

Otter Tail Power Company
South Dakota Energy Efficiency Program 2022 Status Report

Table of Contents

I.	INTRODUCTION	1
II.	DIRECT IMPACT – RESIDENTIAL	3
	A. AIR CONDITIONING CONTROL	3
	B. APPLIANCE RECYCLING.....	4
	C. HOME LIGHTING.....	5
	D. RESIDENTIAL HEAT PUMPS	6
	E. SMART THERMOSTATS	8
III.	DIRECT IMPACT – COMMERCIAL.....	9
	A. COMMERCIAL DIRECT INSTALL	9
	B. COMMERCIAL HEAT PUMPS	10
	C. COMMERCIAL LIGHTING	12
	D. CUSTOM ENERGY EFFICIENCY PROJECT	13
	E. DRIVE POWER.....	14
IV.	INDIRECT IMPACT	15
	ADVERTISING and EDUCATION.....	15
V.	MISCELLANEOUS / INACTIVE PROJECT COSTS	16
	EEP DEVELOPMENT.....	16
VI.	FINANCIAL INCENTIVE	17
VII.	REGULATORY REQUIREMENTS.....	17
	ENERGY ADJUSTMENT RIDER / CARRYING COSTS.....	17

I. INTRODUCTION

The purpose of this Status Report is to present the results of direct impact, indirect impact, and miscellaneous programs completed from January 1, 2022, through December 31, 2022, through Otter Tail Power Company's (Otter Tail, the Company) South Dakota Energy Efficiency Partnership (EEP) program. Cost recovery and the financial incentive calculations for the program are also detailed in this report. Otter Tail has filed this annual filing with the South Dakota Public Utilities Commission (Commission, SDPUC) since its first EEP Status Report annual filing in 2010 which summarized partial-year 2008 and full-year 2009 conservation activities.

Direct Impact Programs

Residential

- Air Conditioning Control
- Appliance Recycling
- Home Lighting
- Residential Heat Pumps
- Smart Thermostats

Commercial

- Commercial Direct Install
- Commercial Heat Pumps
- Commercial Lighting
- Custom Energy Efficiency Project
- Drive Power

Indirect Impact Programs

- Advertising and Education

Miscellaneous and Inactive Programs

- EEP Development

Financial Incentive

Regulatory Requirements

Background

- On July 1, 2020, Otter Tail requested approval of its 2021-2023 EEP, Docket No. EL20-022.
- At the November 24, 2020 SDPUC meeting, the Commission voted unanimously to approve Otter Tail’s proposed EEP for 2021-2023.
- At the October 12, 2021 SDPUC meeting, the Commission voted unanimously to approve some Company requested changes to its Residential and Commercial Heat Pump programs as well as allow for flexibility to lower rebate levels without approval while maintaining cost-effectiveness and staying within the Commission approved 110% spending cap for the 2022 and 2023 program years.

Overview

Overall results for the 2022 South Dakota EEP Program show the Company achieved 61 percent of projected participation goals, 130 percent of projected energy savings goals, and 107 percent of projected demand savings while maintaining spending at 100 percent of the budget.

Summary of Budget to Actuals – 2022			
	Budget	Actual	% of Goal
Expenses All Programs	\$525,000	\$525,883	100%
Participation	9,627	5,831	61%
Energy Savings - kWh	4,669,603	6,067,575	130%
Demand Savings - kW	738.0	786.4	107%

The Company’s 2022 EEP program achieved significant energy and demand savings, stayed within allowed budget parameters, and resulted in an overall cost-effective effort for program participants and South Dakota ratepayers. Otter Tail appreciates the Commission’s support for our program, and we applaud customers’ response. Energy efficiency is a long-term commitment that continues to evolve in South Dakota. Otter Tail is confident that working together with customers we can continue to create a sustainable energy future for South Dakota, of which energy efficiency will play a critical role.

Approved 2022 South Dakota EEP program goals, budgets, net benefits, benefit-cost ratios, and lifetime kWh savings are listed in Appendix A, Tables 1 through 4, along with actual results for 2022.

II. DIRECT IMPACT – RESIDENTIAL

A. AIR CONDITIONING CONTROL

The Air Conditioning Control Program targets residential customers with central air conditioning systems. Customers are encouraged to enroll in the program and receive a \$8.25/month credit for each of the four summer months (June-September). In 2022, Otter Tail controlled air conditioning 26 days totaling of 85 hours and 8 minutes. This control time is within the 300-hour control limit approved for the air conditioning rider.

Otter Tail promotes air conditioning control using various resources listed below:

- *Programs and Services Guide* sent to contractors.
- Bill inserts promoting EEP program opportunities for South Dakota customers.
- Customer care booklet that is sent to all new customers.
- Home page hero spots on the Company website.
- Training material covered with service representatives.
- Bill messages included on customer monthly service statements.
- Brochures available upon request.
- Program, rate, and rebate pages described within the Company’s website.

Participation and Budget

PARTICIPATION AND BUDGET – 2022				
Air Conditioning Control	Actual Annual Added¹	Actual Cumulative	Proposed Cumulative	% of Cumulative Goal
Participation	32	655	725	90%

		Actual Spend	Proposed Spend	% of Goal
Budget \$		\$4,285	\$12,000	36%

Evaluation Methodology

Otter Tail continues to use savings based on a previous study performed where the company extracted interval customer data from its load research database to analyze customer’s 15-minute loads. Otter Tail used this interval data to compare energy consumption on non-control days to control days when the weather was similar between the periods.

¹ At the June 23, 2020 South Dakota Public Utility Commission meeting, Commissioner Fiegen requested the Company report the number of participants added annually.

Energy Savings and Adjustments

Air Conditioning Control	Actual Savings at the Generator	Budgeted Savings at the Generator	% of Goal
Energy Savings – kWh	8,137	9,006	90%
Demand Savings – kW Summer Coincident Peak	135.7	150.2	90%

B. APPLIANCE RECYCLING

The Appliance Recycling project offers participating customers an incentive to recycle inefficient, but still operating refrigerators, freezers, dehumidifiers, and window air conditioners.

Participation and Budget

PARTICIPATION AND BUDGET – 2022			
Appliance Recycling	Actual	Proposed	% of Goal
Participation*	3	100	3%
Budget \$	\$6,515	\$28,000	23%

* Participation is based on the number of units recycled.

The Company recognizes total participation of three in the Appliance Recycling program. At the June 8, 2022, South Dakota Public Utilities Commission meeting, regarding Otter Tail’s 2021 SD EEP Status Report, the Commission made an order to remove the Appliance Recycling program due to non-cost-effectiveness. These three participants represent recycling orders already in place and in the recycling process at the time of the July SD PUC decision. After completing these three recycling orders, Otter Tail discontinued the Appliance Recycling program in its SD EEP plan activities.

Evaluation Methodology

Energy savings estimates utilize the State of Minnesota’s Division of Energy Resources’ Technical Reference Manual (MN TRM) energy savings algorithms.

Energy Savings and Adjustments

Appliance Recycling	Actual Savings at the Generator	Budgeted Savings at the Generator	% of Goal
Energy Savings – kWh	2,994	97,307	3%
Demand Savings – kW Summer Coincident Peak	0.5	15.1	3%

C. HOME LIGHTING

The Home Lighting program promotes qualified ENERGY STAR LED lighting sold by participating retailers to customers of Otter Tail Power Company. The project also provides cash rebate incentives to residential customers for hard-wired retrofits of inefficient lighting technologies to LED lighting systems. Finally, the project offers incentives for installation of hard-wired LED lighting in new construction applications.

Otter Tail actively promotes the Home Lighting program through a variety of promotional resources:

- *Programs and Services Guide* sent to contractors.
- Program, technology, and rebate information available on the Company’s website.
- Bill inserts promoting EEP program opportunities for South Dakota customers.
- Messages on customer billing statements.

Participation and Budget

PARTICIPATION AND BUDGET – 2022			
Home Lighting	Actual	Proposed	% of Goal
Participation*	4,611	7,055	65%
Budget \$	\$26,187	\$35,000	75%

* Participation is based on the number of units installed.

Evaluation Methodology

Engineering calculations and the MN TRM are used for impact savings for energy and demand from the Home Lighting program.

Energy Savings and Adjustments

Home Lighting	Actual Savings at the Generator	Proposed Savings at the Generator	% of Goal
Energy Savings – kWh	182,761	295,269	62%
Demand Savings – kW Summer Coincident Peak	21.3	30.8	69%

D. RESIDENTIAL HEAT PUMPS

The Residential Heat Pump program targets 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. The Company relies on Energy Star qualifications as a guide for the minimum equipment efficiency requirement for its air source heat pumps and geothermal heat pumps. In 2022 the Company discontinued its rebate for standard Energy Star air source heat pumps. This was done to focus the program on the higher efficiency cold climate heat pumps, to simplify the program, and introduce a new emerging technology air to water heat pump rebate.

New for 2022 was the introduction of air to water heat pump (AWHP) rebate. The AWHP is an emerging technology that has the potential to improve efficiencies for customers installing hydronic heating systems where geothermal is not feasible and an electric resistance boiler is the only option. AWHP participation is anticipated to remain low with limited product available in the market. The Company believes it is a positive addition to the heat pump program portfolio to provide options for all customers and to support the energy efficiency of the heat pump technology.

In 2022 air source heat pumps met the following minimum rating requirements.

	SEER	HSPF	COP*
CCHP – Ducted	> or = 15.0	> or = 9.0	-
CCHP – Ductless	> or = 15.0	> or = 10.0	-
Air to Water (AWHP)	-	-	1.7

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

In 2022 geothermal heat pumps met the following minimum rating requirements.

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

The Company added a minimum requirement for single units equal to or larger than six tons. This was done after contractor feedback and the limitation of Energy Star testing that does not account for these larger units. When compared to other heating/cooling options at these larger sizes. The geothermal heat pumps remain the highest efficiency technology available for customers.

Otter Tail promotes energy efficient air source heat pumps through the following resources:

- *Programs and Services Guide* sent to contractors.
- Training material covered with service representatives.
- Bill messages included on customer monthly service statements.
- Bill inserts featuring heat pump efficiency and rebates.
- Program, technology, and rebate information available on the Company’s website.

Participation and Budget

PARTICIPATION AND BUDGET – 2022			
Residential Heat Pumps	Actual	Proposed	% of Goal
Participation*	58	20	290%
Budget \$	\$108,252	\$91,000	119%

* Participation is based on the number of units installed.

Evaluation Methodology

Energy savings estimates utilize the State of Minnesota’s Division of Energy Resources’ Technical Reference Manual (MN TRM) energy savings algorithms. The Company has modified the MN TRM assumptions to reflect the climate conditions in its South Dakota service area.

Energy Savings and Adjustments

Residential Heat Pumps	Actual Savings at the Generator	Proposed Savings at the Generator	% of Goal
Energy Savings – kWh	907,511	384,572	236%
Demand Savings – kW Summer Coincident Peak	67.9	25.6	265%

E. SMART THERMOSTATS

The Smart Thermostat program promotes qualified Tier II and III smart thermostats. The rebate level is dependent on thermostat communication capabilities (tier level) and use of electricity for heating and/or cooling. The rebate amounts for customers with electric cooling but without electric heating range from \$35-\$50 based on tier level. The rebate amounts for customers with electric heating range from \$100-\$150 based on tier level.

Otter Tail actively promotes the Smart Thermostat program through a variety of promotional resources:

- *Programs and Services Guide* sent to contractors.
- Program, technology, and rebate information available on the Company's website.
- Bill inserts featuring smart thermostat rebates.

Participation and Budget

PARTICIPATION AND BUDGET – 2022			
Smart Thermostats	Actual	Proposed	% of Goal
Participation*	14	31	45%
Budget \$	\$1,933	\$17,000	11%

* Participation is based on the number of units installed.

Evaluation Methodology

Engineering calculations and the MN TRM are used for impact savings for energy and demand for the Smart Thermostat program.

Energy Savings and Adjustments

Smart Thermostats	Actual Savings at the Generator	Proposed Savings at the Generator	% of Goal
Energy Savings – kWh	11,154	48,020	23%
Demand Savings – kW Summer Coincident Peak	0.5	1.5	33%

III. DIRECT IMPACT – COMMERCIAL

A. COMMERCIAL DIRECT INSTALL

Otter Tail’s Commercial Direct Install (CDI) project provides free installation of low-cost energy efficiency measures for participating small to mid-sized commercial customers. The project further capitalizes on personal interactions to ensure customers in this market segment have opportunities to engage in:

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

Participation and Budget

PARTICIPATION AND BUDGET – 2022			
Commercial Direct Install	Actual	Proposed	% of Goal
Participation*	0	1,005	0%
Budget \$	\$630	\$26,000	2%

* Participation is based on the number of units installed.

The Company began initial planning to implement its Commercial Direct Install program in 2022 but did not progress further into full implementation due to budget constraints.

Evaluation Methodology

Energy savings estimates utilize the MN TRM algorithms for energy savings.

Energy Savings and Adjustments

Commercial Direct Install	Actual Savings at the Generator	Proposed Savings at the Generator	% of Goal
Energy Savings – kWh	0	243,985	0%
Demand Savings – kW Summer Coincident Peak	0.0	17.4	0%

B. 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 2022 Otter Tail relied on Energy Star qualifications as the reference for minimum equipment efficiency requirements. In 2022 the Company discontinued its rebate for standard Energy Star air source heat pumps. This was done to focus on higher efficiency cold climate heat pumps (CCHPs), to simplify the program, and to introduce a new emerging technology air to water heat pump rebate.

New for 2022 was the introduction of an air to water heat pump (AWHP) rebate. The AWHP is an emerging technology that has the potential to improve efficiencies for customers installing hydronic heating systems where geothermal is not feasible and an electric resistance boiler is the only option. AWHP participation is anticipated to remain low with limited product available in the market. The Company believes it is a positive addition to the heat pump program portfolio to provide options for all customers and to support the energy efficiency of the heat pump technology.

Air source heat pumps met the following rating requirements:

	SEER	HSPF	COP*
CCHP – Ducted	> or = 15.0	> or = 9.0	-
CCHP – Ductless	> or = 15.0	> or = 10.0	-
Air to water (AWHP)	-	-	1.7

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

Geothermal heat pumps met the following rating requirements:

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

The Company added a minimum requirement for single units equal to or larger than six tons. This was done after contractor feedback and the limitation of Energy Star testing that does not account for these large units. When compared to other heating/cooling options at these larger sizes, the geothermal heat pumps remain the highest efficiency technology available for customers.

Otter Tail promotes energy efficient heat pumps using various resources:

- *Programs and Services Guide* sent to contractors.
- Bill messages included on customer statements.
- Bill inserts about heat pump efficiency and rebates.
- Training material covered with service representatives.
- Program, technology, and rebate information available on the Company's website.

Participation and Budget

PARTICIPATION AND BUDGET – 2022			
Commercial Heat Pumps	Actual	Proposed	% of Goal
Participation*	33	13	254%
Budget \$	\$117,389	\$45,000	261%

* Participation is based on the number of units installed.

Evaluation Methodology

Energy savings estimates utilize the MN TRM algorithms for energy savings. The Company has modified the MN TRM assumptions to reflect the climate conditions for the Company's South Dakota service area.

Energy Savings and Adjustments

Commercial Heat Pumps	Actual Savings at the Generator	Proposed Savings at the Generator	% of Goal
Energy Savings – kWh	646,183	223,355	289%
Demand Savings – kW Summer Coincident Peak	59.3	17.7	335%

C. COMMERCIAL LIGHTING

The Commercial 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 promotional resources:

- *Programs and Services Guide* sent to contractors.
- Program, technology, and rebate information available on the Company’s website.

Participation and Budget

PARTICIPATION AND BUDGET – 2022			
Commercial Lighting	Actual	Proposed	% of Goal
Participation	80	69	116%
Budget \$	\$172,962	\$110,000	157%

Advancements in LED product technology continued to play a key role in participation that exceeded expectations in Otter Tail’s 2022 Commercial Lighting program. Product efficiency, improved light quality, reduced maintenance costs, and utility incentives have all contributed to increasing program participation.

Evaluation Methodology

Engineering calculations are used for impact savings for energy and demand from the Commercial Lighting Program.

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. Hours of operation are determined by the MN TRM according to

customer building type. Company personnel conduct visual verification of retrofit projects as needed.

Energy Savings and Adjustments

Commercial Lighting	Actual Savings at the Generator	Proposed Savings at the Generator	% of Goal
Energy Savings – kWh	3,038,239	1,159,616	262%
Demand Savings – kW Summer Coincident Peak	353.7	158.8	223%

D. CUSTOM ENERGY EFFICIENCY PROJECT

The Custom Energy Efficiency Project pays incentives to commercial and industrial customers for energy saving installations such as process changes and new, energy efficient equipment that the Company does not incentivize through prescriptive programs.

Otter Tail promotes the Custom Energy Efficiency Project through a variety of promotional resources:

- *Programs and Services Guide* available to contractors.
- Program, technology, and rebate information available on the Company’s website.
- Direct contact between customers and Otter Tail program implementation and sales staff.

Participation and Budget

PARTICIPATION AND BUDGET – 2022			
Custom Energy Efficiency Project	Actual	Proposed	% of Goal
Participation	0	12	0%
Budget \$	\$1,601	\$42,000	4%

The Company attributes low participation in its Custom Energy Efficiency project to reduced activity with projects such as building envelope, compressed air, refrigeration and process equipment improvements and more projects taking place using technologies covered through prescriptive incentives.

Evaluation Methodology

Otter Tail assists our commercial and industrial customers as needed to help determine the energy and demand savings on a per measure basis needed to develop a grant proposal and often works with internal or third-party engineers to determine and verify savings. The Company will also consider and verify estimated energy savings when submitted by a qualified and independent third-party energy services provider.

Energy Savings and Adjustments

Custom Energy Efficiency Program	Actual Savings at the Generator	Proposed Savings at the Generator	% of Goal
Energy Savings – kWh	0	604,106	0%
Demand Savings – kW Summer Coincident Peak	0.0	123.1	0%

E. DRIVE POWER

The goal of the Drive Power program is to educate dealers and customers on the benefits of installing adjustable speed drives and new and replacement electric motors that meet or exceed the National Electrical Manufacturers Association (NEMA) Premium® efficiency requirements. The program provides incentives for customers to reduce peak demand and energy use by purchasing motors that meet or exceed NEMA Premium® efficiency.

Otter Tail promotes the Drive Power program through a variety of promotional resources:

- *Programs and Services Guide* available to contractors.
- Program, technology, and rebate information available on the Company's website.

Participation and Budget

PARTICIPATION AND BUDGET – 2022			
Drive Power	Actual	Proposed	% of Goal
Participation*	163	72	226%
Budget \$	\$68,899	\$69,000	100%

* Participation is based on the number of units installed.

Evaluation Methodology

The Company uses estimates from the MN TRM, the Company's engineering estimates, and motor usage information from customers to determine the energy savings for each installed motor. The Company also used data from Bonneville Power's MotorMaster software project to develop standard motor efficiency numbers.

For adjustable speed drive projects, Otter Tail relies on methodologies developed by the Electric Power Research Institute (EPRI) for fan- and pump-based adjustable speed drive systems. Hours of operation for associated loading factors are provided by the customer as inputs for the energy and demand savings calculations.

Energy Savings and Adjustments

Drive Power	Actual Savings at the Generator	Proposed Savings at the Generator	% of Goal
Energy Savings – kWh	1,270,597	1,604,366	79%
Demand Savings – kW Summer Coincident Peak	147.6	197.7	75%

IV. INDIRECT IMPACT

ADVERTISING and EDUCATION

The residential Advertising and Education program for 2022 was planned to include:

- Educational outreach to South Dakota school children in third through sixth grades.
- Educational and energy savings information provided through the Home Energy Analyzer (HEA), an online home energy audit tool for customer access.
- General advertisement of energy efficiency program opportunities through bill inserts, newsletters, and through resources posted on the company website www.otpc.com.

A planned component of the Advertising and Education program was *Energy Connections*, an educational outreach program to school age children that is focused on the science of energy, energy resources, conservation, and efficiency. The Minnesota Science Museum, which operates the program on behalf of Otter Tail, suspended their program offering due to pandemic restrictions and began offering services limited to its Minnesota service area during 2022. Otter Tail is exploring alternate cost-effective

resources that may be offered in place of the Energy Connections outreach in future program years.

The Home Energy Analyzer is an online educational and energy savings resource available to South Dakota residential customers. The tool helps residential customers analyze their energy use and identify ways to reduce energy use and costs. Customers may complete a home profile, develop a personalized plan to reduce energy consumption, and compare their electric bills. The HEA was accessed by 214 South Dakota residential customers during 2022.

The general advertisement component of the Advertising and Education program includes support for developing and producing bill inserts, contractor educational information, and online materials that promote energy saving opportunities for customers and programs available through the EEP portfolio, including the HEA tool.

Participation and Budget

SD 2022 A & E Detailed Participation	
Science Museum School Tour	0
Home Energy Analyzer	214
Total	214

PARTICIPATION AND BUDGET – 2022			
Advertising and Education	Actual	Proposed	% of Goal
Participation	214	525	41%
Budget \$	\$12,359	\$35,000	35%

V. MISCELLANEOUS / INACTIVE PROJECT COSTS

EEP DEVELOPMENT

The EEP Development program includes EEP strategic market planning analysis, EEP-related planning work, and EEP-related regulatory coordination. It also includes program development time for research and studying new energy-efficient technologies.

Participation and Budget

PARTICIPATION AND BUDGET – 2022			
EEP Development	Actual	Proposed	% of Goal
Participation	N/A	N/A	N/A
Budget \$	\$4,873	\$15,000	32%

VI. FINANCIAL INCENTIVE

On June 26, 2012, the Commission’s Order approved financial incentive investments in energy efficiency based on a “30% fixed percentage recovery on the lesser of actual expenses incurred or the company’s approved budget expenses for the planned program year.” The Commission’s approval was consistent with South Dakota Staff’s June 8, 2012, memorandum which recommended, “...this method is the appropriate and most reasonable methodology based on prior mechanisms and recovery options.”

As shown in Appendix A, Table 2, the Company spent \$525,883 in 2022. The approved budget for 2022 was \$525,000. The maximum incentive that can be awarded is 30 percent of \$525,000, or \$157,500. Total net benefits provided to South Dakota customers by 2022 EEP projects was \$2,770,031. **The proposed incentive is 5.69 percent of net benefits provided by the program.**

Otter Tail requests approval of a financial incentive of \$157,500 as calculated and shown in Appendix A, Table 5.

VII. REGULATORY REQUIREMENTS

ENERGY ADJUSTMENT RIDER / CARRYING COSTS

The South Dakota EEP account was established on February 1, 2007, when the Company started active development of an energy efficiency plan for South Dakota. This filing includes information regarding the tracker balance as of December 31, 2022. In addition, carrying charges and any applicable incentives (discussed in the financial incentive section), as well as any offsets or adjustments have been included. The Company has calculated the monthly carrying charge equivalent to the Company’s approved rate of return (ROR).

The tracker also accounts for amounts collected from customers through the “ENERGY EFFICIENCY ADJUSTMENT FACTOR.” The energy efficiency adjustment factor is collected monthly based on a kWh charge on customers’ bills. For billing

purposes, the charge is a separate line item on customers’ electric service bills. Otter Tail is not currently recovering any of these costs in base rates; therefore, the Company proposes the energy efficiency adjustment charge recovery mechanism continues as an appropriate means to recover costs associated with developing and implementing the South Dakota Energy Efficiency Partnership.

The current Energy Efficiency Adjustment Factor is \$0.00195/kWh. Otter Tail proposes to lower the EEP factor by approximately eighteen percent to \$0.00160/kWh. Appendix A, Table 7 presents the EEP tracker account balances for year-end 2022 and projections for 2023 through June 2024. When including the financial incentive amount of \$157,500, carrying charges, and the continuation of the current EEP surcharge in the tracker, Otter Tail forecasts the tracker balance to be approximately negative \$1,309 at the end of June 2024. The forecasted revenues collected from the Rider will continue to reduce the EEP tracker balance over the next year and will likely lead to an additional small reduction in the surcharge in July 2024.

The following table summarizes the expenses and revenues discussed above.

	January 2023 - June 2023	July 2023 - June 2024
Beginning Balance	\$234,062	\$52,955
Carrying Charges	\$7,527	\$5,453
EEP Program Expenses	\$326,164	\$602,658
EEP Incentive Proposed	\$0	\$157,500
EEP Rider Revenue	(\$514,797)	(\$819,876)
Ending Balance	\$52,955	(\$1,309)
EEP Factor	\$0.00195/kWh	\$0.00160/kWh

Otter Tail has included a redline and final version of our Section 13.04, EEP cost recovery rider rate schedule in this filing with a July 1, 2023 effective date (Appendix B: Energy Efficiency Adjustment Rider). The EEP cost recovery rider included in this filing reflects the proposed EEP factor of \$0.00160/kWh.

Pursuant to SDCL Chapter 49-34A-12 and ARSD 20:10:13:19, Otter Tail will provide notice of these proposed rates to all South Dakota customers in the form of a bill message. Appendix C, Attachment 1 to this filing includes the bill message as it will appear on customers’ bills in the month of May 2023.

Upon Commission approval, Otter Tail will provide each customer, affected by this change, a customer notice to comparing the prior rates and the new rate impacts for residential customers, as required by ARSD 20:10:16:01 (2), shown in Appendix C, Attachment 4.

Otter Tail has also included a report on tariff schedule changes (Appendix C, Attachment 2). This report complies with ARSD 20:10:13:26, which requires the Utility to report all rate schedule changes and customer impacts. Appendix C, Attachment 3 is also provided to show the monthly billing impacts of the proposed EEP adjustment factor for each revenue class.