BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Request for Increase in Annual Water and Sewer System Operating Revenues For Terre Du Lac Utilities	))))	**Case No. WR-2017-0110**

NOTICE OF PARTIAL DISPOSITION

COMES NOW the Staff of the Missouri Public Service Commission, by and through counsel, and on behalf of Terre Du Lac Utilities and the Office of the Public Counsel (OPC), and for their *Notice of Partial Disposition* in this matter hereby state:

1. On October 11, 2016, Terre Du Lac filed a letter with the Missouri Public Service Commission (Commission) requesting that the Commission approve increases in its annual water and sewer operating revenues, which resulted in the Commission opening two cases, Case Nos. WR-2017-0110 and SR-2017-0109. Staff filed to consolidate the cases, which the Commission granted, consolidating under Case No. WR-2017-0110.

2. Staff conducted an investigation and audit of Terre Du Lac pursuant to 4 CSR 240-3.050(6), and Staff provided its findings to the Company and OPC.

3. At this time the Office of the Public Counsel (OPC) has not requested a local public hearing. Should OPC request a local public hearing Staff will file its Report on the Hearing pursuant to 4 CSR 240-3.050(19). Should any material issues arise at the local public hearing, Staff will include that information in its Report.

4. Subsequent to Staff's investigation and through negotiations between Staff, Terre Du Lac and OPC, the parties have reached an agreement as to some of the

elements of both the water and sewer small company rate increase requests. Attached to this pleading as Exhibit A and reflecting that agreement is a partial disposition for Terre Du Lac's water and sewer requests as approved by Staff and Terre Du Lac pursuant to 4 CSR 240-3.050(11). Also attached to this pleading are Attachments A through E, reflecting Staff's work in these matters.

5. The dispositions include agreements as to: the recommendations of Staff's Auditing Department as laid out in Attachment A; the recommendations of Staff's Consumer and Management Analysis Unit as laid out in Attachment D; a final customer notice following resolution of this matter; and rate design.

6. Terre Du Lac will file proposed updated tariff sheets with the Commission pursuant to 4 CSR 240-3.050(16), which reflect the agreements set forth in this partial disposition.

7. Staff, Terre Du Lac and OPC were unable to reach a final disposition as to the matters of (1) an agreed upon water and sewer revenue requirement increase amount; (2) the net rate base amount; (3) depreciation rates; (4) accounting treatment of certain capital projects; (5) electric costs; (6) employee benefits; and (7) capital structure. The parties request an evidentiary hearing and propose the procedural schedule attached as Exhibit B to present these outstanding issues to the Commission for its determination.

8. Staff has verified that Terre Du Lac filed its annual report and is current on payments of all annual assessments.

WHEREFORE, Staff recommends that the Commission approve this *Partial Disposition* as a final resolution of the specified matters of Terre Du Lac's Small Company Rate Increase Request for both water and sewer; approve the proposed *Procedural Schedule;* and grant such other and further relief as the Commission considers just in the circumstances.

Respectfully submitted,

/s/ Whitney Payne
Whitney Payne
Legal Counsel
Missouri Bar No. 64078
Attorney for the Staff of the
Missouri Public Service Commission
P. O. Box 360
Jefferson City, MO 65102
(573) 751-8706 (Telephone)
(573) 751-9285 (Fax)
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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was served by electronic mail, or First Class United States Postal Mail, postage prepaid, on this 9th day of May, 2017, to all counsel of record.

/s/ Whitney Payne

PARTIAL DISPOSITION AGREEMENT
OF SMALL COMPANY REVENUE INCREASE REQUEST

TERRE DU LAC UTILITIES CORPORATION

MO PSC FILE NO. WR-2017-0110 & SR-2017-0109

BACKGROUND

Terre Du Lac Utilities Corporation ("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 Number 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 October 11, 2016, the Company set forth its request for an increase of $134,000 in its annual water service operating revenues and $8,700 in its annual sewer 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 1,298 water customers and 1,255 sewer customers, the vast majority of which are residential customers.

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

RESOLUTION OF THE COMPANY'S RATE INCREASE REQUEST

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

(1) The Auditing Department conducted a full and complete audit of the Company's books and records. The test year used is the 12-month period ending September 30, 2016, updated to December 31, 2016;

(2) For the purposes of implementing the agreements set out in this partial disposition agreement, the Company will file with the Commission, proposed tariff revisions containing the language set out in the example tariff sheet(s) attached as Attachments B and C.

(3) The Company shall implement the below recommendations of the Auditing Department Report, attached hereto as Attachment A and incorporated by reference herein, and will provide proof of implementing the recommendations to the Manager of the Commission's Auditing Department:

(a) Within thirty (30) days of the effective date of an order approving this Partial Disposition Agreement, Company shall report all plant additions related to customer services to Account 345 – Customer Services for water operations and Account 353 – Customer Services for sewer operations per the USOA;

(b) Within one hundred eighty (180) days of the effective date of an order approving this Partial Disposition Agreement, the Company shall record capitalized payroll related to customer connections as a separate journal entry to ensure this capitalized labor is properly reflected in Company's plant balance for ratemaking purposes. All journal entries related to customer connects should be made on a quarterly basis;

(c) Within one hundred eighty (180) days of the effective date of an order approving this Partial Disposition Agreement, the Company shall record customer connection fees collected as a separate journal entry to ensure these amounts are properly reflected in Company's CIAC balance. All journal entries related to customer connections should be made on a quarterly basis;

(d) Within one hundred eighty (180) days of the effective date of an order approving this Partial Disposition Agreement, the Company shall track all meters installed on its water system separately from other costs to ensure the proper Commission approved depreciation rate is applied for ratemaking purposes, and to ensure adequate records for tracking meter life, locations, and meter accuracy;

(e) The Company shall continue to submit, on or before August 15th of each year, to the Manager of the Auditing Department for the Staff copies of disks containing the final billed water usage, sewer service revenues and all miscellaneous revenues for each month on a separate basis for the period covering January through June. On or before February 15th of each year, Terre Du Lac shall provide to the Manager of the Auditing Department for the Staff copies of disks containing the final billed water usage, sewer service revenues, and all miscellaneous revenues for each month on a separate basis for the period covering July through December;

(f) The Company shall maintain a Plant Additions and Retirement spreadsheet along with supporting documentation to ensure all plant assets are properly reflected in future rate case proceedings. This supporting documentation shall include any bids received, sales or purchase agreements, loan agreements, invoices by vendor and proof of payment;

(g) The Company shall begin immediately following the effective date of an order approving this Partial Disposition Agreement the recording of employee Stephen Skiles' payroll taxes in the appropriate 5001W and 5001S Payroll Taxes accounts;

(h) The Company will keep a record of the customers that are added to and dropped off the systems between this rate case and the Company's next rate case

(i) The Company shall continue tracking costs related to each customer connection to the sewer system and the water system using the form provided in the last rate case. The Company's Thoroughbred Database System appears to have the functionality for tracking all costs related to individual customer connections on a going forward basis;

(j) The Company shall continue recording all parts purchased for customer connections as a separate journal entry to ensure a proper accounting of this cost.

(4) The Company shall implement the recommendations contained in the Consumer and Management Analysis Unit (CMAU) Report, attached hereto as Attachment D and incorporated by reference herein, and provide proof of implementing the recommendation to the Manager of the Commission's CMAU:

(a) Within thirty (30) days of the effective date of an order approving this Partial Disposition Agreement, the Company shall Update and distribute, to all current and future customers, written information specifying the rights and responsibilities of the Company and its customers as required by Commission Rule 4 CSR 240-13.040(3);

(b) Within thirty (30) days of the effective date of an order approving this Partial Disposition Agreement, the Company shall correct its monthly billing statements to include the dates of the beginning and ending meter readings, so that the billing statements adhere to Commission Rules 4 CSR-13.020 (9)(A);

(c) Within thirty (30) days of the effective date of an order approving this Partial Disposition Agreement, the Company shall develop and utilize a notice of discontinuance or make a reasonable effort to contact the customers 24 hours in advance of a service discontinuance in compliance with Commission Rule 4 CSR 240-13.050(8);

(d) Within ninety (90) days of the effective date of an order approving this Partial Disposition Agreement, the Company shall develop written job descriptions for each position that adequately reflect the employee's current job duties and responsibilities;

(e) Within ninety (90) days of the effective date of an order approving this Partial Disposition Agreement, the Company shall develop and utilize a written vehicle log to maintain information regarding vehicle usage. The log should include information regarding the vehicle type, date, employee name, general description and location of the task, and the miles attributable to the task;

(f) Within ninety (90) days of the effective date of an order approving this Partial Disposition Agreement, the Company shall evaluate storing a copy of all customer documentation and billing records off-site;

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

(7) The Company, Staff and Public Counsel 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; and that the Company freely and voluntarily enters into this Partial Disposition Agreement; and

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

ISSUES FOR EVIDENTIARY HEARING

Staff, Terre Du Lac and OPC were unable to reach a final disposition as to the matters of: an agreed upon water and sewer revenue requirement increase amount; the net rate base amount; depreciation rates; accounting treatment of certain capital projects; electric costs; employee benefits; fair rate of return; and capital structure. The parties request an evidentiary hearing and propose the procedural schedule attached as Exhibit B to present these outstanding issues to the Commission for its determination.

ADDITIONAL MATTERS

Other than the specific conditions agreed upon and expressly set out herein, the terms of this Partial Disposition Agreement reflect compromises between Staff and the Company.

The Company and Staff acknowledge that they have previously agreed to extensions of the normal "Day-150" date by which an agreement regarding the resolution of a small company revenue increase request is to be reached due to a delay in response to Data Requests. Copies of the extension agreements can be found in the above-referenced EFIS Case No. for the Request.

Staff has completed a Summary of Case Events and has included that summary as Attachment F to this Partial Disposition Agreement.

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

Additionally, the Company agrees that subject to the rules governing practice before the Commission, Staff shall have the right to provide whatever oral explanation the Commission may request regarding this Partial Disposition Agreement 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, 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 be represented at the meeting.

SIGNATURES

Agreement Signed and Dated:

5-9-17

Michael Tilley
President
Terre Du Lack Utilities Corporation

Date

JSMyers for below

5/9/2017

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

Date

William Williams, OPC Acting Director

5/9/2017

Ryan Smith
Senior Counsel
Missouri Office of the Public Counsel

Date

List of Attachments

Attachment A – Auditing Department Report

Attachment B – Example Water Tariff Sheet

Attachment C – Example Sewer Tariff Sheet

Attachment D – CMAU Report

Attachment E – Water & Sewer Department Report

Attachment F – Summary of Events

EXHIBIT B

PROPOSED PROCEDURAL SCHEDULE

Date	Event
May 31	Direct Testimony of all Parties
June 23	Rebuttal Testimony of all Parties
June 28	List of Issues/Witnesses and Order of Cross/ Openings
June 30	Statement of Positions
July 5	Filed Exhibit List
July 6 and 7	Evidentiary Hearing
July 28	Initial Briefs
August 11	Reply Briefs

Attachment A

Auditing Department Report

M E M O R A N D U M

TO: Jim Busch, Manager – Water and Sewer Department
Curt Gateley, Case Coordinator – Water and Sewer Department

FROM: Keith D. Foster, Utility Regulatory Auditor IV – Auditing Department
Amanda McMellen, Utility Regulatory Auditor V – Auditing Department

SUBJECT: Terre Du Lac Utilities Corporation
Rate Increase Request
Case Nos. WR-2017-0110 and SR-2017-0109

DATE: February 23, 2017 (Revised April 26, 2017)

On October 11, 2016, Terre Du Lac Utilities ("TDLU" or "Company") filed a small utility rate case request to increase its annual water system operating revenues by $134,000 and its annual sewer system operating revenues by $8,700. This Memorandum will address the Auditing Department's review and findings as part of these dockets.

<u>Company History, Rates and Operations</u>

TDLU is located in St. Francois and Washington Counties in Missouri, near the city of Bonne Terre, Missouri, and provides water service to approximately 1,298 customers and sewer service to 1,255 customers. TDLU is co-owned by two brothers, Mike Tilley and Paul Tilley. The Tilley brothers purchased the TDLU systems from James Kwon, the previous TDLU owner, in April 2001. Mike Tilley oversees the day-to-day operations and serves as the licensed operator for the water system. Stephen Skiles currently serves as the licensed operator for the sewer system. Paul Tilley primarily maintains an ownership interest in the Company and occasionally provides very limited assistance with TDLU's operations. TDLU last filed for an increase in rates on October 21, 2013, as part of Case Nos. WR-2014-0104 and SR-2014-0105 under the Commission's small utility rate case procedures. As part of the small utility rate increase requests, TDLU sought a 15% increase in annual water operating revenues and a 16.5% increase in its sewer operating revenues. The Auditing Department Staff ("Staff") conducted an investigation of the Company's books and records and ultimately determined that TDLU required an 18.95% increase for its water operations and a 20.47% increase for its sewer operations. On July 24, 2014, Commission Staff filed a "Notice of Updated Company/Staff Agreement Regarding Disposition of Small Company Rate Increase Request" describing the aforementioned rate increases. On August 20, 2014, the Commission issued its "Order Approving Tariff and Incorporating Disposition Agreement" with an effective date of September 1, 2014, for the new agreed-upon rates.

The following table provides a summary of the current rates approved by this Commission and the number of customers currently served by TDLU:

System	No. Metered Customers	Customer Type	Current Monthly Rate
Water	1274	Standard Residential 5/8"	$ 11.41
	3	Residential – 1" Meter	$ 28.53
	19	Standard – Business	$ 11.41
	1	Business – 1" Meter	$ 28.53
	1	Business – 2" Meter	$ 91.30
Total	1298		
System	**Water Usage**	**Description**	**Current Commodity Rate Quarterly**
Water	No Minimum	Per 1,000 gallons	$ 1.38
System	**No. of Customers**	**Customer Type**	**Current Monthly Rate**
Sewer	1242	Residential	$ 19.41
	7	Residential – Aerator ($18/qtr)	$ 6.00
	3	Commercial – 2" Pressure	$ 155.27
	3	Residential – 1" Main	$ 48.52
Total	1255		

The Company's well number one is located at TDLU's office and is currently not in-service because of unresolved operational technical problems. TDLU has three (3) additional wells: well numbers two, three and the new well number four, that are capable of producing 100, 250 and 320 gallons per minute, respectively, on its water system. Storage capacity for the water system is provided by two elevated storage tanks, of 50,000 and 100,000 gallons volume. The Company currently has approximately 50 miles of water mains consisting of four (4), six (6) and eight (8) inch PVC piping.

The Company currently operates three wastewater treatment facilities: (1) a single-cell lagoon; (2) a three-cell lagoon with aerators and (3) an oxidation ditch. The single-cell lagoon, although small, is not considered capable of meeting regulatory discharge standards. Therefore, TDLU will need to determine alternative wastewater treatment options sometime in the future for customers currently served by the single-cell lagoon. TDLU expects to replace this facility with a lift station which would involve the construction of a new electric power line connection and a force main to transfer sewage to the collection system. There are a total of approximately 45 miles of collection sewers, of which 25 miles are four (4) inch force mains with customers connected through a pump unit, consisting of a septic tank with an electric pump, the remaining 20 miles are mostly eight (8) inch gravity sewers. The Company's single-cell lagoon serves approximately 20 homes. The three-cell lagoon serves approximately 530 homes and the oxidation ditch serves approximately 730 homes. There are nine (9) customers who are not connected to collecting sewers, but instead utilize individual on-site aerated tanks, meaning each customer has a separate aerated tank. These customers can optionally pay an approved charge to TDLU for maintenance of the aerators.

Staff conducted a review of the Company's books and records. For purposes of its audit, Staff utilized a test year of twelve-months ending September 30, 2016, updated through December 31, 2016, for known and measurable changes. Staff reviewed all capital investments, revenues and expenses for the period January 1, 2014, through December 31, 2016, for purposes of conducting its review in this rate case proceeding.

Based upon this review, Staff determined that TDLU warrants an increase in annual water revenues in the amount of $66,197 and a $4,724 increase in annual sewer revenues. This would represent an increase of 23.32% in current water rate revenues and a 1.19% increase in current sewer rate revenues. A discussion of Staff's cost of service calculation and proposed adjustments follows below.

DIVIDENDS

The Company has been paying dividends to Mike Tilley and co-owner, Paul Tilley, since 2006. Prior to that, the co-owners were taking similar payouts in the form of a "draw" that was recorded as an expense on the books of the Company. Amounts disbursed for dividends during the test year ending September 30, 2016, totaled $32,000.

The following chart reflects by year the amount of dividends and draws that have been paid to Mr. Mike Tilley and Paul Tilley since 2003:

Year	Mike Tilley	Paul Tilley	Total
2003	$14,996	$14,996	$29,992
2004	$14,996	$14,996	$29,992
2005	$14,996	$14,996	$29,992
2006	$16,446	$16,446	$32,892
2007	$14,996	$14,996	$29,992
2008	$15,897	$15,897	$31,794
2009	$15,596	$15,596	$31,192
2010	$17,499	$17,499	$34,999
2011	$19,200	$19,200	$38,400
2012	$21,700	$21,700	$43,400
2013	$18,400	$18,400	$39,600
2014	$20,700	$20,700	$41,400
2015	$19,500	$19,500	$39,000
2016 (thru Sep)	$10,000	$10,000	$20,000
Total	$234,922	$234,922	$469,844

In light of ongoing needs to meet the Missouri Department of Natural Resources ("DNR") compliance requirements along with further system improvements, Staff recommends that Mike and Paul Tilley reconsider their practice of paying dividends at the current time and instead re-invest the funds in capital improvements for the water and sewer systems.

RATE BASE AND RELATED ISSUES

Staff used the plant in-service balances at December 31, 2013, previously determined by Staff in Case Nos. WR-2014-0104 and SR-2014-0105, as its starting point in performing this review and included all capital investments that were completed since that time. In this rate case proceeding, Staff verified each capital investment completed during the period covering December 31, 2013, through December 2016, through a review of the Company's general ledger, check registers, bank statements, plant records and invoices.

Per agreements in the last case, Staff continues to remove all costs from plant-in-service associated with a 2011 Cadillac CTS utilized by Kathy Tilley, who serves as TDLU's Vice President. Staff believes this luxury vehicle is excessive in cost and should not be borne by the ratepayers. Staff has previously made TDLU aware of its concern regarding its attempts to include excessively expensive vehicles as part of the cost of service in its previous rate proceeding. During Staff's review in the previous rate case, it was determined that Ms. Tilley uses the vehicle for both TDLU business (approximately one-third of its use) and personal use (approximately two-thirds of its use). Ms. Tilley's duties for TDLU business include trips to Bonne Terre for the completion of banking transactions and trips to the U.S. Post Office. Ms. Tilley also periodically picks up materials and supplies for TDLU. Staff calculated the annual mileage and, using the 2016 IRS Standard Mileage Rate, Staff included $374 in its cost of service calculation for mileage incurred by Ms. Tilley for all TDLU business related trips. Staff recommends that Ms. Tilley maintain travel logs documenting the nature of all business trips including the corresponding date of travel and all mileage incurred.

In addition, since the time of the last rate case, TDLU has made major investments primarily in one additional drinking water well (Well #4), repairs for Well #3 and complete renovations of three sewage lift stations. Staff has reviewed all necessary invoices and verified that these improvements are in-service.

In summary the following chart reflects Staff's inclusion for rate base for TDLU's waterand sewer operations at December 31, 2016:

	Water	Sewer
Plant In Service	$1,436,212	$976,803
Accumulated Depreciation Reserve	$605,293	$363,664
Net Plant in Service	$830,919	$613,139

Contributions in Aid of Construction (CIAC)	($255,450)	($260,808)
CIAC Depreciation	$78,466	$84,941
Inventory	$514	$567
Total Rate Base	$654,449	$437,839

REVENUES

Water

In order to annualize water revenues, Staff reviewed billing data provided by TDLU. At December 31, 2016, TDLU served 1,298 total water customers consisting of 1,274 residential customers with 5/8" meters, three (3) residential customers with 1" meters, nineteen (19) business customers with 5/8" meters, one (1) business customer with 1" meter, and one (1) business customer with 2" meter. These customer levels were then multiplied by each specific base tariff rate to determine annualized base water revenues. Staff also performed an analysis of the usage of each rate class over a four-year period covering January 31, 2013, through December 31, 2016. Based on usage history, Staff determined a normalized usage for the determination of commodity revenue. Staff's total annualized commodity usage was then priced at $1.38 per 1,000 gallons. The commodity usage revenue and base revenue were then added to determine a total annualized water service revenue level of $258,504.

Staff also included other miscellaneous revenues for TDLU's water system in the amount of $6,600. This other miscellaneous revenue is generated from leases entered into with Big River Broadband and WiFi Midwest Inc. for allowing them to place their equipment on TDLU property.

Sewer

Staff annualized sewer revenues based upon the number of customers reported on the TDLU sewer system at the period ending December 31, 2016, at current approved tariffed rates. The sewer customer count at December 31, 2016, is 1,255 customers consisting of 1,242 residential customers with 5/8" and 3/4" water meters, seven (7) residential aerator customers, three (3) commercial–pressure customers with a two (2) inch water meter, and three (3) residential customers with one (1) inch water meter. Based upon the current tariffs and these customer levels, Staff determined a $297,127 level for total annualized sewer service revenues.

Miscellaneous Service Revenue

During the test year ending September 30, 2016, TDLU collected $47,677 in miscellaneous service revenues for sewer. This miscellaneous service revenue was collected to reimburse TDLU for materials and supplies purchased by the Company for maintenance performed on customer sewer pumps. In this proceeding, Staff recommends an inclusion of $38,277 for maintenance expense related to customer sewer pumps. TDLU's current tariff allows the Company to charge customers for all materials and supplies purchased for such repairs. As such, Staff recommends a reduction to miscellaneous service revenue in the amount of $9,401 in order to reflect full recovery of any expense incurred for materials and supplies purchased by the Company to perform maintenance on customer sewer pumps.

Miscellaneous Other Income

During the test year ending September 30, 2016, TDLU collected $10,708 and $7,777 in miscellaneous other income, respectively for water and sewer. This miscellaneous other income is collected from customers when they need a part or pump, at which time TDLU charges an additional 20% above cost for handling, ordering and storage. In this proceeding, Staff recommends inclusion of test year levels (less minor adjustments) for water of $7,602 and $10,533 for sewer. Since this income involves TDLU labor and property, Staff recommends inclusion in revenues.

Non-Tariff New Pressure Pump Revenue

During the test year ending September 30, 2016, TDLU collected $35,137 in non-tariff new pressure pump revenue. This non-tariff new pressure pump revenue was collected when the customer paid for the pump for new construction (Account 4060S). When TDLU pays the invoice from Flo-Systems for the pump, TDLU applies that payment to the corresponding New Connect/Pressure Pump Account (5118S). In order to reflect full recovery of any expense, Staff recommends an inclusion of a $41,785 (test year level less minor adjustment) for new connect/pressure pump expense.

Other Miscellaneous Revenue – Water and Sewer System

Staff also included Other Miscellaneous Revenues in the amount of $21,222 broken down as follows: (1) Late Fees equal to the test year of $15,147; (2) Reconnection Fees equal to the test year of $5,147; (3) Returned Check Fees in the amount of $125; and (4) Refunds equal to the test year of $803. These revenues were spread evenly between the water and sewer systems.

UNCOLLECTIBLE EXPENSE

During the test year, TDLU recorded $316 in uncollectible expense split evenly between its water and sewer accounts. Based on discussions with the Company, Staff learned that TDLU had successfully collected these past due balances during the test year. Therefore, Staff recommends an adjustment to decrease the uncollectible expense to $0 for both water and sewer.

LOST WATER ADJUSTMENT

Staff determined from a comparison of actual customer usage to the master meter usage that TDLU's water system experiences significant water losses. This comparison revealed that 23.88% of the water that was pumped during the test year did not actually pass through customers' meters. Although this is a decrease from the last case, it is still significant. Consistent with its past treatment of lost water at other regulated water utilities, Staff established a maximum allowable 15% water loss factor to address this significant water loss level. After allowing a 15% water loss factor, Staff determined an excess 8.88% water loss percentage to reduce chemicals and electric expense. Staff maintains the position that TDLU customers should not be forced to pay for electricity expense associated with pumping lost water, above the 15% threshold as established by Staff, since the customers are not afforded the use of this water.

PAYROLL

In addition to being the Company's licensed water system operator, Mike Tilley is responsible for daily operations of the water and sewer systems, which includes oversight, inspections, facility locates and meter reading. Mr. Tilley's current salary is $46,218. Staff's opinion is that this salary should be increased to $51,814 to compensate Mr. Tilley for the work he performs for the TDLU systems. Staff reviewed salary data for the southeast region from the Missouri Economic Research and Information Center ("MERIC"), a division of the Missouri Department of Economic Development, to check the reasonableness of the salary being paid to Mr. Tilley and other TDLU employees. Therefore, Staff recommends an adjustment to increase test year payroll expense in the amount of $5,596 that will be split evenly between water and sewer operations.

Kathy Tilley is responsible for billing, customer service, work orders, data entry into TDLU's accounting software and purchasing of materials and supplies for water and sewer operations. Ms. Tilley is a full time employee and acts as office manager for TDLU and is paid an annual salary of $46,218 for the duties that she performs. This is the same as the current annual salary paid to Mr. Tilley who performs considerably different functions. Staff's review of the salary data in MERIC for the type of work performed by Ms. Tilley shows a mean annual wage of $45,046. Staff's opinion is that this salary is reasonable to compensate Ms. Tilley for the work she performs. Therefore, Staff recommends an adjustment to decrease test year payroll expense in the amount of $1,172 that will be split evenly between water and sewer operations.

TDLU also employs a full-time clerical worker, Cynthia Hollock, to assist Kathy Tilley with the duties of the office. Ms. Hollock is currently compensated at a weekly salary of $540 which is $28,080 annually. Staff's review of the salary data in MERIC for the type of work performed by Ms. Hollock shows a mean annual wage of $28,704. This wage appears to be reasonable to compensate her for the work she performs. Therefore, Staff recommends an adjustment to increase test year payroll expense in the amount of $624 that will be split evenly between water and sewer operations.

The Company currently employs five other full-time employees. TDLU currently employs a full-time sewer system operator, Stephen Skiles, who is paid an hourly rate of $18.00. Staff believes this total level of annual pay of $37,440 is adequate to compensate Mr. Skiles for the work he performs for TDLU. The four field technicians currently employed by TDLU are compensated at a per hour rate of $15.72, $12.00, $10.00, and $8.00, respectively. Mr. Robert Ludwig, the senior field technician, has responsibility for meter reading, system maintenance, facility locates, excavating, and, since the last case, backhoe operations. The remaining three field technicians, Robert Brake Jr., John Pratt, and Robert Gough (who began on October 31, 2016) perform similar system maintenance functions, as required, such as meter reading, customer pressure pump repairs, water and sewer leak repairs, and water and sewer lines new construction. Staff reviewed the field technicians' current duties and hourly wage rates compared to MERIC positions for similar duties. Staff believes the current total level of annual pay of $24,960 is adequate to compensate Mr. Brake for the work he performs for TDLU. For Mr. Pratt, whose annual pay is $20,800, Staff believes a $23,181 annual rate, which is the annual wage mean level for MERIC SOC Code 49-9098, Helpers-Installation, Maintenance & Repair Work, is reasonable to compensate for the work he performs for TDLU. For Mr. Gough, the more junior field technician, whose annual pay is $16,640, Staff believes a $17,944 annual rate, which is the annual wage entry level for MERIC SOC Code 49-9098, Helpers-Installation, Maintenance & Repair Work, is reasonable to compensate for the work he performs for TDLU. Staff believes the proposed increases in wages should properly compensate Mr. Brake and Mr. Gough for the work they perform for the water and sewer operations of TDLU. Therefore, Staff has proposed adjustments to the test year to adjust these wages accordingly. For the field technicians all annual wages were allocated to water and sewer based on the hours each recorded on their timesheets for the test year period. For Robert Gough, who started after the test year, Staff used the hours recorded by Ryan Skaggs, who Mr. Gough replaced.

Staff's adjustments record all annualized salaries and wages in Account 5000 –Salaries & Wages. Therefore, Staff also included adjustments to remove all payroll expenses currently recorded in the test year for any other Company account. This includes test year expenses for sick pay, holiday pay, vacation pay, on call pay, maintenance – wells, labor – sewer treatment plants, maintenance – mains, maintenance – meters, education expense, maintenance – customer pressure pump, maintenance – other plant facilities and labor – meter reading.

PAYROLL TAXES

Payroll taxes paid during the test year were $18,026. Of this amount, $9,145 represents the test year level of expense for water operations and $8,881 for sewer operations. Staff made adjustments to increase these test year levels in the amount of $1,371 for water operations and $2,682 for sewer operations to reflect the additional tax liability that will result from the salaries and wages that Staff recommends for the increase in annualized salaries and wages at MERIC rates.

Staff would also like to note that the Company has been inappropriately recording all payroll tax expenses for Stephen Skiles in Account 5045S – Maintenance Sewer Gravity instead of the 5001W and 5001S Payroll Taxes accounts. This grossly overstates the amounts in the maintenance accounts and understates the Company's payroll tax liabilities in the Payroll Taxes accounts. Staff included an adjustment to remove the $3,324 incorrectly recorded in the 5045S account.

UNIFORM ALLOWANCE

In the prior rate cases (Nos. WR-2014-0104 and SR-2014-0105), the Company included a uniform allowance that was paid to all TDLU employees in the form of payroll. The Company stopped including this in the paychecks of its hourly employees after the May 21, 2016 payroll. At that time, the Company started using Clean Uniform Company to supply clean uniforms for the field technicians. The cost for this service is comparable to what was being included in the employees' weekly paychecks. Staff created an adjustment to annualize the uniform expense based on a $10 per week per employee cost. For the salaried employees, Staff also included an adjustment to annualize the payroll taxes due for including this reimbursement in their paychecks.

EMPLOYEE BENEFITS

TDLU provides group health insurance to Mike Tilley, Kathy Tilley and Robert Brake Jr. Staff recommends that health insurance coverage for TDLU's key employees is reasonable and should be allowed to be recovered through rates.

The current (October 1, 2016) annual premium to provide this coverage to TDLU employees is $47,860. TDLU incurred group health insurance expense during the test year ending September 30, 2016, in the amount of $46,076. Staff recommends an adjustment to increase test year expense by $892 for water operations and $893 for sewer operations, to reflect the current premium.

TDLU also purchased supplemental health insurance at a cost of $5,816 during the test year ending September 30, 2016, for Francis and Kaye Tilley who are Mike Tilley's father and step-mother and who are not employees of TDLU. Staff recommends disallowance of amounts paid to provide supplemental health insurance for Francis and Kaye Tilley as they provide no services to TDLU that can be verified. Therefore, Staff proposes adjustments to reduce test year level of group health insurance expense by $2,908 for water operations and $2,908 for sewer operations.

TDLU also purchased dental and life insurance for Mike Tilley, Kathy Tilley and Francis Tilley. Staff recommends disallowance of amounts paid to provide dental and life insurance for Francis Tilley since he is not an employee of TDLU. As such, Staff proposes a reduction in dental & life insurance expense in the amount of $1,466 with an adjustment in the amount of $733 to both water and sewer cost of service.

Finally, Staff removed payments made for health insurance claims that should have been the responsibility of the employee and those paid for non-employee family members.

MAINTENANCE

Water Operations

TDLU has experienced ongoing environmental issues relating to naturally occurring radionuclide levels within its well systems. TDLU has worked with DNR on this matter and previously employed the services of Taylor Engineering to evaluate the environmental issues and provide solutions. TDLU has developed a new Well #4 that it is hoped will resolve the radionuclide issues, however is unknown at this time as it just went into service in late December 2016.

TDLU completed repairs to its wells, pumping plant, meters, mains and other plant facilities during the test year. Staff normalized the on-going level of expense for maintenance to wells, supply & engineering, pumping equipment, mains, meters, and other plant facilities. Staff recommends a total water system maintenance normalized expense of $3,504.

Sewer Operations

TDLU also made repairs to collection/force and sewer gravity, pumping system, customer pressure pump units, treatment & disposal equipment and other plant facilities during the test year. Staff recommends a normalized sewer maintenance expense of $3,731.

Staff determined the level of maintenance expense for customer pressure pumps (i.e., customer-owned sewer pumps) should be recommended as a three-year average of maintenance expense as there has been a fluctuation in this maintenance expense category for the 12-month periods ending September 30 for 2014 through 2016. As such, Staff recommends the on-going level of customer pressure pump maintenance be set at $38,277. Staff also recommends that miscellaneous service revenues be set equal to this amount to reflect full reimbursement from the customer as allowed by TDLU’s current tariff.

CHEMICALS

Staff determined, as part of its review of the chemical expenses for water and sewer, that even though the Company has two accounts for recording these expenses (5020W – Hypochlorite-Wells and 5020S – Chemicals), all of the expenditures in the test year were recorded in incorrect accounts; either the 5005 Purchase Power accounts, or the 5010 Operating Supplies & Expenses accounts. Staff included adjustments to remove the improperly recorded chemical amounts from these accounts (5005 and 5010) and then, as described below, calculated the proposed adjustments to the appropriate 5020 accounts which had a test year balance of zero.

Water Operations

TDLU purchased chemicals during the test year ending September 30, 2016, for its water system in the amount of $2,971. Staff reviewed the water system chemical expenditures for each of the 12-month periods ending September 30 for the years 2014 through 2016. Due to fluctuations in costs incurred during these years Staff calculated a three-year average of $2,941. Staff recommends this average as an appropriate amount for the ongoing level of chemical expense for the water system. To this $2,941, Staff applied the previously described 8.88% water loss factor which reduced the amount by $261 to reflect the cost to treat water that is lost and never consumed by the ratepayer. Therefore, the total normalized ongoing level of chemical expense recommended by Staff for the water system is $2,680.

Sewer Operations

TDLU purchased chemicals during the test year ending September 30, 2016, for its sewer system in the amount of $2,965. Staff reviewed the sewer system chemical expenditures for each of the 12-month periods ending September 30 for the years 2014 through 2016. Due to fluctuations in costs incurred during these years, Staff calculated a three-year average of $3,023. Staff recommends this average as an appropriate amount for the ongoing level of chemical expense for the sewer system.

TELEPHONE EXPENSE

TDLU’s telephone expense for the test year was $4,687, which includes wireless phone service provided to Judy Tilley, Audrey Tilley, Francis Tilley and Hayden Tilley, none of whom are employees of TDLU. Staff disallowed the entire portion of wireless phone service attributable to those non-employee individuals as well as two-thirds of the wireless phone service provided to Kathy Tilley in order to more accurately reflect the business usage portion of her service. In addition, it is Staff’s opinion the Company is overpaying for its wireless plan. In addition to the fact that the Company is paying for wireless services for family members, it is paying for a 30-gigabyte data usage plan with rollover when, on average, approximately 5.5 gigabytes are used, 80% of which are used by family members included in the plan. Therefore, Staff also recommended a reduction in the monthly rate from a 30-gigabyte data plan to a 3-gigabyte data plan to more accurately reflect TDLU test year usage. Reflecting the removal of these wireless phone service charges, Staff determined that the ongoing level of wireless expense should be $2,161 and the ongoing level of telephone expense for the TDLU office should be $1,571 allocated each to the water and sewer systems.

INTERNET SERVICE

In the prior rate case, Staff included $718 in annualized expense for internet service provided by Big River Broadband. Subsequently, the Company switched to Charter Communications who supply both internet and television service. Staff adjusted these charges in the G & A Office Expense accounts (5070) to annualize the internet expense at the current rate and to exclude the television costs as Staff could not determine how this expense benefits the ratepayers.

VEHICLE FUEL EXPENSE

Vehicle fuel expenses incurred by TDLU are charged to TDLU's BP Solutions credit card. BP Solutions provides a detailed invoice to TDLU each month that provides an accurate record of gallons purchased, date purchased, which employee purchased the fuel and price paid. Staff disallowed the fees and charges that were incurred for using a BP card at a non-BP station as well as one late fee/interest charge. Staff proposes the annualized gallons for vehicle fuel expense be based upon the test year ending September 30, 2016. Staff also excluded all vehicle fuel expense for Kathy Tilley since Staff included mileage expense for Kathy Tilley as previously described in the Rate Base and Related Issues section of this memorandum. Staff has included $4,795 in fuel expense for water and $5,513 for sewer.

ELECTRICITY EXPENSE

With the exception of the new Well #4, Staff reviewed TDLU's Ameren Missouri electric service invoices, TDLU's general ledgers and check registers and determined a normalized electricity expense for each metered location. For each location, Staff recorded the detailed information included in each bill for the last three years ending October 31. This date was used instead of September 30 simply because the first bills collected began in November 2013. Using the recorded data, Staff then used the actual usage data split between winter and summer rates to calculate various average annual usages: current year, two-years and three-years. From this, Staff determined, based on the historical usages, which of the usages reflects an appropriate amount to recommend representing electric expense for each location going forward. Upon making a selection, Staff then recalculated the expense using current Ameren Missouri tariff rates. Then, for those meters that supported water functions, the previously described 8.88% water loss factor was applied to reduce the cost of electricity for water loss. For the TDLU headquarters office and Maintenance Shop, this water loss factor was applied to only half the computed electric rates since costs are allocated equally between sewer and water systems for these facilities and the water loss factor is not applied to the sewer systems. For Well #4, which has no historical usage, Staff used the Company's amount contracted with Ameren Missouri for the first year of service to which Staff applied the water loss factor. The following paragraphs denote the average usages selected and the normalized amounts for which Staff based its adjustments.

Water Operations

(1) Well #3 normalized usage based upon a three-year average was determined by Staff to be $21,256 for the on-going level of electricity expense.
(2) Well #2 - chlorinator normalized usage based upon a three-year average was determined by Staff to be $962 for the on-going level of electricity expense.
(3) Well #2 – pump normalized usage based upon a three-year average was determined by Staff to be $4,386 for the on-going level of electricity expense.
(4) Maintenance shop and private lighting at the maintenance shop normalized usage based upon a three-year average was determined by Staff to be $862 for the on-going water portion of electricity expense.
(5) TDLU Headquarters Office normalized usage based upon a three-year average was determined by Staff to be $806 for the on-going water portion of electricity expense.
(6) Well #4, after applying the water loss factor to the Company's contracted rate for the first year of electrical service, was determined by Staff to be $12,253 for the on-going level of electricity expense.

Sewer Operations

(1) Maintenance shop and private lighting at the maintenance shop normalized usage based upon a three-year average was determined by Staff to be $946 for the on-going sewer portion of electricity expense.
(2) TDLU Headquarters Office normalized usage based upon a three-year average was determined by Staff to be $885 for the on-going sewer portion of electricity expense.
(3) Oxidation ditch normalized usage based upon a three-year average was determined by Staff to be $4,299 for the on-going level of electricity expense.
(4) Lift station #1 normalized usage based upon a two-year average was determined by Staff to be $1,434 for the on-going level of expense. A two-year average was chosen for this meter because there was a significant increase in usage from 2014 to 2015 which remained steady into 2016.
(5) Three-cell lagoon normalized usage based upon the current year usage was determined by Staff to be $2,632 for the on-going level of electricity expense. The current year usage was chosen for this meter because the usage showed a steady increase each year.
(6) Lift station #2 normalized usage based upon a two-year average was determined by Staff to be $972 for the on-going level of electricity expense. A two-year average was chosen because there was a steady usage in 2014 and 2015 but then usage went down in 2016.

(7) Lift station #3 normalized usage based upon a three-year average was determined by Staff to be $1,780 for the on-going level of electricity expense.

PROPERTY AND CASUALTY INSURANCE

TDLU currently carries property and casualty insurance for the TDLU office, maintenance shop, wells & well equipment, elevated water towers, sewer treatment plant & treatment plant equipment, electrical panels & testing equipment, lagoon building & equipment, electronic controls and lift station equipment.

The current annual premium paid by TDLU for property and casualty insurance is $14,976. TDLU also had to pay $100 to Savers P&C for a Right of Way Bond in order to cut into the road to access lines. The amount paid during the test year ending September 30, 2016, was $15,737. Therefore, Staff is recommending an adjustment to decrease property and casualty insurance expense by $661. Staff allocated the adjustment between the two systems based upon a percentage of total rate base which resulted in an increase of $1,165 for the water system, and a decrease of $1,825 for the sewer system.

WORKERS' COMPENSATION

TDLU maintains its worker's compensation policy with AmTrust North America. The amount paid by TDLU for workers' compensation insurance during the test year ending September 30, 2016, was $11,362. This total included a $4,185 payment due from the result of an audit and is, therefore, non-recurring. The current annual premium is $8,539 which, in Staff's opinion, is the appropriate on-going level of expense to be included in the cost of service. Therefore, Staff is recommending an adjustment to decrease workers' compensation insurance expense by $2,823. Staff allocated the adjustment between the two systems based upon a percentage of total rate base which resulted in a decrease of $565 for the water system, and a decrease of $2,258 for the sewer system.

VEHICLE INSURANCE

TDLU maintains its vehicle insurance policy with Allstate. The amount paid by TDLU for vehicle insurance during the test year ending September 30, 2016, was $4,698. The current annual premium is $4,889, which Staff reduced by $1,672 to remove the expense associated with the CTS Cadillac used by Kathy Tilley. Therefore, Staff is recommending an adjustment to decrease total vehicle insurance expense by $1,480. Staff allocated the adjustment between the two systems based upon a percentage of total rate base, which resulted in a decrease of $421 for the water system, and a decrease of $1,059 for the sewer system.

BILLING AND COLLECTIONS EXPENSE

TDLU recorded no expense for card stock used to print water and sewer bills during the test year ending September 30, 2016. Therefore, Staff reviewed invoices and developed an annualized expense based upon current customer counts and the most recent purchase of card stock by TDLU. Based upon annualized customer counts determined by Staff in this proceeding and the current cost per bill of $0.05, the annualized cost for cardstock is $407 for water, and $390 for sewer. Staff recommends adjustments in these amounts to properly reflect the on-going level of expense for TDLU to prepare billings for water and sewer operations, respectively.

POSTAGE EXPENSE

During the test year, TDLU recorded $2,419 and $2,418 for postage costs for its water and sewer operation, respectively. Staff annualized postage expense by determining annualized billing and mailing costs based upon the current customer levels. Based upon this analysis, Staff recommends an annualized postage expense level of $2,142 for water operations and $2,054 for sewer operations.

MEMBERSHIP FEES

TDLU pays membership fees to the Missouri Rural Water Association (MRWA). Staff included $320 for water and $320 for sewer as an annualized amount for these membership fees. This annual membership consists of fees for training provided by the MRWA for some continuing education courses relating to motors and pumps and licensing of TLDU's system operators.

ASSOCIATION FEES

TDLU pays association fees to the Terre Du Lac Property Owners' Association. During the test year ending September 30, 2016, TDLU was assessed an amount of $1,680 (for water and sewer both) for its office and maintenance shop. Staff allowed this test year level of expense in the cost of service calculation in order to include an ongoing level for these association fees.

PERMITS AND FEES

Water Operations

TDLU incurred a fee for lab services and program costs in the amount of $200, which Staff included in the cost of service. This $200 fee represents TDLU's annual water program administration fee that is charged by DNR for water testing services. The DNR water testing program provides smaller utilities like TDLU with a direct and affordable approach to maintain compliance with water system testing requirements. Under the program the utility is provided with all sample containers and either prepaid shipping labels or a nearby drop-off location for all required samples. Staff annualized a total of

$596 for all permits and licenses, $15 for the merchant and manufacturer's license and some other various charges for repairing water leaks and inspecting/licensing vehicles. Staff adjusted out $600 for the construction permit for Well #4 and included the amount in plant-in-service.

Sewer Operations

Missouri state statute also requires TDLU to pay annual state operating permit fees to DNR under the Missouri Clean Water Act. TDLU is required to pay $5,000 for its oxidation ditch, $4,000 for the TDLU North Lagoon (which was incorrectly recorded in the water account) and $150 for Terre Du Lac South Lagoon. Staff annualized a total of $9,451 for permits and licenses, which includes the aforementioned charges, a $45 license fee for its backup sewer system operator, and other various charges for permits and inspecting/licensing vehicles. Staff included these costs in TDLU's cost of service.

OUTSIDE SERVICES - LEGAL

TDLU has secured the legal services of Bruntrager & Billings P.C. to represent the Company in litigation involving compliance issues brought forth by DNR and the Missouri Office of the Attorney General (AGO) on behalf of DNR. Total costs incurred during the test year were $400. Staff believes these fees are associated with non-compliance with DNR regulations and could have been avoided by the Company. Therefore, Staff removed the test year level of these fees from the cost of service calculation. TDLU also used legal services from Brydon, Swearengen & England for assistance with MoPSC Case No. WF-2017-0143 regarding its Finance Application. Staff believes these costs are appropriate and recommends these costs be recovered over two years.

LAB TESTING – HYDRO SERVICES

During the test year ending September 30, 2016, TDLU recorded $7,875 in Account 5140S for Lab Analysis Expense for services provided by Environmental Management Services for lab testing. Staff has determined that the level of annual expense should be $9,000 based upon the fifty-two (52) total wastewater tests for the north lagoon and oxidation ditch. The frequency of testing increased since the last rate case due to new DNR regulations, effective February 1, 2015, that changed testing for E. coli from monthly to weekly. Therefore, Staff is recommending an adjustment to increase test year level expense recorded in Account 5140S by $1,125.

PSC ASSESSMENT

Staff recognized $2,922 for water operations and $4,032 for sewer operations in the cost of service calculations to reflect the most current fiscal year 2017 PSC assessment that was issued on July 1, 2016. Amounts paid during the test year ending September 30, 2016, were $2,099 and $2,822, respectively. Some of these costs were incorrectly classified in the general ledger as permits and licenses therefore understating the test year numbers for Accounts 5147W and 5147S. Therefore, Staff recommends an adjustment to increase the annual assessment for the water system by $2,192, and an increase in annual assessment for the sewer system in the amount of $3,024.

REAL ESTATE AND PERSONAL PROPERTY TAX

During the test year, TDLU recorded $2,252 for water and $2,252 for sewer for real estate and personal property taxes paid for a total of $4,504 that were due December 31, 2015. Staff recommends this be allocated to water and sewer operations based upon the actual location of the service or the percentage of total payroll when the asset is used for both water and sewer operations. Staff also recommends that the property tax expense associated with the Cadillac CTS used primarily for personal use by Kathy Tilley be removed as this is also excluded from plant-in-service, and mileage expense is included as described previously. After allocating the remaining amounts, Staff recommends an increase of $1,156 for the water operations, to reflect the current tax liability paid for the year ending December 31, 2016, for a total amount of $3,408 for the water system. Staff recommends an adjustment to decrease real estate and property tax expense by $314 for the sewer operations to reflect a current tax liability paid for the year ending December 31, 2016 for a total amount of $1,938 for the sewer system.

RATE CASE EXPENSE

The Company incurred rate case expense of $858 to print and mail out the initial rate case letters to its customers. Since the Company mailed these letters with the November 2016 bills, Staff reduced this amount by $325 for the postage already included in this case for the annualized postage expense for mailing bills. The remaining $533 was amortized over three years, or $178, split evenly between the water and sewer systems. As this current case progresses, Staff will consider including any additional rate case items prudently incurred by the Company to be amortized over a three-year period.

AUDITING DEPARTMENT STAFF RECOMMENDATIONS

The Auditing Department Staff recommends the following items:

1. Staff recommends that the Commission grant TDLU a $66,197 increase in water revenue requirement and a $4,724 increase in sewer revenue requirement.

2. Company will keep a record of the customers that are added to and dropped off the systems between this rate case and the Company's next rate case.

3. Company shall continue tracking costs related to each customer connection to the water system using the form provided in the last case. The Company's Thoroughbred Database System appears to have the functionality for tracking all costs related to individual customer connections on a going forward basis.

4. Company shall continue tracking costs related to each customer connection to the sewer system using the form provided in the last case.

5. Company shall record capitalized payroll related to customer connections as a separate journal entry to ensure this capitalized labor is properly reflected in Company's plant balance for ratemaking purposes. All journal entries related to customer connects should be made on a quarterly basis. Staff recommends this condition be met no later than six (6) months after new rates become effective.

6. Company shall record customer connection fees collected as a separate journal entry to ensure these amounts are properly reflected in Company's CIAC balance. All journal entries related to customer connections should be made on a quarterly basis. Staff recommends this condition be met no later than six (6) months after new rates become effective.

7. Company shall continue recording all parts purchased for customer connections as a separate journal entry to ensure a proper accounting of this cost.

8. Company shall track all meters installed on its water system separately from those costs recorded in Item 5 above to ensure the proper Commission approved depreciation rate is applied for ratemaking purposes, and to ensure adequate records for tracking meter life, locations, and meter accuracy. Staff recommends this condition be met no later than six (6) months after new rates become effective.

9. Company shall use the appropriate annual report form for Water and Sewer utilities, as specified by Missouri State Codes of Regulation, 4 CSR 240-3.640, 4 CSR 240-50.030, 4 CSR 240-3.335 and 4 CSR 240-61.020, to ensure the proper recording of plant assets, revenues and expenses on a going forward basis. Company should also consider registering with the Missouri Public Service Commission so annual reports may be filed utilizing the Commission's Electronic Filing Information System (EFIS). Staff is available to assist the Company with this recommendation. Staff recommends the Company do this in conjunction with the Company filing its next Annual Report to the Missouri Public Service Commission.

10. Company shall report all plant additions related to customer services to Account 345 – Customer Services for water operations and Account 353 – Customer Services for sewer operations per the USOA. Staff recommends this condition be met within thirty (30) days of the effective date of new rates.

11. Company shall immediately maintain a Plant Additions and Retirement spreadsheet along with supporting documentation to ensure all plant assets are properly reflected in future rate case proceedings. This supporting documentation shall include any bids received, sales or purchase agreements, loan agreements, invoices by vendor and proof of payment. Staff recommends this condition be met no later than six (6) months after new rates become effective.

12. On or before August 15th of each year, Terre Du Lac shall provide to the Manager of the Auditing Department for the Staff copies of disks containing the final billed water usage, sewer service revenues and all miscellaneous revenues for each month on a separate basis for the period covering January through June. On or before February 15th of each year, Terre Du Lac shall provide to the Manager of the Auditing Department for the Staff copies of disks containing the final billed water usage, sewer service revenues, and all miscellaneous revenues for each month on a separate basis for the period covering July through December.

13. Staff recommends the Company continue to record master meter readings at a minimum of five days per week in a master meter log, and that the Company make the master meter log available for review upon Staff's request.

14. Staff recommends the Company take steps to ensure that the employee timesheets, paystubs and associated General Ledger payroll entries all match to accurately record and report allocation of water and sewer work.

15. Staff recommends the Company apply a permanent fix to stop the continued inaccurate recording of Stephen Skiles payroll taxes in the 5045S – Maintenance Sewer Gravity account and to start recording these amounts in the appropriate 5001W and 5001S Payroll Taxes accounts.

Attachment B

Example Water Tariff Sheet

Name of Utility: Terre Du Lac Utilities Corporation
Service Area: Terre Du Lac Development St. Francois and Washington Counties, Missouri

Rules Governing Rendering of
Sewer Service

Schedule of Rates

Availability:

Available to any customer located in the Company's certificated service territory.

Water Service Rates:

5/8" & 3/4" meters	$xx.xx per month
1" Meter	$ xx.xx per month
2" Meter	$ xx.xx per month
Usage Charge	$ xx.xx per 1,000 gallons of water used per month

Taxes:

All Applicable Federal, State or local taxes shall be included in addition to the above charges.

* Indicates new rate or text
\+ Indicates change

Issue Date: ____________________________
Month Day, Year

Effective Date: June 14, 2017
Month Day, Year

Issued By: Michael Tilley, President 1628 St. Francois Rd, Bonne Terre, MO 63628
Name & Title of Issuing Officer Company Mailing Address

Attachment C

Example Sewer Tariff Sheet

Name of Utility: Terre Du Lac Utilities Corporation
Service Area: Terre Du Lac Development St. Francois and Washington Counties, Missouri

Rules Governing Rendering of
Sewer Service

Schedule of Rates

Availability:

Available to any customer located in the Company's certificated service territory.

Sewer Service Rates:

Residential and Commercial (5/8" & 3/4" meters)	$xx.xx per month
Commercial, Multi-Family & Residential (1" meter)	$xx.xx per month
Commercial, Multi-Family & Residential (2" meter)	$xx.xx per month

Taxes:

All Applicable Federal, State or local taxes shall be included in addition to the above charges.

* Indicates new rate or text
+ Indicates change

Issue Date: ____________________
Month Day, Year

Effective Date: June 14, 2017
Month Day, Year

Issued By: Michael Tilley, President 1628 St. Francois Rd, Bonne Terre, MO 63628
Name & Title of Issuing Officer Company Mailing Address

Attachment D

CMAU Report

<u>REPORT OF CUSTOMER SERVICE AND BUSINESS OPERATIONS REVIEW</u>

Consumer and Management Analysis Unit

Case Nos. WR-2017-0110

and SR-2017-0109

Terre Du Lac Utilities Corporation

Scott Glasgow and Brooke Richter

The Consumer and Management Analysis Unit (CMAU) staff of the Missouri Public Service Commission ("Commission") initiated an informal review of the customer service and business processes, procedures, and practices of Terre Du Lac Utilities Corporation ("TDLU") located in Bonne Terre, Missouri. The review was performed in response to TDLU's request for a rate increase in Case Nos. WR-2017-0110 and SR-2017-0109, filed October 11, 2016, and consolidated under WR-2017-0110. TDLU is requesting an increase of $134,000 in its annual water system operating revenues and $8,700 in its annual sewer system operating revenues, which represents an increase of approximately 51% for water and 4% for sewer.

The CMAU staff examined TDLU's tariffs, Commission complaint and inquiry records, as well as other documentation related to TDLU's customer service and business operations. In preparation of this report, the CMAU staff submitted data requests to TDLU on October 31, 2016, and conducted an on-site interview with TDLU personnel on December 13, 2016. The CMAU staff's review of TDLU resulted in the following seven recommendations for TDLU management:

THE CMAU STAFF RECOMMENDS THAT TDLU MANAGEMENT:

1. *<u>Develop written job descriptions for each position at TDLU that adequately reflect the employee's current job duties and responsibilities. This recommendation should be completed within ninety (90) days of the effective date of the Commission order that resolves Case No. WR-2017-0110.</u>*
2. *<u>Develop and utilize a written vehicle log to maintain information regarding vehicle usage. The log should include information regarding the vehicle type, date, employee name, general description and location of the task, and the miles attributable to the task. This recommendation should be completed within ninety (90) days of the effective date of the Commission order that resolves Case No. WR-2017-0110.</u>*

3. *Update and distribute, to all current and future customers, written information specifying the rights and responsibilities of TDLU and its customers as required by Commission Rule 4 CSR 240-13.040(3). This recommendation should be completed within thirty (30) days of the effective date of the Commission order that resolves Case No. WR-2017-0110.*
4. *Correct its monthly billing statements to include the dates of the beginning and ending meter readings, so that the billing statements adhere to Commission Rules 4 CSR-13.020 (9)(A). This recommendation should be completed within thirty (30) days of the effective date of the Commission order that resolves Case No. WR-2017-0110.*
5. *Evaluate storing a copy of all customer documentation and billing records off-site. This recommendation should be completed within ninety (90) days of the effective date of the Commission order that resolves Case No. WR-2017-0110.*
6. *Develop and utilize a notice of discontinuance or make a reasonable effort to contact the customers 24 hours in advance of a service discontinuance in compliance with Commission Rule 4 CSR 240-13.050(8). This recommendation should be completed within thirty (30) days of the effective date of the Commission order that resolves Case No. WR-2017-0110.*

Summary of Review

The purpose of the CMAU is to promote and encourage efficient and effective utility management decisions. This purpose contributes to the Commission's overall mission to ensure that Missourians receive safe and reliable utility service at just, reasonable and affordable rates. CMAU staff has previously performed a customer service review of TDLU in Case Nos. WW-2013-0196 and WR-2014-0104.

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

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

- Meter Reading
- Customer Billing

- Payment Remittance
- Credit and Collections
- Complaints and Inquiries
- Customer Communication
- Records and Documentation Retention

Overview

TDLU operates both a water system and a wastewater collection and treatment system to serve approximately 1,300 customers near Bonne Terre, Missouri. TDLU has an office located at 1628 South St. Francois Road, Bonne Terre, Missouri, which is open from 8:00 a.m. to 4:00 p.m. Monday through Friday. TDLU has a President, Mike Tilley, a Vice President, Kathy Tilley, and office personnel, Cynthia Hollock. However, TDLU does not have written job descriptions for these employee positions. TDLU currently employs five other full-time employees that do have job descriptions. These five employees are responsible for field operations, such as meter reading, system maintenance, work orders, and water/sewer repairs. Two of the employees act as the full-time sewer system and backhoe operators. The five field operations employees work from 7:00 am to 3:30 pm. Both field and office personnel utilize time sheets to allocate time to either water or sewer operations and for payroll purposes. Currently TDLU does not use vehicle logs to track vehicle miles associated with performing work activities.

Outside of normal office hours, TDLU utilizes an automated attendant to answer customer calls and give instructions for the customer to leave a message if it is not an emergency situation. For emergency service, the customer is given a number to contact the on-call employee who responds to emergency situations. TDLU always has at least one on-call field operator. The field operators perform maintenance and repairs, as needed, on holidays and weekends.

Meter Reading

TDLU renders a bill to customers on a monthly basis including a customer charge and usage charge based upon monthly meter reads. There are four employees that perform meter reads. In TDLU's last rate case, WR-2014-0104, TDLU indicated that meter reads would move from quarterly to a monthly read. That change has occurred, resulting in the bills being rendered monthly based on monthly meter reads.

TDLU attempts to begin reading meters around the 17th of each month. TDLU indicates it requires the meter readers to complete the meter readings in a two week period. Meter readings are manually recorded on a meter reading worksheet that includes the last reading and a space to enter the new reading. Meter reads are turned into the Business Office and are entered into the billing system on the 15th of the following month. TDLU indicated to CMAU staff that if there is any abnormal meter reading, their meter readers do re-checks.

Customer Billing

Thoroughbred Utility Manager 32 is the billing software utilized by TDLU since year 2000 to maintain customer account records and prepare monthly billing statements. Bills are reviewed to discover possible reading errors and questionable reads may dictate an additional trip to check the meter reading. Office staff prints billing statements at the Business Office and mails the statements by the 17th of the month. Bills are due by the 14th of the following month.

TDLU currently does not have bill estimation procedures in its tariff. TDLU indicated that the need to estimate usage has historically been rare and will not occur in the future.

Payment Remittance

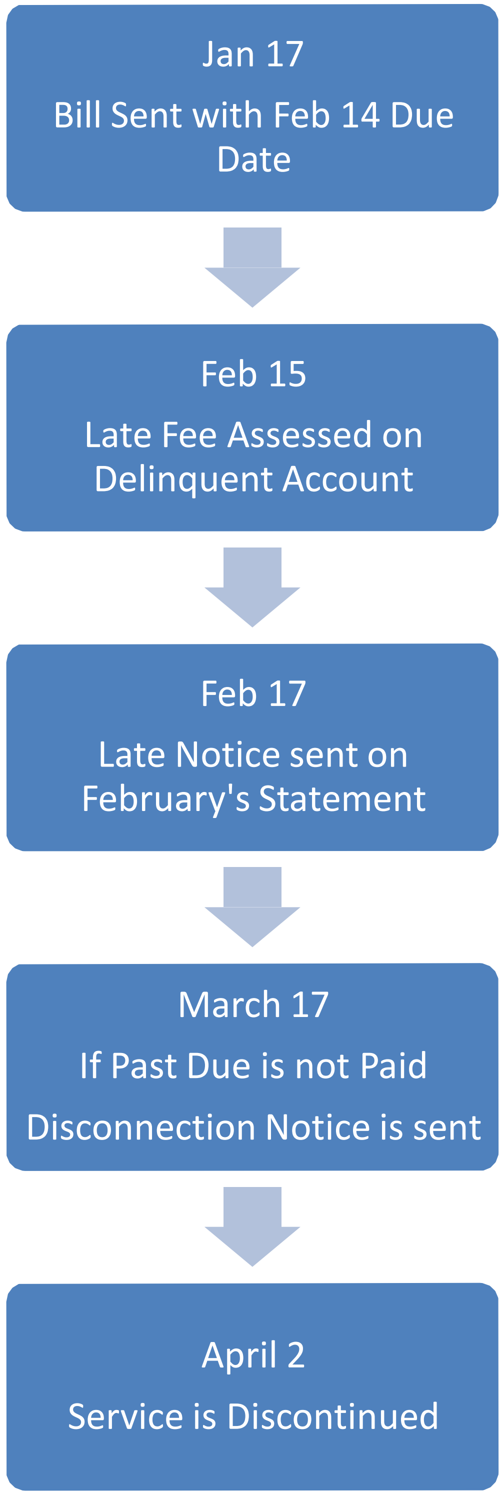
Customers may pay their bills by sending their payment through the mail, through an online bill payer, using one of two drop boxes, or paying their bill at the local bank. TDLU picks up the mail and checks the two drop boxes multiple times a day. Customers are able to make payments by credit card, cash, check or online. Payments are normally posted to the customer's account on the day payment is received.

Credit and Collections

TDLU collects a written application from each new customer and requires a social security number or driver's license, but does not collect customer deposits from its customers. Although TDLU asserted that no deposit is collected from customers, TDLU's tariff provides for the collection of a customer deposit in an amount not to exceed one billing period plus thirty days, computed on estimated or actual usage.

TDLU's late fee of three percent times the unpaid balance or $5.00 (whichever is greater) is applied to delinquent accounts. Currently, TDLU accepts payments of cash or check in the field to avoid service discontinuance. TDLU's tariff allows for and TDLU charges a returned check charge of $25.00 per check for insufficient funds checks.

TDLU indicated that after meter reads are entered into billings system, bills are printed and mailed on the 17th of the month (or the next business day). The bills are due on the 14th of the following month. If no payment is received, a late fee will be assessed on the next billing statement. If the bill is not paid by the time of the next month's bill, the customer will be sent a 15 day disconnect notice. If payment is not received by the date on the delinquent notice, TDLU will knock on the customer's door before the disconnection and if there is no answer TDLU will place a notice on the door that the service is discontinued. TDLU indicated that there is no additional contact attempt before the service is discontinued. Below is an illustration of this process.



Source: TDLU Interview held December 13, 2016

Complaints and Inquiries

Customers may call, mail, fax or email complaints or inquiries to TDLU. Most contacts begin with a phone call. Calls are generally answered by Office personnel who can access their billing history and attempt to resolve a customer's inquiry. TDLU maintains a customer complaint log. The Commission's Electronic Filing Information System (EFIS) received three customer complaints in 2014, three customer complaints in 2015 and zero customer complaints during 2016. As of the time of this report, there are a total of twenty public comments filed by customers in this case. Most comments state that customers are against the amount of the increase and a few public comments indicate that TDLU can improve its communication with its customers.

Customer Communication

TDLU has a written informational brochure. However, the informational brochure does not include all the requirements of Commission Rule 4 CSR 240-13.040(3). Brochures are available to customers at the office and new customers receive one when applying for service. If necessary, TDLU is able to provide messages to customers on their monthly billing statements.

Records and Documentation Retention

TDLU maintains records in a fireproof cabinet for several years. It also does five to six back-ups on CD of all billing records every month. Thoroughbred Utility Manager has also kept records of service locations and billing since 2005. TDLU currently does not maintain any storage off-site for its records.

Findings, Conclusions, and Recommendations

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

- Job Descriptions
- Vehicle Logs
- Customer Communication

- Customer Billing
- Storage Off-site

- Credit and Collections Delinquent Notification Process

Job Descriptions

TDLU does not have written job descriptions defining the activities and responsibilities for the President, Vice President, and Office personnel. The lack of job descriptions makes it more difficult to determine each employee's job functions and an evaluation of their performance. It is a basic business practice to have job descriptions for each position as they provide employees and supervisors a framework for understanding each employee's role at TDLU. The job description can assist in employee training and development, workflow analysis, the clarification of relationships between jobs and work assignments, as well as determining appropriate staffing levels. Written job descriptions become even more important within companies that perform regulated and unregulated activities to document expectations and responsibilities. This recommendation was previously identified in the Disposition Agreement in case WR-2014-0104. TDLU has written job descriptions for some employees but they still need job descriptions for the positions mentioned above. The CMAU staff encourages TDLU to develop and maintain job descriptions for all personnel to adequately reflect the employees' current job duties and responsibilities.

THE CMAU STAFF RECOMMENDS THAT TDLU MANAGEMENT:

> *Develop written job descriptions for each position at TDLU that adequately reflect the employee's current job duties and responsibilities. This recommendation should be completed within ninety (90) days of the effective date of the Commission order that resolves Case No. WR-2017-0110.*

Vehicle Logs

TDLU employees do not currently log the mileage associated with jobs while utilizing TDLU vehicles. This lack of written documentation makes it difficult to ensure that TDLU vehicles are being used for TDLU-related activities and the actual cost associated with specific jobs. An appropriately detailed vehicle log that provides information including the vehicle type, date, employee name, a general description and location of the task, and the miles driven attributable to the task would be useful for review in Company regulatory activities such as rate cases. This recommendation was previously identified in the Disposition Agreement in case WR-2014-0104.

THE CMAU STAFF RECOMMENDS THAT TDLU MANAGEMENT:

> *Develop and utilize a written vehicle log to maintain information regarding vehicle usage. The log should include information regarding the vehicle type, date, employee name, general description and location of the task and the miles attributable to the task. This recommendation should be completed within ninety (90) days of the effective date of the Commission order that resolves Case No. WR-2017-0110.*

Customer Communication

TDLU's informational brochure detailing the rights and responsibilities of TDLU and its customers does not include all requirements of Commission Rule CSR 240-13.040(3). The subparts under CSR 240-13.040 (3) that still need to be included consist of:

(a) Billing and estimated billing procedures; (g) Explanation of meter reading procedures which would enable a customer to read his/her own meter;

TDLU is working with CMAU staff to include all requirements of Commission Rule CSR 240-13.040(3) in the brochure for distribution to existing and future customers.

THE CMAU STAFF RECOMMENDS THAT TDLU MANAGEMENT:

> *Update and distribute, to all current and future customers, written information specifying the rights and responsibilities of TDLU and its customers as required by Commission Rule 4 CSR 240-13.040(3). This recommendation should be completed within thirty (30) days of the effective date of the Commission order that resolves Case No. WR-2017-0110.*

Customer Billing

TDLU's monthly billing statements do not indicate the dates of the beginning and ending meter readings, which violates Commission Rule 4 CSR 240-13. 020(9)(A), which states:

> "Every bill for residential utility service shall clearly state (A) the beginning and ending meter readings of the billing period and the dates of these readings."

THE CMAU STAFF RECOMMENDS THAT TDLU MANAGEMENT:

Correct its monthly billing statements to include the dates of the beginning and ending meter readings, so that the billing statements adhere to Commission Rules 4 CSR-13.020(9)(A). This recommendation should be completed within thirty (30) days of the effective date of the Commission order that resolves Case No. WR-2017-0110.

Storage Off-Site

TDLU currently does not keep any storage of customer information or billing records off-site. Off-site storage of customer information will assist in recreating customer records in case of an emergency in which the Office Building and its contents are destroyed.

THE CMAU STAFF RECOMMENDS THAT TDLU MANAGEMENT:

Evaluate storing a copy of all customer documentation and billing records off-site. This recommendation should be completed within ninety (90) days of the effective date of the Commission order that resolves Case No. WR-2017-0110.

Credit and Collections Delinquent Notification Process

TDLU will send the customer a 15 day disconnect notice if the bill is not paid by the second month's late bill. If payment is not received by the date on the delinquent notice, TDLU will knock on the customer's door before the disconnection and if there is no answer TDLU will place a notice on the door that the service is discontinued. TDLU indicated that there is no additional contact attempt before the service is discontinued. This violates Commission Rule 4 CSR 240-13.050(8), which states:

> At least twenty-four (24) hours preceding discontinuance, a utility shall make reasonable efforts to contact the customer to advise the customer of the proposed discontinuance and what steps must be taken to avoid it. Reasonable efforts shall include either a written

notice following the initial notice pursuant to section (4), a door hanger or at least two (2) telephone call attempts reasonably calculated to reach the customer.

THE CMAU STAFF RECOMMENDS THAT TDLU MANAGEMENT:

Develop and utilize a notice of discontinuance or make reasonable effort to contact the customers 24 hours in advance of a service discontinuance in compliance with Commission Rule 4 CSR 240-13.050(8). This recommendation should be completed within thirty (30) days of the effective date of the Commission order that resolves Case No. WR-2017-0110.

Implementation Review

The CMAU staff will conduct a review of TDLU's progress regarding the implementation of the recommendations made in this report within one hundred and fifty (150) days of the effective date of any Commission order issued in Case No. WR-2017-0110.

Attachment E

Water and Sewer Department Report

REPORT OF WATER AND SEWER UNIT

File Nos. WR-2017-0110
Terre du Lac Utilities Corporation
Martin Hummel / Curtis Gateley

Introduction

This Report was prepared jointly by Staff members Martin Hummel and Curtis Gateley.

Terre du Lac Utilities Corporation (Company or TDLU) holds certificates of public convenience and necessity (CCN) with original water and sewer tariffs that went into effect in 1974. TDLU provides drinking water service and sewer service to the Terre du Lac lake development community located east of Potosi and west of Bonne Terre, Missouri. Currently there are approximately 1,300 service connections on each system, water and sewer.

This report, and this current rate case are a follow-up to TDLU's previous rate case, Case No. WR-2014-0104. In that case, TDLU agreed to undertake certain facility improvements. Improvements to the drinking water system are needed primarily to address daily supply capacity. Improvements to the wastewater system are needed to address operating deficiencies including violations of environmental regulations, resulting largely from degradation due to age. TDLU as part of its last rate case agreed to then subsequently file a rate case to address recovery of capital expenses. While the time between these rate cases has been significantly longer than anticipated by the Company and Staff, it is understandable in that the improvements, primarily one additional drinking water well that is identified as Well #4, and complete renovation of three sewage lift stations, are major projects that took significant time to plan and construct.

TDLU is a small utility having limited staff for operations, and uses outside contracts to accomplish major improvements. Although the Company's manager has held his position for 14 years, he had never before managed the construction of a new well. The logistics for these improvements, and arranging capital financing, are major efforts for this small utility.

The facility improvements (new well and lift stations renovation recently completed) are a big step to alleviating the immediate concerns of the PSC staff and the Department of Natural Resources (DNR) toward the ability of the facilities to provide reliable drinking water and sewer service. A number of small improvements were also made in conjunction with the construction of the new well. Both elevated tanks have been inspected, with vent and overflow pipes installed or improved. Both primary wells will activate automatically.

In the future, TDLU would like to also replace a major component, one of the two aeration rotors on the oxidation ditch; and also install a new lift station to eliminate a small wastewater lagoon. However TDLU could not get these projects completed within the timeframe of this rate case.

On October 19 and December 21, 2016, Staff members Martin Hummel, Jarrod Robertson and David Spratt made observations of the improvements to the drinking water and wastewater systems. The December 21, 2016 was for Staff to verify that Well #4 was "in service", as construction had been completed after the initial October 19th inspection.

Facilities:

<u>The water system</u> utilizes groundwater wells as the source of supply. Well #1 is small and currently removed from service because of unresolved operational technical problems. Well #2 provides approximately 100 gallons per minute (gpm), but is considered a "backup" supply and is not routinely used. Well #3 provides approximately 250 gpm. The new well, #4, provides approximately 320 gpm. The water supply utilizes chlorine disinfection. Well #2 at 100gpm is critical as a backup source when the system demand is high, such as peak usage day of the year. Well #3 and #4 are the primary producers. With the new Well #4, Staff considers the daily pumping capacity to be adequate.

The Company has a complication regarding its sources of supply, in that the ground water in that area of Missouri has a significant probability of radionuclide contamination. In the TDLU system, the radionuclides primarily involved are naturally occurring isotopes of the mineral Radium, with associated Alpha particle emission. The mineral is dissolved in ground water that is extracted through deep wells, such as those owned by TDLU. Maximum contaminant levels in drinking water for various radionuclides are set by the United States Environmental Protection Agency and DNR. Minimizing the radionuclide problem in the new well was a complicating part of the planning process.

Storage is provided by two elevated tanks with 50,000 and 100,000 gallon capacity respectively. For a system with multiple sources of supply (wells) this is adequate storage for peak-hour flows plus some reserve volume for fire protection. The distribution system, with water meters on all customer service connections, has approximately 50 miles of 4, 6 and 8 inch diameter pipe.

With the new well #4, if any other one well is out of service, the system should still be capable of meeting system daily demand. Well #4 has tested below the maximum contaminant level for radionuclides.

<u>The wastewater system</u> consists of three separate collection systems and treatment facilities. The treatment facilities are a small single cell lagoon, an oxidation ditch, and a large three cell aerated lagoon. The collecting sewer systems consists of about 25 miles of pressure collecting sewers with each customer owning a septic tank effluent pump (STEP) pump unit; and about 20 miles of gravity collecting sewer with three (3) lift stations.

The single cell lagoon: this facility serves approximately 18 connections and though it is small it is not considered capable of meeting regulatory water quality discharge standards. TDLU expects to replace this facility with a lift station. Construction of the lift station would also involve the construction of a new electric power line connection, and a force main to transfer sewage to the collection system that drains to the Company's oxidation ditch.

The oxidation ditch: This facility serves approximately 730 connections. As stated earlier, TDLU plans to replace one of two aerator rotors, with a cost estimate of approximately $25,000. The collection system for this treatment plant is a pressure collecting sewer with customer owned STEP pump units on each customer's service sewer.

The three cell aerated lagoon: This facility serves approximately 530 connections. At the time of Staff's inspection the aerators were properly operating. Operation of the aerators has been a problem in the past, and non-operation results in inadequate sewage treatment. Brush, small trees and old fence has been removed from the berm. Fencing around the lagoon is being replaced, but was not yet complete at the time of the inspection. This facility is over 30 years in age, maintenance issues are ongoing including evaluating and addressing sludge accumulation and berm condition.

There are seven customers in the Company's service territory who are not connected to any of the collection systems. These customers are presently served by aerated holding tanks. The Company has been providing maintenance to the aerators for a quarterly $18 fee, which is not authorized in the sewer tariff.

The DNR discharge permits for all of these facilities are currently in effect until June 30, 2018.

Tariff Review

Staff routinely works with utilities to update water and/or sewer tariffs of the individual companies using a generic tariff that is modified for specific operations of the individual companies as they file rate cases with the Commission. Because both the water and sewer tariffs for this company were last revised in 2014, little change is necessary. The sheets with rate schedules (sheet 8 of both tariffs) will be revised with updated rates. Sheet 20 of the sewer tariff will be revised to better conform with DNR requirements regarding proximity of collecting sewers to water mains or water service lines.

Rate Design

Staff also reviewed the Company's current rate design in its investigation. The current rate structure consists of a monthly service charge and a commodity charge for water service, and a monthly flat rate service charge for sewer service. Staff proposes to maintain the same rate structure, updated based on the results of the new a cost of service studies performed as part of this rate case.

WATER AND SEWER UNIT STAFF RECOMMENDATIONS:

1) The Company continues to pursue capital projects as necessary to ensure safe and adequate service, and to comply with DNR regulations and permit requirements.

2) The current PSC MO No 3 Original Sheet 8 in the sewer tariff will be canceled and replaced by First Revised Sheet 8.

3) The current PSC MO No 3 Original Sheet 20 in the sewer tariff will be canceled and replaced by First Revised Sheet 20.

4) The current PSC MO No 2 Original Sheet 8 in the water tariff will be canceled and replaced by First Revised Sheet 8.

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Request for Increase in Annual Water and Sewer System Operating Revenues for Terre Du Lac Utilities	)))	**Case No. WR-2017-0110**

State of Missouri)
) ss.
County of Cole)

AFFIDAVIT OF KEITH D. FOSTER

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Keith D. Foster, of lawful age, on his oath states: (1) that he is a Utility Regulatory Auditor IV, of the Auditing Department – Jefferson City, of the Missouri Public Service Commission; (2) that he participated in the preparation of the foregoing *Partial Stipulation and Agreement*; (3) that information in this *Partial Stipulation and Agreement* was provided by him; (4) that he has knowledge of matters set forth in the *Partial Stipulation and Agreement*; and (5) that such matters set forth in the *Partial Stipulation and Agreement* are true and correct to the best of his knowledge, information and belief.

Keith D. Foster

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 9th day of May, 2017.

Dianna L. Vaught
NOTARY PUBLIC

My commission expires: June 28, 2019.

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

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Request for Increase in Annual Water and Sewer System Operating Revenues for Terre Du Lac Utilities	)))	**<u>Case No. WR-2017-0110</u>**

AFFIDAVIT OF CURT B. GATELEY

State of Missouri)
) ss.
County of Cole)

Curt B. Gateley, of lawful age, on his oath states: (1) that he is a Utility Policy Analyst II, of the Water and Sewer Department, of the Missouri Public Service Commission;(2) that he participated in the preparation of the foregoing *Partial Stipulation and Agreement*; (3) that information in this *Partial Stipulation and Agreement* was provided by him; (4) that he has knowledge of matters set forth in the *Partial Stipulation and Agreement*; and (5) that such matters set forth in the *Partial Stipulation and Agreement* are true and correct to the best of his knowledge, information and belief.

C. B. Gateley
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 9th day of May, 2017.

Dianna L. Vaught
NOTARY PUBLIC

My commission expires: June 28, 2019.

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

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Request for Increase in Annual Water and Sewer System Operating Revenues for Terre Du Lac Utilities	)))	**Case No. WR-2017-0110**

AFFIDAVIT OF SCOTT J. GLASGOW

State of Missouri)
) ss.
County of Cole)

Scott J. Glasgow, of lawful age, on his oath states: (1) that he is a Utility Management Analyst III, of the Consumer and Management Analysis Unit, of the Missouri Public Service Commission;(2) that he participated in the preparation of the foregoing *Staff Recommendation*; (3) that information in this *Partial Stipulation and Agreement* was provided by him; (4) that he has knowledge of matters set forth in the *Partial Stipulation and Agreement*; and (5) that such matters set forth in the *Partial Stipulation and Agreement* are true and correct to the best of his knowledge, information and belief.

Scott J. Glasgow
Scott J. Glasgow

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 9th day of May, 2017.

Dianna L. Vaught
NOTARY PUBLIC

My commission expires: June 28, 2019.

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

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Request for Increase in Annual Water and Sewer System Operating Revenues for Terre Du Lac Utilities	)))	**Case No. WR-2017-0110**

AFFIDAVIT OF MARTIN HUMMEL

State of Missouri)
) ss.
County of Cole)

Martin Hummel, of lawful age, on his oath states: (1) that he is a Utility Engineering Specialist III, of the Water and Sewer Department, of the Missouri Public Service Commission; (2) that he participated in the preparation of the foregoing *Partial Stipulation and Agreement*; (3) that information in this *Partial Stipulation and Agreement* was provided by him; (4) that he has knowledge of matters set forth in the *Partial Stipulation and Agreement*; and (5) that such matters set forth in the *Partial Stipulation and Agreement* are true and correct to the best of his knowledge, information and belief.

Martin Hummel
Martin Hummel

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 9th day of May, 2017.

Dianna L. Vaught
NOTARY PUBLIC

My commission expires: June 28, 2019.

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

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Request for Increase in Annual Water and Sewer System Operating Revenues for Terre Du Lac Utilities	)))	**Case No. WR-2017-0110**

AFFIDAVIT OF AMANDA C. MCMELLEN

State of Missouri)
) ss.
County of Cole)

Amanda C. McMellen, of lawful age, on her oath states: (1) that she is a Utility Regulatory Auditor V, of the Auditing Department – Jefferson City, of the Missouri Public Service Commission; (2) that she participated in the preparation of the foregoing *Partial Stipulation and Agreement*; (3) that information in this *Partial Stipulation and Agreement* was provided by her; (4) that she has knowledge of matters set forth in the *Partial Stipulation and Agreement*; and (5) that such matters set forth in the *Partial Stipulation and Agreement* are true and correct to the best of her knowledge, information and belief.

Amanda C McMellen
Amanda C. McMellen

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 9th day of May, 2017.

Dianna L. Vaught
NOTARY PUBLIC

My commission expires: June 28, 2019.

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

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Request for Increase in Annual Water and Sewer System Operating Revenues for Terre Du Lac Utilities	)))	**Case No. WR-2017-0110**

AFFIDAVIT OF CAROLINE NEWKIRK

State of Missouri)
) ss.
County of Cole)

Caroline Newkirk, of lawful age, on her oath states: (1) that she is a Utility Regulatory Auditor I, of the Auditing Department – Jefferson City, of the Missouri Public Service Commission; (2) that she participated in the preparation of the foregoing *Partial Stipulation and Agreement*; (3) that information in this *Partial Stipulation and Agreement* was provided by her; (4) that she has knowledge of matters set forth in the *Partial Stipulation and Agreement*; and (5) that such matters set forth in the *Partial Stipulation and Agreement* are true and correct to the best of her knowledge, information and belief.

Caroline Newkirk
Caroline Newkirk

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 9th day of May, 2017.

Dianna L. Vaught
NOTARY PUBLIC

My commission expires: June 28, 2019.

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

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Request for Increase in Annual Water and Sewer System Operating Revenues for Terre Du Lac Utilities	)))	**Case No. WR-2017-0110**

AFFIDAVIT OF KEENAN B. PATTERSON. P.E.

State of Missouri)
) ss.
County of Cole)

Keenan B. Patterson, P.E., of lawful age, on his oath states: (1) that he is a Utility Regulatory Engineer I, of the Engineering Analysis Unit, of the Missouri Public Service Commission;(2) that he participated in the preparation of the foregoing *Partial Stipulation and Agreement* ; (3) that information in this *Partial Stipulation and Agreement* was provided by him; (4) that he has knowledge of matters set forth in the *Partial Stipulation and Agreement*; and (5) that such matters set forth in the *Partial Stipulation and Agreement* are true and correct to the best of his knowledge, information and belief.

Keenan B. Patterson

Keenan B. Patterson, P.E.

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 9th day of May, 2017.

Dianna L. Vaught

NOTARY PUBLIC

My commission expires: June 28, 2019.

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

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Request for Increase in Annual Water and Sewer System Operating Revenues for Terre Du Lac Utilities	)))	**Case No. WR-2017-0110**

AFFIDAVIT OF BROOKE RICHTER

State of Missouri)
) ss.
County of Cole)

Brooke Richter, of lawful age, on her oath states: (1) that she is a Utility Management Analyst III, of the Consumer and Management Analysis Unit, of the Missouri Public Service Commission; (2) that she participated in the preparation of the foregoing *Partial Stipulation and Agreement;* 3) that information in this *Partial Stipulation and Agreement* was provided by her; (4) that she has knowledge of matters set forth in the *Partial Stipulation and Agreement*; and (5) that such matters set forth in the *Partial Stipulation and Agreement* are true and correct to the best of her knowledge, information and belief.

Brooke Richter

Brooke Richter

JURAT

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BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Request for Increase in Annual Water and Sewer System Operating Revenues for Terre Du Lac Utilities	)))	**Case No. WR-2017-0110**

AFFIDAVIT OF JEFFREY SMITH

State of Missouri)
) ss.
County of Cole)

Jeffrey Smith, of lawful age, on his oath states: (1) that he is a Utility Regulatory Auditor I, of the Financial Analysis Unit, of the Missouri Public Service Commission; (2) that he participated in the preparation of the foregoing *Partial Stipulation and Agreement*; (3) that information in this *Partial Stipulation and Agreement* was provided by him; (4) that he has knowledge of matters set forth in the *Partial Stipulation and Agreement*; and (5) that such matters set forth in the *Partial Stipulation and Agreement* are true and correct to the best of his knowledge, information and belief.

Jeffrey Smith

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 9th day of May, 2017.

Dianna L. Vaught
NOTARY PUBLIC

My commission expires: June 28, 2019.

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