OTTER TAIL POWER COMPANY

April 1, 2024

2023 Demand Side Management Financial Incentive Project
Docket No. E017/M-24-

Annual Filing to Update the CIP Rider
Docket No. E017/M-24-

2023 CIP Status Report
Docket No. E017/CIP-20-475

215 South Cascade Street
PO Box 496
Fergus Falls, Minnesota 56538-0496
218 739-8200
www.otpco.com (web site)

April 1, 2024

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

Ms. Michelle Gransee
Deputy Commissioner
Minnesota Department of Commerce
Division of Energy Resources
85 7th Place East, Suite 500
St. Paul, Minnesota 55101-2198

RE: Status Report – 2023 CIP Activities
Docket No. E017/CIP-20-475

In the Matter of Otter Tail Power Company's Annual Filing of the Demand Side Management Financial Incentive Project
Docket No. E017/M-24-

In the Matter of Otter Tail Power Company's Annual Filing to Update the Conservation Improvement Project Rider
Docket No. E017/M-24-

Dear Mr. Seuffert and Ms. Gransee:

Enclosed please find Otter Tail Power Company's filing in the above referenced matter which includes:

- Executive Summary
- Summary of Filing
- Petition of Otter Tail Power Company
- Financial Incentive
- Status Report
- Conservation Cost Recovery Adjustment
- Appendix A – Tables
- Appendix B – Third Party Evaluations
- Appendix C – Project Information Sheets
- Appendix D – Customer Notice

A Certificate of Service is also enclosed. Otter Tail Power Company has served a copy of this filing on all parties listed on the enclosed Service List. If you or Commission Staff have any questions, please contact me at (218) 739-8240 or czuniga@otpco.com.

Sincerely,

/s/ CRISTINA ZUNIGA
Cristina Zuniga, Supervisor, DSM Administration
Retail Energy Solutions

sjw
Enclosures
By electronic filing
c: Service List

2023 STATUS REPORT, DSM INCENTIVE, AND FILING TO UPDATE THE RIDER EXECUTIVE SUMMARY

On April 1, 2024, Otter Tail Power Company (Otter Tail or the Company) files with the Minnesota Public Utilities Commission (Commission or MPUC) and the Minnesota Department of Commerce, Division of Energy Resources (DER or Department) its annual report detailing the Company's previous year's Conservation Improvement Program (CIP) activities.

On April 1, 2024, Otter Tail Power Company files its 2023 Status Report.

On April 1, 2024, Otter Tail also files its annual filing to update the CIP Rider.

Otter Tail would like to emphasize the following points concerning the 2023 Conservation Improvement Program:

- The Company achieved 3.62 percent energy savings as a percent of retail energy sales, above our approved goal of 2.83 percent.[1]
- The Company achieved energy savings of 61,444,189 kWh, exceeding its goal by achieving 129 percent of the goal. Demand savings were 99 percent of goal.
- The cost per kWh for *first year* savings is $0.13 (13 cents) compared to a budgeted cost of $0.18 (18 cents). Costs are in line with historical averages of $0.14 (14 cents).
- Expenditures were under budget (92 percent) at $7,729,380 based on an approved budget of $8,385,470.[2]
- Net benefits of $30,263,795 were achieved excluding net benefits from regulatory assessments, low-income programs, and our Publicly-Owned Property Solar Program.

Requests for Approval

- The Company is requesting approval for $2,705,283 in performance incentives for 2023 CIP activities, a small share of the total net benefits delivered to customers from investments in CIP.

[1] Adjusted for one-third energy savings from behavioral change programs and includes energy savings from POP Solar.
[2] Includes modifications approved by the Deputy Commissioner's January 31, 2022, Decision, and November 2, 2022, Decision in Docket No. E017/CIP-20-475.

- The Company is requesting the Average Conservation Cost Recovery Adjustment (CCRA) factor of $0.00555/kWh be reflected on customers' bills using the applicable rate in Exhibit 3 of the Conservation Cost Recovery Adjustment through the Resource Adjustment starting with bills rendered (dated) on and after October 1, 2024.
- As in prior years, Otter Tail is requesting a variance to Minnesota Rule 7820.3500 (K). The requested variance would allow the Company to continue to include CCRA within the Resource Adjustment on customer bills.
- Approval of the administrative changes requested below to our Conservation Improvement Project Rider.
- The Company is requesting approval of the 2023 CIP Tracker, resulting in a year-end negative balance of $3,321,343.

Otter Tail has committed resources and developed new, creative approaches in pursuit of higher conservation goals. This pursuit includes an appropriate balance of direct and indirect impact programs. New technologies, delivery mechanisms, and segmentation strategies emphasize Otter Tail's commitment to energy efficiency. Recent accomplishments are particularly noteworthy in the face of new building codes and equipment efficiencies and saturated markets. A consistent regulatory environment is critical to overcoming these challenges as utilities continue to pursue Minnesota's Next Generation Act and Energy Conservation and Optimization (ECO) goals. Otter Tail appreciates the support from Minnesota's regulatory agencies as we work together to sustain Minnesota's energy future.

Please note that this filing is available through the eDockets system maintained by the Minnesota Department of Commerce and the Minnesota Public Utilities Commission. Access this document by going to eDockets through the websites of the Department of Commerce or the Public Utilities Commission or going to the eDockets homepage at:

https://www.edockets.state.mn.us/EFiling/home.jsp

Once on the eDockets homepage, this document can be accessed through the Search Documents link and entering in docket number: 20-475.

Please contact Otter Tail at 800-493-3299 to request a complete copy of this filing.

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

Status Report – 2023 CIP Activities	**Docket No. E017/CIP-20-475**
In the Matter of Otter Tail Power Company's Annual Filing of the Demand Side Management Financial Incentive Project	**Docket No. E017/M-24-**
In the Matter of Otter Tail Power Company's Annual Filing to Update the Conservation Improvement Project Rider	**Docket No. E017/M-24-**
	SUMMARY OF FILING

Otter Tail Power Company (Otter Tail or the Company) is pleased to report its 2023 DSM achievements. CIP program results for 2023 proved to be another successful year for Otter Tail and our customers exceeding the approved 2.83 percent energy savings goal and achieving 3.62 percent energy savings while delivering over $30 million in customer net benefits.

Otter Tail is requesting approval of a financial incentive of $2,705,283 to be approved and recovered through its Conservation Improvement Project (CIP) Tracker Account.

Otter Tail is requesting the Average Conservation Cost Recovery Adjustment (CCRA) factor of $0.00555/kWh be reflected on customers' bills using the applicable rate in Exhibit 3 of the Conservation Cost Recovery Adjustment through the Resource Adjustment starting with bills rendered (dated) on and after October 1, 2024.

As in prior years, Otter Tail is requesting a variance to Minnesota Rule 7820.3500 (K). The requested variance would allow the Company to continue to include the CCRA within the Resource Adjustment on customer bills.

Approval of the administrative changes requested below to our Conservation Improvement Project Rider.

Lastly, Otter Tail is requesting approval of the 2023 CIP Tracker, resulting in a year-end 2023 negative balance of $3,321,343.

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

Status Report – 2023 CIP Activities	**Docket No. E017/CIP-20-475**
In the Matter of Otter Tail Power Company's Annual Filing of the Demand Side Management Financial Incentive Project	**Docket No. E017/M-24-**
In the Matter of Otter Tail Power Company's Annual Filing to Update the Conservation Improvement Project Rider	**Docket No. E017/M-24-** **PETITION**

I. INTRODUCTION AND BACKGROUND

Otter Tail Power Company (Otter Tail or the Company) is requesting approval of a financial incentive of $2,705,283 to be approved and recovered through its Conservation Improvement Project (CIP) Tracker Account.

Otter Tail is requesting the Average Conservation Cost Recovery Adjustment (CCRA) factor of $0.00555/kWh be reflected on customers' bills using the applicable rate in Exhibit 3 of the Conservation Cost Recovery Adjustment through the Resource Adjustment starting with bills rendered (dated) on and after October 1, 2024.

As in prior years, Otter Tail is requesting a variance to Minnesota Rule 7820.3500 (K). The requested variance would allow the Company to continue to include the CCRA within the Resource Adjustment on customer bills.

Approval of the administrative changes requested below to our Conservation Improvement Project Rider and Mandatory Rider.

Lastly, Otter Tail is requesting approval of the 2023 CIP Tracker, resulting in a year-end 2023 negative balance of $3,321,343.

On June 15, 1994, Otter Tail filed a petition for a CIP Adjustment to recover costs associated with CIP. On October 18, 1994, the Company filed a Motion to File Amended Petition and Accept Settlement Agreement. On December 23, 1994, the Minnesota Public

Utilities Commission (Commission or MPUC) issued an Order Approving Settlement and Proposed CIP Adjustment for Otter Tail.[3] In this Order, the Commission approved a CIP adjustment mechanism to be applied to customers' bills on or after July 1, 1995, which the Company began implementing on July 1, 1995.

On January 27, 2010, the MPUC approved a new shared savings model for 2010 and indicated the new Shared Savings Demand Side Management (DSM) incentive shall be in operation for the length of each utility's Triennial CIP Plan.[4]

On August 5, 2016, the MPUC revised the Shared Savings Model with the modifications for the length of each utility's Triennial CIP plan. This Shared Savings Model applied to utility CIP performance from 2016-2019. Later it was also approved to apply the mechanism to a one-year extension of the plans which included 2020 CIP activities.

On December 9, 2020, the MPUC approved a Shared Savings Model construct with the following points for the 2021-2023 triennium:

1. The Department's recommendations for the 2021–2023 triennium, as stated on pages 31 and 32 and Attachment A of its proposal filed on March 3, 2020, which includes:
    a. For electric utilities:
        i. Net benefits are calculated using the individual CIP Utility Discount Rates approved by the Deputy Commissioner in Docket No. E999/CIP-18-783 on February 11, 2020.
        ii. For a utility that achieves energy savings of at least 1.0 percent of the utility's retail sales, the utility is allowed to collect a financial incentive.
        iii. For a utility that achieves energy savings equal to 1.0 percent of retail sales, the utility is awarded a share of the net benefits as set forth in Attachment A (of Department's recommendation).
        iv. For each additional 0.1 percent of energy savings the utility achieves, the net benefits awarded to the utility is increased by an additional 0.75 percent until the utility achieves savings of 1.7 percent of retail sales.
        v. For savings levels of 1.7 percent and higher, the utility is awarded a share of the net benefits equal to the Net Benefits Cap.
    b. For all utilities, set a Net Benefit Cap of 10 percent.

[3] Docket No. E017/M-94-539.
[4] Docket No. E,G999/CI-08-133.

c. For all utilities, set a Conservation Improvement Program Expenditure Cap of 30 percent.
d. Maintain the following provision from the current Shared Savings DSM Financial Incentive Plan as follows:
    i. CIP-exempt customers shall not be allocated costs for the shared savings incentive. Sales to CIP-exempt customers shall not be included in the calculation of utility energy savings goals.
    ii. If a utility elects not to include a third-party CIP project, the utility cannot change its election until the beginning of subsequent years.
    iii. If a utility elects to include a third-party project, the project's net benefits and savings will be included in the calculation of the energy savings and will count toward the 1.75 percent savings goal.
    iv. The energy savings, cost, and benefits of modifications to non-third-party projects will be included in the calculation of a utility's DSM incentive.
    v. The costs of any mandated, non-third-party projects (e.g., the 2007 Next Generation Energy Act assessments, University of Minnesota Initiative for Renewable Energy and the Environment costs) shall be excluded from the calculation of net benefits and energy savings achieved and incentive awarded.
    vi. Costs, energy savings, and energy production related to Electric Utility Infrastructure Costs, solar installation, and biomethane purchases shall not be included in energy savings for DSM financial incentive purposes.

2. Gas utilities may exceed the 30 percent CIP Expenditures Cap, up to a maximum of 35 percent, if they meet or exceed energy savings equaling 1.2 percent of retail sales; **electric utilities may exceed the 30 percent CIP Expenditures Cap, up to a maximum of 35 percent, if they meet or exceed energy savings equaling 2 percent of retail sales.**

II. REQUEST FOR APPROVAL

Financial Incentive Filing

Otter Tail respectfully requests that a financial incentive of $2,705,283 be approved and recovered through its CIP Tracker Account.

Details of the incentive calculation and corresponding evaluations of direct impact projects are included in the attached report under the Section entitled "FINANCIAL INCENTIVE."

Conservation Improvement Project Rider

The Company is requesting the Average Conservation Cost Recovery Adjustment factor of $0.00555/kWh be reflected on customers' bills using the applicable rate in Exhibit 3 of the Conservation Cost Recovery Adjustment through the Resource Adjustment starting with bills rendered (dated) on and after October 1, 2024.

Administrative Tariff Changes

Otter Tail requests to make two administrative changes to its Conservation Improvement Project Rider. The primary requested change is to align the tariff and rider titles with the newly approved 2024-2026 Triennial ECO plan. The change would replace the title of "Conservation Improvement Project (CIP) Rider" with "Energy Conservation and Optimization (ECO) Rider." Otter Tail believes there is benefit in maintaining consistency between the language of the conservation plan and the corresponding cost recovery mechanism.

The second request is to add the composite CCRA rate within the tariff. Currently, the Commission order highlights the average rate, and the Otter Tail tariff lists the Service Category specific rates, meaning the specific rate in the Order does not tie directly to the tariff. Otter Tail would like to add language that highlights the CCRA rate approved by the Commission to increase transparency and reduce the risk of administrative errors. This request is in direct response to the CCRA rate error that occurred with the 2023 filing where the incorrect set of rates were implemented from October 2023 to February 2023.[5]

III. LEGAL AUTHORITY

The Petition for approval of Otter Tail's Financial Incentive Filing is submitted in accordance with Minn. Stat. § 216B.16, subd. 6c. The Conservation Improvement Project Rider is submitted in accordance with the Miscellaneous Tariff rules.

[5] Docket No. E017/M-23-150, Otter Tail Amended Compliance Filing to Correct Rate, January 5, 2024.

IV. REQUEST FOR VARIANCE TO MINNESOTA RULES

Otter Tail requests a variance to Minnesota Rules 7820.3500 (K), Billing Content, which requires fuel or power adjustment clause separately itemized. The requested variance would allow the Company to continue to include the Conservation Improvement Adjustment on customer bills within the Resource Adjustment line item.

Minnesota Rules 7829.3200 authorizes the Commission to grant a variance to its rules when (1) enforcement of the rule would impose an excessive burden on the applicant, (2) the variance would not adversely affect the public interest, and (3) the variance would not conflict with standards imposed by law. Otter Tail believes the criteria for granting variances are met since the Company has been using the combined Resource Adjustment since July 1995, and customers have become familiar with the single-line item on their bill.

The continuation of the variance would not adversely affect the public interest and may avoid customer confusion if the bill presentment was altered at this time.

And finally, there are no statutory provisions that would prohibit the variance; therefore, the requirement may be varied pursuant to Minnesota rules 7829.3200.

Once approved by the Commission, the Company will be notifying its Minnesota customers of the new CIP/ECO surcharge through an insert in the customers' bills. A surcharge notification will be included with each bill on the billing date following closest to October 1, 2024. An example of the customer notice is included in this filing as Appendix D.

V. MISCELLANEOUS FILING AND REGULATORY REQUIREMENTS

A. All correspondence with respect to this filing should be sent to:

Cristina Zuniga
Otter Tail Power Company
215 South Cascade Street
P.O. Box 496
Fergus Falls, MN 56538-0496
(218) 739-8240
czuniga@otpco.com

We request that all communications regarding this proceeding, including data requests, also be directed to:

Regulatory Filing Coordinator
Otter Tail Power Company
215 South Cascade Street
P.O. Box 496
Fergus Falls, MN 56538-0496
regulatory_filing_coordinators@otpco.com

B. The effective date of the CIP Rider is October 1, 2024. The effective date of the other filings is the date of Commission approval.

C. Otter Tail Power Company agrees that the notice and comment periods set forth in the Miscellaneous Tariff Filing rules control the time frame for processing this type of filing.

D. The reason for the filing and its impacts is explained above and in the attached report.

E. Minn. Rules Ch. 7690 contains the requirements and procedures for CIP filings. Minn. Stat. §§ 216B.2401, 216B.241, and 216B.2411 contain provisions utilities must meet in CIP. All compliance points are addressed in this section.

Statutory Requirements

2023 Minimum Spending Requirement

Minn. Stat. § 216B.241, subd. 2b. **Recovery of expenses.** Part (b), requires 1.75 percent of the Company's electric gross operating revenues, not including revenues from large electric customers exempt from CIP, be spent on CIP activities in the previous year, for the electric utility to be eligible to file for recovery of CIP expenses. Otter Tail's spending in relation to approved minimum spending is as follows:

Minimum Spending Requirement	$2,635,336
Approved Budget[6]	$ 8,385,470
2023 Actual Spending	$7,729,380

[6] Includes modifications approved by the Deputy Commissioner's January 31, 2022, Decision, and November 2, 2022, Decision in Docket No. E017/CIP-20-475.

2023 Minimum Energy Savings Goal

The Company has complied with Minn. Stat. § 216B.241 which sets the minimum energy savings goal of 1.75 percent of MWh sales, determined as a percent of 2017-2019 weather normalized sales.

Energy savings goal at 1.75%	29,568,496 kWh
Approved Energy Savings Goal[7]	47,768,310 kWh
2023 Actual Energy Savings	61,444,189 kWh

2023 Low-Income Spending Requirement

The Company has complied with Minn. Stat. § 216B.241, subd. 7. Low-income programs. Part (a) requiring utilities to spend 0.4 percent of residential electric gross operating revenues on low-income programs.

Low-Income Minimum spend at 0.4%	$ 230,060
Low-Income Approved budget[8]	$ 289,000
Low-Income Actual Spend	$ 301,499

2023 Research and Development 10 Percent Spending Cap

The Company has complied with Minn. Stat. § 216B.241, subd. 2. Public utility; energy conservation and optimization plans. Part (e) which limits spending on Research and Development to 10 percent of the total amount spent and invested on energy conservation improvements.

CIP Spending Budget	$8,385,470
10 percent R&D Spending Cap	$ 838,547
2023 Actual R&D Spending	$ 31,794

Distributed Energy Resource Five Percent Spending Cap

The Company has complied with Minn. Stat. § 216B.2411, subd. 1(a) that allows utilities to spend up to five percent of the utility's energy conservation improvement spending for

[7] Includes modifications approved by the Deputy Commissioner's January 31, 2022, Decision, and November 2, 2022, Decision in Docket No. E017/CIP-20-475.

[8] Includes modification approved by the Deputy Commissioner's January 31, 2022, Decision in Docket No. E017/CIP-20-475.

distributed generation projects. In 2023, Otter Tail spent $325,141 on its POP Solar program, 3.9 percent of the total CIP budget.

Lighting Use and Recycling Programs

The Company has complied with Minn. Stat. § 216B.241 subd. 5. that requires utilities to invest in projects that encourage the use of energy efficient lighting and reclamation and recycling of spent fluorescent and high intensity discharge lamps. Otter Tail met this requirement through its commercial and residential lighting programs.

Sustainable Buildings Certification

The Company has complied with Minn. Stat. § 216B.241, subd. 1f. part (c) that requires utilities to include in their CIP plans projects that facilitate professional engineering verification to qualify a building as ENERGY STAR labeled, Leadership in Energy and Environmental Design (LEED) certified, or Green Globes certified. The Company's Integrated Building Design Plus project facilitates sustainable building labeling and certification.

Sustainable Building 2030 Standards

The Company has complied with Minn. Stat. § 216B.241, subd. 9. part (e) that requires utilities to develop conservation improvement projects to support attaining energy efficiency goals consistent with Sustainable Buildings 2030 (SB 2030) standards. The Company's Integrated Building Design Plus project supports the SB 2030 standards.

Triennial Decision Requirements

The Company has complied with any additional requirements established in the DER Deputy Commissioner's Decision on November 24, 2020, and subsequent Deputy Commissioner Decisions in the 2021 and 2022 annual status reports.

Budget Modifications

On October 10, 2013, the Deputy Commissioner of the DER issued an Order giving utilities budget flexibility criteria by segment rather than individual program budgets. Under this requirement, utilities are required to provide a letter for permission to exceed the overall budget for a segment by 25 percent or more.

Otter Tail did not utilize the budget flexibility method for increasing budgets in 2023.

Measurement and Verification (M&V) Protocols for Large Custom CIP Projects

On July 23, 2008, the Deputy Commissioner approved M&V Protocols for Large Custom CIP Projects. The protocols apply to custom projects that have savings greater than one GWh and are initiated after April 1, 2008.

In 2023, Otter Tail had two custom projects under the Custom Efficiency Grant program estimated to save greater than one GWh. Otter Tail submitted Pre-M&V reports with the DER for approval in late December 2023. The Company continues to work with the Department on the completion of the M&V process. The project costs and associated savings for these two projects are included in this annual update for 2023. At the Department's guidance, Otter Tail will make any true-up calculations in the 2024 annual update.

CIP Employee Related Expenses

In its November 5, 2010, Order in Docket No. E017/M-10-220, the Commission agreed with and adopted the recommendations of the DER regarding reporting of employee expenses in utility status reports. The DER's recommendation included guidelines for public utilities to report employee related expenses that have been charged as Conservation Improvement Program (CIP) expenses. Public utilities must clearly identify all expenses in the four sections below:

- Travel expenses
- Employee meals
- Entertainment expenses, and
- Employee awards.

The DER further recommended, *"to limit the impacts on ratepayers, that these types of expenses remain a minor part of the overall annual budget or expenses, with a cap of 0.5 percent of total annual budgets or expenses."*

Otter Tail Power summarizes the Company's 2023 employee expenses as follows:

Section	Amount	Description
Travel Expense	$34,429	Travel expenses include mileage, rental vehicles, taxi services, and air fare for offsite meetings, customer site visits, and travel to training and conferences. All travel expenses are directly related to CIP program design, training, delivery, and promotion.
Lodging Expenses	$6,398	Lodging expenses include any lodging used for customer site offsite meetings, customer site visits, and lodging for training and conferences. All lodging expenses are directly related to CIP program design, training, delivery, and promotion.
Meal and Entertainment Expenses	$6,218	Meal and entertainment expenses include employee meals while attending offsite meetings, and meals while attending training and conferences. All meal and entertainment expenses are directly related to CIP program design, training, delivery, promotion, and review.
Conferences / Seminars / Trainings	$4,230	Conferences / Seminars / Training expenses consist of registration fees.
Miscellaneous Expenses	$0	Purchase of logo wear attire for employees while attending CIP public education forums and meetings.
TOTAL	$51,275	

Total 2023 employee expenses that were included in Otter Tail's CIP Tracker were $51,275. The total employee expense is 0.66 percent of the total 2023 CIP Tracker expenses of $7,729,380. This amount is in line with the DER's recommended employee expense of 0.5 percent of total CIP expenses. Otter Tail believes a hard cap of 0.5 percent of CIP expenses is not reasonable when considering the 153 communities spread across 25,700 square miles of Minnesota service territory. Otter Tail customers are not located in clustered metropolitan areas. Otter Tail employees frequently travel hundreds of miles a day meeting with customers for the development and promotion of CIP. Otter Tail continues to respectfully request the DER to consider these circumstances when reviewing Otter Tail's employee expenses.

Incorporation of the Average Savings Method (ASM) to account for Behavioral Savings

On April 26, 2012, in Docket Nos. E,G999/CI-08-133 and E017/CIP-10-356, the Deputy Commissioner of the Department of Commerce made a decision in how to count energy savings from behavioral projects in CIP programs and the Shared Savings Demand-Side Management Financial Incentive calculations. The Commissioner ordered Average

Savings Method (ASM) proposed by DER Staff be used with a three-year minimum lifetime, effective with the 2014 program year.

Otter Tail has implemented the Deputy Commissioner's decision for calculating the energy savings for behavioral projects. The results have been incorporated in the energy savings results counted towards the 1.75 percent energy savings goal.

VI. CONCLUSION

Based on information provided throughout this filing, Otter Tail requests the following:

From the MPUC:

1. Approval of the 2023 DSM Financial Incentive, totaling $2,705,283.
2. Approval of the 2023 CIP Tracker, resulting in a year-end negative balance of $3,321,343.
3. Approval to implement the Average CCRA factor of $0.00555/kWh reflected on customers' bills using the applicable rate in Exhibit 3 of the Conservation Cost Recovery Adjustment through the Resource Adjustment starting with bills rendered on and after October 1, 2024.
4. Approval of the administrative changes requested above to our Conservation Improvement Project Rider.
5. Approval of a variance to Minnesota Rule 7820.3500 (K) to allow Otter Tail to continue to include the Conservation Improvement Adjustment in the Resource Adjustment on customer bills.

From the Division of Energy Resources:

1. Approval of the individual 2023 CIP Projects, Evaluations, Energy and Demand Savings.
2. Approval of Otter Tail's response to various DER orders as indicated in the Miscellaneous Filing and Regulatory Compliance section of this filing.

If there are any questions concerning this filing, please contact Cristina Zuniga at (218) 739-8240 or czuniga@otpco.com.

Dated: April 1, 2024

Respectfully submitted,

OTTER TAIL POWER COMPANY

By: */s/ CRISTINA ZUNIGA*

Cristina Zuniga
Retail Energy Solutions
Otter Tail Power Company
P.O. Box 496
215 South Cascade Street
Fergus Falls, MN 56538-0496
(218) 739-8240

Financial Incentive

FINANCIAL INCENTIVE

Otter Tail Power Company (Otter Tail, the Company) hereby submits this filing in compliance with the Minnesota Public Utilities Commission's (Commission, MPUC) January 27, 2010, Order Approving Demand Side Management (DSM) Financial Incentive Plans.[1]

The filing consists of the following items.

- Discussion of 2023 Financial Incentive
- Financial Incentive – Statutory Criteria
- Cost Comparisons / Net Benefits
- Request for Approval

Tables referenced in this Financial Incentive are located in Appendix A and include the following information.

Table 1	Calculation of Carrying Charge – 2023 CIP Tracker
Table 2	2023 Incentive Mechanism
Table 3	2023 Project Costs, Savings, and Benefits
Table 4	2023 Benefit Cost Ratios
Table 5	2023 CIP Program Status Report / CIP Tracker Recap
Table 6	2023 CIP Program Status Report – Costs per kW & per kWh

[1] Docket No. E,G999/CI-08-133.

DISCUSSION OF 2023 FINANCIAL INCENTIVE

The current shared savings financial incentive plan awards Otter Tail Power Company a share of the net benefits from investments in energy efficiency. The plan links the incentive to the utilities' performance in achieving cost-effective energy efficiency.

INCENTIVE CALCULATION

On January 27, 2010, the MPUC approved a new shared savings model for 2010 and indicated the new shared savings DSM incentive shall be in operation for the length of each utility's triennial Conservation Improvement Project (CIP) plan.[2] Otter Tail's triennial plan is approved for 2021-2023.

On August 5, 2016, the MPUC revised the Shared Savings Model with the modifications for the length of each utility's triennial CIP plan. This Shared Savings Model was applied to utility CIP performance from 2016-2019. Later it was also approved to apply the mechanism to a one-year extension of the plans which included 2020 CIP activities.

On December 9, 2020, the MPUC approved a Shared Savings Model construct with the following points for the 2021-2023 triennium:

1. The Department's recommendations for the 2021–2023 triennium, as stated on pages 31 and 32 and Attachment A of its proposal filed on March 3, 2020, which includes:
    a. For electric utilities:
        i. Net benefits are calculated using the individual CIP Utility Discount Rates approved by the Deputy Commissioner in Docket No. E999/CIP-18-783 on February 11, 2020.
        ii. For a utility that achieves energy savings of at least 1.0 percent of the utility's retail sales, the utility is allowed to collect a financial incentive.
        iii. For a utility that achieves energy savings equal to 1.0 percent of retail sales, the utility is awarded a share of the net benefits as set forth in Attachment A (of Department's recommendation).
        iv. For each additional 0.1 percent of energy savings the utility achieves, the net benefits awarded to the utility is increased by an additional 0.75 percent until the utility achieves savings of 1.7 percent of retail sales.

[2] Docket E,G999/CI-08-133.

v. For savings levels of 1.7 percent and higher, the utility is awarded a share of the net benefits equal to the Net Benefits Cap.

b. For all utilities, set a Net Benefit Cap of 10 percent.
c. For all utilities, set a CIP Expenditure Cap of 30 percent.
d. Maintain the following provision from the current Shared Savings DSM Financial Incentive Plan as follows:
    i. CIP-exempt customers shall not be allocated costs for the shared savings incentive. Sales to CIP-exempt customers shall not be included in the calculation of utility energy savings goals.
    ii. If a utility elects not to include a third-party CIP project, the utility cannot change its election until the beginning of subsequent years.
    iii. If a utility elects to include a third-party project, the project's net benefits and savings will be included in the calculation of the energy savings and will count toward the 1.5 percent savings goal.
    iv. The energy savings, cost, and benefits of modifications to non-third-party projects will be included in the calculation of a utility's DSM incentive.
    v. The costs of any mandated, non-third-party projects (e.g., the 2007 Next Generation Energy Act assessments, University of Minnesota Initiative for Renewable Energy and the Environment costs) shall be excluded from the calculation of net benefits and energy savings achieved and incentive awarded.
    vi. Costs, energy savings, and energy production related to Electric Utility Infrastructure Costs, solar installation, and biomethane purchases shall not be included in energy savings for DSM financial incentive purposes.

2. Gas utilities may exceed the 30 percent CIP Expenditures Cap, up to a maximum of 35 percent, if they meet or exceed energy savings equaling 1.2 percent of retail sales; **electric utilities may exceed the 30 percent CIP Expenditures Cap, up to a maximum of 35 percent, if they meet or exceed energy savings equaling 2 percent of retail sales.**

As part of this April 1, 2024, filing under section II, the Company is providing the 2023 proposed incentive. The following steps are used in the incentive calculation:

1. The 2023 incentive is calculated using the model provided by the Department and detailed in Appendix A, Table 2.

2. At year-end, the utility calculates the net benefits for the CIP projects based on actual participation and costs. The net benefits are the avoided costs less the total CIP costs, including both direct and indirect projects.
3. Appendix A, Table 3 lists the 2023 CIP Programs, each as proposed and approved by the Department, and each with actual 2023 results. Also listed are total program costs, resulting benefits, and net benefits for each program and as a total CIP Portfolio.
4. **Actual energy savings was 61,107,913 kWh, excluding the Company's Publicly-Owned Property (POP) Solar program's allocated savings, or 3.62 percent of historic average retail sales. CIP costs totaled $7,729,380. The Company's total net benefits are calculated to be $30,263,795, excluding assessments, Low-Income, and POP Solar.** The 2023 results for energy savings, costs, and net benefits are entered in the post-year financial incentive tool as shown in Appendix A, Table 2.
5. Appendix A, Table 4 outlines the benefit/cost ratios for each 2023 program. Figures are listed for each project "as filed" as part of the 2021-2023 CIP Triennial Filing and "as actual" reflecting 2023 actual participation, savings, and costs.
6. As detailed in Appendix A, Table 2, the total incentive amount achieved in 2023 is **$2,705,064**.

FINANCIAL INCENTIVE – STATUTORY CRITERIA

Minn. Stat. §216B.16, subd. 6c(b), sets forth four statutory criteria with respect to approval by the Minnesota Public Utilities Commission of utility financial incentive plans for energy conservation improvements. In approving incentive plans, the Commission shall consider:

1. whether the plan is likely to increase utility investments in cost-effective energy conservation.
2. whether the plan is compatible with the interest of utility ratepayers and other interested parties.
3. whether the plan links the incentive to the utility's performance in achieving cost-effective conservation.
4. whether the plan is in conflict with other provisions of this chapter.

Consistent with the Commission's January 27, 2010, Order Approving Demand Side Management Financial Incentive Plans in Docket No. E,G999/CI-08-133, the following

discussion describes how Otter Tail's proposed 2023 Demand Side Management financial incentive in the present docket is consistent with each of these statutory criteria.

Otter Tail's financial incentive mechanism is consistent with the considerations set forth by the Commission as follows:

1. Increase investments: The incentive mechanism encourages increased utility investment in cost-effective conservation, recognizing higher incentives for greater net benefits.
2. Interest of ratepayers and others: The current mechanism is in the interest of ratepayers because it awards utilities a percentage of net benefits achieved. The mechanism does not award the incentives for simply complying with statutory spending, but encourages additional cost-effective energy-efficiency investment, which is in the ratepayer's interest.
3. Links incentive to performance: The current incentive is a shared savings mechanism that awards utilities a share of the net benefits from investments in energy efficiency. There is a direct link between the amount of the incentive and the utility's performance of achieving cost-effective efficiency. As cost-effectiveness increases, net benefits increase, and thus, the incentive increases until the utility reaches the expenditure cap.
4. Conflict with other provisions: Otter Tail does not believe the current incentive conflicts with other provisions of law. It does not result in unjust or unreasonable rates since the mechanism awards for cost-effective energy efficiency at a cost less than supply side options.

COST COMPARISONS / NET BENEFITS

In 2023, Otter Tail's average first year cost per kWh saved was 13 cents, which is in line with the five-year average of 14 cents. As noted in Figure 1, the average first year costs per kWh range have remained relatively consistent.

Figure 1: History of Otter Tail's CIP Achievements, Tracker, and Incentives (2019-2023)

	2019	2020	2021	2022	2023
DSM Financial Incentive	$2,718,378	$2,864,948	$2,900,388	$2,414,490	$2,705,283
CIP Expenditures	$9,116,722	$9,643,680	$9,381,509	$7,696,226	$7,729,380
Achieved Energy Savings (kWh)	69,248,477	70,649,612	68,779,250	50,557,160	61,444,189
Average Cost per kWh Saved	$0.13	$0.14	$0.14	$0.15	$0.13

NET BENEFITS

The definition of "net benefits" used in the financial incentive calculation is the total utility benefits less the total utility costs for the entire CIP portfolio for a single year. These figures are derived from a single year (2023) benefit/cost analysis using DSMore™ software. The utility benefits are aggregated for the lifetime of all CIP energy efficiency measures, discounted back to 2023 dollars using the utility discount rate of 5.61 percent for the utility test and the rate of 3.02 percent for the societal test. [3]

As shown in Table 3 of Appendix A, the estimated net benefits for the 2023 Proposed CIP are $22,944,528.[4,5] Additional details of the total costs and the total benefits from benefit/cost analysis of the 2023 Proposed CIP portfolio include:

Figure 2:

Program Costs - Proposed 2023*	
Delivery/Implementation/Administration Costs	$3,543,023
Incentives	$4,776,550
Total Costs	$8,319,573
Program Benefits - Proposed 2023**	
Avoided T&D Electric	$2,123,555
Cost-Based Avoided Electric Production	$20,882,846
Cost-Based Avoided Electric Capacity	$8,257,700
Cost-Based Avoided Ancillary	$0
Total Benefits	$31,264,101
Net Benefits - Proposed 2023	$22,944,528
Benefit/Cost Results - Proposed 2023	3.76

* Benefits are based on lifetime benefits, discounted back to 2023 dollars using 5.61 percent utility discount rate.

** Costs include assessments.

[3] Per the Deputy Commissioner's Decision on February 11, 2020, Docket No. E999/CIP-18-783.
[4] Figure 2 includes modifications approved by the Deputy Commissioner's January 31, 2022, Decision, and the November 2, 2022, Decision in Docket No. E017/CIP-20-475.
[5] Figure 2 reflects total net benefits and not the adjusted net benefits included in the calculation of the financial incentive.

As shown in Table 3 of Appendix A, the actual net benefits of $30,283,991 for 2023 CIP are higher than the proposed net benefits.[6] Additional details of the total costs and the total benefits from the DSMore analysis of the 2023 Actual CIP portfolio include:

Figure 3:

Program Costs - Actual 2023**	
Delivery/Implementation/Administration Costs	$2,458,861
Incentives	$5,270,520
Total Costs	$7,729,380
Program Benefits - Actual 2023*	
Avoided T&D Electric	$2,119,421
Cost-Based Avoided Electric Production	$27,544,201
Cost-Based Avoided Electric Capacity	$8,349,750
Cost-Based Avoided Ancillary	$0
Total Benefits	$38,013,371
Net Benefits - Actual 2023	$30,283,991
Benefit/Cost Results - Actual 2023	4.92

* Benefits are based on lifetime benefits, discounted back to 2023 dollars using 5.61 percent utility discount rate.
** Costs include assessments.

Figure 4:

CIP Cost Breakdown - 2023				
	Proposed Costs		**Actual Costs**	
Delivery	$3,543,023	43%	$2,458,861	32%
Incentives	$4,776,550	57%	$5,270,520	68%
Total CIP Costs	$8,319,573	100%	$7,729,380	100%

SUMMARY OF PROPOSAL

Otter Tail's 2023 CIP energy savings far surpassed Minnesota's energy savings goal of 1.75 percent and finished at 3.62 percent of historical sales. The MPUC's December 9, 2020, Order adopting Modifications to Shared Savings Demand-Side Management Financial Incentive Plan reaffirmed the basis of the utility's financial incentive is to share the net benefits from the conservation programs between customers and the utility. For 2023 CIP results, the utility was eligible to receive 10 percent of the total net benefits

[6] This number reflects total net benefits and not the net benefits included in the calculation of the financial incentive.

delivered to its customers. Since the 2023 CIP energy savings exceeded 2.0 percent of the Company's historic sales, the Company qualifies to increase the expenditure cap from 30 percent to 35 percent. Applying these factors Otter Tail is eligible for a $2,705,283 financial incentive.

Otter Tail's proposed 2023 financial incentive is consistent with Minn. Stat. §216B.16, subd. 6c(b), since it supports an increase in cost-effective utility investments, links the utility's performance to achieving cost-effective conservation, and does not conflict with other provisions of Minn. Stat. §216B.16.

REQUEST FOR APPROVAL

FINANCIAL INCENTIVE FILING

Otter Tail respectfully requests the MPUC to approve the 2023 CIP performance financial incentive amount of $2,705,283 be recoverable through its CIP Tracker Account.

If there are any questions concerning this filing, please contact Cristina Zuniga at (218) 739-8240 or czuniga@otpco.com.

Dated: April 1, 2024

Respectfully submitted,

OTTER TAIL POWER COMPANY

By: */s/ CRISTINA ZUNIGA*

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Status Report

Status Report

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STATUS REPORT – 2023 CIP PROGRAMS

The 2023 Conservation Improvement Program (CIP) Status Report has been combined with the 2023 Financial Incentive Filing, produced annually on April 1. The Status Report covers all 2023 programs, including direct impact, indirect impact, and miscellaneous programs. Participation, program costs, and energy and demand savings for all programs are outlined in Appendix A, Table 5. The programs described in this Status Report are approved for the 2023 CIP Plan unless stated otherwise.

Direct Impact Programs

Residential

- Home Appliance
- Home Direct Install
- Home Energy Feedback
- Home Energy Management
- Home Heating and Cooling
- Home Lighting

Low-Income

- House Therapy
- Low-Income Home Energy Feedback

Commercial

- Commercial Audits and Studies
- Commercial Direct Install
- Commercial Energy Management
- Commercial Heat Pumps
- Commercial Lighting
- Commercial & Industrial Focused Efficiency
- Compressed Air Efficiency
- Custom Efficiency Grants (Custom Projects)
- Drive Power
- Refrigeration

Other

- Publicly Owned Property (POP) Solar
- Emerging Technology Accelerator

Indirect Impact Programs / Regulatory Requirements

- Advertising & Education
- Financing
- Implementation & Training
- Integrated Building Design Plus
- Program Development
- PUC / Regulatory (NGEA) Assessments
- Transmission & Distribution Cost Study

Miscellaneous / Inactive Program Costs

- Accounting Adjustments
- OTP CIP Projects
- Carrying Charges

DIRECT IMPACT – RESIDENTIAL

HOME APPLIANCE

The Company's Home Appliance program continued to offer customers an incentive to recycle inefficient but operating refrigerators, freezers, dehumidifiers, and window air-conditioning units at no cost to the customer. During a scheduled visit to recycle a refrigerator and/or freezer, customers may also recycle a window air-conditioner and/or dehumidifier. In 2023, we continued to offer eight LED bulbs in addition to the recycling incentive for participants. This additional benefit has helped retain customer interest in the program and is reflected in steady program participation. We will continue to provide the additional LED bulb incentive in 2024.

In 2023, the Company experienced unexpected challenges in implementing the recycling services for its Home Appliance program due to discontinued service from its appliance recycling vendor (ARV). Beginning in the early summer of 2023, the ARV began cancelling appointments for appliance pickup and recycling services booked by Otter Tail customers who had submitted pick-up requests. Additional customers began to report that rebate checks, fulfilled by the ARV, were not able to be processed and returned from their banks because the account had non-sufficient funds. Otter Tail staff reached out to the ARV but did not receive a response, making it impossible to plan or remediate the continuation of services with that specific vendor. The Company then began evaluating other options to provide appliance recycling services to Otter Tail customers that had already made a pick-up request. Otter Tail ultimately contracted with an alternate service provider to complete 2023 pending orders. The ARV, who the Company contracted with in the fall, successfully completed the cleanup efforts with those customers on the pending appliance pick up list and continued to offer contact-free participation as an option for customers. Throughout the entire process Otter Tail maintained contact with all customers via email and phone. Although the situation presented by the original ARV resulted in a small number of frustrated customers, the Company is proud of efforts by internal staff in contacting customers and quickly working through a solution.

The Home Appliance program also offered customers rebates for purchasing new standard-sized Energy Star® rated home appliances, including:

- Refrigerators
- Freezers
- Dishwashers

- Clothes washers
- Clothes dryers

Otter Tail promoted the Home Appliance program using various resources including:

- Bill inserts targeting residential customers.
- Print advertising.
- Webpage content including hero ads placed on the Company's home page.
- Digital billboards.
- Bill messages.
- Inclusion, as appropriate, on Home Energy Reports mailed to customers through the Energy Feedback and Low-Income Energy Feedback programs.

Participation and Budget

PARTICIPATION AND BUDGET – 2023			
Home Appliance Program	**Actual**	**Proposed**	**% of Goal**
Participation	1,090	799	136%
Budget $	$187,132	$170,000	110%

Evaluation Methodology

Energy savings for this program are consistent with Attachment B: Electric Product Assumptions, approved in the Company's Triennial Plan.

Energy Savings and Adjustments

ENERGY AND DEMAND RESULTS – 2023	
Home Appliance Program	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	226,723
Demand Savings – kW	37.96

HOME DIRECT INSTALL

The Company's Home Direct Install program consisted of the previously approved residential Home Transformer and School Kit programs. The Home Direct Install program aimed to identify and assist customers in reducing energy loss and waste in their home and to save energy and money through installation of low-cost efficiency improvement measures. The Company reached the market for these improvement measures through the following distribution strategies:

1. Direct install kits distributed to customers at the time a free audit is provided through Home Transformer residential energy audits.
2. Multifamily housing outreach efforts to target this segment with free assessments and low-cost efficiency measures free to residents.
3. Home direct install kits distributed to students in conjunction with an energy efficiency lesson plan targeting 5th grade students in participating schools.

Home Transformer

Through Home Transformer, the Company offered customers with electric space and water-heating homes an energy audit and installation of select energy-efficiency measures at no cost to the customer. Products and services offered include:

- An energy audit including a blower door test and thermal imaging analysis.
- A detailed report on audit findings, including recommendations for energy saving measures with estimated costs, annual savings, and simple payback for each measure.
- Efficiency products, installation demonstration, and education.
    - Electric measures – LED bulbs and a Tier 2 power strip.
    - Heating and cooling measures – exterior door sweep, outlet gaskets, caulking, weather-stripping for windows.
    - Water heating measures – pipe insulation, low-flow showerhead, faucet aerators, temperature assessment of the water heater.

Otter Tail relies on a local community action agency for the technical expertise needed to provide professional home energy audits, reports, and direct installs of energy efficiency measures. Otter Tail promoted the program through bill inserts targeting customers with electric space and water-heating systems.

Additionally, Otter Tail partners with Minnesota Energy Resources Corporation (MERC) to provide audits and direct-install of energy saving measures for customers in

single-family homes with natural gas as their primary heat source. The partnership allows both utilities to more cost effectively offer audits and direct install measures for our mutual customers. Beyond this collaborated effort, in August of 2023, Clean Energy Resource Teams (CERTs) along with Otter Tail and MERC went door to door in multiple Bemidji area manufactured home parks educating customers on energy efficiency opportunities and providing LED light bulbs to households.

In the spring of 2023, Center for Energy and Environment (CEE) completed a building energy assessment and installation of LED bulbs in three 12-unit multifamily buildings. The Company appreciates this CEE partnership for the additional outreach and implementation of energy efficient lighting in multifamily buildings.

School Kit Distribution

The Home Direct Install program offered home energy efficiency products and educational materials to fifth grade students throughout Otter Tail's service area. Otter Tail implemented lesson plans and kit distributions using AM Conservation Group, a contracted third-party.

AM Conservation Group representatives successfully completed outreach by contacting schools throughout our service territory that teach school age children of Otter Tail customers. AM Conservation Group ordered school kits, assembled in reusable tote bags, and shipped the required inventory to participating schools. Kits included: a Tier 2 power strip, six 9-Watt LED Energy Star® bulbs, two faucet aerators, a high efficiency showerhead, and a digital thermometer for a refrigerator. The kits also included information about the products and installation instructions.

Through the Home Direct Install program, teachers at participating schools received lesson plans and an instruction guide to integrate into their curriculum. Participating students received a workbook and study guide that supported the teacher's lesson plans and instruction guide. All teachers participating in the program reported they would recommend participation in the program to their peers.

Participation and Budget

PARTICIPATION AND BUDGET – 2023			
Home Direct Install	**Actual**	**Proposed**	**% of Goal**
Participation	16,148	11,250	144%
Budget $	$178,756	$136,000	131%

Evaluation Methodology

Energy and demand savings for this program are consistent with Attachment B: Electric Product Assumptions, approved in the Company's Triennial Plan.

Energy Savings and Adjustments

ENERGY AND DEMAND RESULTS – 2023	
Home Direct Install	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	1,212,011
Demand Savings – kW	118.32

ENERGY FEEDBACK

The Energy Feedback program consisted of two components: an online energy feedback tool and the Opower Home Energy Report (HER) component. These behavior-based programs are designed to maximize energy savings achieved through behavior changes as a result of providing customers personalized and comparative energy use information.

The online energy feedback tool is an opt-in program option that is accessed with a secure sign-in to our web portal on the Otter Tail website. The HER component of the program is designed as an opt-out program and provides direct mail delivery of up to four comparative energy usage reports to participating Minnesota residential customers each year. Customers who have provided Otter Tail with an email address are also eligible to receive a monthly email home energy report (eHER).

Online Energy Feedback Tool

The Aclara Home Energy Analyzer (HEA) online energy feedback option was available to customers until September 2023. The service was replaced when Otter Tail implemented Accelerated Innovation's (AI) My Meter portal, which is called My Account on the Otter Tail website. This transition was made in conjunction with Otter Tail's implementation of advanced metering infrastructure (AMI) and providing customers the opportunity for more comprehensive usage data.

While available, the Aclara HEA enabled users to understand their individual energy use through the online availability of up to 24 months of billing history with weather overlay and analytics. It offered a custom home energy profile in which customers enter details about the age, size, and features of their home. Customers also had the option to set a personal savings goal and action plan.

For 2023, Otter Tail monitored the number of Aclara HEA users. Beginning in September, the My Account portal provided billing history, weather details, and a home profile tool. Otter Tail will continue to work with AI in 2024 to expand the energy conservation and efficiency features offered to customers in the My Account portal and will begin reporting My Account users in the 2024 status report.

Minnesota residential customers were informed and encouraged to use the HEA tool in the following ways:

- Company's website.
- Bill inserts.
- Customer service guide provided to all new customers.
- Online services brochure provided to all new customers.

Home Energy Reports

The HER program component delivered comparative energy use information to selected Minnesota residential customers. HERs contain various personalized components, including:

- Comparisons of recent energy use to comparable nearby homes.
- Comparison of past energy use to current use over time.
- Energy efficiency tips based on the home's energy use pattern, season, and household heating type.

Participation in the HER component is defined as any Minnesota residential customer that received one or more personalized HERs during 2023. Participation in the HER program in 2023 was 28,813 with additional Minnesota residential customers participating through the Low-Income HER (LI HER) program. The LI HER program is described in more detail in the Low-Income Energy Feedback program section of this report.

Participation and Budget

PARTICIPATION AND BUDGET – 2023			
Energy Feedback	**Actual**	**Proposed[1]**	**% of Goal**
Aclara HEA Participation	808	2,500	32%
Opower HER Participation	28,813	28,331	102%
Budget $	$189,181	$308,903	61%

Evaluation Methodology – Home Energy Analyzer

Annually since 2010, Otter Tail has contracted with Integral Analytics to perform an evaluation of the HEA project. The methodology used in 2010 was approved by DER

[1] Includes modifications approved by the Deputy Commissioner's January 31, 2022, Decision in Docket No. E017/CIP-20-475.

staff. The evaluation relied upon a statistical analysis of the actual billed electricity consumption before and after participation in the HEA project.

The evaluation found that savings varied by the component or level of the Aclara HEA tool the participant used. Integral Analytics has, in addition to calculating the savings by component, calculated an average overall savings calculation. In 2020, the evaluation demonstrated an average 225 kWh per year as measured at the meter.

In 2020, the Aclara HEA produced $17,200 in benefits back to Minnesota customers. However, those benefits were nearly depleted when the $14,750 cost to complete the HEA evaluation was factored into the program results. Additionally, evaluation costs for future years were expected to increase. Therefore, Otter Tail determined to forgo the evaluation in 2021, 2022, and 2023 to save those costs and in return does not claim energy savings associated with this portion of the Energy Feedback program.

Going forward, Otter Tail will work with AI to enhance energy efficiency and conservation tools within the My Account portal and then implement a third-party evaluation of energy savings.

Evaluation Methodology –HER

The 2023 evaluation of energy savings for the HER program was completed by Opower using integrated data from a variety of sources that allow for detailed analysis of energy savings. The evaluation report is included in Appendix B – Third Party Evaluations. The data utilized by Opower included:

1. **Consumption data:** Otter Tail provided weekly updates of monthly consumption data for all households in the program, including historical consumption information.

2. **Parcel data:** Opower received data, to the extent available from a third-party vendor, about household parcels, including house size, age and value, heating and cooling type, as well as pool and hot tub data. Parcel data elements for age and value are static. Other data elements may be updated at the customer's request.

3. **Demographic data:** Opower received participant demographic data, to the extent available from a third-party vendor, including household income, age of occupant(s), number of occupants, and an owner/renter indicator. The number of occupants is a field that is available to be updated at customer's request.

Opower's analysis of the HER program relies upon a fixed-effects regression model. This statistical methodology is standard procedure for the analysis of controlled experiments, is a well-accepted practice within the energy efficiency program measurement and verification (M&V) community. This methodology and analysis closely resemble the "Large Scale Data Analysis" techniques described in the Model Energy Efficiency Program Impact Evaluation Guide from the National Action Plan on Energy Efficiency.

In 2016, updates were made to the Modeled Savings Methodology to improve the accuracy of the reporting. These changes include:

- Establishing the relationship between the monthly savings rate and the cumulative number of print reports received per person in the wave up to that month.
- Applying the forecasted savings rate in each month to the usage of the modeled wave.
- Adapting the algorithm to apply to rolling enrollment waves.

Otter Tail received approval from the MN DER on October 7, 2016, to apply a revised Modeled Savings Methodology to calculate energy savings.

Overall adjusted energy savings associated with the HER and Low-Income HER programs in 2023 totaled 13,785.22 MWh, equal to an average 350.7 kWh per participant household. Otter Tail has reduced its claimed savings to reflect the standard HER program savings below.

Energy Savings and Adjustments

In accordance with the Decision of the DER, these full savings are used in calculating the net benefits and cost effectiveness of the Energy Feedback program. For 2023, the energy savings associated with behavioral change has been reduced by two-thirds, based on the Decision by the Deputy Commissioner of the DER.[2]

ENERGY AND DEMAND RESULTS – 2023	
Aclara Home Energy Analyzer	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	0
Demand Savings – kW	0

[2]April 26, 2012, Docket Nos. E,G999/CI-08-133 and E017/CIP-10-356.

ENERGY AND DEMAND RESULTS – 2023	
Opower Home Energy Reports	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	3,673,537
Demand Savings – kW	1,539.81

ENERGY AND DEMAND RESULTS – 2023	
Energy Feedback Combined Results	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	3,673,537
Demand Savings – kW	1,539.81

HOME ENERGY MANAGEMENT

The Company's Home Energy Management program consisted of the residential Air Conditioning Control program (CoolSavings) that includes cycled control of central air-conditioning systems and heat pumps, and the Water Heater Program that promotes control of water heaters.

Through CoolSavings the Company targets residential customers with central air conditioning. Customers are encouraged to enroll in the program and receive a $8.25/month credit for each of the four summer months (June-September). During a control event, cooling systems are cycled 15 minutes on and 15 minutes off for the duration of the control period, which can occur during the summer season, June through September.

Controlled water heating storage is one of Otter Tail's largest residential direct load management programs. Controlled water heating gives participating customers a discounted rate or bill credit in exchange for allowing the Company to curtail their water heater operation during peak and high energy price periods. During a control event, water heaters are interrupted entirely for the duration of the control period, which can occur at any time of the year.

Otter Tail promotes Home Energy Management using various resources including:

- Radio advertising campaigns.
- Digital and social media advertising campaigns.
- Digital billboards.
- Bill inserts.
- Bill messages.
- Bill return envelopes.
- Training sessions with community action agencies contracted to implement House Therapy.
- Customer care booklet provided to all new customers.
- *Programs and Services Guide* provided to contractors and employees.
- Program, rate, and rebate pages within the Company's website.

In 2023, Otter Tail called controlled air conditioning events on 28 days totaling 65 hours and 17 minutes. This control time is within the 300-hour control limit in the air conditioning rider. Water heaters were controlled approximately 89 hours in 2023 over

42 days. Water heater control events are based on price signals and aim to maximize savings for all customers.

Participation and Budget

Otter Tail initially filed the Water Heating program in its 2014 to 2016 CIP triennial plan with 100 percent residential participation. The program now has a ratio of 94 percent residential and 6 percent commercial. Otter Tail has included participation data for both classes in this section of the Status Report. Coolsavings remains at 100 percent residential participation.

PARTICIPATION AND BUDGET – 2023			
Home Energy Management	**Actual**	**Proposed**	**% of Goal**
Participation	18,752	18,905	99%
Budget $	$85,350	$93,000	92%

Evaluation Methodology

Energy savings for this program are consistent with Attachment B: Electric Product Assumptions, approved in the Company's Triennial Plan.

Energy Savings and Adjustments

ENERGY AND DEMAND RESULTS – 2023	
Home Energy Management	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	311,882
Demand Savings – kW	9,759.02

HOME HEATING AND COOLING

The Company's Home Heating and Cooling (HHC) program provided incentives for efficient air-source and geothermal heat pumps, envelope insulation and air sealing, and smart thermostat installations.

Heat Pumps

The heat pump component targeted residential customers currently using or considering the installation of less efficient electric resistance heating and cooling systems by offering rebates for high-efficiency air source or geothermal heat pumps. The Company applies Energy Star® qualifications as a reference guide for minimum equipment efficiency requirements for air-to-air heat pumps and geothermal heat pumps. The Company utilizes the criteria set by Efficiency Vermont for the air to water heat pump as this emerging technology does not currently have an Energy Star® qualification standard reference.

In 2023, the Company continued its promotion of the air to water heat pump (AWHP) rebate. The AWHP is an emerging technology that has the potential to improve efficiencies for customers installing hydronic heating systems where geothermal is not feasible and an electric resistance boiler is the only option. AWHP participation is anticipated to remain low with continued limited product availability in the market. However, the market is developing rapidly with many large manufactures announcing plans to bring this technology to market in the next couple of years. Additionally, the AWHP technology was a central theme at the 2024 AHR Expo. The Company believes the AWHP is a positive and innovative addition to the heat pump program portfolio which strives to provide options for all customers to take advantage of the energy efficiency of heat pump technology.

In 2023, air source heat pumps met the following minimum rating requirements. The Company provided SEER2/HSPF2 conversion ratings as product rating sheets began transitioning to the new testing standard. The conversion ratings are based on data that was being utilized for the technical reference manual (TRM) update work being completed.

	SEER (SEER2)	HSPF (HSPF2)	COP*
CCHP- Ducted	> or = 15.0 (14.3)	> or = 9.0 (7.6)	-
CCHP- Ductless	> or = 15.0 (15.0)	> or = 10.0 (9.5)	-
Air to Water (AWHP)	-	-	1.7

*COP rating at A5W110 (At an outdoor ambient temperature of 5°F, the unit must deliver 110°F supply water.)

In 2023, geothermal heat pumps met the following minimum rating requirements.

Geothermal Heat Pumps			
Type	**Loop Type**	**COP**	**EER**
Water to air	Open loop	4.1	21.1
Water to air	Closed loop	3.6	17.1
Water to water	Open loop	3.5	20.1
Water to water	Closed loop	3.1	16.1
Direct exchange	-	3.6	16.0
GHP single unit ≥ 6 tons	-	3.1	13.0

The Company added a minimum requirement for single units equal to or larger than six tons. This change was made following contractor feedback and the limitation of Energy Star® testing that does not account for these larger units when compared to other heating/cooling options at these larger sizes. Geothermal heat pumps remain the highest efficiency technology available for customers. The Company also added an additional rebate for customers electing to add a buffer tank with a heating coil or a desuperheater option to their heat pump to provide preheating of domestic hot water. This additional rebate is limited to a maximum of 20 tons per customer.

Home Insulation

Recognizing the importance of an efficient building envelope, the Home Heating and Cooling program targets residential customers with primary electric heat by offering rebates for contractor-installed weatherization and insulation measures.

Smart Thermostats

The smart thermostat component offers rebates to customers who buy and install a qualified Tier II or Tier III thermostat. Tier II thermostats are communicating thermostats that give users access to set points and the ability to schedule from anywhere using a smart device including a mobile phone, tablet, or computer. Tier III thermostats are analytics-capable thermostats that offer energy saving features in addition to those of the Tier II thermostats, including coaching, heating, ventilation, and air conditioning (HVAC) diagnostics, comparative information, and geofencing. The tier level and the type of heating system determined the level of rebate a customer received. A customer without primary electric heating but with a central cooling system is eligible for a lesser rebate.

Otter Tail promotes Home Heating and Cooling using various resources including:

- *Programs and Services Guide* provided to contractors and employees.
- Media campaigns including television, radio, and social media.
- Bill messages.
- Bill inserts.
- Digital billboard.
- Program, rate, technology, and rebate pages within the Company's website.
- Hero spots on the home page of the website.
- Modules on HERs mailed to customers through the Energy Feedback program.

Participation and Budget

PARTICIPATION AND BUDGET – 2023			
Home Heating and Cooling	**Actual**	**Proposed[3]**	**% of Goal**
Participation	566	481	118%
Budget $	$916,900	$1,000,800	92%

Evaluation Methodology

Energy savings for this program are consistent with Attachment B: Electric Product Assumptions, approved in the Company's Triennial Plan.

Energy Savings and Adjustments

ENERGY AND DEMAND RESULTS – 2023	
Home Heating and Cooling	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	4,832,530
Demand Savings – kW	516.55

[3] Includes modifications approved by the Deputy Commissioner's November 2, 2022, Decision in Docket No. E017/CIP-20-475.

HOME LIGHTING

The Company's Home Lighting program is designed to help transform the residential lighting market through three strategies:

1. Funding for upstream incentives to reduce prices of Energy Star® LED lamps at the point of purchase for consumers at participating retail stores.
2. Rebates for retrofits of inefficient, hard-wired light fixtures to LED technology.
3. Rebates during new home construction for installation of hard-wired LED light fixtures.

Upstream Incentives

Through the services of a third-party service provider, Otter Tail offers upstream incentives for Energy Star® lighting products with the following objectives:

- Leverage manufacturer dollars for instant consumer rebate incentives averaging approximately $1.91 per LED bulb.
- Leverage advertising dollars for retailers.
- Highlight Otter Tail's sponsorship of the promotions through press releases, in-store displays, special public relations events, and LED bulb sales.
- Implement the program with seamless coordination with other Energy Star® Lighting promotions throughout Minnesota and the Midwest.

There were 40 retailers in our service territory that participated in the 2023 campaign, contributing to distribution of approximately 128,800 bulbs.

Otter Tail promotes the Home Lighting program using various resources including:

- Bill inserts.
- *Programs and Services Guide* provided to contractors and employees.
- The Company's website.
- Modules on Home Energy Reports mailed to customers through the Energy Feedback program.
- Media campaigns including television, radio, and social media.
- LED lighting factsheets available upon request.
- Special promotional events with four participating retail stores, including live radio remotes highlighting the benefits of LEDs and special pricing on LED lamps available through Otter Tail's program. The events paired nicely with the

retail stores' customer appreciation events and were well attended by local customers.

Other promotions included the following:

- The Company provided eight LED bulbs to each participant who recycled an appliance through the Home Appliance program. This extended customer education about LED bulbs and increased total bulb distribution.
- The Company collaborated with local nonprofit organizations to distribute 2,592 LED holiday light strings through the fall of 2023. LED holiday strings were distributed to customers in exchange for nonperishable food items or cash donations to the nonprofit organizations. The Company organized and staffed these events in Pelican Rapids and Fergus Falls. Results included donations of approximately 1,887 pounds of food and $1,045 in cash donations to benefit local food shelves.

Participation and Budget

PARTICIPATION AND BUDGET – 2023			
Home Lighting	**Actual**	**Proposed**	**% of Goal**
Participation	129,200	106,985	121%
Budget $	$557,631	$545,000	102%

Evaluation Methodology

Energy savings for this program are consistent with Attachment B: Electric Product Assumptions, approved in the Company's Triennial Plan.

Energy Savings and Adjustments

ENERGY AND DEMAND RESULTS – 2023	
Home Lighting	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	5,799,552
Demand Savings – kW	585.90

DIRECT IMPACT – LOW-INCOME

HOUSE THERAPY

The House Therapy program's primary focus is audit, direct-install, and weatherization services for low-income residential customers. The program and measures are available to both renters and homeowners. The following table provides details on measures installed and participant status as owners or renters.

House Therapy -- Owner / Renter Detail 2023			
Installed measures	**Owners**	**Renters**	**Total**
Audit	55	3	58
Custom Measure*	60	2	62
Faucet Aerator	41	4	45
Freezer	18	1	19
LED	443	32	475
Low-flow Showerhead	19	2	21
Pipe Insulation	2		2
Refrigerator	37	3	40
Power Strip Tier II	42	3	45
Water Heater	19	1	20
Water Heater - Reduce Temperature	26	2	28
Water Heater--Controlled Ser. Rate	7		7
Weatherization			
Attic Insulation Materials			
Blower Door Test	1		1
Door Maintenance Materials			
Exterior Wall Insulation Materials			
Foundation or Basement Insulation Materials	1		1
Gaskets Kit Materials			
Other Weatherization Materials	1		1
Thermal Analysis	1		1
Window Maintenance Materials	1		1

*Custom measures include cold climate heat pumps and Energy Star® appliances.

House Therapy -- Owner / Renter Detail - 2023				
	CAP Spending	**Percent**	**Participation**	**Percent**
Owners	$173,341	96%	66	94%
Renters	$7,168	4%	4	6%
Total	$180,509	100%	70	100%

Otter Tail relies on local Community Action Program (CAP) Agencies to provide valuable technical expertise and implementation services for the House Therapy program. The Company commends the agencies' commitment to providing weatherization expertise and excellence in implementation services for this program.

Otter Tail promotes House Therapy using various resources including:

- Residential bill inserts.
- Within the environment disclosure insert posted on our website annually.
- Through the Company's website where contact information is listed for each of the agencies that implement the program.
- Through the CAP Agencies contracted with Otter Tail to implement the program.
- Through the Company's Low-Income Home Energy Feedback HERs targeting low-income households.

Participation and Budget

PARTICIPATION AND BUDGET – 2023			
House Therapy	**Actual**	**Proposed**	**% of Goal**
Participation	70	180	39%
Budget $	$222,079	$204,000	109%

Evaluation Methodology

Energy and demand savings for this program are consistent with Attachment B: Electric Product Assumptions, approved in the Company's Triennial Plan.

Energy Savings and Adjustments

ENERGY AND DEMAND RESULTS – 2023	
House Therapy	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	145,074
Demand Savings – kW	15.13

LOW-INCOME HOME ENERGY FEEDBACK

The Low-Income Home Energy Feedback program consists of a specialized Low-Income Home Energy Report (LI HER) experience to help the low-income segment of our customers to achieve energy savings, gain greater control over their home energy costs, and learn about resources available to them through Company programs and the greater community.

The LI HER program is designed as an opt-out program and provides direct mail delivery of up to four comparative energy usage reports and a monthly emailed LI HER that is sent to those participating customers who provide Otter Tail and email address.

Low-income customers were identified through segmentation within the Opower platform. Segmentation filters were based on the following attributes during 2023:

- Third-party customer-level demographic data to identify customers that have an annual household income of $40,000 or lower.
- Census tract-level data filtered to identify customers that are at an approximate median income of $46,080 or lower.
- The low-income home energy assistance program (LIHEAP) qualified indicator Otter Tail receives from state data.

Participation in the program is defined as any low-income sector Minnesota residential customer that received one or more personalized HERs during 2023. Total participation in 2023 was 10,498.

Low-Income Home Energy Reports

The LI HERs feature:

- Comparisons of recent energy use to comparable nearby homes.
- Comparison of past energy use to current use over time.
- Low-cost and no-cost energy saving ideas with an emphasis on those tips offering the highest impact on energy savings and the home's energy use pattern.
- Promotion of other low-income qualified programs available through Otter Tail.
- Promotion of other low-income qualified programs and services available in the region (such as LIHEAP).

Participation and Budget

PARTICIPATION AND BUDGET – 2023			
Low-Income Home Energy Feedback	**Actual**	**Proposed**	**% of Goal**
LI HER Participation	10,498	8,400	125%
Budget $	$79,420	$85,000	93%

Evaluation Methodology –LI HER

The 2023 evaluation of energy savings for the HER program was completed by Opower using integrated data from a variety of sources that allow for detailed analysis of energy savings results. The evaluation is included in Appendix B – Third Party Evaluations. The data included:

1. **Consumption data:** Otter Tail provided weekly updates of monthly consumption data for all households in the program, including historical consumption information.

2. **Parcel data:** Opower received data, to the extent available from a third-party vendor, about household parcels, including house size, age and value, heating and cooling type, as well as pool and hot tub data. Parcel data elements for age and value are static. Other data elements may be updated at the customer's request.

3. **Demographic data:** Opower received participant demographic data, to the extent available from a third-party vendor, including household income, age of occupant(s), number of occupants, and an owner/renter indicator. The number of occupants is a field that is available to be updated at customer's request.

Opower's analysis of the HER program relies upon a fixed-effects regression model. This statistical methodology is standard procedure for the analysis of controlled experiments, is a well-accepted practice within the energy efficiency program M&V community. This methodology and analysis closely resemble the "Large Scale Data Analysis" techniques described in the Model Energy Efficiency Program Impact Evaluation Guide from the National Action Plan on Energy Efficiency.

In 2016, updates were made to the Modeled Savings Methodology to improve the accuracy of the reporting. These changes include:

- Establishing the relationship between the monthly savings rate and the cumulative number of print reports received per person in the wave up to that month.
- Applying the forecasted savings rate in each month to the usage of the modeled wave.
- Adapting the algorithm to apply to rolling enrollment waves.

Otter Tail received approval from the MN DER on October 7, 2016, to apply a revised Modeled Savings Methodology to calculate energy savings to the HER program offered through the Energy Feedback program. The same approach is used for the Low Income Energy Feedback LI HER program.

Overall adjusted energy savings associated with the HER and Low-Income HER programs in 2023 totaled 13,785.22 MWh, equal to an average 350.7 kWh per participant household.

Energy Savings and Adjustments

In accordance with the Decision of the DER, these full savings are used in calculating the net benefits and cost effectiveness of the Energy Feedback program. For 2023, the energy savings associated with behavioral change has been reduced by two-thirds, based on the Decision by the Deputy Commissioner of the DER.[4]

ENERGY AND DEMAND RESULTS – 2023	
Low-Income Home Energy Feedback	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	1,338,451
Demand Savings – kW	561.03

[4]April 26, 2012, Docket Nos. E,G999/CI-08-133 and E017/CIP-10-356.

LOW-INCOME AND RENTER DETAILS

Pursuant to the Minnesota DeMartment of Commerce, Division of Energy Resources' (Department) Decision In the matter of Otter Tail's 2021-2023 Electric Conservation Improvement Program Triennial Plan (Docket No. E017/CIP-20-475) issued November 24, 2020, requires utilities clearly report the following metrics in their annual status reports:

a) the estimate of anticipated and actual low-income residential customer participation levels for each program as required in Minnesota Rules 7690.0550,
b) the estimate of anticipated and actual residential rental customer participation levels for each program as required in Minnesota Rules 7690.0550,
c) the planned and actual low-income spending and energy savings for each program, including dedicated low-income programs, as required in Minnesota Rules 7690.0550,
d) for programs that make use of the low-income multifamily policy guidance, the anticipated and actual spending and energy savings achieved for the program, and from market-rate versus affordable housing participants, through the program,
e) for programs that make use of the low-income multifamily policy guidance, the number of buildings and units served by market-rate versus affordable housing through the program, and
f) for programs that make use of the low-income multifamily policy guidance, the cumulative number and amount of incentives by measure type for market-rate versus affordable housing delivered through the program (e.g. total number and total value of incentives for boilers installed in market-rate and in affordable housing buildings through a multifamily program).

Tables A, B, and C below provide more detailed information pertaining to the Low-Income and Renter Details reporting requirements. Otter Tail does not offer any hybrid programs making use of the low-income multifamily policy guidance to allocate expenses and savings for such a program to its low-income House Therapy program. The company accounts for expenses and savings from multifamily projects taking place in buildings meeting low-income guidelines through its House Therapy program.

Table A: Budgeted total, actual total, anticipated low-income, and actual low-income participants.

	Budgeted Total Participants	Actual Total Participants	Anticipated Low-Income Participants*	Actual Low-Income Participants**
Residential				
Home Energy Management	18,905	18,752	5,861	1735
Home Appliance	799	1,090	248	51
Home Lighting	106,985	129,200	33,165	30
Energy Feedback Program***	28,331	28,813	-	-
Home Heating & Cooling	481	566	149	12
Home Direct Install	11,250	16,068	3,488	2
Total - Residential	183,869	215,094	46,064	1,830
Low-Income				
House Therapy	180	70	180	70
Low-Income Energy Feedback	8,400	10,498	10,498	10,498
Total - Low-Income	180	70	180	10,568

* Based on 31 percent which was derived from 2010 Census data.

**Cross referenced with OTP customers who received or were approved for an Energy Assistance Payments in 2023.

*** Low-Income participants are counted under the Low-Income Energy Feedback Program.

Table B: Budgeted total participants, actual total participants, anticipated rental participants and actual rental participants.

	Total		Rental	
	Budgeted Participants	Actual Participants	Anticipated Participants*	Actual Participants**
Residential				
Home Energy Management	18,905	18,752	3,970	1,885
Home Appliance	799	1,090	168	33
Home Lighting	106,985	129,200	22,467	22
Energy Feedback Program	28,331	28,813	5,950	4,157
Home Heating & Cooling	481	566	101	25
Home Direct Install	11,250	16,068	2,363	-
Total - Residential	183,869	215,094	35,018	6,122
Low-Income				
House Therapy	180	60	38	4
Low-Income Energy Feedback	8,400	10,498	1,764	2,909
Total - Low-Income	8,580	10,558	1,802	2,913

*Based on 21 percent which was derived from 2010 Census data.

**Cross referenced with OTP customers who were identified as renter or landlord in our CIS system.

Table C: Proposed total kWh savings and expenditures, actual total kWh and expenditures, estimated low-income kWh and expenditures, and actual low-income kWh and expenditures.

	Budgeted Total		Actual Total		Anticipated Low-Income*		Actual Low-Income**	
	kWh Savings	Expenditures	kWh Savings	Expenditures	kWh Savings	Expenditures	kWh Savings	Expenditures
Residential								
Home Energy Management	316,120	$93,000	311,882	$85,350	97,997	$28,830	42,962	$8,125
Home Appliance	369,424	$170,000	226,723	$187,107	114,521	$52,700	13,059	$8,171
Home Lighting	4,235,726	$545,000	5,799,552	$557,631	1,313,075	$168,950	20,271	$5,519
Energy Feedback Program***	3,281,680	$308,903	3,673,537	$189,181	-	-	-	-
Home Heating & Cooling	6,128,023	$1,000,800	4,832,530	$916,900	1,899,687	$310,248	30,314	$8,124
Home Direct Install	1,213,344	$136,000	1,212,011	$178,756	376,137	$42,160	449	$147
Total - Residential	15,544,317	2,253,703	16,056,235	2,114,925	3,801,418	602,888	107,055	30,086
Low-Income								
House Therapy	200,357	$204,000	279,913	$222,079	200,357	$204,000	279,913	$222,079
Low-Income Energy Feedbac	883,431	$85,000	1,338,451	$79,420	883,431	$85,000	1,338,451	$79,420
Total - Low-Income	1,083,788	289,000	1,618,364	301,499	1,083,788	289,000	1,618,364	301,499

* Based on 31 percent which was derived from 2010 Census data.

**Cross referenced with OTP customers who received or were approved for an Energy Assistance Payments in 2023.

*** Low-Income participants are counted under the Low-Income Energy Feedback Program.

The Company does not require customers participating in its residential CIP programs to provide detailed information related to household income. For the purposes of the tables above, the Company instead has cross-referenced information on residential program participation with information on customers eligible for energy assistance. Not all customers who happen to be eligible for energy assistance will necessarily apply for and receive energy assistance, so it is likely that the above numbers understate actual low-income customer participation.

Further, actual participation attributed to low-income customers in larger programs, specifically in Home Lighting, is likely higher than reported estimates in the above tables. The majority of participation, kWh savings, and expenses for this program are the result of providing upstream incentives to provide participants with a more seamless experience. However, delivering programs through an upstream program model does not provide the Company with an accurate method of allocating participation, kWh savings, and expenses exclusively to customers meeting low-income program thresholds and/or those classified as renters. Therefore, Otter Tail only reports low-income Home Lighting participants as only those customers who the Company could cross reference between its hard-wired and new construction participants and those eligible for energy assistance. This results in the actual participation, savings, and incentive numbers being higher than reported in the above tables.

DIRECT IMPACT – COMMERCIAL

COMMERCIAL AUDITS AND STUDIES

Otter Tail's Audits and Studies program provided options for customers interested in assessing their facilities and operations to learn more about opportunities available in increasing energy efficiency. Key components of this program include:

- Building recommissioning/retrocommissioning (RCx).
- Compressed air system audits.
- Compressed air system leak studies.
- Compressed air RCx.
- Small to midsize business assessments.

Building recommissioning/retrocommissioning (RCx)

The *Energy Star® Building Manual* defines commissioning as the process of ensuring that systems are designed, installed, functionally tested, and capable of being operated and maintained to the owner's operational needs.

- Recommissioning is the term used for applying the process to a building that has been commissioned previously (either during construction or as an existing building).
- Retrocommissioning is the systematic process applied to existing buildings that have never been commissioned to ensure that their systems can be operated and maintained according to the owners' needs.

Building tune-ups, RCx Lite, and building optimization all refer to an evolution of the traditional RCx process. The approach starts by targeting the most common RCx measures with the highest chances of returning payback on operations and maintenance improvements. Often, these operation and maintenance improvements are associated with advanced control strategies. Engineering firms completing RCx Lite studies are often capable of identifying these measures through spot inspections of direct digital control systems without the added costs of seasonal monitoring and functional performance testing completed through formal RCx studies. Consequently, the RCx Lite process can identify up to 75 percent of the savings of a more formal RCx study at approximately 25 percent of the cost.

Otter Tail's RCx program provided incentives to qualifying commercial customers to complete RCx studies and implement cost effective, energy savings measures. The RCx program delivers a tiered approach to delivering RCx services. The RCx Lite tier

provided incentives for building tune-ups, where the RCx tier incentivized customers to implement formal RCx studies with more expansive measures. Potential participants must complete a pre-approval application form prior to initiating any RCx projects to insure eventual study funding from Otter Tail. Not all buildings and building types are ideal candidates for achieving energy savings through traditional RCx efficiency measures. The pre-approval process increased the likelihood that customers with buildings and building types with the best RCx opportunities capitalized on the RCx process.

Compressed Air Audits/RCx/Leak Studies

The Compressed Air Audit component paid up to 50 percent of compressed audit costs, with a maximum of $10,000 per participant. The project relied on industry consultants to provide professional audit services with an unbiased report on saving energy with compressed air system improvements.

Otter Tail provided incentives for customers completing studies to identify and repair leaks in compressed air distribution systems. Participants must have repaired all accessible leaks to qualify for study incentives.

Compressed air RCx studies focused on savings potential related to compressed air system setpoints, misapplications of compressed air, and other compressed air operating practices. Customers agreed to completing all identified measures with a combined payback of two years or less as part of receiving incentives through the program.

Small- to Mid-Sized Business Assessments

Customers who participated in Otter Tail's Commercial Direct Install program were eligible for a free assessment identifying the top three to five efficiency opportunities in their small- to mid-sized business. Working in tandem, one auditor focused on installation of low-cost efficiency measures while another auditor toured the business to identify efficiency opportunities. The Company followed up with a two-page report emailed to participants identifying efficiency investment opportunities along with cost estimates, energy cost savings, and payback information. Customers expressed appreciation for the efficiency measures and reports, with approximately ten percent of customers moving forward with implementing measures identified in their free assessments.

Otter Tail promoted the Commercial Audits and Studies program through a variety of resources including:

- *Taking Care of Business* commercial CIP brochure.
- *Programs and Services Guide* provided to contractors and employees.
- Bill inserts.
- Targeted campaigns featuring direct customer contact based on business type, energy use intensity, and geographic location.
- Brochures and literature.
- Personal consultations between program implementation staff and customers.
- Program, technology, and rebate information available on the Company's website.

Participation and Budget[5]

PARTICIPATION AND BUDGET – 2023			
Commercial Audits and Studies	**Actual**	**Proposed**	**% of Goal**
Participation	125	11	73%
Budget $	$116,382	$268,000	43%

Evaluation Methodology

Traditional RCx

Otter Tail, together with a third-party engineering consulting firm, reviewed the RCx study for accuracy of calculations, assumptions, and completion of all required RCx study requirements. Otter Tail works with the customer and the customer's engineering firm as needed to assure engineering calculations, assumptions, and the study all meet the Company's RCx program requirements.

Turn-Key RCx

Otter Tail used savings calculations developed by the Company's program implementation consultant using engineering fundamentals, site data, and energy modeling. To evaluate those savings, Otter Tail and its third-party program implementation consultant performed post-installation functional testing at each facility. This on-site M&V confirms each measure's implementation in accordance with

[5] Reported participation in 2023 includes Commercial Direct Install Assessments which were originally included under the Advertising and Education program.

the engineering recommendations. The savings calculations were revised based on observed conditions post-implementation and reflect any alteration to the measure that results from customer implementation.

Compressed Air

Otter Tail used the TRM, when available, and the Wisconsin and Vermont TRMs in its absence. All savings algorithms include actual data from historical Otter Tail compressed air assessments performed by independent third-party engineers or vendors.

Energy Savings

ENERGY AND DEMAND RESULTS – 2023	
Commercial Audits and Studies	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	329,624
Demand Savings – kW	7.63

COMMERCIAL DIRECT INSTALL

The Commercial Direct Install (CDI) program offered free energy assessments and installation of low-cost energy efficiency measures for participating small- to mid-sized commercial customers. The program capitalizes on personal interactions to educate customers in this often-overlooked market segment on:

- Benefits of energy efficiency.
- Energy efficiency opportunities in the customer's business operations.
- Quick, easy, and affordable measures that have a direct, immediate impact on reducing energy bills.

The free energy assessment offered through the Commercial Audits and Studies program provides the customer with a simple two-page report identifying opportunities for investing in energy efficiency measures and further educates customers on the subject. At the same time, direct-installation of easily installed energy efficiency measures, at no cost to the participant, provides real-world examples of technologies readily available for reducing energy expenses in small- to mid-size businesses.

Otter Tail promoted the CDI program through a targeted strategy based on community size and geographic location. The Company relied on personal contacts with local administration and government, Chamber of Commerce personnel, and other business organizations to determine overall interest in implementing the program.

Participation and Budget

PARTICIPATION AND BUDGET – 2023			
Commercial Direct Install	**Actual**	**Proposed**	**% of Goal**
Participation	1,034	1,369	76%
Budget $	$32,267	$42,000	77%

Evaluation Methodology

The Company uses TRM savings algorithms and assumptions and customer-specific operational data where applicable.

Energy Savings and Adjustments

ENERGY AND DEMAND RESULTS – 2023	
Commercial Direct Install	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	210,218
Demand Savings – kW	32.02

COMMERCIAL ENERGY MANAGEMENT

The Commercial Energy Management program includes the previously approved commercial air conditioning control (CoolSavings) program. CoolSavings air conditioning control program targeted small commercial customers in Minnesota with central air conditioning systems. Customers were encouraged to enroll in the program and receive a bill credit of $6 per ton of connected load for each summer month (June-September).

Otter Tail promoted the program through various resources including:

- Personal business contacts.
- Bill inserts.
- *Taking Care of Business* commercial CIP brochure.
- *Programs and Services Guide* provided to contractors and employees.
- Program, technology, and rebate information available on the Company's website.

In 2023, Otter Tail controlled air conditioning 28 days, totaling 65 hours and 17 minutes. This control time is within the 300-hour control limit in the air conditioning rider.

Participation and Budget

PARTICIPATION AND BUDGET – 2023			
Commercial Energy Management	**Actual**	**Proposed**	**% of Goal**
Participation	330	512	64%
Budget $	$8,585	$30,000	29%

Evaluation Methodology

Current energy and demand savings for this program are consistent with Attachment B: Electric Product Assumptions, approved in the Company's Triennial Plan.

Energy Savings and Adjustments

ENERGY AND DEMAND RESULTS – 2023	
Commercial Energy Management	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	7,083
Demand Savings – kW	467.88

COMMERCIAL HEAT PUMPS

The Commercial Heat Pump program targets commercial customers currently using or considering the installation of less efficient resistance electric heating and cooling systems by offering rebates for high-efficiency air source and geothermal heat pumps. During 2023 Otter Tail relied on Energy Star® qualifications as the reference for minimum equipment efficiency requirements. For air-to-water heat pumps, the Company utilized the criteria set by Efficiency Vermont, as this emerging technology does not currently have an Energy Star® qualification standard reference.

The 2023 program year was an exciting year for the Commercial Heat Pump program as the Company worked to meet updated budget and participation goals refined in the 2022 modification filing to continue the success of the program recorded over the last couple years.

Air source heat pumps met the following minimum rating requirements. The Company provided SEER2/HSPF2 conversion ratings as product rating sheets began transitioning to the new testing standard. The conversion ratings are based on data that was being utilized for the TRM update work being completed by Cadmus.

	SEER (SEER2)	**HSPF (HSPF2)**	**COP***
CCHP- Ducted	> or = 15.0 (14.3)	> or = 9.0 (7.6)	-
CCHP- Ductless	> or = 15.0 (15.0)	> or = 10.0 (9.5)	-
Air to water (AWHP)	-	-	1.7

*COP rating at A5W110 (At an outdoor ambient temperature of 5°F, the unit must deliver 110°F supply water.)

Geothermal heat pumps met the following rating requirements:

Geothermal Heat Pumps			
Type	**Loop Type**	**COP**	**EER**
Water to air	Open loop	4.1	21.1
Water to air	Closed loop	3.6	17.1
Water to water	Open loop	3.5	20.1
Water to water	Closed loop	3.1	16.1
Direct exchange		3.6	16.0
GHP single unit ≥ 6 tons		3.1	13.0

The Company added a minimum requirement for single units equal to or larger than six tons. This change was made following contractor feedback and the limitation of Energy Star® testing that does not account for these larger units which are more prevalent in these commercial buildings. At these larger sizes, when compared to other

heating/cooling options, geothermal heat pumps remain the highest efficiency technology available for customers.

The Company also added an additional rebate for customers electing to add a buffer tank with a heating coil or a desuperheater option to their heat pump to provide preheating of domestic hot water. This rebate is limited to a maximum of 20 tons per customer.

Otter Tail promotes energy efficient heat pumps using various resources including:

- *Taking Care of Business* commercial CIP brochure.
- *Programs and Services Guide* provided to contractors and employees.
- Media campaigns including television, radio, and social and digital media campaigns.
- Bill messages.
- Bill inserts.
- Digital billboards.
- Hero spots on the home page of the website.
- Program, technology, and rebate information available on the Company's website.
- Participation in the Company's Integrated Building Design Plus program.

To increase participation, the Company offered rebates and financing at 1.9 percent in 2023.

Participation and Budget

PARTICIPATION AND BUDGET – 2023			
Heat Pumps	**Actual**	***Proposed*[6]**	**% of Goal**
Participation	250	190	132%
Budget $	$797,898	$770,370	104%

[6] Includes modifications approved by the Deputy Commissioner's November 2, 2022, Decision in Docket No. E017/CIP-20-475.

Evaluation Methodology

Energy savings for this program are consistent with Attachment B: Electric Product Assumptions, approved in the Company's Triennial Plan.

Energy Savings and Adjustments

ENERGY AND DEMAND RESULTS – 2023	
Heat Pumps	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	3,793,354
Demand Savings – kW	451.31

COMMERCIAL LIGHTING

The Commercial Lighting program provides incentives to commercial and industrial customers installing qualifying energy-efficient lighting technologies in new construction and for retrofitting to energy-efficient lighting technologies such as LED lamps and fixtures and lighting controls.

Otter Tail actively promotes the Commercial Lighting program through a variety of strategies including:

- *Taking Care of Business* commercial and industrial CIP brochure.
- Bill inserts.
- Digital and social media campaign.
- Personal interactions between customers and Company program implementation staff.
- *Programs and Services Guide* provided to contractors and employees.
- Program, technology, and rebate information available on the Company's website.
- Assessments completed for small- to mid-sized commercial businesses through the Company's Commercial Audits and Studies and Commercial Direct Install programs.
- Participation in the Company's Integrated Building Design Plus program.

Participation and Budget

PARTICIPATION AND BUDGET – 2023			
Commercial Lighting	**Actual**	**Proposed**	**% of Goal**
Participation	983	840	117%
Budget $	$1,065,988	$1,665,000	64%

Evaluation Methodology

Otter Tail uses the TRM to calculate impact savings for the Commercial Lighting program. For retrofit installation, the Company documents all existing lighting wattage removed at each site and compares it to the actual energy efficient lighting wattage being installed to calculate energy savings. While for newly installed lighting systems, qualifying installed measures are compared to TRM baseline efficiency systems to determine kilowatt-hour savings. The TRM also establishes hours of operation. In accordance with the TRM protocols, energy and demand savings adjustments of 9.5 and

25.4 percent respectively were allocated to those businesses having electric mechanical cooling. This is consistent with Attachment B: Electric Product Assumptions, approved in the Company's Triennial Plan.

Energy Savings and Adjustments

ENERGY AND DEMAND RESULTS – 2023	
Commercial Lighting	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	13,164,649
Demand Savings – kW	2,002.20

COMMERCIAL and INDUSTRIAL FOCUSED EFFICIENCY

Otter Tail's largest industrial customers collectively make up less than one percent of all Minnesota customers but account for approximately 65 percent of total retail energy sales. As significant consumers of electricity, the industrial sector often provides abundant opportunities for improvements in energy management practices and implementation of energy efficiency upgrades.

The Commercial and Industrial Focused Efficiency program targeted customers in Otter Tail's commercial and industrial segment with potential for improvements in production processes, end-use efficiency, and energy management practices. The program used a proactive approach to benchmarking energy management practices and identified specific opportunities for efficiency improvements in large commercial and industrial facilities.

Implementation of the Commercial and Industrial Focused Efficiency program consisted of the following strategies:

1. **Proactive participant identification:** Otter Tail considered anticipated customer engagement and energy savings potential while screening potential participants. The program focused on customers with annual savings potential of 250,000 kWh or greater, typically requiring annual consumption of at least 5,000,000 kWh. Potential participants who bring engaged, enthusiastic management and employee teams to the table are more likely to pursue the most cost-effective energy saving behaviors and opportunities.

2. **Energy management benchmarking:** For qualified customers, Otter Tail funded the Envinta Energy Roadmap energy management benchmarking analysis early in the process. The benchmarking session focuses on management practices related to energy efficiency by incorporating participation from across the customer's organization.

3. **Project identification:** Forming an engaged and knowledgeable energy management team is imperative to identifying efficiency opportunities on the customer site. To further facilitate identification of efficiency measures, Otter Tail funds the cost of engineering studies needed to identify and evaluate energy savings opportunities above a $500 copay from the participant. Possible efficiency measures include lighting, drive-power systems, process efficiency

improvements, refrigeration systems, compressed air systems, and custom efficiency projects.

4. **Project implementation:** Working in tandem with the customer's representation on the energy management team, Otter Tail developed a schedule of efficiency projects with potential bonus incentives. Bonus incentives are provided in exchange for the participant's completion of all measures before established deadlines. Efficiency measures might include projects traditionally accounted for under Otter Tail's prescriptive rebate programs, but Otter Tail attributes energy savings for each efficiency measure to the Commercial and Industrial Focused Efficiency program.

5. **Measurement and verification:** Otter Tail followed the M&V Protocols for end-use efficiency projects meeting the formal M&V requirements established by the DER.

Participation and Budget

PARTICIPATION AND BUDGET – 2023			
Industrial Focused Efficiency	**Actual**	**Proposed**	**% of Goal**
Participation	18	11	164%
Budget $	$1,042,848	$302,000	345%

Evaluation Methodology

Otter Tail developed energy savings estimates through both established methodologies for prescriptive measures and through engineering calculations for custom measures implemented by the customer.

Energy Savings and Adjustments

ENERGY AND DEMAND RESULTS – 2023	
Industrial Focused Efficiency	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	11,824,668
Demand Savings – kW	1,600.12

COMPRESSED AIR EFFICIENCY

The Compressed Air Efficiency program provided incentives to commercial and industrial customers for implementing efficiency improvements in compressed air systems.

Compressed air systems afford users relatively easy distribution of and access to a robust power source present in nearly all industrial facilities, often referred to as the fourth utility in industrial plants. At the same time, compressed air generation is one of the most energy-intensive utilities in industrial facilities, with efficiency of compressed air systems typically at only ten to fifteen percent. Consequently, any improvements in compressed air system efficiency can lead to reduction of facility energy consumption in the order of 20 to 50 percent.

Otter Tail promoted Compressed Air Efficiency using various resources including:

- Personal interactions between Otter Tail representatives and customers with large, compressed-air systems.
- *Taking Care of Business* commercial CIP brochure.
- *Programs and Services Guide* provided to contractors and employees.
- Program, technology, and rebate information available on the Company's website.

Participation and Budget

PARTICIPATION AND BUDGET – 2023			
Compressed Air Efficiency	**Actual**	**Proposed**	**% of Goal**
Participation	9	6	150%
Budget $	$51,000	$48,000	106%

Evaluation Methodology

Otter Tail uses the TRM, when available, and the Wisconsin and Vermont TRMs in its absence. All savings algorithms include actual data from historical Otter Tail compressed air assessments performed by independent third-party engineers or vendors.

Energy Savings and Adjustments

ENERGY AND DEMAND RESULTS – 2023	
Compressed Air Efficiency	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	166,596
Demand Savings – kW	45.42

CUSTOM EFFICIENCY GRANTS (CUSTOM PROJECTS)

The Grants program offered customized incentives to commercial and industrial customers for conservation and efficiency improvements. In 2023, Otter Tail analyzed a variety of customer-submitted grant projects that were approved for incentives.

Custom Projects Type of System Installation	Quantity
Automation	1
Building Envelope Improvements	3
Chiller System	1
Compressed Air System	1
Cooking Equipment	4
Cooling System	8
Heating System	4
Motors	4
Process Improvements	2
Production Equipment	3
Pumps	1
Refrigeration System	1
Variable Speed Drive	3
Total	**36**

Otter Tail promotes the Grant program through a variety of resources including:

- Personal interaction between Otter Tail representatives and customers.
- *Taking Care of Business* commercial CIP brochure.
- *Programs and Services Guide* provided to contractors and employees.
- Bill inserts.
- Program, technology, and rebate information available on the Company's website.
- Participation in the Company's Integrated Building Design Plus program.

Participation and Budget

PARTICIPATION AND BUDGET – 2023			
Custom Efficiency Grants	**Actual**	**Proposed**	**% of Goal**
Participation	36	35	103%
Budget $	$274,276	$321,000	85%

Evaluation Methodology

Each custom grant measure is evaluated on an individual basis and estimated energy savings are calculated by Otter Tail and are specific to each individual measure. The Company also considers and will verify estimated energy savings when submitted by a qualified and independent third-party energy services provider. Otter Tail provided expertise as needed, helped commercial and industrial customers determine the energy and demand savings needed to develop a grant proposal, and often worked with internal or third-party engineers to determine and verify savings.

The Large Custom Grant M&V protocols affect any large project with estimated savings exceeding one million kilowatts hours. The protocols include several options for M&V of large grant projects that meet the protocol criteria. In 2023, Otter Tail had two custom projects under the Custom Efficiency Grant program estimated to save greater than one GWh. Otter Tail submitted Pre-M&V reports with the DER for approval in late December 2023. The Company continues to work with the Department on the completion of the M&V process. The project costs and associated savings for these two projects are included in this annual update for 2023. At the Department's guidance, Otter Tail will make any true-up calculations in the 2024 annual update.

Energy Savings and Adjustments

ENERGY AND DEMAND RESULTS – 2023	
Custom Efficiency Grants	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	3,735,400
Demand Savings – kW	510.50

DRIVE POWER

The Company's Drive Power program encouraged commercial and industrial customers to improve the efficiency of systems through incentives for efficient electric motors and adjustable speed drives to maximize operational efficiency of motor systems.

Motors

The goal of the motors measures within the Drive Power program is to reduce system peak demand and energy use by offering customers incentives to purchase and install motors that meet or exceed NEMA Premium® efficiency ratings for various applications. Otter Tail offers incentives for high-efficiency totally-enclosed fan-cooled and open drip-proof motors sized from one horsepower to five-hundred horsepower. Incentives were also available for customers upgrading to efficient motors with explosion-proof enclosures sized between one and three-hundred horsepower. Additionally, the Company provided incentives for select electronically commutated motors installed in exhaust and HVAC fan applications.

Adjustable Speed Drives (ASDs)

Induction motors are the workhorses of industry, used in virtually every manufacturing plant and office building. However, the single most significant source of energy savings in induction motor systems lies not in the motor itself but rather in the controls that govern the motor's operation. ASDs are one method of modifying or controlling motor operation that is a proven option for improving performance and efficiency in drive systems. Through the Drive Power program, Otter Tail offered incentives based on horsepower for seasonal and nonseasonal ASDs.

Otter Tail promoted the Drive Power program using various resources including:

- *Taking Care of Business* commercial CIP brochure.
- *Programs and Services Guide* provided to contractors and employees.
- Bill inserts.
- Program, technology, and rebate information available on the Company's website.
- Participation in the Company's Integrated Building Design Plus program.

Participation and Budget

PARTICIPATION AND BUDGET – 2023			
Drive Power	**Actual**	**Proposed**	**% of Goal**
Participation	661	227	291%
Budget $	$458,944	$250,000	184%

Evaluation Methodology

Energy and demand savings for this program are consistent with Attachment B: Electric Product Assumptions, approved in the Company's Triennial Plan.

Energy Savings and Adjustments

ENERGY AND DEMAND RESULTS – 2023	
Drive Power	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	10,084,765
Demand Savings – kW	1,167.55

REFRIGERATION

The Refrigeration program is designed to promote high-efficiency commercial refrigeration technologies by offering rebates for new and retrofit installation of equipment such as parallel racks, condenser systems, sub-cooling systems, electrically commutated motors, and high evaporator temperature cases.

Otter Tail promoted the Refrigeration program using a variety of resources including:

- *Taking Care of Business* commercial CIP brochure.
- *Programs and Services Guide* provided to contractors and employees.
- Program, technology, and rebate information available on the Company's website.
- Quarterly phone conversations with contractors specializing in service and installations of commercial refrigeration systems.

Participation and Budget

PARTICIPATION AND BUDGET – 2023			
Refrigeration	**Actual**	**Proposed**	**% of Goal**
Participation	36	72	50%
Budget $	$77,201	$83,000	93%

Evaluation Methodology

The Company used the TRM and engineering estimates for each refrigeration measure. Energy and demand savings for this program are consistent with Attachment B: Electric Product Assumptions, approved in the Company's Triennial Plan.

Energy Savings and Adjustments

ENERGY AND DEMAND RESULTS – 2023	
Refrigeration	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	251,798
Demand Savings – kW	34.74

DIRECT IMPACT – OTHER

PUBLICLY OWNED PROPERTY (POP) SOLAR

The objective of the POP Solar program is to demonstrate the benefits of solar PV generation by offering incentives for universal solar projects to rural Minnesota communities, local and tribal governments, educational facilities. The project provides incentives for the installation of non-residential solar PV systems in public sector facilities. The POP Solar program is an example of universal solar, which shares the benefits of solar with all members of the community, university, public school, tribal property, or other publicly owned properties.

Participation and Budget

PARTICIPATION AND BUDGET – 2023			
Publicly Owned Property Solar	**Actual**	**Proposed**[7]	**% of Goal**
Participation	6	14	43%
Budget $	$325,141	$752,500	43%

Otter Tail's Energy Management Representatives promoted the POP Solar program to public entities across Otter Tail's service territory. The Company had less participation in the program than the 2023 proposed goals updated in the 2022 modification filing. The driving factor behind the proposed increase in participation and budget was to ensure the Company would have the capacity to provide financial support for all schools interested in the Solar for Schools funding opportunities without the risk and concern around budget caps being reached. The increased budget resulted in a record performance year for the Company with the highest participation and total rebated amounts going toward solar installations. Program year 2023 included multiple schools working through the Solar for Schools grant funding award process, and the Company working to bring awareness to public entities about the new direct pay tax credit option. This opportunity was not previously available to these customers.

The Company has high expectations moving forward, as more public schools and colleges are in the process of being awarded the Solar for Schools grant funds and other entities recently submitting applications in an early 2024 application round. The Solar for Schools grant program requires schools to complete projects within 12 months of

[7] Includes modifications approved by the Deputy Commissioner's November 2, 2022, Decision in Docket No. E017/CIP-20-475.

receiving approval. The school has an option to request an additional 6-month window, if they can provide invoices on equipment orders that are being delayed by supply chain issues. The Company anticipates that as long as state grant funds and federal tax credit options remain available, a steady stream of POP projects will be continuously completed moving forward.

The Company was actively engaged with schools throughout the state's Solar for Schools funding application process. The Company provided information and support on technology, installation/interconnection processes, support letters and financial analysis on grants, tax credits, financing options and POP Solar rebates. Company engagement also included traveling to multiple schools and, in some cases, participating in contractor proposal reviews to provide additional guidance to school administrators.

Evaluation Methodology

Otter Tail utilized National Solar Radiation Data to build hourly profiles for a typical solar installation in the company's service area. It uses these profiles to determine energy savings that can be expected of rebated systems based on kW size.

Energy Savings and Adjustments

ENERGY AND DEMAND RESULTS – 2023	
Publicly Owned Property Solar	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	336,276
Demand Savings – kW	144.84

EFFICIENT TECHNOLOGY ACCELERATOR (ETA)

The Center for Energy and Environment (CEE) proposed to implement ETA in Docket No. CIP-21-548 on April 15, 2022.[8] The program was filed under the authorization of the Laws of Minnesota, First Special Session 2021, Chapter 4, article 8, section 17, which established Minnesota statutes 2021, section 216B.241, subdivision 14. The program was designed to accelerate deployment and reduce the cost of emerging and innovative efficient technologies and approached and lead to lower energy costs for Minnesota customers. The program was approved by the Deputy Commissioner for an initial term of five years in June of 2022.

ETA activities in 2023 centered around three main initiatives: Dual-Fuel Air Source Heat Pumps, Luminaire-Level Lighting Controls (LLCs), and High-Performance Windows. CEE has led a strong 2023 initiative with detailed information and robust presentations. Otter Tail has been an active member of these efforts and looks forward to the development of these offerings and those still to come.

Participation and Budget

The majority of 2023 ETA efforts were on Program development making it premature for participation numbers to be reported. Otter Tail did incur costs in 2023, receiving invoices from CEE in the amount of $131,793.12 and dedicating several hours of labor to the Program for a total annual 2023 spend of $133,342.55.

Energy Savings and Adjustments

The ETA program is still under development and has not produced savings to date. Otter Tail believes these programs are promising and will deliver significant energy savings in the future.

[8] The program was originally proposed under the name Minnesota Efficiency Technology Accelerator, but has since developed into the Efficiency Technology Accelerator program.

INDIRECT IMPACT PROGRAMS / REGULATORY REQUIREMENTS

ADVERTISING AND EDUCATION – Residential and Commercial

Advertising and Education – Residential

The Advertising and Education program for 2023 targeted Minnesota service area residents of all ages with reinforcing messages to understand energy options for efficiency and to make conserving energy a lifestyle. The program was designed to include three approaches to achieve its goals:

- *Advertising* that increases awareness of and educates customers about energy-efficient technologies and motivates individuals to act to conserve energy.
- *Internet-based resources* including efficiency program content, technology descriptions, rebate information, and seasonal energy saving tips on the Company website.
- *Learning environment presentations* targeting children across all economic groups with educational messages and activities related to energy production, energy use, and conservation.

Advertising

In 2023, media campaigns supported through the Advertising and Education program focused on delivering messages about energy-efficient technologies. These included:

- Energy efficient technologies as a lifestyle campaign. Television, radio, and social media campaign spots showed customers the many applications where they can choose efficiency when putting energy to use. Advertisements highlighted Energy Star® home appliances, smart thermostats, and LED bulbs.
- Digital billboard space shared at various times of the year by all Conservation Improvement Program (CIP) projects.
- Comprehensive bill inserts offering seasonal energy-efficiency tips applicable to all efficiency programs.

Additional advertising support during 2023 for residential programs included a catalog of CIP offerings available to Minnesota residential and small commercial customers, and contractor education pieces.

Internet-Based Resources

This portion of the program supports development of CIP program-focused promotional and educational materials for the Company website. Web-based materials encourage

participation in direct impact energy-efficiency programs in the CIP portfolio. During 2023, Otter Tail completed work through a web consultant to revise and rewrite the portion of the company website that presents energy efficiency and conservation programs. The previous website content was text-heavy and difficult for mobile visitors to navigate. The work completed during the redesign accomplished the goal of making content mobile-friendly, easier to navigate, and engaging for customers. The readability of site content was improved, and navigation was added to include specific sections for income-qualified customers and renters that target the most beneficial programs for customers in those groups.

Site visit data is collected from web analytic tools used to track unique visitors to the site. The data reported for 2023 reflects activity only on the web pages related to advertising spots supported through this program and adjusted to reflect the Minnesota customer web participation, which is calculated as 45 percent of the unique visitors to the website pages. This represents the portion of Company customers located in Minnesota.

Learning Environment Presentations

Otter Tail continued its partnership with Otter Cove Children's Museum, a unique resource in the region that serves children up to age 10, offering indoor play space with both educational exhibits and a playground structure under the same roof. In 2021, through Otter Tail's Advertising and Education program a set of interactive energy- and conservation-focused exhibits were developed. The exhibits continue to be accessed in 2023, and there were 18,622 children visits logged to the Otter Cove facility with the opportunity to interact with the installations. Additionally, Discover Energy!, a set of interchangeable engagements that are remixed to create unique experiences, was developed and introduced as staff-led experiences for children and their caretakers. Sessions provided during 2023 covered hydroelectric generation, solar energy, and wind energy generation topics and related activities with 22 children participating.

In 2023, Otter Tail provided support for the Headwaters Science Center in Bemidji to develop an educational exhibit focused on the science and mechanics behind heat pumps. Heat pump technology is used, at the science center, to transfer energy between two habitats. Water is warmed to provide an axolotl tank to accommodate the needs of that species, while water is cooled for a trout aquarium, providing conditions appropriate to that species.

Signage was provided to explain how the heat pump works. The exhibit opened in September 2023, and over the next four months 7,431 children visited the learning exhibit through general admissions, field trips, and science clubs.

In November 2023, Otter Tail sponsored the Headwaters Science Center staff to visit a classroom of 26 students at the Bemidji Middle School to present on the physics of modern refrigeration and explaining the science behind energy-efficient heat pumps.

In the fall of 2023, Otter Tail began presentations to eighth-grade classrooms to educate students about the physics at work in heat pump operation. The Heat Pumps 101 lesson featured a demonstration heat pump unit, firsthand activities, and animated models. Teachers reported that the demonstrations were engaging and educational for participating students. Presentations reached seven classes of eighth-grade students in four school districts—Battle Lake, Herman-Norcross, Ashby, and Morris. A total of 112 students participated in the Heat Pumps 101 lesson.

Participation and Budget

2023 A&E Residential Detailed Participation	
Otter Cove Children's Museum	18,600
Headwaters Science Center	7,457
Heat Pump 101 presentations	113
Web visits related to advertising	8,027
Total	34,197

PARTICIPATION AND BUDGET – 2023			
Residential Advertising & Education	**Actual**	**Proposed**	**% of Goal**
Participation	34,197	10,000	342%
Budget $	$184,716	$187,000	99%

Advertising and Education – Commercial

Otter Tail's Advertising and Education program is also used to support promotion of energy-efficiency technologies and conservation benefits to small and midsize commercial customers.

One of the methods used is the development and distribution of a catalog of programs and rebate opportunities aimed at commercial business operations. Additionally, this program supports advertisement about energy efficient upgrades and rebates available to business customers through chamber of commerce newsletters.

Another effort included revision and update to the company web pages related to CIP programs for our Minnesota commercial and industrial customers. This work completed in 2023, was included as part of a web update project for residential customers. The upgrades were designed to make the content mobile-friendly, easier to navigate, engaging and meaningful for commercial and industrial customers, and effective in helping the company reach its CIP program goals. Navigation was added to include sections specific for businesses and contractors that target the most beneficial programs for visitors in those groups.

Participation and Budget

ACTUAL / BUDGET – 2023			
Commercial Advertising & Education	**Actual**	**Proposed**	**% of Goal**
Participation	0	100	0%
Budget $	$36,773	$65,000	57%

Program participation of zero is the result of the Company now tracking efficiency assessments completed as part of the Commercial Direct Install program in Commercial Audits and Studies instead of its Advertising and Education program.

FINANCING – Commercial

The Financing program is designed to provide low-interest loans for installation of air source and geothermal heat pump systems. The difference between the interest expense at the Company's after-tax cost of capital and the expense at the customer's interest rate is the cost charged to the CIP Tracker Account. The interest rate was 1.9 percent for 2023.

Otter Tail promotes the low-interest Financing program in various resources including:

- *Taking Care of Business* commercial CIP booklet.
- *Programs and Services Guide* provided to contractors and employees.

Participation and Budget

PARTICIPATION AND BUDGET – 2023			
Financing	**Actual**	**Proposed**	**% of Goal**
Participation	2	5	40%
Commercial Budget $	$7,070	$17,000	42%

IMPLEMENTATION AND TRAINING – Residential and Commercial

The Implementation and Training program provides instruction about energy efficient technologies and DSM trends for the Company's design, implementation, and customer service staff. This program also provides training opportunities for customers, electricians, insulation installers, other contractors, and Company representatives. In January and February 2023, Otter Tail co-sponsored electrician code credit events with Minnkota Electric Cooperative. Workshops were promoted on our website, in newsletters, and through direct mail pieces.

Participation and Budget

ACTUAL / BUDGET – 2023			
Implementation & Training	**Actual**	**Proposed**	**% of Goal**
Residential Participation	2	175	1%
Residential Budget $	$81,291	$37,000	220%
Commercial Participation	351	250	141%
Commercial Budget $	$92,485	$60,000	154%

INTEGRATED BUILDING DESIGN PLUS (IBD+) – Commercial

In the integrated building design process, architects, engineers, and energy experts team up early in the design process to coordinate and optimize the design of all components and systems. This team functions and works according to clearly defined goals:

- Design a building with operating costs as low as possible without sacrifices to occupant comfort.
- Design a building with as little environmental impact as possible.
- Design a building that will boost worker productivity.
- Incorporate all features with minimal increases in first costs.

The greatest opportunities to reduce the future energy use of a new building occur during the design development phase. However, the decisions made during commercial building design are often driven by aesthetics, capital costs, and designer familiarity. Information on how these decisions will impact energy consumption and operating costs is often not readily available to building design teams. Obtaining data on energy impacts is the primary barrier to analyzing effects of various design decisions on building energy efficiency, as accurate projections require complex, detailed analysis and energy modeling. Most design firms do not have the time or budget to perform the required analyses, and without the need to regularly exercise such skills, the firms also lack the critical staffing needed to perform specialized energy analysis and modeling.

The objective of Otter Tail's IBD+ program is to optimize the energy efficiency of new construction projects by encouraging greater design team cooperation in an integrated building design process. Otter Tail encourages participation in the IBD+ program by providing:

- Design assistance consulting services for participating customers and design teams.
- Reimbursements to design team members for added time required to participate in the integrated building design process.
- Identification of energy savings for various design packages compared to the baseline design efficiency of Minnesota State Energy Code.
- Identification of incentives available through Otter Tail's prescriptive Lighting, Motors, Adjustable Speed Drives, Heat Pumps, and Custom Grants programs.
- Training for design team professionals in proper design of geothermal and other high efficiency HVAC systems.

Otter Tail promotes the IBD+ program through a variety of resources including:

- *Taking Care of Business* commercial CIP brochure mailed to targeted commercial and industrial customers annually.
- Annual *Program and Services Guide* sent to contractors and dealers.
- The Company's website. The website also features a link to an electronic program application form.
- Through the design assistance consultant's network, membership, and participation as professionals in architectural and engineering organizations, including ASHRAE, AIA and IES.

Participation and Budget

PARTICIPATION AND BUDGET – 2023			
Integrated Building Design Plus	**Actual**	**Proposed**	**% of Goal**
Participation	4*	6	67%
Budget $	$154,869	$224,000	69%

*The four IBD+ participants are included here, however their energy efficiency measures are evaluated and included as participants within their corresponding direct impact programs.

PROGRAM DEVELOPMENT

Program Development includes CIP strategic market planning analysis, CIP-related resource planning work, and CIP-related regulatory coordination. It includes program development time for research and studying new energy efficient and DSM technologies. Otter Tail also used development funding for appropriate development research and information from internal and external sources, including E-Source.

Otter Tail's 2011-2013 CIP plan included developing and maintaining a system capable of providing the data necessary for reporting, forecasting, tracking, and processing CIP rebates. The 2021-2023 CIP plan continued work on this system, which is now operating as our rebate processing and data tracking tool. Continuing work includes adding new programs, development of management dashboards, reporting tools for program management, and ongoing enhancements of an online customer portal for submitting rebate applications or checking the status of rebates.

ACTUAL / BUDGET – 2023			
Program Development	**Actual**	**Proposed**	**% of Goal**
Planning – Regulatory Affairs	$236,096	$300,000	77%
Research & Development	$31,794	$225,000	14%

REGULATORY REQUIREMENTS

PUC ASSESSMENTS / REGULATORY (NGEA) ASSESSMENTS

PUC ASSESSMENTS / REGULATORY (NGEA) ASSESSMENTS			
	Actual	**Proposed**	**% of Goal**
PUC Assessments	$8,141	$20,000	41%
Regulatory Assessments (NGEA)	$87,715	$110,000	80%
Transmission & Distribution Cost Study	$0	$0	0%

ASSESSMENTS	
NGEA Assessment – Technical Assistance	$14,321
NGEA Assessment – R&D Grant	$64,444
NGEA Assessment – Facilities Efficiency	$8,950
Total NGEA Assessments	**$87,715**
Direct PUC Assessments	$8,141
Transmission & Distribution Cost Study	$0
Total	**$95,856**

MISCELLANEOUS / INACTIVE PROGRAM COSTS

This section is a summary of costs corresponding to miscellaneous and inactive programs. The associated costs, including closing costs for these programs, were charged to the 2023 CIP tracker account. Each is detailed separately below.

ACCOUNTING ADJUSTMENTS

Four accounting adjustments were required in 2023 totaling $8,111:

- one adjustment in the Home Lighting program to record a true-up to 2022 year-end estimated service provider billing, increasing costs by $1,328;
- one adjustment in the Home Appliance program to record a true-up to the 2022 year-end estimated service provider billing, decreasing costs by $9,351;
- one adjustment in the Commercial Audits and Studies program to record a service provider billing true-up from 2022, decreasing costs by $194;
- one adjustment in the Commercial Direct Install program to record a 2022 service provider billing true-up, increasing costs by $106.

Since 1993, Otter Tail has implemented an internal process to handle moving incorrect charges between project work orders. A line item has been added to the CIP Tracker Account to reflect those charges in transition. The Company believes this method allows us to report current year program costs more accurately.

OTP CIP PROJECTS

Otter Tail didn't complete any facility efficiency projects rebated through CIP in 2023.

Participation and Budget

PARTICIPATION AND BUDGET – 2023			
OTP CIP Projects	**Actual**	***Proposed***	**% of Goal**
Participation	0	0	0%
Budget $	0	0	0%

CARRYING COSTS

Carrying Charges on the balance of the CIP Tracker totaled ($53,636.20), as shown in Appendix A, Table 1.

Otter Tail receives or pays a carrying charge on the outstanding CIP tracker account balance based on its short-term cost of debt rate. The CIP tracker currently reflects an overcollection for the majority of 2023, resulting in a carrying charge amount which will benefit ratepayers. As approved in the MNPUC's September 26, 2015, Order, Docket No. E017/M-14-201, the monthly carrying charge on the CIP tracker-account balance has been set to the short-term cost of debt rate approved in the Company's last rate case. The MPUC's February 1, 2022, Order, Docket No. E017/GR-20-719, set the short-term cost of debt at 1.77 percent, effective January 1, 2021. Otter Tail applied this rate to the CIP tracker-account balance per the MPUC's order.

Otter Tail does not account for carrying cost charges when calculating the spending requirement (see Appendix A, Table 5 Status Report Recap) but does include the amount in the CIP Tracker for recovery.

Conservation Cost Recovery Adjustment

CONSERVATION COST RECOVERY ADJUSTMENT

This filing constitutes the 30th Annual Filing to Update the Conservation Improvement Program (CIP) Rider (Annual Filing) that Otter Tail Power Company (Otter Tail, the Company) has made with the Minnesota Public Utilities Commission (Commission, MPUC) to update the CIP Rider adjustment, more commonly referred to as the Conservation Cost Recovery Adjustment (CCRA).

The CCRA may be adjusted annually by approval of the Commission. The recoverable CIP tracker balance is determined as described below, starting with the Commission accepted CIP tracker account balance as of the end of the prior year. The following adjustments are made from this starting point:

1. Add financial incentives awarded by the Commission not reflected in the prior year-end CIP tracker balance;
2. Add current year CIP approved spending levels.

All costs appropriately charged to the CIP tracker account shall be eligible for recovery through this rider and all revenues received from the application of the CCRA shall be credited to the CIP tracker account. Table 1 illustrates the last ten years of the Average CCRA charge.

Table 1

Year	Average CIP Surcharge / Average CCRA Factor	Previous Year Ending Tracker Balance
Oct 2015 / Sep 2016	$0.00287	$5,731,183
Oct 2016 / Sep 2017	$0.00275	$4,333,061
Oct 2017 / Sep 2018	$0.00536	$4,835,852
Oct 2018 / Dec 2019	$0.00600	$7,365,957
Jan 2020 / Sep 2020	$0.00710	$5,994,017
Oct 2020 / Nov 2021	$0.00485	$3,955,955
Dec 2021 / Sep 2022	$0.00582	$2,067,599
Oct 2022 / Jun 2023 Jul 2023 / Sep 2023*	$0.00667 $0.00805	$2,870,213
Oct 2023 / Jan 2024** Feb 2024 / Sep 2024	$0.00600 $0.00680	$210,329
Oct 2024 / Sep 2025	$0.00555	($3,321,343)

*On July 1, 2022, final rates from Otter Tail's General Rate Case in Docket No. E017/GR-20-719 went into effect which no longer recover any CIP costs through base rates thus no longer needing to subtract those costs from the recoverable CIP tracker.

**On July 27, 2023, the Commission approved a CCRA rate of $0.00682, but Otter Tail inadvertently implemented its originally proposed CCRA rate of $0.00600 from October 1, 2023, through January 31, 2024. The correct rate of $0.00682 when into effect February 1, 2024, and will remain in place until September 30, 2024.

Otter Tail has included the CIP tracker, Exhibit 1, CIP Tracker and Calculation of Proposed Average CCRA, which uses the Commission approved per-kWh method from January 2024 through September 2024. For October 2024 through September 2025, Otter Tail is proposing to change the average surcharge to $0.00555/kWh. Exhibit 2, Comparison of Monthly Bill Impacts, illustrates the monthly impacts for each of the Company's ten rate classes.

In Otter Tail's General Rate Case in Docket No. E017/GR-20-719, Otter Tail was approved to use its E2-E8760 allocator to distribute CIP costs to each of its ten rate classes based on the hourly energy costs to serve each class as ordered in Docket No. E017/GR-15-1033. Exhibit 3, Rate Calculation by Class, shows the computation of the ten class rates based on the E2-CIP allocators. Exhibit 4, Revenue Requirement, shows the calculation of the Revenue Requirement used in Exhibit 3. These values are calculated in Exhibit 1 as Line 7 for September 2024, the bottom sections Total for Lines 3, 4 and 5 and the reversal of Line 7 for September 2025.

Otter Tail has also included the prior year's CIP tracker, Exhibit 5, CIP Tracker and Calculations of CCRA, per the Department's request in Docket Nos. E017/M-20-451 and E017-M-21-228.

Calculation of CCRA

During the 21-month period from end of year 2023 through the end of September 2025, Otter Tail plans to increase the CIP Tracker balance of negative $3,321,343 to an estimated balance of negative $5,930 as illustrated in Table 2 below.

Table 2

	Jan 2024 - Sep 2024	Oct 2024 - Sep 2025
Beginning Balance	**($3,321,343)**	**($2,832,492)**
Carrying Charges	($60,260)	($32,340)
CIP Program Expenses	$5,689,144	$10,055,378
CIP Incentive Proposed	$2,705,283	$1,600,000
CCRA - CIP Rider	($7,845,307)	($8,796,263)
Ending Balance	**($2,832,492)**	**($5,717)**
CCRA Method	**$0.00682/ kWh**	**$0.00555/ kWh**

In addition, Otter Tail estimates the following impacts to the CIP Tracker balance during the 21-month period:

- $19,957,205 of additional expenses from carrying charges, CIP incentive, and CIP program expenses.
- $16,641,570 collected from the CCRA, of which $8,796,263 will be collected during the 12 months from October 2024-September 2025.

As illustrated in Exhibit 1, the proposed change in the surcharge will decrease the Average CCRA by approximately 19 percent. By October 1, 2025, the CIP tracker balance is projected to increase to an estimated negative $5,717. Otter Tail currently receives or pays a carrying charge on the outstanding CIP tracker account balance based on its short-term cost of debt rate. As approved in the MNPUC's September 26, 2015, Order, Docket No. E017/M-14-201, the monthly carrying charge on the CIP tracker-account balance has been set to the short-term cost of debt rate approved in the Company's last rate case. The MPUC's February 1, 2022, Order, Docket No. E017/GR-20-719, set the short-term cost of debt at 1.77 percent, effective January 1, 2021. Otter Tail applied this rate to the CIP tracker-account balance per the MPUC's order.

The amounts on lines 4 and 5 of Exhibit 1 reflect the projected expenditures and financial incentive for 2023 and 2024 through September 2025.

The proposed 2024/2025 Average CCRA is calculated assuming the rate is approved and is effective October 1, 2024. If implementation of the 2024/2025 CCRA occurs after October 1, 2024, the Average CCRA may need to be adjusted to recover the approved revenue requirements over the remaining months of the period, through September 2025. This approach would ensure cost recovery and approved eligible costs match. If it is necessary to adjust the Average CCRA, Otter Tail proposes to calculate the final

2024/2025 CCRA rates and include them with the corresponding rate schedule pages in a compliance filing in this docket.

The redline and final versions of the CIP rider rate schedules are included directly following Exhibits 1 through 5. The CIP rider rate schedule included in this filing accommodates the change to the Average CCRA based on the proposed $0.00555/kWh method of recovery and will display the individual rates being applied to each of the ten class rates based on the E2-CIP allocators as shown in Exhibit 3. Once the 2024/2025 Average CCRA is approved, Otter Tail will file the corresponding rate schedule that complies with the Commission's Order in this docket.

Administrative Tariff Changes

Otter Tail requests to make two administrative changes to its Conservation Improvement Project Rider. The primary requested change is to align the tariff and rider titles with the newly approved 2024-2026 Triennial ECO plan. The change would replace the title of "Conservation Improvement Project (CIP) Rider" with "Energy Conservation and Optimization (ECO) Rider." Otter Tail believes there is benefit in maintaining consistency between the language of the conservation plan and the corresponding cost recovery mechanism.

The second request is to add the Average CCRA rate within the tariff. Currently, the Commission order highlights the composite rate, and the Otter Tail tariff lists the Service Category specific rates, meaning the specific rate in the Order does not tie directly to the tariff. Otter Tail would like to add language that highlights the CCRA rate approved by the Commission to increase transparency and reduce the risk of administrative errors. This request is in direct response to the CCRA rate error that occurred with the 2023 filing where the incorrect set of rates were implemented from October 2023 to February 2023.[1]

CONCLUSION

Otter Tail respectfully requests the following from the MPUC:

1. Approval of the 2023 CIP Tracker, resulting in a year-end balance of negative $3,321,343.

2. Approval to implement the Average CCRA factor of $0.00555/kWh reflected on customers' bills using the applicable rate in Exhibit 3 of the Conservation Cost

[1] Docket No. E017/M-23-150, Otter Tail Amended Compliance Filing to Correct Rate, January 5, 2024.

Recovery Adjustment through the Resource Adjustment starting with bills rendered on and after October 1, 2024.

3. Approval of a variance to Minnesota Rule 7820.3500 (K) to allow Otter Tail to continue to include the Conservation Improvement Adjustment within the Resource Adjustment on customer bills.

4. Approval of the administrative changes requested in the Request for Approval section of the Petition above to our Conservation Improvement Project Rider.

Exhibit 1 is Provided Separately as an Excel Spreadsheet

Otter Tail Power Company **Exhibit 2**

Comparison of Monthly Bill Impacts

CIP Surcharge (CCRA) is based on Class Rate Code shown in Exhibit 3

				Monthly Impacts			
Rate Class	**Bills**	**Average kWh/Bill**	**Average $/Bill before CCRA**	**Current CCRA**	**Proposed CCRA**	**Monthly Bill $ Change**	**Monthly Bill % Change**
Residential	49,223	762	$82.63	$5.21	$4.16	($1.05)	-1.27%
Farm	1,282	2,608	$258.16	$17.97	$14.55	($3.42)	-1.32%
General Service	10,366	2,627	$266.85	$18.02	$14.19	($3.84)	-1.44%
Large General Service	444	158,742	$15,803.34	$1,082.62	$917.53	($165.09)	-1.04%
Irrigation	217	1,535	$160.55	$5.56	$4.67	($0.89)	-0.55%
Outdoor Lighting	239,172	53	$11.89	$0.41	$0.32	($0.09)	-0.73%
OPA	541	2,876	$247.93	$17.37	$14.01	($3.37)	-1.36%
Deferred Load and Water Heating Control	8,161	316	$25.61	$2.07	$1.69	($0.39)	-1.52%
Interruptible Load	73,650	132	$7.97	$0.94	$0.74	($0.20)	-2.46%
Fixed Time of Delivery	239	5,359	$2,419.76	$31.78	$24.28	($7.50)	-0.31%

*All average data comes from Otter Tail's Schedule-E that was filed March 8, 2022, in compliance with the Commission's Findings of Fact, Conclusions, and Order dated February 1, 2022 (Docket No. E017/GR-20-719).

Otter Tail Power Company **Exhibit 3**
Rate Calculation by Class

Line No.	Class	E2-CIP Allocator[1]		Revenue Requirement	CIP kWh Sales	Rate
1	Residential	27.733%	$	2,439,465	447,540,747	$0.00545
2	Farm	2.409%	$	211,945	37,968,036	$0.00558
3	General Service	20.187%	$	1,775,682	329,109,058	$0.00540
4	Large General Service	38.397%	$	3,377,465	584,370,105	$0.00578
5	Irrigation	0.214%	$	18,790	6,185,185	$0.00304
6	Outdoor Lighting	0.634%	$	55,775	9,095,169	$0.00613
7	OPA	1.113%	$	97,924	20,125,407	$0.00487
8	Deferred Load and Water Heating Control	1.720%	$	151,283	28,351,054	$0.00534
9	Controlled Service Interupt	6.777%	$	596,105	106,323,523	$0.00561
10	Controlled Service Off-Peak	0.817%	$	71,838	15,844,001	$0.00453
11						
12	Total Revenue Requirements		$	8,796,272	1,584,912,286	

1. Class E2-CIP allocation factor from Otter Tail's latest general rate case in Minnesota, E017-GR-20-719.

Otter Tail Power Company **Exhibit 4**

Revenue Requirement

-based on Exhibit 1 CIP Tracker and Calculation of Proposed CCRA

Line No.		**October 2024 - September 2025**
1	CIP Expenses	$10,055,378
2	Financial Incentives	$1,600,000
3	Carrying Cost	($32,340)
4	Prior Year End Balance (True up)	($2,832,483)
5	September 2025 Outstanding Balance*	$5,717
6		
7	Total Revenue Requirements	$8,796,272

*Oustanding balance to protect customers from rate volatility

Exhibit 5 is Provided Separately as an Excel Spreadsheet

Redline and Clean Versions of Tariff Sheets

- **MN Index**
- **MN 13.00 Mandatory Riders – Applicability Matrix**
- **MN 13.02 – Conservation Improvement Project (CIP) Rider**

Section	*Item*	

11.00 OTHER SERVICES

12.00 PURCHASE POWER RIDERS AND AVAILABILITY MATRIX

13.00 MANDATORY RIDERS AND APPLICABILITY MATRIX

Section *Item*

11.00 OTHER SERVICES

12.00 PURCHASE POWER RIDERS AND AVAILABILITY MATRIX

13.00 MANDATORY RIDERS AND APPLICABILITY MATRIX

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MANDATORY RIDERS - APPLICABILITY MATRIX

The amount of a bill for service will be modified by any Mandatory Rate Riders that must apply, by any Voluntary Rate Riders selected by the Customer, and charges listed in the General Rules and Regulations.

Applicability Matrix	Mandatory Riders	Energy Adjustment Rider	Energy Conservation and Optimization (ECO) ~~Improvement Project (CIP)~~ Rider	Competitive Rate to Large General Service Rider	Renewable Resource Cost Recovery Rider	Transmission Cost Recovery Rider	Reserved for Future Use	Uplift Program Rider	Environmental Cost Recovery Rider	Energy-Intensive, Trade-Exposed (EITE) Rider	Revenue Decoupling Mechanism (RDM) Rider	Electric Utility Infrastructure Cost Recovery (EUIC) Rider
Tariffs	Section Numbers	13.01	13.02	13.03	13.04	13.05	13.06	13.07	13.08	13.09	13.10	13.11
RESIDENTIAL & FARM SERVICES												
Residential Service	9.01							✓		✓		
Residential Demand Control Service	9.02							✓		✓		
Farm Service	9.03							✓		✓		
GENERAL SERVICES												
Small General Service (Under 20 kW)	10.01									✓		
General Service (20 kW or Greater)	10.02			✓						✓		
General Service - Time of Use	10.03			✓						✓		
Large General Service	10.04			✓						✓		
Large General Service - Time of Day	10.05			✓						✓		
Super Large General Service	10.06									✓		
Electric Vehicle Direct Current Fast Charging (DCFC) General Service - Time of Day	10.07	✓	✓		✓	✓		✓	✓	✓		✓
OTHER SERVICES												
Standby Service	11.01									✓		
Irrigation Service	11.02											
Outdoor Lighting - Energy Only - Dusk to Dawn	11.03									✓		✓
Outdoor Lighting - Dusk to Dawn (CLOSED)	11.04									✓		
Municipal Pumping Service	11.05			✓								
Civil Defense - Fire Sirens	11.06											
LED Street and Area Lighting	11.07									✓		
Key:	✓ = May apply	■ = Mandatory	□ = Not Applicable									

Applicability Matrix	Mandatory Riders	Energy Adjustment Rider	Energy Conservation and Optimization (ECO) Rider	Competitive Rate to Large General Service Rider	Renewable Resource Cost Recovery Rider	Transmission Cost Recovery Rider	Reserved for Future Use	Uplift Program Rider	Environmental Cost Recovery Rider	Energy-Intensive, Trade-Exposed (EITE) Rider	Revenue Decoupling Mechanism (RDM) Rider	Electric Utility Infrastructure Cost Recovery (EUIC) Rider
Tariffs	Section Numbers	13.01	13.02	13.03	13.04	13.05	13.06	13.07	13.08	13.09	13.10	13.11
MANDATORY RIDERS												
Energy Adjustment Rider	13.01									✓		
Energy Conservation and Optimization (ECO) ~~Improvement Project (CIP)~~ Rider	13.02									✓		
Competitive Rate to Large General Service Rider	13.03									✓		
Renewable Cost Recovery Rider	13.04									✓		
Transmission Cost Recovery Rider	13.05									✓		
Reserved for Future Use	13.06											
Uplift Program Rider	13.07											
Environmental Cost Recovery Rider	13.08									✓		
Energy-Intensive, Trade-Exposed (EITE) Rider	13.09											
Revenue Decoupling Mechanism (RDM) Rider	13.10											
Electric Utility Infrastructure Cost Recovery (EUIC) Rider	13.11											
VOLUNTARY RIDERS												
Water Heating Control Rider	14.01		✓							✓		
Real Time Pricing Rider	14.02									✓		
Large General Service Rider	14.03	✓								✓		
Controlled Service - Interruptible Load Self-Contained and CT Metering Rider	14.04									✓		
Reserved for Future Use	14.05											
Controlled Service - Deferred Load Rider	14.06									✓		
Fixed Time of Service Rider	14.07									✓		
Air Conditioning Control Rider (**Cool** *Savings*)	14.08									✓		
Renewable Energy Rider (**Tail** *Winds*)	14.09									✓		
WAPA Bill Crediting Program Rider	14.10											
Reserved for Future Use	14.11											
Off-Peak Electric Vehicle Rider	14.12									✓		
Key:	✓ = May apply	■ = Mandatory	□ = Not Applicable									

MANDATORY RIDERS - APPLICABILITY MATRIX

The amount of a bill for service will be modified by any Mandatory Rate Riders that must apply, by any Voluntary Rate Riders selected by the Customer, and charges listed in the General Rules and Regulations.

Applicability Matrix	Mandatory Riders	Energy Adjustment Rider	Energy Conservation and Optimization (ECO) Rider	Competitive Rate to Large General Service Rider	Renewable Resource Cost Recovery Rider	Transmission Cost Recovery Rider	Reserved for Future Use	Uplift Program Rider	Environmental Cost Recovery Rider	Energy-Intensive, Trade-Exposed (EITE) Rider	Revenue Decoupling Mechanism (RDM) Rider	Electric Utility Infrastructure Cost Recovery (EUIC) Rider
Tariffs	Section Numbers	13.01	13.02	13.03	13.04	13.05	13.06	13.07	13.08	13.09	13.10	13.11
RESIDENTIAL & FARM SERVICES												
Residential Service	9.01							✓		✓		
Residential Demand Control Service	9.02							✓		✓		
Farm Service	9.03							✓		✓		
GENERAL SERVICES												
Small General Service (Under 20 kW)	10.01									✓		
General Service (20 kW or Greater)	10.02			✓						✓		
General Service - Time of Use	10.03			✓						✓		
Large General Service	10.04			✓						✓		
Large General Service - Time of Day	10.05			✓						✓		
Super Large General Service	10.06									✓		
Electric Vehicle Direct Current Fast Charging (DCFC) General Service - Time of Day	10.07	✓	✓		✓	✓		✓	✓	✓		✓
OTHER SERVICES												
Standby Service	11.01									✓		
Irrigation Service	11.02											
Outdoor Lighting - Energy Only - Dusk to Dawn	11.03									✓		✓
Outdoor Lighting - Dusk to Dawn (CLOSED)	11.04									✓		
Municipal Pumping Service	11.05			✓								
Civil Defense - Fire Sirens	11.06											
LED Street and Area Lighting	11.07									✓		

Key: ✓ = May apply ■ = Mandatory ☐ = Not Applicable

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Applicability Matrix	Mandatory Riders	Energy Adjustment Rider	Energy Conservation and Optimization (ECO) Rider	Competitive Rate to Large General Service Rider	Renewable Resource Cost Recovery Rider	Transmission Cost Recovery Rider	Reserved for Future Use	Uplift Program Rider	Environmental Cost Recovery Rider	Energy-Intensive, Trade-Exposed (EITE) Rider	Revenue Decoupling Mechanism (RDM) Rider	Electric Utility Infrastructure Cost Recovery (EUIC) Rider
Tariffs	Section Numbers	13.01	13.02	13.03	13.04	13.05	13.06	13.07	13.08	13.09	13.10	13.11
MANDATORY RIDERS												
Energy Adjustment Rider	13.01									✓		
Energy Conservation and Optimization (ECO) Rider	13.02									✓		
Competitive Rate to Large General Service Rider	13.03									✓		
Renewable Cost Recovery Rider	13.04									✓		
Transmission Cost Recovery Rider	13.05									✓		
Reserved for Future Use	13.06											
Uplift Program Rider	13.07											
Environmental Cost Recovery Rider	13.08									✓		
Energy-Intensive, Trade-Exposed (EITE) Rider	13.09											
Revenue Decoupling Mechanism (RDM) Rider	13.10											
Electric Utility Infrastructure Cost Recovery (EUIC) Rider	13.11											
VOLUNTARY RIDERS												
Water Heating Control Rider	14.01	■	✓		■	■			■	✓		■
Real Time Pricing Rider	14.02		■		■	■			■	✓		
Large General Service Rider	14.03	✓	■		■	■			■	✓		
Controlled Service - Interruptible Load Self-Contained and CT Metering Rider	14.04	■	■		■	■			■	✓		■
Reserved for Future Use	14.05											
Controlled Service - Deferred Load Rider	14.06	■	■		■	■			■	✓		■
Fixed Time of Service Rider	14.07	■	■		■	■			■	✓		■
Air Conditioning Control Rider (**Cool** *Savings*)	14.08								■	✓		
Renewable Energy Rider (**Tail** *Winds*)	14.09									✓		
WAPA Bill Crediting Program Rider	14.10								■			
Reserved for Future Use	14.11											
Off-Peak Electric Vehicle Rider	14.12	■	■		■	■			■	✓		■
Key:	✓ = May apply	■ = Mandatory	□ = Not Applicable									

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ENERGY CONSERVATION AND OPTIMIZATION (ECO)~~IMPROVEMENT PROJECT (CIP)~~ RIDER

DESCRIPTION	RATE CODE
Residential	MCPRS
Farm	MCPFM
General Service	MCPGS
Large General Service	MCPLG
Irrigation Service	MCPIR
Outdoor Lighting	MCPLT
OPA	MCPOP
Controlled Service Deferred	MCPCD
Controlled Service Interruptible	MCPCI
Controlled Service Off Peak	MCPCO

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

APPLICATION OF RIDER: This rider is applicable to any electric service under all of the Company's retail rate schedules in Sections 9, 10, 11, and 14, except for Standby Service, Section 11.01; Civil Defense – Fire Sirens, Section 11.06; Air Conditioning Control Rider, Section 14.08; Renewable Energy Rider, Section 14.09; and those customers who have been granted an exemption under a large customer facility. The exemptions are as follows:

"Large Customer Facility" customers that have been exempted from the Company's Conservation Improvement Program charges pursuant to Minn. Stat. 216B.241, Subd. 1a (b) shall receive a monthly exemption from conservation improvement program charges pursuant to Minn. Stat.216B.16, subd. 6b Energy Conservation Improvement. Such monthly exemption will be effective beginning January 1 of the year following the grant of exemption. Upon exemption from conservation program charges, the "Large Customer Facility" customers can no longer participate in the Company's Energy Conservation Improvement Program.

CONSERVATION SURCHARGE: There shall be added to each non-exempt Customer's bill a Conservation Surcharge, which shall be the Conservation Surcharge Rate multiplied by the customer's billing kWh for electric service. The Conservation Surcharge shall not be applied to Meter(s) on Customer Account(s) granted exemption by the Commissioner of the Minnesota Department of Commerce, Division of Energy Resources (or successor agency) from ECO~~CIP~~ costs pursuant to Minn. Stat. 216B.241.

Service Category	Section	Rate per kWh
Residential	9.01, 9.02	0.~~683~~545 ¢kWh
Farm	9.03	0.~~689~~558 ¢kWh
General Service	10.01, 10.02, 10.03, 10.07	0.~~686~~540 ¢kWh
Large General Service	10.04, 10.05, 10.06, 14.02, 14.03	0.~~682~~578 ¢kWh
Irrigation Service	11.02	0.~~362~~304 ¢kWh
Outdoor Lighting	11.03, 11.04, 11.07	0.~~778~~613 ¢kWh
OPA	11.05	0.~~604~~487 ¢kWh
Controlled Service Deferred	14.01, 14.06	0.~~657~~534 ¢kWh
Controlled Service Interruptible	14.04	0.~~709~~561 ¢kWh
Controlled Service Off Peak	14.07, 14.12	0.~~593~~453 ¢kWh

DETERMINATION OF CONSERVATION SURCHARGE RATES: The Minnesota Public Utilities Commission (MNPUC) annually approves a Conservation Cost Recovery Adjustment (CCRA) which is used to develop the Conservation Surcharge for each Service Category. The approved CCRA is $0.00555. The Conservation Surcharge shall be the Recoverable ~~CIP~~ ECO Tracker Balance multiplied by the Service Category's ~~CIP~~ ECO energy allocator (E2), divided by the corresponding Service Category's projected Minnesota non-exempt retail energy sales for a designated 12-month recovery period. The Surcharge may be adjusted annually by approval of a change in the CCRA ~~of~~ by the ~~Minnesota Public Utilities Commission (~~MNPUC~~)~~. The Recoverable ~~CIP~~ ECO Tracker Balance is determined as described below, starting with the MNPUC accepted ~~CIP~~ ECO Tracker account balance as of the end of the prior year. From this starting point:

1. Add financial incentives awarded by the MNPUC not reflected in the prior year-end ~~CIP~~ ECO Tracker balance;

2. Add current year ~~CIP~~ ECO approved spending levels.

All costs appropriately charged to the ~~CIP~~ ECO Tracker account shall be eligible for recovery through this Rider and all revenues received from the application of the Conservation Surcharge Factor shall be credited to the ~~CIP~~ ECO Tracker account.

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

ENERGY CONSERVATION AND OPTIMIZATION (ECO) RIDER C

DESCRIPTION	RATE CODE
Residential	MCPRS
Farm	MCPFM
General Service	MCPGS
Large General Service	MCPLG
Irrigation Service	MCPIR
Outdoor Lighting	MCPLT
OPA	MCPOP
Controlled Service Deferred	MCPCD
Controlled Service Interruptible	MCPCI
Controlled Service Off Peak	MCPCO

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

APPLICATION OF RIDER: This rider is applicable to any electric service under all of the Company's retail rate schedules in Sections 9, 10, 11, and 14, except for Standby Service, Section 11.01; Civil Defense – Fire Sirens, Section 11.06; Air Conditioning Control Rider, Section 14.08; Renewable Energy Rider, Section 14.09; and those customers who have been granted an exemption under a large customer facility. The exemptions are as follows:

"Large Customer Facility" customers that have been exempted from the Company's Conservation Improvement Program charges pursuant to Minn. Stat. 216B.241, Subd. 1a (b) shall receive a monthly exemption from conservation improvement program charges pursuant to Minn. Stat.216B.16, subd. 6b Energy Conservation Improvement. Such monthly exemption will be effective beginning January 1 of the year following the grant of exemption. Upon exemption from conservation program charges, the "Large Customer Facility" customers can no longer participate in the Company's Energy Conservation Improvement Program.

CONSERVATION SURCHARGE: There shall be added to each non-exempt Customer's bill a Conservation Surcharge, which shall be the Conservation Surcharge Rate multiplied by the customer's billing kWh for electric service. The Conservation Surcharge shall not be applied to Meter(s) on Customer Account(s) granted exemption by the Commissioner of the Minnesota Department of Commerce, Division of Energy Resources (or successor agency) from ECO costs pursuant to Minn. Stat. 216B.241. C

Service Category	Section	Rate per kWh	
Residential	9.01, 9.02	0.545 ¢kWh	**R**
Farm	9.03	0.558 ¢kWh	**R**
General Service	10.01, 10.02, 10.03, 10.07	0.540 ¢kWh	**R**
Large General Service	10.04, 10.05, 10.06, 14.02, 14.03	0.578 ¢kWh	**R**
Irrigation Service	11.02	0.304 ¢kWh	**R**
Outdoor Lighting	11.03, 11.04, 11.07	0.613 ¢kWh	**R**
OPA	11.05	0.487 ¢kWh	**R**
Controlled Service Deferred	14.01, 14.06	0.534 ¢kWh	**R**
Controlled Service Interruptible	14.04	0.561 ¢kWh	**R**
Controlled Service Off Peak	14.07, 14.12	0.453 ¢kWh	**R**

DETERMINATION OF CONSERVATION SURCHARGE RATES: The Minnesota Public Utilities Commission (MNPUC) annually approves a Conservation Cost Recovery Adjustment (CCRA) which is used to develop the Conservation Surcharge for each Service Category. The approved CCRA is $0.00555. The Conservation Surcharge shall be the Recoverable ECO Tracker Balance multiplied by the Service Category's ECO energy allocator (E2), divided by the corresponding Service Category's projected Minnesota non-exempt retail energy sales for a designated 12-month recovery period. The Surcharge may be adjusted annually by approval of a change in the CCRA by the MNPUC. The Recoverable ECO Tracker Balance is determined as described below, starting with the MNPUC accepted ECO Tracker account balance as of the end of the prior year. From this starting point: **N N N NRC C C C C**

1. Add financial incentives awarded by the MNPUC not reflected in the prior year-end ECO Tracker balance; **C**

2. Add current year ECO approved spending levels. **C**

All costs appropriately charged to the ECO Tracker account shall be eligible for recovery through this Rider and all revenues received from the application of the Conservation Surcharge Factor shall be credited to the ECO Tracker account. **C C**

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

Appendix A – Tables

Table 1
2023 CALCULATION OF CARRYING CHARGE ON CONSERVATION DOLLARS HELD IN CIP TRACKER ACCOUNT
Financial Incentive Project - Conservation Improvement Programs
Otter Tail Power Company

	Capital Expenditures (A)	Operating Expenses (B)	Revenues Received (C)	Dr. 1860.3100 Cr. 4310.4000 Carrying Charge 1.77% (D)	Balance Account 1860.3000 + 1860.3100 (E)
Balance Dec. 31, 2022					210,328.85
January:					
Carrying Charge	--	--	--	310.24	310.24
Prior Year Adjustment					
Labor Accrual Adj					0.00
Activity	0.00	295,483.29	(1,464,540.50)	--	(1,169,057.21)
Deferred Taxes	--	--	--	--	--
Balance January 31, 2023	0.00	295,483.29	(1,464,540.50)	310.24	(958,418.12)
February:					
Carrying Charge	--	--	--	(1,413.67)	(1,413.67)
Labor Accrual Adj					0.00
Activity	0.00	290,368.24	(1,399,029.35)	--	(1,108,661.11)
Deferred Taxes	--	--	--	--	--
Balance February 28, 2023	0.00	585,851.53	(2,863,569.85)	(1,103.43)	(2,068,492.90)
March:					
Carrying Charge	--	--	--	(3,051.03)	(3,051.03)
Labor Accrual Adj					0.00
Activity	0.00	986,642.12	(1,337,768.52)	--	(351,126.40)
Deferred Taxes	--	--	--	--	--
Balance March 31, 2023	0.00	1,572,493.65	(4,201,338.37)	(4,154.46)	(2,422,670.33)
April:					
Carrying Charge	--	--	--	(3,573.44)	(3,573.44)
Labor Accrual Adj					0.00
Activity	0.00	447,819.29	(1,252,082.86)	--	(804,263.57)
Deferred Taxes	--			--	--
Balance April 30, 2023	0.00	2,020,312.94	(5,453,421.23)	(7,727.90)	(3,230,507.34)
May:					
Carrying Charge	--	--	--	(4,765.00)	(4,765.00)
Bonus/Incentive					0.00
Labor Accrual Adj					0.00
Activity	0.00	344,100.00	(1,038,360.53)	--	(694,260.53)
Deferred Taxes	--	--	--	--	--
Balance May 31, 2023	0.00	2,364,412.94	(6,491,781.76)	(12,492.90)	(3,929,532.87)
June:					
Carrying Charge	--	--	--	(5,796.06)	(5,796.06)
Bonus/Incentive					0.00
Labor Accrual Adj					0.00
Activity	0.00	451,263.28	(1,137,152.44)	--	(685,889.16)
Deferred Taxes	--	--	--	--	--
Balance June 30, 2023	0.00	2,815,676.22	(7,628,934.20)	(18,288.96)	(4,621,218.09)
July:					
Carrying Charge	--	--	--	(6,816.30)	(6,816.30)
Bonus/Incentive		2,414,490.00			2,414,490.00
Labor Accrual Adj					
Activity	0.00	490,865.96	(1,112,044.59)	--	(621,178.63)
Deferred Taxes	--	--	--	--	--
Balance July 31, 2023	0.00	5,721,032.18	(8,740,978.79)	(25,105.26)	(2,834,723.02)

Table 1
2023 CALCULATION OF CARRYING CHARGE ON CONSERVATION DOLLARS HELD IN CIP TRACKER ACCOUNT
Financial Incentive Project - Conservation Improvement Programs
Otter Tail Power Company

	Capital Expenditures (A)	Operating Expenses (B)	Revenues Received (C)	Dr. 1860.3100 Cr. 4310.4000 Carrying Charge 1.77% (D)	Balance Account 1860.3000 + 1860.3100 (E)
August:					
Carrying Charge	--	--		(4,181.22)	(4,181.22)
Bonus/Incentive					0.00
Labor Accrual Adj					0.00
Activity	0.00	440,135.03	(1,420,862.29)	--	(980,727.26)
Deferred Taxes	--	--	--	--	--
Balance August 31, 2023	0.00	6,161,167.21	(10,161,841.08)	(29,286.48)	(3,819,631.50)
September:					
Carrying Charge	--	--	--	(5,633.96)	(5,633.96)
Lost Margin & Bonus/Incentive					0.00
Labor Accrual Adj					0.00
Activity	0.00	644,072.15	(897,865.92)	--	(253,793.77)
Deferred Taxes	--	--	--	--	--
Balance September 30, 2023	0.00	6,805,239.36	(11,059,707.00)	(34,920.44)	(4,079,059.23)
October:					
Carrying Charge	--	--	--	(6,016.61)	(6,016.61)
Lost Margin & Bonus/Incentive					0.00
Labor Accrual Adj					0.00
Activity	0.00	792,933.38	(916,479.15)	--	(123,545.77)
Deferred Taxes	--	--	--	--	--
Balance October 31, 2023	0.00	7,598,172.74	(11,976,186.15)	(40,937.05)	(4,208,621.61)
November:					
Carrying Charge	--		--	(6,207.72)	(6,207.72)
Bonus/Incentive					0.00
Labor Accrual Adj					0.00
Activity	0.00	603,842.13	(789,984.68)	--	(186,142.55)
Deferred Taxes	--	--	--	--	--
Balance November 30, 2023	0.00	8,202,014.87	(12,766,170.83)	(47,144.77)	(4,400,971.88)
December:					
Carrying Charge	--	--	--	(6,491.43)	(6,491.43)
Lost Margin & Bonus/Incentive					0.00
Labor Accrual Adj					0.00
Activity	0.00	1,941,855.60	(855,734.86)	--	1,086,120.74
Deferred Taxes	--	--	--	--	--
Balance December 31, 2023	0.00	10,143,870.47	(13,621,905.69)	(53,636.20)	(3,321,342.57)

Table 2
2023 INCENTIVE MECHANISM
Financial Incentive Project - Conservation Improvement Programs
Otter Tail Power Company

Inputs	**2023**	
3-year Weather-Normalized Sales Average (kWh)	1,689,628,350	(2017-2019 WN Sales)
1.0% Energy Savings	16,896,283	
Size of steps in Energy Savings	1,689,628	
Estimated CIP Expenditures	$8,385,470	
Estimated CIP Energy Goal	47,768,310	
Estimated Net Benefits at Approved Goal	$18,190,849	Excludes POP Solar and Assessments
Energy savings at 1.75%	29,568,496	

Incentive Calibration	**2023**	
Max Percent of Benefits Awarded	10.0%	Maximum net benefits awarded
Earning Threshold	1.0%	
Max Achievement Level	1.7%	
Max Percent of Expenditures if savings ≤ 2%	30.0%	
Max Percent of Expenditures if savings > 2%	35.0%	
Increment (% Points)	7.5	% Points

Actual Electric CIP Incentive Results	**2023**	
Spending	$7,729,380	
Energy Saved	61,107,913	Excludes POP Solar
Net Benefits Achieved	$30,263,795	Excludes Low-Income, POP Solar, and Assessments
Resulting Incentive		
Achievement Level	3.62%	
Percent of Net Benefits Awarded	10.00%	
Expenditure Cap	$2,705,283	
Financial Incentive Award -- 2023 Results	**$2,705,283**	

Incentive/First Year kWh Saved $	$0.0443
Incentive/Net Benefits	8.94%
Incentive/CIP Expenditures	35.00%

Cost per kWh	$0.13

Table 3
2023 PROJECT COSTS, SAVINGS, AND BENEFITS
Financial Incentive Project - Conservation Improvement Programs
Otter Tail Power Company

	2023 Proposed Savings, Costs, and Benefits				2023 Actual Savings, Costs, and Benefits			
	kWh Savings	Expenditures	Total Benefits	Net Benefits	kWh Savings	Expenditures	Total Benefits	Net Benefits
Residential								
Home Energy Management	316,120	$93,000	$1,135,477	$1,042,477	311,882	$85,350	$1,112,131	$1,026,781
Home Appliance	369,424	$170,000	$148,423	($21,577)	226,723	$187,132	$102,254	($84,878)
Home Lighting	4,235,726	$545,000	$2,736,108	$2,191,108	5,799,552	$557,631	$3,674,781	$3,117,151
Energy Feedback Program	3,281,680	$308,903	$539,681	$230,778	3,673,537	$189,181	$570,473	$381,291
Home Heating & Cooling	6,128,023	$1,000,800	$4,509,781	$3,508,981	4,832,530	$916,900	$3,575,882	$2,658,982
Home Direct Install	1,213,344	$136,000	$2,525,843	$2,389,843	1,212,011	$178,756	$611,582	$432,826
Advertising & Education	0	$187,000	$0	($187,000)	0	$184,716	$0	($184,716)
Implementation & Training	0	$37,000	$0	($37,000)	0	$81,291	$0	($81,291)
Total - Residential	15,544,317	$2,477,703	$11,595,313	$9,117,610	16,056,235	$2,380,957	$9,647,104	$7,266,147
Low-Income								
House Therapy	200,357	$204,000	$104,571	($99,429)	145,074	$222,079	$77,136	($144,943)
Low-Income Energy Feedback Program	883,431	$85,000	$145,380	$60,380	1,338,451	$79,420	$207,851	$128,431
Total - Low-Income	1,083,788	$289,000	$249,951	($39,049)	1,483,525	$301,499	$284,988	($16,512)
Commercial								
Drive Power	3,467,503	$250,000	$2,060,002	$1,810,002	10,084,765	$458,944	$6,180,487	$5,721,544
Commercial Energy Management	10,989	$30,000	$82,298	$52,298	7,083	$8,585	$53,044	$44,459
Commercial Direct Install	276,510	$42,000	$61,815	$19,815	210,218	$32,267	$39,551	$7,284
Compressed Air Efficiency	250,287	$48,000	$134,451	$86,451	166,596	$51,000	$133,886	$82,887
Custom Effiency Grants	2,195,038	$321,000	$2,210,353	$1,889,353	3,735,400	$274,276	$2,429,245	$2,154,969
Commercial Heat Pumps	3,385,982	$770,370	$2,643,634	$1,873,264	3,793,354	$797,898	$2,698,759	$1,900,861
Commercial & Industrial Focused Efficiency	1,145,172	$302,000	$560,809	$258,809	11,824,668	$1,042,848	$7,475,848	$6,433,000
Commercial Lighting	16,685,206	$1,665,000	$9,677,187	$8,012,187	13,164,649	$1,065,988	$8,432,902	$7,366,914
Commercial Audits & Studies	1,826,378	$268,000	$451,563	$183,563	329,624	$116,382	$78,369	($38,013)
Refrigeration	931,909	$83,000	$310,506	$227,506	251,798	$77,201	$101,484	$24,283
Advertising & Education	0	$65,000	$0	($65,000)	0	$36,773	$0	($36,773)
Integrated Building Design Plus	0	$224,000	$0	($224,000)	0	$154,869	$0	($154,869)
Financing	0	$17,000	$0	($17,000)	0	$7,070	$0	($7,070)
Implementation & Training	0	$60,000	$0	($60,000)	0	$92,485	$0	($92,485)
Total - Commercial	30,174,975	$4,145,370	$18,192,620	$14,047,250	43,568,154	$4,216,584	$27,623,575	$23,406,991

Table 3
2023 PROJECT COSTS, SAVINGS, AND BENEFITS
Financial Incentive Project - Conservation Improvement Programs
Otter Tail Power Company

	2023 Proposed Savings, Costs, and Benefits				2023 Actual Savings, Costs, and Benefits			
	kWh Savings	Expenditures	Total Benefits	Net Benefits	kWh Savings	Expenditures	Total Benefits	Net Benefits
Other Projects								
Publicly-Owned Property Solar	965,230	$752,500	$1,226,217	$473,717	336,276	$325,141	$457,705	$132,564
Emerging Technology Accelerator	0	$131,793	$0	($131,793)	0	$133,343	$0	($133,343)
Total - Other	965,230	$752,500	$1,226,217	$473,717	336,276	$458,483	$457,705	($779)
Program Development And Regulatory Requirements								
Planning - Regulatory Affairs	0	$300,000	$0	($300,000)	0	$236,096	$0	($236,096)
Research & Development	0	$225,000	$0	($225,000)	0	$31,794	$0	($31,794)
NGEA - Regulatory Assessments	0	$110,000	$0	($110,000)	0	$87,715	$0	($87,715)
PUC Assessments	0	$20,000	$0	($20,000)	0	$8,141	$0	($8,141)
Transmission & Distribution Cost Study	0	$0	$0	$0	0	$0	$0	$0
Total - Development & Regulatory Requirements	0	$655,000	$0	($655,000)	0	$363,746	$0	($363,746)
Miscellaneous/Inactive								
Company CIP Projects	0	$0	$0	$0	0	$0	$0	$0
Accounting Adjustments	0	$0	$0	$0	0	$8,111	$0	($8,111)
Total - Miscellaneous	0	$0	$0	$0	$0	$8,111	$0	($8,111)
Total - All CIP	47,768,310	$8,385,470	$31,264,101	$22,878,631	61,444,189	$7,729,380	$38,013,371	$30,283,991

All numbers are for a single year - 2023. DSMORE software was used for the analysis, with figures discounted to 2023.

Table 4
2023 CIP Program Status Report / CIP Tracker Recap
Financial Incentive Project - Conservation Improvement Programs
Otter Tail Power Company

	As Filed - 2023 Proposed Benefit/Cost Ratios				Actual - 2023 Benefit/Cost Ratios			
	Utility Test	RIM Test	Societal Test	Participant Test	Utility Test Ratio	RIM Test Ratio	Societal Test Ratio	Participant Test Ratio
Residential								
Home Energy Management	12.21	9.34	12.21	inf.*	13.03	9.80	13.03	inf.
Home Appliance	0.87	0.36	1.23	inf.	0.55	0.30	0.85	inf.
Home Lighting	5.02	0.50	2.69	6.14	6.59	0.50	2.34	4.96
Energy Feedback Program	1.75	0.46	1.90	inf.	3.02	0.49	3.02	inf.
Home Heating & Cooling	4.51	0.53	1.83	3.58	3.90	0.56	3.66	7.95
Home Direct Install	18.57	0.10	51.38	inf.	3.42	0.03	18.74	inf.
Advertising & Education	0.00	0.00	0.00	inf.	0.00	0.00	0.00	inf.
Implementation & Training	0.00	0.00	0.00	inf.	0.00	0.00	0.00	inf.
Total - Residential	4.68	0.28	2.71	12.25	4.05	0.24	2.98	16.62
Low-Income								
House Therapy	0.51	0.05	2.78	inf.	0.35	0.09	2.25	inf.
Low-Income Energy Feedback Program	1.71	0.45	1.71	inf.	2.62	0.48	2.62	inf.
Total - Low-Income	0.86	0.09	2.08	inf.	0.95	0.22	2.50	inf.
Commercial								
Drive Power	8.24	0.80	3.28	3.73	13.47	0.87	2.78	2.71
Commercial Energy Management	2.74	2.02	2.74	inf.	6.18	3.43	6.18	inf.
Commercial Direct Install	1.47	0.41	2.33	inf.	1.23	0.43	1.66	inf.
Compressed Air Efficiency	2.80	0.69	1.94	2.88	2.63	0.76	0.97	1.08
Custom Effiency Grants	6.89	1.03	1.38	1.09	8.86	0.97	2.87	2.57
Commercial Heat Pumps	3.43	0.59	1.55	2.17	3.38	0.63	0.89	1.20
Commercial & Industrial Focused Efficiency	1.86	0.63	1.36	2.33	7.17	0.98	1.61	1.38
Commercial Lighting	5.81	0.81	3.05	3.42	7.91	0.83	3.11	3.29
Commercial Audits & Studies	1.68	0.51	1.32	3.33	0.67	0.37	0.71	4.08
Refrigeration	3.74	0.74	2.93	4.18	1.31	0.55	0.96	1.92
Advertising & Education	0.00	0.00	0.00	inf.	0.00	0.00	0.00	inf.
Integrated Building Design Plus	0.00	0.00	0.00	inf.	0.00	0.00	0.00	inf.
Financing	0.00	0.00	0.00	inf.	0.00	0.00	0.00	inf.
Implementation & Training	0.00	0.00	0.00	inf.	0.00	0.00	0.00	inf.
Total - Commercial	4.39	0.76	2.16	2.62	6.55	0.85	1.94	1.96

Table 4
2023 CIP Program Status Report / CIP Tracker Recap
Financial Incentive Project - Conservation Improvement Programs
Otter Tail Power Company

	As Filed - 2023 Proposed Benefit/Cost Ratios				Actual - 2023 Benefit/Cost Ratios			
	Utility Test	RIM Test	Societal Test	Participant Test	Utility Test Ratio	RIM Test Ratio	Societal Test Ratio	Participant Test Ratio
Other Projects								
Publicly-Owned Property Solar	1.63	0.73	0.98	1.02	1.41	0.60	68.52	inf.
Emerging Technology Accelerator	N/A	N/A	N/A	N/A	0.00	0.00	0.00	inf.
Total - Other	1.63	0.74	0.73	0.98	1.00	0.60	68.52	inf.
Program Development And Regulatory Requirements								
Planning - Regulatory Affairs	0.00	0.00	0.00	inf.	0.00	0.00	0.00	inf.
Research & Development	0.00	0.00	0.00	inf.	0.00	0.00	0.00	inf.
NGEA - Regulatory Assessments	0.00	0.00	0.00	inf.	0.00	0.00	0.00	inf.
PUC Assessments	0.00	0.00	0.00	inf.	0.00	0.00	0.00	inf.
Transmission & Distribution Cost Study	0.00	0.00	0.00	inf.	inf.	inf.	inf.	inf.
Total - Development & Regulatory Requirements	0.00	0.00	0.00	inf.	0.00	0.00	0.00	inf.
Miscellaneous/Inactive								
Company CIP Projects	0.00	0.00	0.00	inf.	inf.	inf.	inf.	inf.
Accounting Adjustments	0.00	0.00	0.00	inf.	0.00	0.00	0.00	inf.
Total - Miscellaneous	0.00	0.00	0.00	inf.	0.00	0.00	0.00	inf.
Total - All CIP	3.76	0.44	2.13	5.19	4.92	0.52	2.11	4.02

*Inf. Indicates a cost test calculation that requires division by zero.

Table 5
2023 CIP Program Status Report / CIP Tracker Recap
Financial Incentive Project - Conservation Improvement Programs
Otter Tail Power Company

	2023 Expenditures			2023 Participation			2023 Energy Savings - kWh			2023 Coincident Demand Savings - kW		
	Actual	Budget	% of Goal	Actual	Budget	% of Goal	Actual	Budget*	% of Goal	Actual	Budget	% of Goal
Residential												
Home Energy Management	$85,350	$93,000	92%	18,752	18,905	99%	311,882	316,120	99%	9,759.02	9,964.7	98%
Home Appliance	$187,132	$170,000	110%	1,090	799	136%	226,723	369,424	61%	37.96	59.1	64%
Home Lighting	$557,631	$545,000	102%	129,200	106,985	121%	5,799,552	4,235,726	137%	585.90	422.3	139%
Energy Feedback Program	$189,181	$308,903	61%	28,813	28,331	102%	3,673,537	3,281,680	112%	1,539.81	1,654.2	93%
Home Heating & Cooling	$916,900	$1,000,800	92%	566	481	118%	4,832,530	6,128,023	79%	516.55	529.8	98%
Home Direct Install	$178,756	$136,000	131%	16,148	11,250	144%	1,212,011	1,213,344	100%	118.32	1,434.1	8%
Advertising & Education	$184,716	$187,000	99%	34,196	10,000	342%	0	0	0%	0.00	0.0	0%
Implementation & Training	$81,291	$37,000	220%	2	175	1%	0	0	0%	0.00	0.0	0%
Total - Residential	$2,380,957	$2,477,703	96%	228,767	176,926	129%	16,056,235	15,544,317	103%	12,557.56	14,064.2	89%
House Therapy	$222,079	$204,000	109%	70	180	39%	145,074	200,357	72%	15.13	22.8	66%
Low-Income Energy Feedback Program	$79,420	$85,000	93%	10,498	8,400	125%	1,338,451	883,431	152%	561.03	445.3	126%
Total - Low-Income	$301,499	$289,000	104%	10,568	8,580	123%	1,483,525	1,083,788	137%	576.16	468.1	123%
Commercial												
Drive Power	$458,944	$250,000	184%	661	227	291%	10,084,765	3,467,503	291%	1,167.55	348.4	335%
Commercial Energy Management	$8,585	$30,000	29%	330	512	64%	7,083	10,989	64%	467.88	725.9	64%
Commercial Direct Install	$32,267	$42,000	77%	1,034	1,369	76%	210,218	276,510	76%	32.02	17.1	188%
Compressed Air Efficiency	$51,000	$48,000	106%	9	6	150%	166,596	250,287	67%	45.42	14.0	324%
Custom Effiency Grants	$274,276	$321,000	85%	36	35	103%	3,735,400	2,195,038	170%	510.50	692.8	74%
Commercial Heat Pumps	$797,898	$770,370	104%	250	190	132%	3,793,354	3,385,982	112%	451.31	246.2	183%
Commercial & Industrial Focused Efficiency	$1,042,848	$302,000	345%	18	11	164%	11,824,668	1,145,172	1033%	1,600.12	145.9	1097%
Commercial Lighting	$1,065,988	$1,665,000	64%	983	840	117%	13,164,649	16,685,206	79%	2,002.20	2,536.3	79%
Commercial Audits & Studies	$116,382	$268,000	43%	8	11	73%	329,624	1,826,378	18%	7.63	100.6	8%
Refrigeration	$77,201	$83,000	93%	36	72	50%	251,798	931,909	27%	34.74	136.7	25%
Advertising & Education	$36,773	$65,000	57%	0	100	0%	0	0	0%	0.00	0.0	0%
Integrated Building Design Plus	$154,869	$224,000	69%	4	6	67%	0	0	0%	0.00	0.0	0%
Financing	$7,070	$17,000	42%	2	5	40%	0	0	0%	0.00	0.0	0%
Implementation & Training	$92,485	$60,000	154%	351	250	141%	0	0	0%	0.00	0.0	0%
Total - Commercial	$4,216,584	$4,145,370	102%	3,722	3,634	102%	43,568,154	30,174,974	144%	6,319.38	4,964.0	127%
Other Projects												
Publicly-Owned Property Solar	$325,141	$752,500	43%	6	14	43%	336,276	965,230	35%	144.84	337.6	43%
Emerging Technology Accelerator	$133,343	$131,793	101%	0	0	0%	0	0	0%	0.00	0.0	0%
Total - Other	$458,483	$752,500	61%	6	14	43%	336,276	965,230	35%	144.84	337.6	43%
Program Development And Regulatory Requirements												
Planning - Regulatory Affairs	$236,096	$300,000	79%									
Research & Development	$31,794	$225,000	14%									
NGEA - Regulatory Assessments	$87,715	$110,000	80%									
PUC Assessments	$8,141	$20,000	41%									
Transmission & Distribution Cost Study	$0	$0	0%									
Total - Development & Regulatory Requirements	$363,746	$655,000	56%									
Miscellaneous/Inactive Projects												
Company CIP Projects	$0	$0	0%									
Accounting Adjustments	$8,111	$0	0%									
Total - Miscellaneous/Inactive	$8,111	$0	0%	0	0	0%	0	0	0%	0.00	0.0	0%
Total - 2023 CIP Project Costs	$7,729,380	$8,385,470	92%	243,063	189,154	129%	61,444,189	47,768,310	129%	19,597.94	19,833.8	99%
CIP Tracker Carrying Costs	($53,636)											
Total - 2023 CIP with Carrying Costs	$7,675,744	$8,385,470	92%	243,063	189,154	129%	61,444,189	47,768,310	129%	19,597.94	19,833.8	99%
Financial Incentive - 2022	$2,414,490											
CIP Recovery Mechanism	($13,621,906)											
Recovered Through Rates												
Prior Year Carry Forward Balance	$210,329											
Tracker Balance - Year End 2023	($3,321,343)											

* The 2023 Energy Savings kWh - Budget for the Low-Income Energy Feedback Program was originally filed with 100% of the savings, this has been corrected by dividing it by 3 since it is a behavioral based program.

Table 6
2023 CIP PROGRAM STATUS REPORT / CIP TRACKER RECAP - COST PER KW / KWH
Financial Incentive Project - Conservation Improvement Programs
Otter Tail Power Company

	2023 Expenditures		2023 Energy Savings - kWh		Cost per kWh		2023 Coincident Demand Savings - kW		Cost per kW	
	Actual	Budget	Actual	Budget*	Actual	Budget	Actual	Budget	Actual	Budget
Residential										
Home Energy Management	$85,350	$93,000	311,882	316,120	$0.27	$0.29	9,759.0	9,964.7	$9	$9
Home Appliance	$187,132	$170,000	226,723	369,424	$0.83	$0.46	38.0	59.1	$4,929	$2,878
Home Lighting	$557,631	$545,000	5,799,552	4,235,726	$0.10	$0.13	585.9	422.3	$952	$1,290
Energy Feedback Program	$189,181	$308,903	3,673,537	3,281,680	$0.05	$0.09	1,539.8	1,654.2	$123	$187
Home Heating & Cooling	$916,900	$1,000,800	4,832,530	6,128,023	$0.19	$0.16	516.5	529.8	$1,775	$1,889
Home Direct Install	$178,756	$136,000	1,212,011	1,213,344	$0.15	$0.11	118.3	1,434.1	$1,511	$95
Budget Modificaiton Request		$0								
Total - Residential	$2,114,950	$2,253,703	16,056,235	15,544,317	$0.13	$0.14	12,557.6	14,064.2	$168	$160
Low-Income										
House Therapy	$222,079	$204,000	145,074	200,357	$1.53	$1.02	15.1	22.8	$14,678	$8,945
Low-Income Energy Feedback Program	$79,420	$85,000	1,338,451	883,431	$0.06	$0.10	561.0	445.3	$142	$191
Total - Low-Income	$301,499	$289,000	1,483,525	1,083,788	$0.20	$0.27	576.2	468.1	$523	$617
Commercial										
Drive Power	$458,944	$250,000	10,084,765	3,467,503	$0.05	$0.07	1,167.5	348.4	$393	$718
Commercial Energy Management	$8,585	$30,000	7,083	10,989	$1.21	$2.73	467.9	725.9	$18	$41
Commercial Direct Install	$32,267	$42,000	210,218	276,510	$0.15	$0.15	32.0	17.1	$1,008	$2,459
Compressed Air Efficiency	$51,000	$48,000	166,596	250,287	$0.31	$0.19	45.4	14.0	$1,123	$3,428
Custom Effiency Grants	$274,276	$321,000	3,735,400	2,195,038	$0.07	$0.15	510.5	692.8	$537	$463
Commercial Heat Pumps	$797,898	$770,370	3,793,354	3,385,982	$0.21	$0.23	451.3	246.2	$1,768	$3,129
Commercial & Industrial Focused Efficiency	$1,042,848	$302,000	11,824,668	1,145,172	$0.09	$0.26	1,600.1	145.9	$652	$2,071
Commercial Lighting	$1,065,988	$1,665,000	13,164,649	16,685,206	$0.08	$0.10	2,002.2	2,536.3	$532	$656
Commercial Audits & Studies	$116,382	$268,000	329,624	1,826,378	$0.35	$0.15	7.6	100.6	$15,244	$2,664
Refrigeration	$77,201	$83,000	251,798	931,909	$0.31	$0.09	34.7	136.7	$2,223	$607
Budget Modificaiton Request		$0								
Total - Commercial	$3,925,388	$3,779,370	43,568,154	30,174,975	$0.09	$0.13	6,319.4	4,964.0	$621	$761
Other Projects										
Publicly-Owned Property Solar	$325,141	$752,500	336,276	965,230	$0.97	$0.78	144.8	337.6	$2,245	$2,229
Emerging Technology Accelerator	$133,343	$131,793	0	0	$0.00	$0.00	0.0	0.0	$0	$0
Total - Other	$458,483	$752,500	336,276	965,230	$1.36	$0.78	144.8	337.6	$3,165	$2,229
Total - Direct Impact	$6,800,321	$7,140,470	61,444,189	47,768,310	$0.11	$0.15	19,597.9	19,833.8	$347	$360
Miscellaneous/Inactive Projects										
Town Energy Challenge - Inactive	$0	$0	0	0	$0.00	$0.00	0.0	0.0	$0	$0
Electronically Commutated Motors	$0	$0	0	0	$0.00	$0.00	0.0	0.0	$0	$0
Company CIP Projects	$0	$0	0	0	$0.00	$0.00	0.0	0.0	$0	$0
Accounting Adjustments	$8,111	$0	0	0	$0.00	$0.00	0.0	0.0	$0	$0
Total - Miscellaneous	$8,111	$0	0	0	$0.00	$0.00	0.0	0.0	$0	$0
Total - Indirect Impact	$920,949	$1,245,000	0	0	$0.00	$0.00	0.0	0.0	$0	$0
Total - Budget Modification Request		$0								
Total - 2023 CIP Project Costs	$7,729,380	$8,385,470	61,444,189	47,768,310	$0.13	$0.18	19,597.9	19,833.8	$394	$423

* The 2023 Energy Savings kWh - Budget for the Low-Income Energy Feedback Program was originally filed with 100% of the savings, this has been corrected by dividing it by 3 since it is a behavioral based program.

Appendix B – Other Evaluations

- **HER OTP Summary Report 2023**

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Otter Tail Home Energy Reports Program:
2023 Results Report

Section 1: Program Overview

In June 2011, Otter Tail Power Company (Otter Tail) and Opower launched the Home Energy Reports pilot, a behavioral program designed to boost customer engagement and reduce residential energy consumption. Initially, 30,000 households were selected for the program, and the vast majority received a series of personalized Home Energy Reports designed to motivate and educate recipients to take actions to improve the energy efficiency of their homes.

- Annually in 2012, 2013, and 2014, additional residential customers in Otter Tail's Minnesota service territory were added to the program as a refill to offset attrition (primarily from utility account turnover) and return the program to its original size. At the onset of the program a control group was put in place, and in August 2015, the control group was discontinued, and program design was expanded to reach as many eligible customers as possible.
    - Refill groups were measured utilizing the Modeled Savings Protocol approved by the Minnesota Department of Energy Resources (MN DER, formerly Office of Energy Security) in 2010. This method is discussed in more detail in Section 2.
    - An update to the Modeled Savings Protocol was submitted for approval to the MN DER with a request to apply the revised methodology to all waves of the program in 2016. The revised methodology is described in more detail in Section 2.
- In January 2017, the program size was reduced to 28,000 households. An additional 4,000 households were added to the program in August 2020, and 1,000 previously treated households from the June 2011 wave were re-added at the same time to maintain the 28,000-household program goal and to provide a level of over selection to plan for near term attrition.
- In January 2021, Otter Tail increased the number of households in the program to 33,000. 33,000 was the maximum number of homes that we can guarantee eligibility for given the territory size and high volume of annual account churn within the territory. As a result, we decided to move Otter Tail to "rolling enrollment."
    - Rolling enrollment is the process of automatically adding customers to the program as they become eligible. The key difference here is that all rolling enrollment customers are on one wave that is automatically refreshed with new eligible recipients as there is account turnover. In the past, customers were added manually all at once, which resulted in the many waves of customers.
    - Given we maxed out the number of households we can guarantee reaching through the program, moving to rolling enrollment was the best choice in order to maximize territory reach at any given moment.
- In May 2022, Otter Tail increased the number of households in the program by 1,300 specifically to provide Home Energy Reports to customers identified as Low to Moderate Income (LMI) customers. A

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new wave was created and launched for this purpose in July 2022, with the original wave size upon selection being 1,224. Additionally, in July 2022, Otter Tail and Opower identified 9,157 customers from among the *already existing* waves as LMI customers, using LIHEAP enrollment and approximate household income compared to state median income as LMI identifiers. For income, customers with less than or equal to $46,080 annual income were identified as LMI. For clarity, these 9,157 customers were A) separate from the 1,224 customers identified as LMI who were added to their own net new wave, and B) were not net new customers themselves but were instead part of already existing waves.

Figure 1a: 2023 Standard Report Recipients by Wave (households receiving at least 1 report in 2023)

Waves	Recipients	% of total wave population
June 2011 Wave	**8,489**	**77.8%**
October 2012 Wave	**988**	**76%**
July 2013 Wave	**828**	**77.7%**
July 2014 Wave	**630**	**75.4%**
August 2015 Wave	**2,526**	**76.8%**
July 2016 Wave	**851**	**75.4%**
October 2018 Wave (Consolidated_E Wave)	**1,918**	**75.8%**
August 2019 Wave	**1,471**	**73.1%**
August 2020 Wave	**1,673**	**70.4%**
January 2021 Wave (Rolling Enrollment Wave)	**9,439**	**73.1%**
July 2022 Wave	**0**	**0.0%**
2023 Total	**28,813**	

Figure 1b: 2023 LMI Report Recipients by Wave (households receiving at least 1 report in 2023)

Waves	Recipients	% of total wave population
June 2011 Wave	**2,419**	**22.2%**
October 2012 Wave	**312**	**24%**
July 2013 Wave	**237**	**22.3%**
July 2014 Wave	**206**	**24.6%**
August 2015 Wave	**763**	**23.2%**
July 2016 Wave	**277**	**24.6%**

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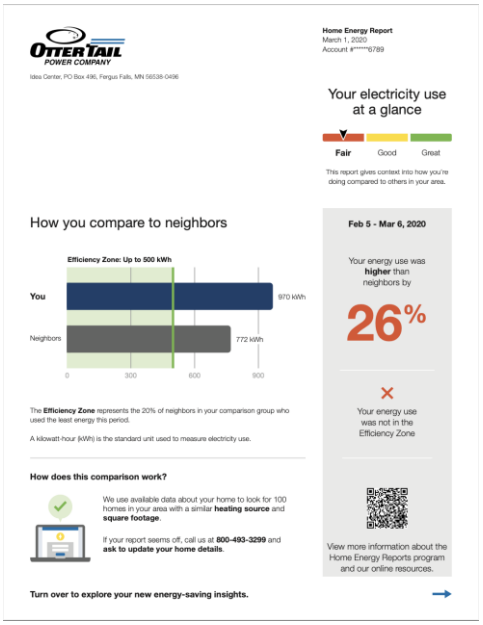
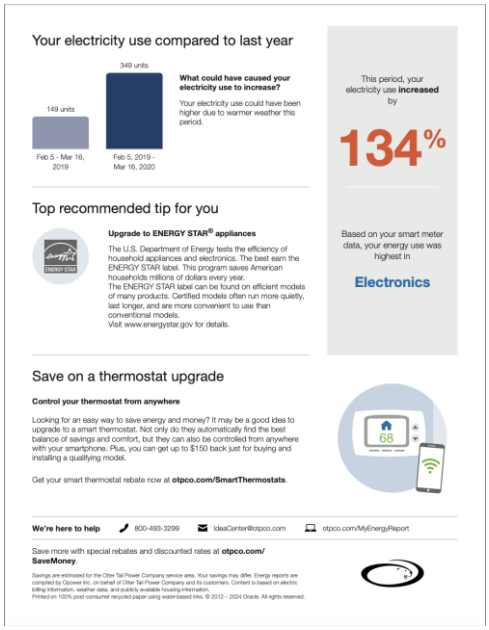
October 2018 Wave (Consolidated_E Wave)	**611**	**24.2%**
August 2019 Wave	**542**	**26.9%**
August 2020 Wave	**704**	**29.6%**
January 2021 Wave (Rolling Enrollment Wave)	**3,482**	**26.9%**
July 2022 Wave	**945**	**100.0%**
2023 Total	**10,498**	

Home Energy Reports, pictured in Figure 2, contain various personalized components designed to motivate and educate customers on energy efficiency actions. In July 2023, Otter Tail moved to using the latest version of Home Energy Report, HERv3. Report components include:

- Comparisons of recent energy use to a group of comparable 'similar homes'; this section includes both normative and injunctive messages designed to motivate action. HERv3 leverages the concept of an Efficiency Zone, instead of efficient neighbors, to create a positive energy use target for customers.
- Comparison of recent energy use to historical energy use, tracking household improvement over time.
- Targeted energy efficiency advice; specific tips are selected based on the home's energy use pattern, housing characteristics, and household demographics.
- Dynamic modules to promote programs and include seasonal information.

Figure 2: Example of Otter Tail Home Energy Report – Print (Front & Back)





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Beginning in mid-October 2022, Opower added email Home Energy Reports to the customer experience for existing HER customers who have a valid email address. Figure 3a, below, shows the count of standard customers who received at least one email report in 2023, broken out by deployment wave. Figure 3b, below, shows the count of LMI customers who received at least one email report in 2023, broken out by deployment wave. From January to December 2023, 177,267 email Home Energy Reports were dispatched to 20,862 unique customers. Similar to the print version of the Home Energy Reports, these reports were upgraded to the latest version, HERv3, and contain an Efficiency Zone comparison, a benchmark for customers' energy usage over time, and personalized energy-saving tips. Space is also provided for optional marketing modules, used to promote other utility initiatives prioritized by Otter Tail. Figure 3c contains pictures of a HERv3 email Home Energy Report. The addition of the email channel is expected to bolster energy savings as well as drive increased customer engagement in digital channels.

Figure 3a: 2023 Standard Email Report Recipients by Wave (households receiving at least 1 report in 2023)

Waves	Recipients
June 2011 Wave	**2,804**
October 2012 Wave	**391**
July 2013 Wave	**327**
July 2014 Wave	**268**
August 2015 Wave	**946**
July 2016 Wave	**439**
October 2018 Wave (Consolidated_E Wave)	**1,085**
August 2019 Wave	**792**
August 2020 Wave	**1,050**
January 2021 Wave (Rolling Enrollment Wave)	**6,959**
July 2022 Wave	**0**
2023 Total	**15,061**

Figure 3b: 2023 LMI Email Report Recipients by Wave (households receiving at least 1 report in 2023)

Waves	Recipients
June 2011 Wave	**768**
October 2012 Wave	**128**
July 2013 Wave	**105**

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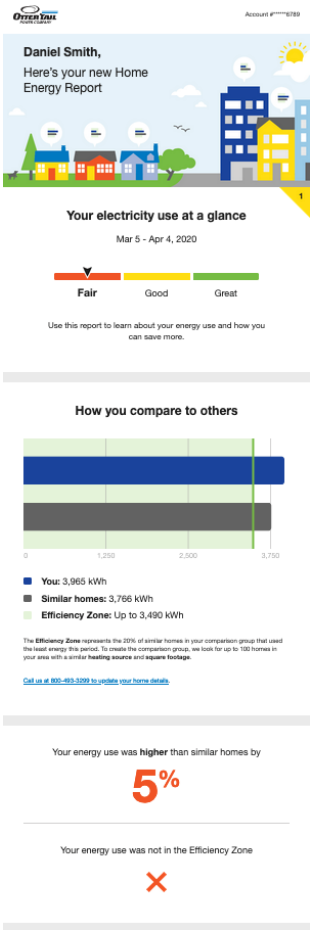
July 2014 Wave	**86**
August 2015 Wave	**300**
July 2016 Wave	**147**
October 2018 Wave (Consolidated_E Wave)	**323**
August 2019 Wave	**284**
August 2020 Wave	**440**
January 2021 Wave (Rolling Enrollment Wave)	**2,624**
July 2022 Wave	**596**
2023 Total	**5,801**

Figure 3c: Example of Otter Tail Home Energy Report - Email



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Cumulatively, 15 customers chose to opt out of the program in 2023, which corresponds to an opt-out rate of 0.038% for the year. The 2023 opt-out rate compares favorably to opt-out rates of between 1 and 3 percent at other Minnesota utilities and is lower than the Opower overall average. In the same timeframe, 3,646 participants closed their electric accounts with Otter Tail, effectively removing them from the program. Depending on when these events occurred, these customers may have received fewer than four print reports in 2023 but are included as participants.

Figure 4: 2023 Account Closures & Opt-Outs by Wave

Wave	Account Closures	Opt-Outs
June 2011 Wave	479	5
October 2012 Wave	63	3
July 2013 Wave	55	0
July 2014 Wave	50	1
August 2015 Wave	169	1
July 2016 Wave	64	0
October 2018 Wave (Consolidated_E Wave)	176	0
August 2019 Wave	146	0
August 2020 Wave	214	1
January 2021 Wave (Rolling Enrollment Wave)	1,999	4
July 2022 Wave	231	0
2023 Total	**3,646**	**15**

Section 2: Savings Calculation Methodology

This section describes the criteria used to define the population eligible to receive Home Energy Reports, the methodology originally used to assign homes to treatment and control groups, the methodology for assigning homes to certain customer segments, and the measurement and verification techniques used to derive program savings.

Opower integrates data from a variety of sources to ensure the Home Energy Reports are personalized, accurate, and meaningful for all recipients. These data integration efforts also allow for detailed analysis of

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energy savings results that enable the optimization of feature design and targeting of specific energy efficiency messages. The data used for the various analyses presented herein were collected from three primary sources:

1. *Consumption data:* Otter Tail provides Opower with weekly updates of monthly consumption data for all households in the program, including historical consumption information.

2. *Parcel data:* Opower received, to the extent available from a third-party vendor, data about household parcels, including home size, age and value, heating and cooling type, as well as pool and hot tub data. These data elements are static with the exception of square footage, heating and cooling type, and pool and hot tub data, which may be updated at the customer's request.

3. *Demographic data:* Opower received, to the extent available from a third-party vendor, demographic data about participants, including household income, number of occupants, age of occupant(s), and an owner/renter indicator. These fields were used to recommend customized energy efficiency tips to customers by using relevant demographic targeting. Household size may be updated at the customer's request.

From June 2011 (program launch) to August 2015, we measured impacts for the Home Energy Reports program via Randomized Control Trial (RCT). This involved taking our eligible population and splitting them into treatment and control groups that were statistically equivalent. We then sent Home Energy Reports to the treatment group, and we attributed any differences in usage between groups to the communications the treatment group received.

The initial analysis of the Home Energy Reports program relied upon a fixed-effects regression model. The rationale for using a regression model to interpret the results of the 2011 wave are threefold: 1) the model eliminates variability due to other factors and allows for tighter error bars around the estimate of report impact; 2) in order to isolate the impact of the Home Energy Reports on energy use, it is appropriate to control for slight differences in the housing and demographic characteristics present in the treatment and control population; and 3) the model makes the search for population segments with better or worse than average impact much more manageable. This statistical methodology is standard procedure for the analysis of controlled experiments and is a well-accepted practice within the energy efficiency program measurement and verification community. This was the statistical methodology used to measure results for the initial wave of 30,000 households.

Once we had measured results for about 4 years, we expanded the program to territory-wide deployment in August 2015. This meant we started treating control customers and switched our savings measurement to a *Modeled Savings Methodology* (see Sections 2.2 and 2.3).

2.1 RCT Disbanded

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In August 2015, we started sending reports to the control group associated with the 2011 pilot wave, making it no longer possible to measure savings via RCT. Therefore, Opower began reporting all savings for the program under the Modeled Savings Protocol. The Modeled Savings Protocol states that:

> "Larger utilities in Minnesota (greater than 15,000 customers) could also have the option of deploying the Opower platform to the entire service territory. Should this case arise, Opower proposes that this protocol also be extended to larger utilities that have a minimum of two years of experimental data from a program administered by Opower. In this case, the model should be based only on results for that particular client, not a sampling of clients across the state."

Otter Tail's Opower program had over four years of measured savings, meeting the approved threshold. Therefore, consistent with the recommendations of the Modeled Savings Protocol, Opower relied on Otter Tail's own results to inform the model for calculating savings going forward.

2.2 Regression Model & Modeled Savings Methodology

The initial regression model of program results included regressors for heating and cooling degree days, baseline usage, home square footage, age of the home, and a treatment variable interacted with an indicator of whether the billing period is pre-treatment or post-treatment. Opower then scored the model based on the coefficients for treatment times post-deployment, baseline usage, home square footage, and age of the home.

Output was a function that describes energy savings as a function of observable household or customer characteristics. The form of the model was determined based on the statistical significance of the candidate variables. A simplified equation using square footage and age of the customer's home, the number of occupants, the baseline usage in the pre-treatment period, and an indicator of whether the customer owns or rents their home is given below:

$$Savings = b0 + b1(sqft) + b2(age) + b3(\#\ of\ occupants) + b4(baseline\ usage) + b5(owner)$$

Model output was the result of a similar equation, depending on the statistically significant variables.

The average of the 'scored' savings was the predicted per household savings for each customer in the utility. Multiplying this score by the number of customers yielded the total savings over the time period in question.

Opower recognizes that because this methodology does not employ experimental design, it may be prudent to adjust the savings percentage accordingly. The resolved solution is to cap the savings calculated through this protocol at the maximum measured savings across the experimentally designed programs in Minnesota.

This methodology for measuring savings in territory-wide deployments, has also been used successfully at various utilities in Minnesota, Colorado, California, and Washington.

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2.3 Update to the *Modeled Savings Methodology*

In 2016, updates were made to the Modeled Savings Methodology to improve the accuracy of the reporting. These changes include:

- Establishing the relationship between the monthly savings rate and the cumulative number of print reports received per person in the wave up to that month.
- Applying the forecasted savings rate in a given month to the usage of the modeled wave.
- Adapting the algorithm to apply to rolling enrollment waves.

To refine Opower's Modeled Savings Methodology, 19 RCT waves at municipal utilities, co-operatives, and small investor-owned utilities, were used to measured the relationship between monthly savings rate and print reports received to date. This yields the following equation:

electric_savings_rate *= (0.0056819 * log_cumulative_report_per_person_lag + 0.0111886) * (1 + 0.3 * emails_per_person_lag)*

Where *log_cumulative_report_per_person_lag* is the log of the cumulative paper reports per person lagged by one month, and the *emails_per_person_lag* is the number of emails per person lagged by one month.

The savings can be calculated from the total usage and estimated savings rate:

savings = savings_rate * treatment_usage / (1 - savings_rate)

Where treatment_usage is the usage of the full, active treatment population.

Otter Tail received approval from the MN DER on October 7, 2016, to apply a revised Modeled Savings Methodology to calculate energy savings.

Section 3: 2023 Program Energy Savings

We estimate the gross total savings for all residential program participants in 2023 amounted to 13,980.96 MWh, and participants saved at a rate of 2.91 percent on average. A month-by-month breakdown of savings for market rate customers is shown below in Figure 5b, and a month-by-month breakdown of savings for LMI customers is shown below in Figure 5c.

Previously, we estimated the savings attributable to low-income versus market rate households by calculating the percentage of the number of low-income (LMI) households relative to the number of market rate participants (as shown in Figures 1a and 1b above) and applying that percentage to the overall savings

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calculated for the program. In 2023, we updated the methodology to estimate savings based on usage, rather than household counts, to be more reflective of the actual savings for these two groups. This approach involves analyzing the total usage by wave and customers type (LMI versus MR) in a given year and allocating the savings based on the percent usage for LMI and MR customers.

We will update the percent allocation each February (once sufficient usage for December of the previous year is received) to be reflective of the actual usage of LMI versus MR customers in each wave for the previous year.

Figure 5a: 2023 Usage Breakdown

Wave	MR MWh Usage (% of total usage)	LI MWh Usage (% of total usage)
June 2011 Wave	113,410 (82.4%)	24,288 (17.6%)
October 2012 Wave	16,086 (80.8%)	3,819 (19.2%)
July 2013 Wave	13,372 (81.3%)	3,074 (18.7%)
July 2014 Wave	10,673 (79.6%)	2,731 (20.4%)
August 2015 Wave	36,036 (80.8%)	8,578 (19.2%)
July 2016 Wave	13,674 (79.8%)	3,459 (20.2%)
October 2018 Wave (Consolidated_E Wave)	32,145 (79.1%)	8,489 (20.9%)
August 2019 Wave	19,132 (78.1%)	5,374 (21.9%)
August 2020 Wave	26,666 (74.9%)	8,923 (25.1%)
January 2021 Wave (Rolling Enrollment Wave)	92,741 (74.9%)	31,012 (25.1%)
July 2022 Wave	0	2,697 (100%)
Total	**373,935 (78.5%)**	**102,445 (21.5%)**

Figure 5b: 2023 Standard Monthly Electric Savings Impact

Month	2023 Savings (MWh)
Jan-2023	1,326
Feb-2023	1,152
Mar-2023	1,103
Apr-2023	893
May-2023	793
Jun-2023	837

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Jul-2023	885
Aug-2023	825
Sep-2023	658
Oct-2023	704
Nov-2023	865
Dec-2023	1,033
Total	**11,077***

* Please note that the total does not add up exactly due to rounded numbers being shown in this table

Figure 5c: 2023 LMI Monthly Electric Savings Impact

Month	2023 Savings (MWh)
Jan-2023	343
Feb-2023	300
Mar-2023	286
Apr-2023	232
May-2023	210
Jun-2023	222
Jul-2023	235
Aug-2023	219
Sep-2023	174
Oct-2023	185
Nov-2023	227
Dec-2023	271
Total	**2,904**

Opower Home Energy Report programs increase customer participation in other utility energy efficiency programs. The evidence for this comes from Opower's RCTs. Treatment customers who receive reports participate in utility energy efficiency programs at higher rates than do control customers. The most recent Opower meta-analyses of the impact on program participation show a 15 percent lift across all utility energy efficiency programs. The increase in participation impacts savings for the reports program in the form of jointly attributable savings. Opower will remove these jointly attributable savings, to avoid the risk of 'double-counting'.

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With a control group no longer available for program participation measurement, Opower has applied a value measured by Xcel Energy in its Minnesota program evaluation, entitled *Verification of Savings from Xcel Energy Minnesota's Print Energy Feedback Pilot Project* from March 2014, performed by the Center for Energy and Environment. The value is an average of the jointly attributable percentage savings from 2010-2012, which equates to 1.4 percent of program annual savings. Gross savings in 2023 will be reduced by 195.73 MWh to account for these jointly attributable savings. Net annual savings for the program in 2023 is therefore adjusted to 13,785.22 MWh, which is equal to an average of 350.7 kilowatt-hours in energy savings per participant household.

**Note that the October 2018 Wave is also referred to as "Consolidated_E wave" in some reports so those two names are interchangeable. **

Appendix C –
Project Information Sheets

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	**Home Energy Management**					
Status:	Existing					
Year:	**2021 Proposed**	**2021 Actual**	**2022 Proposed**	**2022 Actual**	**2023 Proposed**	**2023 Actual**
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$35,310.00	$39,010.69	$35,310.00	$28,768.75	$35,310.00	$25,643.99
Administration	$7,000.00	$2,954.29	$7,000.00	$2,369.92	$7,000.00	$897.67
Evaluation, Measurement & Verification	$2,000.00	$173.82	$2,000.00	$1,195.82	$2,000.00	$162.58
Advertising & Promotion	$45,000.00	$42,832.06	$45,000.00	$48,311.15	$45,000.00	$58,645.67
Incentives	$0.00	$650.00	$0.00	$0.00	$0.00	$0.00
Other	$3,690.00	$0.00	$3,690.00	$0.00	$3,690.00	$0.00
Total Utility Costs	$93,000.00	$85,620.86	$93,000.00	$80,645.64	$93,000.00	$85,349.91
Total Participants	18,905	18,473	18,905	18,831	18,905	18,752
% of Spending by Customer Segments						
Residential	100%	100%	100%	100%	100%	100%
Commercial	0%	0%	0%	0%	0%	0%
Industrial	0%	0%	0%	0%	0%	0%
Farm	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)	31%	31%	31%	31%	31%	31%
Budget % (% of Total Utility Costs)	31%	31%	31%	31%	31%	31%
Renter Participation*						
Participants % (% of Total Participants)	21%	21%	21%	21%	21%	21%
Budget % (% of Total Utility Costs)	21%	21%	21%	21%	21%	21%
Energy Savings						
Annual kWh Savings at Meter	316,120	282,383	126,447	287,512	134,802	285,962
Annual kWh Savings at Generator	347,630	310,530	139,051	316,170	148,238	314,465
Cost per Annual kWh Saved at Generator	$0.2675	$0.2757	$0.6688	$0.2551	$0.6274	$0.2714
Peak kW Savings at Meter	9,964.681	8,865.129	3,015.243	9,011.353	3,214.473	8,947.980
Peak kW Savings at Generator	10,957.906	9,748.756	3,315.786	9,909.555	3,534.874	9,839.865
Cost per Peak kW Saved at Generator	$8.49	$8.78	$28.05	$8.14	$26.31	$8.67
Utility Ratio	12.07	12.72	12.14	13.81	12.21	13.03
Utility NPV	$1,029,646	$1,003,714	$1,036,299	$1,033,243	$1,042,477	$1,026,781
Ratepayer Ratio	9.32	9.70	9.33	10.28	9.34	9.80
Ratepayer NPV	$1,002,179	$977,078	$1,008,283	$1,005,569	$1,013,900	$998,693
Participant Ratio	inf.	inf.	inf.	inf.	inf.	inf.
Participant NPV	$27,467	$27,286	$28,016	$27,674	$28,577	$28,088
Societal Ratio	12.12	12.87	12.14	13.81	12.21	13.03
Societal NPV	$1,034,122	$1,008,725	$1,036,321	$1,033,265	$1,042,501	$1,026,804

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	**Home Appliance**					
Status:	Existing					
Year:	**2021 Proposed**	**2021 Actual**	**2022 Proposed**	**2022 Actual**	**2023 Proposed**	**2023 Actual**
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$77,000.00	$114,799.14	$77,000.00	$89,895.04	$77,000.00	$116,148.77
Administration	$12,000.00	$4,109.64	$12,000.00	$4,938.58	$12,000.00	$5,756.45
Evaluation, Measurement & Verification	$2,000.00	$119.02	$2,000.00	$387.68	$2,000.00	$230.37
Advertising & Promotion	$41,000.00	$26,203.06	$41,000.00	$44,095.77	$41,000.00	$11,271.89
Incentives	$38,000.00	$40,335.00	$38,000.00	$49,945.00	$38,000.00	$53,170.00
Other	$0.00	$0.00	$0.00	$0.00	$0.00	$529.75
Total Utility Costs	$170,000.00	$185,565.86	$170,000.00	$189,262.07	$170,000.00	$187,107.23
Total Participants	799	830	799	1,043	799	1,090
% of Spending by Customer Segments						
Residential	100%	100%	100%	100%	100%	100%
Commercial	0%	0%	0%	0%	0%	0%
Industrial	0%	0%	0%	0%	0%	0%
Farm	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)	31%	31%	31%	31%	31%	31%
Budget % (% of Total Utility Costs)	31%	31%	31%	31%	31%	31%
Renter Participation*						
Participants % (% of Total Participants)	21%	21%	21%	21%	21%	21%
Budget % (% of Total Utility Costs)	21%	21%	21%	21%	21%	21%
Energy Savings						
Annual kWh Savings at Meter	369,424	400,861	369,424	328,172	369,424	207,880
Annual kWh Savings at Generator	406,246	440,816	406,246	360,883	406,246	228,601
Cost per Annual kWh Saved at Generator	$0.4185	$0.4210	$0.4185	$0.5244	$0.4185	$0.8185
Peak kW Savings at Meter	59.065	64.765	59.065	57.018	59.065	34.808
Peak kW Savings at Generator	64.952	71.221	64.952	62.701	64.952	38.277
Cost per Peak kW Saved at Generator	$2,617.33	$2,605.51	$2,617.33	$3,018.49	$2,617.33	$4,888.22
Utility Ratio	0.81	0.87	0.84	0.76	0.87	0.55
Utility NPV	($32,772)	($24,354)	($26,833)	($46,084)	($21,577)	($84,878)
Ratepayer Ratio	0.34	0.36	0.35	0.34	0.36	0.30
Ratepayer NPV	($262,215)	($292,147)	($260,865)	($274,561)	($260,289)	($242,990)
Participant Ratio	inf.	inf.	inf.	inf.	inf.	inf.
Participant NPV	$288,758	$332,660	$293,773	$300,331	$298,889	$228,053
Societal Ratio	1.54	1.64	1.19	1.13	1.23	0.85
Societal NPV	$71,376	$93,213	$24,972	$18,095	$30,758	($20,232)

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	Home Direct Install					
Status:	Existing					
Year:	2021 Proposed	2021 Actual	2022 Proposed	2022 Actual	2023 Proposed	2023 Actual
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$25,000.00	$32,750.45	$25,000.00	$34,463.25	$25,000.00	$34,464.98
Administration	$12,000.00	$4,748.47	$12,000.00	$3,518.78	$12,000.00	$3,181.77
Evaluation, Measurement & Verification	$2,000.00	$258.08	$2,000.00	$141.88	$2,000.00	$162.58
Advertising & Promotion	$20,000.00	$1,358.30	$20,000.00	$458.12	$20,000.00	$0.00
Incentives	$77,000.00	$150,615.43	$77,000.00	$144,928.13	$77,000.00	$140,946.66
Other	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Utility Costs	$136,000.00	$189,730.73	$136,000.00	$183,510.16	$136,000.00	$178,755.99
Total Participants	11,250	15,924	11,250	15,616	11,250	16,148
% of Spending by Customer Segments						
Residential	100%	100%	100%	100%	100%	100%
Commercial	0%	0%	0%	0%	0%	0%
Industrial	0%	0%	0%	0%	0%	0%
Farm	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)	31%	31%	31%	31%	31%	31%
Budget % (% of Total Utility Costs)	31%	31%	31%	31%	31%	31%
Renter Participation*						
Participants % (% of Total Participants)	21%	21%	21%	21%	21%	21%
Budget % (% of Total Utility Costs)	21%	21%	21%	21%	21%	21%
Energy Savings						
Annual kWh Savings at Meter	1,213,344	1,198,881	1,213,344	1,123,025	1,213,344	1,111,284
Annual kWh Savings at Generator	1,334,284	1,318,378	1,334,284	1,234,962	1,334,284	1,222,051
Cost per Annual kWh Saved at Generator	$0.1019	$0.1439	$0.1019	$0.1486	$0.1019	$0.1463
Peak kW Savings at Meter	1,434.097	125.792	1,434.097	112.910	1,434.097	108.490
Peak kW Savings at Generator	1,577.040	138.330	1,577.040	124.165	1,577.040	119.304
Cost per Peak kW Saved at Generator	$86.24	$1,371.58	$86.24	$1,477.96	$86.24	$1,498.33
Utility Ratio	17.96	3.32	18.29	3.29	18.57	3.42
Utility NPV	$2,306,045	$440,256	$2,351,967	$419,739	$2,389,843	$432,826
Ratepayer Ratio	0.10	0.03	0.10	0.03	0.10	0.03
Ratepayer NPV	($22,396,905)	($23,149,979)	($22,845,042)	($22,780,309)	($23,311,106)	($23,209,755)
Participant Ratio	inf.	inf.	inf.	inf.	inf.	inf.
Participant NPV	$27,634,671	$26,450,438	$28,185,825	$26,004,117	$28,748,001	$26,491,804
Societal Ratio	54.71	26.10	50.62	18.15	51.38	18.74
Societal NPV	$3,168,680	$981,608	$2,927,288	$661,658	$2,972,444	$670,561

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	**Energy Feedback**					
Status:	Existing					
Year:	**2021 Proposed**	**2021 Actual**	**2022 Proposed**	**2022 Actual**	**2023 Proposed**	**2023 Actual**
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$273,000.00	$317,747.44	$226,903.00	$235,286.88	$226,903.00	$187,086.23
Administration	$7,000.00	$728.25	$7,000.00	$0.00	$7,000.00	$1,805.54
Evaluation, Measurement & Verification	$18,000.00	$1,432.53	$18,000.00	$720.28	$18,000.00	$289.72
Advertising & Promotion	$32,000.00	$17,364.64	$32,000.00	$2,117.49	$32,000.00	$0.00
Incentives	$25,000.00	$0.00	$25,000.00	$0.00	$25,000.00	$0.00
Other	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Utility Costs	$355,000.00	$337,272.86	$308,903.00	$238,124.65	$308,903.00	$189,181.49
Total Participants	35,500	40,059	28,331	30,909	28,331	28,813
% of Spending by Customer Segments						
Residential	100%	100%	100%	100%	100%	100%
Commercial	0%	0%	0%	0%	0%	0%
Industrial	0%	0%	0%	0%	0%	0%
Farm	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)	31%	31%	0%	0%	0%	0%
Budget % (% of Total Utility Costs)	31%	31%	0%	0%	0%	0%
Renter Participation*						
Participants % (% of Total Participants)	21%	21%	21%	21%	21%	21%
Budget % (% of Total Utility Costs)	21%	21%	21%	21%	21%	21%
Energy Savings						
Annual kWh Savings at Meter	3,984,436	3,978,194	3,281,680	3,242,242	3,281,680	3,368,240
Annual kWh Savings at Generator	4,381,583	4,374,718	3,608,779	3,565,411	3,608,779	3,703,967
Cost per Annual kWh Saved at Generator	$0.0810	$0.0771	$0.0856	$0.0668	$0.0856	$0.0511
Peak kW Savings at Meter	2,034.257	4,459.109	1,654.203	3,417.299	1,654.203	1,411.837
Peak kW Savings at Generator	2,237.020	4,903.568	1,819.085	3,757.916	1,819.085	1,552.561
Cost per Peak kW Saved at Generator	$158.69	$68.78	$169.81	$63.37	$169.81	$121.85
Utility Ratio	1.62	2.71	1.66	3.23	1.75	3.02
Utility NPV	$218,477	$578,352	$204,700	$531,806	$230,778	$381,291
Ratepayer Ratio	0.41	0.63	0.44	0.66	0.46	0.49
Ratepayer NPV	($817,435)	($528,927)	($654,524)	($388,679)	($645,631)	($594,090)
Participant Ratio	inf.	inf.	inf.	inf.	inf.	inf.
Participant NPV	$1,060,912	$1,107,279	$884,224	$920,485	$901,408	$975,381
Societal Ratio	2.26	3.26	1.81	3.24	1.90	3.02
Societal NPV	$414,912	$762,663	$230,391	$532,550	$256,521	$382,123

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	**Home Heating and Cooling**					
Status:	Existing					
Year:	**2021 Proposed**	**2021 Actual**	**2022 Proposed**	**2022 Actual**	**2023 Proposed**	**2023 Actual**
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$94,000.00	$83,140.47	$110,000.00	$85,347.16	$110,000.00	$67,062.97
Administration	$38,000.00	$39,922.30	$45,000.00	$60,601.86	$45,000.00	$67,664.98
Evaluation, Measurement & Verification	$6,000.00	$733.30	$6,000.00	$2,354.03	$6,000.00	$162.58
Advertising & Promotion	$153,000.00	$138,211.75	$153,000.00	$108,813.84	$153,000.00	$148,082.86
Incentives	$171,000.00	$805,893.10	$686,800.00	$694,468.86	$686,800.00	$633,926.74
Other	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Utility Costs	$462,000.00	$1,067,900.92	$1,000,800.00	$951,585.75	$1,000,800.00	$916,900.13
Total Participants	255	602	481	637	481	566
% of Spending by Customer Segments						
Residential	100%	100%	100%	100%	100%	100%
Commercial	0%	0%	0%	0%	0%	0%
Industrial	0%	0%	0%	0%	0%	0%
Farm	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)	31%	31%	31%	31%	31%	31%
Budget % (% of Total Utility Costs)	31%	31%	31%	31%	31%	31%
Renter Participation*						
Participants % (% of Total Participants)	21%	21%	21%	21%	21%	21%
Budget % (% of Total Utility Costs)	21%	21%	21%	21%	21%	21%
Energy Savings						
Annual kWh Savings at Meter	1,512,154	4,497,812	6,128,023	4,159,318	6,128,023	4,430,912
Annual kWh Savings at Generator	1,662,877	4,946,129	6,738,830	4,573,895	6,738,830	4,872,561
Cost per Annual kWh Saved at Generator	$0.2778	$0.2159	$0.1485	$0.2080	$0.1485	$0.1882
Peak kW Savings at Meter	125.376	333.080	529.787	465.350	529.787	473.619
Peak kW Savings at Generator	137.872	366.280	582.593	511.733	582.593	520.827
Cost per Peak kW Saved at Generator	$3,350.93	$2,915.53	$1,717.84	$1,859.54	$1,717.84	$1,760.47
Utility Ratio	2.14	2.88	4.33	3.43	4.51	3.90
Utility NPV	$524,797	$2,010,548	$3,334,779	$2,311,304	$3,508,981	$2,658,982
Ratepayer Ratio	0.45	0.48	0.52	0.54	0.53	0.56
Ratepayer NPV	($1,210,221)	($3,388,195)	($3,995,006)	($2,760,387)	($3,967,401)	($2,853,844)
Participant Ratio	3.48	7.21	3.52	6.39	3.58	7.95
Participant NPV	$1,624,372	$6,365,444	$6,886,873	$5,801,006	$7,065,633	$6,427,219
Societal Ratio	1.82	4.27	1.76	3.03	1.83	3.66
Societal NPV	$774,568	$4,205,644	$2,324,933	$2,707,375	$2,538,110	$3,217,264

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	**Home Lighting**					
Status:	Existing					
Year:	**2021 Proposed**	**2021 Actual**	**2022 Proposed**	**2022 Actual**	**2023 Proposed**	**2023 Actual**
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$103,000.00	$117,710.94	$103,000.00	$111,193.96	$103,000.00	$97,157.53
Administration	$17,000.00	$8,302.62	$17,000.00	$6,282.10	$17,000.00	$7,238.38
Evaluation, Measurement & Verification	$3,000.00	$240.67	$3,000.00	$309.93	$3,000.00	$80.53
Advertising & Promotion	$80,000.00	$10,580.72	$80,000.00	$60,579.62	$80,000.00	$81,047.63
Incentives	$342,000.00	$486,051.43	$342,000.00	$456,246.78	$342,000.00	$371,806.45
Other	$0.00	$317.28	$0.00	$253.92	$0.00	$300.00
Total Utility Costs	$545,000.00	$623,203.66	$545,000.00	$634,866.31	$545,000.00	$557,630.52
Total Participants	106,985	179,605	106,985	175,812	106,985	129,200
% of Spending by Customer Segments						
Residential	100%	100%	100%	100%	100%	100%
Commercial	0%	0%	0%	0%	0%	0%
Industrial	0%	0%	0%	0%	0%	0%
Farm	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)	31%	31%	31%	31%	31%	31%
Budget % (% of Total Utility Costs)	31%	31%	31%	31%	31%	31%
Renter Participation*						
Participants % (% of Total Participants)	21%	21%	21%	21%	21%	21%
Budget % (% of Total Utility Costs)	21%	21%	21%	21%	21%	21%
Energy Savings						
Annual kWh Savings at Meter	4,235,726	7,078,892	4,235,726	6,826,965	4,235,726	5,317,568
Annual kWh Savings at Generator	4,657,919	7,784,477	4,657,919	7,507,439	4,657,919	5,847,593
Cost per Annual kWh Saved at Generator	$0.1170	$0.0801	$0.1170	$0.0846	$0.1170	$0.0954
Peak kW Savings at Meter	422.319	701.692	422.319	702.831	422.319	537.206
Peak kW Savings at Generator	464.414	771.633	464.414	772.886	464.414	590.752
Cost per Peak kW Saved at Generator	$1,173.52	$807.64	$1,173.52	$821.42	$1,173.52	$943.93
Utility Ratio	4.55	7.12	4.82	7.17	5.02	6.59
Utility NPV	$1,936,550	$3,812,309	$2,081,962	$3,914,242	$2,191,108	$3,117,151
Ratepayer Ratio	0.47	0.50	0.48	0.53	0.50	0.50
Ratepayer NPV	($2,845,136)	($4,463,551)	($2,795,357)	($4,075,770)	($2,783,758)	($3,675,904)
Participant Ratio	5.92	4.22	6.03	4.92	6.14	4.96
Participant NPV	$5,012,311	$7,809,074	$5,126,106	$7,860,776	$5,242,178	$6,682,457
Societal Ratio	3.43	2.90	2.58	2.48	2.69	2.34
Societal NPV	$2,975,992	$4,877,608	$1,929,271	$3,238,169	$2,059,958	$2,504,983

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	**Residential Advertising and Education**					
Status:	Existing					
Year:	**2021 Proposed**	**2021 Actual**	**2022 Proposed**	**2022 Actual**	**2023 Proposed**	**2023 Actual**
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$180,000.00	$72,401.86	$180,000.00	$72,402.04	$180,000.00	$115,829.13
Administration	$6,000.00	$225.71	$6,000.00	$225.70	$6,000.00	$98.63
Evaluation, Measurement & Verification	$1,000.00	$0.00	$1,000.00	$0.00	$1,000.00	$138.18
Advertising & Promotion	$0.00	$142,149.06	$0.00	$142,149.04	$0.00	$68,649.56
Incentives	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Other	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Utility Costs	$187,000.00	$214,776.63	$187,000.00	$214,776.78	$187,000.00	$184,715.50
Total Participants	10,000	35,807	10,000	35,537	10,000	34,196
% of Spending by Customer Segments						
Residential	100%	100%	100%	100%	100%	100%
Commercial	0%	0%	0%	0%	0%	0%
Industrial	0%	0%	0%	0%	0%	0%
Farm	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)	31%	31%	31%	31%	31%	31%
Budget % (% of Total Utility Costs)	31%	31%	31%	31%	31%	31%
Renter Participation*						
Participants % (% of Total Participants)	21%	21%	21%	21%	21%	21%
Budget % (% of Total Utility Costs)	21%	21%	21%	21%	21%	21%
Energy Savings						
Annual kWh Savings at Meter	0	0	0	0	0	0
Annual kWh Savings at Generator	0	0	0	0	0	0
Cost per Annual kWh Saved at Generator	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000
Peak kW Savings at Meter	0.000	0.000	0.000	0.000	0.000	0.000
Peak kW Savings at Generator	0.000	0.000	0.000	0.000	0.000	0.000
Cost per Peak kW Saved at Generator	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Utility Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Utility NPV	($187,000)	($195,868)	($187,000)	($214,777)	($187,000)	($184,716)
Ratepayer Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Ratepayer NPV	($187,000)	($195,868)	($187,000)	($214,777)	($187,000)	($184,716)
Participant Ratio	inf.	inf.	inf.	inf.	inf.	inf.
Participant NPV	$0	$0	$0	$0	$0	$0
Societal Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Societal NPV	($187,000)	($195,868)	($187,000)	($214,777)	($187,000)	($184,716)

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	Residential Implementation and Training					
Status:	Existing					
Year:	**2021 Proposed**	**2021 Actual**	**2022 Proposed**	**2022 Actual**	**2023 Proposed**	**2023 Actual**
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$35,000.00	$34,962.78	$35,000.00	$32,141.30	$35,000.00	$73,879.13
Administration	$1,000.00	$80.94	$1,000.00	$2,586.75	$1,000.00	$666.08
Evaluation, Measurement & Verification	$1,000.00	$7,020.91	$1,000.00	$126.51	$1,000.00	$180.47
Advertising & Promotion	$0.00	$748.36	$0.00	$1,009.29	$0.00	$560.85
Incentives	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Other	$0.00	$871.44	$0.00	$148.40	$0.00	$6,004.54
Total Utility Costs	$37,000.00	$43,684.43	$37,000.00	$36,012.25	$37,000.00	$81,291.06
Total Participants	175	2	175	2	175	2
% of Spending by Customer Segments						
Residential	100%	100%	100%	100%	100%	100%
Commercial	0%	0%	0%	0%	0%	0%
Industrial	0%	0%	0%	0%	0%	0%
Farm	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)	31%	31%	31%	31%	31%	31%
Budget % (% of Total Utility Costs)	31%	31%	31%	31%	31%	31%
Renter Participation*						
Participants % (% of Total Participants)	21%	21%	21%	21%	21%	21%
Budget % (% of Total Utility Costs)	21%	21%	21%	21%	21%	21%
Energy Savings						
Annual kWh Savings at Meter	0	0	0	0	0	0
Annual kWh Savings at Generator	0	0	0	0	0	0
Cost per Annual kWh Saved at Generator	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000
Peak kW Savings at Meter	0.000	0.000	0.000	0.000	0.000	0.000
Peak kW Savings at Generator	0.000	0.000	0.000	0.000	0.000	0.000
Cost per Peak kW Saved at Generator	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Utility Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Utility NPV	($37,000)	($43,684)	($37,000)	($36,012)	($37,000)	($81,291)
Ratepayer Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Ratepayer NPV	($37,000)	($43,684)	($37,000)	($36,012)	($37,000)	($81,291)
Participant Ratio	inf.	inf.	inf.	inf.	inf.	inf.
Participant NPV	$0	$0	$0	$0	$0	$0
Societal Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Societal NPV	($37,000)	($43,684)	($37,000)	($36,012)	($37,000)	($81,291)

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	Low-Income House Therapy					
Status:	Existing					
Year:	2021 Proposed	2021 Actual	2022 Proposed	2022 Actual	2023 Proposed	2023 Actual
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$18,000.00	$45,090.72	$18,000.00	$29,071.54	$18,000.00	$29,524.39
Administration	$16,000.00	$7,570.84	$16,000.00	$4,704.93	$16,000.00	$6,552.76
Evaluation, Measurement & Verification	$2,000.00	$4,657.07	$2,000.00	$510.52	$2,000.00	$232.80
Advertising & Promotion	$3,000.00	$2,182.86	$3,000.00	$1,716.11	$3,000.00	$2,377.26
Incentives	$160,000.00	$261,956.94	$160,000.00	$216,768.30	$160,000.00	$181,916.28
Other	$5,000.00	$0.00	$5,000.00	$936.55	$5,000.00	$1,475.56
Total Utility Costs	$204,000.00	$321,458.43	$204,000.00	$253,707.95	$204,000.00	$222,079.05
Total Participants	180	106	180	104	180	70
% of Spending by Customer Segments						
Residential	100%	100%	100%	100%	100%	100%
Commercial	0%	0%	0%	0%	0%	0%
Industrial	0%	0%	0%	0%	0%	0%
Farm	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)	100%	100%	100%	100%	100%	100%
Budget % (% of Total Utility Costs)	100%	100%	100%	100%	100%	100%
Renter Participation*						
Participants % (% of Total Participants)	21%	27%	21%	13%	21%	7%
Budget % (% of Total Utility Costs)	21%	27%	21%	13%	21%	7%
Energy Savings						
Annual kWh Savings at Meter	200,357	256,650	200,357	180,150	200,357	133,017
Annual kWh Savings at Generator	220,327	282,231	220,327	198,106	220,327	146,275
Cost per Annual kWh Saved at Generator	$0.9259	$1.1390	$0.9259	$1.2807	$0.9259	$1.5182
Peak kW Savings at Meter	22.805	28.289	22.805	23.829	22.805	13.873
Peak kW Savings at Generator	25.078	31.109	25.078	26.204	25.078	15.256
Cost per Peak kW Saved at Generator	$8,134.67	$10,333.24	$8,134.67	$9,682.07	$8,134.67	$14,556.92
Utility Ratio	0.47	0.39	0.49	0.37	0.51	0.35
Utility NPV	($108,844)	($195,528)	($103,612)	($161,095)	($99,429)	($144,943)
Ratepayer Ratio	0.04	0.11	0.04	0.10	0.05	0.09
Ratepayer NPV	($2,135,012)	($979,592)	($2,170,303)	($832,310)	($2,207,454)	($772,463)
Participant Ratio	inf.	inf.	inf.	inf.	inf.	inf.
Participant NPV	$2,186,168	$1,046,022	$2,226,691	$887,983	$2,268,025	$809,437
Societal Ratio	3.56	3.51	2.67	2.93	2.78	2.25
Societal NPV	$112,460	$149,120	$73,585	$71,233	$78,490	$50,360

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	Low-Income Home Energy Feedback					
Status:	Existing					
Year:	2021 Proposed	2021 Actual	2022 Proposed	2022 Actual	2023 Proposed	2023 Actual
kWh Line Loss Factor			9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor			9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery			$83,012.00	$65,430.55	$83,012.00	$78,878.93
Administration			$994.00	$177.03	$994.00	$541.49
Evaluation, Measurement & Verification			$994.00	$0.00	$994.00	$0.00
Advertising & Promotion			$0.00	$0.00	$0.00	$0.00
Incentives			$0.00	$0.00	$0.00	$0.00
Other			$0.00	$0.00	$0.00	$0.00
Total Utility Costs			$85,000.00	$65,607.58	$85,000.00	$79,420.42
Total Participants			8,400	10,381	8,400	10,498
% of Spending by Customer Segments						
Residential			100%	100%	100%	100%
Commercial			0%	0%	0%	0%
Industrial			0%	0%	0%	0%
Farm			0%	0%	0%	0%
Other			0%	0%	0%	0%
Total % of Spending			100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)			100%	100%	100%	100%
Budget % (% of Total Utility Costs)			100%	100%	100%	100%
Renter Participation*						
Participants % (% of Total Participants)			21%	13%	21%	28%
Budget % (% of Total Utility Costs)			21%	13%	21%	28%
Energy Savings						
Annual kWh Savings at Meter			883,431	1,137,585	883,431	1,227,216
Annual kWh Savings at Generator			971,487	1,250,973	971,487	1,349,538
Cost per Annual kWh Saved at Generator			$0.0875	$0.0524	$0.0875	$0.0589
Peak kW Savings at Meter			445.313	1,199.006	445.313	514.402
Peak kW Savings at Generator			489.699	1,318.516	489.699	565.675
Cost per Peak kW Saved at Generator			$173.58	$49.76	$173.58	$140.40
Utility Ratio			1.63	4.12	1.71	2.62
Utility NPV			$53,357	$204,533	$60,380	$128,431
Ratepayer Ratio			0.44	0.70	0.45	0.48
Ratepayer NPV			($177,947)	($118,432)	($175,550)	($226,949)
Participant Ratio			inf.	inf.	inf.	inf.
Participant NPV			$231,304	$322,965	$235,930	$355,380
Societal Ratio			1.63	4.12	1.71	2.62
Societal NPV			$53,543	$204,794	$60,580	$128,734

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	Commercial Energy Management					
Status:	Existing					
Year:	2021 Proposed	2021 Actual	2022 Proposed	2022 Actual	2023 Proposed	2023 Actual
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$14,350.00	$5,219.42	$14,350.00	$2,072.04	$14,350.00	$5,910.09
Administration	$9,650.00	$3,588.93	$9,650.00	$575.83	$9,650.00	$546.29
Evaluation, Measurement & Verification	$1,000.00	$0.00	$1,000.00	$281.58	$1,000.00	$225.16
Advertising & Promotion	$5,000.00	$1,273.66	$5,000.00	$534.99	$5,000.00	$1,902.99
Incentives	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Other	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Utility Costs	$30,000.00	$10,082.01	$30,000.00	$3,464.44	$30,000.00	$8,584.53
Total Participants	512	300	512	322	512	330
% of Spending by Customer Segments						
Residential	0%	0%	0%	0%	0%	0%
Commercial	100%	100%	100%	100%	100%	100%
Industrial	0%	0%	0%	0%	0%	0%
Farm	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Renter Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Energy Savings						
Annual kWh Savings at Meter	10,989	5,905	10,989	6,337	10,989	6,494
Annual kWh Savings at Generator	12,085	6,493	12,085	6,969	12,085	7,142
Cost per Annual kWh Saved at Generator	$2.4825	$1.5527	$2.4825	$0.4972	$2.4825	$1.2020
Peak kW Savings at Meter	725.930	390.060	725.930	418.600	725.930	429.000
Peak kW Savings at Generator	798.287	428.939	798.287	460.324	798.287	471.760
Cost per Peak kW Saved at Generator	$37.58	$23.50	$37.58	$7.53	$37.58	$18.20
Utility Ratio	2.71	4.73	2.73	14.86	2.74	6.18
Utility NPV	$51,447	$37,648	$51,878	$48,029	$52,298	$44,459
Ratepayer Ratio	2.02	2.97	2.02	5.12	2.02	3.43
Ratepayer NPV	$41,179	$31,634	$41,404	$41,446	$41,615	$37,577
Participant Ratio	inf.	inf.	inf.	inf.	inf.	inf.
Participant NPV	$10,269	$6,015	$10,474	$6,584	$10,684	$6,882
Societal Ratio	2.72	4.74	2.73	14.86	2.74	6.18
Societal NPV	$51,603	$37,740	$51,879	$48,030	$52,299	$44,460

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	**Drive Power**					
Status:	Existing					
Year:	**2021 Proposed**	**2021 Actual**	**2022 Proposed**	**2022 Actual**	**2023 Proposed**	**2023 Actual**
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$50,000.00	$40,239.06	$50,000.00	$28,176.04	$50,000.00	$27,879.59
Administration	$14,000.00	$10,943.69	$14,000.00	$11,347.63	$14,000.00	$9,466.33
Evaluation, Measurement & Verification	$2,000.00	$339.62	$2,000.00	$194.11	$2,000.00	$162.58
Advertising & Promotion	$12,000.00	$7,104.32	$12,000.00	$3,557.84	$12,000.00	$4,237.17
Incentives	$165,000.00	$389,076.76	$165,000.00	$379,530.41	$165,000.00	$417,198.09
Other	$7,000.00	$0.00	$7,000.00	$0.00	$7,000.00	$0.00
Total Utility Costs	$250,000.00	$447,703.45	$250,000.00	$422,806.03	$250,000.00	$458,943.76
Total Participants	227	545	227	626	227	661
% of Spending by Customer Segments						
Residential	0%	0%	0%	0%	0%	0%
Commercial	30%	30%	30%	30%	30%	30%
Industrial	70%	70%	70%	70%	70%	70%
Farm	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Renter Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Energy Savings						
Annual kWh Savings at Meter	3,467,503	5,613,424	3,467,503	5,186,882	3,467,503	9,246,648
Annual kWh Savings at Generator	3,813,124	6,172,939	3,813,124	5,703,881	3,813,124	10,168,303
Cost per Annual kWh Saved at Generator	$0.0656	$0.0725	$0.0656	$0.0741	$0.0656	$0.0451
Peak kW Savings at Meter	348.402	719.846	348.402	781.688	348.402	1,070.515
Peak kW Savings at Generator	383.129	791.597	383.129	859.602	383.129	1,177.219
Cost per Peak kW Saved at Generator	$652.52	$565.57	$652.52	$491.86	$652.52	$389.85
Utility Ratio	7.49	7.85	7.91	8.45	8.24	13.47
Utility NPV	$1,623,232	$3,065,887	$1,728,502	$3,151,640	$1,810,002	$5,721,544
Ratepayer Ratio	0.76	0.78	0.79	0.82	0.80	0.87
Ratepayer NPV	($596,885)	($975,927)	($536,018)	($782,778)	($499,809)	($947,160)
Participant Ratio	3.59	1.99	3.66	1.89	3.73	2.71
Participant NPV	$1,721,494	$2,199,682	$1,765,897	$2,035,573	$1,811,187	$4,475,452
Societal Ratio	4.27	2.57	3.15	1.83	3.28	2.78
Societal NPV	$2,449,161	$3,597,412	$1,609,063	$1,930,317	$1,706,196	$4,708,738

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	**Compressed Air Efficiency**					
Status:	Existing					
Year:	**2021 Proposed**	**2021 Actual**	**2022 Proposed**	**2022 Actual**	**2023 Proposed**	**2023 Actual**
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$8,000.00	$4,991.61	$8,000.00	$3,704.48	$8,000.00	$2,710.06
Administration	$3,000.00	$444.00	$3,000.00	$1,642.93	$3,000.00	$1,668.93
Evaluation, Measurement & Verification	$2,000.00	$0.00	$2,000.00	$176.23	$2,000.00	$162.58
Advertising & Promotion	$5,000.00	$491.01	$5,000.00	$322.82	$5,000.00	$408.25
Incentives	$25,000.00	$32,450.00	$25,000.00	$30,000.00	$25,000.00	$46,050.00
Other	$5,000.00	$0.00	$5,000.00	$0.00	$5,000.00	$0.00
Total Utility Costs	$48,000.00	$38,376.62	$48,000.00	$35,846.46	$48,000.00	$50,999.82
Total Participants	6	8	6	6	6	9
% of Spending by Customer Segments						
Residential	0%	0%	0%	0%	0%	0%
Commercial	50%	50%	50%	50%	50%	50%
Industrial	50%	50%	50%	50%	50%	50%
Farm	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Renter Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Energy Savings						
Annual kWh Savings at Meter	250,287	179,289	250,287	101,270	250,287	152,750
Annual kWh Savings at Generator	275,234	197,160	275,234	111,364	275,234	167,976
Cost per Annual kWh Saved at Generator	$0.1744	$0.1946	$0.1744	$0.3219	$0.1744	$0.3036
Peak kW Savings at Meter	14.002	31.281	14.002	27.639	14.002	41.649
Peak kW Savings at Generator	15.397	34.399	15.397	30.394	15.397	45.800
Cost per Peak kW Saved at Generator	$3,117.44	$1,115.62	$3,117.44	$1,179.38	$3,117.44	$1,113.54
Utility Ratio	2.52	3.18	2.68	2.41	2.80	2.63
Utility NPV	$73,178	$83,819	$80,658	$50,411	$86,451	$82,887
Ratepayer Ratio	0.64	0.74	0.67	0.74	0.69	0.76
Ratepayer NPV	($67,794)	($42,167)	($63,134)	($30,666)	($60,216)	($41,617)
Participant Ratio	2.78	1.46	2.83	0.87	2.88	1.08
Participant NPV	$106,272	$50,086	$109,091	($17,324)	$111,967	$12,304
Societal Ratio	2.59	1.74	1.86	0.76	1.94	0.97
Societal NPV	$131,307	$84,602	$70,795	($31,963)	$77,698	($4,472)

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	Commercial Direct Install					
Status:	Existing					
Year:	2021 Proposed	2021 Actual	2022 Proposed	2022 Actual	2023 Proposed	2023 Actual
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$18,000.00	$34,977.84	$18,000.00	$48,043.41	$18,000.00	$23,882.85
Administration	$6,000.00	$5,325.68	$6,000.00	$4,133.24	$6,000.00	$1,040.88
Evaluation, Measurement & Verification	$1,000.00	$204.85	$1,000.00	$141.12	$1,000.00	$162.58
Advertising & Promotion	$3,000.00	$0.00	$3,000.00	$294.94	$3,000.00	$180.46
Incentives	$13,000.00	$15,983.51	$13,000.00	$11,258.26	$13,000.00	$7,000.20
Other	$1,000.00	$0.00	$1,000.00	$0.00	$1,000.00	$0.00
Total Utility Costs	$42,000.00	$56,491.88	$42,000.00	$63,870.97	$42,000.00	$32,266.97
Total Participants	1,369	234	1,369	234	1,369	1,034
% of Spending by Customer Segments						
Residential	0%	0%	0%	0%	0%	0%
Commercial	100%	100%	100%	100%	100%	100%
Industrial	0%	0%	0%	0%	0%	0%
Farm	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Renter Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Energy Savings						
Annual kWh Savings at Meter	276,510	719,409	276,510	367,691	276,510	192,747
Annual kWh Savings at Generator	304,071	791,116	304,071	404,340	304,071	211,959
Cost per Annual kWh Saved at Generator	$0.1381	$0.0714	$0.1381	$0.1580	$0.1381	$0.1522
Peak kW Savings at Meter	17.080	89.552	17.080	55.486	17.080	29.363
Peak kW Savings at Generator	18.782	98.478	18.782	61.016	18.782	32.289
Cost per Peak kW Saved at Generator	$2,236.19	$573.65	$2,236.19	$1,046.79	$2,236.19	$999.30
Utility Ratio	1.32	2.46	1.40	1.23	1.47	1.23
Utility NPV	$13,582	$82,649	$16,984	$14,791	$19,815	$7,284
Ratepayer Ratio	0.38	0.29	0.39	0.24	0.41	0.43
Ratepayer NPV	($92,129)	($335,204)	($90,841)	($249,554)	($90,166)	($52,368)
Participant Ratio	inf.	inf.	inf.	inf.	inf.	inf.
Participant NPV	$118,711	$438,298	$120,825	$275,603	$122,982	$66,652
Societal Ratio	3.02	5.65	2.23	1.60	2.33	1.66
Societal NPV	$58,511	$167,522	$35,564	$31,449	$38,666	$16,603

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	Custom Efficiency Grants					
Status:	Existing					
Year:	2021 Proposed	2021 Actual	2022 Proposed	2022 Actual	2023 Proposed	2023 Actual
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$60,000.00	$110,489.13	$60,000.00	$67,638.62	$60,000.00	$45,270.67
Administration	$5,000.00	$7,489.13	$5,000.00	$51,585.90	$5,000.00	$11,805.97
Evaluation, Measurement & Verification	$9,000.00	$11,363.29	$9,000.00	$4,445.85	$9,000.00	$3,050.11
Advertising & Promotion	$2,000.00	$1,847.69	$2,000.00	$718.15	$2,000.00	$500.48
Incentives	$245,000.00	$301,722.00	$245,000.00	$171,164.00	$245,000.00	$213,649.00
Other	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Utility Costs	$321,000.00	$432,911.24	$321,000.00	$295,552.52	$321,000.00	$274,276.23
Total Participants	35	26	35	29	35	36
% of Spending by Customer Segments						
Residential	0%	0%	0%	0%	0%	0%
Commercial	90%	90%	90%	90%	90%	90%
Industrial	10%	10%	10%	10%	10%	10%
Farm	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Renter Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Energy Savings						
Annual kWh Savings at Meter	2,195,038	6,852,669	2,195,038	2,310,217	2,195,038	3,424,962
Annual kWh Savings at Generator	2,413,828	7,535,706	2,413,828	2,540,487	2,413,828	3,766,343
Cost per Annual kWh Saved at Generator	$0.1330	$0.0574	$0.1330	$0.1163	$0.1330	$0.0728
Peak kW Savings at Meter	692.827	1,211.556	692.827	383.062	692.827	468.072
Peak kW Savings at Generator	761.885	1,332.317	761.885	421.244	761.885	514.726
Cost per Peak kW Saved at Generator	$421.32	$324.93	$421.32	$701.62	$421.32	$532.86
Utility Ratio	6.41	13.33	6.69	5.63	6.89	8.86
Utility NPV	$1,736,822	$5,339,782	$1,828,020	$1,367,394	$1,889,353	$2,154,969
Ratepayer Ratio	0.99	1.11	1.02	0.92	1.03	0.97
Ratepayer NPV	($24,206)	$557,385	$31,771	($150,888)	$57,180	($73,698)
Participant Ratio	1.06	5.02	1.07	1.71	1.09	2.57
Participant NPV	$105,787	$4,072,312	$141,008	$704,150	$176,933	$1,493,202
Societal Ratio	1.67	8.71	1.34	1.85	1.38	2.87
Societal NPV	$1,317,430	$8,811,923	$679,833	$942,807	$755,124	$1,891,213

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	**Commercial Heat Pump**					
Status:	Existing					
Year:	**2021 Proposed**	**2021 Actual**	**2022 Proposed**	**2022 Actual**	**2023 Proposed**	**2023 Actual**
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$63,000.00	$114,281.96	$100,000.00	$110,566.25	$100,000.00	$90,593.75
Administration	$13,000.00	$10,530.89	$25,000.00	$2,437.72	$25,000.00	$3,793.31
Evaluation, Measurement & Verification	$4,000.00	$315.63	$5,000.00	$2,095.95	$5,000.00	$162.58
Advertising & Promotion	$11,000.00	$6,541.20	$15,370.00	$1,673.42	$15,370.00	$41,048.12
Incentives	$301,000.00	$857,850.00	$625,000.00	$497,525.13	$625,000.00	$662,300.00
Other	$0.00	$0.00	$0.00	$1,623.66	$0.00	$0.00
Total Utility Costs	$392,000.00	$989,519.68	$770,370.00	$615,922.13	$770,370.00	$797,897.76
Total Participants	69	230	190	162	190	250
% of Spending by Customer Segments						
Residential	0%	0%	0%	0%	0%	0%
Commercial	90%	90%	90%	90%	90%	90%
Industrial	10%	10%	10%	10%	10%	10%
Farm	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Renter Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Energy Savings						
Annual kWh Savings at Meter	1,665,020	4,536,117	3,385,982	2,552,049	3,385,982	3,478,099
Annual kWh Savings at Generator	1,830,980	4,988,252	3,723,478	2,806,424	3,723,478	3,824,777
Cost per Annual kWh Saved at Generator	$0.2141	$0.1984	$0.2069	$0.2195	$0.2069	$0.2086
Peak kW Savings at Meter	167.896	477.333	246.215	276.044	246.215	413.800
Peak kW Savings at Generator	184.631	524.911	270.756	303.558	270.756	455.046
Cost per Peak kW Saved at Generator	$2,123.16	$1,885.12	$2,845.25	$2,029.01	$2,845.25	$1,753.45
Utility Ratio	3.37	3.29	3.30	2.98	3.43	3.38
Utility NPV	$929,778	$2,267,499	$1,771,200	$1,222,086	$1,873,264	$1,900,861
Ratepayer Ratio	0.60	0.60	0.58	0.59	0.59	0.63
Ratepayer NPV	($875,053)	($2,126,729)	($1,830,235)	($1,299,735)	($1,800,200)	($1,615,650)
Participant Ratio	1.24	1.15	2.13	1.39	2.17	1.20
Participant NPV	$413,938	$674,767	$2,242,777	$839,669	$2,314,806	$703,735
Societal Ratio	1.27	1.12	1.49	0.95	1.55	0.89
Societal NPV	$486,979	$546,028	$1,048,714	($109,227)	$1,174,424	($398,138)

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	**Commercial & Industrial Focused Efficiency**					
Status:	Existing					
Year:	**2021 Proposed**	**2021 Actual**	**2022 Proposed**	**2022 Actual**	**2023 Proposed**	**2023 Actual**
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$90,000.00	$134,412.70	$90,000.00	$129,696.75	$90,000.00	$57,314.76
Administration	$40,000.00	$7,798.80	$40,000.00	$9,181.82	$40,000.00	$6,988.08
Evaluation, Measurement & Verification	$6,000.00	$1,391.50	$6,000.00	$1,247.53	$6,000.00	$162.58
Advertising & Promotion	$10,000.00	$346.07	$10,000.00	$0.00	$10,000.00	$0.00
Incentives	$150,000.00	$613,977.39	$150,000.00	$683,853.54	$150,000.00	$978,382.80
Other	$6,000.00	$82.77	$6,000.00	$0.00	$6,000.00	$0.00
Total Utility Costs	$302,000.00	$758,009.23	$302,000.00	$823,979.64	$302,000.00	$1,042,848.22
Total Participants	11	11	11	14	11	18
% of Spending by Customer Segments						
Residential	0%	0%	0%	0%	0%	0%
Commercial	10%	10%	10%	10%	10%	10%
Industrial	90%	90%	90%	90%	90%	90%
Farm	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Renter Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Energy Savings						
Annual kWh Savings at Meter	1,145,172	7,638,523	1,145,172	2,327,964	1,145,172	10,841,953
Annual kWh Savings at Generator	1,259,316	8,399,889	1,259,316	2,560,003	1,259,316	11,922,619
Cost per Annual kWh Saved at Generator	$0.2398	$0.0902	$0.2398	$0.3219	$0.2398	$0.0875
Peak kW Savings at Meter	145.852	973.447	145.852	1,230.124	145.852	1,467.141
Peak kW Savings at Generator	160.390	1,070.475	160.390	1,352.736	160.390	1,613.378
Cost per Peak kW Saved at Generator	$1,882.92	$708.11	$1,882.92	$609.12	$1,882.92	$646.38
Utility Ratio	1.71	4.47	1.78	3.68	1.86	7.17
Utility NPV	$213,352	$2,632,571	$236,953	$2,207,444	$258,809	$6,433,000
Ratepayer Ratio	0.59	0.83	0.61	1.17	0.63	0.98
Ratepayer NPV	($355,169)	($677,734)	($342,939)	$451,436	($332,680)	($180,947)
Participant Ratio	2.25	2.17	2.29	0.95	2.33	1.38
Participant NPV	$399,771	$2,119,565	$411,142	($124,940)	$422,739	$2,484,351
Societal Ratio	1.75	2.90	1.31	1.35	1.36	1.61
Societal NPV	$355,317	$3,693,091	$143,579	$959,902	$168,738	$4,047,662

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	**Commercial Lighting**					
Status:	Existing					
Year:	**2021 Proposed**	**2021 Actual**	**2022 Proposed**	**2022 Actual**	**2023 Proposed**	**2023 Actual**
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$300,000.00	$257,626.16	$300,000.00	$220,684.83	$300,000.00	$183,105.59
Administration	$18,000.00	$17,693.79	$18,000.00	$14,085.12	$18,000.00	$11,827.10
Evaluation, Measurement & Verification	$5,000.00	$986.88	$5,000.00	$212.11	$5,000.00	$162.58
Advertising & Promotion	$25,000.00	$6,308.17	$25,000.00	$1,770.66	$25,000.00	$2,039.27
Incentives	$1,306,000.00	$1,472,130.29	$1,306,000.00	$1,268,211.12	$1,306,000.00	$868,826.65
Other	$11,000.00	$0.00	$11,000.00	$9.82	$11,000.00	$26.96
Total Utility Costs	$1,665,000.00	$1,754,745.29	$1,665,000.00	$1,504,973.66	$1,665,000.00	$1,065,988.15
Total Participants	840	1,061	840	1,041	840	983
% of Spending by Customer Segments						
Residential	0%	0%	0%	0%	0%	0%
Commercial	70%	70%	70%	70%	70%	70%
Industrial	30%	30%	30%	30%	30%	30%
Farm	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Renter Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Energy Savings						
Annual kWh Savings at Meter	16,685,206	15,966,867	16,685,206	14,929,716	16,685,206	12,070,572
Annual kWh Savings at Generator	18,348,295	17,558,356	18,348,295	16,417,828	18,348,295	13,273,700
Cost per Annual kWh Saved at Generator	$0.0907	$0.0999	$0.0907	$0.0917	$0.0907	$0.0803
Peak kW Savings at Meter	2,536.339	2,506.146	2,536.339	2,408.565	2,536.339	1,835.803
Peak kW Savings at Generator	2,789.148	2,755.945	2,789.148	2,648.638	2,789.148	2,018.786
Cost per Peak kW Saved at Generator	$596.96	$636.71	$596.96	$568.21	$596.96	$528.03
Utility Ratio	5.33	5.87	5.60	6.74	5.81	7.91
Utility NPV	$7,217,291	$8,539,477	$7,663,876	$8,645,907	$8,012,187	$7,366,914
Ratepayer Ratio	0.77	0.77	0.80	0.80	0.81	0.83
Ratepayer NPV	($2,653,732)	($3,077,695)	($2,404,568)	($2,466,671)	($2,257,625)	($1,689,563)
Participant Ratio	3.30	2.76	3.36	3.41	3.42	3.29
Participant NPV	$7,789,883	$8,346,565	$7,987,304	$8,750,788	$8,188,673	$6,904,396
Societal Ratio	3.89	3.36	2.94	3.11	3.05	3.11
Societal NPV	$10,807,884	$11,879,114	$7,280,472	$8,173,366	$7,692,694	$6,798,534

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	**Refrigeration**					
Status:	Existing					
Year:	**2021 Proposed**	**2021 Actual**	**2022 Proposed**	**2022 Actual**	**2023 Proposed**	**2023 Actual**
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$15,000.00	$33,080.98	$15,000.00	$24,461.05	$15,000.00	$38,362.01
Administration	$4,000.00	$8,813.62	$4,000.00	$7,252.65	$4,000.00	$7,288.89
Evaluation, Measurement & Verification	$1,000.00	$102.44	$1,000.00	$141.88	$1,000.00	$162.58
Advertising & Promotion	$3,000.00	$2,818.07	$3,000.00	$0.00	$3,000.00	$468.24
Incentives	$60,000.00	$105,434.50	$60,000.00	$33,670.00	$60,000.00	$30,919.21
Other	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Utility Costs	$83,000.00	$150,249.61	$83,000.00	$65,525.58	$83,000.00	$77,200.93
Total Participants	72	79	72	26	72	36
% of Spending by Customer Segments						
Residential	0%	0%	0%	0%	0%	0%
Commercial	90%	90%	90%	90%	90%	90%
Industrial	10%	10%	10%	10%	10%	10%
Farm	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Renter Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Energy Savings						
Annual kWh Savings at Meter	931,909	972,693	931,909	263,852	931,909	230,871
Annual kWh Savings at Generator	1,024,797	1,069,645	1,024,797	290,152	1,024,797	253,883
Cost per Annual kWh Saved at Generator	$0.0810	$0.1405	$0.0810	$0.2258	$0.0810	$0.3041
Peak kW Savings at Meter	136.722	141.872	136.722	38.118	136.722	31.849
Peak kW Savings at Generator	150.350	156.013	150.350	41.917	150.350	35.024
Cost per Peak kW Saved at Generator	$552.05	$963.06	$552.05	$1,563.21	$552.05	$2,204.26
Utility Ratio	3.44	2.28	3.60	1.70	3.74	1.31
Utility NPV	$202,373	$192,668	$215,908	$46,053	$227,506	$24,283
Ratepayer Ratio	0.70	0.64	0.73	0.60	0.74	0.55
Ratepayer NPV	($120,371)	($191,342)	($113,291)	($75,138)	($108,278)	($84,402)
Participant Ratio	4.04	3.19	4.11	3.72	4.18	1.92
Participant NPV	$288,089	$340,303	$294,544	$114,572	$301,128	$67,619
Societal Ratio	3.74	2.73	2.82	1.72	2.93	0.96
Societal NPV	$322,221	$335,252	$213,595	$52,268	$226,533	($5,024)

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	**Commercial Audits & Studies**					
Status:	Existing					
Year:	**2021 Proposed**	**2021 Actual**	**2022 Proposed**	**2022 Actual**	**2023 Proposed**	**2023 Actual**
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$117,500.00	$26,348.49	$117,500.00	$160,198.94	$117,500.00	$76,588.57
Administration	$11,000.00	$7,956.44	$11,000.00	$7,426.73	$11,000.00	$8,101.01
Evaluation, Measurement & Verification	$2,500.00	$100.29	$2,500.00	$141.12	$2,500.00	$162.58
Advertising & Promotion	$14,000.00	$1,759.33	$14,000.00	$1,250.72	$14,000.00	$2,565.50
Incentives	$123,000.00	$272,864.69	$123,000.00	$66,587.75	$123,000.00	$28,835.00
Other	$0.00	$0.00	$0.00	$0.00	$0.00	$129.22
Total Utility Costs	$268,000.00	$309,029.24	$268,000.00	$235,605.26	$268,000.00	$116,381.88
Total Participants	86	277	86	281	86	8
% of Spending by Customer Segments						
Residential	0%	0%	0%	0%	0%	0%
Commercial	10%	10%	10%	10%	10%	10%
Industrial	90%	90%	90%	90%	90%	90%
Farm	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Renter Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Energy Savings						
Annual kWh Savings at Meter	1,826,378	747,270	1,826,378	968,365	1,826,378	302,230
Annual kWh Savings at Generator	2,008,421	821,754	2,008,421	1,064,886	2,008,421	332,355
Cost per Annual kWh Saved at Generator	$0.1334	$0.3761	$0.1334	$0.2212	$0.1334	$0.3502
Peak kW Savings at Meter	100.605	72.405	100.605	38.000	100.605	7.000
Peak kW Savings at Generator	110.633	79.622	110.633	41.788	110.633	7.698
Cost per Peak kW Saved at Generator	$2,422.43	$3,881.21	$2,422.43	$5,638.16	$2,422.43	$15,119.00
Utility Ratio	1.53	0.48	1.62	1.07	1.68	0.67
Utility NPV	$142,671	($159,866)	$164,916	$16,254	$183,563	($38,013)
Ratepayer Ratio	0.47	0.30	0.49	0.46	0.51	0.37
Ratepayer NPV	($455,638)	($342,304)	($445,359)	($297,556)	($438,918)	($135,884)
Participant Ratio	3.22	2.40	3.27	13.14	3.33	4.08
Participant NPV	$497,181	$265,667	$509,147	$351,448	$521,353	$95,634
Societal Ratio	1.79	1.02	1.27	1.37	1.32	0.71
Societal NPV	$290,296	$4,981	$99,174	$73,814	$119,296	($34,046)

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	Commercial Advertising and Education					
Status:	Existing					
Year:	2021 Proposed	2021 Actual	2022 Proposed	2022 Actual	2023 Proposed	2023 Actual
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$62,500.00	$35,806.19	$62,500.00	$35,806.19	$62,500.00	$24,616.71
Administration	$1,500.00	$121.12	$1,500.00	$121.12	$1,500.00	$17.40
Evaluation, Measurement & Verification	$500.00	$0.00	$500.00	$0.00	$500.00	$24.38
Advertising & Promotion	$500.00	$7,329.34	$500.00	$7,329.34	$500.00	$12,114.63
Incentives	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Other	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Utility Costs	$65,000.00	$43,256.65	$65,000.00	$43,256.65	$65,000.00	$36,773.12
Total Participants	100	0	100	0	100	0
% of Spending by Customer Segments						
Residential	0%	0%	0%	0%	0%	0%
Commercial	100%	100%	100%	100%	100%	100%
Industrial	0%	0%	0%	0%	0%	0%
Farm	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Renter Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Energy Savings						
Annual kWh Savings at Meter	0	0	0	0	0	0
Annual kWh Savings at Generator	0	0	0	0	0	0
Cost per Annual kWh Saved at Generator	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000
Peak kW Savings at Meter	0.000	0.000	0.000	0.000	0.000	0.000
Peak kW Savings at Generator	0.000	0.000	0.000	0.000	0.000	0.000
Cost per Peak kW Saved at Generator	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Utility Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Utility NPV	($65,000)	($11,194)	($65,000)	($43,257)	($65,000)	($36,773)
Ratepayer Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Ratepayer NPV	($65,000)	($11,194)	($65,000)	($43,257)	($65,000)	($36,773)
Participant Ratio	inf.	inf.	inf.	inf.	inf.	inf.
Participant NPV	$0	$0	$0	$0	$0	$0
Societal Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Societal NPV	($65,000)	($11,194)	($65,000)	($43,257)	($65,000)	($36,773)

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	Integrated Building Design Plus					
Status:	Existing					
Year:	2021 Proposed	2021 Actual	2022 Proposed	2022 Actual	2023 Proposed	2023 Actual
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$200,000.00	$203,609.60	$200,000.00	$151,653.72	$200,000.00	$148,961.25
Administration	$15,000.00	$7,764.71	$15,000.00	$6,906.45	$15,000.00	$5,406.81
Evaluation, Measurement & Verification	$1,000.00	$0.00	$1,000.00	$0.00	$1,000.00	$0.00
Advertising & Promotion	$2,000.00	$982.02	$2,000.00	$1,165.76	$2,000.00	$500.48
Incentives	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Other	$6,000.00	$0.00	$6,000.00	$0.00	$6,000.00	$0.00
Total Utility Costs	$224,000.00	$212,356.33	$224,000.00	$159,725.93	$224,000.00	$154,868.54
Total Participants	6	3	6	3	6	4
% of Spending by Customer Segments						
Residential	0%	0%	0%	0%	0%	0%
Commercial	100%	100%	100%	100%	100%	100%
Industrial	0%	0%	0%	0%	0%	0%
Farm	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Renter Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Energy Savings						
Annual kWh Savings at Meter	0	0	0	0	0	0
Annual kWh Savings at Generator	0	0	0	0	0	0
Cost per Annual kWh Saved at Generator	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000
Peak kW Savings at Meter	0.000	0.000	0.000	0.000	0.000	0.000
Peak kW Savings at Generator	0.000	0.000	0.000	0.000	0.000	0.000
Cost per Peak kW Saved at Generator	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Utility Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Utility NPV	($224,000)	($212,356)	($224,000)	($159,726)	($224,000)	($154,869)
Ratepayer Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Ratepayer NPV	($224,000)	($212,356)	($224,000)	($159,726)	($224,000)	($154,869)
Participant Ratio	inf.	inf.	inf.	inf.	inf.	inf.
Participant NPV	$0	$0	$0	$0	$0	$0
Societal Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Societal NPV	($224,000)	($212,356)	($224,000)	($159,726)	($224,000)	($154,869)

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	**Commercial Financing**					
Status:	Existing					
Year:	**2021 Proposed**	**2021 Actual**	**2022 Proposed**	**2022 Actual**	**2023 Proposed**	**2023 Actual**
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$10,000.00	$2,870.51	$10,000.00	$2,887.90	$10,000.00	$1,936.62
Administration	$4,000.00	$0.00	$4,000.00	$0.00	$4,000.00	$0.00
Evaluation, Measurement & Verification	$1,000.00	$40.74	$1,000.00	$0.00	$1,000.00	$0.00
Advertising & Promotion	$1,000.00	$0.00	$1,000.00	$0.00	$1,000.00	$0.00
Incentives	$0.00	$4,052.50	$0.00	$5,808.08	$0.00	$5,179.31
Other	$1,000.00	$46.00	$1,000.00	$0.00	$1,000.00	($46.00)
Total Utility Costs	$17,000.00	$7,009.75	$17,000.00	$8,695.98	$17,000.00	$7,069.93
Total Participants	5	0	5	1	5	2
% of Spending by Customer Segments						
Residential	0%	0%	0%	0%	0%	0%
Commercial	90%	90%	90%	90%	90%	90%
Industrial	10%	10%	10%	10%	10%	10%
Farm	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Renter Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Energy Savings						
Annual kWh Savings at Meter	0	0	0	0	0	0
Annual kWh Savings at Generator	0	0	0	0	0	0
Cost per Annual kWh Saved at Generator	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000
Peak kW Savings at Meter	0.000	0.000	0.000	0.000	0.000	0.000
Peak kW Savings at Generator	0.000	0.000	0.000	0.000	0.000	0.000
Cost per Peak kW Saved at Generator	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Utility Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Utility NPV	($17,000)	($7,010)	($17,000)	($8,696)	($17,000)	($7,070)
Ratepayer Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Ratepayer NPV	($17,000)	($7,010)	($17,000)	($8,696)	($17,000)	($7,070)
Participant Ratio	inf.	inf.	inf.	inf.	inf.	inf.
Participant NPV	$0	$4,053	$0	$5,808	$0	$5,179
Societal Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Societal NPV	($17,000)	($2,957)	($17,000)	($2,888)	($17,000)	($1,891)

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	Commercial Implementation and Training					
Status:	Existing					
Year:	2021 Proposed	2021 Actual	2022 Proposed	2022 Actual	2023 Proposed	2023 Actual
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$54,000.00	$40,933.07	$54,000.00	$39,226.92	$54,000.00	$84,052.06
Administration	$2,000.00	$94.77	$2,000.00	$3,157.01	$2,000.00	$757.79
Evaluation, Measurement & Verification	$2,000.00	$8,219.80	$2,000.00	$154.40	$2,000.00	$205.31
Advertising & Promotion	$2,000.00	$876.16	$2,000.00	$1,231.79	$2,000.00	$638.07
Incentives	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Other	$0.00	$1,020.24	$0.00	$181.11	$0.00	$6,831.35
Total Utility Costs	$60,000.00	$51,144.04	$60,000.00	$43,951.23	$60,000.00	$92,484.59
Total Participants	250	259	250	409	250	351
% of Spending by Customer Segments						
Residential	0%	0%	0%	0%	0%	0%
Commercial	90%	90%	90%	90%	90%	90%
Industrial	10%	10%	10%	10%	10%	10%
Farm	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Renter Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Energy Savings						
Annual kWh Savings at Meter	0	0	0	0	0	0
Annual kWh Savings at Generator	0	0	0	0	0	0
Cost per Annual kWh Saved at Generator	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000
Peak kW Savings at Meter	0.000	0.000	0.000	0.000	0.000	0.000
Peak kW Savings at Generator	0.000	0.000	0.000	0.000	0.000	0.000
Cost per Peak kW Saved at Generator	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Utility Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Utility NPV	($60,000)	($51,144)	($60,000)	($43,951)	($60,000)	($92,485)
Ratepayer Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Ratepayer NPV	($60,000)	($51,144)	($60,000)	($43,951)	($60,000)	($92,485)
Participant Ratio	inf.	inf.	inf.	inf.	inf.	inf.
Participant NPV	$0	$0	$0	$0	$0	$0
Societal Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Societal NPV	($60,000)	($51,144)	($60,000)	($43,951)	($60,000)	($92,485)

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	Emerging Technology Accelerator					
Status:	NEW					
Year:	2021 Proposed	2021 Actual	2022 Proposed	2022 Actual	2023 Proposed	2023 Actual
kWh Line Loss Factor					9.064%	9.064%
kW Line Loss Factor					9.064%	9.064%
Utility Costs						
Delivery					$131,793.00	$131,973.12
Administration					$0.00	$1,369.43
Evaluation, Measurement & Verification					$0.00	$0.00
Advertising & Promotion					$0.00	$0.00
Incentives					$0.00	$0.00
Other					$0.00	$0.00
Total Utility Costs					$131,793.00	$133,342.55
Total Participants					N/A	N/A
% of Spending by Customer Segments						
Residential					0%	0%
Commercial					0%	0%
Industrial					0%	0%
Farm					0%	0%
Other					0%	0%
Total % of Spending					0%	0%
Low-Income Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Renter Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Energy Savings						
Annual kWh Savings at Meter					N/A	N/A
Annual kWh Savings at Generator					N/A	N/A
Cost per Annual kWh Saved at Generator					N/A	N/A
Peak kW Savings at Meter					N/A	N/A
Peak kW Savings at Generator					N/A	N/A
Cost per Peak kW Saved at Generator					N/A	N/A
Utility Ratio					N/A	N/A
Utility NPV					N/A	N/A
Ratepayer Ratio					N/A	N/A
Ratepayer NPV					N/A	N/A
Participant Ratio					N/A	N/A
Participant NPV					N/A	N/A
Societal Ratio					N/A	N/A
Societal NPV					N/A	N/A

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	**Publicly-Owned Property Solar**					
Status:	Modify					
Year:	**2021 Proposed**	**2021 Actual**	**2022 Proposed**	**2022 Actual**	**2023 Proposed**	**2023 Actual**
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$8,000.00	$3,131.78	$8,000.00	$25,560.28	$8,000.00	$6,240.42
Administration	$3,000.00	$2,430.44	$5,750.00	$8,814.05	$5,750.00	$1,728.09
Evaluation, Measurement & Verification	$2,000.00	$476.31	$2,000.00	$140.46	$2,000.00	$146.93
Advertising & Promotion	$1,000.00	$0.00	$1,000.00	$0.00	$1,000.00	$696.22
Incentives	$206,250.00	$217,083.00	$735,750.00	$54,000.00	$735,750.00	$316,329.00
Other	$5,635.00	$0.00	$0.00	$250.00	$0.00	$0.00
Total Utility Costs	$225,885.00	$223,121.53	$752,500.00	$88,764.79	$752,500.00	$325,140.66
Total Participants	11	5	14	1	14	6
% of Spending by Customer Segments						
Residential	0%	0%	0%	0%	0%	0%
Commercial	100%	100%	100%	100%	100%	100%
Industrial	0%	0%	0%	0%	0%	0%
Farm	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Renter Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Energy Savings						
Annual kWh Savings at Meter	194,952	231,166	965,216	56,187	965,216	308,329
Annual kWh Savings at Generator	214,384	254,208	1,061,424	61,787	1,061,424	339,061
Cost per Annual kWh Saved at Generator	$1.0536	$0.8777	$0.7090	$1.4366	$0.7090	$0.9589
Peak kW Savings at Meter	0.000	60.117	337.573	19.641	337.573	132.807
Peak kW Savings at Generator	0.000	66.109	371.221	21.598	371.221	146.044
Cost per Peak kW Saved at Generator	$0.00	$3,375.06	$2,027.09	$4,109.83	$2,027.09	$2,226.31
Utility Ratio	0.51	1.27	1.59	0.84	1.63	1.41
Utility NPV	($110,129)	$60,713	$441,319	($13,948)	$473,717	$132,564
Ratepayer Ratio	0.27	0.41	0.72	0.42	0.73	0.60
Ratepayer NPV	($317,831)	($404,663)	($467,744)	($101,834)	($453,527)	($300,801)
Participant Ratio	0.81	inf.	1.00	inf.	1.02	inf.
Participant NPV	($94,797)	$682,459	$7,563	$141,885	$25,744	$749,694
Societal Ratio	0.42	82.36	0.96	2.85	0.98	68.52
Societal NPV	($307,068)	$491,296	($73,897)	$64,237	($31,785)	$594,924

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	Planning - Regulatory Affairs					
Status:	Existing					
Year:	2021 Proposed	2021 Actual	2022 Proposed	2022 Actual	2023 Proposed	2023 Actual
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$0.00	$120,855.26	$0.00	$70,657.55	$0.00	$57,884.07
Administration	$0.00	$101,310.70	$0.00	$113,209.86	$0.00	$122,110.03
Evaluation, Measurement & Verification	$0.00	$45,279.06	$0.00	$60,344.15	$0.00	$56,101.99
Advertising & Promotion	$0.00	$33.51	$0.00	$2,708.16	$0.00	$0.00
Incentives	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Other	$300,000.00	$0.00	$300,000.00	$0.00	$300,000.00	$0.00
Total Utility Costs	$300,000.00	$267,478.53	$300,000.00	$246,919.72	$300,000.00	$236,096.09
Total Participants	0	0	0	0	0	0
% of Spending by Customer Segments						
Residential	0%	0%	0%	0%	0%	0%
Commercial	0%	0%	0%	0%	0%	0%
Industrial	0%	0%	0%	0%	0%	0%
Farm	0%	0%	0%	0%	0%	0%
Other	100%	100%	100%	100%	100%	100%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Renter Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Energy Savings						
Annual kWh Savings at Meter	0	0	0	0	0	0
Annual kWh Savings at Generator	0	0	0	0	0	0
Cost per Annual kWh Saved at Generator	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000
Peak kW Savings at Meter	0.000	0.000	0.000	0.000	0.000	0.000
Peak kW Savings at Generator	0.000	0.000	0.000	0.000	0.000	0.000
Cost per Peak kW Saved at Generator	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Utility Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Utility NPV	($300,000)	($267,479)	($300,000)	($246,920)	($300,000)	($236,096)
Ratepayer Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Ratepayer NPV	($300,000)	($267,479)	($300,000)	($246,920)	($300,000)	($236,096)
Participant Ratio	inf.	inf.	inf.	inf.	inf.	inf.
Participant NPV	$0	$0	$0	$0	$0	$0
Societal Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Societal NPV	($300,000)	($267,479)	($300,000)	($246,920)	($300,000)	($236,096)

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	Research and Deveopment					
Status:	Existing					
Year:	2021 Proposed	2021 Actual	2022 Proposed	2022 Actual	2023 Proposed	2023 Actual
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$0.00	$120,447.70	$0.00	$86,709.58	$0.00	$31,793.59
Administration	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Evaluation, Measurement & Verification	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Advertising & Promotion	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Incentives	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Other	$225,000.00	$0.00	$225,000.00	$0.00	$225,000.00	$0.00
Total Utility Costs	$225,000.00	$120,447.70	$225,000.00	$86,709.58	$225,000.00	$31,793.59
Total Participants	0	0	0	0	0	0
% of Spending by Customer Segments						
Residential	0%	0%	0%	0%	0%	0%
Commercial	0%	0%	0%	0%	0%	0%
Industrial	0%	0%	0%	0%	0%	0%
Farm	0%	0%	0%	0%	0%	0%
Other	100%	100%	100%	100%	100%	100%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Renter Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Energy Savings						
Annual kWh Savings at Meter	0	0	0	0	0	0
Annual kWh Savings at Generator	0	0	0	0	0	0
Cost per Annual kWh Saved at Generator	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000
Peak kW Savings at Meter	0.000	0.000	0.000	0.000	0.000	0.000
Peak kW Savings at Generator	0.000	0.000	0.000	0.000	0.000	0.000
Cost per Peak kW Saved at Generator	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Utility Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Utility NPV	($225,000)	($120,448)	($225,000)	($86,710)	($225,000)	($31,794)
Ratepayer Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Ratepayer NPV	($225,000)	($120,448)	($225,000)	($86,710)	($225,000)	($31,794)
Participant Ratio	inf.	inf.	inf.	inf.	inf.	inf.
Participant NPV	$0	$0	$0	$0	$0	$0
Societal Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Societal NPV	($225,000)	($120,448)	($225,000)	($86,710)	($225,000)	($31,794)

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	NGEA - Regulatory Assessments					
Status:	Existing					
Year:	2021 Proposed	2021 Actual	2022 Proposed	2022 Actual	2023 Proposed	2023 Actual
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Administration	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Evaluation, Measurement & Verification	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Advertising & Promotion	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Incentives	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Other	$110,000.00	$99,050.96	$110,000.00	$103,583.52	$110,000.00	$87,715.32
Total Utility Costs	$110,000.00	$99,050.96	$110,000.00	$103,583.52	$110,000.00	$87,715.32
Total Participants	0	0	0	0	0	0
% of Spending by Customer Segments						
Residential	0%	0%	0%	0%	0%	0%
Commercial	0%	0%	0%	0%	0%	0%
Industrial	0%	0%	0%	0%	0%	0%
Farm	0%	0%	0%	0%	0%	0%
Other	100%	100%	100%	100%	100%	100%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Renter Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Energy Savings						
Annual kWh Savings at Meter	0	0	0	0	0	0
Annual kWh Savings at Generator	0	0	0	0	0	0
Cost per Annual kWh Saved at Generator	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000
Peak kW Savings at Meter	0.000	0.000	0.000	0.000	0.000	0.000
Peak kW Savings at Generator	0.000	0.000	0.000	0.000	0.000	0.000
Cost per Peak kW Saved at Generator	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Utility Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Utility NPV	($110,000)	($99,051)	($110,000)	($103,584)	($110,000)	($87,715)
Ratepayer Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Ratepayer NPV	($110,000)	($99,051)	($110,000)	($103,584)	($110,000)	($87,715)
Participant Ratio	inf.	inf.	inf.	inf.	inf.	inf.
Participant NPV	$0	$0	$0	$0	$0	$0
Societal Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Societal NPV	($110,000)	($99,051)	($110,000)	($103,584)	($110,000)	($87,715)

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	**PUC Assessments**					
Status:	Existing					
Year:	**2021 Proposed**	**2021 Actual**	**2022 Proposed**	**2022 Actual**	**2023 Proposed**	**2023 Actual**
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Administration	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Evaluation, Measurement & Verification	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Advertising & Promotion	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Incentives	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Other	$20,000.00	$953.69	$20,000.00	$6,222.76	$20,000.00	$8,140.89
Total Utility Costs	$20,000.00	$953.69	$20,000.00	$6,222.76	$20,000.00	$8,140.89
Total Participants	0	0	0	0	0	0
% of Spending by Customer Segments						
Residential	0%	0%	0%	0%	0%	0%
Commercial	0%	0%	0%	0%	0%	0%
Industrial	0%	0%	0%	0%	0%	0%
Farm	0%	0%	0%	0%	0%	0%
Other	100%	100%	100%	100%	100%	100%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Renter Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Energy Savings						
Annual kWh Savings at Meter	0	0	0	0	0	0
Annual kWh Savings at Generator	0	0	0	0	0	0
Cost per Annual kWh Saved at Generator	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000
Peak kW Savings at Meter	0.000	0.000	0.000	0.000	0.000	0.000
Peak kW Savings at Generator	0.000	0.000	0.000	0.000	0.000	0.000
Cost per Peak kW Saved at Generator	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Utility Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Utility NPV	($20,000)	($954)	($20,000)	($6,223)	($20,000)	($8,141)
Ratepayer Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Ratepayer NPV	($20,000)	($954)	($20,000)	($6,223)	($20,000)	($8,141)
Participant Ratio	inf.	inf.	inf.	inf.	inf.	inf.
Participant NPV	$0	$0	$0	$0	$0	$0
Societal Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Societal NPV	($20,000)	($954)	($20,000)	($6,223)	($20,000)	($8,141)

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	**Transmission & Distribution Cost Study**					
Status:	Existing					
Year:	**2021 Proposed**	**2021 Actual**	**2022 Proposed**	**2022 Actual**	**2023 Proposed**	**2023 Actual**
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Administration	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Evaluation, Measurement & Verification	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Advertising & Promotion	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Incentives	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Other	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Utility Costs	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Participants	0	0	0	0	0	0
% of Spending by Customer Segments						
Residential	0%	0%	0%	0%	0%	0%
Commercial	0%	0%	0%	0%	0%	0%
Industrial	0%	0%	0%	0%	0%	0%
Farm	0%	0%	0%	0%	0%	0%
Other	100%	100%	100%	100%	100%	100%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Renter Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Energy Savings						
Annual kWh Savings at Meter	0	0	0	0	0	0
Annual kWh Savings at Generator	0	0	0	0	0	0
Cost per Annual kWh Saved at Generator	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000
Peak kW Savings at Meter	0.000	0.000	0.000	0.000	0.000	0.000
Peak kW Savings at Generator	0.000	0.000	0.000	0.000	0.000	0.000
Cost per Peak kW Saved at Generator	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Utility Ratio	inf.	inf.	inf.	inf.	inf.	inf.
Utility NPV	$0	$0	$0	$0	$0	$0
Ratepayer Ratio	inf.	inf.	inf.	inf.	inf.	inf.
Ratepayer NPV	$0	$0	$0	$0	$0	$0
Participant Ratio	inf.	inf.	inf.	inf.	inf.	inf.
Participant NPV	$0	$0	$0	$0	$0	$0
Societal Ratio	inf.	inf.	inf.	inf.	inf.	inf.
Societal NPV	$0	$0	$0	$0	$0	$0

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	Company CIP Projects					
Status:						
Year:	2021 Proposed	2021 Actual	2022 Proposed	2022 Actual	2023 Proposed	2023 Actual
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$0.00	$896.59	$0.00	$0.00	$0.00	$0.00
Administration	$0.00	$108.04	$0.00	$0.00	$0.00	$0.00
Evaluation, Measurement & Verification	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Advertising & Promotion	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Incentives	$0.00	$27,752.70	$0.00	$0.00	$0.00	$0.00
Other	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Utility Costs	$0.00	$28,757.33	$0.00	$0.00	$0.00	$0.00
Total Participants						
% of Spending by Customer Segments						
Residential	0%	0%	0%	0%	0%	0%
Commercial	0%	0%	0%	0%	0%	0%
Industrial	0%	0%	0%	0%	0%	0%
Farm	0%	0%	0%	0%	0%	0%
Other	100%	100%	100%	100%	100%	100%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Renter Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Energy Savings						
Annual kWh Savings at Meter	0	0	0	0	0	0
Annual kWh Savings at Generator	0	0	0	0	0	0
Cost per Annual kWh Saved at Generator	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000
Peak kW Savings at Meter	0.000	0.000	0.000	0.000	0.000	0.000
Peak kW Savings at Generator	0.000	0.000	0.000	0.000	0.000	0.000
Cost per Peak kW Saved at Generator	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Utility Ratio	0.00	0.00	0.00	inf.	0.00	inf.
Utility NPV	$0	($28,757)	$0	$0	$0	$0
Ratepayer Ratio	0.00	0.00	0.00	inf.	0.00	inf.
Ratepayer NPV	$0	($28,757)	$0	$0	$0	$0
Participant Ratio	0.00	inf.	0.00	inf.	0.00	inf.
Participant NPV	$0	$27,753	$0	$0	$0	$0
Societal Ratio	0.00	0.00	0.00	inf.	0.00	inf.
Societal NPV	$0	($1,005)	$0	$0	$0	$0

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category:	Accounting Adjustments					
Status:						
Year:	2021 Proposed	2021 Actual	2022 Proposed	2022 Actual	2023 Proposed	2023 Actual
kWh Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
kW Line Loss Factor	9.064%	9.064%	9.064%	9.064%	9.064%	9.064%
Utility Costs						
Delivery	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Administration	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Evaluation, Measurement & Verification	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Advertising & Promotion	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Incentives	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Other	$0.00	$9,077.71	$0.00	($7,250.48)	$0.00	$8,110.64
Total Utility Costs	$0.00	$9,077.71	$0.00	($7,250.48)	$0.00	$8,110.64
Total Participants						
% of Spending by Customer Segments						
Residential	0%	0%	0%	0%	0%	0%
Commercial	0%	0%	0%	0%	0%	0%
Industrial	0%	0%	0%	0%	0%	0%
Farm	0%	0%	0%	0%	0%	0%
Other	100%	100%	100%	100%	100%	100%
Total % of Spending	100%	100%	100%	100%	100%	100%
Low-Income Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Renter Participation*						
Participants % (% of Total Participants)						
Budget % (% of Total Utility Costs)						
Energy Savings						
Annual kWh Savings at Meter	0	0	0	0	0	0
Annual kWh Savings at Generator	0	0	0	0	0	0
Cost per Annual kWh Saved at Generator	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000
Peak kW Savings at Meter	0.000	0.000	0.000	0.000	0.000	0.000
Peak kW Savings at Generator	0.000	0.000	0.000	0.000	0.000	0.000
Cost per Peak kW Saved at Generator	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Utility Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Utility NPV	$0	($9,078)	$0	$7,250	$0	($8,111)
Ratepayer Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Ratepayer NPV	$0	($9,078)	$0	$7,250	$0	($8,111)
Participant Ratio	0.00	inf.	0.00	inf.	0.00	inf.
Participant NPV	$0	$0	$0	$0	$0	$0
Societal Ratio	0.00	0.00	0.00	0.00	0.00	0.00
Societal NPV	$0	($9,078)	$0	$7,250	$0	($8,111)

* Percentage derived from 2010 Census data.

Appendix D – Customer Notice

Otter Tail Power Company
Minnesota CIP

Customer notice

The Minnesota Public Utilities Commission approved changes to our Conservation Improvement Project Rider, which is part of the Resource Adjustment on your monthly electric bill. This rider recovers costs associated with energy-efficiency programs that help you save energy. The table below shows new rates by Service Category effective October 1, 2024. In addition to updating these rates, we'll now refer to this rider as our Energy Conservation and Optimization (ECO) Rider.

Service Category	Section	Rate per kWh
Residential	9.01, 9.02	0.545 ¢kWh
Farm	9.03	0.558 ¢kWh
General Service	10.01, 10.02, 10.03, 10.07	0.540 ¢kWh
Large General Service	10.04, 10.05, 10.06, 14.02, 14.03	0.578 ¢kWh
Irrigation Service	11.02	0.304 ¢kWh
Outdoor Lighting	11.03, 11.04, 11.07	0.613 ¢kWh
OPA	11.05	0.487 ¢kWh
Controlled Service Deferred	14.01, 14.06	0.534 ¢kWh
Controlled Service Interruptible	14.04	0.561 ¢kWh
Controlled Service Off Peak	14.07, 14.12	0.453 ¢kWh

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

CERTIFICATE OF SERVICE

RE: Status Report – 2023 CIP Activities
Docket No. E017/CIP-20-475

In the Matter of Otter Tail Power Company's Annual Filing of the Demand Side Management Financial Incentive Project
Docket No. E017/M-24-

In the Matter of Otter Tail Power Company's Annual Filing to Update the Conservation Improvement Project Rider
Docket No. E017/M-24-

I, Stacy Wahlund, 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 **1st** day of **April, 2024.**

/s/ Stacy Wahlund
Stacy Wahlund
Regulatory Filing Coordinator
Otter Tail Power Company
215 South Cascade Street
Fergus Falls MN 56537
(218) 739-8338

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Anjali	Bains	bains@fresh-energy.org	Fresh Energy	408 Saint Peter Ste 220 Saint Paul, MN 55102	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Tom	Balster	tombalster@alliantenergy.com	Interstate Power & Light Company	PO Box 351 200 1st St SE Cedar Rapids, IA 524060351	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Lisa	Beckner	lbeckner@mnpower.com	Minnesota Power	30 W Superior St Duluth, MN 55802	Electronic Service	No	OFF_SL_20-475_CIP-20-475
William	Black	bblack@mmua.org	MMUA	Suite 200 3131 Fernbrook Lane North Plymouth, MN 55447	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Christina	Brusven	cbrusven@fredlaw.com	Fredrikson Byron	60 S 6th St Ste 1500 Minneapolis, MN 55402-4400	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Ray	Choquette	rchoquette@agp.com	Ag Processing Inc.	12700 West Dodge Road PO Box 2047 Omaha, NE 68103-2047	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1400 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_20-475_CIP-20-475
George	Crocker	gwillc@nawo.org	North American Water Office	5093 Keats Avenue Lake Elmo, MN 55042	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Patrick	Deal	pdeal@mnchamber.com	Minnesota Chamber of Commerce	400 Robert St N Ste 1500 Saint Paul, MN 55101	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Steve	Downer	sdowner@mmua.org	MMUA	3025 Harbor Ln N Ste 400 Plymouth, MN 554475142	Electronic Service	No	OFF_SL_20-475_CIP-20-475

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Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 280 Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_20-475_CIP-20-475
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Jessica	Fyhrie	jfyhrie@otpco.com	Otter Tail Power Company	PO Box 496 Fergus Falls, MN 56538-0496	Electronic Service	Yes	OFF_SL_20-475_CIP-20-475
Elizabeth	Glidden	elizabeth.glidden@mhponline.org	Minnesota Housing Partnership	2446 University Ave W Ste 140 St Paul, MN 55114	Electronic Service	No	OFF_SL_20-475_CIP-20-475
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Jeffrey	Haase	jhaase@grenergy.com	Great River Energy	12300 Elm Creek Blvd Maple Grove, MN 55369	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Patty	Hanson	phanson@rpu.org	Rochester Public Utilities	4000 E River Rd NE Rochester, MN 55906	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Adam	Heinen	aheinen@dakotaelectric.com	Dakota Electric Association	4300 220th St W Farmington, MN 55024	Electronic Service	No	OFF_SL_20-475_CIP-20-475
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Dave	Johnson	dave.johnson@aeoa.org	Arrowhead Economic Opportunity Agency	702 3rd Ave S Virginia, MN 55792	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Nick	Kaneski	nick.kaneski@enbridge.com	Enbridge Energy Company, Inc.	11 East Superior St Ste 125 Duluth, MN 55802	Electronic Service	No	OFF_SL_20-475_CIP-20-475

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Corey	Lubovich	coreyl@hpuc.com	Hibbing Public Utilities Commission	1902 6th Ave E Hibbing, MN 55746	Electronic Service	No	OFF_SL_20-475_CIP-20-475
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Pam	Marshall	pam@energycents.org	Energy CENTS Coalition	823 E 7th St St Paul, MN 55106	Electronic Service	No	OFF_SL_20-475_CIP-20-475
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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Audrey	Partridge	apartridge@mncee.org	Center for Energy and Environment	212 3rd Ave. N. Suite 560 Minneapolis, MN 55401	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Lisa	Pickard	lseverson@minnkota.com	Minnkota Power Cooperative	5301 32nd Ave S Grand Forks, ND 58201	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Bill	Poppert	info@technologycos.com	Technology North	2433 Highwood Ave St. Paul, MN 55119	Electronic Service	No	OFF_SL_20-475_CIP-20-475
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Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	Yes	OFF_SL_20-475_CIP-20-475
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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Stuart	Tommerdahl	stommerdahl@otpco.com	Otter Tail Power Company	215 S Cascade St PO Box 496 Fergus Falls, MN 56537	Electronic Service	Yes	OFF_SL_20-475_CIP-20-475
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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1400 St. Paul, MN 55101	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
George	Crocker	gwillc@nawo.org	North American Water Office	5093 Keats Avenue Lake Elmo, MN 55042	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Patrick	Deal	pdeal@mnchamber.com	Minnesota Chamber of Commerce	400 Robert St N Ste 1500 Saint Paul, MN 55101	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Steve	Downer	sdowner@mmua.org	MMUA	3025 Harbor Ln N Ste 400 Plymouth, MN 554475142	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Charles	Drayton	charles.drayton@enbridge.com	Enbridge Energy Company, Inc.	7701 France Ave S Ste 600 Edina, MN 55435	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST

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Jim	Erchul	jerchul@dbnhs.org	Daytons Bluff Neighborhood Housing Sv.	823 E 7th St St. Paul, MN 55106	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
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Jeffrey	Haase	jhaase@grenergy.com	Great River Energy	12300 Elm Creek Blvd Maple Grove, MN 55369	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Patty	Hanson	phanson@rpu.org	Rochester Public Utilities	4000 E River Rd NE Rochester, MN 55906	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Lisa	Pickard	lseverson@minnkota.com	Minnkota Power Cooperative	5301 32nd Ave S Grand Forks, ND 58201	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Bill	Poppert	info@technologycos.com	Technology North	2433 Highwood Ave St. Paul, MN 55119	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Dave	Reinke	dreinke@dakotaelectric.com	Dakota Electric Association	4300 220th St W Farmington, MN 55024-9583	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST

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Christine	Schwartz	Regulatory.records@xcelenergy.com	Xcel Energy	414 Nicollet Mall FL 7 Minneapolis, MN 554011993	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
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Robyn	Woeste	robynwoeste@alliantenergy.com	Interstate Power and Light Company	200 First St SE Cedar Rapids, IA 52401	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST

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Ray	Choquette	rchoquette@agp.com	Ag Processing Inc.	12700 West Dodge Road PO Box 2047 Omaha, NE 68103-2047	Electronic Service	No	GEN_SL_Otter Tail Power Company_Otter Tail Power Company_2024 CIP Rider_DSM Incentive
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1400 St. Paul, MN 55101	Electronic Service	No	GEN_SL_Otter Tail Power Company_Otter Tail Power Company_2024 CIP Rider_DSM Incentive
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 280 Saint Paul, MN 551012198	Electronic Service	No	GEN_SL_Otter Tail Power Company_Otter Tail Power Company_2024 CIP Rider_DSM Incentive
Jessica	Fyhrie	jfyhrie@otpco.com	Otter Tail Power Company	PO Box 496 Fergus Falls, MN 56538-0496	Electronic Service	No	GEN_SL_Otter Tail Power Company_Otter Tail Power Company_2024 CIP Rider_DSM Incentive
Adam	Heinen	aheinen@dakotaelectric.com	Dakota Electric Association	4300 220th St W Farmington, MN 55024	Electronic Service	No	GEN_SL_Otter Tail Power Company_Otter Tail Power Company_2024 CIP Rider_DSM Incentive
Nick	Kaneski	nick.kaneski@enbridge.com	Enbridge Energy Company, Inc.	11 East Superior St Ste 125 Duluth, MN 55802	Electronic Service	No	GEN_SL_Otter Tail Power Company_Otter Tail Power Company_2024 CIP Rider_DSM Incentive
James D.	Larson	james.larson@avantenergy.com	Avant Energy Services	220 S 6th St Ste 1300 Minneapolis, MN 55402	Electronic Service	No	GEN_SL_Otter Tail Power Company_Otter Tail Power Company_2024 CIP Rider_DSM Incentive
Kavita	Maini	kmaini@wi.rr.com	KM Energy Consulting, LLC	961 N Lost Woods Rd Oconomowoc, WI 53066	Electronic Service	No	GEN_SL_Otter Tail Power Company_Otter Tail Power Company_2024 CIP Rider_DSM Incentive
Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP	33 South Sixth St Ste 4200 Minneapolis, MN 55402	Electronic Service	No	GEN_SL_Otter Tail Power Company_Otter Tail Power Company_2024 CIP Rider_DSM Incentive
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Generic Notice	Regulatory	regulatory_filing_coordinators@otpco.com	Otter Tail Power Company	215 S. Cascade Street Fergus Falls, MN 56537	Electronic Service	No	GEN_SL_Otter Tail Power Company_Otter Tail Power Company_2024 CIP Rider_DSM Incentive
Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	No	GEN_SL_Otter Tail Power Company_Otter Tail Power Company_2024 CIP Rider_DSM Incentive
Will	Seuffert	Will.Seuffert@state.mn.us	Public Utilities Commission	121 7th Pl E Ste 350 Saint Paul, MN 55101	Electronic Service	No	GEN_SL_Otter Tail Power Company_Otter Tail Power Company_2024 CIP Rider_DSM Incentive
Cary	Stephenson	cStephenson@otpco.com	Otter Tail Power Company	215 South Cascade Street Fergus Falls, MN 56537	Electronic Service	No	GEN_SL_Otter Tail Power Company_Otter Tail Power Company_2024 CIP Rider_DSM Incentive
Stuart	Tommerdahl	stommerdahl@otpco.com	Otter Tail Power Company	215 S Cascade St PO Box 496 Fergus Falls, MN 56537	Electronic Service	No	GEN_SL_Otter Tail Power Company_Otter Tail Power Company_2024 CIP Rider_DSM Incentive