Exhibit No.:	
Issue(s):	*Contract Services, Miscellaneous Service Charges, Tariff Revision*
Witness:	*Curt B. Gateley*
Sponsoring Party:	*MoPSC Staff*
Type of Exhibit:	*Direct Testimony*
Case No.:	*WR-2018-0170*
Date Testimony Prepared:	*June 22, 2018*

MISSOURI PUBLIC SERVICE COMMISSION

COMMISSION STAFF DIVISION

WATER AND SEWER DEPARTMENT

DIRECT TESTIMONY

OF

CURT B. GATELEY

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

CASE NO. WR-2018-0170

Jefferson City, Missouri
June 2018

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DIRECT TESTIMONY

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CASE NO. WR-2018-0170

Q. Please state your name and business address.

A. Curt B. Gateley, P.O. Box 360, Jefferson City, Missouri, 65102.

Q. By whom are you employed and in what capacity?

A. I am a Utility Policy Analyst II for the Missouri Public Service Commission ("Commission").

Q. Please describe your educational background, work experience, and any cases in which you have previously filed testimony before this Commission.

A. My credentials and a listing of cases in which I have filed testimony previously before this Commission are attached to this direct testimony as Schedule CBG-d1.

Q. What is the purpose of your Direct Testimony?

A. The purpose of my Direct Testimony is to describe Staff's positions on certain operational expenses related to contract services, Miscellaneous Service Charges, and tariff review.

Contract Services

Q. Did Staff conduct a review of operations and maintenance at Liberty Utilities (Missouri Water) LLC, d/b/a Liberty Utilities ("Liberty")'s water and sewer systems?

A. Yes. As part of its investigation, Staff reviewed the operation and maintenance activities, and associated costs, at each of the Liberty water and sewer facilities. This effort is associated with determining that safe and adequate service is being provided, and to establish a recommended revenue requirement. At some facilities Liberty employees conduct operations and maintenance, while at others Liberty employs contract operators.

Q. What are Staff's concerns with operations and maintenance?

A. Liberty employs a contract operations company to conduct routine operation and maintenance activities for the former KMB water facilities (Crestview, Cedar Hill, Lakewood Hills, Hillshine, High Ridge Manor, Scotsdale, and Warren Woods). Among those activities are daily tests of chlorine levels in the treated water as it enters the distribution system. The contract operator charges $25 per day, per well, per weekday and $32.50 per day, per well, per weekend day. There are eight wells among the former KMB systems, resulting in approximately $6,480 per month, or $77,760 per year, in charges for checking chlorine levels under the current contract. As there are only a total of 530 water customers among all the KMB systems, this equates to approximately $12.23 in costs per customer each month. Staff believes there are alternatives to the current method that could save customers significant costs in the long run.

Q. What alternative does Staff recommend should be implemented?

A. Similar to many other water systems in the state, Staff recommends it is prudent for Liberty to install continuous chlorine monitoring equipment at the KMB systems rather than to continue to pay for daily chlorine monitoring by a contract operator. Such monitoring systems can be set with an alarm if the level of chlorine falls outside appropriate

parameters. The alarm can be transmitted to an operator similar to Liberty's existing system of alarms for low pressure and other parameters.

Q. How much could this change save customers?

A. Staff has discussed this alternative with the Department of Natural Resources ("DNR"),[1] which is responsible for establishing chlorine monitoring requirements. Once continuous monitoring is installed and calibrated, onsite visits to check the chlorine levels could be reduced to once per week or some other reduced frequency Liberty deems appropriate for the system. Other operational parameters, such as reading the master meter, refilling the chlorine dose tank, etc., could also be performed during this visit. A change to once per week could save $5,680 per month, or $68,160 per year, which is an 88% reduction.

Q. What is the cost to install such monitoring equipment?

A. A cursory review of prices available online showed these monitoring systems cost $1,500-$6,000, but only Liberty would be able to determine the appropriate and most economical equipment for their systems. In simple terms, the cost to install the equipment could be equal to approximately one year of costs under the current monitoring regime, although there would be a small impact to rates in Liberty earning a return of and return on the capital investment. Staff confirmed with DNR that construction and engineering permits would not be required. The monitoring equipment could therefore be installed by a plumber and someone capable of establishing the communication link in the equipment to the existing alarm systems, so installation costs would not be unreasonable.

Q. Has Liberty investigated installation of chlorine monitoring equipment?

[1] See attached Schedule CBG-d2

A. In response to Data Requests,[2] Liberty stated it had only investigated the potential to install Supervisory Control and Data Acquisition (SCADA) systems at each water system, at a cost of approximately $30,000 per system. Typically, a SCADA system would utilize a separate computer (with proprietary software) and electronic controls capable of making automatic adjustments to the chlorine feed pump based on continuous monitoring of chlorine levels, as well as reporting operational parameters back to a Liberty computer system.

Q. What is Staff's opinion on the prudency of installation of SCADA systems on such small water supply and treatment systems?

A. Staff is of the opinion that such expense is unnecessary and imprudent, as the KMB systems are very small and simple to operate. These are small drinking water systems, are sourced from groundwater and therefore, are very consistent and have no other treatment before chlorination. Once the appropriate chlorine feed rate is established, it is not routinely changed.

In contrast, SCADA is most suitable for complex or very remote facilities, with variable performance that requires changes in settings to continue to keep the process within acceptable parameters.

Q. Should this type of monitoring equipment be limited to the KMB systems?

A. No. It exists at the water systems which Liberty has received approval to purchase from Ozark International.[3] Liberty should install this equipment in any facility where it is prudent to ensure the most cost effective method possible to monitor its systems.

Q. How does Staff propose the Commission address this concern?

[2] DR0117, DR0122
[3] WM-2018-0023

A. Staff recommends the Commission order Liberty to investigate, and where feasible, install chlorine monitoring equipment to reduce operational costs. Staff also recommends the Commission order Liberty to investigate other prudent opportunities to reduce operational costs.

Q. If these operational costs are reduced, would another rate case be necessary?

A. Yes. Staff recommends that the Commission order Liberty to file another rate case in no more than two years. In addition to allowing rates to be adjusted for the potential reduction in operational costs for the KMB properties, the next rate case would allow a review and establishment of appropriate rates for the systems Liberty is purchasing from Ozark International, would allow reallocation of corporate costs among all customers, and would allow Liberty to demonstrate they are now in 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*.

Q. Is there an alternative to ordering another rate case to be filed?

A. Yes. If the Commission chose to only address the operational cost issue at KMB noted above, the Commission could order a decrease to the revenue requirement in this case of $68,160 that could have been saved had Liberty made a more prudent decision on operating costs.

Miscellaneous Service Charges

Q. What are Miscellaneous Service Charges?

A. Miscellaneous Service Charges are designed to recover the actual costs to the company associated with performing the services listed, such as reconnecting water service, that are specific to a particular customer.

Q. Why does Staff review the Miscellaneous Service Charges during each rate case?

A. These charges are intended to ensure that the cost causer for these infrequent, but recurring services bears the cost of performing the services. If adequate compensation is not obtained, then the rest of the ratepayers bear the remaining costs through higher rates. If excessive compensation is obtained, it could contribute to over earning by a company.

Q. What information did Staff review related to these charges?

A. Staff filed Data Request 0090, which requested Liberty provide the actual costs to perform the services related to the Miscellaneous Service Charges.

Q. Did Liberty's actual costs show that the existing Miscellaneous Service Charges are in line with the cost to perform those services?

A. No, it does not show that costs are in line with proposed charges. Some of the existing Miscellaneous Service Charges are below the costs to perform the associated service; some are much higher than the cost to perform the service.

Q. Has Liberty proposed revised Miscellaneous Service Charges?

A. Liberty has proposed that the tariffs be consolidated for all water and all sewer customers, but has not yet proposed what the new consolidated Miscellaneous Charges would be.

Q. Did Staff develop a proposal for water customers?

A. Yes. Based on Liberty's response, the Miscellaneous Charges that are common to all water service territories should be:

New Service Connection Fee	Actual Cost
Service Activation/Deactivation (Turn On/Turn Off)	$25.00
Meter Testing (accuracy of the meter)	$25.00
Meter Conversion or Relocation Fee	Actual Cost

Late Payment	$5 or 3% of the balance, whichever is greater
Returned Check	$25.00
Service Connection Inspection	$25.00
Service calls for damages caused by customer	Actual cost but not less than $25
On-site Collection Charge*	$15.00

* This charge will be added to the current bill if the Company personnel are on-site to disconnect the service when the Customer pays the bill. The disconnection fee may not be assessed if the service is not physically disconnected.

Q. Did Staff develop a proposal for sewer customers?

A. Yes. Based on Liberty's response, the Miscellaneous Charges that are common to all sewer service territories should be:

Service Connection Inspection	$25.00
Reconnection of Service Sewer after Physical Disconnection	Actual Cost
Reconnection of Service Caused by Nonpayment of Bill**	$25.00
Reconnection after Customer Requested Disconnection lasting less than 30 days**	$25.00
Late Payment	$5 or 3% of the balance, whichever is greater
Returned Check	$25.00
Service calls for damages caused by customer	Actual cost but not less than $25
On-site Collection Charge*	$15.00

* This charge will be added to the current bill if the Company personnel are on-site to disconnect the service when the Customer pays the bill. The disconnection fee may not be assessed if the service is not physically disconnected.

** These charges apply in those situations where the discontinuance of service was accomplished by the discontinuance of water service via a water meter shut off.

Tariff Revision

Q. You stated that Liberty has proposed consolidating the various water tariffs and sewer tariffs into one each for water and sewer. What is Staff's position on the consolidation proposal?

A. Staff does not oppose consolidation of the tariff rules, Miscellaneous Service Charges, etc., so long as the tariff is updated to comply with current State regulations. Staff does not recommend further consolidation of customer rates. Staff witness Mathew Barnes will address Staff's position on rate consolidation and rate design.

Q. Does this complete your Direct Testimony?

A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In The Matter of the Application of Rate Increase for Liberty Utilities (Missouri Water), LLC d/b/a Liberty Utilities	)))	**Case No. WR-2018-0170**

AFFIDAVIT OF CURT B. GATELEY

State of Missouri)
) ss
County of Cole)

COMES NOW Curt B. Gateley, and on his oath declares that he is of sound mind and lawful age; that he contributed to the attached *Direct Testimony*; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

Curt B. Gateley

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 20th day of June, 2018.

Dianna L. Vaught
NOTARY PUBLIC

DIANNA L. VAUGHT
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: June 28, 2019
Commission Number: 15207377

Curtis B. Gateley

I am a Utility Policy Analyst II in both the Energy Resource Department and the Water & Sewer Department, in the Commission Staff Division of the Missouri Public Service Commission. I have been employed by the Missouri Public Service Commission since July of 2014. In the Water & Sewer Department my primary duties are to act as Case Manager for rate cases and transfer of assets cases, and also draft rate design, and conduct tariff reviews. I also work on regulation development, and liaise with the Department of Natural Resources and the U.S. Environmental Protection Agency on technical issues related to drinking water and sewer regulations. In the Energy Resources Department, I assist with review of utility filings associated with the Missouri Energy Efficiency Investment Act, and rate adjustments under fuel adjustment clauses, as well as regulation development.

Educational Background and Work Experience

I have a Bachelor of Science degree in Fisheries and Wildlife from the University of Missouri-Columbia. Prior to joining the Public Service Commission I was employed by the Missouri Department of Natural Resources from 2000-2014, as an Environmental Specialist and a Unit Chief. During my time with the agency I worked in compliance and enforcement, industrial and domestic wastewater permits, industrial stormwater permits, and eventually oversaw a staff of eight Permit Writers. I have served as expert witness before the Administrative Hearing Commission in permit appeal cases, as well as expert witness in State and Federal enforcement cases.

Previous Testimony Before the Public Service Commission

Case No.	Company	Type of Filing	Issue
SR-2014-0153	Peaceful Valley	Live Testimony in Evidentiary Hearing	Compliance with Dept. of Natural Resources Regulations
WR-2015-0301	Missouri American Water Company	Direct and Rebuttal Testimony	Class Cost of Service Report
SR-2016-0202	Raccoon Creek Utility Operating Company	Direct and Rebuttal Testimony	Rate Design and Tariff Review
WO-2017-0236	Ridge Creek Utility Company, LLC	Live Testimony	Petition for Interim Receiver
WR-2017-0110	Terre Du Lac Utilities Corporation	Direct Testimony	Rate Design and Tariff Review
WR-2017-0259	Indian Hills Utility Operating Company	Direct, Rebuttal and Surrebuttal Testimony	Rate Design
WR-2017-0285	Missouri American Water Company	Direct, Rebuttal and Surrebuttal Testimony	Class Cost of Service, Rate Design

Gateley, Curtis

From: Pattinson, Kristen <kristen.pattinson@dnr.mo.gov>
Sent: Thursday, May 31, 2018 3:33 PM
To: Gateley, Curtis
Subject: RE: remote monitoring, chlorine

A construction permit would not be required for a remote continuous monitoring device. The water quality is not being changed, nor the hydraulics. Yes a plumber or operator could install it.
For the QA/QC of the continuous read, please refer to EPA's Method 33.4.0, Determination of Residual Chlorine in Drinking Water Using an On-line Chlorine Analyzer". The following link is long but it pulls up this method:

https://nepis.epa.gov/Exe/ZyNET.exe/P1005OLV.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2006+Thru+2010&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C06thru10%5CTxt%5C00000012%5CP1005OLV.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL

According to section 10.2.2.3. initial testing is for 14 days the readings must be with 0.1 mg/L or 15% whichever is larger. After that it can be tested once per week. For the QA/QC, an approved DPD device (such as HACH) is checked with the standards (standards can be purchased from lab companies (Hach has them). Then grab sample from the water is tested with the DPD device readings and compared to the continuous device. Multiple samples should be collected to ensure accuracy.

Missouri American uses continuous reads and you could check with them on which manufacturer they used. I checked with one of the staff here and one of their facility's use EVOQUA Water Technologies. The Department doesn't specify on what brand/manufacturer to use as long as it can maintain proper calibration (i.e. don't have to adjust the continuous device each time/everyday). Every time the continuous device is adjusted, the 14 day window starts again.

The facility would need to keep records of the calibration of the DPD device and the continuous reading meter to show the accuracy of the equipment. Something also to keep in mind is where the probe is to be placed for measuring the chlorine equipment. It should be after detention and before the water enters the distribution system. This way inspectors could review during inspections.

Not required, but telemetry, such as SCADA, would be usefully so the operator knows of problems with the chlorination system.

I hope this helps. Please let me know if you need anything else, or have any questions.

Kristen Pattinson
Drinking Water Compliance Unit Chief
Missouri Department of Natural Resources
Southwest Regional Office
Phone: 417-891-4300
Fax: 417-891-4399
Find us on the web at dnr.mo.gov

From: Gateley, Curtis [mailto:Curtis.Gateley@psc.mo.gov]
Sent: Thursday, May 31, 2018 3:03 PM
To: Pattinson, Kristen
Subject: remote monitoring, chlorine

For drinking water facilities with chlorine disinfection, what is the DNR approved process for installation of remote monitoring?

- Is a construction permit required? If not, I would assume a plumber could install the port and probe, yes?
- If the remote monitoring [with a data logger] has telemetry with alarms for high and low concentration, how often is it reasonable for quality assurance testing to be done by the operator? Once per week? Does it vary depending on the size of the facility?
- Are there certain types/brands of monitoring probes that are already approved by DNR for installation? If the monitoring system follows one of the approved processes in *Standard Methods*, is a further approval from DNR necessary?

Thank you for your help.

Curt Gateley
Missouri Public Service Commission
573-526-6029