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April 14, 2025

OTTER TAIL POWER COMPANY

Mr. Will Seuffert
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101-2147

**PUBLIC DOCUMENT -
NOT PUBLIC (OR PRIVILEGED)
DATA HAS BEEN EXCISED**

**RE: In the Matter of Otter Tail Power Company's Petition for Approval of the Annual Update to its Electric Utility Infrastructure Cost Recovery Rider, Rate Schedule 13.11
Docket No. E017/M-25-
Initial Filing**

Dear Mr. Seuffert:

Otter Tail Power Company (Otter Tail Power) submits the attached Petition to the Minnesota Public Utilities Commission (Commission) for approval its annual update to the Electric Utility Infrastructure Cost Recovery Rider under Otter Tail's Rate Schedule 13.11.

Attachment 18 is the live version of Otter Tail Power's Electric Utility Infrastructure Cost Recovery Tracker ("the Model"), which derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use. The Model therefore is (1) "trade secret information", as defined in Minn. Stat. § 13.37, subd. 1(b); (2) is classified as nonpublic data pursuant to Minn. Stat. § 13.37, subd. 2; (3) is also not public data, as defined in Minn. Stat. § 13.02, subd. 8a; and (4) is protected data under Minn. R. 7829.0100, subp. 19a(A). To be clear, Otter Tail Power is not requesting that the data used in the Model be treated as "trade secret information" or protected data. Instead, Otter Tail Power is requesting that the live version of the Model be treated as trade secret information and protected data.

On pages 8, 14, 17, and 27, of the Initial Filing Petition, and on page 10 of Attachment 15 thereto, there is information regarding ongoing contractual negotiations with a vendor, which derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use. This information therefore is (1) "trade secret information", as defined in Minn. Stat. § 13.37, subd. 1(b); (2) is classified as nonpublic data pursuant to Minn. Stat. § 13.37, subd. 2; (3) is also not public data, as defined in Minn. Stat. § 13.02, subd. 8a; and (4) is protected data under Minn. R. 7829.0100, subp. 19a(A).

We have electronically filed this document with the Commission and copies have been served on all parties on the attached service list. A Certificate of Service is also enclosed.

If you have any questions regarding this filing, please contact me at 218-739-8313 or at eketelsen@otpco.com.

Sincerely,

/s/ EMILY KETELSEN
Rates Analyst
Regulatory Economics

lcd
Enclosures
By electronic filing
c: Service List

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

In the Matter of Otter Tail Power Company's Petition for Approval of the Annual Update to its Electric Utility Infrastructure Cost Recovery Rider, Rate Schedule 13.11	**Docket No. E017/M-25-** **SUMMARY OF FILING**

On April 14, 2025, Otter Tail Power Company (Otter Tail Power) filed this Petition with the Minnesota Public Utilities Commission for approval of its Electric Utility Infrastructure Cost (EUIC) Rider Annual Update under Otter Tail Power's rate schedule 13.11. Pursuant to Minn. Stat. §216B.1636 (Recovery of Electric Utility Infrastructure Costs), Otter Tail Power is requesting recovery of updated costs associated with the Advanced Metering Infrastructure, Outage Management Systems, and Demand Response System. In addition, the Company is requesting approval to recover the Bemidji and Milbank Customer Service Center Remodel projects through the Company's EUIC Recovery Rider.

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

In the Matter of Otter Tail Power Company's Petition for Approval of the Annual Update to its Electric Utility Infrastructure Cost Recovery Rider, Rate Schedule 13.11	**Docket No. E017/M-25-** **PETITION**

I. PETITION SUMMARY

A. This filing for Otter Tail Power Company's (Otter Tail Power or Company) Electric Utility Infrastructure Cost (EUIC) recovery rider includes updated actual and forecasted costs and collections associated with the following:
   1. Advanced Metering Infrastructure (AMI).
   2. An Outage Management System (OMS) with Geographic Information System (GIS) Update.
   3. A Demand Response (DR) system project.
   4. Annual Operating and Maintenance (O&M) net savings related to AMI implementation.
   5. The addition of the remodel of the Company's Customer Service Centers (CSC) in Bemidji and Milbank.

B. The Minnesota projected revenue requirement for the recovery period of January 1, 2026, through December 31, 2026, is $2,127,268.

C. The EUIC rider maintains a per meter rate design.

D. The proposed rate is a decrease from the current approved rate. A residential customer with one meter will see a monthly bill decrease of $1.18.

II. INTRODUCTION

Otter Tail Power respectfully submits this Petition to the Commission for an Order approving the 2025 adjustment to its EUIC recovery rider, which includes AMI, OMS with GIS, a DR system, a credit for savings attributable to the AMI implementation, and the inclusion of the remodel projects at the Company's Bemidji and Milbank CSCs. The Commission originally approved Otter Tail Power's EUIC Rate Schedule 13.11 on August 4, 2022, in Docket No. E-017/M-21-382. This is the third update for the EUIC Rider. This filing also includes the annual metrics report on grid modification investments as ordered by the Commission in Docket No. E-017/M-21-382 Order and Docket No. E-017/M-24-186.

III. SUMMARY OF FILING

Pursuant to Minn. Rules 7829.1300, subp. 1, a one-paragraph summary of the filing accompanies this Petition.

IV. GENERAL FILING INFORMATION

Pursuant to Minn. Rules 7829.1300, subp. 3, the following information is provided.

A. Name, address, and telephone number of utility

(Minn. Rules 7829.1300, subp. 3(A))

Otter Tail Power Company
215 South Cascade Street
Fergus Falls, Minnesota 56538-0496
(218) 739-8200

B. Name, address, and telephone number of utility attorney

(Minn. Rules 7829.1300, subp. 3(B))

Lauren D. Donofrio
Senior Associate General Counsel – Regulatory
Otter Tail Power Company
215 South Cascade Street
Fergus Falls, Minnesota 56538-0496
(218) 739-8774

C. Date of filing and proposed effective date of rates

(Minn. Rules 7829.1300, subp. 3(C))

The date of this filing is April 14, 2025. Otter Tail Power requests that the proposed EUIC rider rates become effective January 1, 2026, or on the first day of the month following Commission approval, should its decision be thereafter.

D. Statutes controlling schedule for processing the filing
(Minn. Rules 7829.1300, subp. 3(D))

This filing is a "miscellaneous tariff filing" as defined by the Commission's rules at Minn. Rules 7829.0100, subp. 11. No determination of Otter Tail Power's overall revenue requirement is necessary (or required under the Statute). Minn. Rules 7829.1400, subps. 1 and 4 permit comments in response to a miscellaneous tariff filing to be filed within 30 days and reply comments to be filed no later than 10 days thereafter.

E. Title of utility employee responsible for filing
(Minn. Rules 7829.1300, subp. 3(E))

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F. Impact on Rates
(Minn. Rules 7829.1300, subp. 3(F))

The proposed EUIC Rider update includes recovery for investments occurring outside of the general rate case and therefore does not have an effect on Otter Tail Power's current base rates. The additional information required under Minn. Rule 7829.1300, subp 3(F) is included throughout this Petition.

G. Service List

(Minn. Rules 7829.0700)

Otter Tail Power requests that the following persons be placed on the Commission's official service list for this matter and that any trade secret comments, requests, or information be provided to the following on behalf of Otter Tail Power:

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H. Service on other parties

(Minn. Rules 7829.1300, subp. 2)

Pursuant to Minn. Rules 7829.1300, subp. 2, Otter Tail Power serves this Petition on the Minnesota Department of Commerce (Department), Division of Energy Resources and the Office of Attorney General – Residential Utilities and Antitrust Division via the Commission's e-Filing system. A summary of the filing prepared in accordance with Minn. Rule 7829.1300, subp. 1 was served on all parties on Otter Tail Power's general service list.

V. DESCRIPTION AND PURPOSE OF FILING

A. Introduction

In 2021, Otter Tail Power made its initial request for the establishment of the EUIC rider for recovery of AMI, the OMS with GIS Project, and the DR system replacement. Ultimately, the AMI and OMS Projects were approved, and the DR project request was withdrawn by Otter Tail Power in agreement with the Department. The EUIC rate went into effect September 1, 2022, and this filing is the third annual update to the EUIC. The DR project was subsequently approved in the second annual update to the EUIC in Docket No. E-017/M-24-186.[1]

Otter Tail Power requests the continuation of the EUIC recovery mechanism for costs incurred for the implementation of AMI, OMS and DR, and the addition of the Bemidji and Milbank CSC remodel projects outside of a general rate case. As directed in the previous EUIC Commission's August 4, 2022 Order in Docket No. E-017/M-21-382, Otter Tail Power provides project updates, along with information on the Company's grid modernization investments, and its integrated distribution plan.

B. Overview of Projects Included in this Filing

This section contains updated information on the three projects that the Commission previously approved for EUIC recovery. Also discussed below are the costs for CSC building remodel projects in Bemidji, Minnesota and Milbank, South Dakota, which the Company proposes to include in the EUIC rider.

1. Advanced Metering Infrastructure (AMI)

The original implementation plan for the AMI project anticipated business process development, system integration, and initial deployment to occur in late 2021 through the fourth quarter of 2022, with full deployment from late 2022 to the third quarter 2024. The deployment schedule was delayed due to the integration requirements of the software systems and the associated testing challenges as discussed in the 2023 annual update filing.[2] The AMI pilot of approximately 500 meters occurred in December 2023. Full meter deployment started in mid-February 2024 and continued throughout the year. While most AMI meters were installed by the end of 2024, there are some AMI meter installations that will occur throughout 2025. Allegiant Utility Services, Otter Tail Power's meter installation contractor, completed

[1] The Commission's January 8, 2025 Order.
[2] Docket No. E-017/M-23-131.

the contracted portion of the installations in 2024, which represents approximately 88 percent of the total meter installations. The meters associated with complex rates, complex metering configurations, and heightened impact to customer processes are currently being installed by Otter Tail Power employees. Allowing Otter Tail Power staff to manage these meter exchanges reduced delays in the work previously done by Allegiant Utility Services and provides a more coordinated exchange process for this customer group, which includes larger commercial and industrial loads.

Otter Tail Power's actual cost through 2024 for the AMI project is $45.7 million. The projected total cost of the project is $55.6 million, which is under the $55.9 million approved amount.

Otter Tail Power began to realize O&M savings due to partial AMI implementation in May 2024. The Company estimates that approximately 75 percent of total expected annual savings will be realized in 2025 and nearly 100 percent expected savings will begin in 2026. Minnesota customers receive a credit for O&M savings of meter reading expenses up to the amount included in base rates, as shown in Attachment 8.

2. Outage Management System (OMS)

a. OMS Update on Scope

Otter Tail Power's OMS offers many operational and customer benefits related to outage response as well as a foundation that will be beneficial in future grid modernization plans. The OMS allows Otter Tail Power to identify outages more rapidly and deploy crews more efficiently to reduce the number and length of outages. It also allows the Company to better communicate with customers before, during, and after outage events by sending outage notifications, updates on estimated time of restoration, and restoration notices. Outage notifications were enhanced with the implementation of the Customer Experience Portal (CEP) in August of 2023 for those customers who have signed up to receive notifications.

The implementation of AMI will enhance the speed with which the OMS receives outage information and, therefore, improve restoration times even further. The individual meters provide power-off and power-on notifications to be utilized by the OMS. Otter Tail Power is currently working with the vendors to complete the necessary integrations and anticipates completion in the second quarter of 2025.

b. OMS Update on Implementation Progress

Otter Tail Power completed the GIS update portion of the OMS project in May 2024. The first phase of the OMS installation was completed in December 2022. The Company completed the final go-live improvements to the OMS system, including modeling improvements as part of the GIS portion of the project, in February of 2024. Since project completion, these items have improved available outage and restoration information and communications.

The next stage of OMS development ties closely with the installation of the advanced meter infrastructure and the new CEP. Meters included in the pilot were installed in December 2023. The Company began meter deployment in February 2024 and will continue deploying meters through 2025. Together, OMS, CEP, and AMI will improve the customer experience featuring two-way communication for service outages and a faster restoration process. The CEP system allows customers to receive communication based on their preferences and will give customers the ability to sign up for outage and estimated restoration notifications that pertain specifically to their service.

c. OMS Update on Actual Costs and Savings

The total cost of the project is $3.9 million (OTP Total) / $1.9 million (OTP MN). The $1.9 million is under the $2.0 million soft cap for the Minnesota jurisdictional share.

3. Demand Response (DR)

In an Order dated January 8, 2025, the Commission approved Otter Tail Power's request to recover costs related to the implementation of DR.[3] The approval stipulates a soft cap that reflects the cost decrease the Company will realize if it is able to use the newly implemented AMI meters as load control switches for water heating. The project team will participate in workshops later this year to outline the project requirements for the meter-based control functionality. The vendor has committed to delivering this functionality; however, neither the vendor nor Otter Tail Power have used AMI meters in this capacity previously. Testing of this proposed functionality is estimated to take place after mid-2026.

[3] In the Matter of Otter Tail Power Company's Petition for Approval of the Annual Update to its Electric Utility Infrastructure Rider, Rate Schedule 13.11, Docket No. E-017/M-24-186.

Otter Tail Power's actual cost through February 2025 for the DR project is $1.1 million. The Company expects to begin implementing the DR System in the third quarter of 2026. Otter Tail Power anticipates it will complete the project mid-2028. The projected total cost of the project is **[PROTECTED DATA BEGINS… …PROTECTED DATA ENDS],** which is under the soft cap of **[PROTECTED DATA BEGINS… …PROTECTED DATA ENDS]**.

a. Additional Funding for the Demand Response Project

Otter Tail Power submitted an application to the U.S. Department of Energy (DOE) on May 23, 2024, and to the Minnesota State Competitiveness Fund for a project called Innovative Distributed Energy Automation (IDEA). The project application primarily focused on the DR project but also included a funding request for electric buses in Minnesota and fast charging for electric vehicles in Minnesota, North Dakota, and South Dakota.

The Minnesota State Competitiveness Fund selected Otter Tail Power to potentially receive Minnesota State Competitiveness dollars of up to approximately $1.0 million for the IDEA projects, contingent on the Company also receiving DOE funding for the project. On October 10, 2024, the DOE selected Otter Tail Power to begin negotiations with the DOE for DR project funding. However, due to recent federal administration changes, the DOE placed the negotiations on a pause on February 3, 2025. The DOE has indicated they are awaiting additional implementation guidance before continuing negotiations.

To date, no federal funding has been authorized for the DR project. Therefore, the revenue requirement for the next recovery period does not factor in any external funding. The Company's January updated draft budget submitted to the DOE included a request for 20 percent reimbursement from the DOE for DR project activities. Once Otter Tail Power completes negotiations with the DOE, projected funding amounts will likely be adjusted. Assuming the Company's DR project is funded by the DOE, any reimbursement from the DOE will be passed through as a credit to reduce the total project costs, reducing the revenue requirement for rate payers.

4. Bemidji Customer Service Center (CSC) Remodel

The Company operates customer service facilities, known internally as CSCs, throughout Minnesota, with locations in Bemidji, Crookston, Fergus Falls, and Morris. The facilities provide space for line and service operations, vehicle garage space, office space, and conference rooms.

In 2024, the Company purchased a warehouse to be used as a line and service center in Bemidji, Minnesota to accommodate growing needs for line and service operations. This purchase provided space for the line and service vehicles to transfer from the CSC garage space to the warehouse.

The Company proposes to remodel the office area and garage space in the existing Bemidji CSC to alleviate office space constraints and provide a more energy and operationally efficient space for office personnel. In years past, 10-12 employees were typically located in the Bemidji CSC at any given time. With the introduction of remote work capabilities, office roles that were previously restricted to specific locations, such as Fergus Falls, Minnesota, can now be done remotely from other Company locations. This has expanded the pool of applicants for certain office roles and increased the number of employees in the CSC locations.

The Bemidji CSC area currently has 17 Otter Tail Power office employees that require office space. The Company prioritizes equality and fairness, while maintaining consistent policies and providing similar work experiences for all employees at the same level. For reference, Otter Tail Power's hybrid work from home policy requires employees to work in the office at least three days per week. Although the location can accommodate 15 of the 17 current employees, space constraints at the Bemidji CSC limit the Company's ability to provide equal treatment for these similarly situated employees. The remaining employees near the Bemidji CSC work remotely full-time due to the lack of office space, though they would work in the office if space allowed. This has led to employee dissatisfaction due to unequal work requirements among employees doing similar types of jobs. Further, the Bemidji CSC main level can only accommodate 12 employees, and while there are three cubicles in the basement, these locations are isolated, and the conditions are less desirable. Over the past three to four years, roles that were typically based out of the Fergus Falls office are now able to be filled at the Company's other CSC locations. Based on the growth at office locations outside of Fergus Falls, the Company seeks to proactively make additional office space available for future growth at this location.

In addition to needing more space for local employees, the Bemidji CSC was built in 1965 and requires several updates. Existing bathrooms have insufficient ventilation, peeling wallpaper, and dated tile. There are no sprinklers in the building at this time, the installation of which would limit potential loss in the case of a fire. This location also lacks a mothers' room, which will be added to the building, and which the Company is required to provide by law.

The following is a list of items included in the planned remodel project for the Bemidji CSC to address the issues discussed above.

- Conversion of approximately 75 percent of garage space into office space, to allow for approximately 25 employees onsite.
- Asbestos abatement on the main level.
- Electrical system improvements.
- HVAC system improvements.
- Area for private phone calls.
- Installation of sound masking system.
- Replacement of fluorescent bulbs with more efficient LED lighting.
- Installation of sprinkler system, per insurance company recommendation.
- Customer Service Representative group will be together in one area of the office.
- Large windows for natural light.
- All employee offices on main level of building.
- Addition of a dedicated mother's room.

The Bemidji CSC Remodel is necessary to improve energy efficiency, allow workable space for all employees, and to comply with laws. The cost to build a new office building of similar size would be approximately twice as much (estimated at $5.5 million).

The required information for EUIC rider recovery eligibility determination is provided below.

a. Proposed Recovery Mechanism

Pursuant of Minn. Stat. § 216B.1636, Otter Tail Power submits this request to recover costs related to its Bemidji CSC Remodel Project in the EUIC Recovery Rider.

Minn. Stat. § 216B.1636, subd. 2 (b) (2) has eleven filing requirements that must be met. Each of those filing requirements is addressed below.

(i) the location, description, and costs associated with the project;

Location

320 4th St NW
Bemidji, MN 56619

Description

The existing CSC in Bemidji consists of 4,500 square feet of garage for line and service trucks and other Company vehicles and 2,860 square feet of general office and conference room space.

The proposed space will include 1,020 square feet of garage space for Company vehicles and 6,340 square feet of general office and conference room space.

Costs

The estimated cost of the Bemidji CSC remodel project is $2.7 million (OTP Total).

(ii) evidence that the electric utility infrastructure project will conserve energy or use energy more efficiently than similar facilities currently used by the electric utility;

The Bemidji CSC remodel project incorporates a number of energy efficient features, including:

- Three factory assembled skylights (44 square feet) that take advantage of natural lighting and reduce lighting systems energy usage.
- Insulated tempered glazing glass on the east and north side of the building, and energy efficient windows throughout the building, reducing heat transfer and lowering HVAC costs.

- Electronically Commutated Motors (ECMs) on the centrifugal roof ventilator fan that adjust the speed of the fans to match the demand, reducing energy usage.
- Six new cold climate heat pumps with a Seasonal Energy Efficiency Ratio (SEER2) rating of 16, meeting EnergyStar efficiency criteria; the heat pumps will couple with fans with ECM motors that control the speed to match heating and cooling loads.
- New roof top unit (RTU) with a variable speed drive on the supply fan and an economizer for free cooling when the outside air conditions allow. This unit reduces mechanical cooling and overall energy consumption.
- Energy recovery ventilation (ERV) unit with variable speed drives on the supply and exhaust fans; cooling coil with an Energy Efficiency Ratio (EER) of 12.5 which exceeds code baseline (EER=11.8). This unit recovers heat and moisture from exhaust air with a variable speed drive on the exhaust fan to adjust the speed to match ventilation demand.
- HVAC system controls upgrade to optimize system performance reducing unnecessary heating, cooling, and fans operations.
- Upgrades of all fluorescent lighting to high efficiency LED fixtures with built-in luminaire level lighting controls that adjust lighting based on occupancy and demand.
- Converting part of the garage to office space with storefront windows improves energy efficiency by eliminating frequent overhead door use for truck access.

Otter Tail Power contracted with Michaels Energy, an efficiency and engineering consultant, to implement the Company's Energy Conservation and Optimization (ECO) Integrated Building Design (IBD) Plus program. The IBD Plus program provides customers involved in new construction projects with energy modeling to encourage energy efficient technologies in their project design. The Company looked to Michaels Energy to provide a savings analysis for energy efficient design opportunities in the Bemidji CSC project, relying on the Minnesota

Department of Commerce Technical Resource Manual (TRM) to calculate energy and demand savings for the many energy-efficient design features. Results of this analysis are shown in the table below:

Table 1:
Bemidji CSC Energy Efficiency Comparison

Bemidji CSC Energy Efficiency Comparison			
End Use	**2014 Level II Audit**	**2024 Construction Documents**	**Annual Savings**
Insulation	Roof: **R20.83**	Roof: **R31.25**	1,096 kWh
Interior Lighting	Original CFLs were replaced with equivalent LED fixtures. **The 2009 IECC code requirement was 1 W/SF**	A lighting fixture analysis was conducted on the provided CD set - For a facility size of 9,872 SF, the total lighting wattage is 7,630W, or **0.772 W/SF**. Summer cooling savings will outweigh winter heating losses.	8,976 kWh
Exterior Lighting	2009 IECC base site allowance **600W**	Total exterior lighting from CD set - **334 W**	1,181 kWh
Lighting Controls	Previously controlled with manual switches. Occupancy sensors were installed in the office areas.	Luminaire level lighting controls (LLLCs) applied. Hallway and bathroom fixtures have dimming capability.	23,521 kWh
Mechanical	Digital thermostats were installed to allow for scheduling of first floor heat pumps. CO2 sensors were also installed to reduce outside air requirements. No new equipment installed. Between 9.7-10.3 EER, consistent with 2009 IECC code requirements.	1 New electric water heater 1 New exhasut fan with R10 insulation 6 New heat pumps and corresponding fan coils 1 New packaged rooftop unit (11.7 EER) 1 New energy recovery unit (12.5 EER)	22,487 kWh
		Total Energy Savings (kWh):	57,261

Otter Tail Power provides the full analysis from Michael's Energy as Attachment 13a.

(iii) the proposed schedule for implementation;

- The remodel of the Bemidji CSC started in February 2025 and is expected to be completed by October 2025.

(iv) a description of the costs, and salvage value, if any, associated with the existing infrastructure replaced or modified as a result of the project;

- Otter Tail Power does not book any salvage value associated with company buildings. The buildings have assessed value for property tax purposes based on where they are located. The current assessed value for the Bemidji CSC is $641,200.

(v) the proposed rate design and an explanation of why the proposed rate design is in the public interest;

- Otter Tail Power proposes to include the Bemidji CSC Remodel in the EUIC per meter charge, which is allocated to all customers, with the exception of controlled service customers, based on the weighted average cost of the meters per class. Otter Tail Power proposes no allocation of the Bemidji CSC Remodel costs to controlled service meters because customers on controlled services are paying their share of the remodel costs through the meter charge applied to their base rate electric service meters. Charges for the EUIC recovery mechanism are included in the Resource Adjustment line of customer bills.

(vi) the magnitude and timing of any known future electric utility projects that the utility may seek to recover under this section;

Otter Tail Power provides a summary of upcoming projects in the table below.

Table 2
Upcoming EUIC Projects
(dollars shown in 2025 dollars)

[PROTECTED DATA BEGINS…

…PROTECTED DATA ENDS]

(vii) the magnitude of EUIC in relation to the electric utility's base revenue as approved by the commission in the electric utility's most recent general rate case, exclusive of fuel cost adjustments;

Otter Tail Power's base annual revenue as approved in the Company's last general rate case is $209.0 million. When the remodels of the Bemidji and Milbank CSCs are completed, the total annual EUIC tracker revenue requirement for all EUIC projects is estimated to be approximately $2.1 million, with $157 thousand attributable to the Bemidji CSC remodel project.

(viii) the magnitude of EUIC in relation to the electric utility's capital expenditures since the most recent general rate case;

- The table below shows Otter Tail Power's Total Company annual capital additions, retirements, and net additions for 2021-2024.

Table 3
Net Capital Additions (OTP Total)

	A	B	C	D
	Year	OTP Additions	OTP Retirements	OTP Net Additions
1	2021	247,848,815	(10,952,385)	236,896,430
2	2022	102,283,875	(16,892,557)	85,391,318
3	2023	248,111,303	(76,038,412)	172,072,891
4	2024	222,375,587	(22,311,691)	200,063,896
	Total	820,619,580	(126,195,045)	694,424,535

The Bemidji CSC Remodel project will result in estimated total capital additions of about $2.7 million (OTP Total).

(ix) the amount of time since the utility last filed a general rate case and the utility's reason for seeking recovery outside of a general rate case;

- Otter Tail Power last filed a general rate case on November 2, 2020. The projects included in this filing were not included in the 2021 test year in the 2020-2021 rate case because these projects were neither contemplated, completed nor in-service prior to the end of the case, in 2021.

(x) documentation supporting the calculation of the EUIC;

- A tracker calculating the updated EUIC rate is provided as Attachments 1-12.

(xi) a cost and benefit analysis showing that the electric utility infrastructure project is in the public interest.

- A cost and benefit analysis is included in the "Bemidji Customer Service Center Remodel Business Case" section of this filing.

b. Bemidji Customer Service Center Remodel Business Case

Otter Tail Power approaches the cost and benefit analysis for CSC remodel projects in a similar way to how it evaluates its Portfolio of ECO Programs. The primary cost effectiveness test in Minnesota for Energy Efficiency, Load Management, and Efficient Fuel Switching (EFS) is the Minnesota Cost Test (MCT) that was approved in a March 31, 2023, Department Decision. The MCT is the starting point for this analysis, as the costs and benefits from the remodel project extend beyond the project itself to the larger community and the State of Minnesota.

The business case and resulting cost and benefit analysis for the Customer Service Center remodel projects take a different approach to showing an overall benefit to the "public interest" than previously requested EUIC projects. While it is simple to put a dollar amount on the cost savings from switching from meter readers to AMI meters, it is not as easy to quantify the benefits energy efficiency offers to the Company, customers, the environment, and the state of Minnesota. Otter Tail Power's analysis takes on the effort of trying to quantify societal benefits that will not be realized as an operating cost reduction but are instead realized throughout the community in a variety of ways. The energy benefits calculated, while standard in all cost tests, are still based on the theory and assumptions of not producing a kilowatt hour, not a cost reduction that will be visible on customer bills. The MCT and Department resources utilized in this analysis are tools to help provide dollar amounts tied to benefits resulting from these projects but should not be interpreted as dollar value savings that will be experienced by the Company.

The MCT is an extension of the five standard cost tests to take a unique perspective of the impacts ECO programs have on the state of Minnesota.[4] As a part of the MCT development, the Department outlined several factors for utilities to include as a part of the inputs to be used in the MCT

[4] The five standard cost tests used in Energy Efficiency evaluation are the Total Resource Cost Test, Participant Cost Test, Utility Cost Test, Ratepayer Impact Test, and Societal Cost Test. These tests are designed to evaluate programs and projects from five different perspectives.

benefit/cost analysis. While the majority of the MCT inputs have been quantified or approved by the Department previously, there are some inputs that are still being explored and evaluated by the ECO Cost Effectiveness Advisory Committee, including economic impacts and other environmental impacts.

In line with the MCT and its ongoing development, Otter Tail Power includes six quantified benefit categories and the entire cost of the project in its analysis. The cost benefit analysis reflects the costs and benefits of the Bemidji project from 2025 through 2049, and results in a net benefit of $435,955.

Table 4:
Net Present Value: Bemidji CSC

[PROTECTED DATA BEGINS…

…PROTECTED DATA ENDS]

Energy Benefits

Energy Benefits are composed of Avoided Energy, Avoided Capacity, and Avoided Transmission and Distribution (T&D). These benefits are quantified utilizing DSMore evaluation software with the most recently approved inputs in Otter Tail Power's 2024-2026 ECO plan. These benefits are directly derived from the kWh and kW savings over the life of the energy efficiency measures being installed at the CSC that are discussed in Attachment 13a. The lifetime savings for the project are 883,303 kWh and 320 kW.[5] Attachment 13b outlines the annual benefits for Avoided Energy, Avoided Capacity, and Avoided T&D from 2025 to 2049.

Environmental Benefits

The Department has determined that Electric Utilities will account for the environmental cost values for Carbon Dioxide (CO_2), Nitrogen oxides (NO_x), Sulfur Dioxide (SO_2), and fine Particulate Matter ($PM_{2.5}$) as a part of the MCT.[6] Otter Tail Power's environmental benefits for the reduction of all four pollutants per kWh is $0.0306, this value was recently approved as a part of its September 2024 ECO Modification filing.[7] The environmental value is applied to each kWh saved over the lifetime of each individual energy efficiency measure. The annual quantified amount for environmental benefits for 2025-2049 can be found in Attachment 13b.

Economic Impact

Otter Tail Power believes that the magnitude of this project will impact the economic growth of the State of Minnesota in multiple ways. Energy efficiency projects and programs, on their own, have been proven to provide economic benefits to the communities in which they take place. In June 2020 CADMUS, on the behalf of the Department, conducted an "Economic Impacts of the 2013-2018 Conservation Improvement Program: Macroeconomic Impacts and Cost Effectiveness" study.[8] The study focused on the economic impact Conservation Improvement Plan (CIP) spending has on employment, labor force, increased output, increased gross domestic product (GDP), and disposable personal income. The analysis focused on all gas and electric

[5] While the lifetime of the insulation being implemented is 35 years, the analysis only covers 25 years from 2025 through 2049.
[6] Docket No. E,G999/CIP-23-46, March 31,2023, DOC Decision, Table 25: Environmental Cost Values for CO_2 (2017-2050) (2015 dollars per net short ton) and Table 26: Updated Environmental Cost Values for NO_X, SO_2, and $PM_{2.5}$, pages 97-98.
[7] Docket No. E017/CIP-23-94, November 7, 2024, DOC Decision, page 11.
[8] CADMUS, Economic Impacts of the 2013-2018 Conservation Improvement Program: Macroeconomic Impacts and Cost Effectiveness June 26, 2020.

utilities in Minnesota that provided energy efficiency programming and provided summary analytics based upon fuel type.

Table 5:
Economic Benefits by Fuel Type[9]

Statewide Benefits Created	Electricity	Natural Gas
Employment	32,100 (26 per $1 million)	14,600 (32 per $1 million)
Labor Force	34,300 (27 per $1 million)	14,200 (31 per $1 million)
Output	$7.7 billion ($6.11 per dollar)	$3.0 billion ($6.54 per dollar)
GDP/Value-Added	$3.6 billion ($2.88 per dollar)	$1.7 billion ($3.68 per dollar)
Disposable Personal Income	$3.6 billion ($2.86 per dollar)	$1.4 billion ($3.11 per dollar)

Understanding the economic impacts analysis was conducted using REMI software that Otter Tail Power does not have access to, and knowing that some of the impacts reflected in Table 4 are also reflected in other components of its own analysis, the Company applied a conservative approach by greatly discounting the benefits of economic impacts to $1.30 per dollar spent on the project, and accounted for these benefits for only the first ten years of the project. The $1.30 of benefits represents approximately one-third of the average benefit per dollar of the Output ($6.11), GDP ($2.88), and Disposable Personal Income ($2.86) categories. In Otter Tail Power's analysis, these economic benefits represent the impacts on the Minnesota labor market with project costs being invested into local consulting, engineering, and construction firms. Additionally, there are economic benefits to bringing a large project and additional labor to a smaller community, as it will produce an increase in personal spending in and around the Bemidji area. These increased economic community impacts are also included in the $1.30 economic value.

Otter Tail Power sees economic value within its own operations with the ability to increase the number of Bemidji-based employees who will fill the newly available workspaces within its CSC. Given that employees spend a large portion of their days within the office, Otter Tail Power anticipates seeing economic value in increased productivity from working in a more comfortable, energy efficient building with improved lighting and additional space.

The annual quantified amount for economic impacts for 2025-2034 can be found in Attachment 13b.

[9] Economic Impacts, page 26.

Non-Energy Benefits[10]

Non-Energy Benefits cover a wide range of participant benefits from energy efficiency projects that are not easily quantifiable. The two most common quantifiers for non-energy benefits in other states include an energy adder where value is added on a per kWh basis.[11,12] Non-energy benefits cover a wide range of benefits based on increased health and comfort from an improved and energy efficient environment. Enhanced office buildings can lead to increased lighting quality, noise reduction, and thermal comfort. Office improvements can also lead to increased employee satisfaction, reduced complaints, and reduced missed workdays. Aside from comfort benefits, upgraded energy efficient buildings can lead to health benefits because of improved air quality. The Midwest Energy Efficiency Alliance reports that poor indoor air quality can lead to headaches, sinus infections, fatigue, allergies, colds, asthma, and poor mental health.[13] Reduction in these symptoms may also lead to a reduction of sick time and missed workdays.

While non-energy benefits are not the driving factor for energy efficiency projects, the health and comfort benefits to Otter Tail Power employees should not be excluded from the analysis when looking at the overall impact of the Bemidji CSC remodel project. This analysis assumes a five percent adder to account for non-energy benefits. The adder is applied to the monetary value calculated for avoided energy, capacity, and T&D on an annual basis. The annual quantified amount for non-energy benefits for 2025-2049 can be found in Attachment 13b.

Project Costs

The costs included in this cost and benefit analysis include all project costs from the start of design to the end of construction. While this is a deviation from what is typically included in the MCT, including all project costs is the most reasonable approach for this analysis.[14] The projects costs are all assumed to take place in 2025, and can be seen in attachment 13b.

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[10] The MCT Social Impacts category includes "other environmental" benefits, for clarity, Otter Tail Power is using the more common phrase of non-energy benefits in this filing.
[11] Efficiency Vermont: Analaysis of State Approaches to Cost-Effectiveness Testing.pdf
[12] Docket No. New Jersey Board of Public Utilities, Docket No. August 5, 2020, ACEEE Reply Comments: New Jersey Cost Test Proposal.
[13] Midwest Energy Efficiency Alliance: Health Benefits of Energy Efficiency: How Saving Energy Saves Lives.
[14] The MCT typically includes the Utility administration and implementation costs as well as the rebate amounts received by participants, it does not include the participant costs or incremental costs of the project or measure.

5. Milbank Customer Service Building Remodel

The Company operates with staff located in CSCs throughout Minnesota, North Dakota, and South Dakota. The Company's single South Dakota Customer Service facility is located in Milbank, within ten miles of the Minnesota border. The facility provides space for line and customer service operations that support Otter Tail Power's South Dakota and southern Minnesota customers. The Milbank facility contains vehicle garage space, general office space, and a conference room.

In March 2024, the Company constructed a new line and service center in Milbank, South Dakota to accommodate growing needs for line and service operations. This purchase provided space for the line and service vehicles to transfer from the CSC garage space to the new building.

The Company proposes to remodel the office area and garage space in the existing Milbank CSC to alleviate office space constraints and provide a more operationally and energy efficient facility. In years past, 10-12 office employees were typically located in the Milbank CSC at any given time. As discussed earlier, the introduction of remote work capabilities now allows office roles that were previously mandated to specific locations to be done remotely from other Company locations. There are currently 21 Otter Tail employees assigned to the Milbank CSC; however, space limitations allow for only 16 employees at this location. This results in some employees setting up offices in the community room and other employees working remotely.

The Milbank CSC was built in 1986 and requires several updates. Existing bathrooms have insufficient ventilation, peeling wallpaper, and dated tile. There are no sprinklers in the building at this time, the installation of which would limit potential loss in the case of a fire. The remodel project at this location will also include asbestos abatement, HVAC system improvements to enhance air quality, and the addition of a mothers' room, which the Company is required to provide by law.

The following is a list of items included in the planned remodel project for the Milbank CSC to address the issues discussed above:

- Conversion of approximately 60 percent of garage space into office space to allow for 27 employees onsite.
- Asbestos abatement.
- Electrical system improvements.
- HVAC system improvements.

- Installation of sprinkler system.
- Area for private phone calls.
- Installation of a sound masking system.
- Customer Service Representative group will be together in one area of the office.
- Large windows for natural light.
- Addition of a dedicated mother's room.

The Milbank CSC Remodel is necessary to improve energy efficiency, allow workable space for all employees, and to comply with current laws. The cost to build a new office building of similar size is significantly more expensive, at approximately $5.5 million.

The required information for EUIC rider recovery eligibility determination is provided below.

a. Proposed Recovery Mechanism

Pursuant of Minn. Stat. § 216B.1636, Otter Tail Power submits this request to recover costs related to its Milbank CSC Remodel Project in the EUIC Recovery Rider.

Minn. Stat. § 216B.1636, subd. 2 (b) (2) has eleven filing requirements that must be met. Each of those filing requirements is addressed below.

(i) the location, description, and costs associated with the project;

Location

404 2nd St
Milbank, SD 57252

Description

The existing CSC in Milbank consists of 2,880 square feet of garage for line and service trucks and other Company vehicles and 5,420 square feet of office and conference room space.

The proposed space will include 1,000 square feet of garage space, 937 square feet of conference room space, and 7,300 square feet of general office space.

Costs

The Company has budgeted $3.3 million for the Milbank CSC remodel project.

(ii) *evidence that the electric utility infrastructure project will conserve energy or use energy more efficiently than similar facilities currently used by the electric utility;*

The Milbank CSC remodel design is in accordance with the 2021 International Energy Conservation Code and incorporates a number of energy efficient features, including:

- Clear insulated glazing windows throughout the building reducing heat transfer and lowering HVAC costs.
- Skylights for natural lighting reducing lighting systems energy usage.
- ECMs on the centrifugal roof ventilator fan that adjust the speed of the fans to match the demand, reducing energy usage.
- High efficiency air source heat pumps.
- Upgrade to direct digital controls on HVAC systems to further optimize performance.
- New RTU with an EER of 12.5 exceeding Energy Star criteria. This unit operates with a variable speed drive on the supply and exhaust fans and an economizer for free cooling when the outside air conditions allow.
- Energy recovery unit with variable speed drives on the supply and exhaust fans; cooling coil has EER of 12.5, which exceeds code baseline. This unit recovers heat and moisture from exhaust air with a variable speed drive on the exhaust fan to adjust the speed to match ventilation demand.
- Upgrade all fluorescent lighting to high efficiency LED fixtures and occupancy sensors.

The Company extrapolated savings from the Bemidji CSC savings analysis to estimate kWh and kW savings from the Milbank project as follows:

Table 6:

Milbank CSC Energy Efficiency Comparison

Milbank CSC Energy Efficiency Comparison			
End Use	**comparable to Bemidji CSC baselines**	**2024 Construction Documents**	**Annual Savings**
Insulation	Roof: **R20.83**	Roof: **R31.25**	881 kWh
Interior Lighting	Original CFLs were replaced with equivalent LED fixtures. **The 2009 IECC code requirement was 1 W/SF**	A lighting fixture analysis was conducted on the provided CD set - For a facility size of 8,261 SF, the total lighting wattage is 5,998.5W, or **0.726 W/SF**. Summer cooling savings will outweigh winter heating losses.	9,572 kWh
Exterior Lighting	2009 IECC base site allowance **600W**	Total exterior lighting from CD set **576 W**	106.5 kWh
Lighting Controls	controlled with manual switches.	Occupancy sensors to be installed.	5,583 kWh
Mechanical	Same as Bemidji CSC baseline efficiencies consistent with 2009 IECC code requirements.	Savings from Bemidji CSC mechanical systems were scaled by **0.837** to reflect the difference in building size.	22,492 kWh
		Total Energy Savings	38,634.5 kWh

Otter Tail Power prepared an analysis for the Milbank CSC Remodel. The Company modeled this analysis after the Bemidji CSC Remodel analysis from Michael's Energy and provides this as Attachment 14a.

(iii) the proposed schedule for implementation;

- The remodel of the Milbank CSC is projected to start in October 2025 and is expected to be completed by April 2026.

(iv) a description of the costs, and salvage value, if any, associated with the existing infrastructure replaced or modified as a result of the project;

- Otter Tail Power does not book any salvage value associated with company buildings. The buildings have assessed value for property tax purposes based on where they are located. The current assessed value for the Milbank CSC is $302,403.

(v) the proposed rate design and an explanation of why the proposed rate design is in the public interest;

- Otter Tail Power proposes to include the Milbank CSC Remodel in the EUIC per meter charge, with the exception of controlled service customers, based on the weighted average cost of the meters per class. Otter Tail Power proposes no allocation of the Milbank CSC Remodel costs to controlled service meters because customers on controlled services are paying their share of the remodel costs through the meter charge applied to their base rate electric service meters. Charges for the EUIC recovery mechanism are included in the Resource Adjustment line of customer bills.

(vi) the magnitude and timing of any known future electric utility projects that the utility may seek to recover under this section;

- Otter Tail Power provides a summary of upcoming projects in Table 2 on page 14 of this Petition.

(vii) the magnitude of EUIC in relation to the electric utility's base revenue as approved by the commission in the electric utility's most recent general rate case, exclusive of fuel cost adjustments;

- Otter Tail Power's base annual revenue as approved in the Company's last general rate case is $209.0 million. When the remodels of the Bemidji and Milbank CSCs are completed, the total annual EUIC tracker revenue requirement for all EUIC projects is estimated to be approximately $2.1 million, with $156 thousand attributable to the Milbank CSC remodel project.

(viii) the magnitude of EUIC in relation to the electric utility's capital expenditures since the most recent general rate case;

- A summary of the Company's annual capital additions, retirements, and net additions from 2021-2024 is provided in Table 3 on page 15 of this Petition.

The Milbank CSC Remodel project will result in estimated total capital additions of about $3.3 million (OTP Total).

(ix) the amount of time since the utility last filed a general rate case and the utility's reason for seeking recovery outside of a general rate case;

- Otter Tail Power last filed a general rate case on November 2, 2020. The projects included in this filing were not included in the 2021 test year in the 2020-2021 rate case because these projects were neither contemplated, completed nor in-service prior to the end of the case, in 2021.

(x) documentation supporting the calculation of the EUIC;

- A tracker calculating the updated EUIC rate is provided as Attachments 1-12.

(xi) a cost and benefit analysis showing that the electric utility infrastructure project is in the public interest.

- A cost and benefit analysis is included in the "Milbank Customer Service Center Remodel Business Case" section of this filing.

b. Milbank Customer Service Center Remodel Business Case

Otter Tail Power performed the same analysis for the Milbank CSC remodel project that it did for the Bemidji remodel project. All inputs and assumptions are the same, apart from the project costs and the kWh and kW savings, which are specific to Milbank. A detailed discussion of the methodology and inputs can be found under the Bemidji remodel project. This section will focus on the results specific to Milbank and provide support for using the same assumptions as the Bemidji project.

In line with the MCT and its ongoing development, Otter Tail Power includes six quantified benefit categories and the entire cost of the project. The cost benefit analysis looked at the costs and benefits of the Milbank project from 2025 through 2049, and results in the net benefit of $427,132.[15]

[15] The discount rate used is 3.3 percent, as determined by the DOC for the MCT.

Table 7:
Net Present Value: Milbank CSC

[PROTECTED DATA BEGINS…

…PROTECTED DATA ENDS]

Energy Benefits

The benefits for Avoided Energy, Avoided Capacity, and Avoided T&D are based upon the Milbank lifetime savings of 632,280 kWh and 245 kW. The inputs for these benefits are based upon Otter Tail Power's system as a whole and is not state specific, so an adjustment to the inputs used for the Bemidji analysis was not necessary. Attachment 14b outlines the annual benefits for Avoided Energy, Avoided Capacity, and Avoided T&D from 2025 to 2049.

Environmental Benefits

The Company utilized the same $0.0306 value to quantify environmental benefits for the Milbank project that it is used for Bemidji.

Attachment 14b outlines the annual environmental benefits from 2025 to 2049.

Economic Impact

While the economic impact value used for the Bemidji CSC is derived from a Minnesota specific study, and the Company recognizes that economic impacts will vary between the states it serves, Otter Tail Power continues to use the same $1.30 economic value per dollar spent for the Milbank Customer Service project. While the study might be based upon a Minnesota specific model, the results allow for the conclusion that economic growth is driven in any community or greater geographic region in which large energy efficiency programs and projects are being invested. The Milbank project is a continuation of the cost-effective portfolio of energy efficiency programs the Company has provided in South Dakota for several years. While the "public interest" for approval is not defined, given the geographical location of Milbank, not only will the economic impact be a positive one for employees and customers in Milbank and the surrounding area, but it will most likely spillover into the greater region, including Minnesota.

In order to present a cohesive analysis between projects and given the assumptions that Otter Tail Power made in reducing the economic value for the Bemidji project, the Company is comfortable making the same economic value assumption for the Milbank project. However, acknowledging the fact that the cost centers reside in different states and the population differential between the two towns, Otter Tail Power ran an analysis to find at which economic dollar point the project would no longer be cost effective. Given all the same assumptions, a value less than $1.15 economic value per dollar spent, the project would no longer result in net benefits.

The annual quantified amount for economic impacts for 2025-2035 can be found in Attachment 14b.

Non-Energy Benefits

The Company used the same five percent adder to account for non-energy benefits. There is not a significant difference between those benefits that will be realized between Bemidji and Milbank employees. The annual quantified amount for non-energy benefits for 2025-2049 can be found in Attachment 14b.

Project Costs

The costs included in this cost and benefit analysis includes all project costs from the start of design to the end of construction. The projects costs are assumed to take place in 2025 and 2026 and can be seen in attachment 14b.

c. EUIC Recovery Methodology

Attachments 1-4 of this Petition are, respectively, the Projected Revenue Summary, Revenue Requirement Summary, Rate Design, and Tracker Summary used for Otter Tail Power's proposed EUIC rate update. Attachments 5-7, 9, and 10 provide the revenue requirement calculations for the AMI, OMS, DR, Bemidji CSC Remodel, and Milbank CSC Remodel projects discussed in this filing. Otter Tail Power continues to propose using a per meter charge allocated to all customers based on the weighted average cost of the AMI meters per class to recover costs for the AMI, OMS, and DR between general rate cases. Otter Tail Power proposes to use a per meter charge allocated to all customer classes, with the exception of the controlled service classes, based on the weighted average cost of the

AMI meters per class. Customers enrolled in controlled service rates are paying their share of the remodel costs through the meter charge applied to their base rate electric service meters. The charge calculated for the EUIC recovery mechanism is shown on the Resource Adjustment line of customer bills.

Specifically, the calculations of the revenue requirement in this Petition include the following:

- *Rate base section*. This section provides details on the amount of plant in service, accumulated depreciation (if applicable), construction work in progress (CWIP), accumulated deferred taxes including the effect of proration on Federal amounts, and a 13-month average rate base calculation.
- *Expense section*. The expenses applicable to a project are listed here and include operating costs, property taxes, depreciation, and income taxes.
- *Revenue requirements section*. This section shows the components of the revenue requirements, including expenses and return on rate base.
- *Return on investment (cost of capital)*. The return on investment utilizes the return on equity approved in Otter Tail Power's Rate Case.
- *Depreciation expense*. Depreciation expense is calculated using the Company's current estimated depreciation rates.
- *Property taxes*. The property tax calculation is based on Otter Tail Power's composite tax rate for the jurisdictions in which the facilities are located and is calculated in accordance with the procedures specified by the states.
- *Operation and maintenance expense*. Otter Tail Power will track O&M costs specifically related to each project in Attachments 5-7.
- *Operation and maintenance savings*. Otter Tail Power will track O&M savings specifically related to the AMI project in Attachment 8. Annual O&M savings related to AMI implementation primarily include costs related to manual meter reading, of which a certain portion was completed by third party contract services and a certain portion conducted internally by service reps across Otter Tail Power's system.
- *Proration of Federal Accumulated Deferred Income Taxes (ADIT)*. Once the project is in service, Otter Tail Power will include proration

of Federal ADIT, as shown in Attachment 12. The methodology used for proration of Federal ADIT is in adherence to United States Internal Revenue Service (IRS) rules related to proration, including recently issued IRS private letter rulings. Otter Tail Power interprets this to include proration of Federal ADIT for the (forward-looking) recovery period and, in future filings, preserving the effect of the application of the proration methodology for the true-up period. This calculation methodology is necessary to comply with Section 1.167(l)-l(h)(6)(ii) of the IRS regulations and to avoid a tax normalization violation.[16] In annual Updates, Otter Tail Power will include a workpaper with the details of the calculation of the proration of Federal ADIT for the recovery period and whether it results in an increase or decrease to the revenue requirement.

- *Jurisdictional Allocation Factors*. Jurisdictional allocators are used to allocate system cost among jurisdictions. Otter Tail Power utilizes the Minnesota jurisdictional allocations approved by the Commission in its last Rate Case, Docket No. E017/GR-20-719.

VI. GRID MODERNIZATION AND OTTER TAIL POWER'S INTEGRATED DISTRIBUTION PLAN

Otter Tail Power sees the AMI Project as a contributing factor in the Commission's Planning Objectives for integrated distribution plans. The change to AMI will impact several different areas of Otter Tail Power and, working together, AMI will allow for the growth of potential future technologies in:

- Distribution automation
- Outage detection and management
- Conservation voltage reduction
- Load management replacement
- Distribution Supervisory Control and Data Acquisition (SCADA)

The AMI project itself will allow for new opportunities and choices for customers, including the development of new rate options and near real-time data access. AMI will reduce meter related costs (including meter reading) as well as the risk of safety incidents that are related to meter reading.

[16] *See* Treas. Reg. SS 1.167(l)-1(h)(6)(ii).

AMI, together with the OMS project, will provide improved efficiencies for field personnel and outage assessment and restoration. The Company will be able to identify outages more quickly, deploy the crews more efficiently, reduce restoration times, and customers will have the capability to receive improved outage notifications. Customers will have access to estimated restoration times, progress updates, and predicted outages.

The OMS project enables the capability to "track" each customer on the delivery system, identifying the connection from the meter to the delivery transformer, to a feeder, and to the distribution substation. This data allows for better outage response when the outage information is sent to the OMS. The data collected will also be used by Otter Tail Power engineers to improve asset health programs including underground cable replacement and overhead line replacement. The connectivity model will be used by the AMI technology and will also be available for future tools such as Voltage and Reactive Power (Volt/Var) optimization, DR controls, and automated system reconfiguration.

VII. PERFORMANCE METRICS

Performance metrics for the AMI and OMS projects were agreed upon and included in Docket No. E-017/M-21-382,[17] and performance metrics for the DR project were agreed upon and included in Docket No. E-017/M-24-186.[18]

The full list of performance metrics can be found in Attachment 15.

VIII. RATE DESIGN

Otter Tail Power proposes to continue to use a monthly per meter charge rate design for the EUIC rider. The proposed calculation will determine the average cost per meter for materials and labor for each customer class. The weighted average cost per customer class is then used to determine the percentage of project costs to be charged to each class. The weighted average cost per class, divided by the average annual number of meters per class, equals the monthly per meter charge.

IX. REVENUE REQUIREMENTS, RATE APPLICATION AND IMPACT

Otter Tail Power proposes that the EUIC charge for the AMI, OMS, and DR projects continue to be applicable to electric service meters under all of Otter Tail Power's retail rate schedules, as defined in Rate Schedule 13.11, in Attachment 16. Otter Tail Power

[17] Docket No. E-017/M-21-382 Final Order August 4, 2022, Ordering Point 10.
[18] Docket No. E-017/M-24-186, Order January 8, 2025, Ordering Point 2.

also proposes that the EUIC charge for the Company's CSC Remodel Projects be applicable to electric service meters under all of Otter Tail Power's retail rate schedules, excluding meters used for controlled services. The charges will be included as part of the Resource Adjustment line on customer bills. A residential customer will see a decrease in their monthly bill of $1.18 per meter. A Large General Service commercial customer will see a $65.08 per meter decrease on its monthly bill.

The table below provides a summary of the rates calculated in this filing.

Table 8:
Per Meter Charge Rate Design Summary

	AMI, OMS, & DR	CSC Remodel Projects	Total Charge
Residential	$1.03	$0.26	$1.29
LGS - Primary	$56.72	$14.08	$70.80

In Addition, the Company is taking this opportunity to replace the name and title of Otter Tail Power retiree Bruce G. Gerhardson with the name and title of the Manager of Regulation & Retail Energy Solutions, Stuart D. Tommerdahl, in the footer on page 2 of the Rate Schedule.

X. CUSTOMER NOTIFICATION AND BILLING

Otter Tail Power's proposed notice to customers is provided as Attachment 17 and will be included with customer bills in the month the new EUIC rates are implemented. The Company will work with the Consumer Affairs Office regarding our proposed customer notice.

XI. CONCLUSION

Otter Tail Power respectfully requests that the Commission approve recovery of the new Bemidji and Milbank CSC Remodel projects, the updated costs associated with all projects in the rider, and the EUIC annual rate adjustments as set forth in this Annual Update filing, to be in effect for usage on and after January 1, 2026.

Dated: April 14, 2025

Respectfully submitted,

OTTER TAIL POWER COMPANY

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OTTER TAIL POWER COMPANY
ELECTRIC UTILITY INFRASTRUCTURE COST RECOVERY RIDER
FILING ATTACHMENTS

Attachment 1	Projection of Revenue
Attachment 2	Summary of Revenue Requirements
Attachment 3	Class Allocation and Rate Design
Attachment 4	Electric Utility Infrastructure Cost Recovery Tracker
Attachment 5	Advanced Metering Infrastructure
Attachment 6	Outage Management System
Attachment 7	Demand Response
Attachment 8	AMI Cost Savings Adjustment
Attachment 9	Bemidji CSC Remodel
Attachment 10	Milbank CSC Remodel
Attachment 11	Federal ADIT Proration Projection
Attachment 12	Federal ADIT Proration Preservation
Attachment 13a	Bemidji CSC Remodel Analysis
Attachment 13b	Bemidji CSC Cost and Benefit Analysis
Attachment 14a	Milbank CSC Remodel Analysis
Attachment 14b	Milbank CSC Cost and Benefit Analysis
Attachment 15	Otter Tail Required Metrics
Attachment 16	Electric Utility Infrastructure Cost Recovery Rider, Electric Rate Schedule 13.11
Attachment 17	Notice to Customers
Attachment 18	Excel version of Electric Utility Infrastructure Cost Recovery Tracker

Projected Revenue for January 2026 to December 2026 Recovery Period

Line No.	Class	Meters (Yearly Count)	Monthly Rate per Unit	Amount
1	Residential	655,667	$1.29	$844,407
2				
3	Residential RDC	26,101	$3.01	$78,536
4				
5	Farm	17,545	$3.94	$69,134
6				
7	Small General Service	111,808	$2.07	$231,855
8				
9	General Service	24,724	$8.17	$201,985
10				
11	General Service TOU	1,476	$13.23	$19,532
12				
13	Large General Service 602	195	$70.80	$13,806
14				
15	Large General Service 603	5,043	$12.82	$64,645
16				
17	Irrigation	3,686	$6.94	$25,597
18				
19	Outdoor Lighting	2,769	$1.39	$3,837
20				
21	OPA	5,904	$3.44	$20,338
22				
23	CS - Deferred Load	106,912	$2.41	$257,712
24				
25	CS - Interruptible Small Duel Fuel	83,483	$2.45	$204,891
26				
27	CS - Interruptible Large Duel Fuel	4,124	$11.13	$45,906
28				
29	CS - Off Peak	14,467	$3.12	$45,087
30				
31	Total revenue			$2,127,268

Summary of Revenue Requirements

Line No.	Revenue Requirements	January 2026 - December 2026
1	Advanced Metering Infrastructure	4,569,370
2	Outage Management / GIS Updates	575,266
3	Demand Response System	645,596
4	Bemidji CSC Remodel	157,171
5	Milbank CSC Remodel	155,800
6	O&M Savings due to AMI Implementation	(2,819,023)
7	True-Up	(1,156,911)
8	Net Revenue Requirement	$2,127,268

Class Allocation and Current Rate Design

Line No.		January 2026 - December 2026	Percent of Total	Annual Meter Count	Per Meter Charge	Revenue Requirements by Class
1	Total 2025 Minnesota Revenue Requirements	$2,127,268				
2						
3	Residential		39.69%	655,667	$1.29	$844,407
4	Residential RDC		3.69%	26,101	$3.01	$78,536
5	Farm		3.25%	17,545	$3.94	$69,134
6	Small General Service		10.90%	111,808	$2.07	$231,855
7	General Service		9.50%	24,724	$8.17	$201,985
8	General Service TOU		0.92%	1,476	$13.23	$19,532
9	Large General Service - Primary		0.65%	195	$70.80	$13,806
10	Large General Service - Secondary		3.04%	5,043	$12.82	$64,645
11	Irrigation		1.20%	3,686	$6.94	$25,597
12	Outdoor Lighting		0.18%	2,769	$1.39	$3,837
13	OPA		0.96%	5,904	$3.44	$20,338
14	Controlled Service - Deferred Load		12.11%	106,912	$2.41	$257,712
15	Controlled Service - Interruptible Small Duel Fuel		9.63%	83,483	$2.45	$204,891
16	Controlled Service - Interruptible Large Duel Fuel		2.16%	4,124	$11.13	$45,906
17	Controlled Service - Off Peak		2.12%	14,467	$3.12	$45,087
18	Total Minnesota Revenue Requirements		100.00%	1,063,904		$2,127,268

Rate Impact

	Meter Count (Month)	Current Rate ($ per meter)	Proposed Rate ($ per meter)	Monthly Impact (Increase or decrease from prior rate)
Residential	54,639	$2.47	$1.29	-$1.18
Residential RDC	2,175	$5.77	$3.01	-$2.77
Farm	1,462	$7.56	$3.94	-$3.62
Small General Service	9,317	$3.98	$2.07	-$1.91
General Service	2,060	$15.68	$8.17	-$7.51
General Service TOU	123	$25.40	$13.23	-$12.16
Large General Service - Primary	16	$135.88	$70.80	-$65.08
Large General Service - Secondary	420	$24.60	$12.82	-$11.78
Irrigation	307	$13.33	$6.94	-$6.38
Outdoor Lighting	231	$2.66	$1.39	-$1.27
OPA	492	$6.61	$3.44	-$3.17
Controlled Service - Deferred Load	8,909	$5.77	$2.41	-$3.36
Controlled Service - Interruptible Small Duel Fuel	6,957	$5.88	$2.45	-$3.43
Controlled Service - Interruptible Large Duel Fuel	344	$26.67	$11.13	-$15.54
Controlled Service - Off Peak	1,206	$7.47	$3.12	-$4.35

OTTER TAIL POWER COMPANY
ELECTRIC UTILITY INFRASTRUCTURE
COST RECOVERY RIDER
MINNESOTA

Docket No. E017/M-25-
Attachment 4

Tracker Summary

Line No.		2025 January Actual	2025 February Actual	2025 March Projected	2025 April Projected	2025 May Projected	2025 June Projected	2025 July Projected	2025 August Projected	2025 September Projected	2025 October Projected	2025 November Projected	2025 December Projected	2025 YE Projected
	Revenue Requirements													
1	Advanced Metering Infrastructure	315,206	313,277	351,760	354,647	361,595	365,784	370,599	375,049	376,354	377,197	378,039	378,881	4,318,387
2	Outage Management System	70,204	(1,761)	50,313	50,313	50,313	50,313	50,313	50,313	50,313	50,313	50,313	50,313	571,574
3	Demand Response System	4,837	4,837	6,843	6,843	6,843	6,843	6,841	6,840	6,839	6,826	21,222	21,230	106,845
4	Bemidji CSC Remodel													
5	Milbank CSC Remodel													
6	**Total Revenue Requirements**	390,248	316,354	408,916	411,803	418,751	422,940	427,754	432,202	433,506	434,336	449,574	450,423	4,996,806
7														
8	**ADIT Preservation of Proration**													
9														
10	**O&M Savings due to AMI Implementation**	(90,722)	(128,963)	(176,189)	(176,189)	(176,189)	(176,189)	(176,189)	(176,189)	(176,189)	(176,189)	(176,189)	(176,189)	(1,981,574)
11														
12	**Net Revenue Requirement**	299,526	187,391	232,727	235,614	242,562	246,751	251,565	256,013	257,317	258,147	273,385	274,234	3,015,232
13														
14	Billed (forecast meter x adj factor)	230,106	239,824	369,538	369,538	369,538	369,538	369,538	369,538	369,538	369,538	369,538	369,538	4,165,312
15														
16	Monthly Revenue Difference	69,420	(52,433)	(136,811)	(133,925)	(126,976)	(122,787)	(117,973)	(113,525)	(112,221)	(111,391)	(96,153)	(95,304)	(1,150,080)
17	Carrying Charge	-	-	-	-	-	-	-	-	-	-	-	-	-
18	Life-to-Date Revenue Requirement (Cumulative Difference)	62,589	10,156	(126,656)	(260,580)	(387,557)	(510,344)	(628,317)	(741,842)	(854,064)	(965,455)	(1,061,608)	(1,156,911)	(1,156,911)
19														
20														
21	Carrying Charge Calculation													
22	Cumulative Carrying Charge	-	-	-	-	-	-	-	-	-	-	-	-	
23	Carrying cost													
24														
25														
26	Forecasted Meter Count	88,659	88,659	88,659	88,659	88,659	88,659	88,659	88,659	88,659	88,659	88,659	88,659	1,063,904

SUMMARY	Jan 2025 - Dec 2025
Revenue requirements	$4,036,996
Carrying Charge	0
True-up	77,494
Total requirements	$4,114,490
Jan 2025 - Dec 2025 projected meter count	987,138
Average Rate	$4.16810

Tracker Summary

Line No.		2026 January Projected	2026 February Projected	2026 March Projected	2026 April Projected	2026 May Projected	2026 June Projected	2026 July Projected	2026 August Projected	2026 September Projected	2026 October Projected	2026 November Projected	2026 December Projected	2026 YE Projected
	Revenue Requirements													
1	Advanced Metering Infrastructure	381,420	381,312	381,202	381,089	380,974	380,856	380,736	380,613	380,488	380,359	380,227	380,093	4,569,370
2	Outage Management System	47,939	47,939	47,939	47,939	47,939	47,939	47,939	47,939	47,939	47,939	47,939	47,939	575,266
3	Demand Response System	48,344	48,349	46,641	46,689	46,766	46,806	46,794	61,270	62,166	63,044	63,924	64,805	645,596
4	Bemidji CSC Remodel	13,098	13,098	13,098	13,098	13,098	13,098	13,098	13,098	13,098	13,098	13,098	13,098	157,171
5	Milbank CSC Remodel	11,248	11,248	11,248	11,248	13,851	13,851	13,851	13,851	13,851	13,851	13,851	13,851	155,800
6	**Total Revenue Requirements**	502,048	501,945	500,127	500,062	502,627	502,550	502,417	516,771	517,540	518,290	519,039	519,785	6,103,202
7														
8	**ADIT Preservation of Proration**													
9														
10	**O&M Savings due to AMI Implementation**	(234,919)	(234,919)	(234,919)	(234,919)	(234,919)	(234,919)	(234,919)	(234,919)	(234,919)	(234,919)	(234,919)	(234,919)	(2,819,023)
11														
12	**Net Revenue Requirement**	267,129	267,026	265,209	265,144	267,708	267,632	267,499	281,852	282,622	283,372	284,120	284,866	3,284,179
13														
14	Billed (forecast meter x adj factor)	177,272	177,272	177,272	177,272	177,272	177,272	177,272	177,272	177,272	177,272	177,272	177,272	2,127,268
15														
16	Monthly Revenue Difference	89,857	89,754	87,936	87,871	90,436	90,359	90,226	104,580	105,350	106,100	106,848	107,594	1,156,911
17	Carrying Charge	-	-	-	-	-	-	-	-	-	-	-	-	-
18	Life-to-Date Revenue Requirement (Cumulative Difference)	(1,067,054)	(977,300)	(889,364)	(801,493)	(711,057)	(620,697)	(530,471)	(425,891)	(320,541)	(214,442)	(107,594)	(0)	(0)
19														
20														
21	Carrying Charge Calculation													
22	Cumulative Carrying Charge	-	-	-	-	-	-	-	-	-	-	-	-	
23	Carrying cost													
24														
25														
26	Forecasted Meter Count	88,659	88,659	88,659	88,659	88,659	88,659	88,659	88,659	88,659	88,659	88,659	88,659	1,063,904

SUMMARY	**Jan 2026 - Dec 2026**
Revenue requirements	$3,284,179
Carrying Charge	0
True-up	(1,156,911)
Total requirements	$2,127,268
Jan 2026 - Dec 2026 projected meter count	1,063,904
Average Rate	$1.99949

Advanced Metering Infrastructure

Line No.		2025 Actual January	2025 Actual February	2025 Projected March	2025 Projected April	2025 Projected May	2025 Projected June	2025 Projected July	2025 Projected August	2025 Projected September	2025 Projected October	2025 Projected November	2025 Projected December	2025 Projected Total
	RATE BASE													
1	Plant Balance	39,496,551	39,658,771	40,580,978	42,261,226	42,988,652	43,913,338	45,518,004	45,957,779	46,338,207	46,718,635	47,099,063	47,479,490	47,479,490
2	Accumulated Depreciation	(2,524,312)	(2,800,518)	(3,079,449)	(3,364,274)	(3,663,759)	(3,971,913)	(4,290,611)	(4,619,027)	(4,950,477)	(5,283,973)	(5,619,514)	(5,957,101)	(5,957,101)
3	Net Plant in Service	36,972,238	36,858,253	37,501,529	38,896,952	39,324,893	39,941,425	41,227,394	41,338,753	41,387,730	41,434,662	41,479,548	41,522,389	41,522,389
4	CWIP	0	0	0	0	0	0	0	0	0	0	0	0	0
5	ADIT - NOL DTA													
6	Reversal of ADIT - NOL DTA													
7	Reversal of ADIT - NOL DTA - No Proration													
8	ADIT Proration Factors	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
9	ADIT - Federal & State Depreciation	(725,139)	(812,333)	(898,743)	(983,459)	(1,063,961)	(1,141,972)	(1,216,952)	(1,289,140)	(1,360,455)	(1,431,182)	(1,501,321)	(1,570,872)	(1,570,872)
10	Accumulated Deferred Income Taxes Federal & State - No Proration	(725,139)	(812,333)	(898,743)	(983,459)	(1,063,961)	(1,141,972)	(1,216,952)	(1,289,140)	(1,360,455)	(1,431,182)	(1,501,321)	(1,570,872)	(1,570,872)
11	Ending rate base	36,247,099	36,045,920	36,602,786	37,913,493	38,260,931	38,799,453	40,010,441	40,049,613	40,027,276	40,003,480	39,978,228	39,951,517	39,951,517
12														
13	Average rate base	3,205,833	3,205,833	3,205,833	3,205,833	3,205,833	3,205,833	3,205,833	3,205,833	3,205,833	3,205,833	3,205,833	3,205,833	38,469,998
14														
15	Return on Rate Base	230,059	230,059	230,059	230,059	230,059	230,059	230,059	230,059	230,059	230,059	230,059	230,059	2,760,703
16														
17	Available for return (equity portion of rate base)	159,554	159,554	159,554	159,554	159,554	159,554	159,554	159,554	159,554	159,554	159,554	159,554	1,914,652
18														
19	***EXPENSES***													
20	*O&M and Depreciation*													
21	Operating Costs	82,675	75,029	155,139	155,139	155,139	155,139	155,139	155,139	155,139	155,139	155,139	155,139	1,709,090
22	Property Tax	27,342	27,342	27,342	27,342	27,342	27,342	27,342	27,342	27,342	27,342	27,342	27,342	328,102
23	Book Depreciation	272,707	276,206	278,931	284,825	299,485	308,154	318,698	328,416	331,450	333,496	335,541	337,587	3,705,496
24	Total O&M and Depreciation Expense	382,723	378,577	461,411	467,305	481,965	490,634	501,178	510,896	513,931	515,976	518,022	520,067	5,742,687
25														
26	Income before Taxes													
27	Available for return (from above)	159,554	159,554	159,554	159,554	159,554	159,554	159,554	159,554	159,554	159,554	159,554	159,554	1,914,652
28	Taxable Income (grossed up)	223,911	223,911	223,911	223,911	223,911	223,911	223,911	223,911	223,911	223,911	223,911	223,911	2,686,929
29														
30	Income Taxes													
31	Current Income Tax	(23,843)	(22,837)	(22,054)	(20,360)	(16,146)	(13,654)	(10,624)	(7,831)	(6,959)	(6,371)	(5,783)	(5,195)	(161,654)
32	Deferred Income Tax	88,199	87,193	86,410	84,716	80,502	78,011	74,980	72,187	71,315	70,727	70,139	69,551	933,931
33	Total Income Tax Expense	64,356	64,356	64,356	64,356	64,356	64,356	64,356	64,356	64,356	64,356	64,356	64,356	772,277
34														
35														
36	***REVENUE REQUIRMENTS***													
37	Expenses	447,080	442,933	525,767	531,662	546,322	554,991	565,535	575,253	578,287	580,333	582,378	584,424	6,514,964
38	Return on rate base	230,059	230,059	230,059	230,059	230,059	230,059	230,059	230,059	230,059	230,059	230,059	230,059	2,760,703
39	Subtotal revenue requirements	677,138	672,992	755,826	761,720	776,380	785,049	795,593	805,311	808,346	810,391	812,437	814,482	9,275,667
40	Adjustments													
41	Total revenue requirements	677,138	672,992	755,826	761,720	776,380	785,049	795,593	805,311	808,346	810,391	812,437	814,482	9,275,667
42														
43	Minnesota share - Meters (C6)	232,528	231,111	261,214	262,571	266,331	267,738	274,089	278,855	281,750	284,316	286,894	289,485	3,216,880
44	Minnesota share - FAN (P60)	18,058	17,933	19,866	19,205	19,272	19,091	18,639	18,724	18,680	18,614	18,547	18,480	225,110
45	Minnesota share - Software (P90)	64,620	64,233	70,679	72,871	75,993	78,955	77,872	77,470	75,923	74,268	72,599	70,916	876,397
46	Total Minnesota Share	**315,206**	**313,277**	**351,760**	**354,647**	**361,595**	**365,784**	**370,599**	**375,049**	**376,354**	**377,197**	**378,039**	**378,881**	**4,318,387**

OTTER TAIL POWER COMPANY
ELECTRIC UTILITY INFRASTRUCTURE
COST RECOVERY RIDER
MINNESOTA

Docket No. E017/M-25-
Attachment 5

Advanced Metering Infrastructure

Line No.		2026 Projected January	2026 Projected February	2026 Projected March	2026 Projected April	2026 Projected May	2026 Projected June	2026 Projected July	2026 Projected August	2026 Projected September	2026 Projected October	2026 Projected November	2026 Projected December	2026 Projected Total
	RATE BASE													
1	Plant Balance	47,479,490	47,479,490	47,479,490	47,479,490	47,479,490	47,479,490	47,479,490	47,479,490	47,479,490	47,479,490	47,479,490	47,479,490	47,479,490
2	Accumulated Depreciation	(6,296,734)	(6,636,366)	(6,975,999)	(7,315,632)	(7,655,264)	(7,994,897)	(8,334,529)	(8,674,162)	(9,013,794)	(9,353,427)	(9,693,060)	(10,032,692)	(10,032,692)
3	Net Plant in Service	41,182,756	40,843,124	40,503,491	40,163,859	39,824,226	39,484,594	39,144,961	38,805,329	38,465,696	38,126,063	37,786,431	37,446,798	37,446,798
4	CWIP	0	0	0	0	0	0	0	0	0	0	0	0	0
5	ADIT - NOL DTA													
6	Reversal of ADIT - NOL DTA													
7	Reversal of ADIT - NOL DTA - No Proration													
8	ADIT Proration Factors	0.9178	0.8411	0.7562	0.6740	0.5890	0.5069	0.4219	0.3370	0.2548	0.1699	0.0877	0.0027	
9	ADIT - Federal & State Depreciation	(1,638,476)	(1,702,467)	(1,762,456)	(1,818,575)	(1,870,692)	(1,918,938)	(1,963,183)	(2,003,428)	(2,039,800)	(2,072,172)	(2,100,673)	(2,125,172)	(2,125,172)
10	Accumulated Deferred Income Taxes Federal & State - No Proration	(1,642,348)	(1,713,823)	(1,785,299)	(1,856,775)	(1,928,251)	(1,999,726)	(2,071,202)	(2,142,678)	(2,214,154)	(2,285,629)	(2,357,105)	(2,428,581)	(2,428,581)
11	Ending rate base	39,544,280	39,140,657	38,741,035	38,345,284	37,953,534	37,565,656	37,181,778	36,801,901	36,425,896	36,053,891	35,685,758	35,321,626	35,321,626
12														
13	Average rate base	3,132,774	3,132,774	3,132,774	3,132,774	3,132,774	3,132,774	3,132,774	3,132,774	3,132,774	3,132,774	3,132,774	3,132,774	37,593,293
14														
15	Return on Rate Base	224,816	224,816	224,816	224,816	224,816	224,816	224,816	224,816	224,816	224,816	224,816	224,816	2,697,789
16														
17	Available for return (equity portion of rate base)	155,918	155,918	155,918	155,918	155,918	155,918	155,918	155,918	155,918	155,918	155,918	155,918	1,871,018
18														
19	***EXPENSES***													
20	*O&M and Depreciation*													
21	Operating Costs	159,608	159,608	159,608	159,608	159,608	159,608	159,608	159,608	159,608	159,608	159,608	159,608	1,915,290
22	Property Tax	33,223	33,223	33,223	33,223	33,223	33,223	33,223	33,223	33,223	33,223	33,223	33,223	398,681
23	Book Depreciation	339,633	339,633	339,633	339,633	339,633	339,633	339,633	339,633	339,633	339,633	339,633	339,633	4,075,591
24	Total O&M and Depreciation Expense	532,463	532,463	532,463	532,463	532,463	532,463	532,463	532,463	532,463	532,463	532,463	532,463	6,389,562
25														
26	Income before Taxes													
27	Available for return (from above)	155,918	155,918	155,918	155,918	155,918	155,918	155,918	155,918	155,918	155,918	155,918	155,918	1,871,018
28	Taxable Income (grossed up)	218,808	218,808	218,808	218,808	218,808	218,808	218,808	218,808	218,808	218,808	218,808	218,808	2,625,696
29														
30	Income Taxes													
31	Current Income Tax	(8,586)	(8,586)	(8,586)	(8,586)	(8,586)	(8,586)	(8,586)	(8,586)	(8,586)	(8,586)	(8,586)	(8,586)	(103,031)
32	Deferred Income Tax	71,476	71,476	71,476	71,476	71,476	71,476	71,476	71,476	71,476	71,476	71,476	71,476	857,709
33	Total Income Tax Expense	62,890	62,890	62,890	62,890	62,890	62,890	62,890	62,890	62,890	62,890	62,890	62,890	754,677
34														
35														
36	***REVENUE REQUIRMENTS***													
37	Expenses	595,353	595,353	595,353	595,353	595,353	595,353	595,353	595,353	595,353	595,353	595,353	595,353	7,144,239
38	Return on rate base	224,816	224,816	224,816	224,816	224,816	224,816	224,816	224,816	224,816	224,816	224,816	224,816	2,697,789
39	Subtotal revenue requirements	820,169	820,169	820,169	820,169	820,169	820,169	820,169	820,169	820,169	820,169	820,169	820,169	9,842,028
40	Adjustments													
41	Total revenue requirements	820,169	820,169	820,169	820,169	820,169	820,169	820,169	820,169	820,169	820,169	820,169	820,169	9,842,028
42														
43	Minnesota share - Meters (C6)	292,975	294,475	296,007	297,571	299,170	300,804	302,474	304,181	305,927	307,713	309,541	311,412	3,622,250
44	Minnesota share - FAN (P60)	18,677	18,746	18,817	18,889	18,963	19,039	19,116	19,195	19,276	19,358	19,443	19,529	229,049
45	Minnesota share - Software (P90)	69,768	68,091	66,378	64,628	62,841	61,014	59,146	57,237	55,285	53,287	51,244	49,152	718,071
46	Total Minnesota Share	**381,420**	**381,312**	**381,202**	**381,089**	**380,974**	**380,856**	**380,736**	**380,613**	**380,488**	**380,359**	**380,227**	**380,093**	**4,569,370**

Outage Management System

Line No.		2025 Actual Jan	2025 Actual Feb	2025 Projected Mar	2025 Projected Apr	2025 Projected May	2025 Projected Jun	2025 Projected Jul	2025 Projected Aug	2025 Projected Sep	2025 Projected Oct	2025 Projected Nov	2025 Projected Dec	2025 Projected Total
	RATE BASE													
1	Plant Balance	2,500,206	2,500,206	2,500,206	2,500,206	2,500,206	2,500,206	2,500,206	2,500,206	2,500,206	2,500,206	2,500,206	2,500,206	2,500,206
2	Accumulated Depreciation	(479,928)	(521,598)	(563,268)	(604,938)	(646,608)	(688,278)	(729,948)	(771,618)	(813,288)	(854,959)	(896,629)	(938,299)	(938,299)
3	Net Plant in Service	2,020,279	1,978,609	1,936,939	1,895,269	1,853,598	1,811,928	1,770,258	1,728,588	1,686,918	1,645,248	1,603,578	1,561,908	1,561,908
4	**CWIP Calculation:**													
5	Beginning Balance	-	-	-	-	-	-	-	-	-	-	-	-	
6	Additional CWIP													-
7	Internal Costs													
8	**Removal of $1M in rate case test year**													
9	Closings from CWIP	-	-	-	-	-	-	-	-	-	-	-	-	
10	AFDUC													
11	CWIP	-	-	-	-	-	-	-	-	-	-	-	-	-
12	ADIT Federal Proration Factors	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
13	Accumulated Deferred Income Taxes Federal & State	(307,090)	(326,251)	(345,412)	(364,573)	(383,734)	(402,895)	(422,056)	(441,217)	(460,379)	(479,540)	(498,701)	(517,862)	(517,862)
14	Accumulated Deferred Income Taxes Federal & State - No Proration	(307,090)	(326,251)	(345,412)	(364,573)	(383,734)	(402,895)	(422,056)	(441,217)	(460,379)	(479,540)	(498,701)	(517,862)	(517,862)
15	Ending rate base	1,713,189	1,652,358	1,591,527	1,530,696	1,469,864	1,409,033	1,348,202	1,287,371	1,226,539	1,165,708	1,104,877	1,044,046	1,044,046
16														
17	Average rate base	117,419	117,419	117,419	117,419	117,419	117,419	117,419	117,419	117,419	117,419	117,419	117,419	1,409,033
18														
19	Return on Rate Base	8,426	8,426	8,426	8,426	8,426	8,426	8,426	8,426	8,426	8,426	8,426	8,426	101,116
20														
21	Available for return (equity portion of rate base)	5,844	5,844	5,844	5,844	5,844	5,844	5,844	5,844	5,844	5,844	5,844	5,844	70,128
22														
23	***EXPENSES***													
24	*O&M and Depreciation*													
25	Operating Costs	90,376	(56,036)	49,908	49,908	49,908	49,908	49,908	49,908	49,908	49,908	49,908	49,908	598,895
26	Property Tax	-	-	-	-	-	-	-	-	-	-	-	-	-
27	Book Depreciation	41,670	41,670	41,670	41,670	41,670	41,670	41,670	41,670	41,670	41,670	41,670	41,670	500,041
28	Total O&M and Depreciation Expense	132,046	(14,366)	91,578	91,578	91,578	91,578	91,578	91,578	91,578	91,578	91,578	91,578	1,098,936
29														
30	Income before Taxes													
31	Available for return (from above)	5,844	5,844	5,844	5,844	5,844	5,844	5,844	5,844	5,844	5,844	5,844	5,844	70,128
32	Taxable Income (grossed up)	8,201	8,201	8,201	8,201	8,201	8,201	8,201	8,201	8,201	8,201	8,201	8,201	98,414
33														
34	Income Taxes													
35	Current Income Tax	(16,804)	(16,804)	(16,804)	(16,804)	(16,804)	(16,804)	(16,804)	(16,804)	(16,804)	(16,804)	(16,804)	(16,804)	(201,647)
36	Def Income Tax	19,161	19,161	19,161	19,161	19,161	19,161	19,161	19,161	19,161	19,161	19,161	19,161	229,933
37	Total Income Tax Expense	2,357	2,357	2,357	2,357	2,357	2,357	2,357	2,357	2,357	2,357	2,357	2,357	28,286
38														
39														
40	***REVENUE REQUIRMENTS***													
41	Expenses	134,403	(12,009)	93,935	93,935	93,935	93,935	93,935	93,935	93,935	93,935	93,935	93,935	1,127,222
42	Return on rate base	8,426	8,426	8,426	8,426	8,426	8,426	8,426	8,426	8,426	8,426	8,426	8,426	101,116
43	Subtotal revenue requirements	142,830	(3,582)	102,362	102,362	102,362	102,362	102,362	102,362	102,362	102,362	102,362	102,362	1,228,338
44	Adjustments	-	-	-	-	-	-	-	-	-	-	-	-	-
45	Total revenue requirements	142,830	(3,582)	102,362	102,362	102,362	102,362	102,362	102,362	102,362	102,362	102,362	102,362	1,228,338
46														
47	Minnesota share - P90 Factor	**70,204**	**(1,761)**	**50,313**	**50,313**	**50,313**	**50,313**	**50,313**	**50,313**	**50,313**	**50,313**	**50,313**	**50,313**	**571,574**

Outage Management System

Line No.		2026 Projected Jan	2026 Projected Feb	2026 Projected Mar	2026 Projected Apr	2026 Projected May	2026 Projected Jun	2026 Projected Jul	2026 Projected Aug	2026 Projected Sep	2026 Projected Oct	2026 Projected Nov	2026 Projected Dec	2026 Projected Total
	RATE BASE													
1	Plant Balance	2,500,206	2,500,206	2,500,206	2,500,206	2,500,206	2,500,206	2,500,206	2,500,206	2,500,206	2,500,206	2,500,206	2,500,206	2,500,206
2	Accumulated Depreciation	(979,969)	(1,021,639)	(1,063,309)	(1,104,979)	(1,146,649)	(1,188,319)	(1,229,989)	(1,271,660)	(1,313,330)	(1,355,000)	(1,396,670)	(1,438,340)	(1,438,340)
3	Net Plant in Service	1,520,238	1,478,567	1,436,897	1,395,227	1,353,557	1,311,887	1,270,217	1,228,547	1,186,877	1,145,207	1,103,537	1,061,866	1,061,866
4	**CWIP Calculation:**													
5	Beginning Balance	-	-	-	-	-	-	-	-	-	-	-	-	
6	Additional CWIP													-
7	Internal Costs													
8	**Removal of $1M in rate case test year**													
9	Closings from CWIP	-	-	-	-	-	-	-	-	-	-	-	-	
10	AFDUC													
11	CWIP	-	-	-	-	-	-	-	-	-	-	-	-	-
12	ADIT Federal Proration Factors	0.9178	0.8411	0.7562	0.6740	0.5890	0.5069	0.4219	0.3370	0.2548	0.1699	0.0877	0.0027	
13	Accumulated Deferred Income Taxes Federal & State	(521,274)	(524,504)	(527,532)	(530,364)	(532,994)	(535,429)	(537,663)	(539,694)	(541,530)	(543,164)	(544,602)	(545,839)	(545,839)
14	Accumulated Deferred Income Taxes Federal & State - No Proration	(521,469)	(525,077)	(528,684)	(532,292)	(535,900)	(539,507)	(543,115)	(546,722)	(550,330)	(553,937)	(557,545)	(561,152)	(561,152)
15	Ending rate base	998,964	954,064	909,366	864,863	820,563	776,458	732,554	688,853	645,347	602,043	558,935	516,028	516,028
16														
17	Average rate base	64,821	64,821	64,821	64,821	64,821	64,821	64,821	64,821	64,821	64,821	64,821	64,821	777,852
18														
19	Return on Rate Base	4,652	4,652	4,652	4,652	4,652	4,652	4,652	4,652	4,652	4,652	4,652	4,652	55,821
20														
21	Available for return (equity portion of rate base)	3,226	3,226	3,226	3,226	3,226	3,226	3,226	3,226	3,226	3,226	3,226	3,226	38,714
22														
23	***EXPENSES***													
24	*O&M and Depreciation*													
25	Operating Costs	49,908	49,908	49,908	49,908	49,908	49,908	49,908	49,908	49,908	49,908	49,908	49,908	598,895
26	Property Tax	-	-	-	-	-	-	-	-	-	-	-	-	-
27	Book Depreciation	41,670	41,670	41,670	41,670	41,670	41,670	41,670	41,670	41,670	41,670	41,670	41,670	500,041
28	Total O&M and Depreciation Expense	91,578	91,578	91,578	91,578	91,578	91,578	91,578	91,578	91,578	91,578	91,578	91,578	1,098,936
29														
30	Income before Taxes													
31	Available for return (from above)	3,226	3,226	3,226	3,226	3,226	3,226	3,226	3,226	3,226	3,226	3,226	3,226	38,714
32	Taxable Income (grossed up)	4,527	4,527	4,527	4,527	4,527	4,527	4,527	4,527	4,527	4,527	4,527	4,527	54,329
33														
34	Income Taxes													
35	Current Income Tax	(2,306)	(2,306)	(2,306)	(2,306)	(2,306)	(2,306)	(2,306)	(2,306)	(2,306)	(2,306)	(2,306)	(2,306)	(27,675)
36	Def Income Tax	3,608	3,608	3,608	3,608	3,608	3,608	3,608	3,608	3,608	3,608	3,608	3,608	43,290
37	Total Income Tax Expense	1,301	1,301	1,301	1,301	1,301	1,301	1,301	1,301	1,301	1,301	1,301	1,301	15,615
38														
39														
40	***REVENUE REQUIRMENTS***													
41	Expenses	92,879	92,879	92,879	92,879	92,879	92,879	92,879	92,879	92,879	92,879	92,879	92,879	1,114,552
42	Return on rate base	4,652	4,652	4,652	4,652	4,652	4,652	4,652	4,652	4,652	4,652	4,652	4,652	55,821
43	Subtotal revenue requirements	97,531	97,531	97,531	97,531	97,531	97,531	97,531	97,531	97,531	97,531	97,531	97,531	1,170,372
44	Adjustments	-	-	-	-	-	-	-	-	-	-	-	-	-
45	Total revenue requirements	97,531	97,531	97,531	97,531	97,531	97,531	97,531	97,531	97,531	97,531	97,531	97,531	1,170,372
46														
47	Minnesota share - P90 Factor	**47,939**	**47,939**	**47,939**	**47,939**	**47,939**	**47,939**	**47,939**	**47,939**	**47,939**	**47,939**	**47,939**	**47,939**	**575,266**

OTTER TAIL POWER COMPANY
ELECTRIC UTILITY INFRASTRUCTURE
COST RECOVERY RIDER
MINNESOTA

Docket No. E017/M-25-
Attachment 7

Demand Response System

Line No.		2025 Actual January	2025 Actual February	2025 Projected March	2025 Projected April	2025 Projected May	2025 Projected June	2025 Projected July	2025 Projected August	2025 Projected September	2025 Projected October	2025 Projected November	2025 Projected December	2025 Projected Total
	RATE BASE													
1	Plant Balance	-	-	-	-	-	-	-	-	-	1,765,302	1,765,302	1,765,302	1,765,302
2	Accumulated Depreciation	-	-	-	-	-	-	-	-	-	-	(29,422)	(58,843)	(58,843)
3	Net Plant in Service	-	-	-	-	-	-	-	-	-	1,765,302	1,735,881	1,706,459	1,706,459
4	**CWIP Calculation:**													
5	Beginning Balance	341,646	424,716	594,058	714,076	890,802	1,034,933	1,187,864	1,469,371	1,773,230	1,856,034	229,274	356,078	341,646
6	Additional CWIP	102,199	192,433	136,385	200,825	163,785	173,785	319,895	345,294	94,095	157,435	144,095	399,806	2,430,032
7	Internal Costs	(19,129)	(21,749)	(16,366)	(24,099)	(19,654)	(20,854)	(38,387)	(41,435)	(11,291)	(18,892)	(17,291)	(47,977)	(298,469)
8	Closings from CWIP	-	-	-	-	-	-	-	-	-	(1,765,302)	-	-	(1,765,302)
9	AFUDC	-	-	-	-	-	-	-	-	-	-	-	-	-
10	CWIP	424,716	595,401	714,076	890,802	1,034,933	1,187,864	1,469,371	1,773,230	1,856,034	229,274	356,078	707,907	707,907
11	ADIT - NOL DTA													
12	Reversal of ADIT - NOL DTA													
13	Reversal of ADIT - NOL DTA - No Proration													
14	ADIT Proration Factors	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
15	ADIT - Federal & State Depreciation	-	-	-	-	-	-	-	-	-	(16,074)	(23,691)	(31,308)	(31,308)
16	Accumulated Deferred Income Taxes Federal & State	-	-	-	-	-	-	-	-	-	(16,074)	(23,691)	(31,308)	(31,308)
17	Ending rate base	424,716	595,401	714,076	890,802	1,034,933	1,187,864	1,469,371	1,773,230	1,856,034	1,978,503	2,068,267	2,383,058	2,383,058
18														
19	Average rate base	107,166	107,166	107,166	107,166	107,166	107,166	107,166	107,166	107,166	107,166	107,166	107,166	1,285,993
20														
21	Return on Rate Base	7,691	7,691	7,691	7,691	7,691	7,691	7,691	7,691	7,691	7,691	7,691	7,691	92,286
22														
23	Available for return (equity portion of rate base)	5,334	5,334	5,334	5,334	5,334	5,334	5,334	5,334	5,334	5,334	5,334	5,334	64,004
24														
25	***EXPENSES***													
26	*O&M and Depreciation*													
27	Operating Costs	-	-	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	40,800
28	Property Tax	-	-	-	-	-	-	-	-	-	-	-	-	-
29	Book Depreciation	-	-	-	-	-	-	-	-	-	-	29,422	29,422	58,843
30	Total O&M and Depreciation Expense	-	-	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	33,502	33,502	99,643
31														
32	Income before Taxes													
33	Available for return (from above)	5,334	5,334	5,334	5,334	5,334	5,334	5,334	5,334	5,334	5,334	5,334	5,334	64,004
34	Taxable Income (grossed up)	7,485	7,485	7,485	7,485	7,485	7,485	7,485	7,485	7,485	7,485	7,485	7,485	89,820
35														
36	Income Taxes													
37	Current Income Tax	2,151	2,151	2,151	2,151	2,151	2,151	2,151	2,151	2,151	(13,922)	(5,466)	(5,466)	(5,492)
38	Deferred Income Tax	-	-	-	-	-	-	-	-	-	16,074	7,617	7,617	31,308
39	Total Income Tax Expense	2,151	2,151	2,151	2,151	2,151	2,151	2,151	2,151	2,151	2,151	2,151	2,151	25,816
40														
41														
42	***REVENUE REQUIRMENTS***													
43	Expenses	2,151	2,151	6,231	6,231	6,231	6,231	6,231	6,231	6,231	6,231	35,653	35,653	125,459
44	Return on rate base	7,691	7,691	7,691	7,691	7,691	7,691	7,691	7,691	7,691	7,691	7,691	7,691	92,286
45	Subtotal revenue requirements	9,842	9,842	13,922	13,922	13,922	13,922	13,922	13,922	13,922	13,922	43,344	43,344	217,745
46	Adjustments													
47	Total revenue requirements	9,842	9,842	13,922	13,922	13,922	13,922	13,922	13,922	13,922	13,922	43,344	43,344	217,745
48														
49	Minnesota share - Hardware (C6)	-	-	-	-	-	-	25	41	59	255	1,240	1,124	2,744
50	Minnesota share - Software (P90)	4,837	4,837	6,843	6,843	6,843	6,843	6,816	6,799	6,780	6,571	19,982	20,106	104,101
51	Total Minnesota Share	**4,837**	**4,837**	**6,843**	**6,843**	**6,843**	**6,843**	**6,841**	**6,840**	**6,839**	**6,826**	**21,222**	**21,230**	**106,845**

Demand Response System

Line No.		2026 Projected January	2026 Projected February	2026 Projected March	2026 Projected April	2026 Projected May	2026 Projected June	2026 Projected July	2026 Projected August	2026 Projected September	2026 Projected October	2026 Projected November	2026 Projected December	2026 Projected Total
	RATE BASE													
1	Plant Balance	1,765,302	1,765,302	1,765,302	1,765,302	1,765,302	1,765,302	7,267,832	7,610,455	10,858,095	11,200,718	11,543,340	11,885,963	11,885,963
2	Accumulated Depreciation	(88,265)	(117,687)	(147,109)	(176,530)	(205,952)	(235,374)	(264,795)	(324,787)	(386,681)	(498,897)	(613,015)	(729,037)	(729,037)
3	Net Plant in Service	1,677,037	1,647,615	1,618,194	1,588,772	1,559,350	1,529,929	7,003,037	7,285,668	10,471,413	10,701,821	10,930,325	11,156,926	11,156,926
4	**CWIP Calculation:**													
5	Beginning Balance	707,907	1,067,597	1,330,487	6,493,972	6,756,862	7,170,408	7,436,231	2,481,664	2,731,004	75,328	280,668	486,009	707,907
6	Additional CWIP	408,738	298,738	5,867,597	298,738	469,938	302,072	622,685	672,685	672,685	622,685	622,685	622,685	11,481,935
7	Internal Costs	(49,049)	(35,849)	(704,112)	(35,849)	(56,393)	(36,249)	(74,722)	(80,722)	(80,722)	(74,722)	(74,722)	(74,722)	(1,377,832)
8	Closings from CWIP	-	-	-	-	-	-	(5,502,530)	(342,623)	(3,247,640)	(342,623)	(342,623)	(342,623)	(10,120,661)
9	AFUDC	-	-	-	-	-	-	-	-	-	-	-	-	-
10	CWIP	1,067,597	1,330,487	6,493,972	6,756,862	7,170,408	7,436,231	2,481,664	2,731,004	75,328	280,668	486,009	691,349	691,349
11	ADIT - NOL DTA													
12	Reversal of ADIT - NOL DTA													
13	Reversal of ADIT - NOL DTA - No Proration													
14	ADIT Proration Factors	0.9178	0.8411	0.7562	0.6740	0.5890	0.5069	0.4219	0.3370	0.2548	0.1699	0.0877	0.0027	
15	ADIT - Federal & State Depreciation	(41,409)	(50,970)	(59,933)	(68,317)	(76,104)	(83,312)	(101,321)	(112,755)	(134,479)	(147,263)	(158,300)	(167,601)	(167,601)
16	Accumulated Deferred Income Taxes Federal & State	(41,987)	(52,666)	(63,345)	(74,024)	(84,703)	(95,382)	(124,475)	(144,782)	(187,472)	(215,699)	(243,379)	(270,511)	(270,511)
17	Ending rate base	2,703,225	2,927,133	8,052,234	8,277,317	8,653,654	8,882,847	9,383,380	9,903,918	10,412,262	10,835,226	11,258,033	11,680,674	11,680,674
18														
19	Average rate base	675,339	675,339	675,339	675,339	675,339	675,339	675,339	675,339	675,339	675,339	675,339	675,339	8,104,074
20														
21	Return on Rate Base	48,464	48,464	48,464	48,464	48,464	48,464	48,464	48,464	48,464	48,464	48,464	48,464	581,569
22														
23	Available for return (equity portion of rate base)	33,612	33,612	33,612	33,612	33,612	33,612	33,612	33,612	33,612	33,612	33,612	33,612	403,340
24														
25	***EXPENSES***													
26	*O&M and Depreciation*													
27	Operating Costs	7,321	7,321	7,321	7,321	7,321	7,321	7,321	7,321	7,321	7,321	7,321	7,321	87,856
28	Property Tax	42	42	42	42	42	42	42	42	42	42	42	42	506
29	Book Depreciation	29,422	29,422	29,422	29,422	29,422	29,422	29,422	59,991	61,895	63,798	65,702	67,605	524,943
30	Total O&M and Depreciation Expense	36,785	36,785	36,785	36,785	36,785	36,785	36,785	67,355	69,258	71,162	73,065	74,969	613,305
31														
32	Income before Taxes													
33	Available for return (from above)	33,612	33,612	33,612	33,612	33,612	33,612	33,612	33,612	33,612	33,612	33,612	33,612	403,340
34	Taxable Income (grossed up)	47,169	47,169	47,169	47,169	47,169	47,169	47,169	47,169	47,169	47,169	47,169	47,169	566,027
35														
36	Income Taxes													
37	Current Income Tax	2,878	2,878	2,878	2,878	2,878	2,878	(15,536)	(6,749)	(29,133)	(14,670)	(14,123)	(13,575)	(76,515)
38	Deferred Income Tax	10,679	10,679	10,679	10,679	10,679	10,679	29,093	20,307	42,690	28,227	27,680	27,133	239,203
39	Total Income Tax Expense	13,557	13,557	13,557	13,557	13,557	13,557	13,557	13,557	13,557	13,557	13,557	13,557	162,688
40														
41														
42	***REVENUE REQUIRMENTS***													
43	Expenses	50,343	50,343	50,343	50,343	50,343	50,343	50,343	80,912	82,816	84,719	86,622	88,526	775,993
44	Return on rate base	48,464	48,464	48,464	48,464	48,464	48,464	48,464	48,464	48,464	48,464	48,464	48,464	581,569
45	Subtotal revenue requirements	98,807	98,807	98,807	98,807	98,807	98,807	98,807	129,376	131,280	133,183	135,087	136,990	1,357,561
46	Adjustments													
47	Total revenue requirements	98,807	98,807	98,807	98,807	98,807	98,807	98,807	129,376	131,280	133,183	135,087	136,990	1,357,561
48														
49	Minnesota share - Hardware (C6)	3,344	3,270	28,982	28,265	27,105	26,490	26,682	34,954	35,558	36,417	37,257	38,081	326,405
50	Minnesota share - Software (P90)	45,000	45,079	17,659	18,423	19,660	20,316	20,111	26,316	26,608	26,627	26,667	26,724	319,191
51	Total Minnesota Share	**48,344**	**48,349**	**46,641**	**46,689**	**46,766**	**46,806**	**46,794**	**61,270**	**62,166**	**63,044**	**63,924**	**64,805**	**645,596**

O&M Savings due to AMI Implementation

Line No.		2025 Actual Jan	2025 Actual Feb	2025 Projected Mar	2025 Projected Apr	2025 Projected May	2025 Projected Jun	2025 Projected Jul	2025 Projected Aug	2025 Projected Sep	2025 Projected Oct	2025 Projected Nov	2025 Projected Dec	2025 Projected YE
1	***OTP COSTS***													
2	Meter Reading Total Expenses (FERC 902)	296,718	218,027	120,850	120,850	120,850	120,850	120,850	120,850	120,850	120,850	120,850	120,850	1,723,242
3	Opt Out Costs (excludes 902)	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Fees Paid By Opt Out Customers	-	-	-	-	-	-	-	-	-	-	-	-	-
5														
6	Total Expenses	296,718	218,027	120,850	120,850	120,850	120,850	120,850	120,850	120,850	120,850	120,850	120,850	1,723,242
7														
8	Meter Reading Amount in Base Rates	483,399	483,399	483,399	483,399	483,399	483,399	483,399	483,399	483,399	483,399	483,399	483,399	5,800,784
9														
10	***CUSTOMER SAVINGS***													
11	Monthly Difference	186,681	265,371	362,549	362,549	362,549	362,549	362,549	362,549	362,549	362,549	362,549	362,549	
12	YTD Savings	186,681	452,052	814,601	1,177,150	1,539,699	1,902,248	2,264,797	2,627,346	2,989,895	3,352,444	3,714,993	4,077,542	
13	OTP Meter Reading Customer Savings	186,681	265,371	362,549	362,549	362,549	362,549	362,549	362,549	362,549	362,549	362,549	362,549	4,077,542
14	Minnesota Share - C7 Meter Reading Allocation Factor	48.60%	48.60%	48.60%	48.60%	48.60%	48.60%	48.60%	48.60%	48.60%	48.60%	48.60%	48.60%	48.60%
15	MN Share Meter Reading Savings	**90,722**	**128,963**	**176,189**	**176,189**	**176,189**	**176,189**	**176,189**	**176,189**	**176,189**	**176,189**	**176,189**	**176,189**	**1,981,574**

O&M Savings due to AMI Implementation

Line No.		2026 Projected Jan	2026 Projected Feb	2026 Projected Mar	2026 Projected Apr	2026 Projected May	2026 Projected Jun	2026 Projected Jul	2026 Projected Aug	2026 Projected Sep	2026 Projected Oct	2026 Projected Nov	2026 Projected Dec	2026 Projected YE
1	***OTP COSTS***													
2	Meter Reading Total Expenses (FERC 902)	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Opt Out Costs (excludes 902)	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Fees Paid By Opt Out Customers	-	-	-	-	-	-	-	-	-	-	-	-	-
5														
6	Total Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-
7														
8	Meter Reading Amount in Base Rates	483,399	483,399	483,399	483,399	483,399	483,399	483,399	483,399	483,399	483,399	483,399	483,399	5,800,784
9														
10	***CUSTOMER SAVINGS***													
11	Monthly Difference	483,399	483,399	483,399	483,399	483,399	483,399	483,399	483,399	483,399	483,399	483,399	483,399	
12	YTD Savings	483,399	966,797	1,450,196	1,933,595	2,416,993	2,900,392	3,383,791	3,867,189	4,350,588	4,833,987	5,317,385	5,800,784	
13	OTP Meter Reading Customer Savings	483,399	483,399	483,399	483,399	483,399	483,399	483,399	483,399	483,399	483,399	483,399	483,399	5,800,784
14	Minnesota Share - C7 Meter Reading Allocation Factor	48.60%	48.60%	48.60%	48.60%	48.60%	48.60%	48.60%	48.60%	48.60%	48.60%	48.60%	48.60%	48.60%
15	MN Share Meter Reading Savings	**234,919**	**234,919**	**234,919**	**234,919**	**234,919**	**234,919**	**234,919**	**234,919**	**234,919**	**234,919**	**234,919**	**234,919**	**2,819,023**

Bemidji CSC Remodel

Line No.		2025 Actual Jan	2025 Actual Feb	2025 Projected Mar	2025 Projected Apr	2025 Projected May	2025 Projected Jun	2025 Projected Jul	2025 Projected Aug	2025 Projected Sep	2025 Projected Oct	2025 Projected Nov	2025 Projected Dec	2025 Projected Total
	RATE BASE													
1	Plant Balance	-	-	-	-	-	-	-	-	-	2,632,978	2,632,978	2,632,978	2,632,978
2	Accumulated Depreciation	-	-	-	-	-	-	-	-	-	-	(4,301)	(8,603)	(8,603)
3	Net Plant in Service	-	-	-	-	-	-	-	-	-	2,632,978	2,628,677	2,624,375	2,624,375
4	**CWIP Calculation:**													
5	Beginning Balance	203,031	204,304	235,900	535,535	835,170	1,134,804	1,434,439	1,734,074	2,033,709	2,333,343	-	-	203,031
6	Additional CWIP	1,298	32,241	305,750	305,750	305,750	305,750	305,750	305,750	305,750	305,750			2,479,537
7	Internal Costs	(26)	(645)	(6,115)	(6,115)	(6,115)	(6,115)	(6,115)	(6,115)	(6,115)	(6,115)	-	-	(49,591)
8	Closings from CWIP										(2,632,978)	-	-	(2,632,978)
9	AFDUC													-
10	CWIP	204,304	235,900	535,535	835,170	1,134,804	1,434,439	1,734,074	2,033,709	2,333,343	-	-	-	-
11	ADIT Federal Proration Factors	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
12	Accumulated Deferred Income Taxes Federal & State	-	-	-	-	-	-	-	-	-	(1,377)	(1,518)	(1,659)	(1,659)
13	Accumulated Deferred Income Taxes Federal & State - No Proration	-	-	-	-	-	-	-	-	-	(1,377)	(1,518)	(1,659)	(1,659)
14	Ending rate base	204,304	235,900	535,535	835,170	1,134,804	1,434,439	1,734,074	2,033,709	2,333,343	2,631,601	2,627,159	2,622,716	2,622,716
15														
16	Average rate base	119,011	119,011	119,011	119,011	119,011	119,011	119,011	119,011	119,011	119,011	119,011	119,011	1,428,137
17														
18	Return on Rate Base	8,541	8,541	8,541	8,541	8,541	8,541	8,541	8,541	8,541	8,541	8,541	8,541	102,487
19														
20	Available for return (equity portion of rate base)	5,923	5,923	5,923	5,923	5,923	5,923	5,923	5,923	5,923	5,923	5,923	5,923	71,078
21														
22	***EXPENSES***													
23	*O&M and Depreciation*													
24	Operating Costs													-
25	Property Tax	-	-	-	-	-	-	-	-	-	-	-	-	-
26	Book Depreciation	-	-	-	-	-	-	-	-	-	-	4,301	4,301	8,603
27	Total O&M and Depreciation Expense	-	-	-	-	-	-	-	-	-	-	4,301	4,301	8,603
28														
29	Income before Taxes													
30	Available for return (from above)	5,923	5,923	5,923	5,923	5,923	5,923	5,923	5,923	5,923	5,923	5,923	5,923	71,078
31	Taxable Income (grossed up)	8,312	8,312	8,312	8,312	8,312	8,312	8,312	8,312	8,312	8,312	8,312	8,312	99,748
32														
33	Income Taxes													
34	Current Income Tax	2,389	2,389	2,389	2,389	2,389	2,389	2,389	2,389	2,389	1,012	2,248	2,248	27,011
35	Def Income Tax	-	-	-	-	-	-	-	-	-	1,377	141	141	1,659
36	Total Income Tax Expense	2,389	2,389	2,389	2,389	2,389	2,389	2,389	2,389	2,389	2,389	2,389	2,389	28,670
37														
38														
39	***REVENUE REQUIRMENTS***													
40	Expenses	2,389	2,389	2,389	2,389	2,389	2,389	2,389	2,389	2,389	2,389	6,691	6,691	37,272
41	Return on rate base	8,541	8,541	8,541	8,541	8,541	8,541	8,541	8,541	8,541	8,541	8,541	8,541	102,487
42	Subtotal revenue requirements	10,930	10,930	10,930	10,930	10,930	10,930	10,930	10,930	10,930	10,930	15,231	15,231	139,759
43	Adjustments	-	-	-	-	-	-	-	-	-	-	-	-	-
44	Total revenue requirements	10,930	10,930	10,930	10,930	10,930	10,930	10,930	10,930	10,930	10,930	15,231	15,231	139,759
45														
46	Minnesota share - P90 Factor	**5,372**	**5,372**	**5,372**	**5,372**	**5,372**	**5,372**	**5,372**	**5,372**	**5,372**	**5,372**	**7,486**	**7,486**	**68,695**

Bemidji CSC Remodel

Line No.		2026 Projected Jan	2026 Projected Feb	2026 Projected Mar	2026 Projected Apr	2026 Projected May	2026 Projected Jun	2026 Projected Jul	2026 Projected Aug	2026 Projected Sep	2026 Projected Oct	2026 Projected Nov	2026 Projected Dec	2026 Projected Total
	RATE BASE													
1	Plant Balance	2,632,978	2,632,978	2,632,978	2,632,978	2,632,978	2,632,978	2,632,978	2,632,978	2,632,978	2,632,978	2,632,978	2,632,978	2,632,978
2	Accumulated Depreciation	(12,904)	(17,206)	(21,507)	(25,808)	(30,110)	(34,411)	(38,713)	(43,014)	(47,315)	(51,617)	(55,918)	(60,220)	(60,220)
3	Net Plant in Service	2,620,074	2,615,772	2,611,471	2,607,170	2,602,868	2,598,567	2,594,265	2,589,964	2,585,662	2,581,361	2,577,060	2,572,758	2,572,758
4	**CWIP Calculation:**													
5	Beginning Balance	-	-	-	-	-	-	-	-	-	-	-	-	
6	Additional CWIP													-
7	Internal Costs													
8	Closings from CWIP	-	-	-	-	-	-	-	-	-	-	-	-	
9	AFDUC													
10	CWIP	-	-	-	-	-	-	-	-	-	-	-	-	-
11	ADIT Federal Proration Factors	0.9178	0.8411	0.7562	0.6740	0.5890	0.5069	0.4219	0.3370	0.2548	0.1699	0.0877	0.0027	
12	Accumulated Deferred Income Taxes Federal & State	(2,050)	(2,420)	(2,767)	(3,092)	(3,394)	(3,673)	(3,929)	(4,162)	(4,373)	(4,560)	(4,725)	(4,867)	(4,867)
13	Accumulated Deferred Income Taxes Federal & State - No Proration	(2,072)	(2,486)	(2,900)	(3,313)	(3,727)	(4,141)	(4,554)	(4,968)	(5,382)	(5,795)	(6,209)	(6,623)	(6,623)
14	Ending rate base	2,618,024	2,613,352	2,608,703	2,604,077	2,599,474	2,594,894	2,590,336	2,585,802	2,581,290	2,576,801	2,572,335	2,567,892	2,567,892
15														
16	Average rate base	216,254	216,254	216,254	216,254	216,254	216,254	216,254	216,254	216,254	216,254	216,254	216,254	2,595,054
17														
18	Return on Rate Base	15,519	15,519	15,519	15,519	15,519	15,519	15,519	15,519	15,519	15,519	15,519	15,519	186,228
19														
20	Available for return (equity portion of rate base)	10,763	10,763	10,763	10,763	10,763	10,763	10,763	10,763	10,763	10,763	10,763	10,763	129,156
21														
22	***EXPENSES***													
23	*O&M and Depreciation*													
24	Operating Costs													-
25	Property Tax	2,485	2,485	2,485	2,485	2,485	2,485	2,485	2,485	2,485	2,485	2,485	2,485	29,823
26	Book Depreciation	4,301	4,301	4,301	4,301	4,301	4,301	4,301	4,301	4,301	4,301	4,301	4,301	51,617
27	Total O&M and Depreciation Expense	6,787	6,787	6,787	6,787	6,787	6,787	6,787	6,787	6,787	6,787	6,787	6,787	81,439
28														
29	Income before Taxes													
30	Available for return (from above)	10,763	10,763	10,763	10,763	10,763	10,763	10,763	10,763	10,763	10,763	10,763	10,763	129,156
31	Taxable Income (grossed up)	15,104	15,104	15,104	15,104	15,104	15,104	15,104	15,104	15,104	15,104	15,104	15,104	181,251
32														
33	Income Taxes													
34	Current Income Tax	3,928	3,928	3,928	3,928	3,928	3,928	3,928	3,928	3,928	3,928	3,928	3,928	47,131
35	Def Income Tax	414	414	414	414	414	414	414	414	414	414	414	414	4,964
36	Total Income Tax Expense	4,341	4,341	4,341	4,341	4,341	4,341	4,341	4,341	4,341	4,341	4,341	4,341	52,095
37														
38														
39	***REVENUE REQUIRMENTS***													
40	Expenses	11,128	11,128	11,128	11,128	11,128	11,128	11,128	11,128	11,128	11,128	11,128	11,128	133,535
41	Return on rate base	15,519	15,519	15,519	15,519	15,519	15,519	15,519	15,519	15,519	15,519	15,519	15,519	186,228
42	Subtotal revenue requirements	26,647	26,647	26,647	26,647	26,647	26,647	26,647	26,647	26,647	26,647	26,647	26,647	319,762
43	Adjustments	-	-	-	-	-	-	-	-	-	-	-	-	-
44	Total revenue requirements	26,647	26,647	26,647	26,647	26,647	26,647	26,647	26,647	26,647	26,647	26,647	26,647	319,762
45														
46	Minnesota share - P90 Factor	**13,098**	**13,098**	**13,098**	**13,098**	**13,098**	**13,098**	**13,098**	**13,098**	**13,098**	**13,098**	**13,098**	**13,098**	**157,171**

Milbank CSC Remodel

Line No.		2025 Actual Jan	2025 Actual Feb	2025 Projected Mar	2025 Projected Apr	2025 Projected May	2025 Projected Jun	2025 Projected Jul	2025 Projected Aug	2025 Projected Sep	2025 Projected Oct	2025 Projected Nov	2025 Projected Dec	2025 Projected Total
	RATE BASE													
1	Plant Balance	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Accumulated Depreciation	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Net Plant in Service	-	-	-	-	-	-	-	-	-	-	-	-	-
4	**CWIP Calculation:**													
5	Beginning Balance	167,857	168,909	169,960	169,960	169,960	169,960	169,960	169,960	169,960	169,960	608,776	1,047,592	167,857
6	Additional CWIP	1,073	1,073								447,771	447,771	447,771	1,345,460
7	Internal Costs	(21)	(21)	-	-	-	-	-	-	-	(8,955)	(8,955)	(8,955)	(26,909)
8	Closings from CWIP													-
9	AFDUC													-
10	CWIP	168,909	169,960	169,960	169,960	169,960	169,960	169,960	169,960	169,960	608,776	1,047,592	1,486,407	1,486,407
11	ADIT Federal Proration Factors	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
12	Accumulated Deferred Income Taxes Federal & State	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Accumulated Deferred Income Taxes Federal & State - No Proration	-	-	-	-	-	-	-	-	-	-	-	-	-
14	Ending rate base	168,909	169,960	169,960	169,960	169,960	169,960	169,960	169,960	169,960	608,776	1,047,592	1,486,407	1,486,407
15														
16	Average rate base	31,021	31,021	31,021	31,021	31,021	31,021	31,021	31,021	31,021	31,021	31,021	31,021	372,248
17														
18	Return on Rate Base	2,226	2,226	2,226	2,226	2,226	2,226	2,226	2,226	2,226	2,226	2,226	2,226	26,713
19														
20	Available for return (equity portion of rate base)	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	18,527
21														
22	***EXPENSES***													
23	*O&M and Depreciation*													
24	Operating Costs													-
25	Property Tax	88	88	88	88	88	88	88	88	88	88	88	88	1,062
26	Book Depreciation	-	-	-	-	-	-	-	-	-	-	-	-	-
27	Total O&M and Depreciation Expense	88	88	88	88	88	88	88	88	88	88	88	88	1,062
28														
29	Income before Taxes													
30	Available for return (from above)	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	18,527
31	Taxable Income (grossed up)	2,167	2,167	2,167	2,167	2,167	2,167	2,167	2,167	2,167	2,167	2,167	2,167	26,000
32														
33	Income Taxes													
34	Current Income Tax	623	623	623	623	623	623	623	623	623	623	623	623	7,473
35	Def Income Tax	-	-	-	-	-	-	-	-	-	-	-	-	-
36	Total Income Tax Expense	623	623	623	623	623	623	623	623	623	623	623	623	7,473
37														
38	***REVENUE REQUIRMENTS***													
39	Expenses	711	711	711	711	711	711	711	711	711	711	711	711	8,535
40	Return on rate base	2,226	2,226	2,226	2,226	2,226	2,226	2,226	2,226	2,226	2,226	2,226	2,226	26,713
41	Subtotal revenue requirements	2,937	2,937	2,937	2,937	2,937	2,937	2,937	2,937	2,937	2,937	2,937	2,937	35,248
42	Adjustments	-	-	-	-	-	-	-	-	-	-	-	-	-
43	Total revenue requirements	2,937	2,937	2,937	2,937	2,937	2,937	2,937	2,937	2,937	2,937	2,937	2,937	35,248
44														
45	Minnesota share - P90 Factor	**1,444**	**1,444**	**1,444**	**1,444**	**1,444**	**1,444**	**1,444**	**1,444**	**1,444**	**1,444**	**1,444**	**1,444**	**17,325**

Milbank CSC Remodel

Line No.		2026 Projected Jan	2026 Projected Feb	2026 Projected Mar	2026 Projected Apr	2026 Projected May	2026 Projected Jun	2026 Projected Jul	2026 Projected Aug	2026 Projected Sep	2026 Projected Oct	2026 Projected Nov	2026 Projected Dec	2026 Projected Total
	RATE BASE													
1	Plant Balance	-	-	-	3,241,669	3,241,669	3,241,669	3,241,669	3,241,669	3,241,669	3,241,669	3,241,669	3,241,669	3,241,669
2	Accumulated Depreciation	-	-	-	-	(5,296)	(10,592)	(15,887)	(21,183)	(26,479)	(31,775)	(37,071)	(42,366)	(42,366)
3	Net Plant in Service	-	-	-	3,241,669	3,236,374	3,231,078	3,225,782	3,220,486	3,215,190	3,209,895	3,204,599	3,199,303	3,199,303
4	**CWIP Calculation:**													
5	Beginning Balance	1,486,407	1,925,223	2,364,038	2,802,854	-	-	-	-	-	-	-	-	1,486,407
6	Additional CWIP	447,771	447,771	447,771	447,771									1,791,084
7	Internal Costs	(8,955)	(8,955)	(8,955)	(8,955)									(35,822)
8	Closings from CWIP				(3,241,669)	-	-	-	-	-	-	-	-	(3,241,669)
9	AFDUC													-
10	CWIP	1,925,223	2,364,038	2,802,854	-	-	-	-	-	-	-	-	-	(0)
11	ADIT Federal Proration Factors	0.9178	0.8411	0.7562	0.6740	0.5890	0.5069	0.4219	0.3370	0.2548	0.1699	0.0877	0.0027	
12	Accumulated Deferred Income Taxes Federal & State	-	-	-	(1,509)	(1,800)	(2,070)	(2,317)	(2,542)	(2,745)	(2,926)	(3,085)	(3,222)	(3,222)
13	Accumulated Deferred Income Taxes Federal & State - No Proration	-	-	-	(1,922)	(2,321)	(2,720)	(3,120)	(3,519)	(3,919)	(4,318)	(4,717)	(5,117)	(5,117)
14	Ending rate base	1,925,223	2,364,038	2,802,854	3,240,161	3,234,574	3,229,008	3,223,465	3,217,945	3,212,446	3,206,969	3,201,514	3,196,081	3,196,081
15														
16	Average rate base	240,645	240,645	240,645	240,645	240,645	240,645	240,645	240,645	240,645	240,645	240,645	240,645	2,887,745
17														
18	Return on Rate Base	17,269	17,269	17,269	17,269	17,269	17,269	17,269	17,269	17,269	17,269	17,269	17,269	207,232
19														
20	Available for return (equity portion of rate base)	11,977	11,977	11,977	11,977	11,977	11,977	11,977	11,977	11,977	11,977	11,977	11,977	143,723
21														
22	***EXPENSES***													
23	*O&M and Depreciation*													
24	Operating Costs													-
25	Property Tax	784	784	784	784	784	784	784	784	784	784	784	784	9,404
26	Book Depreciation	-	-	-	-	5,296	5,296	5,296	5,296	5,296	5,296	5,296	5,296	42,366
27	Total O&M and Depreciation Expense	784	784	784	784	6,079	6,079	6,079	6,079	6,079	6,079	6,079	6,079	51,770
28														
29	Income before Taxes													
30	Available for return (from above)	11,977	11,977	11,977	11,977	11,977	11,977	11,977	11,977	11,977	11,977	11,977	11,977	143,723
31	Taxable Income (grossed up)	16,808	16,808	16,808	16,808	16,808	16,808	16,808	16,808	16,808	16,808	16,808	16,808	201,694
32														
33	Income Taxes													
34	Current Income Tax	4,831	4,831	4,831	2,909	4,431	4,431	4,431	4,431	4,431	4,431	4,431	4,431	52,854
35	Def Income Tax	-	-	-	1,922	399	399	399	399	399	399	399	399	5,117
36	Total Income Tax Expense	4,831	4,831	4,831	4,831	4,831	4,831	4,831	4,831	4,831	4,831	4,831	4,831	57,971
37														
38	***REVENUE REQUIRMENTS***													
39	Expenses	5,615	5,615	5,615	5,615	10,910	10,910	10,910	10,910	10,910	10,910	10,910	10,910	109,741
40	Return on rate base	17,269	17,269	17,269	17,269	17,269	17,269	17,269	17,269	17,269	17,269	17,269	17,269	207,232
41	Subtotal revenue requirements	22,884	22,884	22,884	22,884	28,180	28,180	28,180	28,180	28,180	28,180	28,180	28,180	316,973
42	Adjustments	-	-	-	-	-	-	-	-	-	-	-	-	-
43	Total revenue requirements	22,884	22,884	22,884	22,884	28,180	28,180	28,180	28,180	28,180	28,180	28,180	28,180	316,973
44														
45	Minnesota share - P90 Factor	**11,248**	**11,248**	**11,248**	**11,248**	**13,851**	**13,851**	**13,851**	**13,851**	**13,851**	**13,851**	**13,851**	**13,851**	**155,800**

Federal ADIT Proration

		January 2026 - December 2026 Recovery Period		
Line No.	**Month**	**All Projects' Revenue Requirements without ADIT Prorated**	**All Projects' Revenue Requirements with ADIT-Prorated**	**Difference due to Federal ADIT Proration**
1	Jan-26	$501,522	$502,048	$526
2	Feb-26	$501,419	$501,945	$526
3	Mar-26	$499,606	$500,127	$522
4	Apr-26	$499,540	$500,062	$522
5	May-26	$502,105	$502,627	$522
6	Jun-26	$502,029	$502,550	$522
7	Jul-26	$501,896	$502,417	$521
8	Aug-26	$516,249	$516,771	$521
9	Sep-26	$517,019	$517,540	$521
10	Oct-26	$517,769	$518,290	$521
11	Nov-26	$518,518	$519,039	$521
12	Dec-26	$519,264	$519,785	$521
13		$6,096,937	$6,103,202	$6,265
14				
15				
16		**Revenue Requirement Related to Federal ADIT Proration-Projection**		**$6,265**

Federal ADIT Proration -- Preserve True-Up Period

Line No.	Month	Original ADIT Balance - All Projects	Federal ADIT Prorate Balance - All Projects	Difference due to Federal ADIT Proration
	January 2025 - December 2025			
1	Jan-25	(106,201)	(101,932)	4,269
2	Feb-25	(153,200)	(160,886)	
3	Mar-25	(195,099)	(213,496)	
4	Apr-25	(232,265)	(259,636)	
5	May-25	(264,748)	(298,325)	
6	Jun-25	(292,698)	(330,783)	
7	Jul-25	(315,964)	(356,960)	
8	Aug-25	(334,547)	(377,247)	
9	Sep-25	(348,598)	(392,440)	
10	Oct-25	(357,965)	(413,096)	
11	Nov-25	(362,800)	(423,275)	
12	Dec-25	(362,951)	(428,456)	(65,505)
13	Simple Average	(234,576)	(265,194)	(30,618)
14				
15			Rate Base Rev Req Gross Up Factor	9.18%
16			Total Company Revenue Requirement	(2,812)
17				(1,030)
18	**MN Revenue Requirement Related to Federal ADIT**			
19	**Proration-Preservation**			
20				
21				
22		Tax Conversion Factor	1.4034	
23		Gross Up of Equity %	6.98%	
24		Equity Return %	4.98%	
25		Gross Up Factor	2.01%	
26				
27			**Annual**	**Monthly**
28		Debt Return %	2.20%	0.18%
29		Preferred Equity %	0.00%	0.00%
30		Equity Return %	4.98%	0.41%
31		Rate of Return	7.18%	0.60%
32		Tax RR on Equity Return	2.01%	0.17%
33		Rate Base Rev Req Gross Up Factor	9.18%	0.77%
34				

Otter Tail Power Company

Integrated Building Design Plus

MichaelsEnergy

Energy Savings Analysis

Bemidji Customer Service Center

Prepared by: Silas Taylor

March 2025

Contents

Bemidji CSC – Energy Analysis

An energy analysis was conducted to compare the overall building efficiency between the Otter Tail Bemidji Customer Service Center design as reported in the Level 2 audit performed by Michaels Energy in 2014 and the current set of construction documents, signed and submitted as of September 2024. Savings estimates were calculated using Version 4.1 of the Minnesota Technical Reference Manual (TRM) – results for each measure are listed in the table below, and the corresponding calculation methodologies are outlined in *Ex-Ante Savings Calculations*.

Table 1. Energy Efficiency Comparison

Bemidji CSC Energy Efficiency Comparison			
End Use	**2014 Level II Audit**	**2024 Construction Documents**	**Annual Savings**
Insulation	Roof: **R20.83**	Roof: **R31.25**	1,096 kWh
Interior Lighting	Original CFLs were replaced with equivalent LED fixtures. **The 2009 IECC code requirement was 1 W/SF**	A lighting fixture analysis was conducted on the provided CD set - For a facility size of 9,872 SF, the total lighting wattage is 7,630W, or **0.772 W/SF**. Summer cooling savings will outweigh winter heating losses.	8,976 kWh
Exterior Lighting	2009 IECC base site allowance **600W**	Total exterior lighting from CD set - **334 W**	1,181 kWh
Lighting Controls	Previously controlled with manual switches. Occupancy sensors were installed in the office areas.	Luminaire level lighting controls (LLLCs) applied. Hallway and bathroom fixtures have dimming capability.	23,521 kWh
Mechanical	Digital thermostats were installed to allow for scheduling of first floor heat pumps. CO2 sensors were also installed to reduce outside air requirements. No new equipment installed. Between 9.7-10.3 EER, consistent with 2009 IECC code requirements.	1 New electric water heater 1 New exhaust fan with R10 insulation 6 New heat pumps and corresponding fan coils 1 New packaged rooftop unit (11.7 EER) 1 New energy recovery unit (12.5 EER)	22,487 kWh
		Total Energy Savings (kWh):	57,261

1.1 Key Findings

The ex-ante calculations were conducted using the methodology outlined in the Minnesota Technical Reference Manual (TRM). The TRM is a reliable source for energy calculations, providing standardized, transparent, and consistent calculation methodologies to estimate energy savings for common energy efficiency measures. The TRM is based on researched and validated data and assumptions that accurately represent current baselines and allow for accurate savings estimates to maintain transparency and fairness during energy efficiency evaluations.

The primary difference in efficiency between the two findings stems from the lighting retrofit and controls upgrades in the customer service center. In 2014, the facility originally had compact fluorescent lights (CFLs) throughout, which were upgraded to wattage-equivalent LED fixtures to achieve minimum code requirements of 1 watt per square foot. A lighting fixture analysis was conducted using the provided construction documents, and the resulting overall building lighting power density was found to be 0.772 watts per square foot – a 23% overall reduction in energy usage. In addition to the reduction in lighting power, luminaire level lighting controls were proposed, reducing the amount of time the fixtures are illuminated and allowing individual fixture dimming capability, thus reducing the overall energy usage even further.

In addition, a new electric water heater, exhaust fan with R10 insulation, (6) heat pumps, (6) fan coils, a new packaged rooftop unit, and a new energy recovery unit are to be installed as indicated in the construction documents. The specified EER of the new packaged rooftop is 11.7 EER, which is higher than the equipment efficiencies required under the 2009 IECC, the code cycle that was in effect during the 2014 Level II audit. The existing equipment was installed circa 1995, so the efficiency is assumed to be lower than code minimums in 2014, making the use of these code minimums a conservative estimate of the realistic energy savings. The energy recovery unit does not appear to be replacing an old system and will therefore provide energy recovery where waste heat was typically exhausted.

The Bemidji CSC as documented in the CD set will be more efficient overall than the facility as reported in the Level II audit due primarily to major lighting reductions and controls additions, as well as mechanical efficiency improvements and the addition of an energy recovery unit. Savings calculations conducted using TRM approved methodology results in overall annual building energy use savings of 57,261 kWh.

1.2 Ex-Ante Savings Calculations

Many of the following calculations were conducted using the methodology outlined in version 4.1 of the MN TRM. However, there are no savings calculations for commercial insulation. Instead, the ex-ante savings for this measure were derived using a Department of Energy (DOE) prototype energy model for a small office building.

1.2.1 Insulation

As described above, a separate methodology was used to determine the savings due to increasing the roof insulation from R-20.83 to R-31.25. A DOE-approved energy model, created in Open Studio, was used to approximate the savings from this measure. The results were then scaled by a factor of 1.79 to reflect the difference in square footage between the DOE prototype, and the Bemidji Customer Service Center.

Model Package	Total Energy Use (kWh)	Total Demand (kW)	Energy Savings (%)	Demand Savings (%)	Baseline (kWh)	Baseline (kW)	Incremental Energy Savings (kWh)	Incremental Load Savings (kW)	EUI (kBtu/SF)
Baseline	**58,587**	**32.11**	--	--	--	--	--	--	**41.7**
R30 Roof Insulation	57,976	31.61	1.04%	1.57%	58,587	32.11	611	1	41.3

$$\boldsymbol{DOE\ Prototype\ SF} = 5{,}502$$

$\boldsymbol{Bemidji\ CSC\ SF} = 9{,}872$

$\boldsymbol{Scaling\ Ratio} = \frac{9{,}872}{5{,}502}$

$\boldsymbol{Scaling\ Ratio} = 1.794$

$$\Delta kWh = Modeled\ Savings * Scaling\ Ratio$$

$$\Delta kWh = 611 * 1.794$$

$$\boxed{\Delta kWh = 1{,}096.29}$$

1.2.2 Interior & Exterior Lighting

The savings due to the interior and exterior lighting power reductions were calculated using the methodology outlined on page 258 of version 4.1 of the MN TRM. The high-efficiency fixture wattage values were calculated via a fixture analysis of the submitted construction documents to be 7.63 kW, while the baseline wattage was determined using code required levels as of 2014, listed in the 2009 IECC.

$\boldsymbol{SF} = 9{,}872$

$\boldsymbol{kW\_Base} = 9.872$
$\boldsymbol{kW\_EE} = 7.63$

Interior values based on fixture analysis of CD set

$\boldsymbol{kW\_Base} = 0.6$
$\boldsymbol{kW\_EE} = 0.334$

Exterior values based on fixture analysis of CD set

$\boldsymbol{Hrs} = 4{,}439$
$\boldsymbol{CF} = 0.7$

as outlined in Table 2 (pg. 259)

$\boldsymbol{HVAC\_cooling\_kWhsavings\_factor} = 1.095$
$\boldsymbol{HVAC\_cooling\_kWsavings\_factor} = 1.254$
$\boldsymbol{HVAC\_heating\_penalty\_factor} = -0.0023$

Interior values as outlined in Table 1 (pg. 259)

$\boldsymbol{HVAC\_cooling\_kWhsavings\_factor} = 1$
$\boldsymbol{HVAC\_cooling\_kWsavings\_factor} = 1$
$\boldsymbol{HVAC\_heating\_penalty\_factor} = 0$

Exterior values as outlined in Table 1 (pg. 259)

$$kWh\ Savings\ per\ Year\ = (kW_{Base} - kW_{EE}) * Hrs * HVAC\_cooling\_kWhsavings\_factor$$

$$\boldsymbol{Interior}\ kWh\ Savings\ per\ Year\ = (9.87 - 7.63) * 4{,}439 * 1.095$$

$$\boxed{Interior\ kWh\ Savings\ per\ Year\ = 10{,}897.70}$$

$$\boldsymbol{Exterior}\ kWh\ Savings\ per\ Year\ = (0.6 - 0.334) * 4{,}439 * 1$$

$$\boxed{Exterior\ kWh\ Savings\ per\ Year\ = 1{,}180.77}$$

$$Peak\ kW\ Savings\ per\ Year\ = CF * (kW_{Base} - kW_{EE}) * HVAC\_cooling\_kWsavings\_factor$$

$$\boldsymbol{Interior}\ Peak\ kW\ Savings\ per\ Year\ = 0.7 * (9.87 - 7.63) * 1.254$$

$$\boxed{Interior\ Peak\ kW\ Savings\ per\ Year\ = 1.968}$$

$$Peak\ kW\ Savings\ per\ Year\ = CF * (kW_{Base} - kW_{EE}) * HVAC\_cooling\_kWsavings\_factor$$

$$\boldsymbol{Exterior}\ Peak\ kW\ Savings\ per\ Year\ = 0.7 * (0.6 - 0.334) * 1$$

$$\boxed{Exterior\ Peak\ kW\ Savings\ per\ Year\ = 0.186}$$

$$(\boldsymbol{Interior})\ Dth\ Savings\ per\ Year\ = (kW_{Base} - kW_{EE}) * Hrs * HVAC\_heating\_penalty\_factor$$

$$Dth\ Savings\ per\ Year\ = (9.872 - 7.63) * 4{,}439 * -0.0023$$

$$\boxed{Dth\ Savings\ per\ Year\ = -22.89}$$

As this facility has no gas usage, the estimated increase in electricity usage to make up for heating losses due to more efficient lighting was converted to kWh savings via Joules. The penalty for gas heating was assumed to be calculated at 80% efficiency, and the weighted average COP of the new heat pumps was calculated to be 2.79. These values were used in the conversion of the gas heating penalty into an electric heating penalty:

$$1\ Dth\ = 1{,}055{,}055{,}900\ Joules$$

$$Joules\ saved = -22.89 * 1{,}055{,}055{,}900 * \frac{0.8}{2.79}$$

$$Joules\ saved = -24{,}150{,}385{,}066.24$$

$$kWh\ Savings = \frac{-24{,}150{,}385{,}066.24}{3{,}600{,}000}$$

$$\boxed{kWh\ Savings = -1{,}921.82}$$

$$\boxed{Total\ kWh\ Savings = 8{,}975.88}$$

1.2.3 Lighting Controls

The savings due to the addition of luminaire level lighting controls (LLLC) were calculated using the methodology outlined on page 266 of version 4.1 of the MN TRM. The full interior lighting load of 7.63 kW was used in this, as all fixtures are proposed to be controlled by LLLCs. The remaining inputs came directly from the TRM:

$\boldsymbol{kW} = 7.63$

$\boldsymbol{Hrs} = 4{,}439$

$\boldsymbol{SF\_new} = 0.77$

$\boldsymbol{SF\_old} = 0$

Values as outlined in Tables 1 & 2. (pg. 268-9) – **SF_old** was set to 0 as there were **no** lighting controls in the building as of the 2014 Level II audit.

$\boldsymbol{CF} = 0.7$

$\boldsymbol{HVAC\_cooling\_kWhsavings\_factor} = 1.095$

$\boldsymbol{HVAC\_cooling\_kWsavings\_factor} = 1.254$

$\boldsymbol{HVAC\_heating\_penalty\_factor} = -0.0023$

Values as outlined in Table 1 (pg. 259)

$$kWh\ Savings\ per\ Year = kW * (SF\_new - SF\_old) * Hrs * HVAC\_cooling\_kWhsavings\_factor$$

$$kWh\ Savings\ per\ Year = 7.63 * (0.77 - 0) * 4{,}439 * 1.095$$

$$\boxed{kWh\ Savings\ per\ Year = 28{,}557.13}$$

$$Peak\ kW\ Savings = CF * kW * (SF\_new - SF\_old) * Hrs * HVAC\_cooling\_kWsavings\_factor$$

$$Peak\ kW\ Savings = 0.7 * 7.63 * (0.77 - 0) * 4{,}439 * 1.254$$

$$\boxed{Peak\ kW\ Savings = 5.16}$$

$$Dth\ Savings\ per\ Year = kW * (SF\_new - SF\_old) * Hrs * HVAC\_heating\_penalty\_factor$$

$$Dth\ Savings\ per\ Year\ = 7.63 * (0.77 - 0) * 4{,}439 * -0.0023$$

$$\boxed{Dth\ Savings\ per\ Year\ = -59.98}$$

As this facility has no gas usage, the estimated increase in electricity usage to make up for heating losses due to more efficient lighting was converted to kWh savings via Joules. The penalty for gas heating was assumed to be calculated at 80% efficiency, and the weighted average COP of the new heat pumps was calculated to be 2.79. These values were used in the conversion of the gas heating penalty into an electric heating penalty:

$$1\ Dth\ = 1{,}055{,}055{,}900\ Joules$$

$$Joules\ saved = -59.98 * 1{,}055{,}055{,}900 * \frac{0.8}{2.79}$$

$$Joules\ saved = -63{,}285{,}426{,}986.02$$

$$kWh\ Savings = \frac{-63{,}285{,}426{,}986.02}{3{,}600{,}000}$$

$$\boxed{kWh\ Savings = -5{,}036.08}$$

$$\boxed{Total\ kWh\ Savings = 23{,}521.05}$$

The Michaels team would like to note that CEE conducted their own TRM-based savings estimate in parallel for the interior lighting projects at the Bemidji CSC. Their teams' analysis resulted in a total annual savings of **39,423.38 kWh**. This value matches the value determined through the interior lighting and controls methodologies almost exactly:

$$Interior\ Lighting\ kWh\ Savings\ = Interior\ Lighting + Lighting\ Controls$$

$$Interior\ Lighting\ kWh\ Savings\ = 10{,}897.70 + 28{,}557.13$$

$$\boxed{Interior\ Lighting\ kWh\ Savings\ = 39{,}454.83}$$

Due to the close match in savings between these two analyses, the Michaels team believes these estimates to be a good approximation for the savings due to these measures. The one major difference of note surrounds the inclusion of heating penalties in the Michaels teams' energy analysis. The MN TRM does not include electric heating penalties for lighting reductions, but it does include gas penalties. As this facility has no gas usage, a decrease in the level of lighting, and thus, the heat emitted by each light fixture, additional electric heating loads will be required to cover the heating losses.

1.2.4 Mechanical

The savings due to the set of (6) new heat pumps, were calculated using the methodology outlined on page 338 of version 4.1 of the MN TRM. The manufacturer-provided SEER2 and HSPF2 values were converted to SEER and HSPF using Table 2 on page 41 of the TRM.

$\boldsymbol{CF} = 0.9$

$\boldsymbol{SEER_{base}} = 13$ Equivalent to 2009 IECC code minimum

$\boldsymbol{SEER_{ee}} = 16$

$\boldsymbol{EFLH_{cool}} = 257$

$\boldsymbol{EFLH_{heat}} = 1{,}966$

Annual cooling/heating hours for a low rise office in zone 1 as outlined in Tables 1. (pg. 340)

$\boldsymbol{HSPF_{base}} = 7.7$ TRM-provided value

$\boldsymbol{HSPF_{ee}} = 9.17$

$\boldsymbol{Size\ (tons)} = 15$

$$kWh\ Savings = Size * 12 * (EFLH_{cool} * \left(\frac{1}{SEER_{base}} - \frac{1}{SEER_{ee}}\right) + EFLH_{heat} * (\frac{1}{HSPF_{base}} - \frac{1}{HSPF_{ee}})$$

$$kWh\ Savings = 15 * 12 * (257 * \left(\frac{1}{13} - \frac{1}{16}\right) + 1{,}966 * (\frac{1}{7.7} - \frac{1}{9.17})$$

$$\boxed{kWh\ Savings = 8{,}061.81}$$

The savings due to the new heat recovery unit, were calculated using the methodology outlined on page 445 of version 4.1 of the MN TRM.

$\boldsymbol{CF} = 0.9$

$\boldsymbol{CFM} = 800$ As listed on page M001 in the CD set

$\boldsymbol{Eff\_fan} = 0.705$ As listed on page 439 of the TRM

$\boldsymbol{Eff\_motor} = 0.855$ As listed on page 439 of the TRM

$\boldsymbol{ERV\_E} = 0.466$ As listed in Table 4 (pg. 442) of the TRM

$\boldsymbol{Hours} = 12$ As listed on page 440 of the TRM

$\boldsymbol{EER} = 12.5$ As listed on page M001 in the CD set

$\boldsymbol{Delta\ h\_heating} = 30.5$ As listed in Table 1 (pg. 441) of the TRM

$\boldsymbol{N} = 1$ Electric resistance efficiency

$\boldsymbol{HDD65} = 9{,}833$

$\boldsymbol{T\_indoor} = 70$ As listed in Table 1 (pg. 441) of the TRM

$\boldsymbol{T_{design}} = -22$

$\boldsymbol{PD} = 0.00055$ As listed in Table 4 (pg. 442) of the TRM

$$Unit\ kWh\ Saving = \frac{(4.5 * CFM * \Delta h\_heating)}{N} * \frac{HDD65 * 24}{T_{indoor} - T_{design}} * \frac{\frac{Hours}{24}}{3{,}412} * ERV_E * 0.75$$

$$Unit\ kWh\ Saving = \frac{(4.5 * 800 * 30.5)}{1} * \frac{9{,}833 * 24}{70 - (-22)} * \frac{\frac{Hours}{24}}{3{,}412} * 0.466 * 0.75$$

$$\boxed{kWh\ Savings = 14{,}425.14}$$

One major difference of note stems from the calculation methodology in the TRM for energy recovery defaulting to gas heating and gas efficiencies. As this building is all electric, the Michaels teams' energy analysis modifies the TRM calculation by adjusting N=0.8 to N=1, equivalent to electric resistance efficiency, as well as the 1,000,000-reduction factor that is traditionally used to convert BTUs to Dekatherms. As we are looking to calculate the electric savings, this value was adjusted to 3,412 to capture the conversion factor from BTU to kWh.

Bemidji CSC	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**
Avoided Energy	$ 1,857	$ 1,920	$ 1,998	$ 2,029	$ 2,005	$ 1,996	$ 2,020
Avoided Capacity	$ 2,843	$ 2,900	$ 2,958	$ 3,017	$ 3,077	$ 3,139	$ 3,201
Avoided T&D	$ 520	$ 535	$ 551	$ 568	$ 585	$ 602	$ 621
Environmental Benefits	$ 2,080	$ 2,080	$ 2,080	$ 2,080	$ 2,080	$ 2,080	$ 2,080
Economic Impact	$ 349,273	$ 349,273	$ 349,273	$ 349,273	$ 349,273	$ 349,273	$ 349,273
Non-Energy Benefits	$ 261	$ 268	$ 275	$ 281	$ 283	$ 287	$ 292
Total Benefits	**$ 356,833**	**$ 356,976**	**$ 357,135**	**$ 357,247**	**$ 357,304**	**$ 357,377**	**$ 357,487**

NPV Benefits	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**
Avoided Energy	$ 1,857	$ 1,859	$ 1,872	$ 1,840	$ 1,761	$ 1,697	$ 1,663
Avoided Capacity	$ 2,843	$ 2,807	$ 2,772	$ 2,737	$ 2,702	$ 2,668	$ 2,635
Avoided T&D	$ 520	$ 518	$ 517	$ 515	$ 514	$ 512	$ 511
Environmental Benefits	$ 2,080	$ 2,014	$ 1,950	$ 1,887	$ 1,827	$ 1,769	$ 1,712
Economic Impact	$ 349,273	$ 338,115	$ 327,313	$ 316,857	$ 306,735	$ 296,936	$ 287,450
Non-Energy Benefits	$ 261	$ 259	$ 258	$ 255	$ 249	$ 244	$ 240
Total Benefits	**$ 356,833**	**$ 345,572**	**$ 334,682**	**$ 324,091**	**$ 313,788**	**$ 303,826**	**$ 294,211**

Bemidji CSC Costs	**2025**
Projects Costs	$ 2,686,712

Bemidji CSC	2032	2033	2034	2035	2036	2037	2038	2039	2040
Avoided Energy	$ 2,044	$ 2,087	$ 2,204	$ 2,422	$ 1,149	$ 1,221	$ 1,301	$ 1,431	$ 64
Avoided Capacity	$ 3,265	$ 3,331	$ 3,397	$ 3,438	$ 2,435	$ 2,484	$ 2,534	$ 2,584	$ 4
Avoided T&D	$ 639	$ 658	$ 678	$ 693	$ 496	$ 510	$ 526	$ 542	$ 1
Environmental Benefits	$ 2,080	$ 2,080	$ 2,080	$ 2,041	$ 948	$ 948	$ 948	$ 948	$ 41
Economic Impact	$ 349,273	$ 349,273	$ 349,273						
Non-Energy Benefits	$ 297	$ 304	$ 314	$ 328	$ 204	$ 211	$ 218	$ 228	$ 3
Total Benefits	**$ 357,599**	**$ 357,733**	**$ 357,946**	**$ 8,921**	**$ 5,232**	**$ 5,374**	**$ 5,527**	**$ 5,733**	**$ 114**

NPV Benefits	2032	2033	2034	2035	2036	2037	2038	2039	2040
Avoided Energy	$ 1,628	$ 1,609	$ 1,646	$ 1,751	$ 804	$ 827	$ 853	$ 908	$ 39
Avoided Capacity	$ 2,602	$ 2,569	$ 2,537	$ 2,485	$ 1,704	$ 1,683	$ 1,661	$ 1,640	$ 3
Avoided T&D	$ 509	$ 508	$ 506	$ 501	$ 347	$ 346	$ 345	$ 344	$ 1
Environmental Benefits	$ 1,657	$ 1,605	$ 1,553	$ 1,475	$ 663	$ 642	$ 622	$ 602	$ 25
Economic Impact	$ 278,267	$ 269,378	$ 260,772	$ -	$ -	$ -	$ -	$ -	$ -
Non-Energy Benefits	$ 237	$ 234	$ 234	$ 237	$ 143	$ 143	$ 143	$ 145	$ 2
Total Benefits	**$ 284,901**	**$ 275,903**	**$ 267,248**	**$ 6,448**	**$ 3,661**	**$ 3,640**	**$ 3,624**	**$ 3,639**	**$ 70**

Bemidji CSC	2041	2042	2043	2044	2045	2046	2047	2048	2049
Avoided Energy	$ 63	$ 66	$ 70	$ 73	$ 69	$ 77	$ 80	$ 79	$ 74
Avoided Capacity	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Avoided T&D	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Environmental Benefits	$ 37	$ 37	$ 37	$ 37	$ 37	$ 37	$ 37	$ 37	$ 37
Economic Impact									
Non-Energy Benefits	$ 3	$ 3	$ 3	$ 4	$ 3	$ 4	$ 4	$ 4	$ 4
Total Benefits	**$ 103**	**$ 106**	**$ 110**	**$ 114**	**$ 110**	**$ 117**	**$ 121**	**$ 120**	**$ 115**

NPV Benefits	2041	2042	2043	2044	2045	2046	2047	2048	2049
Avoided Energy	$ 38	$ 38	$ 39	$ 40	$ 36	$ 39	$ 39	$ 37	$ 34
Avoided Capacity	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Avoided T&D	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Environmental Benefits	$ 22	$ 21	$ 21	$ 20	$ 19	$ 19	$ 18	$ 18	$ 17
Economic Impact	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Non-Energy Benefits	$ 2	$ 2	$ 2	$ 2	$ 2	$ 2	$ 2	$ 2	$ 2
Total Benefits	**$ 61**	**$ 61**	**$ 61**	**$ 62**	**$ 57**	**$ 59**	**$ 59**	**$ 57**	**$ 53**

Otter Tail Power Company

Energy savings analysis

Milbank Customer Service Center

Milbank CSC- Energy Analysis

An energy analysis was performed using the Minnesota Technical Reference Manual (MN TRM) and extrapolating savings from the Bemidji Customer Service Center (CSC) which features similar renovations. These renovations include a lighting retrofit and controls upgrades, roof insulation upgrade, new high efficiency heat pumps, and an energy recovery unit.

The energy savings analysis for the Bemidji CSC was conducted by a third-party engineering firm, Michaels Energy, using the methodology outlined in version 4.1 of the MN TRM and a Department Of Energy (DOE) prototype energy model to quantify the savings from the roof insulation upgrade.

To account for differences in facility size, the savings have been scaled accordingly to reflect conditions at the Milbank CSC.

Bemidji Sqft = 9,872

Milbank Sqft = 8,261

Scaling ratio = $\frac{8,261}{9,872} = 0.837$

Table 1. Energy Efficiency Comparison

Milbank CSC Energy Efficiency Comparison			
End Use	**comparable to Bemidji CSC baselines**	**2024 Construction Documents**	**Annual Savings**
Insulation	Roof: **R20.83**	Roof: **R31.25**	881 kWh
Interior Lighting	Original CFLs were replaced with equivalent LED fixtures. **The 2009 IECC code requirement was 1 W/SF**	A lighting fixture analysis was conducted on the provided CD set - For a facility size of 8,261 SF, the total lighting wattage is 5,998.5W, or **0.726 W/SF**. Summer cooling savings will outweigh winter heating losses.	9,572 kWh
Exterior Lighting	2009 IECC base site allowance **600W**	Total exterior lighting from CD set **576 W**	106.5 kWh
Lighting Controls	controlled with manual switches.	Occupancy sensors to be installed.	5,583 kWh
Mechanical	Same as Bemidji CSC baseline efficiencies consistent with 2009 IECC code requirements.	Savings from Bemidji CSC mechanical systems were scaled by **0.837** to reflect the difference in building size.	22,492 kWh
		Total Energy Savings	38,634.5 kWh

1. Insulation

A DOE-approved energy model, created in Open Studio, was used to approximate the savings of increasing the roof insulation of the Bemidji CSC to R-31.25. The same insulation is assumed to be achieved at the Milbank CSC, so the savings can be extrapolated using the above scaling ratio.

Bemidji kWh savings = 1,096.29

Milbank kWh savings = 1,096.29 *0.837 = **881.02**

2. Interior and Exterior Lighting

The savings from interior and exterior lighting power reduction were calculated using the methodology outlined on page 258 of version 4.1 of the MN TRM. The wattage of high efficiency fixtures was determined through a fixture analysis of the submitted construction documents, resulting in a total of 5.998 kW for the interior and 0.576 kW for the exterior lights. Baseline wattage was established as 1W/sqft for interior, and 600W for exterior lights based on the 2009 IECC code requirement.

$Sqft\ = 8{,}261$

$$\left.\begin{aligned} kW_{Base} &= 8.261 \\ kW_{EE} &= 5.998 \end{aligned}\right\}\ \text{Interior values based on fixture analysis of CD set}$$

$$\left.\begin{aligned} kW_{Base} &= 0.6 \\ kW_{EE} &= 0.576 \end{aligned}\right\}\ \text{Exterior values based on fixture analysis of CD set}$$

$Hrs\ = 4{,}439$

$CF\ = 0.7$

$$\left.\begin{aligned} HVAC\_cooling\_kWhsavings\_factor &= 1.095 \\ HVAC\_cooling\_kWsavings\_factor &= 1.254 \\ HVAC\_heating\_penalty\_factor &= -0.0023 \end{aligned}\right\}\ \text{Interior values as outlined in Table 1. (pg. 259)}$$

$$\left.\begin{aligned} HVAC\_cooling\_kWhsavings\_factor &= 1 \\ HVAC\_cooling\_kWsavings\_factor &= 1 \\ HVAC\_heating\_penalty\_factor &= 0 \end{aligned}\right\}\ \text{Exterior values as outlined in Table 1. (pg. 259)}$$

$$kWh\ Savings\ per\ Year\ = (kW_{Base} - kW_{EE}) * Hrs * HVAC\_cooling\_kWhsavings\_factor$$

$$Interior\ kWh\ Savings\ per\ Year\ = (8.261 - 5.998) * 4{,}439 * 1.095$$

$$Interior\ kWh\ Savings\ per\ Year\ = 10{,}997.35$$

$$Exterior\ kWh\ Savings\ per\ Year\ = (0.6 - 0.576) * 4{,}439 * 1$$

$$Exterior\ kWh\ Savings\ per\ Year\ = 106.536$$

$$Peak\ kW\ Savings\ per\ Year\ = CF * (kW_{Base} - kW_{EE}) * HVAC\_cooling\_kWsavings\_factor$$

$$Interior\ Peak\ kW\ Savings\ per\ Year\ = 0.7 * (8.261 - 5.998) * 1.254$$

$$Interior\ Peak\ kW\ Savings\ per\ Year\ = 1.986$$

$$Peak\ kW\ Savings\ per\ Year\ = CF * (kW_{Base} - kW_{EE}) * HVAC\_cooling\_kWsavings\_factor$$

$$Exterior\ Peak\ kW\ Savings\ per\ Year\ = 0.7 * (0.6 - 0.576) * 1$$

$$Exterior\ Peak\ kW\ Savings\ per\ Year\ = 0.0168$$

$$(Interior)\ Dth\ Savings\ per\ Year\ = (kW_{Base} - kW_{EE}) * Hrs * HVAC\_heating\_penalty\_factor$$

$$Dth\ Savings\ per\ Year\ = (8.261 - 5.998) * 4{,}439 * -0.0023$$

$$Dth\ Savings\ per\ Year\ = -23.10$$

With no gas usage, heating losses from efficient lighting were converted to kWh using joules. The gas heating penalty assumed 80% efficiency, while the new heat pumps are rated at a COP of 3.8. These values were used to convert the gas heating penalty to an electric heating penalty.

1 Dth = 1,055,055,900 $Joules$

$$\text{kWh savings}\ = -23.10 * 1{,}055{,}055{,}900 * \frac{0.8}{3.8} * \frac{1}{3{,}600{,}000} = -1{,}425.22$$

$$Interior\ kWh\ Savings\ per\ Year\ = 10{,}997.35 - 1{,}425.22 = 9{,}572.13$$

Total kWh savings = $Interior\ kWh\ Savings + \ Exterior\ kWh\ Savings = \mathbf{9,678.66}$

Total peak kW savings = $Interior\ Peak\ kW\ Savings + \ Exterior\ Peak\ kW\ Savings = \mathbf{2.0}$

3. Lighting Controls

Savings from the installation of occupancy sensors were calculated using the methodology outlined on page 266 of version 4.1 of the MN TRM. The full interior load of 5.998 was used in this analysis.

$kW\ = 5.998$

$Hrs\ = 4{,}439$

$SF\_new\ = 0.22$

$SF\_old\ = 0$

$CF\ = 0.7$

$HVAC\_cooling\_kWhsavings\_factor\ = 1.095$

$HVAC\_cooling\_kWsavings\_factor\ = 1.254$

$HVAC\_heating\_penalty\_factor \ = -0.0023$

$$kWh\ Savings\ per\ Year \ = kW * (SF\_new - SF\_old) * Hrs * HVAC\_cooling\_kWhsavings\_factor$$

$$kWh\ Savings\ per\ Year \ = 5.998 * (0.22 - 0) * 4{,}439 * 1.095$$

$$kWh\ Savings\ per\ Year \ = 6{,}414.53$$

$$Peak\ kW\ Savings = CF * kW * (SF\_new - SF\_old) * Hrs * HVAC\_cooling\_kWsavings\_factor$$

$$Peak\ kW\ Savings = 0.7 * 5.998 * (0.22 - 0) * 4{,}439 * 1.254$$

$$Peak\ kW\ Savings = \mathbf{1.16}$$

$$Dth\ Savings\ per\ Year \ = kW * (SF\_new - SF\_old) * Hrs * HVAC\_heating\_penalty\_factor$$

$$Dth\ Savings\ per\ Year \ = 5.998 * (0.22 - 0) * 4{,}439 * -0.0023 = -13.47$$

$$kWh\ Savings \ = -13.47 * 1{,}055{,}055{,}900 * \frac{0.8}{3.8} * \frac{1}{3{,}600{,}000} = -831.30$$

$$Total\ kWh\ Savings \ = 6{,}414.53 - 831.30 = \mathbf{5{,}583.23}$$

4. Mechanical

Both buildings' mechanical system upgrade includes new high efficiency heat pumps and an energy recovery unit. While the mechanical drawings for the Milbank CSC are not yet finalized, the systems are expected to align with those at the Bemidji CSC. Consequently, mechanical savings were extrapolated from the Bemidji analysis.

Bemidji kWh savings= 26,878.44

Bemidji peak kW savings = 16.03

Milbank kWh savings = Bemidji kWh savings * scaling ratio = 26,878.44 * 0.837 = **22,492.18**

Milbank peak kW savings = Bemidji peak kW savings * scaling ratio = 16.03 * 0.837 = **13.414**

Milbank CSC	2025	2026	2027	2028	2029	2030	2031
Avoided Energy	$ 1,287	$ 1,331	$ 1,385	$ 1,406	$ 1,390	$ 1,384	$ 1,400
Avoided Capacity	$ 2,125	$ 2,167	$ 2,210	$ 2,255	$ 2,300	$ 2,346	$ 2,393
Avoided T&D	$ 388	$ 400	$ 412	$ 424	$ 437	$ 450	$ 464
Environmental Benefits	$ 1,442	$ 1,442	$ 1,442	$ 1,442	$ 1,442	$ 1,442	$ 1,442
Economic Impact	$ 197,176	$ 430,017	$ 430,017	$ 430,017	$ 430,017	$ 430,017	$ 430,017
Non-Energy Benefits	$ 190	$ 195	$ 200	$ 204	$ 206	$ 209	$ 213
Total Benefits	**$ 202,608**	**$ 435,552**	**$ 435,667**	**$ 435,748**	**$ 435,792**	**$ 435,848**	**$ 435,929**

NPV Benefits	2025	2026	2027	2028	2029	2030	2031
Avoided Energy	$ 1,287	$ 1,288	$ 1,298	$ 1,276	$ 1,221	$ 1,176	$ 1,152
Avoided Capacity	$ 2,125	$ 2,098	$ 2,071	$ 2,045	$ 2,020	$ 1,994	$ 1,969
Avoided T&D	$ 388	$ 387	$ 386	$ 385	$ 384	$ 383	$ 382
Environmental Benefits	$ 1,442	$ 1,396	$ 1,351	$ 1,308	$ 1,266	$ 1,226	$ 1,187
Economic Impact	$ 197,176	$ 416,280	$ 402,982	$ 390,108	$ 377,646	$ 365,582	$ 353,903
Non-Energy Benefits	$ 190	$ 189	$ 188	$ 185	$ 181	$ 178	$ 175
Total Benefits	**$ 202,608**	**$ 421,638**	**$ 408,276**	**$ 395,307**	**$ 382,717**	**$ 370,538**	**$ 358,768**

Milbank CSC Costs	2025	2026
Projects Costs	$ 1,516,742	$ 1,791,084

Milbank CSC	2032	2033	2034	2035	2036	2037	2038	2039	2040
Avoided Energy	$ 1,416	$ 1,446	$ 1,528	$ 1,707	$ 962	$ 1,022	$ 1,089	$ 1,198	$ 54
Avoided Capacity	$ 2,440	$ 2,489	$ 2,539	$ 2,587	$ 2,039	$ 2,079	$ 2,121	$ 2,163	$ 5
Avoided T&D	$ 478	$ 492	$ 507	$ 521	$ 415	$ 427	$ 440	$ 453	$ 1
Environmental Benefits	$ 1,442	$ 1,442	$ 1,442	$ 1,438	$ 794	$ 794	$ 794	$ 794	$ 35
Economic Impact	$ 430,017	$ 430,017	$ 430,017	$ 232,841					
Non-Energy Benefits	$ 217	$ 221	$ 229	$ 241	$ 171	$ 176	$ 183	$ 191	$ 3
Total Benefits	**$ 436,011**	**$ 436,108**	**$ 436,261**	**$ 239,336**	**$ 4,380**	**$ 4,499**	**$ 4,627**	**$ 4,799**	**$ 98**

NPV Benefits	2032	2033	2034	2035	2036	2037	2038	2039	2040
Avoided Energy	$ 1,129	$ 1,115	$ 1,141	$ 1,234	$ 673	$ 692	$ 714	$ 760	$ 33
Avoided Capacity	$ 1,944	$ 1,920	$ 1,896	$ 1,870	$ 1,426	$ 1,408	$ 1,391	$ 1,373	$ 3
Avoided T&D	$ 381	$ 379	$ 378	$ 377	$ 290	$ 289	$ 289	$ 288	$ 1
Environmental Benefits	$ 1,149	$ 1,112	$ 1,077	$ 1,040	$ 555	$ 538	$ 520	$ 504	$ 21
Economic Impact	$ 342,597	$ 331,653	$ 321,058	$ 168,289	$ -	$ -	$ -	$ -	$ -
Non-Energy Benefits	$ 173	$ 171	$ 171	$ 174	$ 119	$ 120	$ 120	$ 121	$ 2
Total Benefits	**$ 347,372**	**$ 336,350**	**$ 325,720**	**$ 172,983**	**$ 3,064**	**$ 3,047**	**$ 3,034**	**$ 3,046**	**$ 60**

Milbank CSC	2041	2042	2043	2044	2045	2046	2047	2048	2049
Avoided Energy	$ 51	$ 53	$ 56	$ 59	$ 56	$ 62	$ 64	$ 63	$ 59
Avoided Capacity	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Avoided T&D	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Environmental Benefits	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30
Economic Impact									
Non-Energy Benefits	$ 3	$ 3	$ 3	$ 3	$ 3	$ 3	$ 3	$ 3	$ 3
Total Benefits	**$ 83**	**$ 86**	**$ 89**	**$ 92**	**$ 88**	**$ 94**	**$ 97**	**$ 96**	**$ 92**

NPV Benefits	2041	2042	2043	2044	2045	2046	2047	2048	2049
Avoided Energy	$ 30	$ 31	$ 31	$ 32	$ 29	$ 31	$ 31	$ 30	$ 27
Avoided Capacity	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Avoided T&D	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Environmental Benefits	$ 18	$ 17	$ 17	$ 16	$ 16	$ 15	$ 15	$ 14	$ 14
Economic Impact	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Non-Energy Benefits	$ 2	$ 2	$ 2	$ 2	$ 1	$ 2	$ 2	$ 2	$ 1
Total Benefits	**$ 49**	**$ 49**	**$ 49**	**$ 49**	**$ 46**	**$ 48**	**$ 47**	**$ 46**	**$ 42**

Attachment 15 – EUIC Metrics

Customer Feedback

1. **Survey results addressing Advanced Metering Infrastructure (AMI)/Outage Management System (OMS) communications and feedback utilizing the volunteer Otter Voice group of customers.**
   No new information is available at this time. Otter Tail Power did not utilize Otter Voice for customer feedback in 2024.

2. **Percentage of Customers with an advanced meter for at least 30 days that receive an energy efficiency bill insert/New AMI options/Future options.**
   As of February 28, 2025, 94% of Otter Tail Power customers have gotten a new AMI meter and the installations were phased in over the year. Otter Tail Power creates an annual communication plan for bill inserts that include energy efficient heating and cooling technologies.
   Otter Tail Power communicates about other rebate programs, rates, and appliance recycling. The Company communicates these various options via messages on the monthly bills.
   Otter Tail Power continues to promote energy efficiency through heating and cooling technologies, rebates, and promotion of off-peak rates. The Company communicates these energy efficient options through various bill inserts and messages are sent at different times throughout the year. Pending on when customers had their meter(s) exchanged, they may not have gotten all of the inserts in 2024 but will in 2025.

3. **Estimated percentage of low-income customers with an advanced meter at least 30 days.**
   Low-income customers are included in the AMI installed meter count in Metric 2 above, and they also receive the same bill inserts.

Opt-Out and Complaints

4. **Number of customers electing to opt-out of AMI.**
   As of February 28, 2025, there are two opt-out customers in Minnesota.

5. **Information on reasons customers choose to opt-out, if available.**
   One opt-out customer stated a health concern, and the other opt-out customer did not provide a specific reason.

6. **Number of non-complaint calls to Customer Service and meter installation vendor regarding meter installation.**
   Customer Service has received 297 calls from Minnesota customers regarding advanced meter installation that were non-complaints.

7. **Number of complaints to Customer Service regarding AMI installation.**
   As of February 28, 2025, Otter Tail Power has received nine complaints regarding advanced meter installation.

AMI Deployment and Budget

8. **Number of advanced meters installed/in inventory/other uses.**
   As of February 21, 2025, 160,353 meters have been installed, 13,993 meters are in inventory, and no meters are reserved for other uses.

9. **Percentage of advanced meters deployed compared to planned installation.**
   Otter Tail Power's meter deployment rate is in line with expectations.

10. **Percentage of customers with advanced meters.**
    As of February 21, 2025, 94.1 percent of customers have advanced meters.

11. **Number of missed installation appointments.**
    Otter Tail Power did not track the number of missed appointments. Some installations took multiple attempts to complete, but not specifically due to a missed appointment.

12. **Total AMI project capital spend to-date vs. total AMI project capital budget.**
    The AMI approved project budget is $55.9 million. The total project cost through February 28, 2025 is $47.0 million.

13. **Total annual AMI O&M expense to-date vs. projected annual AMI O&M expense.**

Year	Expense
2023	$33,529
2024	$764,559
2025 YTD	$157,703
Projected 2025 Total	$1,709,090

FAN Deployment and Budget

(Otter Tail Power will discontinue this FAN metric reporting with the next annual filing.)

14. **Percentage of FAN deployed.**
    FAN is 100 percent deployed.

15. **Percentage of FAN deployed compared to planned installation.**
    FAN is 100 percent deployed. FAN installations occurred June 2023 through August 2023.

AMI Customer Data

16. **Total number of AMI meters used for billing (activated).**
    As of February 21, 2025, there are 75,985 advanced meters used for billing.

17. **Percentage of customers with transmitting advanced meters that receive estimated bills.**
    As of month-end January 2025, approximately four percent of customers with transmitting advanced meters receive estimated bills.

18. Number of customers with an advanced meter with an active web portal account.

Otter Tail Power has 30,646 customers as of February 28, 2025 that have an AMI meter with an active web portal account.

19. Number of monthly, unique visits to the web portal (My Account).

Otter Tail Power implemented the Company's My Account portal in August 2023. Since the implementation through February 28, 2025, there have been 656,548 unique visits to the web portal.

20. Customer access to hourly or sub-hourly data.

The Meter Data Management System (MDMS) has been integrated with the My Account system, and interval data is currently being populated and tested on a very small subset of employees. Otter Tail Power anticipates customers will have access to their interval data in the second quarter of 2025.

21. Provide information on the type of data available to customers and the format in which they have access.

My Account will display kilowatt hours, kilowatts, and KVAR. Customers will be able to see hourly and daily usage and various other intervals they may choose. This data will be displayed in charts and graphs and customers will be able to export the data.

22. Percentage of customers with an advanced meter that have made a complaint of inaccurate meter readings.

The percentage of customers with a complaint of an inaccurate AMI meter reading has been less than 0.1 percent.

23. Meter accuracy test percentage.

Otter Tail Power utilizes the American National Standards Institute (ANSI) standards as guides for meter accuracy. All installed advanced meters meet the plus or minus 0.2 percent standard.

24. Percentage of interval reads received (versus reads where data is not properly received).

The percentage of interval reads received as of February 21, 2025 is 96.7 percent.

25. Third-party service access to customer data for reports or studies.

Otter Tail Power does not allow third-party access to our customer data for the purpose of reports or studies.

AMI Post Deployment

26. AMI meter failure rate.

Otter Tail Power's advanced meter failure rate is less than 0.1 percent.

27. Annual trips for damaged customer equipment.

Prior to the deployment of advanced meters, Otter Tail Power averaged approximately 3,000 meter exchanges per year. These exchanges were made for a number of reasons, including failure, damage, obsolescence, and changes to the customers' billing tariff types.

28. Annual trips for residential manual disconnection (not opt-out).

In the last year, Otter Tail Power has completed 397 manual disconnections. The Company continues to make personal visits before disconnecting service in compliance with Minn. Rule 7820.2500.

29. Annual trips for residential manual reconnection (not opt-out).

Otter Tail Power completed 399 manual reconnections in 2024. 351 of the reconnections were completed after Otter Tail Power began deploying advanced meters in February 2024.

Savings

30. O&M cost savings from avoided field visits.

Year	MN Savings
2024	$691,693
2025 YTD	$219,685
Projected 2025	$1,981,574

31. Number of avoided truck rolls/field visits.

As of February 26, 2025, Otter Tail Power has avoided 25,626 truck rolls due to the implementation of AMI.

Time Of Use Rates

32. Number of customer/account inquiries regarding AMI or time-varying rates.

In 2024 Otter Tail Power logged 288 customer contacts regarding AMI installation. These calls were general questions about AMI installation. Otter Tail Power did not receive any calls in 2024 regarding time-varying rates.

33. Number of customers with advanced meters that adopt an advanced rate options (e.g. TOU) tariff, expressed as a number and percentage by each rate.

Otter Tail Power did not have any customers with advanced meters that adopted an advanced rate option through 2023. Data for eligible rates in 2024 is provided below. The AMI meters for the majority of customers on advanced rates will be installed by Otter Tail Power employees in 2025.

TOD/TOU Rate	Rate Schedule	Description	2024 AMI Meters	2024 Non-AMI Meters	2024 Total Meters	Percentage AMI Customers on Advanced Rates
430	10.07	Secondary Service 3rd party provider with RECs	1	3	4	25.00%
431	10.07	Primary Service 3rd party provider with RECs	0	0	0	0.00%
448	10.07	Secondary Service Company provider with RECs	0	0	0	0.00%
704	11.02	Irrigation Option 2 Times of Use	0	141	141	0.00%
708	10.03	General Service Time of Use	0	41	41	0.00%
611	10.05	LGS TOD – Secondary	2	17	19	10.53%

34. Number of customers enrolled in time-varying rate programs.

As of February 28, 2025, Otter Tail Power has 83 customers enrolled in time-varying rate programs.

OMS Deployment

35. Total OMS project capital spend to-date vs. total OMS project capital budget.

The original OMS capital budget is $848,500. The actual capital expenditures are provided in the table below. The OMS project did not exceed the budgeted amount.

OMS Capital Expenditures				
2021	2022	2023	2024	Total
$25,120	$552,600	$200,162	($6,914)*	$770,968

* The credit in 2024 is a sales tax refund to customers.

36. Total annual OMS O&M spend to-date vs. projected annual OMS O&M.

Year	Expense
2021	$0
2022	$97,704
2023	$465,464
2024	$141,072
2025 YTD	$34,340
Projected 2025 Total	$130,500

37. Number of unique visits to the updated Outage Map.

As of February 26, 2025, the otpco.com/outages site has had 88,998 total users with 238,970 total page views since deployment on December 21, 2022.

38. Information on how customers are reporting Outages.

Customers can report outages via Otter Tail Power's IVR system, talking with a Customer Service Representative during business hours, and a Customer Service Agent from our third-party after business hours answering service. In 2024, Otter Tail Power's IVR and third-party after business hours answering service handled 15,302 outage reports. During business hours, customers can choose to speak to one of the Company's Customer Service Representatives (CSR). Otter Tail Power's CSRs handled 2,830 outage reports in 2024.

39. Customer-minutes of interruption – major events.

Otter Tail Power provides the table below as a summary of customer minutes of interruption during Major Event Days (MED).

	2021	2022	2023	2024	2025 YTD
Customer minutes – MED	0	0	5,838,666	1,835,201	0
Old Itron IMS – feeder level – MED	2,985,915	4,042,043	5,540,407	0	0

40. Customer-minutes of interruption – single customer events.

	2021	2022	2023	2024	2025 YTD
Customer minutes – single customer	0	7,156	1,050,631	1,835,201	45,936

41. Customer-minutes of interruption – tap level events.

	2021	2022	2023	2024	2025 YTD
Customer minutes – tap level	0	4,034,887	32,621,979	20,055,697	711,332

42. Customers enrolled in Outage Alerts.

As of February 21, 2025, Otter Tail Power has 32,995 customers registered to receive outage alerts.

43. IVR Call Capture

Otter Tail Power continues to utilize the Milsoft OMS system. The Company has identified an issue with previous reports that did not accurately reflect the call types, or the number of calls processed by the Milsoft system. Additionally, a recent Milsoft update resulted in the loss of the system's ability to distinguish calls received from the Company's third-party after-hours provider and the calls handled by the Interactive Voice Response (IVR) system. As a temporary workaround, the Company generates a separate report for after-hours calls from the third-party provider and subtracts the after-hours calls from the total reported IVR calls. Otter Tail Power is engaged with Milsoft to separate the after-hours calls from the IVR category. This year's report is a more complete and accurate view of the calls that have been handled by the systems since the implementation in December 2022 than what was provided in Otter Tail Power's previous annual filing metrics.

IVR Performance by Month – Report an Outage							
Year/Month	**IVR Calls**	**After-Hours Calls**	**Manual Calls**	**Total Calls**	**Percent IVR**	**Percent After-Hours**	**Percent Manual**
2022							
Dec	1,499	0	507	1,956	74.08%	0.00%	25.92%
2022 Total	**1,449**	**0**	**507**	**1,956**	**74.08%**	**0.00%**	**25.92%**
2023							
Jan	873	0	260	1,133	77.05%	0.00%	22.95%
Feb	422	0	196	618	68.28%	0.00%	31.72%
Mar	658	0	253	911	72.23%	0.00%	27.77%
Apr	1,006	0	302	1,308	76.91%	0.00%	23.09%
May	1,131	0	374	1,505	75.15%	0.00%	24.85%
Jun	1,545	0	401	1,946	79.39%	0.00%	20.61%
Jul	1,298	0	437	1,735	74.81%	0.00%	25.19%
Aug	1,081	0	430	1,511	71.54%	0.00%	28.46%
Sep	1,143	0	292	1,435	79.65%	0.00%	20.35%
Oct	896	169	160	1,225	73.14%	13.80%	13.06%
Nov	556	117	144	817	68.05%	14.32%	17.63%
Dec	1,591	390	217	2,198	72.38%	17.74%	9.87%
2023 Total	**12,200**	**676**	**3,466**	**16,342**	**74.65%**	**4.14%**	**21.21%**

Year/Month	IVR Calls	After-Hours Calls	Manual Calls	Total Calls	Percent IVR	Percent After-Hours	Percent Manual
2024							
Jan	602	53	139	794	75.82%	6.68%	17.51%
Feb	500	75	102	677	73.86%	11.08%	15.07%
Mar	626	137	108	871	71.87%	15.73%	12.40%
Apr	1,195	189	263	1,647	72.56%	11.48%	15.97%
May	1,332	228	363	1,923	69.27%	11.86%	18.88%
Jun	1,876	299	336	2,511	74.71%	11.91%	13.38%
Jul	2,021	491	415	2,927	69.05%	16.77%	14.18%
Aug	701	121	267	1,089	64.37%	11.11%	24.52%
Sep	1,254	223	253	1,730	72.49%	12.89%	14.62%
Oct	1,280	281	211	1,772	72.23%	15.86%	11.91%
Nov	629	102	219	950	66.21%	10.74%	23.05%
Dec	934	153	154	1,241	75.26%	12.33%	12.41%
2024 Total	**12,950**	**2,352**	**2,830**	**18,132**	**71.42%**	**12.97%**	**15.61%**
2025							
Jan	671	96	182	949	70.71%	10.12%	19.18%
Feb	252	0	182	336	75.00%	0.00%	25.00%
2025 YTD	**923**	**96**	**266**	**1,285**	**71.83%**	**7.47%**	**20.70%**
Total	**27,522**	**3,124**	**7,069**	**37,715**	**72.97%**	**8.28%**	**18.74%**

Demand Response

44. Number of Load Control Devices (LCDs) installed/in inventory/other uses.

This information is not yet available due to DR deployment starting in 2026.

45. Percentage of LCDs deployed compared to planned installation.

This information is not yet available due to DR deployment starting in 2026.

46. Number of calls to Customer Service regarding LCD installation.

This information is not yet available due to DR deployment starting in 2026.

47. Total DR project capital spend-to-date vs. total DR project capital budget.

The soft cap on the DR project is **[PROTECTED DATA BEGINS… …PROTECTED DATA ENDS].** Total project cost to date is $1.1 million.

48. Total annual DR O&M spend-to-date vs. projected annual DR O&M.

Year	Expense
2024	$0
2025 YTD	$0
Projected 2025 Total	$40,800

Attachment 16
Redline and Clean Versions of
Section 13.11 – Electric Utility Infrastructure Cost
Recovery Rider, Electric Rate Schedule

RATE:

Service Category	Section	Per Meter Charge
Residential	9.01	$1.29~~2.47~~
Residential RDC	9.02	$3.01~~5.77~~
Farm	9.03	$3.94~~7.56~~
Small General Service (Under 20 kW)	10.01	$2.07~~3.98~~
General Service (20 kW or Greater)	10.02	$8.17~~15.68~~
General Service - TOU	10.03, 10.07	$13.23~~25.40~~
Large General Service - Primary / Transmission	10.04, 10.05, 10.06, 11.01	$70.80~~135.88~~
Large General Service - Secondary	10.04, 10.05, 10.06, 11.01	$12.82~~24.60~~
Irrigation Service	11.02	$6.94~~13.33~~
Outdoor Lighting (Metered)	11.03	$1.39~~2.66~~
OPA (Metered)	11.05	$3.44~~6.61~~
Controlled Service Deferred Load	14.01, 14.06	$2.41~~5.77~~
Controlled Service Interruptible – Self-Contained	14.04	$2.45~~5.88~~
Controlled Service Interruptible – CT Metering	14.04	$11.13~~26.67~~
Controlled Service Off Peak	14.07, 14.12	$3.12~~7.47~~

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 rider. See Sections 12.00, 13.00 and 14.00 of the Minnesota electric rates for the matrices of riders.

RATE:

Service Category	Section	Per Meter Charge	
Residential	9.01	$1.29	**R**
Residential RDC	9.02	$3.01	**R**
Farm	9.03	$3.94	**R**
Small General Service (Under 20 kW)	10.01	$2.07	**R**
General Service (20 kW or Greater)	10.02	$8.17	**R**
General Service - TOU	10.03, 10.07	$13.23	**R**
Large General Service - Primary / Transmission	10.04, 10.05, 10.06, 11.01	$70.80	**R**
Large General Service - Secondary	10.04, 10.05, 10.06, 11.01	$12.82	**R**
Irrigation Service	11.02	$6.94	**R**
Outdoor Lighting (Metered)	11.03	$1.39	**R**
OPA (Metered)	11.05	$3.44	**R**
Controlled Service Deferred Load	14.01, 14.06	$2.41	**R**
Controlled Service Interruptible – Self-Contained	14.04	$2.45	**R**
Controlled Service Interruptible – CT Metering	14.04	$11.13	**R**
Controlled Service Off Peak	14.07, 14.12	$3.12	**R**

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 rider. See Sections 12.00, 13.00 and 14.00 of the Minnesota electric rates for the matrices of riders.

Customer notice

The Minnesota Public Utilities Commission approved an adjustment to our Electric Utility Infrastructure Cost (EUIC) Recovery Rider. The approved per-meter charges begin January 1, 2026, for all customer classes.

This rider recovers costs associated with advanced metering infrastructure and our outage management and demand response systems.

Class	Section	Per-meter charge effective January 1, 2026
Residential	9.01	$1.29
Residential RDC	9.02	$3.01
Farm	9.03	$3.94
Small General Service (under 20 kW)	10.01	$2.07
General Service (20kW or greater)	10.02	$8.17
General Service TOU	10.03, 10.07	$13.23
Large General Service - Primary / Transmission	10.04, 10.05, 10.06, 11.01	$70.80
Large General Service - Secondary	10.04, 10.05, 10.06, 11.01	$12.82
Irrigation	11.02	$6.94
Outdoor Lighting (Metered)	11.03	$1.39
OPA (Metered)	11.05	$3.44
Controlled Service Deferred Load	14.01, 14.06	$2.41
Controlled Service Interruptible - Self Contained	14.04	$2.45
Controlled Service Interruptible - CT Metering	14.04	$11.13
Controlled Service Off Peak	14.07, 14.12	$3.12

For more information, contact us at 800-257-4044 or visit otpco.com.

CERTIFICATE OF SERVICE

RE: In the Matter of Otter Tail Power Company's Petition for Approval of the Annual Update to its Electric Utility Infrastructure Rider, Rate Schedule 13.11
Docket No. E017/M-25-

I, Laura Dewey, hereby certify that I have this day served a copy of the following, or a summary thereof, on Will Seuffert and Sharon Ferguson by e-filing, and to all other persons on the attached service list by electronic service or by First Class Mail.

Otter Tail Power Company
Initial Filing

Dated this **14th** day of **April, 2025.**

/s/ LAURA DEWEY

Laura Dewey
Regulatory Filing Coordinator
Otter Tail Power Company
215 South Cascade Street
Fergus Falls MN 56537
(218) 739-8604

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
1	Ray	Choquette	rchoquette@agp.com	Ag Processing Inc.		12700 West Dodge Road PO Box 2047 Omaha NE, 68103-2047 United States	Electronic Service		No	MN EUIC 2015
2	Generic	Commerce Attorneys	commerce.attorneys@ag.state.mn.us		Office of the Attorney General - Department of Commerce	445 Minnesota Street Suite 1400 St. Paul MN, 55101 United States	Electronic Service		No	MN EUIC 2015
3	Sharon	Ferguson	sharon.ferguson@state.mn.us		Department of Commerce	85 7th Place E Ste 280 Saint Paul MN, 55101-2198 United States	Electronic Service		No	MN EUIC 2015
4	Jessica	Fyhrie	jfyhrie@otpco.com	Otter Tail Power Company		PO Box 496 Fergus Falls MN, 56538-0496 United States	Electronic Service		No	MN EUIC 2015
5	Amber	Grenier	agrenier@otpco.com	Otter Tail Power Company		215 S. Cascade St. Fergus Falls MN, 56537 United States	Electronic Service		No	MN EUIC 2015
6	Adam	Heinen	aheinen@dakotaelectric.com	Dakota Electric Association		4300 220th St W Farmington MN, 55024 United States	Electronic Service		No	MN EUIC 2015
7	Nick	Kaneski	nick.kaneski@enbridge.com	Enbridge Energy Company, Inc.		11 East Superior St Ste 125 Duluth MN, 55802 United States	Electronic Service		No	MN EUIC 2015
8	James D.	Larson	james.larson@avantenergy.com	Avant Energy Services		220 S 6th St Ste 1300 Minneapolis MN, 55402 United States	Electronic Service		No	MN EUIC 2015
9	Kavita	Maini	kmaini@wi.rr.com	KM Energy Consulting, LLC		961 N Lost Woods Rd Oconomowoc WI, 53066 United States	Electronic Service		No	MN EUIC 2015
10	Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP		33 South Sixth St Ste 4200 Minneapolis MN, 55402 United States	Electronic Service		No	MN EUIC 2015
11	Matthew	Olsen	molsen@otpco.com	Otter Tail Power Company		215 South Cascade Street Fergus Falls MN, 56537 United States	Electronic Service		No	MN EUIC 2015
12	Generic Notice	Regulatory	regulatory_filing_coordinators@otpco.com	Otter Tail Power Company		215 S. Cascade Street Fergus Falls MN, 56537 United States	Electronic Service		No	MN EUIC 2015
13	Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	1400 BRM Tower 445 Minnesota St St. Paul MN, 55101-2131 United States	Electronic Service		No	MN EUIC 2015

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
14	Will	Seuffert	will.seuffert@state.mn.us		Public Utilities Commission	121 7th Pl E Ste 350 Saint Paul MN, 55101 United States	Electronic Service		No	MN EUIC 2015
15	Cary	Stephenson	cstephenson@otpco.com	Otter Tail Power Company		215 South Cascade Street Fergus Falls MN, 56537 United States	Electronic Service		No	MN EUIC 2015
16	Stuart	Tommerdahl	stommerdahl@otpco.com	Otter Tail Power Company		215 S Cascade St PO Box 496 Fergus Falls MN, 56537 United States	Electronic Service		No	MN EUIC 2015

[PROTECTED DATA BEGINS…

Attachment 18 is
CONFIDENTIAL in its Entirety

…PROTECTED DATA ENDS]