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2027-2029

Energy Efficiency Partnership Triennial Plan

Docket No. EL26-



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OTTER TAIL POWER COMPANY 2027-2029 ENERGY EFFICIENCY PARTNERSHIP TRIENNIAL PLAN

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INTRODUCTION

Otter Tail Power Company (OTP or the Company) presents for the South Dakota Public Utilities Commission's (PUC) consideration this 2027-2029 Energy Efficiency Partnership Triennial Plan (EEP or Plan) to promote energy efficiency to South Dakota customers. The Plan, as proposed, includes projects for all customer classes and major end uses allowing for the greatest potential for energy savings. The Plan includes nine Programs intended to achieve approximately 7.7 million kWh in annual energy savings at an approximate cost of \$650,000. Most of these costs – approximately 71 percent, or \$460,750 of the proposed budget – are expected to be customer incentives. The energy savings goal represents approximately 1.4 percent of South Dakota's 2025 retail energy sales. The budget represents approximately 1.4 percent of the State's 2025 retail revenue. The Company proposes launching these programs January 1, 2027.

South Dakota Data 2025 Statistical Report	
Customers	11,997
kWh sales	564,322,199
Retail revenue	\$48,719,566

OTP proposes continuation of residential and commercial projects proven to bring cost-effective energy savings to South Dakota customers. Per the PUC Staff's memorandum from October 30, 2013, in Docket No. EL13-016, the Company is balancing the factors described in the Commission's Direction. These factors include:

- The portfolio being cost effective from the Total Resource Cost (TRC) test,
- Maximizing participation,
- Minimizing short-term rate impacts,
- Recognizing the Ratepayer Impact Measure (RIM) test, but not excluding a program based on failure of RIM, and
- Allowing a program that fails the TRC to be included if it targets hard to reach customer segments.

The 2027-2029 portfolio benefit/cost ratios are illustrated in the following table:

Utility Test	Total Resource Cost Test	Ratepayer Impact Test	Participant Test
8.88	2.58	0.71	3.62

This Plan will be evaluated on an ongoing basis, and any major modifications will be proposed to the PUC in a timely manner. Major modifications would include new program additions, increases in participant incentives, increases to the overall proposed budget by more than 10 percent, or ending programs.

The following sections provide specific details about the 2027-2029 EEP:

- Plan Summary – The Plan Summary includes an overview of the proposed plan, a list of the individual programs, and 2025 Company statistics as background information. A summary of the overall annual kWh savings goals, budgets, and proposed participation is also provided.
- Program Descriptions – This section presents the individual program descriptions and justifications, as well as estimated kWh and kW reductions, budgets, and participation goals.
- Cost Recovery and Financial Incentive – Cost recovery methodology and a discussion of the Company financial incentive for providing energy efficiency projects in South Dakota is also included.
- Evaluation – This section shows the cost effectiveness test results for the Plan and assumptions associated with the cost effectiveness evaluations.
- Summary – A brief conclusion of the Plan.

PLAN SUMMARY

For 2027-2029, OTP is proposing to continue, with modifications, its portfolio of cost-effective energy efficiency programs in South Dakota. The portfolio includes the programs listed below, which are described in greater detail in the following sections of this filing.¹

Residential

- Air Conditioning Control - promotes managing peak demand and energy of cooling systems
- Home Lighting- promotes efficient lighting
- Smart Thermostat - promotes managing efficient operation of heating and cooling systems
- Home Heating and Cooling - promotes efficient heating and cooling

Commercial/Industrial

- Commercial Heating and Cooling - promotes efficient heating and cooling
- Drive Power - promotes high efficiency motors, adjustable speed drives, energy-savings hand dryers, and high-volume, low-speed fans
- Custom Efficiency Projects - promotes efficient energy use such as heat recovery, building envelope, and process improvements
- Commercial Lighting - promotes efficient lighting

All Sectors

- Advertising and Education
- Development

¹ A complete list of proposed measures and summary of assumptions can be found in Appendix B Tables 1 and 2.

2027 South Dakota Energy Efficiency Plan				
Customer Class	Budget	Annual kWh Savings	Annual kW Savings	Annual Participants
Residential	\$205,000	980,285	535.0	4,045
Commercial/Industrial	\$384,000	6,676,082	1,429.4	552
Indirect Impact (all sectors)	\$61,000	N/A	N/A	525
Totals	\$650,000	7,656,367	1,964.4	5,122

2028 South Dakota Energy Efficiency Plan				
Customer Class	Budget	Annual kWh Savings	Annual kW Savings	Annual Participants
Residential	\$205,000	980,701	541.9	4,055
Commercial/Industrial	\$384,000	6,676,082	1,429.4	552
Indirect Impact (all sectors)	\$61,000	N/A	N/A	525
Totals	\$650,000	7,7656,783	1,971.3	5,132

2029 South Dakota Energy Efficiency Plan				
Customer Class	Budget	Annual kWh Savings	Annual kW Savings	Annual Participants
Residential	\$205,000	981,117	548.8	4,065
Commercial/Industrial	\$384,000	6,676,082	1,429.4	552
Indirect Impact (all sectors)	\$61,000	N/A	N/A	525
Totals	\$650,000	7,657,199	1,978.2	5,142

AIR CONDITIONING CONTROL (Existing, Residential)

A. PROJECT DESCRIPTION

The Air Conditioning Control program will continue to include systems cycled on and off approximately every 15 minutes during peak-demand periods through the Company's air conditioning control rider (**CoolSavings**). The program also includes heat pump systems served through OTP's dual fuel and deferred load rates that are part of OTP's portfolio of demand response programs. Customers who enroll in the Air Conditioning Control program receive a \$6.75 monthly bill credit from May through October in exchange for allowing the Company to cycle the air conditioner during system peak events. Units participating through other off-peak rates receive a discounted price for energy.

Residential customers with a central air conditioner or air-source heat pump that are not currently on a controlled electric service can enroll in the **CoolSavings** option. OTP relies on services from electrical contractors to install load control devices that enable cycling through a radio signal sent from the Company's load management system. Cooling system control is permitted by the **CoolSavings** rider for up to 300 hours during the year.

The benefits and enrollment requirements of the **CoolSavings** project are marketed to customers in the South Dakota service territory through bill inserts, bill messages, website promotions, and targeted media campaigns. Yet, new enrollments have remained below the project goal in recent years. To help ensure the success of this project, OTP will monitor program participation and evaluate opportunities to support customer awareness and participation as needed. Once enrolled in the program, participants stay with the project for many years with a minimal number of opt-outs occurring.

B. PROJECT JUSTIFICATION

The U.S. Energy Information Administration (EIA) reports that in 2025 space cooling accounted for about 17.3% of all residential electricity use, equivalent to about 261 billion kWh.² Though energy consumption for space cooling is significant, the design of a typical home air conditioning system provides excellent demand response opportunities for electric utilities and consumers alike. By cycling home air-conditioning units through programs such as OTP's **CoolSavings** program, most residential customers can contribute to delaying or eliminating the need for utilities to add peak generation resources while also reducing utility expenses with minimal, if any, adverse impacts to home comfort.

The existing, summer-focused, Air Conditioning Control program is an integral part of OTP's extensive portfolio of pricing and demand response programs. About one-third of the Company's residential and small commercial customers are participating

² U.S. Energy Information Administration. [Use of electricity - U.S. Energy Information Administration \(EIA\)](#)

in one of the Company's demand response programs. Through these initiatives, the Company maintains system reliability, reduces the need to purchase high-priced spot market electricity, and meets our regulated resource adequacy requirements. Although OTP is historically winter peaking, the Company is a member of the Midcontinent Independent System Operator (MISO) region, which has traditionally been summer peaking. Projects and rates that reduce summer energy and capacity needs are particularly valuable in MISO.

C. LONG TERM DEMAND SIDE MANAGEMENT GOALS

Air Conditioning Control			
	2027	2028	2029
kWh – at the generator	28,312	28,728	29,144
Cost / kWh	\$0.28	\$0.28	\$0.27
kW – at the generator	471.9	478.9	485.8
Cost / kW	\$16.95	\$16.71	\$16.47

D. PROJECT BUDGET & PARTICIPATION

Air Conditioning Control			
	2027	2028	2029
Project Delivery & Administration	\$6,500	\$6,500	\$6,500
Advertising and Promotion	\$1500	\$1500	\$1500
Total	\$8,000	\$8,000	\$8,000
Participation	681	691	701

Most of the Project Delivery and Administration costs are for local electrical contractors hired to install equipment outside the home to control the customer's cooling system.

Participation numbers reflect cumulative participants, including customers on short-duration controlled rates and participants enrolled in previous years. Actual proposed, incremental participation is 10 participants annually.

HOME LIGHTING (Existing, Residential)

A. PROJECT DESCRIPTION

The Company's Home Lighting program promotes light-emitting diode (LED) light bulbs and fixtures sold by participating retailers located in South Dakota communities receiving retail electric service from OTP. The program also provides cash rebate incentives to residential customers for hard-wired retrofits of inefficient lighting technologies to LED lighting systems. Finally, the project provides incentives for installation of hard-wired LED lighting in new construction applications.

The project's objective is to achieve energy savings through increased adoption of LED lighting in the residential market. The Company proposes a continued, up-stream approach to incentivize the purchase of LED lighting products through recruiting local retailers to stock and promote LED lighting products. These local retail stores will then promote and sell LED products with point of purchase price discounts, significantly reducing costs for participating customers. In hard-wired retrofits and new construction applications, the Company will continue providing incentives through a cash rebate. This requires participating customers to provide documentation including invoices, receipts, and product specifications.

OTP proposes to continue contracting for services with a firm specializing in recruiting and training retailers on LED lighting products to ensure success in its Home Lighting project. Specific strategies in this effort will include:

1. Building a network of participating hardware retailers in smaller, rural South Dakota communities.
2. Encouraging other types of businesses outside of hardware stores as participating retailers (e.g., grocery stores).
3. Encouraging retailers to stock a variety of LED lamps and wattages, including floods, dimmable lamps, and globes.
4. Raising awareness among customers of the benefits of energy efficient lighting and the opportunities available through the program.

The Company has modified all savings calculations to reflect baseline efficacy of 45 lumens per watt as reported in the Minnesota Technical Reference Manual (TRM) Version 5.0³. The Company is aware of federal lamp efficiency standards increasing to 120 lumens per watt beginning July 25, 2028, but proposes operating its residential upstream lighting program, based on Minnesota's TRM 5.0, through the entirety of the 2027–2029 period.

As with past federal lighting efficacy changes, the U.S. Department of Energy rule applies only to screw-in lamps imported or manufactured after the compliance date and does not prohibit consumers from using bulbs they already own or purchasing

³ <https://mn.gov/commerce-stat/trm/releases/5.0.pdf> (January 2026).

existing inventory produced before the deadline. Based on shelf lives of lesser efficient lighting products remaining in the marketplace after past changes in federal lighting standards, the Company continues to support its position that lighting incentives provided through the entire triennial period will continue to influence consumer decisions to choose the most efficient lighting products available.

B. PROJECT JUSTIFICATION

The U.S. EIA estimates in 2025, the U.S. residential, commercial, and industrial sectors combined used about 4.1 trillion kWh of electricity.⁴ The residential sector accounted for 1.51 trillion kWh, or about 37.3% of all electricity consumption, with lighting accounting for 3.4 percent of residential electricity consumption. An LED saves 85 percent of energy use over an incandescent bulb and lasts up to 25 times longer. LEDs generate much less heat than incandescent bulbs and are less of a fire hazard.

C. MARKETING

OTP's marketing plan for Home Lighting includes the following proposed strategies:

- Retailer training, development, and network expansion regarding qualified LEDs.
- Targeted advertising to residential customers through bill inserts and targeted media campaigns.
- Educational and promotional information included on the Company's website.
- Live on-site radio remote broadcasts during the campaign (as the budget permits).
- Point of sale promotional materials.
- Instant, time of sale, rebates on qualified LEDs.
- Promotions through non-profit organizations.

D. LONG TERM DEMAND SIDE MANAGEMENT GOALS

Home Lighting			
	2027	2028	2029
kWh – at the generator	228,589	228,589	228,589
Cost / kWh	\$0.17	\$0.17	\$0.17
kW – at the generator	39.2	39.2	39.2
Cost / kW	\$1,021	\$1,021	\$1,021

⁴ U.S. Energy Information Administration. [Electricity Explained: Electricity Consumption in the United States](#)

E. PROJECT BUDGET & PARTICIPATION

Home Lighting			
	2027	2028	2029
Project Delivery & Administration	\$22,000	\$22,000	\$22,000
Incentives	\$18,000	\$18,000	\$18,000
Total	\$40,000	\$40,000	\$40,000
Participation	3,150	3,150	3,150

SMART THERMOSTAT (Existing, Residential)

A. PROJECT DESCRIPTION

The Company's Smart Thermostat program is an offering for the residential sector. Smart thermostats provide energy savings by changing the temperature set points during unoccupied, occupied, and nighttime preferences. These changes in temperature set points reduce the operating time of the heating and cooling system.

Tier II and Tier III capable smart thermostats are the primary targets of this program. Tier II thermostats hold the function of communicating, giving users access to set points and the ability to schedule temperature settings from anywhere using a smart device including a mobile phone, tablet, or computer. Tier III are analytics capable thermostats that offer additional energy savings features, including coaching, Heating, Ventilation, and Air Conditioning (HVAC) diagnostics, comparative information, and geofencing, which is the use of global positioning or other tools to define boundaries. Both Tier II and Tier III hold demand response capabilities and customer engagement features including customer-specific data and recommendations including filter change reminders and alerts regarding equipment performance changes. The Company will only offer one rebate per customer per program year. The rebate is capped by the lower amount of either the rebate or invoice cost.

At this time, the Company is not proposing any company-initiated control projects tied to smart thermostat technology but sees future potential as more advanced thermostats are deployed in the Company's service territory. By supporting the adoption of new thermostat technologies, the Company is preparing a foundation capable of supporting additional program services. The Company is currently in the process of deploying new load management systems that could allow for more flexibility in incorporating smart thermostats into a demand response program. This ability will continue to be monitored for future growth potential.

B. PROJECT JUSTIFICATION

The EIA 2020 Residential Energy Consumption Survey found only 10 percent of households reported having a smart thermostat in very-cold/cold climate regions.⁵ Additionally, the EIA 2020 survey found that more than two-thirds of residents with Tier I programmable thermostats did not operate their systems using the programmable features. One possible reason is that schedule adjustments must be made at the thermostat itself, which may discourage regular use of the programmable functions. The internet connectivity abilities of Tier II and Tier III thermostats provide a solution to resolve this ease-of-use barrier. Smart thermostats provide the ability to engage customers in their HVAC system's energy usage and place the information in the palms of their hands. Tier III smart thermostats, also known as learning thermostats, can detect customer behaviors and preferences to create a temperature

⁵ <https://www.eia.gov/consumption/residential/data/2020/hc/pdf/HC%206.6.pdf>.

setting profile without the need for customer intervention. The ease of use and learning abilities of smart thermostats provide a benefit that results in energy savings over manual and Tier I programmable thermostats.

C. LONG TERM DEMAND SIDE MANAGEMENT GOALS

Smart Thermostat			
	2027	2028	2029
kWh – at the generator	36,477	36,477	36,477
Cost / kWh	\$0.19	\$0.19	\$0.19
kW – at the generator	2.3	2.3	2.3
Cost / kW	\$3,021	\$3,021	\$3,021

D. PROJECT BUDGET & PARTICIPATION

Smart Thermostat			
	2027	2028	2029
Project Delivery & Administration	\$4,250	\$4,250	\$4,250
Incentives	\$2,750	\$2,750	\$2,750
Total	\$7,000	\$7,000	\$7,000
Participation	40	40	40

HOME HEATING AND COOLING (Existing, Residential)

A. PROJECT DESCRIPTION

The Home Heating and Cooling program is designed to provide customers with a multi-faceted approach for optimizing heating and cooling efficiencies in their homes. The portfolio includes Energy Star® Air Conditioning, Heat Pumps, Pre-heating of Domestic Hot Water, Energy Recovery Ventilation, Maintenance Tune-ups, and a Quality Installation Program.

The U.S. EIA and the U.S. Department of Energy both state that U.S. households use, on average, more than 55 percent of total annual household electricity consumption for two energy intensive end uses: heating and cooling. The Minnesota Department of Commerce's Home Energy Guide further states that the average family spends a significant amount of money on energy, but simple, energy-saving home improvements have the potential to reduce heating and cooling costs by as much as 30 percent.⁶ The Home Energy Guide further states that the same strategies proven to lower heating costs, offer other important benefits:

- Protect homes from moisture damage year-round.
- Reduce structural roof integrity problems caused by ice dams.
- Significantly cut summer cooling costs.
- Extend the life of homes.
- Increase potential resale value.

OTP's 2022 Residential Survey suggested that nearly 50 percent of customer homes were constructed prior to 1969.⁷ Over the past several decades homes have become increasingly complex. The effects of the interactions of structural systems, weatherization components, mechanical equipment, and electrical devices in today's homes are the subject of an entire field of study known as building science. The Home Heating and Cooling program intends to build off the key principles of building science to improve the heating and cooling efficiency of residential properties by offering incentives to residential customers for virtually all aspects of improving home heating and cooling efficiency, including:

- Replacing or augmenting standard efficiency electric heating and cooling systems with higher-efficiency air conditioner or air-source, air-to-water, and geothermal heat pump systems.
- Installing high-efficiency heat pumps for new residential construction projects.
- Incentivizing pre-heating of domestic hot water utilizing heat pump technology.
- Incentivizing quality installations and maintenance tune-ups of air conditioner or heat pump systems.

⁶ Minnesota Commerce Department Division of Energy Resources. (July 2025). [Home Energy Guide](#).

⁷ OTP's 2022 Residential End-Use Survey.

- Installing energy recovery ventilation to reduce energy usage from air exchange ventilation systems.

B. PROJECT JUSTIFICATION

The Home Heating and Cooling program's objective is to provide customers with a multi-faceted approach for optimizing heating and cooling efficiencies through proper application of high-efficiency technologies including:

- Energy Star® Air Conditioners
- Heat Pumps: air source (ASHP), air-to-water (AWHP) and geothermal (GHP) technologies
- Quality installation and maintenance tune-ups of heat pump technologies
- Active HVAC monitoring
- Installation of energy recovery ventilation

The Home Heating and Cooling program also provides heat pump information and technical support to end-users, retailers, suppliers, installers, and electricians. Promotions emphasize the use of these renewable technologies and serve to educate customers on the efficiency and benefits associated with heat pumps. Rebates are based on the size (tons) of the unit being installed.

Energy Star® Air Conditioners

This measure will provide important baseline data to see how many opportunities are missed where a heat pump is not being selected by customers in the Company's service area and better understand the impacts of OTP's heat pump programs. The measure does not include window or portable air-conditioning units. The rebates for an Energy Star® air conditioner will be based on a flat per unit amount.

Heat Pumps

OTP's 2022 Residential End-Use Survey indicates 30 percent of our residential customers, in single family homes, heat primarily with electricity.⁸ The same survey further indicated that just nine percent of our customers have an air-to-air heat pump for heating and eight percent for cooling with only 1.5 percent owning a geothermal heat pump system. This research supports that significant market opportunities exist for energy efficiency improvements through the use of heat pump technologies in heating and cooling systems.

The ASHP efficiency measures target residential customers using or considering less-efficient cooling or electric resistance heating options. This technology is a great option where space constraints or project cost are limitations for Geothermal Heat Pump (GHP) applications. The measures are split between a lower and higher efficiency Seasonal Energy Efficiency Ratio (SEER)2/Heating Seasonal Performance Factor (HSPF)2 rating utilizing the federal and state incentive requirements as guidelines.

The GHP efficiency measure capitalizes on renewable energy technology and targets

⁸ OTP's 2022 Residential End-Use Survey.

residential customers currently using or considering the installation of less-efficient resistance electric heating and cooling systems. The U.S. Energy Information Administration states that the U.S. Environmental Protection Agency (EPA) regards GHP as the most energy-efficient, environmentally clean, and cost-effective system for heating and cooling buildings.⁹ Its efficient use of natural active solar heating and cooling is unparalleled by any other system available in today's market.

The AWHP efficiency measure is in support of an emerging technology that has the potential to improve efficiency for a customer installing a hydronic heating system where geothermal is not feasible and an electric resistance boiler is the only electric alternative. AWHP participation is expected to remain low with limited product options 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 heat pump technology.

New to the Home Heating and Cooling Program are package terminal and window unit heat pump measures. These technologies are separated from standard heat pump measures to ensure they meet applicable rating requirements, align with available market options, and provide sufficient rebate levels to support participation for these specific installation types. These units have been identified as cost-effective solutions that can expand multifamily participation due to their simplified installation methods and use cases.

Pre-Heating of Domestic Hot Water

The Pre-heating of Domestic Hot water measure is an add-on for a Geothermal or AWHP system that elects to add a desuperheater or buffer tank with coils that allow for supplemental heating to a standard water heater. The rebate is offered to offset some of the additional cost for these add-on features to further maximize the energy efficiency benefit of the heat pump technology.¹⁰

Quality Installation and Maintenance Tune-Up

The quality installation measure provides customers with an incentive to select contractors who have attained certifications beyond basic licensing that improves service technician knowledge and expertise, ensuring that equipment is being installed in accordance with manufacturer recommendations and best practices in the industry. An example of an accepted certifications includes HVAC certifications test by North American Technician Excellence (NATE). The Company plans to work with contractors who do not meet requirements to help locate resources and assist with getting them certified. The maintenance tune-up measure targets customers with existing air conditioner or heat pump equipment, that is not end of life, to schedule a tune-up of their equipment. The tune-up will include condenser coil cleaning, air filter change, and refrigerant charge measurement. An air flow measurement and correction will be included if not previously done by the homeowner/contractor at the time of equipment installation.

⁹ U.S. Energy Information Administration. [Basics: Geothermal Explained](#)

¹⁰ The 2026 Illinois TRM version 14.0 Volume 3 has desuperheaters assumed to offset 44 percent of domestic hot water needs. [2026 Illinois TRM Version 14.0](#)

Energy Recovery Ventilation

New to the Home Heating and Cooling Program, the Energy Recovery Ventilation (ERV) measure provides incentives for customers to install ERV systems. ERVs offer significant advantages when retrofitting existing air-side equipment and when incorporated into new systems where energy recovery is not currently required by building codes. Compared to heat recovery ventilation (HRV) systems, ERVs are more energy efficient because they transfer both heat and moisture from exhausted indoor air. This ability to recover humidity reduces the need for supplemental humidification and dehumidification, lowering operational energy use while helping maintain consistent indoor conditioned air comfort levels.

C. PROGRAM-SPECIFIC POLICIES

Energy Star® Air Conditioners and Heat Pumps

The program is applicable only for the installation of new Energy Star® A/C units and ASHP, AWHP, and GHP systems that meet the below minimum requirements. In the air-source category, rebates are split between a lower and higher tier based on minimum efficiency requirements. The higher tier is marketed utilizing the terminology Cold Climate Heat Pump (CCHP) which promotes the higher heating performance rating and lower operating capabilities of the equipment allowing for lower switch over set points. The efficiency levels and performance of the system are confirmed when the rebate application is submitted by manufacturer documentation or, where applicable, an Air Conditioning, Heating and Refrigeration Institute (AHRI) certificate. OTP receives continuous feedback from contractors and equipment manufacturers and will maintain flexibility in reviewing and adjusting ratings on an annual basis, while still passing necessary cost-effectiveness tests, to ensure high performance equipment meets program requirements. The Energy Star® A/C rebate is strictly utilized as a data collection incentive to determine missed heat pump opportunities. The Company sees this as highly beneficial in determining scale of missed opportunities and determining any possible trends with certain contractors. OTP may propose to discontinue Energy Star® A/C rebates once the potential for missed opportunities is understood and diminished.

A/C and ASHP Minimum Requirements:

Tier	Type	SEER2 / (EER)	HSPF2 / (COP)
Energy Star® AC	-	> or =15.2	-
Standard	Ductless/Ducted	> or =14.3	> or =7.5
Cold Climate Heat Pump	Ductless/Ducted	> or =16.0	> or =8.0
Window Unit	-	> or = (10)	> or = (3.0)
Packaged Terminal	-	> or = (10)	> or = (3.0)

OTP will provide rebates at the following levels:

- \$50/unit for Energy Star® A/C units
- \$400/ton for Standard – Ductless/Ducted Heat Pumps
- \$800/ton for CCHP – Ductless
- \$1,000/ton for CCHP – Ducted
- \$200/ton for Window unit and Packaged Terminal Heat Pumps

Geothermal Heat Pump and Air-to-Water Minimum Requirements:

Type	Coefficient of Performance (COP)	Energy Efficiency Ratio (EER)
Single GHP < 6 tons	3.1	16.0
Single GHP ≥ 6 tons	3.1	13.0
Air to water	1.7*	-

*COP rating based on a full load capacity at an outdoor air temp of 5°F and having a water output of 110°F (A5W110).

OTP will provide rebates at the following levels:

- \$1,200/ton for AWHP
- \$1,400/ton for Residential GHP
- \$200/ton for pre-heating domestic hot water using heat pump technology (limited to a maximum of 20 tons).

Quality Installation and Maintenance Tune-Up

Residential customers who select contractors participating in our Quality Installation Program are eligible for additional incentives: \$150 per ton for qualifying heat pump installations or \$100 per unit for A/C unit installations.

Contractors may become certified to participate in the Quality Installation Program by completing an application and providing proof of qualifying credentials. Accepted certifications include, but are not limited to, NATE HVAC certification, participation in the ASHP Collaborative Preferred Contractor Network, completion of manufacturer or distributor heat pump training, or participation in company-sponsored contractor workshops that include heat pump training.

Residential customers will complete and submit a rebate form along with an invoice for the maintenance tune up measure. The form will include a checklist verifying the contractor has completed condenser coil cleaning, air filter change, and refrigerant charge measurement. An air flow measurement and correction should be included if not previously done by homeowner/contractor at equipment installation. The form will also request information on air conditioner or heat pump unit information details including make, model, and equipment age/condition. The rebate for an air conditioner will be \$50 per unit and a heat pump will be \$150 per unit.

Energy Recovery Ventilation

The Energy Recovery Ventilation (ERV) measure is available to residential customers who install an ERV with a minimum Sensible Recovery Efficiency (SRE) of 65% at 32°F, as defined in ENERGY STAR® technical specifications. Eligible installations include homes without existing energy recovery ventilation, replacements of failed ventilation systems, and new construction projects where ERVs are not required by building code. The initial rebate for 2027 is \$500 per unit. Rebate amounts and minimum efficiency requirements may be adjusted over time based on participation, customer engagement, building code changes, and measured program performance, while maintaining overall cost-

effectiveness. The Home Ventilation Institute certified products directory will be utilized as a reference verification resource.¹¹

D. LONG TERM DEMAND SIDE MANAGEMENT GOALS

Home Heating and Cooling			
	2027	2028	2029
kWh – at the generator	686,908	686,908	686,908
Cost / kWh	\$0.22	\$0.22	\$0.22
kW – at the generator	21.5	21.5	21.5
Cost / kW	\$6,964	\$6,964	\$6,964

E. PROJECT BUDGET & PARTICIPATION

Home Heating and Cooling			
	2027	2028	2029
Project Delivery & Administration	\$31,000	\$31,000	\$31,000
Incentives	\$119,000	\$119,000	\$119,000
Total	\$150,000	\$150,000	\$150,000
Participation	174	174	174

¹¹ [Home Ventilating Institute: Heat/Energy Recovery Products](#)

COMMERCIAL HEATING AND COOLING (Existing, Commercial & Industrial)

A. PROJECT DESCRIPTION

The Company's Commercial Heating and Cooling Program incentivizes the adoption of high-efficiency heating, cooling, and ventilation technologies in commercial and industrial facilities. Eligible measures include air-source, air-to-water and geothermal heat pumps; quality installation and maintenance tune-ups; energy recovery ventilation and demand-controlled ventilation; heat pump water heaters and domestic hot water pre-heating.

Through the Commercial Heating and Cooling Program, commercial and industrial customers can receive rebates for replacing standard-efficiency electric heating and cooling equipment with high-efficiency heat pumps, as well as for installing qualifying systems in new construction. Additional incentives are available for using qualified contractors, completing maintenance tune-ups, implementing energy recovery ventilation or ventilation demand controls, installing heat pump water heating and domestic hot water pre-heating components.

In addition to financial incentives, the program provides education, outreach, and technical assistance to end users, retailers, suppliers, installers, and electricians. Program marketing highlights the efficiency, performance, and long-term value of heat pump technologies while supporting broader market awareness and adoption.

B. PROJECT JUSTIFICATION

The program's objective is to optimize heating and cooling efficiencies through proper application of air source and geothermal heat pump technologies. In addition, complementary measures including quality installation and tune-ups, energy recovery ventilation, heat pump water heating, heat pump pre-heating of domestic hot water, active HVAC monitoring, high volume low speed fans and smart thermostats provide a robust complementary program offering. The target market of this program is the OTP commercial and industrial customer base, specifically, those who are investing in electric space heating and cooling.

Air-Source Heat Pumps (ASHPs)

ASHP efficiency measures are designed for commercial and industrial customers currently using—or considering—less efficient cooling systems or electric resistance heating. ASHPs are particularly well suited for projects where space limitations or high installation costs make geothermal systems impractical. Incentives are offered across two performance tiers with progressively higher efficiency requirements. Modern ASHP systems use inverter-driven, variable-speed compressors that deliver reliable heating performance at outdoor temperatures of 0°F and below. In many applications, ASHPs can meet over 90 percent of a facility's space-heating demand while significantly improving overall energy efficiency.

Geothermal Heat Pumps (GHPs)

The GHP efficiency measure promotes a renewable, ultra-efficient technology for commercial customers operating or evaluating less efficient electric resistance heating and cooling systems. Recognized by the U.S. Department of Energy as the most efficient electric option for space conditioning, geothermal heat pumps leverage stable underground temperatures to provide superior heating and cooling performance. This ground-coupled approach delivers unmatched efficiency compared with conventional HVAC technologies.

Air-to-Water Heat Pumps (AWHPs)

The AWHP efficiency measure supports an emerging technology that meets growing demand for hydronic heating solutions. AWHP systems address a critical market need for customers who require hydronic heating but have limited alternatives beyond standard electric boilers when geothermal systems are not feasible.

Domestic Hot Water Pre-Heating

The domestic hot water pre-heating measure is available as an add-on for GHP and AWHP systems. Customers can install desuperheaters or buffer tanks with integrated coils to provide supplemental heating to conventional water heaters. Incentives help offset the incremental cost of these components while maximizing the overall energy savings and performance benefits of heat pump installations.

Quality Installation and Maintenance Tune-Up

The Heat Pump Quality Installation measure encourages customers to work with contractors who exceed minimum licensing requirements. Participating contractors complete advanced training to ensure installations meet manufacturer specifications and industry best practices. This includes proper equipment sizing, verification of refrigerant charge, and correct installation of insulated and protected line sets. Additional information is available in the Home Heating and Cooling section.

The Maintenance Tune-Up incentive is designed to motivate customers to schedule routine system checkups and ensure their equipment operates at peak efficiency. Participating contractors must complete essential maintenance services such as condenser coil cleaning, air filter replacement, and refrigerant charge measurement. Airflow measurement and correction are also included when these steps were not completed during the original installation. Beyond improving system performance, this incentive creates an opportunity for customers and contractors to discuss remaining system life and begin proactive conversations about future options, including potential upgrades or replacements.

Energy Recovery and Demand Control Ventilation

The energy recovery ventilation measure encourages customers to upgrade their mechanical ventilation systems with energy recovery technology. These upgrades reduce HVAC operating loads and the need for supplemental humidification or dehumidification while maintaining proper air circulation and occupant comfort. The demand control ventilation measure is designed for facilities with significant fluctuations in ventilation needs throughout the day. These customers benefit from automated controls that

continuously adjust outdoor air intake based on actual building demand, rather than relying on fixed schedules or manual adjustments.

Heat Pump Water Heating

The heat pump water heating measures ensure that, in the limited cases where a customer already uses electric domestic hot water heating, the Company can still provide a rebate path like the fuel switching counterpart. The measure accommodates emerging market offerings, such as the Mitsubishi Heat2O, which explicitly applies heat pump efficiency to domestic hot water production.¹² This represents a more direct and targeted efficiency measure than hot water pre-heating measures, which reduce water heating loads passively through standard HVAC operation.

Smart Thermostats

The Commercial Smart Thermostat program is a new offering designed to provide commercial customers with an incentive to capture energy savings through the installation of approved smart thermostat technologies. These systems support improved visibility into building energy use and provide accessible tools for monitoring and adjusting heating and cooling operations, enabling customers to better manage energy consumption while maintaining occupant comfort.

Commercial smart thermostats are particularly well-suited for small to mid-sized facilities that may not utilize full building automation systems. By encouraging the adoption of these technologies, the program aims to expand access to cost-effective energy management solutions across a broader segment of the Company's commercial customer base.

At this time, OTP is not proposing any Company-initiated control programs tied to commercial thermostat technologies. However, the Company sees future potential to leverage these systems as adoption increases and supporting infrastructure continues to evolve. The introduction of this program establishes a foundation for future opportunities to deliver additional energy optimization services and enhance demand-side capabilities within the commercial sector.

C. PROGRAM-SPECIFIC POLICIES

The program is applicable only for the installation of new ASHP, CCHP, AWHP, and GHP systems that follow the guidelines below that take into consideration the federal and state incentives and their efficiency requirements as references. OTP receives continuous feedback from contractors and equipment manufacturers and will maintain flexibility in adjusting ratings on an annual basis if needed, while still passing necessary cost-effectiveness tests, to ensure high-performance equipment meets program requirements.

¹²<https://www.mitsubishicomfort.com/products/commercial-water-heating>

ASHP Minimum Requirements:

Tier	Type	SEER2 / (EER)	HSPF2 / (COP)
Standard ASHP	Ductless/Ducted	> or =14.3	> or = 7.5
Cold Climate Heat Pump	Ductless/Ducted	> or =16.0	> or =8.0
Packaged Terminal	-	> or = (10)	> or = (3.0)

OTP will provide rebates at the following levels:

- \$400/ton for Standard Ducted/Ductless incentives
- \$800/ton for CCHP-Ductless incentives
- \$1,000/ton for CCHP-Ducted incentives
- \$200/ton for Packaged Terminal incentives

Geothermal Heat Pump and Air-to-Water Minimum Requirements:

Type	COP	EER
Single GHP < 6 tons	3.1	16.0
Single GHP ≥ 6 tons	3.1	13.0
Air-to-Water (AWHP)	1.7*	-

*COP rating based on a full load capacity at an outdoor air temp of 5°F and having a water output of 110°F (A5W110).

OTP will provide rebates at the following levels:

- \$1,400/ton for GHP
- \$1,200/ton for AWHP
- \$200/ton for Pre-Heating of Domestic Hot Water using Heat Pump technology (limited to a maximum of 20 tons)

Quality Installation and Maintenance Tune-Up

Commercial customers who choose contractors participating in the Quality Installation Program are eligible for enhanced incentives: \$200 per ton for qualifying heat pump installations or \$100 per unit for air conditioner installations. For commercial air conditioners, the Company will only be offering a rebate for the quality installation and not for the unit itself. This structure still allows important data to be gathered to see how many heat pump installation opportunities are still being missed.

Contractors may become certified to participate in the Quality Installation Program by completing an application and providing proof of qualifying credentials. Accepted certifications include, but are not limited to, NATE HVAC certification, participation in the ASHP Collaborative Preferred Contractor Network, completion of manufacturer or distributor heat pump training, or participation in company-sponsored contractor workshops that include heat pump training.

Maintenance and Tune Up measures will require Commercial customers to complete a rebate form along with submitting an invoice for the maintenance tune up measure. The form will include a checklist verifying the contractor has completed condenser coil

cleaning, air filter change, and refrigerant charge measurement. An air flow measurement and correction will be included if not previously done by customer/contractor at equipment installation. The form will also request air conditioner or heat pump unit information details including make, model, and equipment age/condition. The rebate for an air conditioner is \$25 per ton and for a heat pump \$50 per ton.

Energy Recovery Ventilation

The Energy Recovery Ventilation (ERV) measure is available to commercial customers who install an ERV with a minimum Sensible Recovery Efficiency (SRE) of 65% at 32°F, as defined in ENERGY STAR® technical specifications. Eligible installations include commercial buildings without existing energy recovery ventilation, replacements of failed ventilation systems, and new construction projects where ERVs are not required by building code. The initial rebate for 2027 is \$200 per 100 cfm. Rebate amounts and minimum efficiency requirements may be adjusted over time based on participation, customer engagement, building code updates, and measured program performance, while maintaining overall cost-effectiveness. The Home Ventilation Institute certified products directory will be utilized as a reference verification resource¹³ along with product technical data.

Heat Pump Water Heating

Commercial customers installing heat pump water heating equipment may receive an incentive of \$500 per 1,000 gallons of average monthly hot water usage. Average monthly usage is calculated by multiplying annual hot water consumption by the percentage of load served by the installed equipment, then dividing the result by 12,000 annual gallons. Eligible equipment must have a coefficient of performance (COP) greater than 3, as documented through engineered design specifications or manufacturer product literature that is consistent with the system's intended application.

D. LONG TERM DEMAND SIDE MANAGEMENT GOALS

Commercial Heating and Cooling			
	2027	2028	2029
kWh – at the generator	442,743	442,743	442,743
Cost / kWh	\$0.29	\$0.29	\$0.29
kW – at the generator	26.6	26.6	26.6
Cost / kW	\$4,884	\$4,884	\$4,884

¹³ [Home Ventilating Institute: Heat/Recovery Products](#)

E. PROJECT BUDGET & PARTICIPATION

Commercial Heating and Cooling			
	2027	2028	2029
Project Delivery & Administration	\$21,000	\$21,000	\$21,000
Incentives	\$109,000	\$109,000	\$109,000
Total	\$130,000	\$130,000	\$130,000
Participation	208	208	208

DRIVE POWER (Existing, Commercial, and Industrial)

A. PROJECT DESCRIPTION

The goal of the Drive Power project is to educate dealers and customers on the benefits of installing variable frequency drive (VFD) motor controls as well as new and replacement electric motors that meet or exceed the National Electrical Manufacturers Association (NEMA) Premium® efficiency requirements. Rather than simply isolating opportunities for electric motor efficiency upgrades, the Drive Power project offers incentives to make entire motor systems more energy efficient by encouraging the installation of VFDs that control motor loads more efficiently.

The Drive Power project offers customers incentives for purchasing and installing the following energy efficient measures in electric motor-driven systems:

- Adjustable speed drives, also known as variable speed drives, variable frequency drives, and inverters.
- Open drip proof (ODP) and totally enclosed fan cooled (TEFC) motors exceeding NEMA Premium efficiency in new purchase applications and when replaced at failure.
- ODP and TEFC Motors meeting NEMA Premium efficiency when replaced prior to failure.
- Electronically commutated motors in nonresidential HVAC and exhaust fan applications.
- Electric hand dryers - eliminating electric resistance heating elements.
- High-volume, low-speed fans used in commercial and industrial facilities with high-bay spaces to reduce temperature stratification while replacing smaller fans that would otherwise be required. By minimizing the temperature difference between air at the ceiling and the floor, these fans allow HVAC set points to be raised or lowered seasonally without compromising occupant comfort.

B. PROJECT JUSTIFICATION

The EIA reports in its 2022 Manufacturing Energy Consumption Survey (MECS) that over half of the electricity consumed in the manufacturing sector is used for powering motors driving fans, pumps, conveyors, and compressors.¹⁴ At the same time, the U.S. Department of Energy's sourcebook for improving motor and drive system performance reports that electricity costs make up about 96 percent of the total life-cycle cost of a motor, while capital costs and maintenance account for 3 percent and 1 percent, respectively.¹⁵ Engineering principles in motor systems state that reducing motor speed by 50 percent will result in power consumption declining to one-eighth

¹⁴ U.S. Energy Information Administration. [U.S. Energy Information Administration - EIA - Independent Statistics and Analysis](#).

¹⁵ Lawrence Berkeley National Laboratory and Resource Dynamics Corporation. (September 2008). *Improving Motor and Drive System Performance: A Sourcebook for Industry*.

of a motor running at full speed, suggesting huge savings opportunities in motor controls. Adjustable Speed Drives (ASDs) are a highly effective technology for modifying or controlling motor operation that is recognized for improving performance and efficiency in drive systems.

C. PROGRAM-SPECIFIC POLICIES

Proposed rebate levels for ASD installations are \$10/horsepower for seasonal and HVAC applications and \$20/horsepower for non-seasonal or process applications. Prescriptive rebate incentives are available for ASD installations up to 500 horsepower. ASD installations exceeding 500 horsepower are eligible for incentives through the Custom Efficiency Projects Program.

OTP proposes a simple rebate for all TEFC, ODP, and explosion-proof motor installations with the amount dependent on motor horsepower for motors rated from one to 500 horsepower. The policy enables more clear and concise communications of program efficiency requirements and rebate levels, making participation simpler for customers, contractors, and dealers. ECM motor rebates are dependent on size from 0.125 horsepower to 3.0 horsepower, ranging from \$15 per motor to \$250 per motor. OTP proposes a \$250 incentive for qualifying hand dryer units operating without electric resistance heating elements and \$225 per unit for high volume low speed fans.

D. LONG TERM DEMAND SIDE MANAGEMENT GOALS

Drive Power			
	2027	2028	2029
kWh – at the generator	3,981,790	3,981,790	3,981,790
Cost / kWh	\$0.03	\$0.03	\$0.03
kW – at the generator	518.7	518.7	518.7
Cost / kW	\$256	\$256	\$256

E. PROJECT BUDGET & PARTICIPATION

Drive Power			
	2027	2028	2029
Project Delivery & Administration	\$15,000	\$15,000	\$15,000
Incentives	\$97,000	\$97,000	\$97,000
Total	\$112,000	\$112,000	\$112,000
Participation	241	241	241

CUSTOM ENERGY EFFICIENCY PROJECT (Existing, Commercial, and Industrial)

A. PROJECT DESCRIPTION AND JUSTIFICATION

The Custom Energy Efficiency project incentivizes commercial and industrial customers for energy-saving equipment installations and process changes that improve energy efficiency. The Custom Energy Efficiency project is a comprehensive project that is designed to cover energy-saving applications that are not served by the Company's other prescriptive rebate projects.

Impact savings estimates from Custom Energy Efficiency projects are provided to OTP by the customer in a project proposal. The proposal presents detailed demand and energy savings for each proposed measure that are then reviewed and verified by OTP engineering staff. If necessary, modifications are made to the proposal, and an iterative process takes place with the customer to ensure accuracy of savings calculations and appropriate documentation of proposed improvements. The Company offers technical assistance to commercial and industrial customers to help them determine the energy and demand savings necessary in developing a custom efficiency project proposal.

In addition, the customer often works with internal or third-party engineers to determine and verify savings. End-use metering may also be used for verifying impact savings.

B. PROGRAM-SPECIFIC POLICIES

All potential projects require pre-approval and evaluation of proposed costs, energy savings, and demand savings by Company staff prior to any consent or agreement to provide an incentive to participants. Proposed projects must pass the Total Resource and Utility Cost Tests with a value of 1.0 or greater to qualify for incentives. Further, OTP reserves the right to:

- Review applications and determine the suitability of projects.
- Modify incentive amounts as needed to fulfill its EPP requirements.
- Adjust payout of grants to allow for M&V and/or budget limitations.
- Establish values which may vary based on life of the project.

C. LONG TERM DEMAND SIDE MANAGEMENT GOALS

Custom Energy Efficiency			
	2027	2028	2029
kWh – at the generator	1,059,360	1,059,360	1,059,360
Cost / kWh	\$0.07	\$0.07	\$0.07
kW – at the generator	688.6	688.6	688.6
Cost / kW	\$105	\$105	\$105

D. PROJECT BUDGET & PARTICIPATION

Custom Energy Efficiency			
	2027	2028	2029
Project Delivery & Administration	\$6,000	\$6,000	\$6,000
Incentives	\$66,000	\$66,000	\$66,000
Total	\$72,000	\$72,000	\$72,000
Participation	12	12	12

COMMERCIAL LIGHTING (Existing, Commercial, and Industrial)

A. PROJECT DESCRIPTION

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

B. PROJECT JUSTIFICATION

The U.S. EIA estimates that in 2025 the residential and commercial sectors consumed about 2.5 trillion kWh of electricity, with 11 percent of that electricity used for lighting in the commercial sector and 6 percent in the industrial sector.¹⁶ Large buildings that are dominated with internal heat-generating processes often use far more air conditioning than heating. As a result, these are excellent candidates for lighting efficiency upgrades as they can experience an HVAC energy-savings bonus of 40 percent or more in addition to efficiency gains from the actual lighting efficiency improvements.

C. PROGRAM-SPECIFIC POLICIES

OTP proposes to continue tracking actual wattage of both removed fixtures and lamps as well as installed, efficient products for each installation in retrofit applications. For both new construction and retrofits, the Company relies on the MN TRM for other key assumptions used in savings algorithms, including:

- Annual hours of operation for various business types
- Adjustments in savings calculations for mechanical cooling systems.
- Wattage assumptions for both baseline and efficient lighting systems in new construction applications.

For new construction applications, OTP proposes incentives for LED technology only. OTP recommends and strongly encourages all Commercial Lighting Program participants and installation contractors to choose LED products meeting Design Lights Consortium Qualified Products List standards.

¹⁶ [Use of electricity - U.S. Energy Information Administration \(EIA\)](#)

D. LONG TERM DEMAND SIDE MANAGEMENT GOALS

Commercial Lighting			
	2027	2028	2029
kWh – at the generator	1,192,189	1,192,189	1,192,189
Cost / kWh	\$0.06	\$0.06	\$0.06
kW – at the generator	195.5	195.5	195.5
Cost / kW	\$358	\$358	\$358

E. PROJECT BUDGET & PARTICIPATION

Commercial Lighting			
	2027	2028	2029
Project Delivery & Administration	\$21,000	\$21,000	\$21,000
Incentives	\$49,000	\$49,000	\$49,000
Total	\$70,000	\$70,000	\$70,000
Participation	91	91	91

ADVERTISING AND EDUCATION

(Existing, Residential, Commercial, and Industrial)

A. PROJECT DESCRIPTION AND JUSTIFICATION

The range and complexity of energy-related decisions consumers make continue to multiply. This is due to the variety of energy-powered technologies used in modern life; the variety of construction materials available; the number of construction techniques represented in today's building stock; and the number of options available for heating, cooling, and ventilation systems.

The primary purpose of the Advertising and Education project is educational outreach targeting residential customers, commercial customers, and school-age children across all economic groups within the OTP customer base. The program objective is to increase consumer awareness of energy-saving practices and to educate both today's consumers and future consumers, preparing them to make lifestyle and business choices and buying decisions that maximize energy efficiency and savings.

Components of the Advertising and Education project include:

- Providing educational materials such as bill inserts, brochures, flyers, and other literature to customers;
- Providing web-based educational information and personalized data about energy use and energy conservation options; and
- Offering educational presentations to students and their teachers; and offering energy assessments for small to midsize businesses.

General information literature

Materials will be developed and produced to support the projects and technologies offered in this portfolio as well as general energy efficiency education. Pieces will include bill inserts, brochures, flyers, and other educational materials.

Internet based resources

Online tools and materials developed through this project will direct customers to www.otpc.com where they will find a variety of conservation tips and resources. Additionally, by year-end 2026 OTP will launch a new customer engagement portal "My Account / Actions" as an online energy feedback tool. The Company will leverage this portal to provide energy usage information, interactive charts and heat maps that include weather data, energy use, and billing costs, encouraging and rewarding customers to track the impacts of new energy-efficient equipment additions, and dated-equipment removal, as well as lifestyle changes. This detailed information will help customers make changes that impact their usage patterns and reduce overall monthly bills.

School-Age Educational Presentations

OTP will continue to partner with child-focused science museums and activity centers in the service area to deliver educational messages of energy conservation and optimization. With the support of OTP, experienced educators from the Science Museum of Minnesota will visit service area communities in South Dakota delivering the acclaimed Energy Connections Assembly.

B. LONG TERM DEMAND SIDE MANAGEMENT GOALS

This project is not a direct impact project; therefore, no estimates have been made to determine any effects on peak demand or energy consumption.

C. PROJECT BUDGET & PARTICIPATION

Advertising and Education			
	2027	2028	2029
Project Delivery & Administration	\$41,000	\$41,000	\$41,000
Total	\$41,000	\$41,000	\$41,000
Participation	525	525	525

EEP DEVELOPMENT AND PLANNING (Existing)

A. PROJECT DESCRIPTION

Research and development are critical steps in ensuring that OTP's EEP in South Dakota remains relevant and effective to South Dakota Customers over the long term. The Development and Planning Program is designed to allow for both long-term and near-term management and development of the EEP at the Company.

The program will encompass analyzing new trends and technologies, conducting EEP-related strategic planning (economic and impact), and EEP-related regulatory coordination and compliance. Analysis activities will focus on national, state, and other utility trends; demand side management potential, load research, legislative and regulatory activity; and private sector development of new technologies and projects aligned with energy efficiency efforts.

B. LONG TERM DEMAND SIDE MANAGEMENT GOALS

Development and Planning is not a direct impact project; therefore, no estimates have been made to determine any effects on peak demand or energy consumption.

C. PROJECT BUDGET & PARTICIPATION

Development and Planning			
	2027	2028	2029
Development and Planning	\$20,000	\$20,000	\$20,000

COST RECOVERY AND FINANCIAL INCENTIVE

OTP has established a balancing account to track South Dakota conservation costs, including a carrying charge for the time value of the money invested in energy efficiency programs incurred by the Company. The tracker also accounts for amounts collected from customers through the conservation cost recovery charge. The conservation cost recovery charge is collected monthly based on the applicable adjustment factor multiplied by the Customer's monthly energy (kWh) usage. For billing purposes, the cost recovery charge is combined with other charges as part of the energy adjustment that appears on customers' electric service bills.

We are not currently recovering any of these program costs in base rates. The conservation cost recovery mechanism is an appropriate means to recover costs associated with developing and implementing the South Dakota Energy Efficiency Partnership Triennial Plan.

On May 1 of each year the Company plans to file a Status Report detailing the previous year's EEP results, including energy savings and expenses. In addition, the Company will request approval of a financial incentive, an update to the amount of the conservation cost recovery charge, and approval to continue the adjustment charge on customers' bills, effective July 1, of that year.

OTP requests a financial incentive for the 2027-2029 EEP consistent with the incentive proposal filed on May 1. The following table shows the proposed incentive for 2027, 2028, and 2029 capped at 30 percent of budgeted annual EEP expenses. The financial incentive realized by the Company would be based on the lesser of the budget or actual expenses and filed annually in the May 1 Status Report.

SD Energy Efficiency Financial Incentive	2027	2028	2029
Proposed EEP Budget	\$650,000	\$650,000	\$650,000
Percent of Budget	30%	30%	30%
Financial Incentive (cap)	\$195,000	\$195,000	\$195,000

EVALUATION

OTP uses DSMore™ software to analyze projects and to calculate benefit-cost test results for each direct-impact project and for the aggregate EEP portfolio including indirect impact project costs. A summary of the cost effectiveness of the portfolio is presented in the following table for each year of the 2027-2029 EEP and for the three years combined.

2027 Energy Efficiency Plan - Benefit / Cost Results			
Utility Test	Total Resource Cost Test	Ratepayer Impact Test	Participant Test
8.61	2.50	0.70	3.56
2028 Energy Efficiency Plan - Benefit / Cost Results			
Utility Test	Total Resource Cost Test	Ratepayer Impact Test	Participant Test
8.89	2.58	0.71	3.63
2029 Energy Efficiency Plan - Benefit / Cost Results			
Utility Test	Total Resource Cost Test	Ratepayer Impact Test	Participant Test
9.16	2.66	0.72	3.69
2027 - 2029 Energy Efficiency Plan - Benefit / Cost Results			
Utility Test	Total Resource Cost Test	Ratepayer Impact Test	Participant Test
8.88	2.58	0.71	3.62

For this analysis, the Company excluded externality values in the TRC Test.

DSMore™ incorporates data from the Company's Integrated Resource Plan, transmission cost models, and financial parameters to model our customer load profiles, system peaks, line losses, customer rates, marginal energy costs, avoided capacity costs, and avoided transmission and distribution costs. Results for the individual projects are provided in Appendix A along with benefit/cost test results for each project.

The Company used the following discount rates as inputs to DSMore™ for the 2027-2029 analysis. The Residential Participant Test discount rate utilized in this analysis is 3.0% and is based upon guidance from the United States Office of Management and Budget to Federal agencies on the development of regulatory analysis as required in Executive Order 12866.

The TRC test discount rate is based on the theory that energy efficiency investments are funded by both the utility and the ratepayers that participate in the programs. Utilities invest money in the programs and customer participants pay incremental costs for equipment at their homes and businesses. For the TRC test, OTP used a blended discount rate balancing its weighted cost of capital and the 3.0% rate to reflect both the utilities and customer's cost of capital.

Participant Test Residential	Participant Test Commercial	Ratepayer Impact Test	Total Resource Cost Test	Utility Test
3.0%	7.09%	7.09%	5.2%	7.09%

SUMMARY

OTP's 2027-2029 Plan presents projects for all customer classes and major end uses. The Plan includes projects intended to achieve approximately 7.7 million kWh in annual energy savings at an approximate total cost of \$650,000. DSMore™ results demonstrate that the Plan passes all required cost effectiveness tests.

OTP proposes launching these projects January 1, 2027. Following the Plan's implementation and evaluation, the Company will provide reviews to the Commission of the Company's performance compared to the budgets every year by May 1. The Company aims to achieve a financial incentive for providing energy savings and net benefits to South Dakota customers. This incentive is proposed at 30 percent of actual EEP expenses, capped at 30 percent of proposed budget. This incentive structure is consistent with historical utility incentive practices.

We respectfully request the Commission approve the 2027-2029 Energy Efficiency Portfolio and incentive plan.