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June 5, 2017

Daniel P. Wolf  
Executive Secretary  
Minnesota Public Utilities Commission  
121 7<sup>th</sup> Place East, Suite 350  
St. Paul, Minnesota 55101-2147

RE: **Comments of the Minnesota Department of Commerce, Division of Energy Resources**  
Docket No. E017/M-17-152

Dear Mr. Wolf:

Attached are the Comments of the Minnesota Department of Commerce, Division of Energy Resources (Department) in the following matter:

Otter Tail Power Company's Petition for Approval of the Company's Proposed LED Street and Area Lighting Rate Schedule 11.07 and Associated LED Implementation Plan.

The Petition was filed on February 22, 2017 by:

Jason A. Grenier  
Otter Tail Power Company  
Manager, Market Planning  
215 South Cascade Street  
P.O. Box 496  
Fergus Falls, MN 56538-0496

The Department recommends that the Minnesota Public Utilities Commission (Commission) **approve, with modification**, Otter Tail Power's Petition. The Department is available to answer any questions the Commission may have.

Sincerely.

/s/ DANIELLE WINNER  
Rates Analyst

DW/ja  
Attachment

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

COMMENTS OF THE  
MINNESOTA DEPARTMENT OF COMMERCE  
DIVISION OF ENERGY RESOURCES

DOCKET No. E017/M-17-152

**I. SUMMARY OF FILING**

On February 22, 2017, Otter Tail Power (Otter Tail, OTP or the Company) filed with the Minnesota Public Utilities Commission (Commission) its *Petition for Approval of the Company's LED Street and Area Lighting Rate Schedule 11.07 and Associated LED Implementation Plan* (Petition). In this Petition, the Company proposed to replace all Company-owned street and area lights throughout OTP's Minnesota service territory from high-intensity discharge (HID) lights to equivalent light-emitting diodes (LEDs) over a five-year period starting in 2017. This proposal entails opening a new rate schedule, closing a rate schedule, and recovery of associated costs through tariffed rates, the Conservation Improvement Program's (CIP) Conservation Cost Recovery Adjustment (CCRA), and a future rate case.

Otter Tail indicated that its proposal would impact customers' monthly lighting charges slightly, but would be revenue neutral to the Company.

**II. BACKGROUND**

"Street Lighting," also called "Public Street Lighting," is a class of utility customers in the same way that "Residential," "Commercial," and "Industrial" are classes of utility customers. Many street lighting customers are cities or municipalities; however, street lighting customers can also be private entities, such as a homeowner's association or a company. Street lighting is a unique type of electric service in that it may or may not be metered. When unmetered service is taken, customers pay a per-light monthly rate, and therefore unmetered street lighting rates vary based on the wattage of each lamp.<sup>1</sup> Historically, street

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<sup>1</sup> In commercial lighting, the term "lamp" is typically used rather than "bulb." A "luminaire," by contrast, is the entire lighting unit, including both the lamp and the fixture. Lamps also have an auxiliary component called a ballast, which draws a small amount of electricity in addition to that drawn for light.

lighting needs have been met through incandescent lights or HID lights, the latter of which comprises high pressure sodium lights, mercury vapor lights, and mercury halide lights. Increasingly street lighting needs are being met with LEDs, which are more efficient and thus cheaper to operate, but the lamps themselves are typically more expensive than other types of lamps. In recent years, however, the cost of LEDs has decreased substantially, making them much more cost-effective.

The street lighting class comprises a small percentage of each regulated utilities' energy sales, dollar revenues, and number of customers, as shown in the tables below.

**Tables 1, 2, and 3: Regulated Electric Utility Sales, Revenues, and Number of Street Lighting Customers for 2016<sup>2</sup>**

<b>Utility Sales (kWh)</b>	<b>Xcel</b>	<b>Otter Tail</b>	<b>Minnesota Power</b>	<b>Dakota Electric</b>
Total Retail Sales (kWh)	30,296,690,000	2,543,009,000	8,181,381,814	1,821,974,126
Public Street Lighting Sales (kWh)	134,901,000	9,877,000	15,587,780	11,235,644
Public Street Lighting Sales as Percentage of Total Retail Sales	0.45%	0.39%	0.19%	0.62%

<b>Utility Revenues (\$)</b>	<b>Xcel</b>	<b>Otter Tail</b>	<b>Minnesota Power</b>	<b>Dakota Electric</b>
Total Retail Revenue (\$)	3,119,568,662	200,454,000	502,936,560	200,045,171
Public Street Lighting Revenue (\$)	22,866,539	1,706,000	2,136,073	2,042,232
Public Street Lighting Revenue as Percentage of Total Revenue	0.73%	0.85%	0.42%	1.02%

<b>Utility Customer Number (monthly average)</b>	<b>Xcel</b>	<b>Otter Tail</b>	<b>Minnesota Power</b>	<b>Dakota Electric</b>
Total Ultimate Customers (mo avg)	1,269,408	61,226	145,642	104,972
Public Street Lighting Customers (mo avg)	4,392	154	689	217
Public Street Lighting Customers as Percentage of Total Customers	0.35%	0.25%	0.47%	0.21%

As seen in the above tables, in 2016 Otter Tail Power's street lighting class comprised 0.39% of retail kWh sales, 0.85% of retail revenues, and 0.25% of ultimate customers.

Otter Tail currently has two separate street lighting tariffs: Outdoor Lighting Dusk to Dawn (Section 11.04), and Outdoor Lighting- Energy Only Dusk to Dawn (Section 11.03). The Section 11.03 Outdoor Lighting-Energy Only rate was first approved by the Commission in Docket No. E017/M-98-998 and most recently updated to interim rates in the Company's current rate case proceeding in Docket No. E017/GR-15-1033.<sup>3</sup> Under this rate, the customers install, own, and maintain the facilities in question and only pay the Company for

<sup>2</sup> Source: Each regulated electric utility's 2015 Electric Jurisdictional Annual Report, as filed in Docket No. E999/PR-17-4. The figures do not include non-retail sales such as sales-for-resale.

<sup>3</sup> At the time of these comments, reconsideration has been requested in OTP's rate case.

the energy used. The Company does not propose to change the Section 11.03 rate in the instant docket.

The Section 11.04 Outdoor Lighting tariff was first established in the 1980's, and was most recently updated to interim rates during the Company's current rate case proceeding. Under this tariff, the customer owns the area or street to be illuminated, but the Company owns, operates, and maintains the lighting facilities. Otter Tail states that it currently serves 161 communities and customers under this tariff, for an estimated 19,500 lights in total. The Company has an additional 253 lights that are used specifically for Company purposes, although the Company does not specify whether these lights are also subject to the 11.04 rate. In the instant docket, the Company proposes to close the Section 11.04 rates to new customers; existing customers taking service under this tariff would gradually be moved to the new proposed 11.07 rate as their lights are switched over to new LEDs as part of the Company-Owned Street and Area Lighting Program (Program), which is part of Otter Tail's CIP portfolio.

Otter Tail Power proposed its Company-Owned Street and Area Lighting Program in the Company's 2017-2019 Triennial Filing (Docket No. E017/CIP-16-116, filed June 1, 2016). In that filing, the Minnesota Department of Commerce's (Department) CIP Unit reviewed the cost effectiveness of the program and on February 17, 2017, the Department's Deputy Commissioner approved the program with an annual spending goal of \$1,102,309. After the initial approval of this goal, the Company decided to use a different lighting vendor, and on February 28, 2017 requested a modified annual budget totaling \$1,303,846 with no changes to savings or participation goals. On April 26, 2017, the Department's Deputy Commissioner approved the following final program goals for years 2017-2019:

**Table 2: Approved Spending, Savings, and Participation for  
Company-Owned Street and Area Lighting Program, 2017-2019**

Annual Spending	Annual Savings	Annual Participation
\$1,303,846	2,391,646 kWh	3,940 lights

Once a CIP spending goal has been approved by the Deputy Commissioner,<sup>4</sup> Minnesota Statutes § 216B.241, Subd. 2b allows the utility to recover the related costs. Minnesota Statutes § 216B.241, Subd. 2b states, in part:

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<sup>4</sup> There are two different groups within the Department who work on CIP: the State Energy Office, and the Energy Regulation and Planning Group. The State Energy Office reviews utility Triennial filings and annual CIP Status Reports and makes recommendations to the Deputy Commissioner of Commerce about approval or denial of those filings. The Energy Regulation and Planning Group reviews the Financial Incentive, the CIP Tracker, and the Conservation Cost Recovery Adjustment, and makes recommendations to the Commission about those filings. As part of this division of responsibilities, therefore, the State Energy Office reviews proposed program budgets and the Deputy Commissioner approves proposed and actual spending amounts; the Energy Regulation and Planning Group is not involved in the review of individual CIP programs.

The commission shall allow a utility to recover expenses resulting from a conservation improvement program required by the department and contributions and assessments to the energy and conservation account, unless the recovery would be inconsistent with a financial incentive proposal approved by the commission.

CIP expenses are typically recovered through two mechanisms: the Conservation Cost Recovery Charge (CCRC) and the Conservation Cost Recovery Adjustment (CCRA). The CCRC is built into CIP-applicable base rates during a rate case proceeding and is based on the approved CIP budget for the test year. Thus, in a rate case, a utility sets the CCRC based on projected CIP expenditures. The CCRA, on the other hand, is an annual true-up mechanism between rate cases to ensure that actual CIP expenditures, and CIP financial incentives, are recovered. It is set based on the projected CIP tracker balance at year-end. The CIP tracker, therefore, is a ratemaking tool in which a utility projects the tracker balance based on a number of factors (existing balance, projected expenditures, recoveries, carrying charges, financial incentives, and adjustments), and sets the CCRA to make up for any over- or under-recoveries.

Thus, the instant filing is somewhat of an anomaly, as the Commission is being asked to make a determination on recovery of costs related to a specific CIP project. The Department notes, however, that Otter Tail's Company-Owned Street and Area Lighting Program is unlike other CIP programs in the following respects:

- This Program is administered internally by the Company using Company labor for program delivery;
- This Program involves upgrading the Company's own infrastructure, and therefore involves utility capital costs;
- This Program, as an unmetered street lighting program, involves costs that are recovered through the street lighting rates; and
- The CIP rebate associated with this Program accrues to the utility rather than a participating customer.

In its analysis of Otter Tail's proposal, the Department examined the following components of Otter Tail's Company-Owned Street and Area Lighting Program:

- the Company's proposed cost recovery through street lighting rates;
  - the Company's proposed cost recovery through the CCRA;
  - the Company's proposed cost recovery through a future rate case; and
  - the Company's proposed tariff sheet modifications.
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### III. DEPARTMENT ANALYSIS

#### A. *Minnesota Statutes and Minnesota Rules*

Minn. Rule 7825.3200 requires that utilities serve notice to the Commission at least 90 days prior to the proposed effective date of modified rates. OTP is not proposing to implement the LED street lighting rates prior to Commission approval. Therefore, the Department recommends that, if approved, the Company's proposed rate changes be implemented as soon as practicable after the Commission issues its Order in this matter.

As noted above, Minnesota Statutes § 216B.241, Subd. 2b allows the utility to recover the costs associated with CIP programs approved by the Department.

#### B. *Company's Proposed Cost Recovery*

##### 1. *Recovering Costs through Street Lighting Rates*

In setting the new LED rates, Otter Tail proposes to maintain the Section 11.04 revenue requirement established during its current rate case in Docket No. E017/GR-15-1033, and use that revenue requirement as the basis for the new rates in Section 11.07. To calculate the appropriate rates for each Section 11.07 rate, the Company stated that it:

- i. Determined the lamp equivalencies between the HID lamps and the LED lamps;
- ii. Performed an LED marginal cost of service study for the proposed LED fixtures and pole offerings;
- iii. Determined the approved revenue requirement for Section 11.04; and
- iv. Used a Weighted Average Method of allocating the Section 11.04 revenue requirements to the 11.07 lamps.

This process resulted in proposed LED rates that are comparable to the old HID rates, and would maintain the revenue requirement associated with Section 11.04. The results can be found in Attachment A to the Company's Petition.

The Department reviewed each of the documents submitted by the Company, and concludes that the calculations appear to be correct.<sup>5</sup> However, the Department observes that the marginal cost of service study was not used as a basis for establishing Section 11.07 rates

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<sup>5</sup> The marginal cost analysis provided by the Company in Attachment E of the Company's initial comments was found to contain errors; therefore, the Company provided the Department with a revised version, which the Department has provided in Attachment A to the current comments.

(other than as a basis for the monthly pole cost);<sup>6</sup> rather it appears to have been provided as a reasonableness check on the proposed rates for each lamp type. Nevertheless, the Department notes that the monthly fixture costs for each type of LED calculated in the marginal cost analysis are consistently lower than the rates that would be required for the Company to retain the same revenue requirement (the revenue requirement associated with Section 11.04), in some cases significantly so. In other words, Otter Tail is proposing to charge customers more than the actual costs of LEDs in order to maintain a revenue requirement that is associated with a service that would no longer be offered (Section 11.04). The Department provides the following table to show these differences:

**Table 3: Comparison of Company's Proposed LED Rates vs. Actual LED Costs, and Section 11.04 Revenue Requirement vs. Projected Revenue based on Actual LED Costs**

	(a)	(b)	(c)	(d)	(e)
New Light Type	Annual Bill Quantity (# of monthly bills)	Proposed LED Monthly Rate (\$)	Actual LED Monthly Fixture Cost (\$)	Required Revenue for Section 11.04 (\$)	Projected Revenue using Actual LED Costs (\$)
		(d)/(a)			(c)*(a)
LED5	192,096	\$9.89	\$9.13	\$1,899,832	\$1,753,836
LED10	5,321	\$19.87	\$10.55	\$105,734	\$56,137
LED3PT	4,378	\$11.88	\$10.99	\$52,014	\$48,114
LED5PT	613	\$15.25	\$12.21	\$9,352	\$7,485
LED8	4,360	\$17.73	\$9.74	\$77,300	\$42,466
LED13	1,915	\$24.85	\$12.13	\$47,579	\$23,229
LED20 FLOOD	17,702	\$24.88	\$17.00	\$440,423	\$300,934
LED30 FLOOD	3,184	\$46.45	\$21.44	\$147,873	\$68,265
SECURITY LIGHT (OPEN BOTTOM) LED5	Not provided	Not provided	\$8.56	Not provided	Unknown
UNDERGROUND QUANTITIES	194	\$31.77*	Not provided	\$6,162	Unknown
TOTAL	229,569	n/a	n/a	\$2,786,269	\$2,300,466

\*Note: This figure was calculated by the Department based on the annual bill quantity and rate case revenue requirement figures provided by the Company in Attachment A of the Petition.

Despite these discrepancies between proposed rates and actual costs, the Department concludes that it is appropriate for the Company to maintain its revenue requirement from Section 11.04 as service through Section 11.04 is gradually eliminated and customers are transitioned into Section 11.07. Generally, a public utility may not change its rates without undergoing a general rate case in which the Commission comprehensively reviews the

<sup>6</sup> The costs identified in the marginal cost analysis comprise only costs associated with the new LEDs; no costs associated with the old lamps are included.

utility's costs and revenues. Inevitably, as in this case, changes to costs and revenues do occur between rate cases.<sup>7</sup> Therefore, OTP's proposal to maintain revenue neutrality is consistent with ratemaking principals. The Department notes that recovery of any costs associated with the LED street lighting service (proposed Section 11.07) would be recorded in the appropriate Federal Energy Regulatory Commission (FERC) account and factored into the revenue requirement in the next rate case to establish new rates for Section 11.07.

## *2. Recovering Program Costs through the CIP Tracker*

Otter Tail proposed to recover some of the costs of administering the Company-Owned Street and Area Lighting Program through the CIP tracker. The Company estimated that the total cost of the Company-Owned Area and Street Lighting Program will be about \$10 million over the course of the full five years, including approximately \$7.9 million in capital costs.<sup>8</sup> The Company proposed to recover \$6.5 million of the Program costs through the CIP tracker; the Company expects to request recovery of the remaining \$3.6 million (reflecting the Company's net capital investment) in its next rate case.

The Department notes its understanding that Otter Tail's proposal is to add \$1,303,846 to the CIP tracker each year for 5 years, but that the actual amount included would reflect actual expenses over time. The Department requests that Otter Tail confirm the Department's understanding in the Company's reply comments.

As noted above, CIP expenses added to the CIP tracker are recovered through the CCRA, which is paid for by all CIP-applicable customers. In general, the Department is not opposed to OTP's cost recovery strategy, other than the issues discussed below; the CCRA exists in part to allow the utilities CIP expense/recovery flexibility between rate cases. However, the Department is concerned about the cost categories proposed to be added to the CIP tracker, as more fully discussed below.

The cost categories requested to be recovered through the CCRA can be categorized as costs associated with Section 11.04, and costs associated with the Company-Owned Street and Area Lighting Program.

Table 5 on page 17 of the Company's Petition, which has been copied below, shows the breakdown of how the Company is proposing to recover costs.

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<sup>7</sup> Otter Tail filed its rate case (Docket No. E017/GR-15-1033) on February 16, 2016, 4 months prior to filing its Triennial CIP Filing on June 1, 2016.

<sup>8</sup> Petition, page 14.



	2017 Year 1	2018 Year 2	2019 Year 3	2020 Year 4	2021 Year 5	5 Year Total
Installation Labor and Fixture Costs	\$1,415,885	\$1,415,885	\$1,415,885	\$1,415,885	\$1,415,885	<b>\$7,079,424</b>
Administrative Costs	\$164,460	\$164,460	\$164,460	\$164,460	\$164,460	<b>\$822,301</b>
<b>A Total Capital Investment</b>	<b>\$1,580,345</b>	<b>\$1,580,345</b>	<b>\$1,580,345</b>	<b>\$1,580,345</b>	<b>\$1,580,345</b>	<b>\$7,901,724</b>
<b>Expense Recovery through CIP Account Tracker</b>						
Retirement Expense	\$229,217	\$229,217	\$229,217	\$229,217	\$229,217	\$1,146,087
Disposal of Material Expense	\$203,585	\$203,585	\$203,585	\$203,585	\$203,585	\$1,017,927
CIP Program Evaluation	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$15,000
<b>Reductions to Capital Investment</b>						
<b>B CIP Rebate</b>	<b>\$178,572</b>	<b>\$178,572</b>	<b>\$178,572</b>	<b>\$178,572</b>	<b>\$178,572</b>	<b>\$892,859</b>
<b>C Non-Deprec. Asset Balance Recovery</b>	<b>\$525,011</b>	<b>\$525,011</b>	<b>\$525,011</b>	<b>\$525,011</b>	<b>\$525,011</b>	<b>\$2,625,057</b>
<b>D Administrative Recovery</b>	<b>\$164,460</b>	<b>\$164,460</b>	<b>\$164,460</b>	<b>\$164,460</b>	<b>\$164,460</b>	<b>\$822,301</b>
<b>Total Recovery through CIP Tracker</b>	<b>\$1,303,846</b>	<b>\$1,303,846</b>	<b>\$1,303,846</b>	<b>\$1,303,846</b>	<b>\$1,303,846</b>	<b>\$6,519,230</b>
<b>Net Capital Investment (A-B-C-D)</b>	<b>\$712,302</b>	<b>\$712,302</b>	<b>\$712,302</b>	<b>\$712,302</b>	<b>\$712,302</b>	<b>\$3,561,508</b>

This table shows that OTP expects to incur a total of \$7,901,724 in capital costs over five years. These costs are proposed to be offset by the non-depreciated value of the old street lights and the CIP rebate, which are proposed to be recovered through the CCRA. Administrative costs associated with the capital investment would also be recovered through the CIP tracker. The Company intends to request recovery of the remaining \$3,561,508 of capital costs through the next rate case.

*i. Retirement Expense, Disposal Costs of Material Expense, and Non-Depreciated Net Value of HID Fixtures*

The Company proposes to recover through the CIP tracker the following costs over the course of five years: \$1,146,087 in Retirement Expense, \$1,017,927 in Disposal of Materials Expense, and \$2,625,057 in Non-Depreciated Asset Balance Recovery. (There are additional costs beyond those that the Company proposes to recover through the CIP tracker, which will be discussed in more detail below.) These costs are all costs associated with existing capital assets rather than new capital assets.

Typically, all costs associated with existing capital infrastructure, including retirement and disposal costs, are factored in at the beginning of the life of the asset. These costs are then depreciated over the life of the asset, captured in depreciation filings, and factored into rate base within the course of a rate case. Therefore, the Company's Non-Depreciated Asset Balance, Retirement costs and Disposal costs associated with Section 11.04 lights are *currently being recovered in base rates*; recovering those costs through the CCRA by including them in the CIP tracker would result in double-recovery of the costs. The Company seems to acknowledge this fact, as it states in its Petition, "The non-depreciated net value of

the existing HID lights is recovered through existing tariffs, but when each light is retired it will be replaced by a new LED light at a higher capital cost which ensures there is no double recovery.” However, recovering a portion of the new capital costs now would run counter to the ratemaking principles discussed above, and unnecessarily complicate development of revenue requirements for Section 11.07 in the Company’s next rate case.

The Department supports Otter Tail’s proposal to establish Section 11.07 rates based on the revenue requirements established in a future rate case, and concludes that in the meantime, only incremental Program-related costs (CIP Program Evaluation, CIP Rebate, and Administration) be included in the Company’s CIP tracker. Recovery of new capital costs, on the other hand, should be left until the next rate case, to avoid single-issue ratemaking.

The Company has pointed out, and the Department has confirmed, that the Company was allowed to recover the Non-Depreciated Asset Balance of the old lamps in Docket No. E017/CIP-90-552 (the 1991 CIP proceeding), during which the Mercury Vapor lamps were switched to HID lamps. The Department notes that decision reflected an agreement between the Company and the Department, not a decision by the Commission. The Commissioner of the Department (f/k/a the Minnesota Department of Public Service) approved Department Staff’s recommendation to reduce the project budget from the requested \$206,886 to \$85,808.<sup>9</sup> Department Staff’s analysis stated, in part:

In addition, Department Staff note that street lighting is a tariffed item and the cost for lamps is recovered through rates. Staff believe that no expenditure should be allocated for recovery through CIP if they are being recovered through Commission-approved tariffs. However, rate treatment for the street lighting project is complex. Allowances need to be made for the amount not depreciated and remaining on lamps and fixtures removed to complete the changeouts.

Department Staff believe the street lighting project is a valid demand-side management project, successful in conserving energy and providing more lumens to the community streets. Therefore, Staff met with Company officials to discuss the rate treatment of the street lighting project and to formulate a workable plan to maintain the project in the OTP CIP. Department Staff and Company officials agreed to maintain the project in CIP, but only include the amount not depreciated on the equipment and the incremental cost of the HPS-9 lamps and

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<sup>9</sup> *Before the Commissioner of the Department of Public Service Krista L. Sanda, Commissioner, In the Matter of the Implementation of a Conservation Improvement Program for Otter Tail Power Company, Issue Date August 19, 1991, Docket No. E017/CIP-90-552.*

fixture—and the administrative expenses—in the CIP tracker account.

It appears that Department Staff at the time believed that the Company should be additionally compensated for non-depreciated amounts associated with existing lighting, simply because that lighting would be replaced. As noted above, Otter Tail is already recovering, and would continue to recover, those costs through the Section 11.04/Section 11.07 tariffed rates. While included in the Company's CIP budget approved by the Deputy Commissioner, the Department concludes that Retirement Expense, Disposal Expense, and Non-Depreciated Value of existing fixtures those costs are already being recovered in base rates, at amounts that are higher than the costs of using LEDs. That is, these costs are not Program-related; rather they are costs already being recovered through Commission-approved base rates. Therefore, the Commission should deny OTP's request to double-recover those costs through the CCRA.

*ii. Administrative Costs*

The Company is proposing to recover \$164,460 per year, for a total of \$822,301 over the five-year period, for Administrative Costs.

The Department notes that typically Administrative Costs are approved for recovery only if they reflect incremental administrative costs, most commonly in the form of new administrative personnel. However, if no new personnel are expected to be hired to administer the Company-Owned Street and Area Lighting Program, those administrative costs have already been built into rate base, and therefore are not eligible for additional recovery.

In an email, the Department asked the Company to explain if new personnel are being hired to administer the Program. The Company stated that the Administrative costs reflect both costs due to existing personnel, as well as costs due to a new vendor for sourcing, procurement, and siting materials. The Company further clarified that the Administrative costs associated with the existing personnel are not being double recovered because the costs would be for incremental work done by those staff, specifically noting that the employee in question "was working on development of our large transmission projects and typically has all labor capitalized as part of these transmission projects." Since the employee is now going to be working on the LED project, the Company proposes to recover that labor through CIP instead of capitalizing it along with the project.

The Department concludes that it is reasonable to recover any incremental labor costs associated with the program, but notes that the internal employee's capitalized transmission labor have already been factored into rate base during the rate case proceeding. Therefore, the Department recommends that the Commission approve for recovery through the CIP tracker only the Administrative Costs associated with the new

vendor. The Department requests that Otter Tail provide the annual estimated Administrative Costs in reply comments.

*iii. CIP Program Evaluation*

Otter Tail proposes to recover \$3,000 per year for CIP Program Evaluation, for a total of \$15,000 over the 5-year period, for evaluating the LED lighting program. These costs appear reasonable to the Department. The Department recommends that the Commission approve recovery of these costs through the CIP tracker.

*iv. CIP Rebates Paid to the Company*

Otter Tail proposes to pay a rebate to itself based on the energy savings associated with each lighting upgrade. The Company states that this rebate would be at the same level that the Lighting Retrofit customers get through the Company's CIP, and estimates that the total cost of this would be \$178,572 a year, for a total of \$892,859 over the full 5-year period.

As the Company has noted, the Commission has previously decided that utilities may participate in their own CIP programs. The Commission's July 16, 2013 Order in Docket No. E,G999/DI-12-1342 stated:

The Commission hereby finds that utilities may participate in CIP projects at their own facilities and that the associated customer and/or vendor incentives, program delivery, evaluation, marketing, and administrative costs may be recovered through the CIP ratemaking process if the costs are approved by the Department as part of CIP and provided a utility demonstrates that its participation in CIP does not result in double recovery of ratepayer funds. This finding does not extend to electric utility infrastructure projects governed by Minnesota Statutes section 216B.1636.

The Department notes that CIP rebates are key to CIP participation. For instance, a tenant who pays a utility for energy usage is unlikely to participate in any CIP program requiring investment in a building the tenant does not own. Similarly, a landlord may be unlikely to participate in a CIP program that involves out-of-pocket expenditures but only benefits the building's tenants.<sup>10</sup> In this context, the utility may be considered to be similar to the landlord, and it is reasonable to incentivize a landlord to make these types of improvements.

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<sup>10</sup> The Department notes that there are currently some CIP programs that give rebates to renters because they pay into CIP, and other programs that give rebates to landlords to incentive efficiency improvements.

Finally, the Department notes that the Department's CIP Staff, who specialize in CIP program budgeting and design, have vetted the budget of the LED Street and Area Lighting Program and did not raise any objections concerning the Company receiving a rebate. As such, the Department defers to their expertise regarding the appropriateness of design of the LED lighting program.

Therefore, the Department recommends that the Commission approve recovery of the incentive costs through the CIP Tracker.

### *3. Costs to be Recovered through the Next Rate Case*

The Company indicated that it expects to ask for recovery of about \$3.6 million in net capital investment through the next rate case.

The Department notes that at the time of the next rate case, the FERC accounts associated with both the Section 11.04 and, if approved, Section 11.07 tariffs will be the basis for the revenue requirement established for Section 11.07. In other words, it is appropriate for OTP to continue to recover the revenue requirement established in its last rate case for Section 11.04 until the revenue requirement for Section 11.07 can be established in the Company's next rate case.

### *C. PROPOSED TARIFF SHEET MODIFICATIONS*

As part of its filing, the Company included the following tariff sheet modification documents:

- Original Version of Section 11.07 LED Street Lighting- Electric Rate Schedules
- Redline and Clean Versions of Section 12.00 – 14.00 Rider Applicability Matrices
- Redline and Clean Versions of Minnesota Electric Rate Schedule Index
- Redline and Clean Versions of Section 11.04 Outdoor Lighting- Electric Rate Schedules

In addition, after finding errors in the original marginal cost analysis, the Company submitted an updated version of Section 11.07, which can be found in Attachment B to these comments. The updated marginal cost analysis informs the Additional Monthly Charges of the Aluminum Alloy Poles.

The Department reviewed the proposed tariff sheet modifications and concludes that the proposed changes to the Rider Applicability Matrices, the Index, and Section 11.04 are reasonable. The Department generally concludes that the proposed tariff sheets for Section 11.07 are reasonable. However, the Department notes that the LED monthly charges continue to reflect the interim LED weighted monthly rates and must be updated to reflect the final LED Weighted Monthly rates based on the revenue requirement. Additionally, the Department is unclear as to how the Additional Monthly Charges for the Aluminum Alloy

Poles were calculated, and requests that the Company clarify how these charges relate to the Total Monthly Pole Costs from the marginal cost analysis.

#### IV. CONCLUSIONS AND RECOMMENDATIONS

The Department concludes that certain aspects of the Company's proposal are not reasonable. Specifically, the proposal to include Retirement Expense, Disposal Expense, and Non-Depreciated Asset Balance of the existing lamps in Otter Tail's CIP tracker would result in double recovery. Therefore, the Department recommends that the Commission allow only the actual Program-related costs to the CIP tracker, estimated to be as follows:

**Table 4: Department's Recommended Cost Categories to be Added to OTP's CIP Tracker**

	2017	2018	2019	2020	2021	5-Year Total
CIP Program Evaluation	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$15,000
CIP Rebate	\$178,572	\$178,572	\$178,572	\$178,572	\$178,572	\$892,859
Administrative Costs	tbd	tbd	tbd	tbd	tbd	tbd
Total Recovery through CIP Tracker	tbd	tbd	tbd	tbd	tbd	tbd

The Department also recommends that Otter Tail adjust its Section 11.07 Monthly Charges to reflect the final LED Weighted Monthly Rate based upon the approved (Section 11.04) revenue requirement.

Additionally, the Department requests that Otter Tail provide the Department with the following:

- The estimated annual administrative costs associated with the new vendor;
- A confirmation of the Department's understanding that only actual expenditures, rather than projected expenditures, will be added to the CIP tracker; and
- A clarification as to how the Additional Monthly Charges for the Aluminum Alloy Poles in the proposed Section 11.07 tariff sheets relate to the Total Monthly Pole costs calculated in the updated marginal cost analysis.

The Department's proposed cost recovery methodology would allow continued cost recovery of the Section 11.04 revenue requirement through the Section 11.07 rates, even though the costs of LED lights are lower. The Department supports Otter Tail's proposal to establish new Section 11.07 rates in its next rate case.

/ja

Attachment A, Docket E017/M-17-152  
Department Comments, June 5, 2017

### **Facilities and O&M Related Costs**

			LED5	LED10	LED3PT	LED5PT	LED8	LED13	LED20 FLOOD	LED30 FLOOD	SECURITY LIGHT (OPEN BOTTOM) LED5
(1)	Marginal Investment per fixture (all costs and labor)	Input- MCS Annual Customer T29 P1	\$267.39	\$398.60	\$551.43	\$585.60	\$316.59	\$439.60	\$974.85	\$1,179.86	\$334.01
(2)	With General Plant Loading	(1) x 1.0130	\$270.87	\$403.78	\$558.60	\$593.21	\$320.71	\$445.31	\$987.52	\$1,195.20	\$338.35
(3)	Annual Economic Carrying Charge Related to Capital Investment	(9) Input - Marginal Cost Study ECC T24	9.49%	9.49%	9.49%	9.49%	9.49%	9.49%	9.49%	9.49%	9.49%
(4)	A&G Loading (plant-related)	(10) Input - Marginal Cost Study T23	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
(5)	Total Annual Carrying Charge	(3) + (4)	9.59%	9.59%	9.59%	9.59%	9.59%	9.59%	9.59%	9.59%	9.59%
(6)	Annualized Costs	(2) x (5)	\$25.97	\$38.71	\$53.56	\$56.87	\$30.75	\$42.69	\$94.68	\$114.59	\$32.44
(7)	Annual Lighting O&M Expenses	Input- MCS Annual Customer T29 P1	\$11.76	\$11.76	\$11.76	\$11.76	\$11.76	\$11.76	\$11.76	\$11.76	\$0.00
(8)	With A&G Loading (non-plant related)	(7) x 1.1323 Input-Marginal Cost Study	\$13.32	\$13.32	\$13.32	\$13.32	\$13.32	\$13.32	\$13.32	\$13.32	\$0.00
(9)	Distribution Facilities Related Costs	(6) + (8)	\$39.28	\$52.03	\$66.87	\$70.19	\$44.06	\$56.01	\$107.99	\$127.90	\$32.44
	Working Capital										
(10)	Material and Supplies	(2) x 1.20%	\$3.25	\$4.85	\$6.70	\$7.12	\$3.85	\$5.34	\$11.85	\$14.34	\$4.06
(11)	Prepayments	(2) x 0.03%	\$0.08	\$0.12	\$0.17	\$0.18	\$0.10	\$0.13	\$0.30	\$0.36	\$0.10
(12)	Cash Working Capital Allowance	(8) x 6.67%	\$0.89	\$0.89	\$0.89	\$0.89	\$0.89	\$0.89	\$0.89	\$0.89	\$0.00
(13)	Total Working Capital	(10) + (11) + (12)	\$4.22	\$5.85	\$7.76	\$8.18	\$4.83	\$6.37	\$13.03	\$15.59	\$4.16
(14)	Revenue Requirement for Working Capital	(13) x 11.20%	\$0.47	\$0.66	\$0.87	\$0.92	\$0.54	\$0.71	\$1.46	\$1.75	\$0.47
(15)	Total Annual Marginal Distribution Facilities Related Costs	(9) + (14)	\$39.76	\$52.68	\$67.74	\$71.11	\$44.60	\$56.72	\$109.45	\$129.65	\$32.91
O&M - Meter, Customer Accounts Expenses, Customer Service											
(16)	Meter and CT O&M Expenses	(13) Input - MCS Annual Customer T29 P5	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
(17)	Customer Accounts Expenses	(14) Input - MCS Annual Customer T29 P5	\$2.39	\$2.39	\$2.39	\$2.39	\$2.39	\$2.39	\$2.39	\$2.39	\$2.39
(18)	Customer Service and Informational Expenses	(15) Input - MCS Annual Customer T29 P5	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10
(19)	With A&G Loading (Non-plant Related)	[(16)+(17)+(18)] x 1.1323	\$3.95	\$3.95	\$3.95	\$3.95	\$3.95	\$3.95	\$3.95	\$3.95	\$3.95
(20)	Customer-Related Costs	(19)	\$3.95	\$3.95	\$3.95	\$3.95	\$3.95	\$3.95	\$3.95	\$3.95	\$3.95
	Working Capital										
(21)	Materials and Supplies		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
(22)	Prepayments		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
(23)	Cash Working Capital	(19) x 6.67%	\$0.26	\$0.26	\$0.26	\$0.26	\$0.26	\$0.26	\$0.26	\$0.26	\$0.26
(24)	Revenue Requirement for Working Capital	[(21)+(22)+(23)]x11.20%	\$0.03	\$0.03	\$0.03	\$0.03	\$0.03	\$0.03	\$0.03	\$0.03	\$0.03
(25)	Total Annual Marginal Customer-Related Costs	(20) + (24)	\$3.98	\$3.98	\$3.98	\$3.98	\$3.98	\$3.98	\$3.98	\$3.98	\$3.98
(26)	Total Annual Marginal Facilities & Customer-Related Costs per fixture	(15) + (25)	\$43.74	\$56.67	\$71.72	\$75.09	\$48.59	\$60.70	\$113.43	\$133.63	\$36.89
(27)	Monthly Marginal Facilities & Customer-Related Costs per lighting fixture	(26) / 12	\$3.64	\$4.72	\$5.98	\$6.26	\$4.05	\$5.06	\$9.45	\$11.14	\$3.07
Energy Costs Calculation per Fixture											
(26)	Lighting fixture input (connected kW)	input - Mfg data	0.047	0.095	0.026	0.047	0.076	0.133	0.199	0.261	0.047
(27)	Monthly charge per connected l (Marginal KWH rate/4100/12month)	\$7.26 input Section 11.03, Rate Code 31-749	\$7.26	\$7.26	\$7.26	\$7.26	\$7.26	\$7.26	\$7.26	\$7.26	\$7.26
(28)	Monthly kWh charge	(26 * 27)	\$0.34	\$0.69	\$0.19	\$0.34	\$0.55	\$0.97	\$1.44	\$1.89	\$0.34
Total Monthly Fixture Cost											
(29)	Monthly Marginal Cost per fixture (excluding monthly energy)	(27)	\$3.64	\$4.72	\$5.98	\$6.26	\$4.05	\$5.06	\$9.45	\$11.14	\$3.07
(30)	Monthly kWh charge	(28)	\$0.34	\$0.69	\$0.19	\$0.34	\$0.55	\$0.97	\$1.44	\$1.89	\$0.34
(30)	Total Monthly Pole Cost	(29)	\$5.14	\$5.14	\$4.82	\$5.61	\$5.14	\$6.10	\$6.10	\$8.41	\$5.14
(32)	Total Monthly Fixture Cost	(27) + (28)+(29)	\$9.13	\$10.55	\$10.99	\$12.21	\$9.74	\$12.13	\$17.00	\$21.44	\$8.56
			----- (2016 Dollars per fixture) -----								
Interim Rate as of 4/16/2016											



### Facilities and O&M Related Costs

Revenues and O&M Related Costs			FIBERGLASS STANDARDS FS18	FIBERGLASS STANDARDS FS23	ALUMINUM ALLOY STANDARDS 30'	ALUMINUM ALLOY STANDARDS40'	STANDARD POLE (LED5, LED8 & LED10)	STANDARD POLE (LED13 & LED20 FLOOD)	STANDARD POLE (LED30 FLOOD)
(1)	Marginal Investment per fixture (all costs and labor)								
(2)	With General Plant Loading								
(3)	Annual Economic Carrying Charge Related to Capital Investment	(9)	Input - MCS Annual Customer T29 P1						
(4)	A&G Loading (plant-related)	(10)	Input - Marginal Cost Study ECC T24	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%
(5)	Total Annual Carrying Charge		Input - Marginal Cost Study T23	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
			(3) + (4)	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%
(6)	Annualized Costs		(2) x (5)	\$52.81	\$62.05	\$205.14	\$222.90	\$56.58	\$67.88
(7)	Annual Lighting O&M Expenses		Input- MCS Annual Customer T29 P1	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
(8)	With A&G Loading (non-plant related)		(7) x 1.1323 Input-Marginal Cost Study	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
(9)	Distribution Facilities Related Costs		(6) + (8)	\$52.81	\$62.05	\$205.14	\$222.90	\$56.58	\$67.88
	Working Capital								
(10)	Material and Supplies		(2) x 1.20%	\$9.32	\$10.95	\$36.21	\$39.35	\$9.99	\$11.98
(11)	Prepayments		(2) x 0.03%	\$0.23	\$0.27	\$0.91	\$0.98	\$0.25	\$0.30
(12)	Cash Working Capital Allowance		(8) x 6.67%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
(13)	Total Working Capital		(10) + (11) + (12)	\$9.56	\$11.23	\$37.12	\$40.33	\$10.24	\$12.28
(14)	Revenue Requirement for Working Capital		(13) x 11.20%	\$1.07	\$1.26	\$4.16	\$4.52	\$1.15	\$1.38
(15)	Total Annual Marginal Distribution Facilities Related Costs		(9) + (14)	\$53.88	\$63.31	\$209.30	\$227.42	\$57.73	\$69.25
<b>O&amp;M - Meter, Customer Accounts Expenses, Customer Service</b>									
(16)	Meter and CT O&M Expenses	(13)	Input - MCS Annual Customer T29 P5	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
(17)	Customer Accounts Expenses	(14)	Input - MCS Annual Customer T29 P5	\$2.39	\$2.39	\$2.39	\$2.39	\$2.39	\$2.39
(18)	Customer Service and Informational Expenses	(15)	Input - MCS Annual Customer T29 P5	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10
(19)	With A&G Loading (Non-plant Related)		[(16)+(17)+(18)] x 1.1323	\$3.95	\$3.95	\$3.95	\$3.95	\$3.95	\$3.95
(20)	Customer-Related Costs		(19)	\$3.95	\$3.95	\$3.95	\$3.95	\$3.95	\$3.95
	Working Capital								
(21)	Materials and Supplies			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
(22)	Prepayments			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
(23)	Cash Working Capital		(19) x 6.67%	\$0.26	\$0.26	\$0.26	\$0.26	\$0.26	\$0.26
(24)	Revenue Requirement for Working Capital		[(21)+(22)+(23)]x11.20%	\$0.03	\$0.03	\$0.03	\$0.03	\$0.03	\$0.03
(25)	Total Annual Marginal Customer-Related Costs		(20) + (24)	\$3.98	\$3.98	\$3.98	\$3.98	\$3.98	\$3.98
(26)	Total Annual Marginal Facilities & Customer-Related Costs per fixture		(15) + (25)	\$57.86	\$67.29	\$213.28	\$231.40	\$61.71	\$73.24
(27)	Monthly Marginal Facilities & Customer-Related Costs per lighting fixture		(26) / 12	\$4.82	\$5.61	\$17.77	\$19.28	\$5.14	\$6.10
<b>Energy Costs Calculation per Fixture</b>									
(26)	Lighting fixture input (connected kW)		input - Mfg data	0.000	0.000	0.000	0.000	0.000	0.000
(27)	Monthly charge per connected l (Marginal KWH rate/4100/12month)	\$7.26	input Section 11.03, Rate Code 31-749	\$7.26	\$7.26	\$7.26	\$7.26	\$7.26	\$7.26
(28)	Monthly kWh charge		(26 * 27)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Total Monthly Fixture Cost</b>									
(29)	Monthly Marginal Cost per fixture (excluding monthly energy)	(27)		\$4.82	\$5.61	\$17.77	\$19.28	\$5.14	\$6.10
(30)	Monthly kWh charge	(28)		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
(30)	Total Monthly Pole Cost	(29)							
(32)	Total Monthly Fixture Cost	(27) + (28)+(29)		\$4.82	\$5.61	\$17.77	\$19.28	\$5.14	\$6.10



Fergus Falls, Minnesota

**LED STREET and AREA LIGHTING – DUSK TO DAWN**

N

DESCRIPTION	RATE CODE
LED Outdoor Lighting	31-730
LED Flood Lighting	31-732
Aluminum Alloy Poles	31-734
LED Flood Visor	31-735

N  
N  
N  
N  
N  
N

**RULES AND REGULATIONS:** Terms and conditions of this electric rate schedule and the General Rules and Regulations govern use of this service.

N  
N

**APPLICATION OF SCHEDULE:** This schedule is applicable to any Customer for automatically operated dusk to dawn outdoor lighting supplied and operated by the Company.

N  
N

**RATE:**

LED TYPE	Approximate Lumens	Approximate Wattage	Monthly Charge
LED5	5175	47	\$8.68
LED8	9003	76	\$15.55
LED3PT	2759	26	\$10.41
LED5PT	5404	47	\$13.37
LED10	12388	95	\$17.41
LED13	16691	133	\$21.80
LED20 - Flood	23067	199	\$21.82
LED30 - Flood	32003	261	\$40.77

N  
N  
N  
N  
N  
N  
N  
N  
N  
N  
N  
N

Appropriate standard wood pole is included in the Monthly Charge

N

ALUMINUM ALLOY POLES	Additional Monthly Charge
STANDARDS 30'	\$11.67
STANDARDS 40'	\$10.87

N  
N  
N  
N

LED FLOOD VISOR	Additional Monthly Charge
Lighting Visor LED 20-Flood	\$0.76
Lighting Visor LED 30-Flood	\$1.38

N  
N  
N  
N



Fergus Falls, Minnesota

**INTERIM RATE ADJUSTMENT:**

A 9.56 percent increase will be added to the sum of the following, as applicable: Customer Charge, Energy Charge, Demand Charge, Fixed Charge, Facilities Charge, and the monthly Minimum Charge.

N  
N  
N  
N

**MANDATORY AND VOLUNTARY RIDERS:** The amount of a bill for service will be modified by any Mandatory Rate Riders that must apply and by any Voluntary Rate Riders selected by the Customer, unless otherwise noted in this rate schedule. See Sections 12.00, 13.00 and 14.00 of the Minnesota electric rates for the matrices of riders.

N  
N  
N  
N

**SEASONAL CUSTOMERS:** Seasonal Customers will be billed at the same rate as year-around Customers, except as follows:

N  
N

A fixed charge of \$27.59 will be billed each Seasonal Customer once per season per fixture in addition to the rate provided above. The fixed charge will be included in the first bill rendered for each season.

N  
N  
N

Each Seasonal Customer will be billed for the number of months each season that the outdoor lighting fixture is in use, but not less than a minimum of four months, plus the seasonal fixed charge.

N  
N  
N

**UNDERGROUND SERVICE:** If the Customer requests underground service to any outdoor lighting unit, the Company will supply up to 200 feet of wire and add an additional \$2.12 to the monthly rate specified above. If overhead service is not available, there is no additional charge. There is no additional charge for LED5PT or LED3PT fixtures, or fixtures mounted on Aluminum Alloy Standards.

N  
N  
N  
N  
N

**EQUIPMENT AND OVERHEAD SERVICE SUPPLIED BY THE COMPANY:** The light shall be mounted on a suitable new or existing Company-owned pole. Any extension beyond an average installation length of 150' will be at the expense of the Customer.

N  
N  
N

The Company will install, own and operate, and have discretion to replace or upgrade a high intensity discharge light including suitable reflector or a flood light including a lamp, or a bracket for mounting on wood poles with overhead wiring and photo-electric or other device to control operating hours. Customers provided with pole top fixtures on fiberglass poles and fixtures mounted on Aluminum Alloy Standards will not receive overhead power supply. The light shall operate from dusk to dawn. The Company will supply the necessary electricity and maintenance for the unit.

N  
N  
N  
N  
N  
N  
N

**SERVICE CONDITIONS:** Lighting will not be mounted on Customer-owned property. The light shall be mounted upon a suitable new or existing Company-owned facility. The Company shall own, operate, and maintain the lighting unit including the pole, fixture, lamp, ballast,

N  
N  
N



Fergus Falls, Minnesota

photoelectric control, mounting brackets, fixture arrester, LED driver and all necessary wiring  
using the Company's standard street lighting equipment. The Company shall furnish all electric  
Energy required for operation of the unit.

N  
N  
N

In cases of vandalism or damages, the Company has the discretion to discontinue service and  
remove Company equipment.

N  
N

## **CERTIFICATE OF SERVICE**

I, Sharon Ferguson, hereby certify that I have this day, served copies of the following document on the attached list of persons by electronic filing, certified mail, e-mail, or by depositing a true and correct copy thereof properly enveloped with postage paid in the United States Mail at St. Paul, Minnesota.

**Minnesota Department of Commerce**  
**Comments**

**Docket No. E017/M-17-152**

**Dated this 5<sup>th</sup> day of June 2017**

**/s/Sharon Ferguson**

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Julia	Anderson	Julia.Anderson@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	Yes	OFF_SL_17-152_M-17-152
Christopher	Anderson	canderson@allete.com	Minnesota Power	30 W Superior St  Duluth, MN 558022191	Electronic Service	No	OFF_SL_17-152_M-17-152
Ray	Choquette	rchoquette@agp.com	Ag Processing Inc.	12700 West Dodge Road PO Box 2047 Omaha, NE 68103-2047	Electronic Service	No	OFF_SL_17-152_M-17-152
Ian	Dobson	Residential.Utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes	OFF_SL_17-152_M-17-152
James C.	Erickson	jericksonkbc@gmail.com	Kelly Bay Consulting	17 Quechee St  Superior, WI 54880-4421	Electronic Service	No	OFF_SL_17-152_M-17-152
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 280  Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_17-152_M-17-152
Bruce	Gerhardson	bgerhardson@otpc.com	Otter Tail Power Company	PO Box 496 215 S Cascade St Fergus Falls, MN 565380496	Electronic Service	No	OFF_SL_17-152_M-17-152
Jason	Grenier	jgrenier@otpc.com	Otter Tail Power Company	215 South Cascade Street  Fergus Falls, MN 56537	Electronic Service	No	OFF_SL_17-152_M-17-152
Shane	Henriksen	shane.henriksen@enbridge.com	Enbridge Energy Company, Inc.	1409 Hammond Ave FL 2  Superior, WI 54880	Electronic Service	No	OFF_SL_17-152_M-17-152
Douglas	Larson	dlarson@dakotaelectric.com	Dakota Electric Association	4300 220th St W  Farmington, MN 55024	Electronic Service	No	OFF_SL_17-152_M-17-152

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
James D.	Larson	james.larson@avantenergy.com	Avant Energy Services	220 S 6th St Ste 1300  Minneapolis, MN 55402	Electronic Service	No	OFF_SL_17-152_M-17-152
Kavita	Maini	kmairi@wi.rr.com	KM Energy Consulting LLC	961 N Lost Woods Rd  Oconomowoc, WI 53066	Electronic Service	No	OFF_SL_17-152_M-17-152
Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP	33 South Sixth St Ste 4200  Minneapolis, MN 55402	Electronic Service	No	OFF_SL_17-152_M-17-152
David G.	Prazak	dprazak@otpc.com	Otter Tail Power Company	P.O. Box 496 215 South Cascade Street Fergus Falls, MN 565380496	Electronic Service	No	OFF_SL_17-152_M-17-152
Larry L.	Schedin	Larry@LLSResources.com	LLS Resources, LLC	332 Minnesota St, Ste W1390  St. Paul, MN 55101	Electronic Service	No	OFF_SL_17-152_M-17-152
Cary	Stephenson	cStephenson@otpc.com	Otter Tail Power Company	215 South Cascade Street  Fergus Falls, MN 56537	Electronic Service	No	OFF_SL_17-152_M-17-152
Stuart	Tommerdahl	stommerdahl@otpc.com	Otter Tail Power Company	215 S Cascade St PO Box 496 Fergus Falls, MN 56537	Electronic Service	No	OFF_SL_17-152_M-17-152
Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_17-152_M-17-152