

PARTIAL DISPOSITION AGREEMENT
OF SMALL WATER AND SEWER COMPANY REVENUE INCREASE REQUEST

LIBERTY UTILITIES (MISSOURI WATER), LLC D/B/A LIBERTY UTILITIES

MO PSC FILE NO. WR-2018-0170, SR-2018-0171

BACKGROUND

Liberty Utilities (Missouri Water), LLC d/b/a Liberty Utilities ("Company") initiated the small company revenue increase request ("Request") for water and sewer service, which is the subject of the above-referenced Missouri Public Service Commission ("Commission") File Numbers by submitting a letter to the Secretary of the Commission in accordance with the provisions of Commission Rule 4 CSR 240-3.050, Small Utility Rate Case Procedure ("Small Company Procedure"). In its request letter, received by the Commission on December 15, 2017, the Company set forth its request for an increase of \$995,844 in its total annual water service operating revenues and \$196,617 in its total annual sewer service operating revenues. The Company also acknowledged that the design of its customer rates, service charges, customer service practices, general business practices and general tariff provisions would be reviewed during the Commission Staff's ("Staff") review of the revenue increase request, and could thus be the subject of Staff's recommendations. The Company provides service to approximately 1,954 water customers and 416 sewer customers located in eastern and southwest Missouri.

Pursuant to the provisions of the Small Company Procedure and related internal operating procedures, Staff initiated an audit of the Company's books and records, a review of the Company's customer service and general business practices, a review of the Company's existing tariff, an inspection of the Company's facilities and a review of the Company's operation of its facilities. (These activities are collectively referred to hereinafter as "Staff's investigation of the Company's Request" or "Staff's investigation.")

Upon completion of Staff's investigation of the Company's Request, Staff provided the Company, the Office of the Public Counsel ("OPC"), with information regarding Staff's investigation and the results of the investigation, including Staff's initial recommendations for the resolution of the Company's Request.

PARTIAL RESOLUTION OF THE COMPANY'S RATE INCREASE REQUEST

Pursuant to negotiations held subsequent to the parties' receipt of the above-referenced information regarding Staff's investigation of the Company's Request, the parties hereby state the following agreements:

(1) The schedule of depreciation rates in Attachment A, incorporated by reference herein, includes the depreciation rates used by Staff in its revenue requirement analysis and shall be the prescribed schedule of plant depreciation rates for the Company;

(2) Within thirty (30) days of the effective date of an order approving this Partial Disposition Agreement, the Company agrees to implement the recommendations contained in the Customer Experience Department Report, attached hereto as Attachment B and incorporated by reference herein, and provide proof of implementing the recommendations to the Manager of the Commission's Customer Experience Department and to OPC:

- (a) The Company's call center representatives will include the Company name "Liberty Utilities" in the opening response to after-hours telephone calls;
- (b) The Company agrees to ensure the accuracy of information presented on all Company billing statements.
- (c) The Company agrees to use the four (4) credit criteria provided in Commission Rule 4 CSR 240-13.030(C) when determining whether it may collect a deposit from new customers.
- (d) The Company agrees to comply with Commission Rule 4 CSR 240-13.040.
- (e) The Company agrees to review and update the information presented in the Company rights and responsibilities brochure and website to eliminate all inaccurate statements and ensure that this information is consistent with Company practices and Commission rules. (A link to the Company's tariffs must be provided.)

(3) Within one hundred eighty days (180) days of the effective date of an order approving this Partial Disposition Agreement, the Company shall implement the recommendations contained in the Water & Sewer Department Memorandum, attached hereto as Attachment C and incorporated by reference herein, and agrees to provide proof of implementing the recommendation to the Manager of the Commission's Water & Sewer Unit and to OPC:

- (a) The Company agrees to test, and then repair or replace water meters as necessary, on according to the schedule provided in 4 CSR 240-

10.030(38). Meters that do not comply with 4 CSR 240-10.030(37) shall be replaced.

(4) The Company shall mail its customers a final written notice of the rates and charges included in its proposed tariff revisions prior to or with its next billing cycle after issuance of the Commission order approving the terms of this Partial Disposition Agreement. The notice shall include a summary of the impact of the proposed rates on an average residential customer's bill. When the Company mails the notice to its customers, it shall also file a copy of the notice in EFIS;

(5) Staff and OPC may conduct follow-up reviews of the Company's operations to ensure that the Company has complied with the provisions of this Partial Disposition Agreement;

(6) Staff or OPC may file a formal complaint against the Company if the Company does not comply with the provisions of this Partial Disposition Agreement;

(7) The Parties agree that they have read the foregoing Partial Disposition Agreement, that the facts stated therein are true and accurate to the best of the Company's knowledge and belief, that the foregoing conditions accurately reflect the agreement reached between the Company OPC and Staff; and that the Company freely and voluntarily enters into this Disposition Agreement; and

(8) The above agreements satisfactorily resolve all issues identified by Staff, OPC and the Company regarding the Company's Request, except as otherwise specifically stated herein.

ADDITIONAL MATTERS

The parties acknowledge that they have previously agreed to an extension of the normal "Day-150" date by which an agreement regarding the resolution of a small company revenue increase request is to be reached. The extension was necessary due to delays in Company responses to Data Requests. A copy of the extension agreement can be found in the above-referenced EFIS Case No. at EFIS item 28 - Notice of Extension..

Staff has completed a Summary of Case Events and has included that summary as Attachment D to this Company/Staff/OPC Disposition Agreement.

REQUEST FOR EVIDENTIARY HEARING

The parties were unable to reach a full disposition agreement for this case. This partial disposition resolves only the items listed in the section above. The remaining issues are:

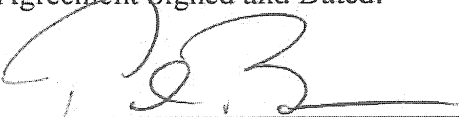
1. Revenue requirement, including all portions of the calculation not specifically noted above;
2. Return on equity;
3. Capital structure;
4. Rate base;
5. Rate case expense;
6. Rate design and rate consolidation; and
7. Compliance with § 393.140(4) RSMo, 4 CSR 240-50.030(1) and 4 CSR 204-61.020(1), the use of *The Uniform System of Accounts*.

The parties acknowledge that Staff will be filing this Partial Disposition Agreement and the attachments hereto. The parties also acknowledge that Staff and the Company may make other filings in this case.

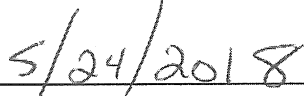
Additionally, the Company agrees that subject to the rules governing practice before the Commission and without waiving the confidentiality of the facts and positions disclosed in the course of settlement, Staff shall have the right to provide an oral explanation to support its entering into this Partial Disposition Agreement, if the Commission requests one at any agenda meeting at which this case is noticed to be considered by the Commission. Subject to the rules governing practice before the Commission and without waiving the confidentiality of the facts and positions disclosed in the course of settlement, Staff will be available to answer Commission questions regarding this Partial Disposition Agreement. To the extent reasonably practicable, Staff shall provide the Company with advance notice of any such agenda meeting so that they may have the opportunity to be present and/or represented at the meeting.

SIGNATURES

Agreement Signed and Dated:



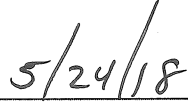
Paul A. Boudreau
Brydon, Swearingen, & England P.C.
Counsel for Liberty Utilities (Missouri Water), LLC d/b/a Liberty Utilities



Date



James Busch
Manager
Water & Sewer Department
Missouri Public Service Commission Staff



Date

/s/ Lera Shemwell

Lera Shemwell
Senior Counsel
The Office of the Public Counsel

Date

List of Attachments

- Attachment A – Schedule of Depreciation Rates
- Attachment B – Customer Experience Department Report
- Attachment C – Water & Sewer Unit Memorandum
- Attachment D – Summary of Events

**LIBERTY UTILITIES (MISSOURI WATER)
KMB (CAPE ROCK VILLAGE)
SCHEDULE of DEPRECIATION RATES
SEWER
WR-2018-0170 (SR-2017-0171)**

<u>ACCOUNT NUMBER</u>	<u>ACCOUNT DESCRIPTION</u>	<u>DEPRECIATION RATE</u>	<u>AVERAGE SERVICE LIFE (YEARS)</u>	<u>NET SALVAGE</u>
COLLECTION PLANT				
351	Structure & Improvements	2.5%	44	-10%
352.2	Collection Sewers (Gravity)	2.0%	50	0%
353	Services (A & B)	2.0%	50	0%
354	Flow Measurement Devices	3.3%	30	0%
PUMPING PLANT				
361	Structures and Improvements	4.0%	27.5	-10%
363	Electric Pumping Equipment	10.0%	10	0%
TREATMENT & DISPOSAL PLANT				
371	Structures and Improvements	3.7%	30	-10%
372	Treatment & Disposal Facilities	5.0%	22	-10%
372.1	Oxidation Lagoons	4.0%	40	-60%
373	Plant Sewers	5.0%	20	0%
374	Outfall Sewer Lines	2.0%	50	0%
GENERAL PLANT				
390	Structures and Improvements	2.5%	40	0%
391	Office Furniture & Equipment	5.0%	20	0%
391.1	Office Electronic & Computer Equip.	14.3%	7	0%
392	Transportation Equipment	13.0%	7	9%
393	Stores Equipment	4.0%	25	0%
394	Tools, Shop, and Garage Equipment	5.0%	18	10%
395	Laboratory Equipment	5.0%	20	0%
396	Power Operated Equipment	6.7%	13	13%
397	Communication Equipment	6.7%	15	0%
399	Other Tangible Plant	5.0%	20	0%
SHARED SERVICES PLANT**				
374	Land and Land Rights - Corporate	0.0%		
390	Structures and Improvements - Corporate	2.5%	40	0%
391	Office Furniture and Equipment - Corporate	5.0%	20	0%
392.1	Transportation Equipment less than 12,000 lbs - Corporate	9.4%	10	6%
394	Tools, Shop, and Garage Equipment - Corporate	5.0%	20	0%
398	Miscellaneous Equipment - Corporate	5.0%	20	0%
399	Other Tangible Property - Corporate	14.3%	7	0%
399.1	Other Tangible Property - Servers - H/W - Corporate	20.0%	5	0%
399.3	Other Tangible Property - Network - H/W - Corporate	14.3%	7	0%
399.4	Other Tangible Property - PC Hardware - Corporate	20.0%	5	0%
399.5	Other Tangible Property - Software - Corporate	14.3%	7	0%

**Depreciation Rates for Shared Services Plant will conform to ordered rates for Shared Services Accounts in GR-2018-0013. If the ordered rates for Shared Services Plant in GR-2018-0013 differ from the Shared Services Rates shown on this schedule, then the rates from GR-2018-0013 have precedent.

LIBERTY UTILITIES (MISSOURI WATER)
OZARK MOUNTAIN RESORT & TIMBER CREEK RESORT
SCHEDULE of DEPRECIATION RATES
SEWER
WR-2018-0170 (SR-2017-0171)

<u>ACCOUNT NUMBER</u>	<u>ACCOUNT DESCRIPTION</u>	<u>DEPRECIATION RATE</u>	<u>AVERAGE SERVICE LIFE (YEARS)</u>	<u>NET SALVAGE</u>
COLLECTION PLANT				
351	Structures & Improvements	4.0%	27.5	-10%
352.1	Collection Sewers (Force)	2.0%	50	0%
352.2	Collection Sewers (Gravity)	2.0%	50	0%
353	Services (A & B)	2.0%	50	0%
354	Flow Measurement Devices	3.3%	30	0%
355	Flow Measurement Installations	3.3%	30	0%
PUMPING PLANT				
361	Structures and Improvements	4.0%	27.5	-10%
362	Receiving Wells	4.0%	26	-5%
363	Electric Pumping Equipment	0.0%	*	
TREATMENT & DISPOSAL PLANT				
371	Structures and Improvements	3.7%	30	-10%
372	Treatment & Disposal Facilities	5.0%	22	-10%
373	Plant Sewers	2.5%	40	0%
374	Outfall Sewer Lines	2.0%	50	0%
GENERAL PLANT				
390	Structures & Improvement	2.5%	44	-10%
391	Office Furniture & Equipment	5.0%	20	0%
391.1	Office Electronic & Computer Equip.	14.3%	7	0%
392	Transportation Equipment	13.0%	7	9%
393	Stores Equipment	4.0%	25	0%
394	Tools, Shop, and Garage Equipment	5.0%	18	10%
395	Laboratory Equipment	5.0%	20	0%
396	Power Operated Equipment	6.7%	13	13%
397	Communication Equipment	6.7%	15	0%
399	Other Tangible Plant	5.0%	20	0%
SHARED SERVICES PLANT**				
374	Land and Land Rights - Corporate	0.0%		
390	Structures and Improvements - Corporate	2.5%	40	0%
391	Office Furniture and Equipment - Corporate	5.0%	20	0%
392.1	Transportation Equipment less than 12,000 lbs - Corporate	9.4%	10	6%
394	Tools, Shop, and Garage Equipment - Corporate	5.0%	20	0%
398	Miscellaneous Equipment - Corporate	5.0%	20	0%
399	Other Tangible Property - Corporate	14.3%	7	0%
399.1	Other Tangible Property - Servers - H/W - Corporate	20.0%	5	0%
399.3	Other Tangible Property - Network - H/W - Corporate	14.3%	7	0%
399.4	Other Tangible Property - PC Hardware - Corporate	20.0%	5	0%
399.5	Other Tangible Property - Software - Corporate	14.3%	7	0%

* Account fully accrued.

**Depreciation Rates for Shared Services Plant will conform to ordered rates for Shared Services Accounts in GR-2018-0013. If the ordered rates for Shared Services Plant in GR-2018-0013 differ from the Shared Services Rates shown on this schedule, then the rates from GR-2018-0013 have precedent.

LIBERTY UTILITIES (MISSOURI WATER)
KMB
SCHEDULE of DEPRECIATION RATES
WATER
WR-2018-0170

ACCOUNT NUMBER	ACCOUNT DESCRIPTION	DEPRECIATION RATE	AVERAGE SERVICE LIFE (YEARS)	NET SALVAGE
Source of Supply				
314	Wells & Springs	2.0%	55	-8%
316	Supply Mains	2.0%	50	0%
Pumping Plant				
321	Structures & Improvements	2.5%	44	-10%
325	Electric Pumping Equipment	0.0%	*	
328	Other Pumping Equipment	0.0%	*	
Water Treatment Plant				
332	Water Treatment Equipment	2.9%	35	0%
Transmission and Distribution				
342	Distribution Reservoirs & Standpipes	2.5%	42	-5%
343	Transmission & Distribution Mains	2.0%	50	0%
345	Customer Services	2.5%	40	0%
346	Customer Meters	0.0%	*	
347	Customer Meter Pits & Installation	2.5%	40	0%
348	Hydrants	2.0%	50	0%
General Plant				
390	Structures & Improvements	2.5%	44	-10%
391	Office Furniture & Equipment	5.0%	20	0%
391.1	Office Electronic & Computer Equip.	0.0%	*	
392	Transportation Equipment	13.0%	7	9%
393	Stores Equipment	4.0%	25	0%
394	Tools, Shop, Garage Equipment	5.0%	18	10%
395	Laboratory Equipment	5.0%	20	0%
396	Power Operated Equipment	6.7%	13	13%
397	Communication Equipment	6.7%	15	0%
399	Other Tangible Plant	5.0%	20	0%
Shared Services Plant**				
374	Land and Land Rights - Corporate	0.0%		
390	Structures and Improvements - Corporate	2.5%	40	0%
391	Office Furniture and Equipment - Corporate	5.0%	20	0%
392.1	Transportation Equipment less than 12,000 lbs - Corporate	9.4%	10	6%
394	Tools, Shop, and Garage Equipment - Corporate	5.0%	20	0%
398	Miscellaneous Equipment - Corporate	5.0%	20	0%
399	Other Tangible Property - Corporate	14.3%	7	0%
399.1	Other Tangible Property - Servers - H/W - Corporate	20.0%	5	0%
399.3	Other Tangible Property - Network - H/W - Corporate	14.3%	7	0%
399.4	Other Tangible Property - PC Hardware - Corporate	20.0%	5	0%
399.5	Other Tangible Property - Software - Corporate	14.3%	7	0%

* Account fully accrued.

**Depreciation Rates for Shared Services Plant will conform to ordered rates for Shared Services Accounts in GR-2018-0013. If the ordered rates for Shared Services Plant in GR-2018-0013 differ from the Shared Services Rates shown on this schedule, then the rates from GR-2018-0013 have precedent.

LIBERTY UTILITIES (MISSOURI WATER)
NOEL
SCHEDULE of DEPRECIATION RATES
WATER
WR-2018-0170

<u>ACCOUNT NUMBER</u>	<u>ACCOUNT DESCRIPTION</u>	<u>DEPRECIATION RATE</u>	<u>AVERAGE SERVICE LIFE (YEARS)</u>	<u>NET SALVAGE</u>
Source of Supply				
310	Land and Land Rights	0.0%	0	0%
314	Wells & Springs	2.0%	55	-8%
316	Supply Mains	2.0%	50	0%
Pumping Plant				
321	Structures & Improvements	2.5%	44	-10%
325.1	Submersible Pumping Equipment	10.0%	12	-20%
325.2	High Service or Booster Pumping Equip.	6.7%	15	0%
328	Other Pumping Equipment	4.0%	25	0%
Water Treatment Plant				
332	Water Treatment Equipment	2.9%	35	0%
Transmission and Distribution				
342	Distribution Reservoirs & Standpipes	2.5%	42	-5%
343	Transmission & Distribution Mains	2.0%	50	0%
345	Customer Services	2.5%	40	0%
346	Customer Meters	3.3%	30	0%
347	Customer Meter Pits & Installation	2.5%	40	0%
348	Hydrants	2.0%	50	0%
General Plant				
390	Structures & Improvements	2.5%	44	-10%
391	Office Furniture & Equipment	6.7%	15	0%
391.1	Office Electronic & Computer Equip.	14.3%	7	0%
392	Transportation Equipment	13.0%	7	9%
393	Stores Equipment	4.0%	25	0%
394	Tools, Shop, Garage Equipment	5.0%	18	10%
395	Laboratory Equipment	5.0%	20	0%
396	Power Operated Equipment	6.7%	13	13%
397	Communication Equipment	6.7%	15	0%
399	Other Tangible Plant	5.0%	20	0%
Shared Services Plant**				
374	Land and Land Rights - Corporate	0.0%		
390	Structures and Improvements - Corporate	2.5%	40	0%
391	Office Furniture and Equipment - Corporate	5.0%	20	0%
392.1	Transportation Equipment less than 12,000 lbs - Corporate	9.4%	10	6%
394	Tools, Shop, and Garage Equipment - Corporate	5.0%	20	0%
398	Miscellaneous Equipment - Corporate	5.0%	20	0%
399	Other Tangible Property - Corporate	14.3%	7	0%
399.1	Other Tangible Property - Servers - H/W - Corporate	20.0%	5	0%
399.3	Other Tangible Property - Network - H/W - Corporate	14.3%	7	0%
399.4	Other Tangible Property - PC Hardware - Corporate	20.0%	5	0%
399.5	Other Tangible Property - Software - Corporate	14.3%	7	0%

**Depreciation Rates for Shared Services Plant will conform to ordered rates for Shared Services Accounts in GR-2018-0013. If the ordered rates for Shared Services Plant in GR-2018-0013 differ from the Shared Services Rates shown on this schedule, then the rates from GR-2018-0013 have precedent.

LIBERTY UTILITIES (MISSOURI WATER)
HOLIDAY HILLS RESORT, OZARK MOUNTAIN RESORT & TIMBER CREEK RESORT
SCHEDULE of DEPRECIATION RATES
WATER
WR-2018-0170

ACCOUNT NUMBER	ACCOUNT DESCRIPTION	DEPRECIATION RATE	AVERAGE SERVICE LIFE (YEARS)	NET SALVAGE
Source of Supply				
311	Structures & Improvements	2.5%	44	-10%
314	Wells & Springs	2.0%	55	-8%
316	Supply Mains	2.0%	50	0%
Pumping Plant				
321	Structures & Improvements	2.5%	44	-10%
325	Electric Pumping Equipment	0.0%	*	
325.2	High Service or Booster Pumping Equip.	6.7%	15	0%
328	Other Pumping Equipment	4.0%	25	0%
Water Treatment Plant				
332	Water Treatment Equipment	2.9%	35	0%
Transmission and Distribution				
341	Structures & Improvements	2.5%	44	-10%
342	Distribution Reservoirs & Standpipes	2.5%	42	-5%
343	Transmission & Distribution Mains	2.0%	50	0%
345	Customer Services	2.5%	40	0%
346	Customer Meters	5.0%	20	0%
348	Hydrants	2.0%	50	0%
General Plant				
390	Structures & Improvements	2.5%	44	-10%
391	Office Furniture & Equipment	5.0%	20	0%
391.1	Office Electronic & Computer Equip.	14.3%	7	0%
392	Transportation Equipment	13.0%	7	9%
393	Stores Equipment	4.0%	25	0%
394	Tools, Shop, Garage Equipment	5.0%	18	10%
395	Laboratory Equipment	5.0%	20	0%
396	Power Operated Equipment	6.7%	13	13%
397	Communication Equipment	6.7%	15	0%
399	Other Tangible Plant	5.0%	20	0%
Shared Services Plant**				
374	Land and Land Rights - Corporate	0.0%		
390	Structures and Improvements - Corporate	2.5%	40	0%
391	Office Furniture and Equipment - Corporate	5.0%	20	0%
392.1	Transportation Equipment less than 12,000 lbs - Corporate	9.4%	10	6%
394	Tools, Shop, and Garage Equipment - Corporate	5.0%	20	0%
398	Miscellaneous Equipment - Corporate	5.0%	20	0%
399	Other Tangible Property - Corporate	14.3%	7	0%
399.1	Other Tangible Property - Servers - H/W - Corporate	20.0%	5	0%
399.3	Other Tangible Property - Network - H/W - Corporate	14.3%	7	0%
399.4	Other Tangible Property - PC Hardware - Corporate	20.0%	5	0%
399.5	Other Tangible Property - Software - Corporate	14.3%	7	0%

* Account fully accrued.

**Depreciation Rates for Shared Services Plant will conform to ordered rates for Shared Services Accounts in GR-2018-0013. If the ordered rates for Shared Services Plant in GR-2018-0013 differ from the Shared Services Rates shown on this schedule, then the rates from GR-2018-0013 have precedent.

CONSUMER EXPERIENCE DEPARTMENT

FINAL REPORT

The purpose of the Customer Experience Department (“CXD”) is to investigate and make recommendations to the Commission on issues related to the customer experience and customer expectations which include promoting and encouraging efficient and effective utility management and customer service. These objectives contribute to the Commission’s overall mission to ensure that Missourians receive safe and reliable utility service at just, reasonable, and affordable rates.

The objectives of this review are to document and analyze the management control processes, procedures, and practices used by Liberty Utilities to ensure that its customers’ service needs are met and to make recommendations, where appropriate, by which the Company may improve the quality of services provided to its customers. The findings of this review will also provide the Commission with information regarding the Company’s customer service and business operations.

The scope of this review focuses on processes, procedures, and practices related to:

- Meter Reading
- Customer Billing
- Payment Remittance
- Credit and Collections
- Complaints and Inquiries
- Customer Communication

The CXD Staff examined the Company’s tariffs, annual reports, Commission complaint and inquiry records, and other documentation related to the Company’s customer service and business operations. In preparation of this report, the CXD Staff submitted initial data requests to the Company on January 2, 2018, and conducted interviews on February 14, 2018, with Company personnel.

Overview

The Liberty Utilities business office is located at 110 Foster Street, Noel, Missouri 64854. Its hours of operation are 7:30 a.m. to 4:00 p.m. (closed 12:00-12:30 p.m. for lunch) Monday through Friday. Company personnel are available 24/7 by telephone. During regular business hours, customer calls are answered by business office personnel in Noel, Missouri. From 4:00 p.m. – 7:00 p.m., Monday through Friday, customer calls may be answered by Company personnel at an Ozark, Missouri office, or by call center personnel at Empire District Electric Company in Joplin, Missouri. All customer calls received at other times are handled by call center personnel at Empire District Electric Company. The CXD Staff called the after-hours telephone number and although a call center representative gave her name and asked how she could help, no mention was made that someone representing Liberty Utilities or any other corporation had answered the call. Company management asserts that all customer data is backed up with duplicate data centers and stored in two different geographical locations.

The full-time staff of Liberty Utilities consists of six individuals. This includes a customer service representative who is responsible for the business office activity in Noel, Missouri. One certified operator is responsible for the outside operations activity in all service areas of the Company. Two individuals read meters and perform routine maintenance work in the Noel service area. The billing function is supported by two individuals in Jackson, Missouri. Some responsibilities are handled by shared-services employees who have duties outside of the water and sewer operation of Liberty Utilities. The Company utilizes outside contractors to perform operations responsibilities in all service areas except Noel. The Noel business office is the only customer-accessible office in the Liberty Utilities water and sewer service areas. All employees keep time records. Monthly vehicle inspection forms are maintained for each Company vehicle that include the miles each vehicle was used. Company personnel asserted that all vehicles are dedicated solely to Company business and are not driven for personal use by Company employees. The CXD Staff observes that daily vehicle logs are common and necessary in companies that use vehicles for purposes outside of regulated business activities.

As mentioned above, Liberty Utilities provided inconsistent customer numbers in two Commission staff data request responses. Commission staff Data Request No. 7 asked for the number of customers by service area. Data provided by the Company indicated it provided water and sewer service to 2,404 customers in December 2016 and 2,367 customers in December 2017. In the Data Request No. 52 response, the Company asserted there were 2,845 customers at end-of-year 2016 and 2,781 customers at end-of-year 2017. At this time, the Company has not provided information that the CXD Staff requested to verify actual customer number totals. The following table provides water and sewer customer number totals in each service area for December 2016 and December 2017 based on the Data Request No. 7 response. The city location of each service area is also included.

Number of Water and Sewer Customer in Each Liberty Utilities Service Area				
Service Area/Missouri City	December 2016		December 2017	
	Water	Sewer	Water	Sewer
Noel, MO	672		665	
Timber Creek / Desoto, MO	25	16	25	16
Ozark Mountain / Kimberling City, MO	256	230	256	231
Holiday Hills / Branson, MO	491		476	
KMB - Cape Rock Village / Cape Girardeau, MO		171		171
KMB - Warren Woods / House Springs, MO	19		21	
KMB - Scotsdale / Scotsdale, MO	36		39	
KMB - Lakewood Hills / Pacific, MO	114		114	
KMB - Catawissa, MO	33		33	
KMB - High Ridge Manor / House Springs, MO	81		87	
KMB - Crestview Acres / Pacific, MO	55		55	
KMB - Cedar Hills Estates / Cedar Hills, MO	205		178	
	1,987	417	1,949	418

Source: Liberty Utilities DR No. 7 Response

Company personnel estimated a customer growth potential of about 5%.

Meter Reading

Liberty Utilities meter reading responsibilities are divided between Company and contract personnel. Two Company meter readers read the water meters in the Noel service territory and contract meter readers are responsible for meter reading in the remaining Liberty Utilities service territories. Most meter readings are recorded manually with the exception of the KMB service territory where most meter readings are entered into Itron handheld meter reading devices. Meters are typically read between the 4th and 12th of each month. Company staff in the Noel business office review all bills for accuracy by comparing the usage with high and low parameters established for each customer. Company staff represent that questionable meter readings result in rereads prior to bill calculation. All meters, including inactive meters, are read on a monthly basis. Meter readings are transmitted to the Company's office in Jackson, Missouri, to complete the bill calculation process prior to the 22nd of each month. Company personnel represent there have been no documented cases of theft of service in 2016 and 2017. Liberty Utilities is gradually converting to radio-read meters when meters are replaced for other reasons.

Customer Billing

Liberty Utilities generates all customer bills out of its Jackson, Missouri, office using its customer account record software, Microsoft GP Cogsdale. With the exception of bills for the Timber Creek service area, the Company uses Captum, a third-party vendor from Glendale, Illinois, to print and mail the billing statements. Timber Creek billing statements are printed locally and mailed directly to customers. All billing statements are mailed on the 22nd of each month. Company personnel did not indicate that random tests for bill accuracy are performed after the bills are generated and before they are mailed. Company personnel assert that all bills are due 21 days after mailing. Customers may return the top portion of the billing statement with their payment and retain the bottom portion for their own records. The Company's four water tariffs and two sewer tariffs include the applicable rates in each respective service territory where water and/or sewer service is provided.

The billing statement contains line entries for the present meter reading, the previous meter reading, gallons used, current amount due, any balance in arrears, the base monthly water charge, the commodity water charge, the due date, the net amount due, and any late fees that are due. The Company's six tariffs governing water and sewer service have different provisions for late fees. One tariff does not provide for a late fee, three tariffs include a provision for the greater of \$5.00 or 3% of the unpaid balance, and two tariffs provide for the greater of \$2.00 or 3% of the unpaid balance. A CXD Staff review of a sample of 30 billing statements revealed one instance of apparent incorrect calculation of the late fee. Company personnel could not provide an explanation for the miscalculation at a CXD Staff on-site meeting and has not offered an explanation since the error was brought to their attention. The billing statements also include one phone number to call for billing questions and a different after-hours emergency phone number. Company personnel asserted that customers only need to call the first regular telephone number presented on each billing statement when they want to contact the Company.

Payment Remittance

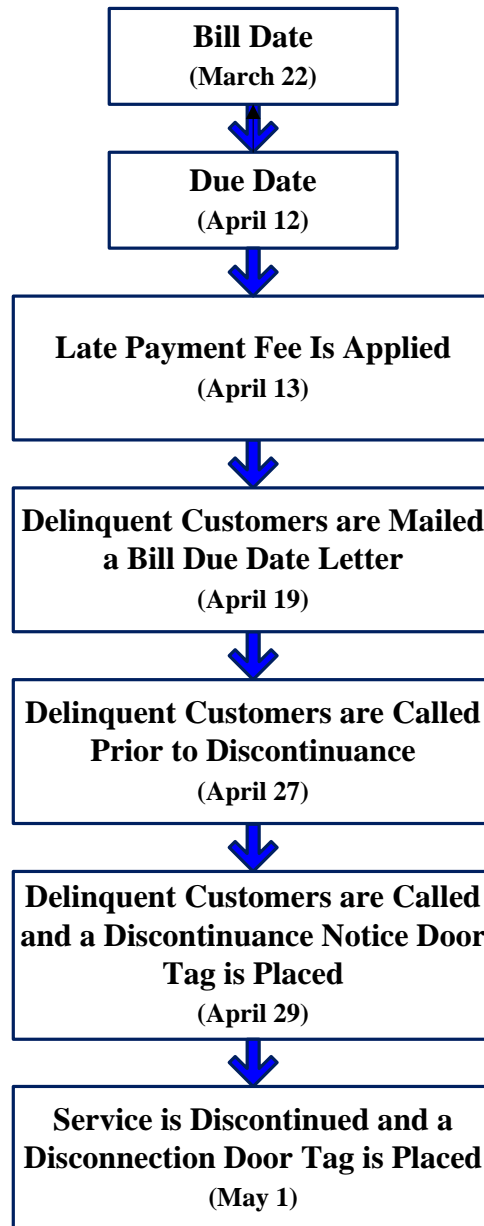
Customer payment options include checks, credit and debit cards, money orders, and electronic bank drafts. Cash payments are also accepted in the business office located in Noel, Missouri. Most Liberty Utilities customers make their bill payments by check, although electronic bank drafts and credit and debit cards are also very popular. A Jackson, Missouri, office mailing address included on the billing statements is used for payment remittance. Customers may access the Company's website to make payments from their checking account or with a credit or debit card. The website also provides options for customers to set up paperless billing or make automatic payments from a checking or savings account. A payment table is provided to inform customers of the time they must allow for payments to be processed. The payment table states that a credit card payment made by telephone requires two business days to process although Company personnel informed the CXD Staff they do not accept telephone payments. Company personnel assert that bill payments are processed and recorded on the day they are received and bank deposits are made daily.

Credit and Collections

Customers requesting water or sewer service are required to complete a written application. Residential customers who do not meet the Company's credit criteria must pay a deposit as a condition for providing service. Deposit amounts range from \$25.00 - \$55.00 depending on the amount authorized in the Company's Commission-approved tariff. Company personnel represent that deposits are collected from new customers unless they enroll for automatic payment of their monthly water or sewer bill or unless they provide a satisfactory credit reference letter. These credit criteria are not consistent with credit criteria that are provided in Company tariffs and the Company's Missouri Responsibilities and Rights brochure. These documents include four credit criteria provided in Commission Rule 4 CSR 240-13.030 whereby customers may avoid paying a security deposit. Company management indicated that 149 deposits were collected in 2016 and 154 deposits were received in 2017. Liberty Utilities personnel indicate that deposits are refunded with the interest authorized in the applicable tariff after 12 months of satisfactory payment history or when customers move. Company personnel assert there were 13 returned checks in 2016 and 11 returned checks in 2016. The Company's current tariff provisions for returned check fees range from \$20.00 to \$25.00.

Liberty Utilities has an established procedure for handling delinquent accounts. The following illustration shows the actions that would be taken on delinquent accounts:

Delinquent Account Actions



Source: Liberty Utilities DR No. 71 Response

Liberty Utilities data indicate that an average of six customers have their service discontinued each month for nonpayment of their bills. The Company's tariffs provide for reconnection fees ranging from \$15.00 to \$25.00 depending on the service area of the customers. The Company indicated that, as of January 15, 2018, 74 customers had been delinquent 31 to 60 days and 30 customers were delinquent from 61 to 90 days. The Company also responded in Data Request No. 72 that 178 accounts have been delinquent over 150 days. The CXD Staff requested the number of write-offs in 2016 and 2017. The Company responded that no accounts have been sent to a collection agency in 2016 and 2017. The Company also indicated that it has

had no contracts with collection agencies in 2016 and 2017. Additional information regarding the Company's policy on the collection of delinquent accounts that remain unpaid for an extensive period of time will be presented in the Commission's Auditing Department's Day 120 report.

Complaints and Inquiries

Customers with questions or concerns may call the Company using the first telephone number (855/426-4376) that appears on their bill. Office personnel respond to most calls, and operations personnel may also become involved in certain situations. Liberty Utilities personnel assert that information regarding customer contacts requiring follow-up action is recorded in individual customer account notes, but no other summary log is kept of all customer complaints and inquiries. Company personnel indicated that reasons for calls may be noted; however, specific customer information regarding the date, customer's name, service location, and description of the complaint/inquiry is not recorded. A review of the Commission's complaint/inquiry records for water service since 2016 showed there was one complaint in February 2018 regarding water quality, service, and opposition to the rate increase request. Commission records for Liberty Utilities sewer service indicate one inquiry in February 2018 opposing the rate increase request.

Customer Communication

Customer bills, billing inserts, special letters, and the Company's website are all ways the Company conveys information to the customer. A Company brochure about rights and responsibilities required by Commission Rule 4 CSR 240-13.040 is also provided to new customers. However, a CXD Staff review of the brochure showed inconsistencies with information presented on customer bills and the website. For example, the brochure provides three after-hours telephone numbers, customer bills provide one after-hours telephone number, and Company management asserts there is no separate after-hours telephone number. Customers may call the same number after hours that they can call during regular business hours. The CXD Staff also noted that the credit criteria communicated to customers in the brochure is not consistent with the actual credit criteria Company representatives use to determine whether a customer must remit a security deposit prior to establishing new service.

Findings, Conclusions, and Recommendations

The following discussion presents a summary of the findings, conclusions, and recommendations pertaining to Liberty Utilities' customer service operations. The information presented in this section focuses on the following five issues that require Company's attention:

- Customer Telephone Contact Procedure
- Bill Accuracy
- Deposit Credit Rating Criteria
- Customer Complaint Log
- Customer Rights and Responsibilities Brochure

Customer Telephone Contact Procedure

Company personnel answering after-hours customer telephone calls do not consistently identify the Company name at the beginning of the call. The CXD Staff called the after-hours telephone number and a call center representative gave her name and asked how she could help,

but no mention was made that someone representing Liberty Utilities had answered the call. When the CXD Staff member asked who they had reached, the representative responded “Empire.” When the CXD Staff member explained they were trying to reach Liberty Utilities, the representative replied that Empire takes Liberty Utilities’ calls after hours. Since it is likely that most Liberty Utilities customers would not know that the Empire District Electric Company takes after-hours telephone calls for Liberty Utilities, it is possible that some customers may be confused, frustrated, and possibly hang up before providing the reason for their call. An introductory statement by the call center representative that correctly identifies the Company would enable customers to conduct the business of their calls in a timelier manner and increase customer satisfaction.

THE CXD STAFF RECOMMENDS THAT COMPANY MANAGEMENT:

Initiate procedures that ensure call center representative include the Company name in the opening response to after-hours telephone calls. This recommendation should be completed within ninety (90) days of the effective date of the Commission order.

Bill Accuracy

Liberty Utilities customer billing statements include inaccuracies related to the calculation of a late payment charge and the provision of an after-hours telephone contact number. A CXD Staff review of a sample of 30 billing statements revealed an instance of apparent incorrect calculation of the late fee. Company personnel could not provide an explanation for the miscalculation at a CXD Staff on-site meeting and has not offered an explanation since the error was brought to their attention. Company personnel did not indicate that random tests for bill accuracy are performed after the bills are generated and before they are mailed. The Company’s billing statements also present inaccurate information regarding the after-hours telephone number provided to customers. The billing statements include one telephone number to call for billing questions and a different after-hours emergency telephone number. Company personnel asserted that customers only need to call the first regular telephone number presented on each billing statement when they want to contact the Company, regardless of the time of day or day of the week.

It is critical that customer billing statements provide accurate information to customers. The provision of inaccurate billing information related to late fees and telephone information is a violation of Commission Rule 4 CSR 240.13.020, which requires companies to include specific information on customer billing statements. Miscalculation of the late payment fee also violates the provision in the Company’s tariffs authorizing a late payment fee. In addition, the provision of inaccurate billing statement information can cause customer dissatisfaction and lack of trust in the Company. Customer satisfaction and trust are vital components of the Company and customer relationship.

THE CXD STAFF RECOMMENDS THAT COMPANY MANAGEMENT:

Initiate actions to ensure the accuracy of information presented on Company billing statements. These actions should incorporate a comprehensive analysis of information presented on billing statements including an evaluation of cost components such as calculation of customer charges and late payment fees; also,

a review of general information for accuracy like the contact telephone number for customers. Actions should also include establishing a routine procedure to analyze a random sample of billing statements for accuracy prior to mailing. This recommendation should be completed within thirty (30) days of the effective date of the Commission order.

Deposit Credit Rating Criteria

The credit rating criteria used by Liberty Utilities to determine whether new customers must remit a deposit is not consistent with the credit rating criteria specified in Commission Rule 4 CSR 240-13.030(C), the Commission's Company-approved tariffs, or the Company's Missouri Responsibilities and Rights brochure provided to new customers and available on the Company's website. Company personnel represent that deposits are collected from new customers unless they sign up for automatic payment of their monthly water or sewer bill or unless they provide a satisfactory credit reference letter. Commission Rule 4 CSR 240-13.030(C), the Commission's Company-approved tariffs, and the Company's Missouri Responsibilities and Rights brochure specify the following four criteria by which customers may establish an acceptable credit rating and avoid paying a deposit:

1. Owns or is purchasing a home;
2. Is and has been regularly employed on a full-time basis for at least one (1) year;
3. Has a regular source of income; or
4. Can provide adequate credit references from a commercial credit source.

Only one of the four Commission-approved criteria, the credit reference letter, is used to evaluate the need for a deposit.

Inadequate application of credit rating criteria precipitates several negative results. The Company is in violation of Commission Rules and Commission-approved tariffs. Customers may become dissatisfied knowing they are subjected to deposit practices inconsistent with criteria presented to them in the Company's informational brochure. There is the probability of increased Company personnel workload associated with maintaining records for a greater number of deposits than necessary and returning the deposits of customers who have established a satisfactory credit history, with interest, after 12 months. Proper use of the four Commission-approved credit criteria for collecting a deposit from new customers would help ensure compliance with Commission rules, increase customer satisfaction, and decrease Company workload associated with collecting and administering deposits.

THE CXD STAFF RECOMMENDS THAT COMPANY MANAGEMENT:

Initiate consistent use of the four credit criteria provided in Commission Rule 4 CSR 240-13.030(C) when determining the need to collect a deposit from new customers. This recommendation should be completed within thirty (30) days of the effective date of the Commission order.

Customer Complaint Log

The Company does not keep a record of customer contacts about complaints it receives. Liberty Utilities personnel assert that information is recorded within individual customer account notes when follow-up action is required, but no written summary is kept of customer complaints.

Commission Rule 4 CSR 240-13.040(5) states “A utility shall maintain records on its customers for at least two (2) years which contain all information concerning ... (B) The number and general description of complaints registered with the utility; ...”

The availability of summary information about customer contacts is important for several reasons. A log of customer contacts would enable the Company to meet the Commission rule requirement for recording complaint information. The availability of documented customer contact information would enable Company management to evaluate why customers contact the Company, determine if any corrective measures could be taken to reduce customer contacts, and improve customer satisfaction. The availability of documentation regarding customer contacts would also help to show the Company’s responsiveness in addressing customer issues.

THE CXD STAFF RECOMMENDS THAT COMPANY MANAGEMENT:

Develop and implement a process to ensure all customer complaints received by Company personnel are documented and maintained for at least two (2) years. Documentation shall adhere to Commission Rule 4 CSR 240-13.040 and include the customer name, address, nature of the complaint, date of occurrence, as well as an explanation of what the Company has done to address the complaint. This recommendation should be completed within thirty (30) days of the effective date of the Commission order.

Customer Rights and Responsibilities Brochure and Website Information

Some information presented in the Company’s rights and responsibilities brochure and website is inaccurate and inconsistent with Company practice. The brochure provides three after-hours telephone numbers while Company management asserts there is no separate after-hours telephone number. Customers may call the same number after hours that they can call during regular business hours. A payment table on the Company’s website is provided to inform customers of the time they must allow for payments to be processed. The payment table states that a credit card payment made by telephone requires two business days to process although Company personnel informed the CXD Staff they do not accept telephone payments. Inaccurate and inconsistent customer information can contribute to frustration and dissatisfaction. The provision of accurate and consistent information within all Company communication vehicles is essential in order for customers to be able to conduct Company business in an efficient, satisfactory manner.

THE CXD STAFF RECOMMENDS THAT COMPANY MANAGEMENT:

Conduct a comprehensive review of the information presented in the Company rights and responsibilities brochure and website and initiate action to correct all inaccurate statements to ensure that customer information is consistent with Company practices and Commission rules. This recommendation should be completed within thirty (30) days of the effective date of the Commission order.

REPORT OF WATER AND SEWER DEPARTMENT
FIELD OPERATIONS AND TARIFF REVIEW

Case No. WR-2018-0170

Liberty Utilities (Missouri Water), LLC d/b/a Liberty Utilities

Introduction

For this rate case, Liberty Utilities is requesting a rate increase for its Silverleaf Resort water and sewer systems and for the KMB and Noel companies' systems that Liberty Utilities has acquired since its last rate case, Case No. WR-2006-0425.

Liberty Utilities purchased the assets of KMB in Case No. WO-2011-0350 and its certificate of convenience and necessity (CCN) from the Missouri Public Service Commission (Commission) for those systems became effective August 20, 2011. The Company provides water service to approximately 521 customers in seven certificated service areas of Franklin and Jefferson Counties and sewer service to approximately 169 sewer customers in the service area of Cape Rock Village in Cape Girardeau County. The Commission's Water and Sewer Department Staff (Staff) performed an inspection of the sewer system on January 18, 2018 and the water systems on February 15, 2018.

In Case No. WO-2005-0206, Liberty Utilities purchased the Missouri water and sewer utility assets from Silverleaf Resorts (the resorts have recently been purchased by Holiday Inn Club Vacations), which included the utility assets of Timber Creek, Holiday Hills, and Ozark Mountain Resorts. The Commission granted the CCN which became effective September 22, 2005. The Commission's Staff performed an inspection of the Timber Creek (DeSoto) water and sewer systems in Jefferson County on January 23, 2018 and the Branson (Holiday Hills) and Kimberling City (Ozark Mountain) water and sewer systems in Taney County on February 9, 2018.

Liberty Utilities purchased the assets of Noel Water Company in WO-2011-0328. The CCN from the Commission became effective August 20, 2011. Staff performed an inspection of the facilities February 8, 2018.

Observations and system improvements of each facility are listed below each system description.

KMB Facilities

Sewer System Cape Rock Village and Tanglewood Estates subdivisions, Cape Girardeau, Cape Girardeau County

The Cape Rock Village sewer system provides sewer service to approximately 169 customers. The sewer system consists of a three-cell aerated lagoon with the design capacity of

approximately 40,000 gallons per day (gpd) but an actual flow of approximately 35,000 gpd¹. The collection system is composed mostly of PVC and clay pipe with manholes for access. The waste water is delivered by gravity to a lift station on Singing Hills Street. The lift station contains two 25 horsepower pumps which pump the effluent up to the lagoon for treatment. The wet well capacity of the lift station is nearly 12,000 gallons, which provides several hours of storage in the event of an electrical outage, or a failure of both electric pumps. The effluent is presently not disinfected before it is discharged into the receiving stream. The Missouri Department of Natural Resources (DNR) issued a schedule of compliance (SOC) in the Company's last permit dated June 1, 2015 requiring the lagoon to "attain compliance with the final effluent limitations for ammonia and E. coli as soon as reasonably achievable or no later than 4 years of the effective date of this permit." The Company stated it intends to add disinfection to comply with the SOC.

The DNR inspection report from 2012 mentioned that "many items listed as unsatisfactory during the previous inspection on August 21, 2008, had been addressed the maintenance was much improved." **Water Systems**

Hillshine Acres (Catawissa, Franklin County)

The Company provides water service to approximately 29 water service connections. The water system consists of a single well, a master meter, a well house, a chlorine pump for disinfection, and three 119 gallon bladder tanks to maintain pressure on the system. According to past records the well produces about 15 gallons per minute.

Improvements since acquisition:

- Installed chlorination.
- Upgraded the electrical system in the well house.
- Replaced the well pump and pipe in 2017.
- Installed two new bladder tanks in 2016.
- Installed remote monitoring to track of electric issues and system pressure.
- Many of the water meters are located inside the homes in this system. The Company has installed radio read meters for ease of reading.

Crestview Acres (Pacific, Franklin County)

The Company provides water service to approximately 55 water service connections. The water system consists of a single well, a master meter, a well house, a chlorine pump for disinfection, and a 2,000 gallon hydropneumatic tank to maintain pressure on the system. According to past records the well produces about 32 gallons per minute.

¹ Volume estimated in a Dept. of Natural Resources inspection report.

Improvements since acquisition:

- Installed chlorination.
- Upgraded the electrical system in the well house.
- Installed remote monitoring to track of electric issues and system pressure.

Cedar Hill Estates (Cedar Hill, Jefferson County)

The Company provides water service to approximately 185 water service connections. The water system consists of a single well, a master meter, a well house, a chlorine pump for disinfection, and a 51,000 gallon standpipe, approximately half of which is usable, to provide storage and maintain pressure by gravity on the system. According to past records the well produces about 300 gallons per minute.

Improvements since acquisition:

- Cleaned and painted the standpipe.
- Installed an interconnect with the city of Cedar Hill for emergency water supply backup.
- Installed chlorination.
- Installed separate influent pipe extended to the top of the water level for aeration of the water as the tank fills to reduce hydrogen sulfide.
- Upgraded the electrical system in the well house.
- Installed remote monitoring to track electric issues and system pressure.

Scotsdale (Scotsdale, Jefferson County)

The Company provides water service to approximately 33 water service connections. The water system consists of a single well, a master meter, a well house, a chlorine pump for disinfection, and a 100,000 gallon concrete ground storage tank located at the highest point in the system to provide storage and maintain pressure on the system. According to past records the well produces about 75 gallons per minute.

Improvements since acquisition:

- Upgraded the electrical system in the well house.
- Installed remote monitoring to track electric issues and system pressure.
- Installed a gate at the driveway entrance to the well house and tank area to provide security.

High Ridge Manor (House Springs, Jefferson County)

The Company provides water service to approximately 87 water service connections. The water system consists of a single well, a master meter, a well house, a chlorine pump for disinfection, and a 10,000 gallon hydropneumatic tank to maintain pressure on the system. According to past records the well produces about 70 gallons per minute. Several customer comments have been received about water quality. The Company attributes these comments to the iron content in the well. The Company has purchased filters to aid in the removal of iron from the water going into the distribution system. The filters were not in service at the time of Staff's inspection.

Improvements since acquisition:

- Installed chlorination.
- Cleaned the hydropneumatic tank approximately two years ago.
- Upgraded the electrical system in the well house.
- Installed remote monitoring to keep track electric issues and system pressure.
- Installed a new flush hydrant at the end of a dead end line.

Warren Woods Subdivision (House Springs, Jefferson County)

The Company provides water service to approximately 19 water service connections. The water system consists of a single well, a master meter, a well house, a chlorine pump for disinfection, a 15,000 gallon concrete ground storage tank, two high service pumps which pump water out of the storage tank and pressurize the distribution system, and four 119 gallon bladder tanks to maintain pressure on the system. According to past records the well produces about 14 gallons per minute.

Improvements since acquisition:

- Upgraded the electrical system in the well house.
- Installed remote monitoring to track electric issues and system pressure.
- Installed an emergency interconnect with the local public water district.

Lakewood Hills (Pacific, Jefferson County)

The Company provides water service to approximately 113 water service connections. The water system consists of two wells. Each well has a master meter, a well house, and a chlorine pump for disinfection. Well #1 has an 18,000 gallon concrete ground storage tank located at the highest point in the system to provide storage and maintain pressure on the system. The approximate production of Well #1, according to past records, is 42 gallons per minute. Well #2 is presently not in service because the water is exhibiting black flakes in it and the Company

does not want to serve that water to its customers. According to records, Well #2 has the ability to produce approximately 60 gallons per minute.

Improvements since acquisition:

- Upgraded the electrical system in both well houses.
- Installed remote monitoring to track electric issues and system pressure.
- Installed chlorination at both wells.
- Installed a new roof on the well house at Well #1.
- Installed a new well pump, motor, and pipe at Well #1.
- Upgraded piping at Well #1 approximately two years ago.
- Cleaned ground storage tank at Well#1 approximately years ago.
- Built a new well house at Well #2.

Holiday Inn Club Vacations (Formerly Silverleaf Resorts) Facilities

Timber Creek (DeSoto, Jefferson County)

Sewer System

The Company provides sewer service to approximately 16 customers, each of which are recreational multi-unit condominium buildings. Waste water is treated by using an extended aeration plant with a design capacity of 50,000 gpd but the actual flow is approximately 33,600 gpd². The effluent is disinfected with ultraviolet (UV) light for disinfection prior to being discharged into the receiving stream. The waste water is delivered to the treatment facility by gravity through a collection system composed of various sizes of PVC pipe ranging from four inches to ten inches in diameter with manholes for access. The records of all three of the Holiday Inn properties are reported together, therefore Staff does not have a breakdown of the amount of pipe for the Timber Creek nor of the other individual systems. The collection system receives a large amount of inflow and infiltration (I&I). The contract operator told Staff that the collecting sewers have been smoke tested to look for I&I, and the results indicated repairs need to be made to the collection system.

Improvements since the last rate case:

- Installed two new blowers.
- Upgraded electric at the sewer treatment plant.
- Installed additional bulb in UV disinfection.

Water System

² Volume estimated in a Dept. of Natural Resources inspection report.

The Company provides water service to approximately 25 water service connections, most of which are multi-unit recreational condominium buildings. Each of the buildings has one meter for eight units. The water system consists of two wells. Well #1 consists of a well house, a master meter, a chlorine pump for disinfection, a generator to provide backup power, a 210,000 gallon ground storage tank, and a 10,000 gallon hydropneumatic tank and two high service pumps to maintain pressure on the system. According to past records Well #1 produces about 250 gallons per minute. Well #2 consists of a well house, master meter, and a high service pump which pumps the water to Well #1 to be disinfected and stored in the ground storage tank. Well #2 was struck by lightning some time ago and is presently out of service. Historically, Well #2 has been used as a backup well and has the ability to pump 400 gpm.

The Company walks the system looking for water leaks and fixes them as they are found. The Company intends to install some isolation valves to try and isolate parts of the system in order to mitigate water outages. The Company stated that old water meters could be making the water loss problem appear greater than it actually is, due to under registering water usage. These water meters are outdated and have not been replaced in accordance with 4 CSR 240-10.030 (38).

Improvements since the last rate case:

- Replaced gas chlorination with liquid bleach for safety reasons.
- Replaced well pump and motor
- Upgraded the electrical system at Well #1.

Ozark Mountain (Kimberling City, Stone County)

Sewer System

The Company provides sewer service to approximately 221 customers, most of which are multi-unit recreational condominium buildings. Waste water is treated by using an extended aeration plant with a design capacity of 54,000 gallons per day (gpd) but an actual flow of 21,300 gpd³. The effluent is treated with chlorine gas for disinfection prior to being discharged into the receiving stream. The waste water is delivered to one of five lift stations by gravity through a collection system composed of various sizes of PVC pipe ranging in size from two inches to eight inches in diameter. The effluent is pumped from the lift stations to the treatment facility.

Improvements since the last rate case:

- Installed a new blower.
- Installed or maintained buildings over lift stations.
- Rebuilt all five lift stations.

³ Volume estimated in a Dept. of Natural Resources inspection report.

- Installed new filters at treatment plant.
- Reconfigured piping at the treatment plant.
- Added a holding tank at the lift station by the lake to provide additional containment time.

Water System

The Company provides water service to approximately 248 water customers, most of which are multi-unit recreational condominium buildings. Each of the buildings has one meter. Some of these water meters are outdated and have not been replaced in accordance with 4 CSR 240-10.030 (38). This water system consists of one ground water well, a well house, a master meter, a chlorine pump for disinfection, a generator to provide backup power, a 100,000 gallon ground storage tank, and a 10,000 gallon hydropneumatic tank and two high service pumps to maintain pressure on the system. According to past records the well produces about 300 gallons per minute.

Improvements since the last rate case:

- Installed two new generators for emergency electric power.
- Installed a variable frequency drive.
- Replaced gas chlorination with liquid chlorine for safety reasons.
- Replaced well pump and motor.
- Upgraded the electrical system in the well house #1.

Holiday Hills (Branson, Taney County)

Water System

The Company provides water service to approximately 478 water customers, most of which are multi-unit recreational condominium buildings. Each of the buildings has one meter. These water meters are outdated and have not been replaced in accordance with 4 CSR 240-10.030 (38). The water system consists of two wells. Each well consists of a well house, a master meter, a chlorine pump for disinfection, a 100,000 gallon ground storage tank, three high service pumps and a 10,000 gallon hydropneumatic tank to maintain pressure on the system. According to past records, Well #1 produces about 380 gpm and Well #2 has the ability to pump 660 gpm. A booster station which contains a 5,000 gallon hydropneumatic tank and three high service pumps boosts the pressure to the customers at the highest elevation in the distribution system.

Improvements since the last rate case:

- Replaced motors on the high service pumps.
- Inspected and painted the hydropneumatic tank at the booster station.

Noel

Water System

The Company provides water service to approximately 670 water service connections. The Noel municipal area water system consists of six wells. Each well has a master meter, a well house, and a chlorine pump for disinfection. There are three storage tanks with a combined storage of 400,000 gallons of water. The water distribution system consists of over 95,000 feet of pipe ranging from 2 inches to 10 inches in diameter composed of various materials including PVC, galvanized steel, cast iron, and asbestos cement. The distribution system has seven booster stations to ensure the water pressure is sufficient in areas of higher elevation. The yield of each well in the Noel service area, provided by DNR Drinking Water Watch, is listed below:

Well #1 – 190 gallons per minute (gpm)
Well #3 – 250 gpm
Well #4 – 285 gpm
Well #5 – 180 gpm
Well #6 – 465 gpm (presently out of service)
Well #7 – 440 gpm

According to the Company, the water production at Well #1 has been decreasing over the last several years. The Company made the decision to replace the pump, motor, and well drop pipe to increase production. The electrical components for the well house were also upgraded at this time.

The city of Noel is divided by a river. Well #1 and Well #3 are the only wells that provide water service to the southern part of the system south of the river. There is a water main crossing the river, but it is normally closed. System pressure differences and valve accessibility due to river conditions are factors limiting its use. The Company was concerned if Well #3 went down then Well #1 would not be able to keep up with demand so the pump at Well #1 was replaced.

Wells #4, 5, and 7 all pump to the North reservoir which provides water to the Northern part of the service area north of the river. The Company would eventually like to replace the concrete ground storage tank with a standpipe or elevated storage.

Well #6 is not in operation as a result of the well testing high for radionuclides. The Company has indicated that it intends to plug the well.

Improvements since the last rate case:

- Replaced the pump, drop pipe, and electrical components of Well #1 February 26, 2018.

- Replaced the roof on Well #1 and Well #4 well houses
- Installed fencing around Well #3 and Well #4.
- Installed variable frequency drives (VFDs) on all well pumps to regulate the flow of water while pumping and reduce wear and tear on pumps and motors.
- Replaced gas chlorine with liquid chlorine for safety reasons at all well houses.
- Installed remote monitoring to track electric issues and system pressure.

Water Quality and Service

Multiple public comments were received from customers in the former KMB service areas regarding the taste and odor of chlorine, other taste and odor issues, and low water pressure. Staff reviewed the public comments, Liberty Utilities' operating records / laboratory results, DNR correspondence, inspection reports and permits. Staff visited each water system, interviewed Liberty Utilities' system operator and / or the operations manager and comments, contacted customers and performed field testing of drinking water taste, odor and chlorine content. Staff has concluded that:

Liberty Utilities voluntarily added chlorine to the drinking water as a safety precaution in August 2017. Samples taken by Staff and Company samples submitted to DNR show that the Company is not exceeding the permitted parameters allowed by DNR.

Some public comments concerning taste and odor are based on current conditions of supply. Liberty Utilities is in the process of installing greensand filters for the High Ridge Manor system. These filters are designed to remove iron and should improve taste and odor.

Some public comments referenced conditions that occurred several years ago. Since then, Liberty Utilities has made improvements to these systems and the conditions no longer exist.

Review of DNR Records

Staff reviewed Liberty Utilities' Operating Permits, DNR inspection reports and correspondence, and water sample laboratory results. Staff found that the operating permits for each of Liberty Utilities' water and waste water systems were existing and current. A review of DNR inspection reports and correspondence showed that Liberty Utilities is operating its systems in compliance with DNR requirements. Water analysis results showed that Liberty Utilities has historically operated its chlorinated its systems within the Environmental Protection Agency (EPA) guidelines for disinfection.

Customer Contact

From January 16, 2018 through February 15, 2018, the Commission Staff and/or the Office of Public Counsel received public comments from Liberty Utilities' customers. Staff initiated contact with customers whose public comments were service related (i.e. taste, odor, pressure) to ascertain as much information as possible. Some customers responded by phone, some responded by e mail, and some did not respond. Staff spoke with the Company about the issues. The Company stated it was aware of these issues and had spoken to many of these customers about the issues. The Company stated that it was attempting to address the issues by making modifications which it believed would improve the quality of the water and satisfy the customers. Staff made site visits with a Company representative to each of the homes of the customers who had voiced service quality issues in public comments. Staff took water samples in each of the KMB service areas to physically observe the characteristics of the water being received. Staff did not observe any objectionable traits in the water at any of the homes where samples were taken. The water appeared clean. It did not smell or taste like chlorine. Chlorine tests were taken on each sample to determine if chlorine was in the system and all samples showed chlorine present. Staff believes that many of the concerns customers had with chlorine odor and taste is due to the recent addition of chlorine by the Company in August of 2017 to ensure the water is disinfected. The Company has been making adjustments to the chlorine levels since it was installed to ensure it is consistent, and Staff believes the Company has been able to do that over the last two or three months based on sample results recorded on Drinking Water Watch. Staff took pressure readings at the homes where customers expressed a concern with low pressure and found all of those homes to have adequate water pressure by DNR standards. DNR requires that all customer water services are above 20 pounds per square inch (psi) at the meter.

On March 13, 2018, Staff, with Liberty Utilities' system operator, performed field testing of drinking water for taste, odor, and chlorine residual at some of the former KMB systems. Staff sampled at the well houses immediately after chlorine injection and at customers' residences. All water samples from customers' residences were obtained from outside spigots. Staff did not observe any objectionable taste or odor in the water at any of the homes where samples were taken. An initial grab sample was obtained and tested for chlorine. These initial samples typically did not contain measurable amounts of chlorine. The lines were then purged by allowing tap water to flow through the spigot, and then the water was resampled two to three times. In each case, measurable amounts of chlorine were detected in the water samples obtained after purging.

Discussion of Field Testing

Chlorine is one of the most widely used potable water disinfectants. Chlorine can be easily applied, measured and controlled. It is fairly persistent and relatively inexpensive. Liberty

Utilities adds chlorine to the water by using chemical feed systems to inject liquid sodium hypochlorite (bleach) solution into the main distribution line. Missouri DNR does not require Liberty Utilities to chlorinate the KMB systems; however, as a precaution, the Company voluntarily chlorinates these systems. Chlorinated water can taste and smell different than untreated water¹. Some people like the taste and smell of chlorinated water, and others do not. Taste and smell problems may arise depending upon the water quality and amount of chlorine in the water. According to the National Primary Drinking Water Regulations, chlorine levels up to 4 milligrams per liter (mg/L or 4 parts per million (ppm) are considered safe in drinking water⁴. At this concentration no harmful health effects are likely to occur.

Based on the Staff's field work, Staff found that Liberty is safely operating its chlorination systems within the limits of the National Primary Drinking Water Regulations.

Water pressure is the force that allows water to go through pipes and reach people's homes. Some factors that affect water pressure are the elevation of the water reservoir, the proximity of a home in relation to the reservoir and the water usage of customers. Water pressure can vary at different times of the day. Pressure is normally higher later at night when there is less of a water demand, and lower in the morning when more water is being shared by many customers. The Missouri Safe Drinking Water Regulation 10 CSR 60-4.080 (9), requires Liberty Utilities to keep the water pressure above 20 psig in the distribution piping. All pressure readings taken by Staff were above 20 psig.

Customer Complaints and Company Contact

Through discussions with the system operators and the operations manager, Staff became aware that in some instances, customers would contact the system operator with a water quality issue and the system operator would respond to the issue. Although this method minimizes the time for a Company response, no written summary was kept of the customer's complaint. This finding supports CXD Staff's findings and recommendations for a customer complaint log.

Staff Recommendations

Liberty Utilities shall comply with 4 CSR 240-10.030 (38) and test, repair or replace affected water meters within one hundred eighty (180) days of the effective date of the Commission order.

Liberty Utilities shall develop a customer complaint log as described in CXD Staff's recommendation.

Tariff Review

¹ <https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations#Disinfectants>

Staff recommends combining the four existing tariffs for water and the two existing tariffs for sewer so that one set of rules applies to all facilities. Any necessary rules specific to a particular service area would be retained. Since some portions of the existing tariffs have not been updated in more than 20 years, replacing them with an updated consolidated tariff would also bring compliance with current regulations.

Rate Design

Staff recommends maintaining the existing rate designs, with rates updated to the new cost of service for each system.

Disposition Agreement Attachment D

Summary of Case Events

Liberty Utilities (Missouri Water), LLC d/b/a Liberty Utilities
Case No. WR-2018-0170
Summary of Case Events

Date Filed: December 15, 2017

Day 150: May 24, 2017

Extension? Yes
If yes, why? Needed more information

Amount Requested: \$995,844 & \$196,617
Amount Agreed Upon: NA

Item(s) Driving Rate Increase: Plant investment, increases in operation and maintenance costs

Number of Customers: 1,954 water, 416 sewer

Assessment Current: Yes
Annual Reports Filed: Yes

Other Open Cases before Commission: Yes. WM-2018-0023

Status with Secretary of State: Good Standing
DNR Violations: Currently in Compliance

Service/Quality Issues: Reported Outages in certain service areas.
Chlorine Taste/Smell in certain areas.

