEAK DEMAND**
14 **RATIO OF 1.45?**

15 A No. The Company acknowledged that this value reflects an assumption, as there was
16 not a value to use from the Bolivar annual report.²¹ However, the Company claims that
17 it is reasonable for a system of Bolivar's size, and states that as the Company continues
18 to operate in Bolivar, it will be able to provide further measurement.²² In addition, the
19 Company acknowledges that it does not have historical data for Bolivar as it has only
20 owned Bolivar since early 2022.²³ Thus, the Company does not have the necessary

²⁰ AWWA Manual M1 Seventh Edition at page 373.

²¹ Liberty's Response to Data Request No. BOL-35. Attached as Schedule JAY-1 at pages 1-3.

²² *Id.*

²³ *Id.*

1 system peak demand data for a representative number of years, and has not complied
2 with the guidance of the AWWA Manual M1.

3 **V. LIBERTY'S WASTEWATER CCOSS FOR BOLIVAR**

4 **Q PLEASE DISCUSS THE COMPANY'S WASTEWATER CCOSS FOR BOLIVAR.**

5 A Liberty uses the Base-Extra Capacity method for the allocation of wastewater costs,
6 and relies on the same unsupported assumptions for the derivation of its external
7 allocation factors as those described above for water CCOSS. This is evident from a
8 comparison of the Company's Direct Schedule TO-6.6 to Direct Schedule TO-8.6, and
9 Direct Schedule TO-6.7 to Direct Schedule TO-8.7.

10 **Q WHAT IS YOUR RECOMMENDATION REGARDING LIBERTY'S WASTEWATER**
11 **CCOSS FOR BOLIVAR?**

12 A Because Liberty has relied on unsupported assumptions for the allocation of costs to
13 its Bolivar wastewater customers, I recommend the CCOSS not be relied upon as the
14 basis for developing the wastewater revenue apportionment in this case. Instead, any
15 approved change in revenue requirement for the Bolivar wastewater customers should
16 be applied on an equal percentage basis across the customer classes.

17 **Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

18 A Yes, it does.

1 **Qualifications of Jessica A. York**

2 **Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A Jessica A. York. My business address is 16690 Swingley Ridge Road, Suite 140,
4 Chesterfield, MO 63017.

5 **Q PLEASE STATE YOUR OCCUPATION.**

6 A I am a consultant in the field of public utility regulation and a Principal with the firm of
7 Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory consultants.

8 **Q PLEASE IDENTIFY THE JURISDICTIONS IN WHICH YOU HAVE PREVIOUSLY
9 SPONSORED TESTIMONY.**

10 A I have sponsored expert testimony in front of the Idaho Public Utilities Commission, the
11 Illinois Commerce Commission, Indiana Utility Regulatory Commission, the Michigan
12 Public Service Commission, the Minnesota Public Utilities Commission, the Missouri
13 Public Service Commission, the Public Utilities Commission of Nevada, the Oklahoma
14 Corporation Commission, the Virginia State Corporation Commission, and the Public
15 Service Commission of Wisconsin.

16 **Q PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL
17 EMPLOYMENT EXPERIENCE.**

18 A I graduated from Truman State University in 2008 where I received my Bachelor of
19 Science Degree in Mathematics with minors in Statistics and Actuarial Science. I
20 earned my Master of Business Administration Degree with a concentration in Finance
21 from the University of Missouri-St. Louis in 2014.

1 I joined BAI in 2011 as an analyst. Then, in March 2015, I joined the consulting
2 team of BAI.

3 I have worked in various electric, natural gas and water and wastewater
4 regulatory proceedings addressing cost of capital, sales revenue forecasts, revenue
5 requirement assessments, class cost of service studies, rate design, and various policy
6 issues. I have also conducted competitive power and natural gas solicitations on behalf
7 of large electric and natural gas users, have assisted those large power and natural
8 gas users in developing procurement plans and strategies, assisted in competitive
9 contract negotiations, and power and natural gas contract supply administration. In the
10 regulated arena, I have evaluated cost of service studies and rate designs proffered by
11 other parties in cases for various utilities, including in Idaho, Illinois, Indiana, Kansas,
12 Wisconsin and others. I have conducted bill audits, rate forecasts and tariff rate
13 optimization studies.

14 I have also provided support to clients with facilities in deregulated markets,
15 including drafting supply requests for proposals, evaluating supply bids, and auditing
16 competitive supply bills. I have also prepared and presented to clients reports that
17 monitor the electric market and recommend strategic hedging transactions.

18 BAI was formed in April 1995. BAI and its predecessor firm have participated
19 in more than 700 regulatory proceedings in forty states and Canada.

20 BAI provides consulting services in the economic, technical, accounting, and
21 financial aspects of public utility rates and in the acquisition of utility and energy
22 services through RFPs and negotiations, in both regulated and unregulated markets.
23 Our clients include large industrial and institutional customers, some utilities and, on
24 occasion, state regulatory agencies. We also prepare special studies and reports,
25 forecasts, surveys and siting studies, and present seminars on utility-related issues.

1 In general, we are engaged in energy and regulatory consulting, economic
2 analysis and contract negotiation.

3 In addition to our main office in St. Louis, the firm also has branch offices in
4 Corpus Christi, Texas; Louisville, Kentucky and Phoenix, Arizona.

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Liberty Utilities (Missouri Water) LLC. d.b.a. Liberty
Case No. WR-2024-0104
City of Bolivar Data Request - BOL-35

Data Request Received: 2024-06-26

Response Date: 2024-07-16

Request No. BOL-35

Witness/Respondent: Thomas O'Neill

Submitted by: Peggy Whipple, peggy@healylawoffices.com

REQUEST:

Regarding the Company's water class cost of service study for the City of Bolivar:

- a. Please confirm that the water class cost of service study for the City of Bolivar is predicated on the City of Bolivar's water plant that existed at the time the system was acquired by Liberty. If not confirmed, please provide a detailed explanation supporting the response.
- b. Please identify the sizes (diameters) of mains that the Company considers to be distribution mains.
- c. Please provide the length of distribution main in the water system. Please separate the length of distribution main by diameter. Please provide the data in electronic spreadsheet format with all formulas and links intact.
- d. Please identify the sizes (diameters) of mains that the Company considers to be transmission mains.
- e. Please provide the length of transmission main in the water system. Please separate the length of transmission main by diameter. Please provide the data in electronic spreadsheet format with all formulas and links intact.
- f. Please explain whether any customers in the Commercial class are connected directly to transmission mains, and therefore, are not served by distribution mains.
- g. If the response to part c. is affirmative:
 - i. Please provide the annual water consumption of the Commercial customers served directly from transmission mains for the most recent 12-month period for which it is available.
 - ii. Please provide the annual water consumption of the Commercial customers connected to distribution mains, for the same recent 12-month period used in part g.i.
 - iii. Please provide the total annual water consumption of the Commercial class for same recent 12-month period used in part g.i.
- h. Please refer to Schedule 6.6 of the water class cost of service study for the City of Bolivar:
 - i. Please provide the calculation of the system maximum day to average day ratio of 1.45 in electronic spreadsheet format with all formulas and links intact.

- ii. Please provide the system maximum day to average day ratio for each year for the most recent 10-year period available. In electronic spreadsheet format with all formulas and links intact, please provide the calculations supporting the system maximum day to average day ratio for each year.
 - iii. Regarding the calculation of the system maximum hour to average hour ratio of 0.063, please provide a detailed explanation of the formula used to derive this value.
 - iv. Please provide the system maximum hour to average hour ratio for each year for the most recent 10-year period available. In electronic spreadsheet format with all formulas and links intact, please provide the calculations supporting the system maximum hour to average hour ratio for each year.
 - v. Please indicate whether the customer class peaking factors reflect non-coincident peaking factors, or whether they reflect coincident peaking factors.
 - vi. Please provide the Company's rationale for using the type of peaking factors identified above in subpart v.
- i. Please refer to Schedule 6.7 of the water class cost of service study for the City of Bolivar:
- i. In electronic spreadsheet format with all formulas and links intact, please provide calculations supporting the customer class maximum day peaking factors.
 - ii. In electronic spreadsheet format with all formulas and links intact, please provide calculations supporting the customer class maximum hour peaking factors.
 - iii. Please explain how the customer class maximum day peaking factors were derived.
 - iv. Please explain how the customer class maximum hour peaking factors were derived.
 - v. Please provide monthly water consumption for the Residential class for the most recent 10-years for which the data is available.
 - vi. Please provide the monthly water consumption for the Commercial class for the most recent 10-years for which the data is available.
 - vii. Please indicate whether the Company has calculated a system diversity ratio to check the reasonableness of its customer class maximum day peaking factors, as recommended in the American Water Works Association's Manual M1. If the response is affirmative, please identify the system diversity ratio that was calculated and provide the calculation in electronic spreadsheet format with all formulas and links intact.
 - viii. Please indicate whether the Company has calculated a system diversity ratio to check the reasonableness of its customer class maximum hour peaking factors, as recommended in the American Water Works Association's Manual M1. If the response is affirmative, please identify the system diversity ratio that was calculated and provide the calculation in electronic spreadsheet format with all formulas and links intact.

RESPONSE:

a. The Class Cost of Service was predicated on the plant accounts at the end of the Test Year, in this case December 2022, with known and measurable changes. This is to ensure that the most up to date accounts are used for accuracy of accounting.

b-g. Please identify the sizes (diameters) of mains that the Company considers to be distribution mains. For questions b – g, the information requested here was not considered or used in the development of the Class Cost of Service.

h.

i. The Maximum day value used in schedule 6.6 was a value that had to be assumed, as there was not a value to use from the Bolivar Annual report. This value, typically reported and measured, drives formulas for the ratios in schedule 6.6. The assumed value of 1.45 is a reasonable value for a system of Bolivars size, and as the Company continues to operate in Bolivar it will be able to provide further measurement.

ii – vi. As Liberty has only owned Bolivar since early 2022, the Company does not have the 10-year data requested. The formula used to calculate the .063 Max hour to average hour ratio is linked in Schedule 6.6.

i.

i-iv: all formulas are intact in Schedule 6.7 and can be reviewed there. The percentages used for % of average day that are hard coded were again assumed based on the size of the Bolivar system compared to similar systems as that exact information was not available.

v - viii: As stated previously, Liberty has not owned the Bolivar system for a long enough period of time to be able to respond to these questions.



Liberty Utilities (Missouri Water) LLC. d.b.a. Liberty

Case No. WR-2024-0104

City of Bolivar Data Request - BOL-38

Data Request Received: 2024-06-26

Response Date: 2024-07-16

Request No. BOL-38

Witness/Respondent: Thomas O'Neill

Submitted by: Peggy Whipple, peggy@healylawoffices.com

REQUEST:

Please confirm that the wastewater class cost of service study for the City of Bolivar is predicated on the City of Bolivar's wastewater plant that existed at the time the system was acquired by Liberty. If not confirmed, please provide a detailed explanation supporting the response.

RESPONSE:

The Class Cost of Service is predicated on the plant accounts at Year End of the Test Year, in this case December 2022, including known and measurable changes. This is best practice for any rate case using a historical test year and is meant to utilize the most accurate accounting practices available to the Company.



Liberty Utilities (Missouri Water) LLC. d.b.a. Liberty
Case No. WR-2024-0104
City of Bolivar Data Request - BOL-19

Data Request Received: 2024-06-26

Response Date: 2024-07-16

Request No. BOL-19

Witness/Respondent: Cindy Wilson

Submitted by: Peggy Whipple, peggy@healylawoffices.com

REQUEST:

Please provide the actual cost of providing water service (e.g., Operation and Maintenance (“O&M”) expense depreciation, taxes, return on rate base) to the City of Bolivar for each of the following periods. In addition, please provide the data in electronic spreadsheet format with all formulas and links intact.

- a. Acquisition date through December 31, 2022.
- b. Calendar year 2023.
- c. January 2024 to date.

RESPONSE:

The cost of service is not available for each specific period requested; however, the Missouri Water Cost of Service is based on the books and records of the Company for the twelve months ending December 2022. The Company’s Cost of Service reflects adjustments for items that are known and measurable through the update period of June 2024.

Parties were provided with a link to the Missouri Water Cost of Service at the time of the initial filing as well as the subsequent update. Please refer to the Company’s Cost of Service for the items requested above.



Liberty Utilities (Missouri Water) LLC. d.b.a. Liberty
Case No. WR-2024-0104
City of Bolivar Data Request - BOL-21

Data Request Received: 2024-06-26

Response Date: 2024-07-16

Request No. BOL-21

Witness/Respondent: Cindy Wilson

Submitted by: Peggy Whipple, peggy@healylawoffices.com

REQUEST:

Please provide the actual cost of providing waste water service (e.g., O&M expense, depreciation, taxes, return on rate base) to the City of Bolivar for each of the following time periods. In addition, please provide the data in electronic spreadsheet format with all formulas and links intact.

- a. Acquisition date through December 31, 2022.
- b. Calendar year 2023.
- c. January 2024 to date.

RESPONSE:

The cost of service is not available for each specific period requested. The Missouri Water Cost of Service is based on the books and records of the Company for the twelve months ending December 2022. The Company's Cost of Service reflects adjustments for items that are known and measurable through the update period of June 2024.

Parties were provided with a link to the Missouri Water Cost of Service at the time of the initial filing as well as the subsequent update. Please refer to the Company's Cost of Service for the items requested above.