



April 1, 2022

**2021 Demand Side Management
Financial Incentive Project**
Docket No. E017/M-22-

Annual Filing to Update the CIP Rider
Docket No. E017/M-22-

2021 CIP Status Report
Docket No. E017/CIP-20-475.01



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April 1, 2022



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

Mr. Kevin Lee
Deputy Commissioner
Minnesota Department of Commerce
Division of Energy Resources
85 7th Place East, Suite 500
St. Paul, Minnesota 55101-2198

**RE: 2021 Conservation Improvement Project Status Report
Docket No. E017/CIP-20-475.01**

**2021 Demand Side Management Financial Incentive Project
Docket No. E017/M-22-**

**Annual Filing to Update the Conservation Improvement Project Rider
Docket No. E017/M-22-**

Dear Mr. Seuffert and Mr. Lee:

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

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) 739-8639 or JGrenier@otpc.com.

Very truly yours,

/s/ JASON GRENIER
Jason Grenier, Manager
Market Planning

sjw
Enclosures
By electronic filing
c: Service List

2021 DSM INCENTIVE, FILING TO UPDATE THE RIDER, AND STATUS REPORT EXECUTIVE SUMMARY

On April 1, 2022, 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, 2022, Otter Tail Power Company files its 2021 Status Report.

On April 1, 2022, Otter Tail also files its annual filing to update the CIP Rider.

Otter Tail would like to emphasize the following points concerning the 2021 Conservation Improvement Program:

- The Company achieved 4.07¹ percent energy savings as a percent of retail energy sales, above our approved goal of 2.54 percent.
- The Company achieved energy savings of 68,779,250 kWh, exceeding goal by 160 percent. Demand savings were 122 percent of goal.
- The cost per kWh for *first year* savings is \$0.14 (14 cents) compared to a budgeted cost of \$0.18 (18 cents). Costs are in line with historical averages of \$0.13 (13 cents).
- Expenditures were under budget (94 percent) at \$9,381,509 based on an approved budget of \$9,978,634.²
- Net benefits of \$29,700,515 were achieved excluding the negative net benefits from assessments.

Requests for Approval

- The Company is requesting approval for \$2,900,388 in performance incentives for 2021 CIP activities, a small share of the total net benefits delivered to customers from investments in CIP.
- The Company is requesting the Conservation Cost Recovery Adjustment (CCRA) factor of \$0.00667 /kWh be reflected on customers' bills through the Resource Adjustment starting with bills rendered (dated) on and after October 1, 2022.³

¹ Adjusted for one-third energy savings from behavioral change programs and includes energy savings from POP Solar and the Company-Owned LED Street & Area Lighting projects.

² Includes budget modification request approved by the DER on December 10, 2021, for \$2,260,000.

³ In Otter Tail's current rate case, Docket No. E017/GR-20-719, Otter Tail has proposed 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. Otter Tail has also proposed to roll the CCRC \$0.00223/kWh into the CCRA rate. Once final rates are approved in the rate case docket by the MPUC, Otter Tail will make a filing in this docket to adjust the CCRA to reflect the proposed increase in this docket.

- 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.
- The Company is requesting approval of the 2021 CIP Tracker, resulting in a year-end balance of \$2,870,213.

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 energy 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: 20-475.01.

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 – 2021 CIP Activities

Docket No. E017/CIP-20-475.01

**In the Matter of Otter Tail Power
Company's Annual Filing of the
Demand Side Management
Financial Incentive Project**

Docket No. E017/M-22-

**In the Matter of Otter Tail Power
Company's Annual Filing to
Update the Conservation
Improvement Project Rider**

Docket No. E017/M-22-

SUMMARY OF FILING

Otter Tail Power Company (Otter Tail or the Company) is pleased to report its 2021 DSM achievements. CIP program results for 2021 proved to be another successful year for Otter Tail and our customers exceeding the approved 2.54 percent energy savings goal and achieving 4.07 percent energy savings while delivering over \$29.6 million in customer net benefits.

Otter Tail is requesting approval of a financial incentive of \$2,900,388 to be approved and recovered through its Conservation Improvement Project (CIP) Tracker Account.

Otter Tail is requesting the Conservation Cost Recovery Adjustment (CCRA) factor of \$0.00667/kWh be reflected on customers' bills through the Resource Adjustment starting with bills rendered (dated) on and after October 1, 2022.

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.

Lastly, Otter Tail is requesting approval of the 2021 CIP Tracker, resulting in a year-end 2021 balance of \$2,870,213.

**STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION**

Status Report – 2021 CIP Activities

Docket No. E017/CIP-20-475.01

**In the Matter of Otter Tail Power
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Update the Conservation
Improvement Project Rider**

Docket No. E017/M-22-

PETITION

I. INTRODUCTION AND BACKGROUND

Otter Tail Power Company (Otter Tail or the Company) is requesting approval of a financial incentive of \$2,900,388 to be approved and recovered through its Conservation Improvement Project (CIP) Tracker Account.

Otter Tail is requesting the Conservation Cost Recovery Adjustment (CCRA) factor of \$0.00667/kWh be reflected on customers' bills through the Resource Adjustment starting with bills rendered (dated) on and after October 1, 2021.

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.

Lastly, Otter Tail is requesting approval of the 2021 CIP Tracker, resulting in a year-end 2021 balance of \$2,870,213.

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.⁴In 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.

⁴ Docket No. E017/M-94-539.

On January 27, 2010, the MPUC approved a new shared savings model⁵ 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.

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.
 - 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.

⁵ Docket No. E,G999/CI-08-133.

- 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 \$2,900,388 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 Conservation Cost Recovery Adjustment factor of \$0.00667/kWh be reflected on customers' bills through the Resource Adjustment starting with bills rendered (dated) on and after October 1, 2022.

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.

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 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, 2022. In general, the notification will state, "Beginning October 1, 2022, the Resource Adjustment includes a CCRA factor of \$0.00667/kWh that has been applied based on the Commission's order."

V. MISCELLANEOUS FILING AND REGULATORY REQUIREMENTS

- A. All correspondence with respect to this filing should be sent to:
Jason Grenier
Otter Tail Power Company
215 South Cascade Street
P.O. Box 496
Fergus Falls, MN 56538-0496
(218) 739-8639 Phone
(218) 739-8941 FAX
- B. The effective date of the CIP Rider is October 1, 2022. 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

2021 Minimum Spending Requirement

Minn. Stat. § 216B.241, requires that 1.75 percent of the Company's electric gross operating revenues be spent on CIP. Otter Tail's spending in relation to approved minimum spending is as follows:

Minimum Spending Requirement	\$ 2,258,860
Approved Budget	\$ 9,978,634 ⁶
2021 Actual Spending	\$ 9,381,509

2021 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	42,945,163 kWh
2021 Actual Energy Savings	68,779,250 kWh

2021 Low-Income Spending Requirement

The Company has complied with Minn. Stat. § 216B.241, subd. 7 requiring utilities to spend 0.2 percent of residential electric gross operating revenues on low-income programs.

Low-income minimum spend at 0.2%	\$ 115,030
Low-income approved budget	\$ 204,000
Low-income actual spend	\$ 321,458

2021 Research and Development 10 Percent spending cap

The Company has complied with Minn. Stat. § 216B.241, subd. 2c that limits spending on Research and Development to 10 percent of the minimum spending requirement.

Minimum CIP Spending Requirement	\$ 2,258,860
10 percent R&D Spending Cap	\$ 225,000
2021 Actual R&D Spending	\$ 120,448

⁶ Includes budget modification request approved by the DER on December 10, 2021, for \$2,260,000.

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 minimum spending requirement on distributed generation project.

Lighting Use and Recycling Programs

The Company has complied with Minn. Stat. § 216B.241 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(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(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.

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 requested a budget increase of \$2,260,000 on November 30, 2021. The DER approved the request on December 10, 2021.

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 2021 Otter Tail had two custom projects under the Custom Efficiency Grant program estimated to save greater than one GWh. The Company received the DER's approval for both of the M&V reports for the projects on December 20, 2021.

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 2021 employee expenses as follows:

Section	Amount	Description
Travel Expense	\$37,561	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	\$3,926	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	\$3,929	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	\$3,188	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	\$48,604	

Total 2021 employee expenses that were included in Otter Tail's CIP Tracker were \$48,604. The total employee expense is 0.52 percent of the total 2021 CIP Tracker expenses of \$9,381,509. 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 respectfully asks 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 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 2021 DSM Financial Incentive, totaling \$2,900,388.
2. Approval of the 2021 CIP Tracker, resulting in a year-end balance of \$2,870,213.
3. Approval to implement the CCRA factor of \$0.00667/kWh reflected on customers' bills through the Resource Adjustment starting with bills rendered on and after October 1, 2022.⁷
4. 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 2021 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 Jason Grenier at (218) 739-8639 or jgrenier@otpc.com.

Dated: April 1, 2022

**Respectfully submitted,
OTTER TAIL POWER COMPANY**

By: /s/ JASON GRENIER

Jason Grenier
Manager, Market Planning
Otter Tail Power Company
P.O. Box 496
215 South Cascade Street
Fergus Falls, MN 56538-0496
(218) 739-8639

⁷ In Otter Tail's current rate case, Docket No. E017/GR-20-719, Otter Tail has proposed 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. Otter Tail has also proposed to roll the CCRC \$0.00223/kWh into the CCRA rate. Once final rates are approved in the rate case docket by the MPUC, Otter Tail will make a filing in this docket to adjust the CCRA to reflect the proposed increase in this docket.

Financial Incentive

FINANCIAL INCENTIVE

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

The filing consists of the following items.

- Discussion of 2021 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 – 2021 CIP Tracker
Table 2	2021 Incentive Mechanism
Table 3	2021 Project Costs, Savings, and Benefits
Table 4	2021 Benefit Cost Ratios
Table 5	2021 CIP Program Status Report / CIP Tracker Recap
Table 6	2021 CIP Program Status Report – Costs per kW & per kWh

¹ Docket No. E,G999/CI-08-133.

I. DISCUSSION OF 2021 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 model² 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. 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 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.
 - c. For all utilities, set a Conservation Improvement Program Expenditure Cap of 30 percent.

² Docket E,G999/CI-08-133.

- 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, 2022, filing under section II, the Company is providing the 2021 proposed incentive. The following steps are used in the incentive calculation:

1. The 2021 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 2021 CIP Programs, each as proposed and approved by the Department, and each with actual 2021 results. Also listed are total program costs, resulting benefits, and net benefits for each program and as a total CIP Program.
4. **Actual energy savings was 66,506,148 kWh, excluding the Company's Publicly-Owned Property (POP) Solar and Company-Owned Street and Area Lighting (Street Lighting) programs' allocated savings, or 3.94 percent of historic average retail sales. CIP costs totaled \$9,381,509 and excludes the return on the LED Street**

and Area Lighting project's investment. The Company's total net benefits are calculated to be \$29,003,882, excluding assessments, House Therapy, POP Solar, and LED Street Lighting. The 2021 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 2021 program. Figures are listed for each project "as filed" as part of the 2021-2023 CIP Triennial Filing and "as actual" reflecting 2021 actual participation, savings, and costs.
6. As detailed in Appendix A, Table 2, the total incentive amount achieved in 2021 is **\$2,900,388.**

II. 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 2021 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.

III. COST COMPARISONS / NET BENEFITS

In 2021, Otter Tail's average first year cost per kWh saved was 14 cents, which is in line with the five-year average of 13 cents. As noted in the Table 1, the average first year costs per kWh range have remained relatively consistent.

Table 1: History of Otter Tail's CIP Achievements, Tracker, and Incentives (2017-2021)					
	2017	2018	2019	2020	2021
DSM Financial Incentive	\$2,642,360	\$3,004,311	\$2,718,378	\$2,864,948	\$2,900,388
CIP Expenditures	\$6,605,899	\$9,027,762	\$9,116,722	\$9,643,680	\$9,381,509
Achieved Energy Savings (kWh)	52,497,167	73,255,915	69,248,477	70,649,612	68,779,250
Average Cost per kWh Saved	\$0.13	\$0.12	\$0.13	\$0.14	\$0.14

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 (2021) benefit/cost analysis using DSMore™ software. The utility benefits are aggregated for the lifetime of all CIP energy efficiency measures, discounted back to 2021 dollars using the utility discount rate of 5.61 percent for the utility test and the rate of 3.02 percent³ for the societal test.

As shown in Table 3 of Appendix A, the estimated net benefits for the 2021 Proposed CIP are \$17,032,167.⁴ Additional details of the total costs and the total benefits from benefit/cost analysis of the 2021 Proposed CIP portfolio include:

Program Costs - Proposed 2021**	
Delivery/Implementation/Administration Costs	\$4,132,812
Incentives	\$3,585,822
Total Costs	\$7,718,634
Program Benefits - Proposed 2021*	
Avoided T&D Electric	\$1,786,394
Cost-Based Avoided Electric Production	\$15,695,747
Cost-Based Avoided Electric Capacity	\$7,268,660
Cost-Based Avoided Ancillary	\$0
Total Benefits	\$24,750,801
Net Benefits - Proposed 2021	\$17,032,167
Benefit/Cost Results - Proposed 2021	3.21

* Benefits are based on lifetime benefits, discounted back to 2021 dollars using 5.61 percent utility discount rate.

** Costs include assessments.

As shown in Table 3 of Appendix A, the actual net benefits of \$29,600,511⁵ for 2021 CIP are higher than the proposed net benefits. Additional details of the total costs and the total benefits from the DSMore analysis of the 2021 Actual CIP portfolio include:

³ Per the Deputy Commissioner’s Decision on February 11, 2020, Docket No. E999/CIP-18-783.

⁴ This number reflects total net benefits and not the net benefits included in the calculation of the financial incentive.

⁵ This number reflects total net benefits and not the net benefits included in the calculation of the financial incentive.

Program Costs - Actual 2021**	
Delivery/Implementation/Administration Costs	\$3,156,789
Incentives	\$6,224,720
Total Costs	\$9,381,509
Program Benefits - Actual 2021*	
Avoided T&D Electric	\$2,443,025
Cost-Based Avoided Electric Production	\$27,244,640
Cost-Based Avoided Electric Capacity	\$9,294,355
Cost-Based Avoided Ancillary	\$0
Total Benefits	\$38,982,020
Net Benefits - Actual 2021	\$29,600,511
Benefit/Cost Results - Actual 2021	4.16

* Benefits are based on lifetime benefits, discounted back to 2021 dollars using 5.61 percent utility discount rate.

** Costs include assessments.

CIP Cost Breakdown - 2021				
	Proposed Costs		Actual Costs	
Delivery	\$4,132,812	54%	\$3,156,789	34%
Incentives	\$3,585,822	46%	\$6,224,720	66%
Total CIP Costs	\$7,718,634	100%	\$9,381,509	100%

IV. SUMMARY OF PROPOSAL

Otter Tail's 2021 CIP energy savings more than doubled Minnesota's energy savings goal of 1.50 percent and finished at 3.94 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 2021 CIP results, the utility was eligible to receive 10 percent of the total net benefits delivered to its customers. Since the 2021 CIP energy savings exceeded 2.0 percent of the Company's historic sales, the Company was able to increase the expenditure cap from 30 percent to 35 percent. Applying these factors Otter Tail qualifies for a \$2,900,388 financial incentive.

Otter Tail's proposed 2021 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.

V. REQUEST FOR APPROVAL

FINANCIAL INCENTIVE FILING

Otter Tail respectfully requests the MPUC to approve the 2021 CIP performance financial incentive amount of \$2,900,388 be recoverable through its CIP Tracker Account.

If there are any questions concerning this filing, please contact Jason Grenier at (218)739-8639 or jgrenier@otpc.com.

Dated: April 1, 2022

Respectfully submitted,
OTTER TAIL POWER COMPANY

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Status Report

Status Report

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STATUS REPORT – 2021 CIP PROGRAMS

The 2021 Conservation Improvement Program (CIP) Status Report has been combined with the 2021 Financial Incentive Filing, produced annually on April 1. The Status Report covers all 2021 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 2021 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

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

- Company-Owned Street & Area Lighting
- Publicly Owned Property (POP) Solar

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
- Electronically Commutated Motors
- OTP CIP Projects
- Carrying Charges

DIRECT IMPACT – RESIDENTIAL

HOME APPLIANCE

The Company's Home Appliance program continues to offer customers incentives to recycle qualified inefficient but operating refrigerators and freezers, dehumidifiers, and window air-conditioning units at no cost to the customer. During a scheduled visit to recycle refrigerators and/or freezers, customers may also recycle a window air-conditioner and/or dehumidifier. In 2021 we offered eight LED bulbs in addition to the recycling incentive for participants. This has helped retain customer interest in the program as reflected in participation. We will continue with the additional incentive in 2022.

The Company continues to offer contact-free participation for customers concerned with COVID-19, yet still wanting to recycle inefficient appliances.

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

- Refrigerators
- Freezers
- Dishwashers
- Clothes washers
- Clothes dryers

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

- Bill inserts targeting residential customers.
- Print advertising.
- Digital and social media advertising campaigns.
- 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 program.

Participation and Budget

PARTICIPATION AND BUDGET – 2021			
Home Appliance Program	Actual	Proposed	% of Goal
Participation	830	799	104%
Budget \$	\$185,566	\$170,000	109%

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 – 2021	
Home Appliance Program	At the Generator (DSMore Summer Coincident Peak kW)
Energy Savings – kWh	437,195
Demand Savings – kW	70.64

HOME DIRECT INSTALL

The Company's Home Direct Install program consists of the previously approved residential Home Transformer and School Kit programs. The Home Direct Install program aims 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 improvements. The Company reaches the market for these measures through the following distribution strategies:

- 1) Direct install kits distributed at the time of a free audit provided through Home Transformer residential energy audits.
- 2) Multifamily housing outreach efforts.
- 3) Home direct install kits distributed to students in conjunction with a lesson plan targeting 5th grade students in participating schools.

Home Transformer

Through Home Transformer the Company offers customers with homes featuring electric space- and water-heating an energy audit and installations of select energy-efficiency products at no cost to the customer. Products and services 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 Tier 2 power strips.
 - Heating and cooling measures – exterior door sweep, outlet gaskets, caulking, weather-stripping for windows.

- Water heating measures – pipe insulation, low-flow showerheads and faucet aerators, temperature assessment and setback of water heater temperature if warranted to enhance residence safety and energy savings.

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 strategically scheduled bill inserts targeting customers with electric space- and water-heating systems.

Multifamily outreach

Otter Tail partners with Minnesota Energy Resources Corporation (MERC) and Center for Energy and Environment (CEE) to provide audits and direct-install of energy saving measures for customers in both multifamily buildings and single-family homes. The partnership allows both utilities to more cost effectively offer audits and direct install measures at no cost to customers. These partnerships have traditionally focused on natural gas heated buildings with five or more units as well as single-family homes. In 2021, Otter Tail continued to work with CEE to explore electric energy saving opportunities in multifamily buildings MERC had audited prior to the Otter Tail/MERC partnership.

Multifamily customers with five or more units receive:

- A comprehensive analysis of the building's energy use.
- A building assessment report with information on cost-effective energy efficiency improvements for the property and no-cost control adjustments.
- Assessment of major energy end-uses and building components such as insulation levels, heating system, domestic hot water system, building controls, lighting, and appliances. Customers that pursued projects received referrals to authorized contractors and information on MERC and Otter Tail rebates.
- Boiler control assessment and adjustments to maximize energy savings and occupant comfort.
- Installation of energy saving measures including:
 - LED bulbs
 - low-flow showerheads
 - faucet aerators
 - pipe wrap on boiler and domestic hot water pipes
 - temperature assessment and setback of water heater when warranted to maximize residence safety and energy savings.

School kit distribution

The Home Direct Install program offered energy efficient items and educational materials primarily to fifth grade students, and on a limited basis to sixth grade students, in school districts

throughout Otter Tail's service area. Otter Tail implemented the LivingWise program using AM Conservation Group, a contracted third-party.

AM Conservation Group representatives successfully completed outreach by contacting schools throughout our service territory school age children of Otter Tail customers. AM Conservation Group ordered the 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 temperature gauge for the refrigerator. Along with the products, the kits included information about the products and installation instructions.

Integration into lesson plans for teachers was another key deliverable for the Home Direct Install program by providing all teachers at participating schools with an instruction guide and lesson plans. Participating students received a workbook and study guide following the teacher's instruction guide. All teachers participating in the program reported they would recommend participation to their peers.

Participation and Budget

PARTICIPATION AND BUDGET – 2021			
Home Direct Install	Actual	Proposed	% of Goal
Participation	15,924	11,250	142%
Budget \$	\$189,731	\$136,000	140%

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 – 2021	
Home Direct Install	At the Generator (DSMore Summer Coincident Peak kW)
Energy Savings – kWh	1,307,547
Demand Savings – kW	137.19

HOME ENERGY FEEDBACK

The Energy Feedback program consists of two components: Aclara Technologies Home Energy Analyzer (HEA) and an Opower Home Energy Report (HER). These behavior-based programs aim to maximize energy savings achieved through behavior changes that result from providing customers personalized and comparative energy use information.

The HEA component is an opt-in program that provides feedback to residential users through an online portal. The HER project is an opt-out program based on direct mail delivery of up to four comparative energy usage reports to participating Minnesota residential customers each year.

Home Energy Analyzer

HEA enables users to understand their individual energy use through online presentation of up to 24 months of billing history and analytics. It includes a “My Energy” section that features a home energy profile. Customers enter details about the age and size of home, appliance inventory, insulation and window features, heating system, and energy consumption. The data is compiled and included in an energy analysis. Customers can set a personal savings goal and are presented energy saving actions that will help them achieve their desired goal.

Minnesota residential customers were encouraged to participate in use of the HEA tool in the following ways:

- Company’s website, including hero-spot ads presented on the home page.
- Bill inserts.
- Digital billboard.
- Digital and social media campaigns.
- Customer service guide provided to all new customers.
- Online services brochure provided to all new customers.

To encourage participation, the Company offered an incentive to customers to use the tool to update their home energy profile, savings goal, and/or action plan. Customers completing the home energy profile step were presented with more accurate energy benchmarking analysis within the HEA portal and received a \$20 gift card.

Opower Home Energy Reports

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

- Comparisons of recent energy use to a group of nearby similar homes.
- Comparison of recent energy use to current use, tracking changes over time.
- Energy efficiency tips selected based on the home’s energy use pattern and season, and household heating type.

Participation in the program is defined as any Minnesota residential customer that received one or more personalized HER during 2021.

Participation and Budget

PARTICIPATION AND BUDGET – 2021			
Energy Feedback	Actual	Proposed	% of Goal
Aclara HEA Participation	1,452	2,500	58%
Opower HER Participation	38,607	33,000	117%
Budget \$	\$337,273	\$355,000	95%

Evaluation Methodology – Home Energy Analyzer

Annually since 2010, Otter Tail contracted with Integral Analytics to perform an evaluation of the Bill Analyzer project. The methodology used in 2010 was approved by DER 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 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 provided \$17,200 in net benefits back to Minnesota customers. However, those benefits were nearly depleted when the \$14,750 cost to contract with Integral Analytics to complete the HEA evaluation was factored into the program results. Additionally, evaluation costs for 2021 were expected to be higher. Therefore, Otter Tail determined to forgo the evaluation to save those costs and is not claiming energy savings associated with this portion of the Energy Feedback program for 2021.

For 2022, Otter Tail will continue to offer the HEA tool to customers as an energy-savings educational and awareness service. Otter Tail does not plan to evaluate or claim energy savings for this component in 2022 results. During 2022, the Company will evaluate how to improve the program design and will inform the department of future changes.

Evaluation Methodology – Opower HER

The 2021 evaluation of energy savings for the Opower 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 demographic data, to the extent available from a third-party vendor, about participants, 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 for update 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 community, and closely resembles 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 program in 2021 totaled 11,935 MWh, equal to an average 309.13 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 2021, the energy savings associated with behavioral change has been reduced by two-thirds, based on the Decision¹ by the Deputy Commissioner of the DER.

ENERGY AND DEMAND RESULTS – 2021	
Aclara Home Energy Analyzer	At the Generator (DSMore Summer Coincident Peak kW)
Energy Savings – kWh	0
Demand Savings – kW	0

ENERGY AND DEMAND RESULTS – 2021	
Opower Home Energy Reports	At the Generator (DSMore Summer Coincident Peak kW)
Energy Savings – kWh	4,338,777
Demand Savings – kW	4,863.28

ENERGY AND DEMAND RESULTS – 2021	
Energy Feedback Combined Results	At the Generator (DSMore Summer Coincident Peak kW)
Energy Savings – kWh	4,338,777
Demand Savings – kW	4,863.28

HOME ENERGY MANAGEMENT

The Company's Home Energy Management program consists of the previously approved residential Air Conditioning Control program (CoolSavings) that included cycled control of central air-conditioning systems and heat pumps, and the previously approved Water Heater Store & Save Program that promoted control of water heaters and grid-enabled technologies.

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 prorated 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.

¹April 26, 2012, Docket Nos. E,G999/CI-08-133 and E017/CIP-10-356.

Controlled water heating storage is one of Otter Tail’s largest residential direct load management programs. Water Heater Store and Save gives participating customers a discounted rate or a bill credit in exchange for allowing the Company to curtail their water heating energy use 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 2021, Otter Tail controlled air conditioning 59 days totaling 212 hours and 2 minutes. This control time is within the 300-hour control limit in the air conditioning rider. Water heaters were controlled approximately 630 hours in 2021 over 241 days. Water heater control uses a protocol of frequent, short-duration events based on pricing signals aimed at maximizing savings to customers from water heater control.

Participation and Budget

Otter Tail initially filed the Water Heating Store & Save program with 100 percent residential participation. The program 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.

PARTICIPATION AND BUDGET – 2021			
Home Energy Management	Actual	Proposed	% of Goal
Participation	18,473	18,905	98%
Budget \$	\$85,621	\$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 – 2021	
Home Energy Management	At the Generator (DSMore Summer Coincident Peak kW)
Energy Savings – kWh	307,979
Demand Savings – kW	9,668.66

HOME HEATING AND COOLING

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

Heat pumps

The Heat Pump component targets residential customers currently using or considering the installation of less efficient resistance electric heating and cooling systems by offering rebates for high-efficiency air source heat pumps or geothermal heat pumps. The Company relies on Energy Star qualifications as the minimum equipment efficiency requirement for air source and geothermal heat pumps.

In 2021 air source heat pumps met the following minimum rating requirements.

Air Source Heat Pumps			
Energy Star	HSPF	SEER	EER
Split System	> or = 8.5	> or = 15.0	12.5
Package Terminal	-	-	> or = 12.0
CCHP- Ducted	> or = 9.0	> or = 15.0	-
CCHP- Ductless	> or = 10.0	> or = 15.0	-

A special category of air source heat pump, the cold climate heat pump (CCHP), was included in our 2021 program. CCHPs are identified as rated with a heating seasonal performance factor (HSPF) of 9 or greater for ducted systems or an HSPF of 10 or greater for ductless systems, and either labeled Energy Star or have a minimum seasonal energy efficiency ratio (SEER) rating of 15 or greater.

In 2021 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

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 schedule from anywhere using a smart device including a mobile phone, tablet, or computer. Tier III are analytics-capable thermostats that offer energy saving features in addition to those of the Tier II thermostats, including coaching, 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 and digital media.
- Bill messages.
- Bill inserts.
- Digital billboard.
- Program, rate, technology, and rebate pages described within the Company's website.
- Hero spots on the home page of the website.

Participation and Budget

PARTICIPATION AND BUDGET – 2021			
Home Heating and Cooling	Actual	Proposed	% of Goal
Participation	602	255	236%
Budget \$	\$1,067,901	\$462,000	231%

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 – 2021	
Home Heating and Cooling	At the Generator (DSMore Summer Coincident Peak kW)
Energy Savings – kWh	4,905,494
Demand Savings – kW	363.27

HOME LIGHTING

The Company's Home Lighting program aims to 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 \$1.50 per LED bulb.
- Leverage advertising dollars for retailers.
- Highlight Otter Tail's sponsorship of the promotions through press releases, in-store displays, and 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 24 retailers in our service territory that participated in the 2021 campaign, contributing to distribution of approximately 179,300 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.
- Energy efficient lighting modules on Home Energy Reports mailed to customers through the Energy Feedback program.
- LED lighting factsheets available upon request.
- Special collaborations with two local participating retail stores, including live radio remotes highlighting the benefits of LEDs and special pricing on LED lamps through Otter Tail's program. The events paired nicely with the retail stores' customer appreciation events and were well attended by local customers.

Other unique promotions included the following:

- The Company provided eight LED bulbs to Home Appliance participants for each appliance recycled through the Home Appliance program. This extended customer education about LED bulbs and increased the total bulb distribution.
- The Company collaborated with local nonprofit organizations to distribute LED holiday light strings through the Fall of 2021. LED holiday strings were distributed to customers in exchange for nonperishable food items and/or cash donations to the nonprofit organization. The Company organized and staffed these events in Hallock, Crookston, Bemidji, Morris, and Fergus Falls, holding all events outdoors with COVID-19 precautionary measures in place. Results included donations of approximately 6,227 pounds of food and \$3,220 in cash to benefit food shelves and a separate \$250 cash donation to the Fergus Falls Fire Department for hosting and volunteering to assist with distributions and donation collections at one event.

Participation and Budget

PARTICIPATION AND BUDGET – 2021			
Home Lighting	Actual	Proposed	% of Goal
Participation	179,605	106,985	168%
Budget \$	\$623,204	\$545,000	114%

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 – 2021	
Home Lighting	At the Generator (DSMore Summer Coincident Peak kW)
Energy Savings – kWh	7,720,523
Demand Savings – kW	765.29

DIRECT IMPACT – LOW-INCOME

HOUSE THERAPY

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

House Therapy -- Owner / Renter Detail 2021			
Installed measures	Owners	Renters	Total
Audit	57	36	93
Custom Measure*	2	24	26
Engine Block Timer	7	0	7
Faucet Aerator	26	28	54
Freezer	23	1	24
LED	560	510	1,070
Low-flow Showerhead	10	14	24
Pipe Insulation	4	0	4
Refrigerator	36	24	60
Power Strip Tier II	46	47	93
Water Heater	16	1	17
Water Heater - Reduce Temperature	30	16	46
Water Heater--Controlled Ser. Rate	10	0	10
Weatherization			
Attic Insulation Materials	4	13	17
Blower Door Test	6	1	7
Door Maintenance Materials	1	0	1
Exterior Wall Insulation Materials	0	1	1
Foundation or Basement Insulation Materials	0	1	1
Gaskets Kit Materials	0	12	12
Other Weatherization Materials	51	0	51
Thermal Analysis	6	13	19
Window Maintenance Materials	7	0	7

*Custom measures include LED hard-wired retrofits and cold climate heat pumps.

House Therapy -- Owner / Renter Detail - 2021				
	CAP Spending	Percent	Participation	Percent
Owners	\$131,695	56%	77	73%
Renters	\$105,440	44%	29	27%
Total	\$237,135	100%	106	100%

Otter Tail relies on local Community Action Program (CAP) Agencies to provide valuable technical expertise and implementation services for the House Therapy program. COVID-19 presented challenges for implementation of the House Therapy program in 2020 and this trend continued into 2021, forcing CAP agencies to temporarily discontinue in-home audits and other related services. Local CAP agencies further reported delays in delivery and installation of Energy Star appliances and continue to do so. Even with these challenges, Otter Tail is proud of the effort put forth by Company staff, CAP agency partners, and other advocates for customers served by the House Therapy program.

Additional efforts include:

- 1) Work with Fergus Falls Area Habitat for Humanity to install Energy Star cold climate air source heat pumps in two newly constructed homes. In addition to the energy efficient measures, staff coordinated an employee volunteer effort on the jobsite to assist in the construction of these homes and was recognized with a “Business of the Year” award from the Fergus Falls Area Habitat for Humanity.
- 2) Partnership with Northwoods Habitat for Humanity of Bemidji to install two cold climate heat pumps in project homes they constructed.
- 3) Our Energy Management team identified an opportunity to replace inefficient bulbs with LEDs in an income-qualified senior housing apartment building in Bemidji resulting in the installation of 192, 9-watt bulbs in 49 individual housing units.
- 4) An extended effort from our CAP agencies resulted in upgrades at two separate income-eligible multifamily sites. The first project consisted of efficiency upgrades in two separate six-plex buildings on one site. Specific measures included a building envelope audit, weatherization measures, appliance upgrades, LED lighting, and cold climate air-source heat pumps to replace electric baseboard heat and through-the-wall air conditioning units. The second project took place at an 8-plex building at a different site. Efficiency upgrades included a building envelope audit, refrigerator replacements and LED bulb installations. Further weatherization improvements and heat pump installations are planned for 2022.

The Company typically meets annually with the local CAP Agencies to review the program and ensure House Therapy is implemented as cost-effectively as possible. With COVID-19 concerns throughout much of 2021, Company staff instead chose to meet virtually with CAP agency

representatives to review 2021 activities and discuss upcoming program changes. The Company commends the agencies' commitment to providing weatherization expertise and excellence in implementation services for this program even with the COVID-19 related challenges throughout 2021.

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 we list contact information for each of the agencies that implement the program.
- Through the CAP Agencies contracted with Otter Tail to implement the program.

Participation and Budget

PARTICIPATION AND BUDGET – 2021			
House Therapy	Actual	Proposed	% of Goal
Participation	106*	180	59%
Budget \$	\$321,458	\$204,000	158%

*Total participation of 106 includes 57 individual rental apartments from two separate multifamily buildings participating in House Therapy but reported by the Company as only two participants. The Company did not report any participants from its residential Energy Star Lighting program, including in-store sales of LED bulbs as participants in House Therapy.

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 – 2021	
House Therapy	At the Generator (DSMore Summer Coincident Peak kW)
Energy Savings – kWh	279,913
Demand Savings – kW	30.85

LOW-INCOME AND RENTER DETAILS

Pursuant to the Minnesota Department 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	18,473	5,861	128
Home Appliance	799	830	248	60
Home Lighting	106,985	179,605	33,165	216
Energy Feedback Program	35,500	40,059	11,005	4267
Home Heating & Cooling	255	602	79	1
Home Direct Install	11,250	15,924	3,488	8
Total - Residential	183,869	276,098	56,999	4,680
Low-Income				
House Therapy	180	106	180	106
Total - Low-Income	180	106	180	106

* 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 2021.

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	18,473	3,970	175
Home Appliance	799	830	168	70
Home Lighting	106,985	179,605	22,467	30
Energy Feedback Program	35,500	40,059	7,455	6,428
Home Heating & Cooling	255	602	54	9
Home Direct Install	11,250	15,924	2,363	2
Total - Residential	183,869	276,098	36,476	6,714
Low-Income				
House Therapy	180	106	38	29
Total - Low-Income	180	106	38	29

*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	307,979	\$85,621	97,997	\$28,830	1,435	\$630
Home Appliance	369,424	\$170,000	437,195	\$185,566	114,521	\$52,700	26,137	\$1,585
Home Lighting	4,235,726	\$545,000	7,720,523	\$623,204	1,313,075	\$168,950	7,404	\$420
Energy Feedback Program	4,035,646	\$355,000	4,338,777	\$337,273	1,251,050	\$110,050	479,539	\$42,670
Home Heating & Cooling	1,512,154	\$462,000	4,905,494	\$1,067,901	468,768	\$143,220	30,078	\$241
Home Direct Install	1,213,344	\$136,000	1,307,547	\$189,731	376,137	\$42,160	18,151	\$97
Total - Residential	11,682,415	\$1,985,000	19,017,514	\$2,728,848	3,621,549	\$615,350	562,745	\$45,643
Low-Income								
House Therapy	200,357	\$204,000	279,913	\$321,458	200,357	\$204,000	279,913	\$321,458
Total - Low-Income	200,357	\$204,000	279,913	\$321,458	200,357	\$204,000	279,913	\$321,458

* 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 2021.

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-reference 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 low-income participation, kWh savings, and expenses attributed to low-income customers specifically in Home Lighting, Otter Tail's largest program in terms of participants, kWh savings, and expenses is likely higher than reported 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 such as Home Lighting under this 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. The Company therefore reported low-income Home Lighting participants as those who the Company could cross reference between its hard-wired and new construction measures and those eligible for energy assistance.

DIRECT IMPACT – COMMERCIAL

COMMERCIAL AUDITS AND STUDIES

Otter Tail's Audits and Studies program provides 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 provides incentives to qualifying commercial customers to complete RCx studies and implement cost effective, energy savings measures. The RCx program proposes a tiered approach to delivering RCx services. The RCx Lite tier provides incentives for building tune-ups, where the RCx tier incentivizes 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 be assured of 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 increases the likelihood that customers with buildings and building types with the best RCx opportunities capitalize on the RCx process.

Compressed Air Audits/RCx/Leak Studies

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

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

Compressed air RCx studies focus on savings potential related to compressed air system setpoints, misapplications of compressed air, and other compressed air operating practices. Customers agree 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 participating in Otter Tail's Commercial Direct Install program are 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 focuses on installation of low-cost efficiency measures while another auditor tours the business to identify measures. The Company follows with a two-page report emailed to participants identifying efficiency investment opportunities along with cost estimates, energy cost savings, and payback information. Customers express appreciation for the efficiency measures and reports, with a consistent percentage of customers moving forward with implementing measures identified in their free assessments.

Otter Tail promotes 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 explaining the components.
- Personal consultations between program implementation staff and customers.
- Program, technology, and rebate information available on the Company's website.

Participation and Budget

PARTICIPATION AND BUDGET – 2021			
Commercial Audits and Studies	Actual	Proposed	% of Goal
Participation	277	11	2,518%
Budget \$	\$309,029	\$268,000	115%

Evaluation Methodology

Traditional RCx

Otter Tail, together with a third-party engineering consulting firm, reviews 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 uses 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 perform post-installation functional testing at each facility. This on-site M&V confirms each measure's implementation in accordance with the engineering recommendations. The savings calculations are revised based on observed conditions post-implementation and reflect any alteration to the measure that results from customer implementation.

Compressed Air

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 assessment performed by independent third-party engineers or vendors.

Energy Savings

ENERGY AND DEMAND RESULTS – 2021	
Commercial Audits and Studies	At the Generator (DSMore Summer Coincident Peak kW)
Energy Savings – kWh	815,003
Demand Savings – kW	78.97

COMMERCIAL DIRECT INSTALL

The Commercial Direct Install (CDI) program offers 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 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 promotes the CDI program through a targeted strategy based on community size and geographic location. The Company relies on personal contacts with city administration and government, Chamber of Commerce personnel, and any other business organizations to determine overall interest in implementing the program. The Company has also leveraged valuable assistance from the Clean Energy Resource Team (CERTs) in conducting outreach with potential participants. Once Otter Tail has discussed the program with community civic and business leaders, promotion of the CDI program for potential participants includes the following steps:

1. Otter Tail coordinates a mutually convenient time between internal staff, CERTs staff, and the Company's third-party implementation partner to conduct door-to-door outreach efforts at the community business district level.
2. Otter Tail notifies community government and city leaders of the scheduled outreach and direct install dates, verifying that local law enforcement is aware of upcoming promotional efforts and implementation of the direct install measures.
3. CERTs staff spends one to two days contacting potential participants via telephone, providing information about the program, and scheduling dates for the program implementation while determining customer interest.
4. Otter Tail, CERTs, and Otter Tail's program implementation partner discuss results from CERTs outreach efforts and businesses requesting participation in the CDI program.
5. Otter Tail's program implementation partner completes assessments for participating businesses and installation of all pertinent measures complimentary to program participants.

6. Following completion of all direct installation measures, Otter Tail follows up with participating businesses on opportunities for efficiency identified during the assessment completed by the Company's implementation partner.

Participation and Budget

PARTICIPATION AND BUDGET – 2021			
Commercial Direct Install	Actual	Proposed	% of Goal
Participation	3,220	1,369	235%
Budget \$	\$56,492	\$42,000	135%

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 – 2021	
Commercial Direct Install	At the Generator (DSMore Summer Coincident Peak kW)
Energy Savings – kWh	784,616
Demand Savings – kW	97.67

COMMERCIAL ENERGY MANAGEMENT

The Commercial Energy Management program includes the previously approved commercial air conditioning control (CoolSavings) program. CoolSavings air conditioning control program targets small commercial customers in Minnesota with central air conditioning systems. Customers are 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 promotes 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 2021, Otter Tail controlled air conditioning 59 days, totaling 212 hours and 2 minutes. This control time is within the 300-hour control limit in the air conditioning rider.

PARTICIPATION AND BUDGET – 2021			
Commercial Energy Management	Actual	Proposed	% of Goal
Participation	300	512	59%
Budget \$	\$10,082	\$30,000	34%

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 – 2021	
Commercial Energy Management	At the Generator (DSMore Summer Coincident Peak kW)
Energy Savings – kWh	6,440
Demand Savings – kW	425.42

COMMERCIAL HEAT PUMPS

The Air Source and Geothermal 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 2021 Otter Tail relied on Energy Star qualifications as the reference for equipment efficiency requirements.

Air source heat pumps met the following rating requirements:

Air Source Heat Pumps			
Energy Star	HSPF	SEER	EER
Split System	> or = 8.5	> or = 15.0	12.5
Package Terminal	-	-	> or = 12.0
CCHP- Ducted	> or = 9.0	> or = 15.0	-
CCHP- Ductless	> or = 10.0	> or = 15.0	-

For 2021, Otter Tail also promoted a special category of air source heat pumps, the Cold Climate Heat Pump (CCHP). CCHPs are identified as rated with a HSPF of 10 or greater for ductless units and a HSPF of 9 or greater for ducted units. They must also be labeled Energy Star or have a minimum rating of 15 SEER.

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

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 2021.

Participation and Budget

PARTICIPATION AND BUDGET – 2021			
Heat Pumps	Actual	Proposed	% of Goal
Participation	230	69	333%
Budget \$	\$989,520	\$392,000	252%

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 – 2021	
Heat Pumps	At the Generator (DSMore Summer Coincident Peak kW)
Energy Savings – kWh	4,947,270
Demand Savings – kW	520.60

COMMERCIAL LIGHTING

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

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

- *Taking Care of Business* commercial and industrial CIP brochure.
- Bill inserts.
- 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 and Budget

PARTICIPATION AND BUDGET – 2021			
Commercial Lighting	Actual	Proposed	% of Goal
Participation	1,061	840	126%
Budget \$	\$1,754,745	\$1,665,000	105%

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 baseline efficiency systems to determine kilowatt-hour savings. The TRM 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 – 2021	
Commercial Lighting	At the Generator (DSMore Summer Coincident Peak kW)
Energy Savings – kWh	17,414,104
Demand Savings – kW	2,733.30

COMMERCIAL and INDUSTRIAL FOCUSED EFFICIENCY

Otter Tail's largest industrial customers collectively make up less than two percent of all Minnesota customers but account for more than 60 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 targets 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 uses a proactive approach to benchmarking energy management practices and identifies specific opportunities for efficiency improvements in large commercial and industrial facilities.

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

1. **Proactive participant identification:** Otter Tail considers anticipated customer engagement and energy savings potential while screening potential participants. The program focuses 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

bringing 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 qualifying customers, Otter Tail funds the Envinta One2Five 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 develops a schedule of efficiency projects with bonus incentives 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 follows the Measurement and Verification Protocols for end-use efficiency projects meeting the formal measurement and verification requirements established by the DER.

Participation and Budget

PARTICIPATION AND BUDGET – 2021			
Industrial Focused Efficiency	Actual	Proposed	% of Goal
Participation	11	11	100%
Budget \$	\$758,009	\$302,000	251%

Participation numbers represent the Company's strategy of cost effectively reaching slightly smaller commercial and industrial customers through the program, while still integrating the key steps of identifying savings opportunities and providing bonus incentives in exchange for commitment from customers to implement measures by established deadlines.

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 – 2021	
Industrial Focused Efficiency	At the Generator (DSMore Summer Coincident Peak kW)
Energy Savings – kWh	8,330,879
Demand Savings – kW	1,061.68

COMPRESSED AIR EFFICIENCY

The Compressed Air Efficiency program provides 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, with this compressed air resource 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 on 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 – 2021			
Compressed Air Efficiency	Actual	Proposed	% of Goal
Participation	8	6	133%
Budget \$	\$38,377	\$48,000	80%

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 assessment performed by independent third-party engineers or vendors.

Energy Savings and Adjustments

ENERGY AND DEMAND RESULTS – 2021	
Compressed Air Efficiency	At the Generator (DSMore Summer Coincident Peak kW)
Energy Savings – kWh	195,540
Demand Savings – kW	34.12

CUSTOM EFFICIENCY GRANTS (CUSTOM PROJECTS)

The Grants program offers customized incentives to commercial and industrial customers for conservation and efficiency improvements. In 2021, Otter Tail analyzed a variety of customer-submitted grant projects with 26 of these projects approved for incentives.

Custom Projects	Quantity
Air Handling Equipment	1
Appliances	1
Automation	1
Building Envelope Improvements	2
Cooking Equipment	1
Cooling System	5
Heat Recovery System	1
Heating System	1
Motors	4
Process Improvements	1
Production Equipment	3
Pump	2
Refrigeration System	1
Variable Speed Drive	1
Ventilation System	1
Total	26

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 – 2021			
Custom Efficiency Grants	Actual	Proposed	% of Goal
Participation	26	35	74%
Budget \$	\$432,911	\$321,000	135%

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 will also consider and verify estimated energy savings when submitted by a qualified and independent third-party energy services provider. Otter Tail provides expertise as needed, helps commercial and industrial customers determine the energy and demand savings needed to develop a grant proposal, and often works with internal or third-party engineers to determine and verify savings.

The Large Custom Grant Measurement and Verification (M&V) protocols affect any large project with estimated savings exceeding one million kilowatts hours. The protocols include several options for measurement and verification of large grant projects that meet the protocol criteria. Otter Tail had two projects that qualified for formal M&V in 2021 under the Custom Efficiency Grants program. Otter Tail received email notifications approving both M&V reports on December 20, 2021, from Department staff.

Energy Savings and Adjustments

ENERGY AND DEMAND RESULTS – 2021	
Custom Efficiency Grants	At the Generator (DSMore Summer Coincident Peak kW)
Energy Savings – kWh	7,473,795
Demand Savings – kW	1,321.37

DRIVE POWER

The Company's Drive Power program encourages commercial and industrial customers to improve the efficiency of motor and drive 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 in various applications. We offer incentives for high-efficiency totally-enclosed fan-cooled and open drip-proof motors sized from one horsepower to five-hundred horsepower. Incentives are also available for customers upgrading to efficient motors with explosion-proof enclosures sized between one and three-hundred horsepower. The Company also provides incentives for select electronically commutated motors installed in exhaust fan applications.

Adjustable Speed Drives

Induction motors are the workhorses of industry, used in virtually every manufacturing plant and office building. However, the single most potent 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. Adjustable speed drives (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 we offer incentives based on horsepower for seasonal and nonseasonal ASDs.

Otter Tail promotes 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 and Budget

PARTICIPATION AND BUDGET – 2021			
Drive Power	Actual	Proposed	% of Goal
Participation	545	227	240%
Budget \$	\$447,703	\$250,000	179%

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 – 2021	
Drive Power	At the Generator (DSMore Summer Coincident Peak kW)
Energy Savings – kWh	6,122,225
Demand Savings – kW	785.09

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 promotes 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 – 2021			
Refrigeration	Actual	Proposed	% of Goal
Participation	79	72	110%
Budget \$	\$150,250	\$83,000	181%

Evaluation Methodology

The Company uses 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 – 2021	
Refrigeration	At the Generator (DSMore Summer Coincident Peak kW)
Energy Savings – kWh	1,060,857
Demand Savings – kW	154.73

DIRECT IMPACT – OTHER

COMPANY-OWNED STREET AND AREA LIGHTING

Otter Tail provides illumination services to 161 Minnesota communities and other customers through company ownership, operation, and maintenance of approximately 19,677 street and area lighting fixtures. Customers receive hassle-free illumination service, including equipment installation, asset rental, electricity, and maintenance for a convenient monthly charge on the customer's electric service bill. Otter Tail installs street and area lighting fixtures at the request of our customers and, consequently, classifies electricity consumption for company-owned street and area lighting fixtures as customer electricity usage.

The objective of the Company-owned Street and Area Lighting program is to retrofit all Company-owned street and area light fixtures used in providing illumination services for retail customers from HID to LED technology.

Participation and Budget

PARTICIPATION AND BUDGET – 2021			
Company-Owned Street & Area Lighting	Actual	Proposed	% of Goal
Participation	3,442	3,941	87%
Budget \$	\$342,916	\$881,749	39%

Otter Tail worked closely with leaders of municipal governments in launching its successful street and area lighting retrofit campaign in 2018 and continued this strategy through 2021. The Company is very pleased to report completion of its Company-owned Street and Area Lighting project in 2021.

The Company was able to minimize third party-program administration expenses by leveraging services offered through existing relationships with key vendors as well as internal procedures already in place for existing street and area lighting services. Otter Tail is very pleased with the quality and performance of LED lighting products used in the retrofits. Customer feedback on the new LEDs has also been extremely positive, with little to no customer complaints. Field representatives for Otter Tail continue to report how well the project has been received for being such a significant change in our communities.

The Company-owned Street and Area Lighting program has been a success from the operations/installation side as well. Otter Tail completed all LED retrofits in 2021 by installing 3,442 LEDs, while only spending 39 percent of budget or \$349,916. By managing expenses closely Otter Tail has ultimately saved customers money, in addition to the energy savings of the

LEDs. This project has become an immense value for customers by reducing energy use, increasing customer satisfaction, and improving safety while keeping costs below budget. The following table summarizes expenses for the Company-owned Street and Area Lighting program for the year:

Summary of 2021 Tracker Account for Street and Area Lighting	Budgeted Expenses	Actual Expenses
CIP Program Evaluation	\$3,000	\$2,996
CIP Rebate (reduction to rate base)	\$178,572	\$151,175
Admin. Costs (external project management and adverting/printing)	\$125,000	\$0
Retirement and Disposal Costs	\$432,803	\$188,745
Return on Incremental Costs of New Lights	\$142,374	\$0
Total Recovery through CIP Tracker	\$881,749	\$342,916

Evaluation Methodology

The Company compares the fixtures being installed to the fixtures being removed to determine energy and demand savings. The savings calculation utilizes the TRM values for hours of operation. Specifics are included in Attachment B: Electric Product Assumptions, approved in the Company's triennial plan.

Energy Savings & Adjustments

ENERGY AND DEMAND RESULTS – 2021	
Company-Owned Street & Area Lighting	At the Generator (DSMore Summer Coincident Peak kW)
Energy Savings – kWh	2,020,983
Demand Savings – kW	0.00

PUBLICLY OWNED PROPERTY (POP) SOLAR

The objective of the POP Solar program is to demonstrate the benefits of solar PV generation to rural Minnesota communities, educational facilities, and local and tribal governments by offering incentives for universal solar projects. The project provides incentives for 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 properties, or other public owned properties.

Participation and Budget

PARTICIPATION AND BUDGET – 2021			
Publicly Owned Property Solar	Actual	Proposed	% of Goal
Participation	5	11	45%
Budget \$	\$223,122	\$225,885	99%

Otter Tail’s Energy Management Representatives promote the POP program to public entities across Otter Tail’s service territory. The Company was able to reach its installed kW goal but fell short of its goal of having eleven total participants. This was due to the average selected system size per participant being higher than forecasted.

The Company was happy with the increase in installed kW over previous years with the rebate modification in 2021 to \$1,500/kW, covering approximately 50 percent of project cost. Recent participants, including city and tribal groups, installed over 150 kW of solar in 2021. This rebate along with the announcement of the Minnesota “Solar for Schools” grant program has generated a lot of conversations with schools being served by the Company. A total of seven schools have received early indications of receiving funding if they are able to complete the necessary applications. The Company will monitor to determine if a budget increase will need to be requested to ensure schools benefit from this limited opportunity.

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.

Energy Savings and Adjustments

ENERGY AND DEMAND RESULTS – 2021	
Publicly Owned Property Solar	At the Generator (DSMore Summer Coincident Peak kW)
Energy Savings – kWh	274,971
Demand Savings – kW	65.57

INDIRECT IMPACT PROGRAMS / REGULATORY REQUIREMENTS

ADVERTISING AND EDUCATION – Residential and Commercial

Advertising and Education – Residential

The Advertising and Education program for 2021 targeted Minnesota service area residents of all ages with reinforcing messages to understand energy options and to make conserving energy a lifestyle. The program is designed to include three approaches to achieve its goals:

- *Advertising* that increases awareness of and educates about energy-efficient technologies and motivates individuals to act to conserve energy.
- *Internet-based resources* including YouTube.com videos and web-based content 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

Several media campaigns ran in 2021 that focused on delivering messages about energy-efficient technologies. These included:

- **Cold climate heat pumps:** A television campaign was completed to educate customers about higher-efficiency air source heat pumps.
- **Air conditioning cycling:** A radio and social media campaign was completed to educate customers about the energy saving and peak demand reducing option available through allowing the company to cycle central cooling systems during peak summer periods.
- **The Home Advantage of efficiency options:** A digital and social media campaign to educate customers about the many energy savings opportunities available through technology upgrades for their home and available rebate programs.

Additional advertising support for residential programs included digital billboard space, newsletter articles, a catalog of Conservation Improvement Program offerings available to the Minnesota residential and small commercial customers, and contractor education pieces.

Internet-based resources

This program supports development of promotional and educational materials for the Company website. These materials encourage participation in direct impact energy-efficiency programs in the CIP portfolio. Data is collected from web analytic tools used on the company websites to track unique visitors to the site. Minnesota customer web participation is calculated as 45 percent of the unique visitors to the website material. This represents the portion of Company customers located in Minnesota.

An educational YouTube video series continued to be presented to customers focused on home insulation and maintenance topics:

- Weatherization.
- Furnace filter change out.
- Sealing attic access doors.
- Sealing attic bypass leaks.
- Insulating and sealing rim joists.

Learning environment presentations

Following the COVID-19-related suspension of the in-person interactive lyceum program provided by the Science Museum of Minnesota to fourth through sixth graders at schools in the company's service area, the company sought alternative organizations that could appropriately offer energy and conservation related educational outreach to the children we serve.

Otter Tail partnered with Otter Cove Children's Museum, a unique resource in the region that is targeted to service children up to age 10, offering indoor play space with both educational exhibits and a playground structure under the same roof. Beginning in 2020 the company worked with Otter Cove to develop a number of interactive energy- and conservation-focused exhibits and hands-on learning programs. In July of 2021, several modules related to the region's renewable energy resources and wise-use of energy were created and installed. During 2021, 6,987 children visited the Otter Cove facility and were given the opportunity to interact with the installations. Additionally, Discover Energy!, a set of interchangeable engagements that remix to create 12 monthly unique experiences, was developed for walk-up and staff-led experiences for children and their caretakers. Development was completed in late 2021 and staff-led engagements with groups of children are scheduled throughout 2022.

Participation and Budget

2021 A&E Residential Detailed Participation	
Otter Cove Children's Museum	6,987
Web visits tied to advertising spots	7,523
YouTube videos	6,093
Total	20,603

PARTICIPATION AND BUDGET – 2021			
Residential Advertising & Education	Actual	Proposed	% of Goal
Participation	20,603*	10,000	206%
Budget \$	\$195,868	\$187,000	105%

*Web-based ad participation was not included when the original participation goal was established but was added as an effective means to reach customers.

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 primary methods used is the development 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.

Participation and Budget

ACTUAL / BUDGET – 2021			
Commercial Advertising & Education	Actual	Proposed	% of Goal
Participation	0	100	0%
Budget \$	\$11,194	\$65,000	17%

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 2021. Otter Tail had no new participants in 2021 but continues to service financing plans from previous years.

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 – 2021			
Financing	Actual	Proposed	% of Goal
Participation	0	5	0%
Commercial Budget \$	\$7,010	\$17,000	41%

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 for customers, electricians, insulation installers, other contractors, and Company representatives. In January and February 2021, 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 – 2021			
Implementation & Training	Actual	Proposed	% of Goal
Residential Participation	2	175	1%
Residential Budget \$	\$43,684	\$37,000	118%
Commercial Participation	259	250	104%
Commercial Budget \$	\$51,144	\$60,000	85%

INTEGRATED BUILDING DESIGN PLUS – 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 Integrated Building Design Plus (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, and
- 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 – 2021			
Integrated Building Design Plus	Actual	Proposed	% of Goal
Participation	3*	6	50%
Budget \$	\$212,356	\$224,000	95%

*The three 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 continues 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 development of an online customer portal for submitting rebate applications or checking the status of rebates.

ACTUAL / BUDGET – 2021			
Program Development	Actual	Proposed	% of Goal
Planning – Regulatory Affairs	\$267,479	\$300,000	89%
Research & Development	\$120,448	\$225,000	54%

REGULATORY REQUIREMENTS

PUC ASSESSMENTS / REGULATORY (NGEA) ASSESSMENTS

PUC ASSESSMENTS / REGULATORY (NGEA) ASSESSMENTS			
	Actual	Proposed	% of Goal
PUC Assessments	\$954	\$20,000	5%
Regulatory Assessments (NGEA)	\$99,051	\$110,000	90%
Transmission & Distribution Cost Study	\$0	\$0	0%

ASSESSMENTS	
NGEA Assessment – Technical Assistance	\$16,172
NGEA Assessment – R&D Grant	\$72,772
NGEA Assessment – Facilities Efficiency	\$10,107
Total NGEA Assessments	\$ 99,051
Direct PUC Assessments	\$954
Transmission & Distribution Cost Study	\$0
Total	\$100,005

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 2021 CIP tracker account. Each is detailed separately below.

ACCOUNTING ADJUSTMENTS

Seven accounting adjustments were required in 2021 totaling \$9,078:

- four adjustments in the Home Lighting program to record true ups to the 2020 and 2021 year-end estimated service provider billings and to record bulbs purchased in 2020 but distributed in 2021 as well as bulbs purchased in 2021 but to be distributed in 2022 in the Appliance Recycling program, reflecting an increase in costs of \$5,300;
- one adjustment in the Home Appliance program to record a true up to the 2021 year-end estimated service provider billing, increasing costs by \$2,494;
- one adjustment in the House Therapy program to record 2020 billing corrections, resulting in a decrease in costs of \$20;
- one adjustment in the Commercial Direct Install program to record 2020 billing corrections, increasing costs by \$1,303.

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.

ELECTRONICALLY COMMUTATED MOTORS

The Electronically Commutated Motors (ECM) program encouraged customers to install an efficient ECM as a part of a new heating system rather than selecting a system with a lower efficiency motor option.

Otter Tail provided customers a \$100 rebate for a contractor-installed unit.

Participation and Budget

PARTICIPATION AND BUDGET – 2021			
Electronically Commutated Motors	Actual	Proposed	% of Goal
Participation	73	0	0%
Budget \$	\$10,578	0	0%

Otter Tail discontinued the program at the end of 2020, but the company documented ECM installations that took place in 2020 up until a deadline for rebate application submittal of March 31, 2021. Participation and expense numbers reflect applications for ECM rebates submitted from January 1, 2021, to March 31, 2021.

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 – 2021	
Electronically Commutated Motors	At the Generator (DSMore Summer Coincident Peak kW)
Energy Savings – kWh	57,992
Demand Savings – kW	16.98

OTP CIP PROJECTS

Otter Tail completed a LED lighting upgrade at its Fergus Falls facility in 2021. The table below reflects this single participant and cost to complete the lighting project.

Participation and Budget

PARTICIPATION AND BUDGET – 2021			
OTP CIP Projects	Actual	Proposed	% of Goal
Participation	1	0	0%
Budget \$	\$28,757	0	0%

CARRYING COSTS

Charges totaled \$13,163 for carrying costs on the balance of the CIP Tracker, as shown in Appendix A, Table 1.

The Commission and Otter Tail have agreed that allowing carrying charges to be added to the CIP Tracker Account will compensate the Company for the time value of the money invested in CIP programs.

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 December 24, 2020 Order, Docket No. E017/GR-20-719, set the short-term cost of debt at 3.37 percent, effective January 1, 2021. Finally, 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 count the carrying cost charges toward the spending requirement (see Appendix A, Table 5 Status Report Recap) but does include the charges in the CIP Tracker for recovery.

Conservation Cost Recovery Adjustment

CONSERVATION COST RECOVERY ADJUSTMENT

This filing constitutes the 28th 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;
3. Subtract current year CIP cost recovery through base rates as estimated based on Company's projected retail sales.

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 CCRA charge.

Table 1

Year	CIP Surcharge / CCRA Factor	Previous Year Ending Tracker Balance
Jul 2013 / Jun 2014	\$0.00175/kWh	\$3,572,621
Oct 2014 / Sep 2015	\$0.00263	\$4,835,558
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 / Sept 2020	\$0.00710	\$5,994,017
Oct 2020 / Nov 2021	\$0.00485	\$3,955,955
Dec 2021 / Sept 2022	\$0.00582	\$2,067,599
Oct 2022 / Sept 2023	\$0.00667	\$2,870,213

Otter Tail has included the CIP tracker, Exhibit 1, which uses the Commission approved per-kWh method from January 2022 through September 2022. For October 2022 through September 2023, Otter Tail is proposing to change the surcharge to \$0.00667/kWh. Exhibit 2 illustrates the monthly impacts for each of the Company's ten rate classes. In Otter Tail's current rate case, Docket No. E017/GR-20-719, Otter Tail has proposed 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-15-1033.¹ Once final rates are approved in the rate case docket by the MPUC, Otter Tail will make a filing in this docket to account for the roll-in of the CCRC into the CCRA and allocation of CCRA cost recovery across the Company's ten rate classes.

Otter Tail has also included the prior year's CIP tracker, Exhibit 3, per the Department's request in Docket Nos. E017/M-20-451 and E017-M-21-228.

Calculation of CCRA and Conservation Cost Recovery Charge (CCRC)

During the 21-month period from end of year 2021 through the end of September 2023, Otter Tail plans to reduce the CIP Tracker balance of \$2,870,213 to an estimated negative \$13,394 as illustrated in Table 2 below.

Table 2

	Jan 2022 - Sep 2022	Oct 2022 - Sep 2023
Beginning Balance	\$2,870,213	\$2,064,794
Carrying Charges	\$12,050	(\$1,876)
CIP Program Expenses	\$6,102,804	\$9,300,000
CIP Incentive Proposed	\$2,900,388	\$3,000,000
CCRC through Base Rates	(\$2,723,079)	(\$3,602,155)
CCRA - CIP Rider	(\$7,097,581)	(\$10,774,157)
Ending Balance	\$2,064,794	(\$13,394)
CCRA Method	\$0.00582/ kWh	\$0.00667/ kWh

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

- \$21,313,366 of additional expenses from carrying charges, CIP incentive, and CIP program expenses.
- \$6,325,234 collected from the CCRC.
- \$17,871,739 collected from the CCRA, of which \$10,774,157 will be collected during the 12 months from October 2022-September 2023.

As illustrated in Exhibit 1, the proposed change in the surcharge will increase the CCRA by approximately 15 percent. By October 1, 2023, the CIP tracker balance is projected to decrease to an estimated negative \$13,394. 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

¹Docket No. E017/GR-15-1033, Findings of Fact, Conclusions, and Order at 62 ((May 1, 2017)).

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 2021 and 2022 through September 2023. Line 6 removes from the CIP tracker the portion of CIP costs that are included in base rates. The base rate amount from January 2022 through September 2023 is calculated each month as forecasted retail sales multiplied by the approved CCRC in base rates of \$0.00223/kWh. This rate was approved in Otter Tail's 2016 general rate case (Docket No. E017/GR-15-1033). In Otter Tail's current rate case, Docket No. E017/GR-20-719, Otter Tail has proposed to roll the CCRC \$0.00223/kWh into the CCRA rate. Once final rates are approved in the rate case docket by the MPUC, Otter Tail will make a filing in this docket to account for the roll-in of the CCRC into the CCRA and allocation of CCRA cost recovery across the Company's ten rate classes.

The proposed 2022/2023 CCRA is calculated assuming the rate is approved and is effective October 1, 2022. If implementation of the 2022/2023 CCRA occurs after October 1, 2022, the CCRA may need to be adjusted to recover the approved revenue requirements over the remaining months of the period, through September 2023. This approach would ensure cost recovery and approved eligible costs match. If it is necessary to adjust the CCRA, Otter Tail proposes to calculate the final 2022/2023 CCRA and include it 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 immediately following Exhibits 1, 2 and 3. The CIP rider rate schedule included in this filing accommodates the change to the CCRA based on the proposed \$0.00667/kWh method of recovery. Once the 2022/2023 CCRA is approved, Otter Tail will file the corresponding rate schedule that complies with the Commission's Order in this docket.

CONCLUSION

Otter Tail respectfully requests the following from the MPUC:

1. Approval of the 2021 CIP Tracker, resulting in a year-end balance of \$2,870,213.
2. Approval to implement the CCRA factor of \$0.00667/kWh reflected on customers' bills through the Resource Adjustment starting with bills rendered on and after October 1, 2022.
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.

Exhibit 1 is Provided Separately
as an Excel Spreadsheet

Otter Tail Power Company
Comparison of Monthly Bill Impacts

CIP Surcharge (CCRA) is based on \$0.00667 / kWh

Rate Class	Average kWh/Bill	Average \$/Bill before CCRA	Monthly Impacts			
			Current CCRA	Proposed CCRA	Monthly Bill \$ Change	Monthly Bill % Change
Residential	760	\$83.97	\$4.42	\$5.07	\$0.65	0.77%
Farm	2,605	\$266.33	\$15.16	\$17.37	\$2.21	0.83%
General Service	2,586	\$266.65	\$15.05	\$17.25	\$2.20	0.82%
Large General Service	133,438	\$6,118.31	\$776.61	\$890.03	\$113.42	1.85%
Irrigation	1,536	\$129.40	\$8.94	\$10.25	\$1.31	1.01%
Outdoor Lighting	54	\$14.20	\$0.31	\$0.36	\$0.05	0.32%
Municipal Pumping	3,266	\$282.76	\$19.01	\$21.79	\$2.78	0.98%
Deferred Load and Water Heating Control	314	\$25.79	\$1.83	\$2.10	\$0.27	1.04%
Interruptible Load	131	\$7.97	\$0.76	\$0.88	\$0.11	1.40%
Fixed Time of Delivery	5,469	\$230.01	\$31.83	\$36.48	\$4.65	2.02%

*All average data comes from Otter Tail's proposed rates in Schedule-E that was filed November 2, 2020 in compliance to the ALJ's (Docket no. E017/GR-20-719).

Exhibit 3 is Provided Separately
as an Excel Spreadsheet

Redline and Clean Versions of
Tariff Sheet MN 13.02 –
Conservation Improvement Project (CIP) Rider



Fergus Falls, Minnesota

Minnesota Public Utilities Commission
Section 13.02
ELECTRIC RATE SCHEDULE
Conservation Improvement Project (CIP) Rider

Page 1 of 2
~~Twenty-second~~ **First** Revision

CONSERVATION IMPROVEMENT PROJECT (CIP) RIDER

DESCRIPTION	RATE CODE
Conservation Surcharge	MCIP
CIP Exempt Adjustment Credit	MCCRC

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, except for Standby Service, Section 11.01 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 AND EXEMPTION ADJUSTMENT: There shall be added to each non-exempt Customer's bill a Conservation Surcharge based on the applicable Conservation Surcharge Factor multiplied by the Customer's monthly energy use. 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 CIP costs pursuant to Minn. Stat. 216B.241. Meter(s) on Customer Account(s) granted an exemption shall receive a Conservation Cost Recovery Charge (CCRC) Exemption Adjustment Credit.

The Conservation Surcharge Factor is \$0.00~~667582~~ per kWh.

R

DETERMINATION OF CONSERVATION SURCHARGE FACTOR: The Conservation Surcharge shall be the quotient of the Recoverable CIP Tracker Balance, divided by projected Minnesota non-exempt retail energy sales for a designated 12-month recovery period. The Surcharge may be adjusted annually by approval of the Minnesota Public Utilities Commission (MNPUC). The Recoverable CIP Tracker Balance is determined as described below, starting with the MNPUC accepted CIP 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 Tracker balance;



Fergus Falls, Minnesota

Minnesota Public Utilities Commission
Section 13.02
ELECTRIC RATE SCHEDULE
Conservation Improvement Project (CIP) Rider

Page 1 of 2
Twenty-second Revision

CONSERVATION IMPROVEMENT PROJECT (CIP) RIDER

DESCRIPTION	RATE CODE
Conservation Surcharge	MCIP
CIP Exempt Adjustment Credit	MCCRC

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, except for Standby Service, Section 11.01 and those customers who have been granted an exemption under a large customer facility. The exemptions are as follows:

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CONSERVATION SURCHARGE AND EXEMPTION ADJUSTMENT: There shall be added to each non-exempt Customer's bill a Conservation Surcharge based on the applicable Conservation Surcharge Factor multiplied by the Customer's monthly energy use. 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 CIP costs pursuant to Minn. Stat. 216B.241. Meter(s) on Customer Account(s) granted an exemption shall receive a Conservation Cost Recovery Charge (CCRC) Exemption Adjustment Credit.

The Conservation Surcharge Factor is \$0.00667 per kWh.

R

DETERMINATION OF CONSERVATION SURCHARGE FACTOR: The Conservation Surcharge shall be the quotient of the Recoverable CIP Tracker Balance, divided by projected Minnesota non-exempt retail energy sales for a designated 12-month recovery period. The Surcharge may be adjusted annually by approval of the Minnesota Public Utilities Commission (MNPUC). The Recoverable CIP Tracker Balance is determined as described below, starting with the MNPUC accepted CIP 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 Tracker balance;

Appendix A – Tables

Table 1

2021 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 2.55% (D)	Balance Account 1860.3000 + 1860.3100 (E)
Balance Dec. 31, 2020					2,067,599.07
January:					
Carrying Charge	--	--	--	3,049.71	3,049.71
Trf Carrying Charge Bal					0.00
Labor Accrual Adj					0.00
Activity	0.00	438,616.55	(1,137,883.95)	--	(699,267.40)
Deferred Taxes	--	--	--	--	--
Balance January 31, 2021	0.00	438,616.55	(1,137,883.95)	3,049.71	1,371,381.38
February:					
Carrying Charge	--	--	--	2,022.79	2,022.79
Labor Accrual Adj					0.00
Activity	0.00	622,372.45	(1,070,815.76)	--	(448,443.31)
Deferred Taxes	--	--	--	--	--
Balance February 29, 2021	0.00	1,060,989.00	(2,208,699.71)	5,072.50	924,960.86
March:					
Carrying Charge	--	--	--	1,364.32	1,364.32
Labor Accrual Adj					0.00
Activity	0.00	1,084,163.41	(1,056,933.52)	--	27,229.89
Deferred Taxes	--	--	--	--	--
Balance March 31, 2021	0.00	2,145,152.41	(3,265,633.23)	6,436.82	953,555.07
April:					
Carrying Charge	--	--	--	1,406.49	1,406.49
Labor Accrual Adj					0.00
Activity	0.00	923,457.51	(974,815.04)	--	(51,357.53)
Deferred Taxes	--	--	--	--	--
Balance April 30, 2021	0.00	3,068,609.92	(4,240,448.27)	7,843.31	903,604.03
May:					
Carrying Charge	--	--	--	1,332.82	1,332.82
Bonus/Incentive					0.00
Labor Accrual Adj					0.00
Activity	0.00	534,612.88	(797,885.13)	--	(263,272.25)
Deferred Taxes	--	--	--	--	--
Balance May 31, 2021	0.00	3,603,222.80	(5,038,333.40)	9,176.13	641,664.60
June:					
Carrying Charge	--	--	--	946.46	946.46
Bonus/Incentive					0.00
Labor Accrual Adj					0.00
Activity	0.00	872,619.43	(880,121.50)	--	(7,502.07)
Deferred Taxes	--	--	--	--	--
Balance June 30, 2021	0.00	4,475,842.23	(5,918,454.90)	10,122.59	635,108.99
July:					
Carrying Charge	--	--	--	936.79	936.79
Bonus/Incentive					0.00
Labor Accrual Adj					
Activity	0.00	662,734.42	(941,912.31)	--	(279,177.89)
Deferred Taxes	--	--	--	--	--
Balance July 31, 2021	0.00	5,138,576.65	(6,860,367.21)	11,059.38	356,867.89

Table 1

2021 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 2.55% (D)	Balance Account 1860.3000 + 1860.3100 (E)
August:					
Carrying Charge	--	--		526.38	526.38
Bonus/Incentive					0.00
Labor Accrual Adj					0.00
Activity	0.00	599,180.58	(1,008,536.99)	--	(409,356.41)
Deferred Taxes	--	--	--	--	--
Balance August 31, 2021	0.00	5,737,757.23	(7,868,904.20)	11,585.76	(51,962.14)
September:					
Carrying Charge	--	--	--	(76.64)	(76.64)
Lost Margin & Bonus/Incentive					0.00
Labor Accrual Adj					0.00
Activity	0.00	498,836.32	(882,071.45)	--	(383,235.13)
Deferred Taxes	--	--	--	--	--
Balance September 30, 2021	0.00	6,236,593.55	(8,750,975.65)	11,509.12	(435,273.91)
October:					
Carrying Charge	--	--	--	(642.03)	(642.03)
Lost Margin & Bonus/Incentive					0.00
Labor Accrual Adj					0.00
Activity	0.00	577,503.97	(785,102.81)	--	(207,598.84)
Deferred Taxes	--	--	--	--	--
Balance October 31, 2021	0.00	6,814,097.52	(9,536,078.46)	10,867.09	(643,514.78)
November:					
Carrying Charge	--		--	(949.18)	(949.18)
Bonus/Incentive		2,864,948.00			2,864,948.00
Labor Accrual Adj					0.00
Activity	0.00	857,535.33	(878,153.52)	--	(20,618.19)
Deferred Taxes	--	--	--	--	--
Balance November 30, 2021	0.00	10,536,580.85	(10,414,231.98)	9,917.91	2,199,865.85
December:					
Carrying Charge	--	--	--	3,244.80	3,244.80
Lost Margin & Bonus/Incentive					0.00
Labor Accrual Adj					0.00
Activity	0.00	1,709,876.47	(1,042,774.57)	--	667,101.90
Deferred Taxes	--	--	--	--	--
Balance December 31, 2021	0.00	12,246,457.32	(11,457,006.55)	13,162.71	2,870,212.55

Table 2
2021 INCENTIVE MECHANISM
Financial Incentive Project - Conservation Improvement Programs
Otter Tail Power Company

Inputs	2021	
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	\$7,718,634	
Estimated CIP Energy Goal	42,945,163	
Estimated Net Benefits at Approved Goal	\$17,071,471	excludes Company-Owned Street Lighting, POP Solar, and Assessments
Energy savings at 1.75%	29,568,496	
Incentive Calibration	2021	
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 \leq 2%	30.0%	
Max Percent of Expenditures if savings > 2%	35.0%	
Increment (% Points)	7.5	% Points
Actual Electric CIP Incentive Results	2021	
Spending	\$9,381,509	
Energy Saved	66,506,148	excludes Company-Owned Street Lighting and POP Solar
Net Benefits Achieved	\$29,003,882	excludes House Therapy, Company-Owned Street Lighting, POP Solar, and Assessments
Resulting Incentive		
Achievement Level	3.94%	
Percent of Net Benefits Awarded	10.00%	
Expenditure Cap	\$3,283,528	excludes Company-Owned Street Lighting return on incremental costs
Financial Incentive Award -- 2021 Results	\$2,900,388	
Incentive/First Year kWh Saved \$	\$0.0436	
Incentive/Net Benefits	10.00%	
Incentive/CIP Expenditures	30.92%	
Cost per kWh	\$0.14	

Table 3

2021 PROJECT COSTS, SAVINGS, AND BENEFITS**Financial Incentive Project - Conservation Improvement Programs****Otter Tail Power Company**

	2021 Proposed Savings, Costs, and Benefits				2021 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	\$1,122,646	\$1,029,646	307,979	\$85,621	\$1,089,334	\$1,003,714
Home Appliance	369,424	\$170,000	\$137,228	(\$32,772)	437,195	\$185,566	\$161,212	(\$24,354)
Home Lighting	4,235,726	\$545,000	\$2,481,550	\$1,936,550	7,720,523	\$623,204	\$4,435,513	\$3,812,309
Energy Feedback Program	4,035,646	\$355,000	\$573,477	\$218,477	4,338,777	\$337,273	\$915,625	\$578,352
Home Heating & Cooling	1,512,154	\$462,000	\$986,797	\$524,797	4,905,494	\$1,067,901	\$3,078,449	\$2,010,548
Home Direct Install	1,213,344	\$136,000	\$2,442,045	\$2,306,045	1,307,547	\$189,731	\$629,987	\$440,256
Advertising & Education	0	\$187,000	\$0	(\$187,000)	0	\$195,868	\$0	(\$195,868)
Implementation & Training	0	\$37,000	\$0	(\$37,000)	0	\$43,684	\$0	(\$43,684)
Total - Residential	11,682,415	\$1,985,000	\$7,743,743	\$5,758,743	19,017,514	\$2,728,848	\$10,310,120	\$7,581,273
Low-Income								
House Therapy	200,357	\$204,000	\$95,156	(\$108,844)	279,913	\$321,458	\$125,931	(\$195,528)
Total - Low-Income	200,357	\$204,000	\$95,156	(\$108,844)	279,913	\$321,458	\$125,931	(\$195,528)
Commercial								
Drive Power	3,467,503	\$250,000	\$1,873,232	\$1,623,232	6,122,225	\$447,703	\$3,513,590	\$3,065,887
Commercial Energy Management	10,989	\$30,000	\$81,447	\$51,447	6,440	\$10,082	\$47,730	\$37,648
Commercial Direct Install	276,510	\$42,000	\$55,582	\$13,582	784,616	\$56,492	\$139,141	\$82,649
Compressed Air Efficiency	250,287	\$48,000	\$121,178	\$73,178	195,540	\$38,377	\$122,196	\$83,819
Custom Efficiency Grants	2,195,038	\$321,000	\$2,057,822	\$1,736,822	7,473,795	\$432,911	\$3,257,018	\$2,824,107
Commercial Heat Pumps	1,665,020	\$392,000	\$1,321,778	\$929,778	4,947,270	\$989,520	\$5,772,694	\$4,783,174
Commercial & Industrial Focused Efficiency	1,145,172	\$302,000	\$515,352	\$213,352	8,330,879	\$758,009	\$3,390,580	\$2,632,571
Commercial Lighting	16,685,206	\$1,665,000	\$8,882,291	\$7,217,291	17,414,104	\$1,754,745	\$10,294,222	\$8,539,477
Commercial Audits & Studies	1,826,378	\$268,000	\$410,671	\$142,671	815,003	\$309,029	\$149,164	(\$159,866)
Refrigeration	931,909	\$83,000	\$285,373	\$202,373	1,060,857	\$150,250	\$342,917	\$192,668
Advertising & Education	0	\$65,000	\$0	(\$65,000)	0	\$11,194	\$0	(\$11,194)
Integrated Building Design Plus	0	\$224,000	\$0	(\$224,000)	0	\$212,356	\$0	(\$212,356)
Financing	0	\$17,000	\$0	(\$17,000)	0	\$7,010	\$0	(\$7,010)
Implementation & Training	0	\$60,000	\$0	(\$60,000)	0	\$51,144	\$0	(\$51,144)
Total - Commercial	28,454,012	\$3,767,000	\$15,604,728	\$11,837,728	47,150,729	\$5,228,822	\$27,029,253	\$21,800,431

Table 3

2021 PROJECT COSTS, SAVINGS, AND BENEFITS

Financial Incentive Project - Conservation Improvement Programs

Otter Tail Power Company

	2021 Proposed Savings, Costs, and Benefits				2021 Actual Savings, Costs, and Benefits			
	kWh Savings	Expenditures	Total Benefits	Net Benefits	kWh Savings	Expenditures	Total Benefits	Net Benefits
Other Projects								
Company-Owned Street & Area Lighting	2,413,419	\$881,749	\$1,191,417	\$309,668	2,020,983	\$342,916	\$1,174,364	\$831,448
Publicly-Owned Property Solar	194,960	\$225,885	\$115,756	(\$110,129)	252,119	\$223,122	\$283,834	\$60,713
Total - Other	2,608,379	\$1,107,634	\$1,307,174	\$199,540	2,273,103	\$566,037	\$1,458,198	\$892,161
Program Development And Regulatory Requirements								
Planning - Regulatory Affairs	0	\$300,000	\$0	(\$300,000)	0	\$267,479	\$0	(\$267,479)
Research & Development	0	\$225,000	\$0	(\$225,000)	0	\$120,448	\$0	(\$120,448)
NGEA - Regulatory Assessments	0	\$110,000	\$0	(\$110,000)	0	\$99,051	\$0	(\$99,051)
PUC Assessments	0	\$20,000	\$0	(\$20,000)	0	\$954	\$0	(\$954)
Transmission & Distribution Cost Study	0	\$0	\$0	\$0	0	\$0	\$0	\$0
Total - Development & Regulatory Requirements	0	\$655,000	\$0	(\$655,000)	0	\$487,931	\$0	(\$487,931)
Miscellaneous/Inactive								
Electronically Commutated Motors	0	\$0	\$0	\$0	57,992	\$10,578	\$58,518	\$47,940
Company CIP Projects	0	\$0	\$0	\$0	0	\$28,757	\$0	(\$28,757)
Accounting Adjustments	0	\$0	\$0	\$0	0	\$9,078	\$0	(\$9,078)
Total - Miscellaneous	0	\$0	\$0	\$0	\$57,992	\$48,413	\$58,518	\$10,105
Budget Modification Request								
Residential		\$700,000						
Low Income		\$60,000						
Commercial		\$1,500,000						
Total - Budget Modification Request		\$2,260,000						
Total - All CIP	42,945,163	\$9,978,634	\$24,750,801	\$17,032,167	68,779,250	\$9,381,509	\$38,982,020	\$29,600,511

All numbers are for a single year - 2021. DSMORE software was used for the analysis, with figures discounted to 2021.

Table 4

2021 CIP Program Status Report / CIP Tracker Recap

Financial Incentive Project - Conservation Improvement Programs

Otter Tail Power Company

	As Filed - 2021 Proposed Benefit/Cost Ratios				Actual - 2021 Benefit/Cost Ratios			
	Utility Test	RIM Test	Societal Test	Participant Test	Utility Test	RIM Test	Societal Test	Participant Test
Residential								
Home Energy Management	4.52	3.76	4.54	inf.	12.72	9.70	12.87	inf.
Home Appliance	1.63	0.41	2.62	inf.	0.87	0.36	1.64	inf.
Home Lighting	7.23	0.46	7.11	18.07	7.12	0.50	2.90	4.22
Energy Feedback Program	2.50	0.54	2.87	inf.	2.71	0.63	3.26	inf.
Home Heating & Cooling	4.61	0.46	2.89	6.69	2.88	0.48	4.27	7.21
Home Direct Install	5.32	0.53	10.04	inf.	3.32	0.03	26.10	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	4.43	0.56	4.55	14.84	3.78	0.25	3.49	13.20
Low-Income								
House Therapy	0.82	0.30	9.64	inf.	0.39	0.11	3.51	inf.
Total - Low-Income	0.82	0.30	9.64	inf.	0.39	0.11	3.51	inf.
Commercial								
Drive Power	8.05	0.63	6.11	6.84	7.85	0.78	2.57	1.99
Commercial Energy Management	12.21	4.66	12.23	inf.	4.73	2.97	4.74	inf.
Commercial Direct Install	2.47	0.53	6.94	inf.	2.46	0.29	5.65	inf.
Compressed Air Efficiency	3.56	0.69	3.63	4.44	3.18	0.74	1.74	1.46
Commercial Heat Pumps	6.73	0.85	2.43	1.80	3.29	0.60	1.12	1.15
Custom Efficiency Grants	4.08	0.59	2.45	3.00	13.33	1.11	8.71	5.02
Commercial & Industrial Focused Efficiency	5.32	0.80	3.29	3.39	4.47	0.83	2.90	2.17
Commercial Lighting	3.60	0.64	1.58	1.76	5.87	0.77	3.36	2.76
Commercial Audits & Studies	2.91	0.61	2.51	4.17	0.48	0.30	1.02	2.40
Refrigeration	3.78	0.68	3.73	5.12	2.28	0.64	2.73	3.19
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	0.00	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	4.56	0.68	1.82	1.92	5.17	0.78	2.81	2.25

Table 4

2021 CIP Program Status Report / CIP Tracker Recap

Financial Incentive Project - Conservation Improvement Programs

Otter Tail Power Company

	As Filed - 2021 Proposed Benefit/Cost Ratios				Actual - 2021 Benefit/Cost Ratios			
	Utility Test	RIM Test	Societal Test	Participant Test	Utility Test	RIM Test	Societal Test	Participant Test
Other Projects								
Company-Owned Street & Area Lighting	1.15	0.26	2.82	inf.	3.42	3.02	11.80	inf.
Publicly-Owned Property Solar	1.17	0.51	0.69	0.83	1.27	0.41	82.36	inf.
Total - Other	1.15	0.29	1.77	5.74	2.58	1.35	13.95	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								
Electronically Commutated Motors	3.63	0.61	3.78	8.63	5.53	0.71	4.43	4.36
Company CIP Projects	0.00	0.00	0.00	inf.	0.00	0.00	0.00	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.	1.21	0.48	3.02	5.88
Total - All CIP	3.54	0.59	2.12	3.21	4.16	0.50	3.00	4.42

Table 5

2021 CIP Program Status Report / CIP Tracker Recap

Financial Incentive Project - Conservation Improvement Programs

Otter Tail Power Company

	2021 Expenditures			2021 Participation			2021 Energy Savings - kWh			2021 Coincident Demand Savings - kW		
	Actual	Budget	% of Goal	Actual	Budget	% of Goal	Actual	Budget	% of Goal	Actual	Budget	% of Goal
Residential												
Home Energy Management	\$85,621	\$93,000	92%	18,473	18,905	98%	307,979	316,120	97%	9,668.66	9,964.68	97%
Home Appliance	\$185,566	\$170,000	109%	830	799	104%	437,195	369,424	118%	70.64	59.06	120%
Home Lighting	\$623,204	\$545,000	114%	179,605	106,985	168%	7,720,523	4,235,726	182%	765.29	422.32	181%
Energy Feedback Program	\$337,273	\$355,000	95%	40,059	35,500	113%	4,338,777	4,035,646	108%	4,863.28	2,034.26	239%
Home Heating & Cooling	\$1,067,901	\$462,000	231%	602	255	236%	4,905,494	1,512,154	324%	363.27	125.38	290%
Home Direct Install	\$189,731	\$136,000	140%	15,924	11,250	142%	1,307,547	1,213,344	108%	137.19	1,434.10	10%
Advertising & Education	\$195,868	\$187,000	105%	20,603	10,000	206%	0	0	0%	0.00	0.00	0%
Implementation & Training	\$43,684	\$37,000	118%	2	175	1%	0	0	0%	0.00	0.00	0%
Total - Residential	\$2,728,848	\$1,985,000	137%	276,098	183,869	150%	19,017,514	11,682,415	163%	15,868.34	14,039.79	113%
Low-Income												
House Therapy	\$321,458	\$204,000	158%	106	180	59%	279,913	200,357	140%	30.85	22.80	135%
Total - Low-Income	\$321,458	\$204,000	158%	106	180	59%	279,913	200,357	140%	30.85	22.80	135%
Commercial												
Drive Power	\$447,703	\$250,000	179%	545	227	240%	6,122,225	3,467,503	177%	785.09	348.40	225%
Commercial Energy Management	\$10,082	\$30,000	34%	300	512	59%	6,440	10,989	59%	425.42	725.93	59%
Commercial Direct Install	\$56,492	\$42,000	135%	3,220	1,369	235%	784,616	276,510	284%	97.67	17.08	572%
Compressed Air Efficiency	\$38,377	\$48,000	80%	8	6	133%	195,540	250,287	78%	34.12	14.00	244%
Custom Efficiency Grants	\$432,911	\$321,000	135%	26	35	74%	7,473,795	2,195,038	340%	1,321.37	692.83	191%
Commercial Heat Pumps	\$989,520	\$392,000	252%	230	69	333%	4,947,270	1,665,020	297%	520.60	167.90	310%
Commercial & Industrial Focused Efficiency	\$758,009	\$302,000	251%	11	11	100%	8,330,879	1,145,172	727%	1,061.68	145.85	728%
Commercial Lighting	\$1,754,745	\$1,665,000	105%	1,061	840	126%	17,414,104	16,685,206	104%	2,733.30	2,536.34	108%
Commercial Audits & Studies	\$309,029	\$268,000	115%	277	11	2518%	815,003	1,826,378	45%	78.97	100.60	78%
Refrigeration	\$150,250	\$83,000	181%	79	72	110%	1,060,857	931,909	114%	154.73	136.72	113%
Advertising & Education	\$11,194	\$65,000	17%	0	100	0%	0	0	0%	0.00	0.00	0%
Integrated Building Design Plus	\$212,356	\$224,000	95%	3	6	50%	0	0	0%	0.00	0.00	0%
Financing	\$7,010	\$17,000	41%	0	5	0%	0	0	0%	0.00	0.00	0%
Implementation & Training	\$51,144	\$60,000	85%	259	250	104%	0	0	0%	0.00	0.00	0%
Total - Commercial	\$5,228,822	\$3,767,000	139%	6,019	3,513	171%	47,150,729	28,454,012	166%	7,212.95	4,885.65	148%
Other Projects												
Company-Owned Street & Area Lighting	\$342,916	\$881,749	39%	3,442	3,941	87%	2,020,983	2,413,419	84%	0.00	0.00	0%
Publicly-Owned Property Solar	\$223,122	\$225,885	99%	5	11	45%	252,119	194,960	129%	65.57	0.00	0%
Total - Other	\$566,037	\$1,107,634	51%	3,447	3,952	87%	2,273,103	2,608,379	87%	65.57	0.00	0%

2021 CIP Program Status Report / CIP Tracker Recap
Financial Incentive Project - Conservation Improvement Programs
Otter Tail Power Company

[illegible]

Table 6
2021 CIP PROGRAM STATUS REPORT / CIP TRACKER RECAP - COST PER KW / KWH
Financial Incentive Project - Conservation Improvement Programs
Otter Tail Power Company

Appendix B – Other Evaluations

- **HER OTP Summary Report 2021 Final**

Otter Tail Home Energy Reports Program: 2021 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 is 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 have 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.

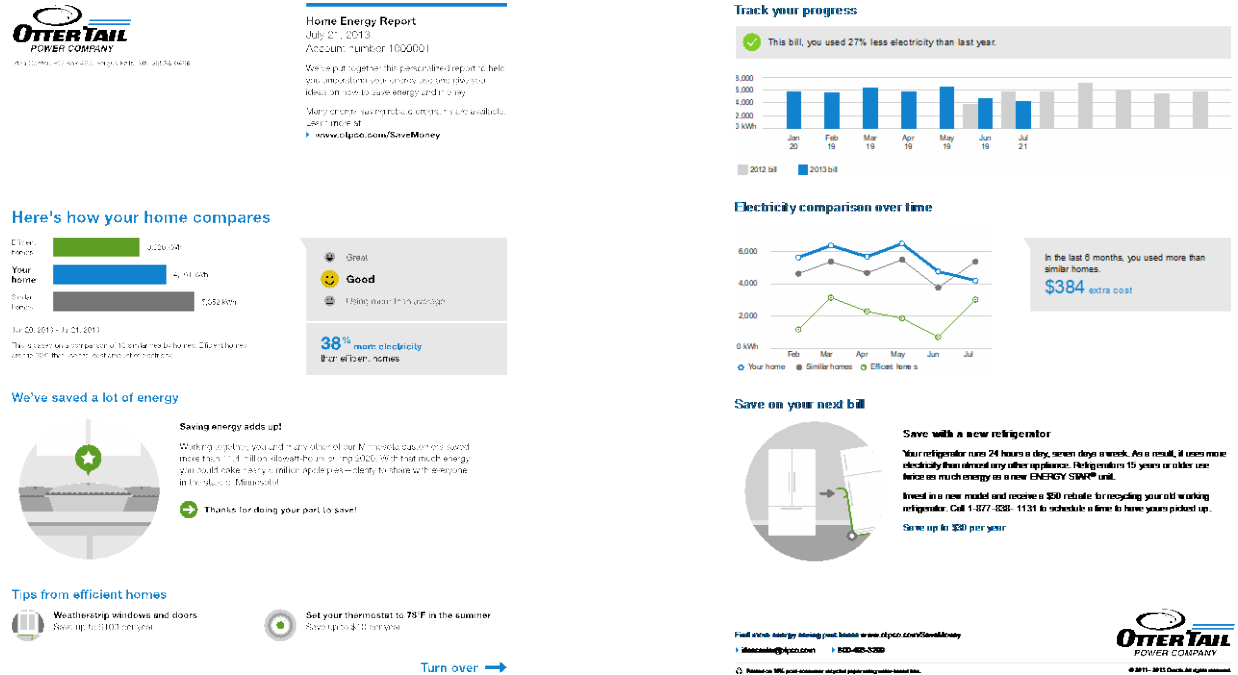
Figure 1: 2021 Report Recipients by Wave (households receiving at least 1 report in 2021)

Waves	Recipients
June 2011 Wave	12,536
October 2012 Wave	1,535
July 2013 Wave	1,249
July 2014 Wave	1,009
August 2015 Wave	3,844
July 2016 Wave	1,402
October 2018 Wave (Consolidated_E Wave)	3,193
August 2019 Wave	2,674
August 2020 Wave	3,448
January 2021 Wave	7,717
2021 Total	38,607

Home Energy Reports, pictured in Figure 2, contain various personalized components designed to motivate and educate customers on energy efficiency actions. 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.
- 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.
- An informative Frequently Asked Questions section is included periodically.

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



Cumulatively, 14 customers chose to opt out of the program in 2021, which corresponds to an opt-out rate of 0.037 percent for the year. The 2021 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, 3,973 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 reports in 2021 but are included as participants.

Figure 3: 2021 Account Closures & Opt-Outs by Wave

Wave	Account Closures	Opt-Outs
June 2011 Wave	747	5
October 2012 Wave	116	0
July 2013 Wave	86	1
July 2014 Wave	76	0
August 2015 Wave	235	1
July 2016 Wave	133	0
August 2019 Wave	332	0

August 2020 Wave	559	3
January 2021 Wave	1,346	2
Consolidated_E Wave	343	2
2021 Total	3,973	14

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 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.

The primary measure of success for the Home Energy Reports program is the difference between the average energy consumption of homes in the treatment group and homes in the control group. Because of the statistical homogeneity of these two groups, any difference in their respective energy consumption from June 2011 (program start) to August 2015 (end of randomized controlled trial (RCT)) can be attributed to the Home Energy Reports.

The analysis of the Home Energy Reports program relies 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 up until the expansion to territory-wide deployment in August 2015.

2.1 Modeled Savings Methodology

Without the benefit of a control group, the Modeled Savings Methodology was applied to measure the impact of the Home Energy Reports program in the 2012 through 2021 waves. This approach was approved by the MN DER in October 2010. This protocol aimed to leverage Opower expertise from ongoing programs in Minnesota with treatment and control populations, thus offering better safeguards to control for weather and other conditions specific to the state. With the Otter Tail program, savings associated with Otter Tail's 2012 through 2021 waves have been modeled using RCT-measured results from Otter Tail's own 2011 wave.

2.2 RCT Disbanded

As of August 2015, the control group associated with the 2011 pilot wave was converted to recipient status and began receiving reports as participants in the program. Measuring savings for the 2011 wave via a RCT became no longer possible. 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 is able to rely on Otter Tail's own results to inform the model for calculating savings going forward.

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.

This methodology for measuring savings in territory-wide deployments, described in more detail below, has also been used successfully at Rochester Public Utilities in Minnesota and Fort Collins Utilities in Colorado.

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

2.2.1 Regression Model & Modeled Savings Methodology

The regression model of program results includes 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 scores the model based on the coefficients for treatment times post-deployment, baseline usage, home square footage, and age of the home.

Output is a function that describes energy savings as a function of observable household or customer characteristics. The final form of the model is 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:

$$\text{Savings} = b_0 + b_1(\text{sqft}) + b_2(\text{age}) + b_3(\text{\# of occupants}) + b_4(\text{baseline usage}) + b_5(\text{owner})$$

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

The average of the 'scored' savings is the predicted per household savings for each customer in the utility. Multiplying this score by the number of customers yields 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.

Section 3: Program Energy Savings

The Home Energy Reports program demonstrated a clear and significant reduction in residential energy consumption. Gross total savings for the program in 2021 amounted to 12,104 MWh. Over the course of 2021, participants saved at a rate of 3 percent. A month-by-month breakdown of savings by deployment wave is shown below in Figure 4.

Figure 4: 2021 Monthly Electric Savings Impact Broken Down by Deployment Wave

Month	2011 Wave Savings (MWh)	2012 Wave Savings (MWh)	2013 Wave Savings (MWh)	2014 Wave Savings (MWh)	2015 Wave Savings (MWh)	2016 Wave Savings (MWh)	2018 Wave Savings (MWh)	2019 Wave Savings (MWh)	2020 Wave Savings (MWh)	2021 Wave Savings (MWh)
1-2021	584	85	67	51	169	63	128	65	83	0
2-2021	543	79	63	47	158	59	120	60	78	0
3-2021	458	66	53	39	133	49	101	53	72	40
4-2021	379	55	43	33	109	40	83	44	60	36
5-2021	349	50	41	31	103	38	78	43	56	41
6-2021	384	56	45	34	115	43	88	51	66	57
7-2021	422	61	49	37	127	47	97	56	73	65
8-2021	386	56	45	35	116	44	89	52	67	67
9-2021	292	43	34	26	88	33	68	39	54	57
10-2021	322	47	38	28	97	35	73	42	57	61
11-2021	410	60	48	36	123	45	94	50	70	88
12-2021	530	78	61	46	160	59	123	65	91	125
Total	5,059	736	587	443	1498	555	1,142	620	827	637

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'.

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 2021 will be reduced by 169.45 MWh to account for these jointly attributable savings. Net annual savings for the program in 2021 is therefore adjusted

to 11,934.55 MWh, which is equal to an average of 309.13 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: Status: Year:	Home Energy Management					
	Existing					
	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	\$35,310.00	\$39,010.69	\$35,310.00		\$35,310.00	
Administration	\$7,000.00	\$2,954.29	\$7,000.00		\$7,000.00	
Evaluation, Measurement & Verification	\$2,000.00	\$173.82	\$2,000.00		\$2,000.00	
Advertising & Promotion	\$45,000.00	\$42,832.06	\$45,000.00		\$45,000.00	
Incentives	\$0.00	\$650.00	\$0.00		\$0.00	
Other	\$3,690.00	\$0.00	\$3,690.00		\$3,690.00	
Total Utility Costs	\$93,000.00	\$85,620.86	\$93,000.00		\$93,000.00	
Total Participants	18,905	18,473	18,905		18,905	
% 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)	31%	31%	31%		31%	
Budget % (% of Total Utility Costs)	31%	31%	31%		31%	
Renter Participation*						
Participants % (% of Total Participants)	21%	21%	21%		21%	
Budget % (% of Total Utility Costs)	21%	21%	21%		21%	
Energy Savings						
Annual kWh Savings at Meter	316,120	282,383	126,447		134,802	
Annual kWh Savings at Generator	347,630	310,530	139,051		148,238	
Cost per Annual kWh Saved at Generator	\$0.2675	\$0.2757	\$0.6688		\$0.6274	
Peak kW Savings at Meter	9,964.681	8,865.129	3,015.243		3,214.473	
Peak kW Savings at Generator	10,957.906	9,748.756	3,315.786		3,534.874	
Cost per Peak kW Saved at Generator	\$8.49	\$8.78	\$28.05		\$26.31	
Utility Ratio	12.07	12.72	12.14		12.21	
Utility NPV	\$1,029,646	\$1,003,714	\$1,036,299		\$1,042,477	
Ratepayer Ratio	9.32	9.70	9.33		9.34	
Ratepayer NPV	\$1,002,179	\$977,078	\$1,008,283		\$1,013,900	
Participant Ratio	inf.	inf.	inf.		inf.	
Participant NPV	\$27,467	\$27,286	\$28,016		\$28,577	
Societal Ratio	12.12	12.87	12.14		12.21	
Societal NPV	\$1,034,122	\$1,008,725	\$1,036,321		\$1,042,501	

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Home Appliance					
	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	\$77,000.00	\$114,799.14	\$77,000.00		\$77,000.00	
Administration	\$12,000.00	\$4,109.64	\$12,000.00		\$12,000.00	
Evaluation, Measurement & Verification	\$2,000.00	\$119.02	\$2,000.00		\$2,000.00	
Advertising & Promotion	\$41,000.00	\$26,203.06	\$41,000.00		\$41,000.00	
Incentives	\$38,000.00	\$40,335.00	\$38,000.00		\$38,000.00	
Other	\$0.00	\$0.00	\$0.00		\$0.00	
Total Utility Costs	\$170,000.00	\$185,565.86	\$170,000.00		\$170,000.00	
Total Participants	799	830	799		799	
% 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)	31%	31%	31%		31%	
Budget % (% of Total Utility Costs)	31%	31%	31%		31%	
Renter Participation*						
Participants % (% of Total Participants)	21%	21%	21%		21%	
Budget % (% of Total Utility Costs)	21%	21%	21%		21%	
Energy Savings						
Annual kWh Savings at Meter	369,424	400,861	369,424		369,424	
Annual kWh Savings at Generator	406,246	440,816	406,246		406,246	
Cost per Annual kWh Saved at Generator	\$0.4185	\$0.4210	\$0.4185		\$0.4185	
Peak kW Savings at Meter	59.065	64.765	59.065		59.065	
Peak kW Savings at Generator	64.952	71.221	64.952		64.952	
Cost per Peak kW Saved at Generator	\$2,617.33	\$2,605.51	\$2,617.33		\$2,617.33	
Utility Ratio	0.81	0.87	0.84		0.87	
Utility NPV	(\$32,772)	(\$24,354)	(\$26,833)		(\$21,577)	
Ratepayer Ratio	0.34	0.36	0.35		0.36	
Ratepayer NPV	(\$262,215)	(\$292,147)	(\$260,865)		(\$260,289)	
Participant Ratio	inf.	inf.	inf.		inf.	
Participant NPV	\$288,758	\$332,660	\$293,773		\$298,889	
Societal Ratio	1.54	1.64	1.19		1.23	
Societal NPV	\$71,376	\$93,213	\$24,972		\$30,758	

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Home Direct Install					
	Existing					
	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	\$25,000.00	\$32,750.45	\$25,000.00		\$25,000.00	
Administration	\$12,000.00	\$4,748.47	\$12,000.00		\$12,000.00	
Evaluation, Measurement & Verification	\$2,000.00	\$258.08	\$2,000.00		\$2,000.00	
Advertising & Promotion	\$20,000.00	\$1,358.30	\$20,000.00		\$20,000.00	
Incentives	\$77,000.00	\$150,615.43	\$77,000.00		\$77,000.00	
Other	\$0.00	\$0.00	\$0.00		\$0.00	
Total Utility Costs	\$136,000.00	\$189,730.73	\$136,000.00		\$136,000.00	
Total Participants	11,250	15,924	11,250		11,250	
% 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)	31%	31%	31%		31%	
Budget % (% of Total Utility Costs)	31%	31%	31%		31%	
Renter Participation*						
Participants % (% of Total Participants)	21%	21%	21%		21%	
Budget % (% of Total Utility Costs)	21%	21%	21%		21%	
Energy Savings						
Annual kWh Savings at Meter	1,213,344	1,198,881	1,213,344		1,213,344	
Annual kWh Savings at Generator	1,334,284	1,318,378	1,334,284		1,334,284	
Cost per Annual kWh Saved at Generator	\$0.1019	\$0.1439	\$0.1019		\$0.1019	
Peak kW Savings at Meter	1,434.097	125.792	1,434.097		1,434.097	
Peak kW Savings at Generator	1,577.040	138.330	1,577.040		1,577.040	
Cost per Peak kW Saved at Generator	\$86.24	\$1,371.58	\$86.24		\$86.24	
Utility Ratio	17.96	3.32	18.29		18.57	
Utility NPV	\$2,306,045	\$440,256	\$2,351,967		\$2,389,843	
Ratepayer Ratio	0.10	0.03	0.10		0.10	
Ratepayer NPV	(\$22,396,905)	(\$23,149,979)	(\$22,845,042)		(\$23,311,106)	
Participant Ratio	inf.	inf.	inf.		inf.	
Participant NPV	\$27,634,671	\$26,450,438	\$28,185,825		\$28,748,001	
Societal Ratio	54.71	26.10	50.62		51.38	
Societal NPV	\$3,168,680	\$981,608	\$2,927,288		\$2,972,444	

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Energy Feedback					
	Existing					
	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	\$273,000.00	\$317,747.44	\$273,000.00		\$273,000.00	
Administration	\$7,000.00	\$728.25	\$7,000.00		\$7,000.00	
Evaluation, Measurement & Verification	\$18,000.00	\$1,432.53	\$18,000.00		\$18,000.00	
Advertising & Promotion	\$32,000.00	\$17,364.64	\$32,000.00		\$32,000.00	
Incentives	\$25,000.00	\$0.00	\$25,000.00		\$25,000.00	
Other	\$0.00	\$0.00	\$0.00		\$0.00	
Total Utility Costs	\$355,000.00	\$337,272.86	\$355,000.00		\$355,000.00	
Total Participants	35,500	40,059	35,500		35,500	
% 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)	31%	31%	31%		31%	
Budget % (% of Total Utility Costs)	31%	31%	31%		31%	
Renter Participation*						
Participants % (% of Total Participants)	21%	21%	21%		21%	
Budget % (% of Total Utility Costs)	21%	21%	21%		21%	
Energy Savings						
Annual kWh Savings at Meter	3,984,436	3,978,194	3,984,436		3,984,436	
Annual kWh Savings at Generator	4,381,583	4,374,718	4,381,583		4,381,583	
Cost per Annual kWh Saved at Generator	\$0.0810	\$0.0771	\$0.0810		\$0.0810	
Peak kW Savings at Meter	2,034.257	4,459.109	2,034.257		2,034.257	
Peak kW Savings at Generator	2,237.020	4,903.568	2,237.020		2,237.020	
Cost per Peak kW Saved at Generator	\$158.69	\$68.78	\$158.69		\$158.69	
Utility Ratio	1.62	2.71	1.77		1.86	
Utility NPV	\$218,477	\$578,352	\$274,526		\$306,533	
Ratepayer Ratio	0.41	0.63	0.45		0.46	
Ratepayer NPV	(\$817,435)	(\$528,927)	(\$782,105)		(\$771,231)	
Participant Ratio	inf.	inf.	inf.		inf.	
Participant NPV	\$1,060,912	\$1,107,279	\$1,081,631		\$1,102,763	
Societal Ratio	2.26	3.26	1.91		2.01	
Societal NPV	\$414,912	\$762,663	\$300,376		\$332,447	

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Home Heating and Cooling					
	Existing					
	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	\$94,000.00	\$83,140.47	\$94,000.00		\$94,000.00	
Administration	\$38,000.00	\$39,922.30	\$38,000.00		\$38,000.00	
Evaluation, Measurement & Verification	\$6,000.00	\$733.30	\$6,000.00		\$6,000.00	
Advertising & Promotion	\$153,000.00	\$138,211.75	\$153,000.00		\$153,000.00	
Incentives	\$171,000.00	\$805,893.10	\$171,000.00		\$171,000.00	
Other	\$0.00	\$0.00	\$0.00		\$0.00	
Total Utility Costs	\$462,000.00	\$1,067,900.92	\$462,000.00		\$462,000.00	
Total Participants	255	602	255		255	
% 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)	31%	31%	31%		31%	
Budget % (% of Total Utility Costs)	31%	31%	31%		31%	
Renter Participation*						
Participants % (% of Total Participants)	21%	21%	21%		21%	
Budget % (% of Total Utility Costs)	21%	21%	21%		21%	
Energy Savings						
Annual kWh Savings at Meter	1,512,154	4,497,812	1,512,154		1,512,154	
Annual kWh Savings at Generator	1,662,877	4,946,129	1,662,877		1,662,877	
Cost per Annual kWh Saved at Generator	\$0.2778	\$0.2159	\$0.2778		\$0.2778	
Peak kW Savings at Meter	125.376	333.080	125.376		125.376	
Peak kW Savings at Generator	137.872	366.280	137.872		137.872	
Cost per Peak kW Saved at Generator	\$3,350.93	\$2,915.53	\$3,350.93		\$3,350.93	
Utility Ratio	2.14	2.88	2.27		2.37	
Utility NPV	\$524,797	\$2,010,548	\$588,667		\$631,033	
Ratepayer Ratio	0.45	0.48	0.47		0.48	
Ratepayer NPV	(\$1,210,221)	(\$3,388,195)	(\$1,181,052)		(\$1,174,080)	
Participant Ratio	3.48	7.21	3.54		3.61	
Participant NPV	\$1,624,372	\$6,365,444	\$1,666,565		\$1,709,601	
Societal Ratio	1.82	4.27	1.37		1.43	
Societal NPV	\$774,568	\$4,205,644	\$351,435		\$403,122	

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Home Lighting					
	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	\$103,000.00	\$117,710.94	\$103,000.00		\$103,000.00	
Administration	\$17,000.00	\$8,302.62	\$17,000.00		\$17,000.00	
Evaluation, Measurement & Verification	\$3,000.00	\$240.67	\$3,000.00		\$3,000.00	
Advertising & Promotion	\$80,000.00	\$10,580.72	\$80,000.00		\$80,000.00	
Incentives	\$342,000.00	\$486,051.43	\$342,000.00		\$342,000.00	
Other	\$0.00	\$317.28	\$0.00		\$0.00	
Total Utility Costs	\$545,000.00	\$623,203.66	\$545,000.00		\$545,000.00	
Total Participants	106,985	179,605	106,985		106,985	
% 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)	31%	31%	31%		31%	
Budget % (% of Total Utility Costs)	31%	31%	31%		31%	
Renter Participation*						
Participants % (% of Total Participants)	21%	21%	21%		21%	
Budget % (% of Total Utility Costs)	21%	21%	21%		21%	
Energy Savings						
Annual kWh Savings at Meter	4,235,726	7,078,892	4,235,726		4,235,726	
Annual kWh Savings at Generator	4,657,919	7,784,477	4,657,919		4,657,919	
Cost per Annual kWh Saved at Generator	\$0.1170	\$0.0801	\$0.1170		\$0.1170	
Peak kW Savings at Meter	422.319	701.692	422.319		422.319	
Peak kW Savings at Generator	464.414	771.633	464.414		464.414	
Cost per Peak kW Saved at Generator	\$1,173.52	\$807.64	\$1,173.52		\$1,173.52	
Utility Ratio	4.55	7.12	4.82		5.02	
Utility NPV	\$1,936,550	\$3,812,309	\$2,081,962		\$2,191,108	
Ratepayer Ratio	0.47	0.50	0.48		0.50	
Ratepayer NPV	(\$2,845,136)	(\$4,463,551)	(\$2,795,357)		(\$2,783,758)	
Participant Ratio	5.92	4.22	6.03		6.14	
Participant NPV	\$5,012,311	\$7,809,074	\$5,126,106		\$5,242,178	
Societal Ratio	3.43	2.90	2.58		2.69	
Societal NPV	\$2,975,992	\$4,877,608	\$1,929,271		\$2,059,958	

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Residential Advertising and Education					
	Existing					
	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	\$180,000.00	\$77,333.52	\$180,000.00		\$180,000.00	
Administration	\$6,000.00	\$0.00	\$6,000.00		\$6,000.00	
Evaluation, Measurement & Verification	\$1,000.00	\$117.30	\$1,000.00		\$1,000.00	
Advertising & Promotion	\$0.00	\$118,417.41	\$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	\$187,000.00	\$195,868.23	\$187,000.00		\$187,000.00	
Total Participants	10,000	20,603	10,000		10,000	
% 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)	31%	31%	31%		31%	
Budget % (% of Total Utility Costs)	31%	31%	31%		31%	
Renter Participation*						
Participants % (% of Total Participants)	21%	21%	21%		21%	
Budget % (% of Total Utility Costs)	21%	21%	21%		21%	
Energy Savings						
Annual kWh Savings at Meter	0	0	0		0	
Annual kWh Savings at Generator	0	0	0		0	
Cost per Annual kWh Saved at Generator	\$0.0000	\$0.0000	\$0.0000		\$0.0000	
Peak kW Savings at Meter	0.000	0.000	0.000		0.000	
Peak kW Savings at Generator	0.000	0.000	0.000		0.000	
Cost per Peak kW Saved at Generator	\$0.00	\$0.00	\$0.00		\$0.00	
Utility Ratio	0.00	0.00	0.00		0.00	
Utility NPV	(\$187,000)	(\$195,868)	(\$187,000)		(\$187,000)	
Ratepayer Ratio	0.00	0.00	0.00		0.00	
Ratepayer NPV	(\$187,000)	(\$195,868)	(\$187,000)		(\$187,000)	
Participant Ratio	inf.	inf.	inf.		inf.	
Participant NPV	\$0	\$0	\$0		\$0	
Societal Ratio	0.00	0.00	0.00		0.00	
Societal NPV	(\$187,000)	(\$195,868)	(\$187,000)		(\$187,000)	

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Residential Implementation and Training					
	Existing	2021 Proposed	2021 Actual	2022 Proposed	2022 Actual	2023 Proposed 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		\$35,000.00	\$34,962.78	\$35,000.00		\$35,000.00
Administration		\$1,000.00	\$80.94	\$1,000.00		\$1,000.00
Evaluation, Measurement & Verification		\$1,000.00	\$7,020.91	\$1,000.00		\$1,000.00
Advertising & Promotion		\$0.00	\$748.36	\$0.00		\$0.00
Incentives		\$0.00	\$0.00	\$0.00		\$0.00
Other		\$0.00	\$871.44	\$0.00		\$0.00
Total Utility Costs		\$37,000.00	\$43,684.43	\$37,000.00		\$37,000.00
Total Participants		175	2	175		175
% 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)		31%	31%	31%		31%
Budget % (% of Total Utility Costs)		31%	31%	31%		31%
Renter Participation*						
Participants % (% of Total Participants)		21%	21%	21%		21%
Budget % (% of Total Utility Costs)		21%	21%	21%		21%
Energy Savings						
Annual kWh Savings at Meter		0	0	0		0
Annual kWh Savings at Generator		0	0	0		0
Cost per Annual kWh Saved at Generator		\$0.0000	\$0.0000	\$0.0000		\$0.0000
Peak kW Savings at Meter		0.000	0.000	0.000		0.000
Peak kW Savings at Generator		0.000	0.000	0.000		0.000
Cost per Peak kW Saved at Generator		\$0.00	\$0.00	\$0.00		\$0.00
Utility Ratio		0.00	0.00	0.00		0.00
Utility NPV		(\$37,000)	(\$43,684)	(\$37,000)		(\$37,000)
Ratepayer Ratio		0.00	0.00	0.00		0.00
Ratepayer NPV		(\$37,000)	(\$43,684)	(\$37,000)		(\$37,000)
Participant Ratio		inf.	inf.	inf.		inf.
Participant NPV		\$0	\$0	\$0		\$0
Societal Ratio		0.00	0.00	0.00		0.00
Societal NPV		(\$37,000)	(\$43,684)	(\$37,000)		(\$37,000)

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Low-Income House Therapy					
	Existing					
	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	\$18,000.00	\$45,090.72	\$18,000.00		\$18,000.00	
Administration	\$16,000.00	\$7,570.84	\$16,000.00		\$16,000.00	
Evaluation, Measurement & Verification	\$2,000.00	\$4,657.07	\$2,000.00		\$2,000.00	
Advertising & Promotion	\$3,000.00	\$2,182.86	\$3,000.00		\$3,000.00	
Incentives	\$160,000.00	\$261,956.94	\$160,000.00		\$160,000.00	
Other	\$5,000.00	\$0.00	\$5,000.00		\$5,000.00	
Total Utility Costs	\$204,000.00	\$321,458.43	\$204,000.00		\$204,000.00	
Total Participants	180	106	180		180	
% 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%	27%	21%		21%	
Budget % (% of Total Utility Costs)	21%	27%	21%		21%	
Energy Savings						
Annual kWh Savings at Meter	200,357	256,650	200,357		200,357	
Annual kWh Savings at Generator	220,327	282,231	220,327		220,327	
Cost per Annual kWh Saved at Generator	\$0.9259	\$1.1390	\$0.9259		\$0.9259	
Peak kW Savings at Meter	22.805	28.289	22.805		22.805	
Peak kW Savings at Generator	25.078	31.109	25.078		25.078	
Cost per Peak kW Saved at Generator	\$8,134.67	\$10,333.24	\$8,134.67		\$8,134.67	
Utility Ratio	0.47	0.39	0.49		0.51	
Utility NPV	(\$108,844)	(\$195,528)	(\$103,612)		(\$99,429)	
Ratepayer Ratio	0.04	0.11	0.04		0.05	
Ratepayer NPV	(\$2,135,012)	(\$979,592)	(\$2,170,303)		(\$2,207,454)	
Participant Ratio	inf.	inf.	inf.		inf.	
Participant NPV	\$2,186,168	\$1,046,022	\$2,226,691		\$2,268,025	
Societal Ratio	3.56	3.51	2.67		2.78	
Societal NPV	\$112,460	\$149,120	\$73,585		\$78,490	

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Commercial Energy Management					
	Existing					
	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	\$14,350.00	\$5,219.42	\$14,350.00		\$14,350.00	
Administration	\$9,650.00	\$3,588.93	\$9,650.00		\$9,650.00	
Evaluation, Measurement & Verification	\$1,000.00	\$0.00	\$1,000.00		\$1,000.00	
Advertising & Promotion	\$5,000.00	\$1,273.66	\$5,000.00		\$5,000.00	
Incentives	\$0.00	\$0.00	\$0.00		\$0.00	
Other	\$0.00	\$0.00	\$0.00		\$0.00	
Total Utility Costs	\$30,000.00	\$10,082.01	\$30,000.00		\$30,000.00	
Total Participants	512	300	512		512	
% of Spending by Customer Segments						
Residential	0%	0%	0%		0%	
Commercial	100%	100%	100%		100%	
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)						
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		10,989	
Annual kWh Savings at Generator	12,085	6,493	12,085		12,085	
Cost per Annual kWh Saved at Generator	\$2.4825	\$1.5527	\$2.4825		\$2.4825	
Peak kW Savings at Meter	725.930	390.060	725.930		725.930	
Peak kW Savings at Generator	798.287	428.939	798.287		798.287	
Cost per Peak kW Saved at Generator	\$37.58	\$23.50	\$37.58		\$37.58	
Utility Ratio	2.71	4.73	2.73		2.74	
Utility NPV	\$51,447	\$37,648	\$51,878		\$52,298	
Ratepayer Ratio	2.02	2.97	2.02		2.02	
Ratepayer NPV	\$41,179	\$31,634	\$41,404		\$41,615	
Participant Ratio	inf.	inf.	inf.		inf.	
Participant NPV	\$10,269	\$6,015	\$10,474		\$10,684	
Societal Ratio	2.72	4.74	2.73		2.74	
Societal NPV	\$51,603	\$37,740	\$51,879		\$52,299	

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Drive Power					
	Existing	2021 Proposed	2021 Actual	2022 Proposed	2022 Actual	2023 Proposed
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		\$50,000.00	\$40,239.06	\$50,000.00		\$50,000.00
Administration		\$14,000.00	\$10,943.69	\$14,000.00		\$14,000.00
Evaluation, Measurement & Verification		\$2,000.00	\$339.62	\$2,000.00		\$2,000.00
Advertising & Promotion		\$12,000.00	\$7,104.32	\$12,000.00		\$12,000.00
Incentives		\$165,000.00	\$389,076.76	\$165,000.00		\$165,000.00
Other		\$7,000.00	\$0.00	\$7,000.00		\$7,000.00
Total Utility Costs		\$250,000.00	\$447,703.45	\$250,000.00		\$250,000.00
Total Participants		227	545	227		227
% of Spending by Customer Segments						
Residential		0%	0%	0%		0%
Commercial		30%	30%	30%		30%
Industrial		70%	70%	70%		70%
Farm		0%	0%	0%		0%
Other		0%	0%	0%		0%
Total % of Spending		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		3,467,503
Annual kWh Savings at Generator		3,813,124	6,172,939	3,813,124		3,813,124
Cost per Annual kWh Saved at Generator		\$0.0656	\$0.0725	\$0.0656		\$0.0656
Peak kW Savings at Meter		348.402	719.846	348.402		348.402
Peak kW Savings at Generator		383.129	791.597	383.129		383.129
Cost per Peak kW Saved at Generator		\$652.52	\$565.57	\$652.52		\$652.52
Utility Ratio		7.49	7.85	7.91		8.24
Utility NPV		\$1,623,232	\$3,065,887	\$1,728,502		\$1,810,002
Ratepayer Ratio		0.76	0.78	0.79		0.80
Ratepayer NPV		(\$596,885)	(\$975,927)	(\$536,018)		(\$499,809)
Participant Ratio		3.59	1.99	3.66		3.73
Participant NPV		\$1,721,494	\$2,199,682	\$1,765,897		\$1,811,187
Societal Ratio		4.27	2.57	3.15		3.28
Societal NPV		\$2,449,161	\$3,597,412	\$1,609,063		\$1,706,196

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Compressed Air Efficiency					
	Existing	2021 Proposed	2021 Actual	2022 Proposed	2022 Actual	2023 Proposed
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		\$8,000.00	\$4,991.61	\$8,000.00		\$8,000.00
Administration		\$3,000.00	\$444.00	\$3,000.00		\$3,000.00
Evaluation, Measurement & Verification		\$2,000.00	\$0.00	\$2,000.00		\$2,000.00
Advertising & Promotion		\$5,000.00	\$491.01	\$5,000.00		\$5,000.00
Incentives		\$25,000.00	\$32,450.00	\$25,000.00		\$25,000.00
Other		\$5,000.00	\$0.00	\$5,000.00		\$5,000.00
Total Utility Costs		\$48,000.00	\$38,376.62	\$48,000.00		\$48,000.00
Total Participants		6	8	6		6
% of Spending by Customer Segments						
Residential		0%	0%	0%		0%
Commercial		50%	50%	50%		50%
Industrial		50%	50%	50%		50%
Farm		0%	0%	0%		0%
Other		0%	0%	0%		0%
Total % of Spending		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		250,287
Annual kWh Savings at Generator		275,234	197,160	275,234		275,234
Cost per Annual kWh Saved at Generator		\$0.1744	\$0.1946	\$0.1744		\$0.1744
Peak kW Savings at Meter		14.002	31.281	14.002		14.002
Peak kW Savings at Generator		15.397	34.399	15.397		15.397
Cost per Peak kW Saved at Generator		\$3,117.44	\$1,115.62	\$3,117.44		\$3,117.44
Utility Ratio		2.52	3.18	2.68		2.80
Utility NPV		\$73,178	\$83,819	\$80,658		\$86,451
Ratepayer Ratio		0.64	0.74	0.67		0.69
Ratepayer NPV		(\$67,794)	(\$42,167)	(\$63,134)		(\$60,216)
Participant Ratio		2.78	1.46	2.83		2.88
Participant NPV		\$106,272	\$50,086	\$109,091		\$111,967
Societal Ratio		2.59	1.74	1.86		1.94
Societal NPV		\$131,307	\$84,602	\$70,795		\$77,698

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Commercial Direct Install					
	Existing					
	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	\$18,000.00	\$34,977.84	\$18,000.00		\$18,000.00	
Administration	\$6,000.00	\$5,325.68	\$6,000.00		\$6,000.00	
Evaluation, Measurement & Verification	\$1,000.00	\$204.85	\$1,000.00		\$1,000.00	
Advertising & Promotion	\$3,000.00	\$0.00	\$3,000.00		\$3,000.00	
Incentives	\$13,000.00	\$15,983.51	\$13,000.00		\$13,000.00	
Other	\$1,000.00	\$0.00	\$1,000.00		\$1,000.00	
Total Utility Costs	\$42,000.00	\$56,491.88	\$42,000.00		\$42,000.00	
Total Participants	1,369	234	1,369		1,369	
% of Spending by Customer Segments						
Residential	0%	0%	0%		0%	
Commercial	100%	100%	100%		100%	
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)						
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		276,510	
Annual kWh Savings at Generator	304,071	791,116	304,071		304,071	
Cost per Annual kWh Saved at Generator	\$0.1381	\$0.0714	\$0.1381		\$0.1381	
Peak kW Savings at Meter	17.080	89.552	17.080		17.080	
Peak kW Savings at Generator	18.782	98.478	18.782		18.782	
Cost per Peak kW Saved at Generator	\$2,236.19	\$573.65	\$2,236.19		\$2,236.19	
Utility Ratio	1.32	2.46	1.40		1.47	
Utility NPV	\$13,582	\$82,649	\$16,984		\$19,815	
Ratepayer Ratio	0.38	0.29	0.39		0.41	
Ratepayer NPV	(\$92,129)	(\$335,204)	(\$90,841)		(\$90,166)	
Participant Ratio	inf.	inf.	inf.		inf.	
Participant NPV	\$118,711	\$438,298	\$120,825		\$122,982	
Societal Ratio	3.02	5.65	2.23		2.33	
Societal NPV	\$58,511	\$167,522	\$35,564		\$38,666	

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Custom Efficiency Grants					
	Existing	2021 Proposed	2021 Actual	2022 Proposed	2022 Actual	2023 Proposed
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		\$60,000.00	\$110,489.13	\$60,000.00		\$60,000.00
Administration		\$5,000.00	\$7,489.13	\$5,000.00		\$5,000.00
Evaluation, Measurement & Verification		\$9,000.00	\$11,363.29	\$9,000.00		\$9,000.00
Advertising & Promotion		\$2,000.00	\$1,847.69	\$2,000.00		\$2,000.00
Incentives		\$245,000.00	\$301,722.00	\$245,000.00		\$245,000.00
Other		\$0.00	\$0.00	\$0.00		\$0.00
Total Utility Costs		\$321,000.00	\$432,911.24	\$321,000.00		\$321,000.00
Total Participants		35	26	35		35
% of Spending by Customer Segments						
Residential		0%	0%	0%		0%
Commercial		90%	90%	90%		90%
Industrial		10%	10%	10%		10%
Farm		0%	0%	0%		0%
Other		0%	0%	0%		0%
Total % of Spending		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		2,195,038
Annual kWh Savings at Generator		2,413,828	7,535,706	2,413,828		2,413,828
Cost per Annual kWh Saved at Generator		\$0.1330	\$0.0574	\$0.1330		\$0.1330
Peak kW Savings at Meter		692.827	1,211.556	692.827		692.827
Peak kW Savings at Generator		761.885	1,332.317	761.885		761.885
Cost per Peak kW Saved at Generator		\$421.32	\$324.93	\$421.32		\$421.32
Utility Ratio		6.41	13.33	6.69		6.89
Utility NPV		\$1,736,822	\$5,339,782	\$1,828,020		\$1,889,353
Ratepayer Ratio		0.99	1.11	1.02		1.03
Ratepayer NPV		(\$24,206)	\$557,385	\$31,771		\$57,180
Participant Ratio		1.06	5.02	1.07		1.09
Participant NPV		\$105,787	\$4,072,312	\$141,008		\$176,933
Societal Ratio		1.67	8.71	1.34		1.38
Societal NPV		\$1,317,430	\$8,811,923	\$679,833		\$755,124

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Commercial Heat Pump					
	Existing					
	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	\$63,000.00	\$114,281.96	\$63,000.00		\$63,000.00	
Administration	\$13,000.00	\$10,530.89	\$13,000.00		\$13,000.00	
Evaluation, Measurement & Verification	\$4,000.00	\$315.63	\$4,000.00		\$4,000.00	
Advertising & Promotion	\$11,000.00	\$6,541.20	\$11,000.00		\$11,000.00	
Incentives	\$301,000.00	\$857,850.00	\$301,000.00		\$301,000.00	
Other	\$0.00	\$0.00	\$0.00		\$0.00	
Total Utility Costs	\$392,000.00	\$989,519.68	\$392,000.00		\$392,000.00	
Total Participants	69	230	69		69	
% of Spending by Customer Segments						
Residential	0%	0%	0%		0%	
Commercial	90%	90%	90%		90%	
Industrial	10%	10%	10%		10%	
Farm	0%	0%	0%		0%	
Other	0%	0%	0%		0%	
Total % of Spending	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	1,665,020		1,665,020	
Annual kWh Savings at Generator	1,830,980	4,988,252	1,830,980		1,830,980	
Cost per Annual kWh Saved at Generator	\$0.2141	\$0.1984	\$0.2141		\$0.2141	
Peak kW Savings at Meter	167.896	477.333	167.896		167.896	
Peak kW Savings at Generator	184.631	524.911	184.631		184.631	
Cost per Peak kW Saved at Generator	\$2,123.16	\$1,885.12	\$2,123.16		\$2,123.16	
Utility Ratio	3.37	3.29	3.58		3.72	
Utility NPV	\$929,778	\$2,267,499	\$1,011,566		\$1,064,598	
Ratepayer Ratio	0.60	0.60	0.63		0.64	
Ratepayer NPV	(\$875,053)	(\$2,126,729)	(\$829,362)		(\$813,149)	
Participant Ratio	1.24	1.15	1.27		1.29	
Participant NPV	\$413,938	\$674,767	\$450,035		\$486,853	
Societal Ratio	1.27	1.12	0.99		1.03	
Societal NPV	\$486,979	\$546,028	(\$18,265)		\$47,413	

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Commercial & Industrial Focused Efficiency					
	Existing	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		\$90,000.00	\$134,412.70	\$90,000.00		\$90,000.00
Administration		\$40,000.00	\$7,798.80	\$40,000.00		\$40,000.00
Evaluation, Measurement & Verification		\$6,000.00	\$1,391.50	\$6,000.00		\$6,000.00
Advertising & Promotion		\$10,000.00	\$346.07	\$10,000.00		\$10,000.00
Incentives		\$150,000.00	\$613,977.39	\$150,000.00		\$150,000.00
Other		\$6,000.00	\$82.77	\$6,000.00		\$6,000.00
Total Utility Costs		\$302,000.00	\$758,009.23	\$302,000.00		\$302,000.00
Total Participants		11	11	11		11
% of Spending by Customer Segments						
Residential		0%	0%	0%		0%
Commercial		10%	10%	10%		10%
Industrial		90%	90%	90%		90%
Farm		0%	0%	0%		0%
Other		0%	0%	0%		0%
Total % of Spending		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		1,145,172
Annual kWh Savings at Generator		1,259,316	8,399,889	1,259,316		1,259,316
Cost per Annual kWh Saved at Generator		\$0.2398	\$0.0902	\$0.2398		\$0.2398
Peak kW Savings at Meter		145.852	973.447	145.852		145.852
Peak kW Savings at Generator		160.390	1,070.475	160.390		160.390
Cost per Peak kW Saved at Generator		\$1,882.92	\$708.11	\$1,882.92		\$1,882.92
Utility Ratio		1.71	4.47	1.78		1.86
Utility NPV		\$213,352	\$2,632,571	\$236,953		\$258,809
Ratepayer Ratio		0.59	0.83	0.61		0.63
Ratepayer NPV		(\$355,169)	(\$677,734)	(\$342,939)		(\$332,680)
Participant Ratio		2.25	2.17	2.29		2.33
Participant NPV		\$399,771	\$2,119,565	\$411,142		\$422,739
Societal Ratio		1.75	2.90	1.31		1.36
Societal NPV		\$355,317	\$3,693,091	\$143,579		\$168,738

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Commercial Lighting					
	Existing	2021 Proposed	2021 Actual	2022 Proposed	2022 Actual	2023 Proposed
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		\$300,000.00	\$257,626.16	\$300,000.00		\$300,000.00
Administration		\$18,000.00	\$17,693.79	\$18,000.00		\$18,000.00
Evaluation, Measurement & Verification		\$5,000.00	\$986.88	\$5,000.00		\$5,000.00
Advertising & Promotion		\$25,000.00	\$6,308.17	\$25,000.00		\$25,000.00
Incentives		\$1,306,000.00	\$1,472,130.29	\$1,306,000.00		\$1,306,000.00
Other		\$11,000.00	\$0.00	\$11,000.00		\$11,000.00
Total Utility Costs		\$1,665,000.00	\$1,754,745.29	\$1,665,000.00		\$1,665,000.00
Total Participants		840	1,061	840		840
% of Spending by Customer Segments						
Residential		0%	0%	0%		0%
Commercial		70%	70%	70%		70%
Industrial		30%	30%	30%		30%
Farm		0%	0%	0%		0%
Other		0%	0%	0%		0%
Total % of Spending		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		16,685,206
Annual kWh Savings at Generator		18,348,295	17,558,356	18,348,295		18,348,295
Cost per Annual kWh Saved at Generator		\$0.0907	\$0.0999	\$0.0907		\$0.0907
Peak kW Savings at Meter		2,536.339	2,506.146	2,536.339		2,536.339
Peak kW Savings at Generator		2,789.148	2,755.945	2,789.148		2,789.148
Cost per Peak kW Saved at Generator		\$596.96	\$636.71	\$596.96		\$596.96
Utility Ratio		5.33	5.87	5.60		5.81
Utility NPV		\$7,217,291	\$8,539,477	\$7,663,876		\$8,012,187
Ratepayer Ratio		0.77	0.77	0.80		0.81
Ratepayer NPV		(\$2,653,732)	(\$3,077,695)	(\$2,404,568)		(\$2,257,625)
Participant Ratio		3.30	2.76	3.36		3.42
Participant NPV		\$7,789,883	\$8,346,565	\$7,987,304		\$8,188,673
Societal Ratio		3.89	3.36	2.94		3.05
Societal NPV		\$10,807,884	\$11,879,114	\$7,280,472		\$7,692,694

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Refrigeration					
	Existing	2021 Proposed	2021 Actual	2022 Proposed	2022 Actual	2023 Proposed
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		\$15,000.00	\$33,080.98	\$15,000.00		\$15,000.00
Administration		\$4,000.00	\$8,813.62	\$4,000.00		\$4,000.00
Evaluation, Measurement & Verification		\$1,000.00	\$102.44	\$1,000.00		\$1,000.00
Advertising & Promotion		\$3,000.00	\$2,818.07	\$3,000.00		\$3,000.00
Incentives		\$60,000.00	\$105,434.50	\$60,000.00		\$60,000.00
Other		\$0.00	\$0.00	\$0.00		\$0.00
Total Utility Costs		\$83,000.00	\$150,249.61	\$83,000.00		\$83,000.00
Total Participants		72	79	72		72
% of Spending by Customer Segments						
Residential		0%	0%	0%		0%
Commercial		90%	90%	90%		90%
Industrial		10%	10%	10%		10%
Farm		0%	0%	0%		0%
Other		0%	0%	0%		0%
Total % of Spending		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		931,909
Annual kWh Savings at Generator		1,024,797	1,069,645	1,024,797		1,024,797
Cost per Annual kWh Saved at Generator		\$0.0810	\$0.1405	\$0.0810		\$0.0810
Peak kW Savings at Meter		136.722	141.872	136.722		136.722
Peak kW Savings at Generator		150.350	156.013	150.350		150.350
Cost per Peak kW Saved at Generator		\$552.05	\$963.06	\$552.05		\$552.05
Utility Ratio		3.44	2.28	3.60		3.74
Utility NPV		\$202,373	\$192,668	\$215,908		\$227,506
Ratepayer Ratio		0.70	0.64	0.73		0.74
Ratepayer NPV		(\$120,371)	(\$191,342)	(\$113,291)		(\$108,278)
Participant Ratio		4.04	3.19	4.11		4.18
Participant NPV		\$288,089	\$340,303	\$294,544		\$301,128
Societal Ratio		3.74	2.73	2.82		2.93
Societal NPV		\$322,221	\$335,252	\$213,595		\$226,533

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Commercial Audits & Studies					
	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	\$117,500.00	\$26,348.49	\$117,500.00		\$117,500.00	
Administration	\$11,000.00	\$7,956.44	\$11,000.00		\$11,000.00	
Evaluation, Measurement & Verification	\$2,500.00	\$100.29	\$2,500.00		\$2,500.00	
Advertising & Promotion	\$14,000.00	\$1,759.33	\$14,000.00		\$14,000.00	
Incentives	\$123,000.00	\$272,864.69	\$123,000.00		\$123,000.00	
Other	\$0.00	\$0.00	\$0.00		\$0.00	
Total Utility Costs	\$268,000.00	\$309,029.24	\$268,000.00		\$268,000.00	
Total Participants	86	277	86		86	
% of Spending by Customer Segments						
Residential	0%	0%	0%		0%	
Commercial	10%	10%	10%		10%	
Industrial	90%	90%	90%		90%	
Farm	0%	0%	0%		0%	
Other	0%	0%	0%		0%	
Total % of Spending	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		1,826,378	
Annual kWh Savings at Generator	2,008,421	821,754	2,008,421		2,008,421	
Cost per Annual kWh Saved at Generator	\$0.1334	\$0.3761	\$0.1334		\$0.1334	
Peak kW Savings at Meter	100.605	72.405	100.605		100.605	
Peak kW Savings at Generator	110.633	79.622	110.633		110.633	
Cost per Peak kW Saved at Generator	\$2,422.43	\$3,881.21	\$2,422.43		\$2,422.43	
Utility Ratio	1.53	0.48	1.62		1.68	
Utility NPV	\$142,671	(\$159,866)	\$164,916		\$183,563	
Ratepayer Ratio	0.47	0.30	0.49		0.51	
Ratepayer NPV	(\$455,638)	(\$342,304)	(\$445,359)		(\$438,918)	
Participant Ratio	3.22	2.40	3.27		3.33	
Participant NPV	\$497,181	\$265,667	\$509,147		\$521,353	
Societal Ratio	1.79	1.02	1.27		1.32	
Societal NPV	\$290,296	\$4,981	\$99,174		\$119,296	

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Commercial Advertising and Education					
	Existing	2021 Proposed	2021 Actual	2022 Proposed	2022 Actual	2023 Proposed
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		\$62,500.00	\$4,765.04	\$62,500.00		\$62,500.00
Administration		\$1,500.00	\$1,200.17	\$1,500.00		\$1,500.00
Evaluation, Measurement & Verification		\$500.00	\$20.70	\$500.00		\$500.00
Advertising & Promotion		\$500.00	\$5,207.61	\$500.00		\$500.00
Incentives		\$0.00	\$0.00	\$0.00		\$0.00
Other		\$0.00	\$0.00	\$0.00		\$0.00
Total Utility Costs		\$65,000.00	\$11,193.52	\$65,000.00		\$65,000.00
Total Participants		100	0	100		100
% of Spending by Customer Segments						
Residential		0%	0%	0%		0%
Commercial		100%	100%	100%		100%
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)						
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
Annual kWh Savings at Generator		0	0	0		0
Cost per Annual kWh Saved at Generator		\$0.0000	\$0.0000	\$0.0000		\$0.0000
Peak kW Savings at Meter		0.000	0.000	0.000		0.000
Peak kW Savings at Generator		0.000	0.000	0.000		0.000
Cost per Peak kW Saved at Generator		\$0.00	\$0.00	\$0.00		\$0.00
Utility Ratio		0.00	0.00	0.00		0.00
Utility NPV		(\$65,000)	(\$11,194)	(\$65,000)		(\$65,000)
Ratepayer Ratio		0.00	0.00	0.00		0.00
Ratepayer NPV		(\$65,000)	(\$11,194)	(\$65,000)		(\$65,000)
Participant Ratio		inf.	inf.	inf.		inf.
Participant NPV		\$0	\$0	\$0		\$0
Societal Ratio		0.00	0.00	0.00		0.00
Societal NPV		(\$65,000)	(\$11,194)	(\$65,000)		(\$65,000)

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Integrated Building Design Plus					
	Existing					
	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	\$200,000.00	\$203,609.60	\$200,000.00		\$200,000.00	
Administration	\$15,000.00	\$7,764.71	\$15,000.00		\$15,000.00	
Evaluation, Measurement & Verification	\$1,000.00	\$0.00	\$1,000.00		\$1,000.00	
Advertising & Promotion	\$2,000.00	\$982.02	\$2,000.00		\$2,000.00	
Incentives	\$0.00	\$0.00	\$0.00		\$0.00	
Other	\$6,000.00	\$0.00	\$6,000.00		\$6,000.00	
Total Utility Costs	\$224,000.00		\$224,000.00		\$224,000.00	
Total Participants	6	3	6		6	
% of Spending by Customer Segments						
Residential	0%	0%	0%		0%	
Commercial	100%	100%	100%		100%	
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)						
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	
Annual kWh Savings at Generator	0	0	0		0	
Cost per Annual kWh Saved at Generator	\$0.0000	\$0.0000	\$0.0000		\$0.0000	
Peak kW Savings at Meter	0.000	0.000	0.000		0.000	
Peak kW Savings at Generator	0.000	0.000	0.000		0.000	
Cost per Peak kW Saved at Generator	\$0.00	\$0.00	\$0.00		\$0.00	
Utility Ratio	0.00	0.00	0.00		0.00	
Utility NPV	(\$224,000)	(\$212,356)	(\$224,000)		(\$224,000)	
Ratepayer Ratio	0.00	0.00	0.00		0.00	
Ratepayer NPV	(\$224,000)	(\$212,356)	(\$224,000)		(\$224,000)	
Participant Ratio	inf.	inf.	inf.		inf.	
Participant NPV	\$0	\$0	\$0		\$0	
Societal Ratio	0.00	0.00	0.00		0.00	
Societal NPV	(\$224,000)	(\$212,356)	(\$224,000)		(\$224,000)	

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Commercial Financing					
	Existing	2021 Proposed	2021 Actual	2022 Proposed	2022 Actual	2023 Proposed 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		\$10,000.00	\$2,870.51	\$10,000.00		\$10,000.00
Administration		\$4,000.00	\$0.00	\$4,000.00		\$4,000.00
Evaluation, Measurement & Verification		\$1,000.00	\$40.74	\$1,000.00		\$1,000.00
Advertising & Promotion		\$1,000.00	\$0.00	\$1,000.00		\$1,000.00
Incentives		\$0.00	\$4,052.50	\$0.00		\$0.00
Other		\$1,000.00	\$46.00	\$1,000.00		\$1,000.00
Total Utility Costs		\$17,000.00	\$7,009.75	\$17,000.00		\$17,000.00
Total Participants		5	0	5		5
% of Spending by Customer Segments						
Residential		0%	0%	0%		0%
Commercial		90%	90%	90%		90%
Industrial		10%	10%	10%		10%
Farm		0%	0%	0%		0%
Other		0%	0%	0%		0%
Total % of Spending		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
Annual kWh Savings at Generator		0	0	0		0
Cost per Annual kWh Saved at Generator		\$0.0000	\$0.0000	\$0.0000		\$0.0000
Peak kW Savings at Meter		0.000	0.000	0.000		0.000
Peak kW Savings at Generator		0.000	0.000	0.000		0.000
Cost per Peak kW Saved at Generator		\$0.00	\$0.00	\$0.00		\$0.00
Utility Ratio		0.00	0.00	0.00		0.00
Utility NPV		(\$17,000)	(\$7,010)	(\$17,000)		(\$17,000)
Ratepayer Ratio		0.00	0.00	0.00		0.00
Ratepayer NPV		(\$17,000)	(\$7,010)	(\$17,000)		(\$17,000)
Participant Ratio		inf.	inf.	inf.		inf.
Participant NPV		\$0	\$4,053	\$0		\$0
Societal Ratio		0.00	0.00	0.00		0.00
Societal NPV		(\$17,000)	(\$2,957)	(\$17,000)		(\$17,000)

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Commercial Implementation and Training					
	Existing	2021 Proposed	2021 Actual	2022 Proposed	2022 Actual	2023 Proposed
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		\$54,000.00	\$40,933.07	\$54,000.00		\$54,000.00
Administration		\$2,000.00	\$94.77	\$2,000.00		\$2,000.00
Evaluation, Measurement & Verification		\$2,000.00	\$8,219.80	\$2,000.00		\$2,000.00
Advertising & Promotion		\$2,000.00	\$876.16	\$2,000.00		\$2,000.00
Incentives		\$0.00	\$0.00	\$0.00		\$0.00
Other		\$0.00	\$1,020.24	\$0.00		\$0.00
Total Utility Costs		\$60,000.00	\$51,144.04	\$60,000.00		\$60,000.00
Total Participants		250	259	250		250
% of Spending by Customer Segments						
Residential		0%	0%	0%		0%
Commercial		90%	90%	90%		90%
Industrial		10%	10%	10%		10%
Farm		0%	0%	0%		0%
Other		0%	0%	0%		0%
Total % of Spending		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
Annual kWh Savings at Generator		0	0	0		0
Cost per Annual kWh Saved at Generator		\$0.0000	\$0.0000	\$0.0000		\$0.0000
Peak kW Savings at Meter		0.000	0.000	0.000		0.000
Peak kW Savings at Generator		0.000	0.000	0.000		0.000
Cost per Peak kW Saved at Generator		\$0.00	\$0.00	\$0.00		\$0.00
Utility Ratio		0.00	0.00	0.00		0.00
Utility NPV		(\$60,000)	(\$51,144)	(\$60,000)		(\$60,000)
Ratepayer Ratio		0.00	0.00	0.00		0.00
Ratepayer NPV		(\$60,000)	(\$51,144)	(\$60,000)		(\$60,000)
Participant Ratio		inf.	inf.	inf.		inf.
Participant NPV		\$0	\$0	\$0		\$0
Societal Ratio		0.00	0.00	0.00		0.00
Societal NPV		(\$60,000)	(\$51,144)	(\$60,000)		(\$60,000)

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Company-Owned Street & Area Lighting					
	Existing					
	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	\$432,803.00	\$188,744.89	\$432,803.00		\$0.00	
Administration	\$125,000.00	\$0.00	\$125,000.00		\$0.00	
Evaluation, Measurement & Verification	\$3,000.00	\$2,996.12	\$3,000.00		\$0.00	
Advertising & Promotion	\$0.00	\$0.00	\$0.00		\$0.00	
Incentives	\$178,572.00	\$151,174.80	\$178,572.00		\$0.00	
Other	\$142,374.00	\$0.00	\$177,795.00		\$0.00	
Total Utility Costs	\$881,749.00	\$342,915.81	\$917,170.00		\$0.00	
Total Participants	3,941	3,442	3,941		0	
% of Spending by Customer Segments						
Residential	0%	0%	0%		0%	
Commercial	0%	0%	0%		0%	
Industrial	0%	0%	0%		0%	
Farm	0%	0%	0%		0%	
Other	100%	100%	100%		100%	
Total % of Spending	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	2,414,037	1,853,025	2,414,037		0	
Annual kWh Savings at Generator	2,654,655	2,037,724	2,654,655		0	
Cost per Annual kWh Saved at Generator	\$0.3322	\$0.1683	\$0.3455		\$0.0000	
Peak kW Savings at Meter	0.000	0.000	0.000		0.000	
Peak kW Savings at Generator	0.000	0.000	0.000		0.000	
Cost per Peak kW Saved at Generator	\$0.00	\$0.00	\$0.00		\$0.00	
Utility Ratio	1.35	3.42	1.41		inf.	
Utility NPV	\$309,668	\$831,448	\$372,581		\$0	
Ratepayer Ratio	0.34	3.02	0.36		inf.	
Ratepayer NPV	(\$2,286,680)	\$784,920	(\$2,275,694)		\$0	
Participant Ratio	inf.	inf.	inf.		inf.	
Participant NPV	\$2,774,920	\$197,703	\$2,826,847		\$0	
Societal Ratio	3.46	11.80	2.23		inf.	
Societal NPV	\$1,730,304	\$2,070,045	\$905,120		\$0	

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Publicly-Owned Property Solar					
	Existing					
	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	\$8,000.00	\$3,131.78	\$8,000.00		\$8,000.00	
Administration	\$3,000.00	\$2,430.44	\$3,000.00		\$3,000.00	
Evaluation, Measurement & Verification	\$2,000.00	\$476.31	\$2,000.00		\$2,000.00	
Advertising & Promotion	\$1,000.00	\$0.00	\$1,000.00		\$1,000.00	
Incentives	\$206,250.00	\$217,083.00	\$206,250.00		\$206,250.00	
Other	\$5,635.00	\$0.00	\$5,635.00		\$5,635.00	
Total Utility Costs	\$225,885.00	\$223,121.53	\$225,885.00		\$225,885.00	
Total Participants	11	5	11		11	
% of Spending by Customer Segments						
Residential	0%	0%	0%		0%	
Commercial	100%	100%	100%		100%	
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)						
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	194,952		194,952	
Annual kWh Savings at Generator	214,384	254,208	214,384		214,384	
Cost per Annual kWh Saved at Generator	\$1.0536	\$0.8777	\$1.0536		\$1.0536	
Peak kW Savings at Meter	0.000	60.117	0.000		0.000	
Peak kW Savings at Generator	0.000	66.109	0.000		0.000	
Cost per Peak kW Saved at Generator	\$0.00	\$3,375.06	\$0.00		\$0.00	
Utility Ratio	0.51	1.27	0.55		0.58	
Utility NPV	(\$110,129)	\$60,713	(\$100,575)		(\$94,802)	
Ratepayer Ratio	0.27	0.41	0.29		0.30	
Ratepayer NPV	(\$317,831)	(\$404,663)	(\$312,431)		(\$310,895)	
Participant Ratio	0.81	inf.	0.82		0.83	
Participant NPV	(\$94,797)	\$682,459	(\$90,643)		(\$86,406)	
Societal Ratio	0.42	82.36	0.30		0.32	
Societal NPV	(\$307,068)	\$491,296	(\$368,748)		(\$361,575)	

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Planning - Regulatory Affairs					
	Existing					
	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	\$0.00	\$120,855.26	\$0.00		\$0.00	
Administration	\$0.00	\$101,310.70	\$0.00		\$0.00	
Evaluation, Measurement & Verification	\$0.00	\$45,279.06	\$0.00		\$0.00	
Advertising & Promotion	\$0.00	\$33.51	\$0.00		\$0.00	
Incentives	\$0.00	\$0.00	\$0.00		\$0.00	
Other	\$300,000.00	\$0.00	\$300,000.00		\$300,000.00	
Total Utility Costs	\$300,000.00	\$267,478.53	\$300,000.00		\$300,000.00	
Total Participants	0	0	0		0	
% of Spending by Customer Segments						
Residential	0%	0%	0%		0%	
Commercial	0%	0%	0%		0%	
Industrial	0%	0%	0%		0%	
Farm	0%	0%	0%		0%	
Other	100%	100%	100%		100%	
Total % of Spending	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	
Annual kWh Savings at Generator	0	0	0		0	
Cost per Annual kWh Saved at Generator	\$0.0000	\$0.0000	\$0.0000		\$0.0000	
Peak kW Savings at Meter	0.000	0.000	0.000		0.000	
Peak kW Savings at Generator	0.000	0.000	0.000		0.000	
Cost per Peak kW Saved at Generator	\$0.00	\$0.00	\$0.00		\$0.00	
Utility Ratio	0.00	0.00	0.00		0.00	
Utility NPV	(\$300,000)	(\$267,479)	(\$300,000)		(\$300,000)	
Ratepayer Ratio	0.00	0.00	0.00		0.00	
Ratepayer NPV	(\$300,000)	(\$267,479)	(\$300,000)		(\$300,000)	
Participant Ratio	inf.	inf.	inf.		inf.	
Participant NPV	\$0	\$0	\$0		\$0	
Societal Ratio	0.00	0.00	0.00		0.00	
Societal NPV	(\$300,000)	(\$267,479)	(\$300,000)		(\$300,000)	

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Research and Deveopment					
	Existing					
	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	\$0.00	\$120,447.70	\$0.00		\$0.00	
Administration	\$0.00	\$0.00	\$0.00		\$0.00	
Evaluation, Measurement & Verification	\$0.00	\$0.00	\$0.00		\$0.00	
Advertising & Promotion	\$0.00	\$0.00	\$0.00		\$0.00	
Incentives	\$0.00	\$0.00	\$0.00		\$0.00	
Other	\$225,000.00	\$0.00	\$225,000.00		\$225,000.00	
Total Utility Costs	\$225,000.00	\$120,447.70	\$225,000.00		\$225,000.00	
Total Participants	0	0	0		0	
% of Spending by Customer Segments						
Residential	0%	0%	0%		0%	
Commercial	0%	0%	0%		0%	
Industrial	0%	0%	0%		0%	
Farm	0%	0%	0%		0%	
Other	100%	100%	100%		100%	
Total % of Spending	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	
Annual kWh Savings at Generator	0	0	0		0	
Cost per Annual kWh Saved at Generator	\$0.0000	\$0.0000	\$0.0000		\$0.0000	
Peak kW Savings at Meter	0.000	0.000	0.000		0.000	
Peak kW Savings at Generator	0.000	0.000	0.000		0.000	
Cost per Peak kW Saved at Generator	\$0.00	\$0.00	\$0.00		\$0.00	
Utility Ratio	0.00	0.00	0.00		0.00	
Utility NPV	(\$225,000)	(\$120,448)	(\$225,000)		(\$225,000)	
Ratepayer Ratio	0.00	0.00	0.00		0.00	
Ratepayer NPV	(\$225,000)	(\$120,448)	(\$225,000)		(\$225,000)	
Participant Ratio	inf.	inf.	inf.		inf.	
Participant NPV	\$0	\$0	\$0		\$0	
Societal Ratio	0.00	0.00	0.00		0.00	
Societal NPV	(\$225,000)	(\$120,448)	(\$225,000)		(\$225,000)	

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	NGEA - Regulatory Assessments					
	Existing	2021 Proposed	2021 Actual	2022 Proposed	2022 Actual	2023 Proposed
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		\$0.00	\$0.00	\$0.00		\$0.00
Administration		\$0.00	\$0.00	\$0.00		\$0.00
Evaluation, Measurement & Verification		\$0.00	\$0.00	\$0.00		\$0.00
Advertising & Promotion		\$0.00	\$0.00	\$0.00		\$0.00
Incentives		\$0.00	\$0.00	\$0.00		\$0.00
Other		\$110,000.00	\$99,050.96	\$110,000.00		\$110,000.00
Total Utility Costs		\$110,000.00	\$99,050.96	\$110,000.00		\$110,000.00
Total Participants		0	0	0		0
% of Spending by Customer Segments						
Residential		0%	0%	0%		0%
Commercial		0%	0%	0%		0%
Industrial		0%	0%	0%		0%
Farm		0%	0%	0%		0%
Other		100%	100%	100%		100%
Total % of Spending		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
Annual kWh Savings at Generator		0	0	0		0
Cost per Annual kWh Saved at Generator		\$0.0000	\$0.0000	\$0.0000		\$0.0000
Peak kW Savings at Meter		0.000	0.000	0.000		0.000
Peak kW Savings at Generator		0.000	0.000	0.000		0.000
Cost per Peak kW Saved at Generator		\$0.00	\$0.00	\$0.00		\$0.00
Utility Ratio		0.00	0.00	0.00		0.00
Utility NPV		(\$110,000)	(\$99,051)	(\$110,000)		(\$110,000)
Ratepayer Ratio		0.00	0.00	0.00		0.00
Ratepayer NPV		(\$110,000)	(\$99,051)	(\$110,000)		(\$110,000)
Participant Ratio		inf.	inf.	inf.		inf.
Participant NPV		\$0	\$0	\$0		\$0
Societal Ratio		0.00	0.00	0.00		0.00
Societal NPV		(\$110,000)	(\$99,051)	(\$110,000)		(\$110,000)

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	PUC Assessments					
	Existing	2021 Proposed	2021 Actual	2022 Proposed	2022 Actual	2023 Proposed
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		\$0.00	\$0.00	\$0.00		\$0.00
Administration		\$0.00	\$0.00	\$0.00		\$0.00
Evaluation, Measurement & Verification		\$0.00	\$0.00	\$0.00		\$0.00
Advertising & Promotion		\$0.00	\$0.00	\$0.00		\$0.00
Incentives		\$0.00	\$0.00	\$0.00		\$0.00
Other		\$20,000.00	\$953.69	\$20,000.00		\$20,000.00
Total Utility Costs		\$20,000.00	\$953.69	\$20,000.00		\$20,000.00
Total Participants		0	0	0		0
% of Spending by Customer Segments						
Residential		0%	0%	0%		0%
Commercial		0%	0%	0%		0%
Industrial		0%	0%	0%		0%
Farm		0%	0%	0%		0%
Other		100%	100%	100%		100%
Total % of Spending		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
Annual kWh Savings at Generator		0	0	0		0
Cost per Annual kWh Saved at Generator		\$0.0000	\$0.0000	\$0.0000		\$0.0000
Peak kW Savings at Meter		0.000	0.000	0.000		0.000
Peak kW Savings at Generator		0.000	0.000	0.000		0.000
Cost per Peak kW Saved at Generator		\$0.00	\$0.00	\$0.00		\$0.00
Utility Ratio		0.00	0.00	0.00		0.00
Utility NPV		(\$20,000)	(\$954)	(\$20,000)		(\$20,000)
Ratepayer Ratio		0.00	0.00	0.00		0.00
Ratepayer NPV		(\$20,000)	(\$954)	(\$20,000)		(\$20,000)
Participant Ratio		inf.	inf.	inf.		inf.
Participant NPV		\$0	\$0	\$0		\$0
Societal Ratio		0.00	0.00	0.00		0.00
Societal NPV		(\$20,000)	(\$954)	(\$20,000)		(\$20,000)

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

	Transmission & Distribution Cost Study					
Category:	Existing					
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%	
kW Line Loss Factor	9.064%	9.064%	9.064%		9.064%	
Utility Costs						
Delivery	\$0.00	\$0.00	\$0.00		\$0.00	
Administration	\$0.00	\$0.00	\$0.00		\$0.00	
Evaluation, Measurement & Verification	\$0.00	\$0.00	\$0.00		\$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	\$0.00	\$0.00	\$0.00		\$0.00	
Total Participants	0	0	0		0	
% of Spending by Customer Segments						
Residential	0%	0%	0%		0%	
Commercial	0%	0%	0%		0%	
Industrial	0%	0%	0%		0%	
Farm	0%	0%	0%		0%	
Other	100%	100%	100%		100%	
Total % of Spending	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	
Annual kWh Savings at Generator	0	0	0		0	
Cost per Annual kWh Saved at Generator	\$0.0000	\$0.0000	\$0.0000		\$0.0000	
Peak kW Savings at Meter	0.000	0.000	0.000		0.000	
Peak kW Savings at Generator	0.000	0.000	0.000		0.000	
Cost per Peak kW Saved at Generator	\$0.00	\$0.00	\$0.00		\$0.00	
Utility Ratio	inf.	inf.	inf.		inf.	
Utility NPV	\$0	\$0	\$0		\$0	
Ratepayer Ratio	inf.	inf.	inf.		inf.	
Ratepayer NPV	\$0	\$0	\$0		\$0	
Participant Ratio	inf.	inf.	inf.		inf.	
Participant NPV	\$0	\$0	\$0		\$0	
Societal Ratio	inf.	inf.	inf.		inf.	
Societal NPV	\$0	\$0	\$0		\$0	

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Electronically Commutated Motors					
	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	\$0.00	\$3,211.32				
Administration	\$0.00	\$0.00				
Evaluation, Measurement & Verification	\$0.00	\$66.87				
Advertising & Promotion	\$0.00	\$0.00				
Incentives	\$0.00	\$7,300.00				
Other	\$0.00	\$0.00				
Total Utility Costs	\$0.00	\$10,578.19				
Total Participants						
% of Spending by Customer Segments						
Residential	100%	100%				
Commercial	0%	0%				
Industrial	0%	0%				
Farm	0%	0%				
Other	0%	0%				
Total % of Spending	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	53,172				
Annual kWh Savings at Generator	0	58,472				
Cost per Annual kWh Saved at Generator	\$0.0000	\$0.1809				
Peak kW Savings at Meter	0.000	15.571				
Peak kW Savings at Generator	0.000	17.123				
Cost per Peak kW Saved at Generator	\$0.00	\$617.78				
Utility Ratio	0.00	5.53				
Utility NPV	\$0	\$47,940				
Ratepayer Ratio	0.00	0.71				
Ratepayer NPV	\$0	(\$24,398)				
Participant Ratio	0.00	4.36				
Participant NPV	\$0	\$61,388				
Societal Ratio	0.00	4.43				
Societal NPV	\$0	\$73,877				

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Company CIP Projects					
	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	\$0.00	\$896.59				
Administration	\$0.00	\$108.04				
Evaluation, Measurement & Verification	\$0.00	\$0.00				
Advertising & Promotion	\$0.00	\$0.00				
Incentives	\$0.00	\$27,752.70				
Other	\$0.00	\$0.00				
Total Utility Costs	\$0.00	\$28,757.33				
Total Participants						
% of Spending by Customer Segments						
Residential	0%	0%				
Commercial	0%	0%				
Industrial	0%	0%				
Farm	0%	0%				
Other	100%	100%				
Total % of Spending	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				
Annual kWh Savings at Generator	0	0				
Cost per Annual kWh Saved at Generator	\$0.0000	\$0.0000				
Peak kW Savings at Meter	0.000	0.000				
Peak kW Savings at Generator	0.000	0.000				
Cost per Peak kW Saved at Generator	\$0.00	\$0.00				
Utility Ratio	0.00	0.00				
Utility NPV	\$0	(\$28,757)				
Ratepayer Ratio	0.00	0.00				
Ratepayer NPV	\$0	(\$28,757)				
Participant Ratio	0.00	inf.				
Participant NPV	\$0	\$27,753				
Societal Ratio	0.00	0.00				
Societal NPV	\$0	(\$1,005)				

* Percentage derived from 2010 Census data.

Electric Conservation Project Information Sheet
Otter Tail Power Company

Category: Status: Year:	Accounting Adjustments					
	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	\$0.00	\$0.00				
Administration	\$0.00	\$0.00				
Evaluation, Measurement & Verification	\$0.00	\$0.00				
Advertising & Promotion	\$0.00	\$0.00				
Incentives	\$0.00	\$0.00				
Other	\$0.00	\$9,077.71				
Total Utility Costs	\$0.00	\$9,077.71				
Total Participants						
% of Spending by Customer Segments						
Residential	0%	0%				
Commercial	0%	0%				
Industrial	0%	0%				
Farm	0%	0%				
Other	100%	100%				
Total % of Spending	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				
Annual kWh Savings at Generator	0	0				
Cost per Annual kWh Saved at Generator	\$0.0000	\$0.0000				
Peak kW Savings at Meter	0.000	0.000				
Peak kW Savings at Generator	0.000	0.000				
Cost per Peak kW Saved at Generator	\$0.00	\$0.00				
Utility Ratio	0.00	0.00				
Utility NPV	\$0	(\$9,078)				
Ratepayer Ratio	0.00	0.00				
Ratepayer NPV	\$0	(\$9,078)				
Participant Ratio	0.00	inf.				
Participant NPV	\$0	\$0				
Societal Ratio	0.00	0.00				
Societal NPV	\$0	(\$9,078)				

* Percentage derived from 2010 Census data.

CERTIFICATE OF SERVICE

**RE: In the Matter of Otter Tail Power Company's 2021 CIP Status Report,
2021 Demand Side Management Financial Incentive Project, and Annual Filing
to Update the Conservation Improvement Project Rider
Docket Nos. E017/CIP-20-475.01, E017/M-22- , and E017/M-22-**

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, 2022**.

/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
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_2022 CIP Rider and DSM Incentive Service List
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_2022 CIP Rider and DSM Incentive Service List
Brooke	Cooper	bcooper@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022191	Electronic Service	No	GEN_SL_Otter Tail Power Company_Otter Tail Power Company_2022 CIP Rider and DSM Incentive Service List
James C.	Erickson	jericksonkbc@gmail.com	Kelly Bay Consulting	17 Quechee St Superior, WI 54880-4421	Electronic Service	No	GEN_SL_Otter Tail Power Company_Otter Tail Power Company_2022 CIP Rider and DSM Incentive Service List
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_2022 CIP Rider and DSM Incentive Service List
Jessica	Fyhrie	jfyhrie@otpc.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_2022 CIP Rider and DSM Incentive Service List
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_2022 CIP Rider and DSM Incentive Service List
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_2022 CIP Rider and DSM Incentive Service List
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_2022 CIP Rider and DSM Incentive Service List
Kavita	Maini	kmairi@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_2022 CIP Rider and DSM Incentive Service List

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Andrew	Moratzka	andrew.moratzka@stoel.com	Steel Rives LLP	33 South Sixth St Ste 4200 Minneapolis, MN 55402	Electronic Service	No	GEN_SL_Otter Tail Power Company_Otter Tail Power Company_2022 CIP Rider and DSM Incentive Service List
Matthew	Olsen	molsen@otpc.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_2022 CIP Rider and DSM Incentive 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	GEN_SL_Otter Tail Power Company_Otter Tail Power Company_2022 CIP Rider and DSM Incentive Service List
Will	Seuffert	Will.Seuffert@state.mn.us	Public Utilities Commission	121 7th PI E Ste 350 Saint Paul, MN 55101	Electronic Service	No	GEN_SL_Otter Tail Power Company_Otter Tail Power Company_2022 CIP Rider and DSM Incentive Service List
Cary	Stephenson	cStephenson@otpc.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_2022 CIP Rider and DSM Incentive Service List
Stuart	Tommerdahl	stommerdahl@otpc.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_2022 CIP Rider and DSM Incentive Service List

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
Rebekah	Billings	rebekah.billings@centerpointenergy.com	CenterPoint Energy Minnesota Gas	505 Nicollet Mall Minneapolis, MN 55402	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	200 S 6th St Ste 4000 Minneapolis, MN 554021425	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Charlie	Buck	charlie.buck@oracle.com	Oracle	760 Market St FL 4 San Francisco, CA 94102	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
Brooke	Cooper	bcooper@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022191	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
George	Crocker	gwillc@nawo.org	North American Water Office	PO Box 174 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
Charles	Drayton	charles.drayton@enbridge.com	Enbridge Energy Company, Inc.	7701 France Ave S Ste 600 Edina, MN 55435	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Jim	Erchul	jerschul@dbnhs.org	Daytons Bluff Neighborhood Housing Sv.	823 E 7th St St. Paul, MN 55106	Electronic Service	No	OFF_SL_20-475_CIP-20-475
James C.	Erickson	jericksonkbc@gmail.com	Kelly Bay Consulting	17 Quechee St Superior, WI 54880-4421	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Greg	Ernst	gaernst@q.com	G. A. Ernst & Associates, Inc.	2377 Union Lake Trl Northfield, MN 55057	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Melissa S	Feine	melissa.feine@semcac.org	SEMCAC	PO Box 549 204 S Elm St Rushford, MN 55971	Electronic Service	No	OFF_SL_20-475_CIP-20-475
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
Karolanne	Foley	Karolanne.foley@dairylandpower.com	Dairyland Power Cooperative	PO Box 817 La Crosse, WI 54602-0817	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
Rob	Friend	rfriend@mchamber.com	Minnesota Chamber of Commerce - MN Waste Wise Foundation	400 Robert St N Ste 1500 Saint Paul, MN 55101	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Jessica	Fyhrie	jfyhrie@otpc.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
Jenny	Glumack	jenny@mrea.org	Minnesota Rural Electric Association	11640 73rd Ave N Maple Grove, MN 55369	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Laura	Goldberg	lgoldberg@nrdc.org	Natural Resources Defense Council	20 N. Upper Wacker Dr. Suite 1600 Chicago, IL 60606	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Angela E.	Gordon	agordon@trccompanies.com	Lockheed Martin	1000 Clark Ave. St. Louis, MO 63102	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Pat	Green	N/A	N Energy Dev	City Hall 401 E 21st St Hibbing, MN 55746	Paper Service	No	OFF_SL_20-475_CIP-20-475
Jason	Grenier	jgrenier@otpc.com	Otter Tail Power Company	215 South Cascade Street Fergus Falls, MN 56537	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Jeffrey	Haase	jhaase@greenergy.com	Great River Energy	12300 Elm Creek Blvd Maple Grove, MN 55369	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
Tony	Hainault	anthony.hainault@co.henn epin.mn.us	Hennepin County DES	701 4th Ave S Ste 700 Minneapolis, MN 55415-1842	Electronic Service	No	OFF_SL_20-475_CIP-20- 475
Tyler	Hamman	tylerh@bepec.com	Basin Electric Power Cooperative	1717 E Interstate Ave Bismarck, ND 58501	Electronic Service	No	OFF_SL_20-475_CIP-20- 475
Patty	Hanson	phanson@rupu.org	Rochester Public Utilities	4000 E River Rd NE Rochester, MN 55906	Electronic Service	No	OFF_SL_20-475_CIP-20- 475
Norm	Harold	N/A	NKS Consulting	5591 E 180th St Prior Lake, MN 55372	Paper Service	No	OFF_SL_20-475_CIP-20- 475
Adam	Heinen	aheinen@dakotaelectric.co m	Dakota Electric Association	4300 220th St W Farmington, MN 55024	Electronic Service	No	OFF_SL_20-475_CIP-20- 475
Jared	Hendricks	jared.hendricks@owatonna utilities.com	Owatonna Municipal Public Utilities	PO Box 800 208 S Walnut Ave Owatonna, MN 55060-2940	Electronic Service	No	OFF_SL_20-475_CIP-20- 475
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.co m	Enbridge Energy Company, Inc.	11 East Superior St Ste 125 Duluth, MN 55802	Electronic Service	No	OFF_SL_20-475_CIP-20- 475
Deborah	Knoll	dknoll@mnpower.com	Minnesota Power	30 W Superior St Duluth, MN 55802	Electronic Service	No	OFF_SL_20-475_CIP-20- 475
Tina	Koecher	tkoecher@mnpower.com	Minnesota Power	30 W Superior St Duluth, MN 558022093	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
Kelly	Lady	kellyl@austinutilities.com	Austin Utilities	400 4th St NE Austin, MN 55912	Electronic Service	No	OFF_SL_20-475_CIP-20-475
James D.	Larson	james.larson@avantenergy.com	Avant Energy Services	220 S 6th St Ste 1300 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Erica	Larson	erica.larson@centerpointenergy.com	CenterPoint Energy	505 Nicollet Avenue P.O. Box 59038 Minneapolis, Minnesota 55459-0038	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Martin	Lepak	Martin.Lepak@aeoa.org	Arrowhead Economic Opportunity	702 S 3rd Ave Virginia, MN 55792	Electronic Service	No	OFF_SL_20-475_CIP-20-475
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
Kavita	Maini	kmairi@wi.rr.com	KM Energy Consulting, LLC	961 N Lost Woods Rd Oconomowoc, WI 53066	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Pam	Marshall	pam@energycents.org	Energy CENTS Coalition	823 7th St E St. Paul, MN 55106	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Scot	McClure	scotmcclure@alliantenergy.com	Interstate Power And Light Company	4902 N Biltmore Ln PO Box 77007 Madison, WI 537071007	Electronic Service	No	OFF_SL_20-475_CIP-20-475
John	McWilliams	John.McWilliams@DairylandPower.com	Dairyland Power Cooperative	3200 East Ave SPO Box 817 La Crosse, WI 54601-7227	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Brian	Meloy	brian.meloy@stinson.com	STINSON LLP	50 S 6th St Ste 2600 Minneapolis, MN 55402	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
David	Moeller	dmoeller@allte.com	Minnesota Power	30 W Superior St Duluth, MN 558022093	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP	33 South Sixth St Ste 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Ted	Nedwick	tnedwick@nhtinc.org	National Housing Trust	1101 30th Street NW Ste 100A Washington, DC 20007	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Carl	Nelson	cnelson@mncee.org	Center for Energy and Environment	212 3rd Ave N Ste 560 Minneapolis, MN 55401	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Samantha	Norris	samanthanorris@alliantenergy.com	Interstate Power and Light Company	200 1st Street SE PO Box 351 Cedar Rapids, IA 524060351	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Audrey	Partridge	apartridge@mncee.org	Center for Energy and Environment	212 3rd Ave. N. Suite 560 Minneapolis, Minnesota 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
Dave	Reinke	dreinke@dakotaelectric.com	Dakota Electric Association	4300 220th St W Farmington, MN 55024-9583	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
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
Christopher	Schoenherr	cp.schoenherr@smmpa.org	SMMPA	500 First Ave SW Rochester, MN 55902-3303	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Will	Seuffert	Will.Seuffert@state.mn.us	Public Utilities Commission	121 7th PI E Ste 350 Saint Paul, MN 55101	Electronic Service	Yes	OFF_SL_20-475_CIP-20-475
Ken	Smith	ken.smith@districtenergy.com	District Energy St. Paul Inc.	76 W Kellogg Blvd St. Paul, MN 55102	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Anna	Sommer	ASommer@energyfuturesgroup.com	Energy Futures Group	PO Box 692 Canton, NY 13617	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Russ	Stark	Russ.Stark@ci.stpaul.mn.us	City of St. Paul	390 City Hall 15 West Kellogg Boulevard Saint Paul, MN 55102	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Cary	Stephenson	cStephenson@otpc.com	Otter Tail Power Company	215 South Cascade Street Fergus Falls, MN 56537	Electronic Service	Yes	OFF_SL_20-475_CIP-20-475
Lynnette	Sweet	Regulatory.records@xcelenergy.com	Xcel Energy	414 Nicollet Mall FL 7 Minneapolis, MN 554011993	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Stuart	Tommerdahl	stommerdahl@otpc.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
Kodi	Verhalen	kverhalen@taftlaw.com	Taft Stettinius & Hollister LLP	80 S 8th St Ste 2200 Minneapolis, MN 55402	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
Michael	Volker	mvolker@eastriver.coop	East River Electric Power Coop	211 S. Harth Ave Madison, SD 57042	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Sharon N.	Walsh	swalsh@shakopeeutilities.com	Shakopee Public Utilities	255 Sarazin St Shakopee, MN 55379	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Ethan	Warner	ethan.warner@centerpointenergy.com	CenterPoint Energy	505 Nicollet Mall Minneapolis, Minnesota 55402	Electronic Service	No	OFF_SL_20-475_CIP-20-475
Robyn	Woeste	robynwoeste@alliantenergy.com	Interstate Power and Light Company	200 First St SE Cedar Rapids, IA 52401	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
Tom	Balster	tombalster@alliantenergy.com	Interstate Power & Light Company	PO Box 351 200 1st St SE Cedar Rapids, IA 524060351	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Lisa	Beckner	lbeckner@mnpower.com	Minnesota Power	30 W Superior St Duluth, MN 55802	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Rebekah	Billings	rebekah.billings@centerpointenergy.com	CenterPoint Energy Minnesota Gas	505 Nicollet Mall Minneapolis, MN 55402	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
William	Black	bblack@mmua.org	MMUA	Suite 200 3131 Fernbrook Lane North Plymouth, MN 55447	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Christina	Brusven	cbrusven@fredlaw.com	Fredrikson Byron	200 S 6th St Ste 4000 Minneapolis, MN 554021425	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Charlie	Buck	charlie.buck@oracle.com	Oracle	760 Market St FL 4 San Francisco, CA 94102	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Ray	Choquette	rchoquette@agp.com	Ag Processing Inc.	12700 West Dodge Road PO Box 2047 Omaha, NE 68103-2047	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
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	PO Box 174 Lake Elmo, MN 55042	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Patrick	Deal	pdeal@mchamber.com	Minnesota Chamber of Commerce	400 Robert St N Ste 1500 Saint Paul, MN 55101	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
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
Jim	Erchul	jerschul@dbnhs.org	Daytons Bluff Neighborhood Housing Sv.	823 E 7th St St. Paul, MN 55106	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Greg	Ernst	gaernst@q.com	G. A. Ernst & Associates, Inc.	2377 Union Lake Trl Northfield, MN 55057	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Melissa S	Feine	melissa.feine@semcac.org	SEMCAC	PO Box 549 204 S Elm St Rushford, MN 55971	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 280 Saint Paul, MN 551012198	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Karolanne	Foley	Karolanne.foley@dairylandpower.com	Dairyland Power Cooperative	PO Box 817 La Crosse, WI 54602-0817	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Rob	Friend	rfriend@mnchamber.com	Minnesota Chamber of Commerce - MN Waste Wise Foundation	400 Robert St N Ste 1500 Saint Paul, MN 55101	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Jenny	Glumack	jenny@mrea.org	Minnesota Rural Electric Association	11640 73rd Ave N Maple Grove, MN 55369	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Angela E.	Gordon	agordon@trccompanies.com	Lockheed Martin	1000 Clark Ave. St. Louis, MO 63102	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
Pat	Green	N/A	N Energy Dev	City Hall 401 E 21st St Hibbing, MN 55746	Paper Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Jason	Grenier	jgrenier@otpc.com	Otter Tail Power Company	215 South Cascade Street Fergus Falls, MN 56537	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
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
Tony	Hainault	anthony.hainault@co.henn epin.mn.us	Hennepin County DES	701 4th Ave S Ste 700 Minneapolis, MN 55415-1842	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Tyler	Hamman	tylerh@bepec.com	Basin Electric Power Cooperative	1717 E Interstate Ave Bismarck, ND 58501	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
Norm	Harold	N/A	NKS Consulting	5591 E 180th St Prior Lake, MN 55372	Paper Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Jared	Hendricks	jared.hendricks@owatonna utilities.com	Owatonna Municipal Public Utilities	PO Box 800 208 S Walnut Ave Owatonna, MN 55060-2940	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Dave	Johnson	dave.johnson@aeoa.org	Arrowhead Economic Opportunity Agency	702 3rd Ave S Virginia, MN 55792	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Deborah	Knoll	dknoll@mnpower.com	Minnesota Power	30 W Superior St Duluth, MN 55802	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
Tina	Koecher	tkoecher@mnpower.com	Minnesota Power	30 W Superior St Duluth, MN 558022093	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Kelly	Lady	kellyl@austinutilities.com	Austin Utilities	400 4th St NE Austin, MN 55912	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Erica	Larson	erica.larson@centerpointenergy.com	CenterPoint Energy	505 Nicollet Avenue P.O. Box 59038 Minneapolis, Minnesota 55459-0038	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Martin	Lepak	Martin.Lepak@aeoa.org	Arrowhead Economic Opportunity	702 S 3rd Ave Virginia, MN 55792	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Corey	Lubovich	coreyl@hpuc.com	Hibbing Public Utilities Commission	1902 6th Ave E Hibbing, MN 55746	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Pam	Marshall	pam@energycents.org	Energy CENTS Coalition	823 7th St E St. Paul, MN 55106	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Scot	McClure	scotmcclure@alliantenergy.com	Interstate Power And Light Company	4902 N Biltmore Ln PO Box 77007 Madison, WI 537071007	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
John	McWilliams	John.McWilliams@DairylandPower.com	Dairyland Power Cooperative	3200 East Ave SPO Box 817 La Crosse, WI 54601-7227	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Brian	Meloy	brian.meloy@stinson.com	STINSON LLP	50 S 6th St Ste 2600 Minneapolis, MN 55402	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
David	Moeller	dmoeller@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022093	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
Andrew	Moratzka	andrew.moratzka@stoel.com	Steel Rives LLP	33 South Sixth St Ste 4200 Minneapolis, MN 55402	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Carl	Nelson	cnelson@mncee.org	Center for Energy and Environment	212 3rd Ave N Ste 560 Minneapolis, MN 55401	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Samantha	Norris	samanthanorris@alliantenergy.com	Interstate Power and Light Company	200 1st Street SE PO Box 351 Cedar Rapids, IA 524060351	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Audrey	Partridge	apartridge@mncee.org	Center for Energy and Environment	212 3rd Ave. N. Suite 560 Minneapolis, Minnesota 55401	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
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
Christopher	Schoenherr	cp.schoenherr@smmpa.org	SMMPA	500 First Ave SW Rochester, MN 55902-3303	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Will	Seuffert	Will.Seuffert@state.mn.us	Public Utilities Commission	121 7th Pl E Ste 350 Saint Paul, MN 55101	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
Ken	Smith	ken.smith@districtenergy.com	District Energy St. Paul Inc.	76 W Kellogg Blvd St. Paul, MN 55102	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Anna	Sommer	ASommer@energyfuturesgroup.com	Energy Futures Group	PO Box 692 Canton, NY 13617	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Russ	Stark	Russ.Stark@ci.stpaul.mn.us	City of St. Paul	390 City Hall 15 West Kellogg Boulevard Saint Paul, MN 55102	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Lynnette	Sweet	Regulatory.records@xcelenergy.com	Xcel Energy	414 Nicollet Mall FL 7 Minneapolis, MN 554011993	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Kodi	Verhalen	kverhalen@taftlaw.com	Taft Stettinius & Hollister LLP	80 S 8th St Ste 2200 Minneapolis, MN 55402	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Michael	Volker	mvolker@eastriver.coop	East River Electric Power Coop	211 S. Harth Ave Madison, SD 57042	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Sharon N.	Walsh	swalsh@shakopeeutilities.com	Shakopee Public Utilities	255 Sarazin St Shakopee, MN 55379	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
Ethan	Warner	ethan.warner@centerpointenergy.com	CenterPoint Energy	505 Nicollet Mall Minneapolis, Minnesota 55402	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
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