STATE OF SOUTH DAKOTA BEFORE THE SOUTH DAKOTA PUBLIC UTILITIES COMMISSION

In the Matter of Otter Tail Power Company's 2014 South Dakota Energy Efficiency Plan Status Report and 2015 Annual Filing to Update the Energy Efficiency Adjustment Rider

Docket No. EL15-___

SUMMARY OF FILING

Status Report

Overall results for the 2014 South Dakota Energy Efficiency Plan ("EEP") Program show Otter Tail Power Company ("Otter Tail", "Company") achieved 99.6 percent of budget, 61 percent of participation goals, 129 percent of projected energy savings goals, and 133 percent of proposed demand savings. A brief summary of each of the programs offered to South Dakota customers in 2014 is presented. Summary tables of actual results compared to goals are provided in Appendix A, Tables 1 through 3.

Financial Incentive

The South Dakota Public Utilities Commission approved a "percent of approved budget" method for calculating the financial incentive, which would equal \$105,445. A summary spreadsheet is presented in Appendix A, Table 4.

Energy Adjustment Rider

The Company is proposing an increase to the Energy Efficiency Adjustment Rider from \$0.00103 to \$0.00152. This adjustment is to be reflected on customers' bills as a separate line item starting with bills rendered (dated) on or after July 1, 2015. The EEP tracker balance is provided in the attached report under the section "ENERGY ADJUSTMENT RIDER." A summary spreadsheet is presented in Appendix A, Table 5 and Appendix B presents a copy of the Energy Efficiency Adjustment Rider.

Conclusion

Otter Tail requests approval of the 2014 Financial Incentive, totaling \$105,445. The Company also requests an update to the Energy Efficiency Adjustment Rider to \$0.00152 on customer's bills. The next status report will be filed on May 1, 2016, with the program subject to modifications as proposed and approved by the Commission at that time.

Otter Tail Power Company South Dakota Energy Efficiency Program 2014 Status Report

Table of Contents

INTRODUCTION	2
DIRECT IMPACT - RESIDENTIAL	4
	ب
	4
AIR SOURCE HEAT PUMPS (Residential)	5
GEOTHERMAL HEAT PUMPS (Residential)	6
LIGHTING (Residential)	8
DIRECT IMPACT – COMMERCIAL	10
AIR SOURCE HEAT PUMPS (Commercial)	10
CUSTOM EFFICIENCY PROGRAM	11
DRIVE POWER	13
GEOTHERMAL HEAT PUMPS (Commercial)	15
LIGHTING (Commercial)	16
INDIRECT IMPACT	
ADVERTISING & EDUCATION (Residential)	18
MISCELLANEOUS / INACTIVE PROJECT COSTS	
EEP DEVELOPMENT	19
FINANCIAL INCENTIVE	20
REGULATORY REQUIREMENTS	21
ENERGY ADJUSTMENT RIDER / CARRYING COSTS	21

INTRODUCTION

The purpose of this Status Report is to present the results of direct impact, indirect impact, and miscellaneous programs completed from January 1, 2014 through December 31, 2014, through Otter Tail Power Company's ("Otter Tail", "Company") South Dakota Energy Efficiency Partnership ("EEP") program. Cost recovery and the financial incentive calculations for the Program are also detailed in this report. This filing is the sixth Status Report provided to the South Dakota Public Utilities Commission ("Commission", "SDPUC") and summarizes the results of the sixth full year of EEP activity since the Program's inception.

Direct Impact Programs

Residential

- Air Conditioning Control
- Air Source Heat Pumps

Commercial

- Air Source Heat Pumps
- Custom Efficiency
- Geothermal Heat Pumps

Indirect Impact Programs

• Advertising & Education

Geothermal Heat Pumps

- Lighting
- Lighting
- Motors

Miscellaneous and Inactive Programs

• EEP Development

Financial Incentive

Regulatory Requirements

Background

- On May 1, 2013, Otter Tail requested approval of its 2014-2015 EEP, Docket no. EL13-016.
- On June 24, 2013, Otter Tail resubmitted its 2014-2015 EEP. The revised EEP plan reflected avoided costs based on a summer peak, which is consistent with the Midcontinent Independent System Operator ("MISO") region. All tables and benefit/cost test were updated to reflect Otter Tail's capacity resource needs based on summer peak.
- At the November 5, 2013 SDPUC meeting, the Commission voted unanimously to approve Otter Tail's proposed EEP for 2014-2015.
- At the December 3, 2013 SDPUC meeting, the Commission voted unamimously to reconsider the 30 percent over-budget provision within the 2014-2015 EEP. The majority of the SDPUC voted to amend the approval previously given in the Order by changing the 30 percent allowance to exceed the budget, to a 10 percent over budget allowance.

Overview

Overall results for the 2014 South Dakota EEP Program show the Company achieved 61 percent of projected participation goals, 129 percent of projected energy savings goals, and 133 percent of projected demand savings while maintaining spending at 99.6 percent of the budget.

Summary of Budget to Actuals – 2014			
	Budget	Actual Results	% of Budget
Expenses All Programs	\$353,000	\$351,483	99.6%
Participation	904	554	61.3%
Energy Savings - kWh	2,808,649	3,626,634	129.1%
Demand Savings - kW	409.1	544.8	133.2%

The Company's 2014 EEP achieved significant energy and demand savings, stayed within budget, and resulted in a 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 we can continue to create a sustainable energy future for South Dakota, of which energy efficiency will play a critical role.

Approved 2014 South Dakota EEP goals and budgets are listed in Appendix A, Tables 1 through 3, along with actual results for 2014.

DIRECT IMPACT – RESIDENTIAL 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 \$7/month credit for each of the 4 summer months (June-September).

In 2014, Otter Tail controlled air conditioning on 27 separate occasions for a total of 48 hours and 37 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:

- *Guide to the Programs and Services* sent to contractors
- Bill inserts sent in January and April of 2014
- Television and radio campaign conducted in conjunction with other company promotions.
- Customer care booklet that is sent to all new customers
- Website Hero Spots at <u>www.otpco.com</u> home page
- Pocket calendar and products and services guide
- Presentations and literature distribution at workshops
- Annual and monthly service rep training
- Brochures available in customer service center lobbies and by request
- Program, rate, and rebates described within the Company's web site at <u>www.otpco.com</u>

This Program has been approved for continuation in the 2015 EEP.

Participation & Budget

PARTICIPATION AND BUDGET – 2014				
Air Conditioning Control Actual Proposed % of Goal				
Participation	19	30	63%	
Budget \$	\$7,184	\$14,000	51%	

Evaluation Methodology

Otter Tail analyzed a sample of air conditioning control customer's interval data to estimate energy savings. Otter Tail examined the interval data prior to load-control, during load-control, and for several hours post load-control to establish estimated savings.

Energy Savings & Adjustments

Air conditioning control per participant produces energy savings of approximately 48 kWh per household, and impacts summer peak demand by approximately 0.71 kW at the generator.

Air Conditioning Control	Actual Savings at the Generator	Budgeted Savings at the Generator	% of Budget
Energy Savings – kWh	917	1,448	63%
Demand Savings – kW Summer Coincident Peak	13.498	21.310	63%

AIR SOURCE HEAT PUMPS (Residential)

The Air Source Heat Pump Program targets residential customers currently using or considering the installation of less efficient resistance electric heating and cooling systems by offering rebates for high-efficiency air source heat pumps. For 2014, Otter Tail relied on Energy Star qualifications for the minimum equipment efficiency requirement for this program:

Energy Star – ASHP	HSPF	SEER	EER
Split System	> or = 8.2	> or = 14.5	12.0
Package Terminal			> or = 11.0

Otter Tail Power Company promotes energy efficient heat pumps through the following resources:

- Guide to the Programs and Services sent to contractors
- Brochures available in customer service center lobbies and by request
- Presentations and literature distribution at Builder and Electrical Workshops for contractors
- Training material covered with service representatives in annual and monthly training
- Bill messages included on all customer monthly service statements
- Bill inserts about heat pump efficiency and rebates
- Website Hero Spots at <u>www.otpco.com</u> home page
- Program, rate, and rebate descriptions on the Company's web site <u>www.otpco.com</u>

This Program has been approved for continuation in the 2015 EEP.

Participation & Budget

PARTICIPATION AND BUDGET – 2014				
Air Source Heat Pumps (R)ActualProposed% of Goal				
Participation	19	25	76%	
Budget \$	\$11,062	\$19,000	58%	

Evaluation Methodology

Energy savings estimates from the State of Minnesota's Division of Energy Resources Technical Reference Manual ("MN TRM") are used for cooling energy savings assumptions. The Company's engineering estimates are used to determine energy savings for heating for each air source heat pump system installed.

Energy Savings & Adjustments

The 2014 average annual energy savings at the generator are 9,727 kWh per unit, with summer peak demand savings of 0.26 kW per unit installed. Average size unit installed in 2014 was 2.8 tons.

Air Source Heat Pumps (R)	Actual Savings at the Generator	Proposed Savings at the Generator	% of Budget
Energy Savings – kWh	184,818	222,277	83%
Demand Savings – kW Summer Coincident Peak	4.908	6.460	76%

GEOTHERMAL HEAT PUMPS (Residential)

Geothermal heat pumps are most often used in the coldest climates where the winter season ground temperature is significantly warmer and less variable than outside air temperatures. Because of the consistent, steady ground temperatures, geothermal heat pumps can achieve efficiencies of up to 400 percent. The Geothermal Heat Pump Program capitalizes on a renewable technology and targets customers currently using or considering the installation of less efficient resistance electric heating and cooling systems.

A minimum Energy Star qualification is required for this program. During 2014, units were required to meet an Energy Star qualification listed in the chart below.

Туре	СОР	
	Open	Closed
Water to air	4.1	3.6
Water to water	3.5	3.1
Direct exchange	3.6	

Otter Tail promotes energy efficient heat pumps using the following promotional resources:

- *Guide to Programs and Services* sent to contractors
- Brochures available in customer service center lobbies and by request
- Presentations and literature distribution at Builder and Electrical Workshops for contractors
- Training material covered with service representatives in annual and monthly training
- Bill messages included on all customer monthly service statements
- Promotional bill inserts about heat pump efficiency and rebates
- Website Hero Spots at <u>www.otpco.com</u> home page
- Program, rate, and rebate descriptions within the Company's web site at <u>www.otpco.com</u>

This Program has been approved for continuation in the 2015 EEP. Required COP levels are the same for 2015 and will match Energy Star program requirements.

Participation & Budget

PARTICIPATION AND BUDGET – 2014				
Geothermal Heat Pumps (R) Actual Proposed % of Goal				
Participation	7	10	70%	
Budget \$	\$15,746	\$23,000	68%	

Evaluation Methodology

Engineering estimates are used to determine energy savings from each geothermal heat pump system installed.

Energy Savings & Adjustments

On average, the 2014 energy savings at the generator is 18,529 kWh per unit, with summer peak demand savings of 1.74 kW for the seven units installed. Average size unit installed in 2014 was 4.4 tons.

Geothermal Heat Pumps (R)	Actual Savings at the Generator	Proposed Savings at the Generator	% of Budget
Energy Savings – kWh	129,700	206,583	63%
Demand Savings – kW Summer Coincident Peak	12.206	17.440	70%

LIGHTING (Residential)

The Lighting Program provides rebates to residential customers for retrofit installations of energy-efficient lighting technologies. Possible measures implemented by customers include retrofits from inefficient incandescent and linear fluorescent lighting systems to the following efficient technologies: screw-in compact fluorescent; fluorescent fixtures with T-8 and T-5 lamps and various electronic ballast configurations; and LED lighting systems. The 2014 program offered customers an opportunity to change-out their old, inefficient lighting systems.

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

- Presentations and literature distribution at Builder, Electrical and Electric Technologies Workshops for contractors
- Guide to Programs and Services sent to contractors
- Program, technology, and rebate information available on the Company's web site at www.otpco.com
- EEP bill inserts for South Dakota customers

This Program has been approved for continuation in the Company's 2015 Plan.

Participation & Budget

PARTICIPATION AND BUDGET – 2014				
Lighting (R) Actual Proposed % of Goal				
Participation	58	340	17%	
Budget \$	\$2,000	\$4,000	50%	

Evaluation Methodology

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

The Company has documented all existing lighting wattage that is removed at each site and compared that to the actual energy efficient lighting wattage being installed to calculate energy savings.

Energy Savings & Adjustments

For retrofit lighting, lighting systems being installed are compared with systems being removed to determine the change in wattage.

	Actual Savings	Proposed Savings	
Lighting (R)	at the Generator	at the Generator	% of Goal
Energy Savings – kWh	15,988	24,098	66%
Demand Savings – kW Summer Coincident Peak	3.462	2.160	160%

DIRECT IMPACT – COMMERCIAL AIR SOURCE HEAT PUMPS (Commercial)

The Air Source 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 heat pumps. For 2014, Otter Tail relied on Energy Star qualifications as the minimum equipment efficiency requirement for this program:

Energy Star – ASHP	HSPF	SEER	EER
Split System	> or = 8.2	> or = 14.5	12.0
Package Terminal			> or= 11.0

Otter Tail promotes energy efficient heat pumps using various resources:

- Presentations and literature distribution at Builder and Electrical Workshops for contractors
- Guide to Programs and Services sent to contractors
- Brochures available in customer service center lobbies and by request
- Bill messages included on customer statements
- Bill inserts about heat pump efficiency and rebates
- Website Hero Spots at <u>www.otpco.com</u> home page
- Training material covered with service representatives in annual and monthly training
- Program, rate, and rebate descriptions within the Company's web site at <u>www.otpco.com</u>

This Program has been approved for continuation in the 2015 EEP. Required equipment efficiency specification levels will be adjusted each year to match Energy Star program requirements.

Participation & Budget

PARTICIPATION AND BUDGET – 2014				
Air Source Heat Pumps (C) Actual Proposed % of Goal				
Participation	14	15	93%	
Budget \$	\$19,309	\$13,000	149%	

Evaluation Methodology

Engineering estimates from the MN TRM are used for cooling energy savings assumptions. The Company's engineering estimates are used to determine heating energy savings assumptions.

Energy Savings & Adjustments

Annual energy savings on average at the generator in 2014 are 21,447 kWh with summer peak demand savings of 0.26 kW per unit installed. The average size unit installed was 6 tons.

Air Source Heat Pumps (C)	Actual Savings at the Generator	Proposed Savings at the Generator	% of Goal
Energy Savings – kWh	300,259	134,044	224%
Demand Savings – kW Summer Coincident Peak	3.617	3.880	93%

CUSTOM EFFICIENCY PROGRAM

The Custom Efficiency Program pays incentives to commercial and industrial customers for energy saving installations such as new energy-efficient equipment and process changes. The Custom Efficiency Program is intended to provide incentives to customers considering energy efficiency technologies or applications not currently available through existing prescriptive rebate programs.

Efficiency Custom Projects Type of System Installation	Quantity
Building Envelope Improvements	1
Variable Speed Drive	1

Otter Tail promotes the custom efficiency program through a variety of promotional resources:

- Presentations and literature distribution at Builder and Electrical Workshops for contractors
- Guide to Programs and Services available to contractors
- *Make It Electric* newsletter for commercial and industrial customers
- Program, technology, and rebate information available on the Company's web site at <u>www.otpco.com</u>
- EEP bill inserts for South Dakota customers

This Program has been approved for continuation in the Company's 2015 Plan.

Participation & Budget

PARTICIPATION AND BUDGET – 2014				
Custom Efficiency Actual Proposed % of Goal				
Participation	2	5	40%	
Budget \$	\$16,808	\$71,000	24%	

Evaluation Methodology

Impact savings estimates from the Custom Efficiency Program come directly from the customer, who submits detailed information showing demand and energy savings for each proposed measure. The Company verifies the feasibility of the proposed savings, and if necessary, makes modifications to the analysis. Otter Tail offers assistance for our commercial and industrial customers to help them determine the energy and demand savings necessary in developing a Custom Efficiency Program proposal. Customers often work with internal or third-party engineers to determine and verify savings.

Energy Savings & Adjustments

Energy savings are based on customer efficiency proposals and reviewed and verified by Otter Tail engineering staff.

Custom Efficiency Program	Actual Savings at the Generator	Proposed Savings at the Generator	% of Goal
Energy Savings – kWh	44,850	968,760	5%
Demand Savings – kW Summer Coincident Peak	31.655	134.550	24%

Energy (kWh) and demand (kW) savings from the Custom Efficiency Program were significantly short of goal in 2014. Relatively low participation is often inherent in this program and one or two large industrial projects can significantly influence results. The Company is optimistic about efficiency opportunities with large commercial and industrial customers in 2015.

DRIVE POWER

The goal of the Drive Power Program is to educate dealers and customers on the benefits of installing new and replacement electric motors and adjustable speed drives 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:

- Presentations and literature distribution at Builder and Electrical Workshops for contractors
- *Guide to Programs and Services* available to contractors
- *Make It Electric* newsletter for commercial and industrial customers
- Program, technology, and rebate information available on the Company's web site at <u>www.otpco.com</u>
- EEP bill inserts for South Dakota customers

This Program has been approved as the Drive Power program for continuation in the Company's 2015 Plan.

PARTICIPATION AND BUDGET - 2014			
Drive Power Actual Proposed % of Goal			
Participation	89	31	287%
Budget \$	\$162,105	\$63,000	257%

Participation & Budget

To ensure adequate rebate dollars are available for all customers, Otter Tail has a rule that no single customer can receive rebate dollars that exceed twenty percent of the overall EEP budget. For 2014, the maximum rebate at twenty percent of the \$353,000 budget is \$70,600.

In 2014, one customer had a very large Drive Power project that qualified for rebates in excess of forty percent of budget. Due to the nature of these large capital intensive projects being infrequent, Otter Tail developed a plan to pay the customer twenty percent of the budget in 2014 and an additional twenty percent of budget in 2015. If there is excess dollars in the budget at the end of 2015, Otter Tail will pay any additional rebate dollars to the customer for the qualifying equipment. Otter Tail also claimed half of the project's kWh and kW savings in 2014, with the plan to claim the remainder in 2015.

This plan ensures all customers can participate in EEP, even ones that have large capital intensive projects that occur infrequently. The plan also provides the majority of the

budget to be available for other EEP participants. Otter Tail recognizes that large projects like the one included in 2014 are very important to the EEP plan. Industrial customers typically pay a large portion of EEP costs through the EEP surcharge so it is necessary that they are also able to participate in the program. The large energy savings from projects like this are especially important at reducing energy costs for all South Dakota customers.

Prior to implementing this plan, Otter Tail discussed it with SDPUC Staff. They indicated that Otter Tail should explain how we handle these larger projects through this Status Report.

Otter Tail also referred to this rule in Docket no. EL13-016, question no. SD-PUC-01-07. Otter Tail stated, "…no single customer will be paid more than 20 percent of the South Dakota EEP total budget in a single year unless approved by Otter Tail management."

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.

Energy Savings & Adjustments

Engineering estimates from the MN TRM and the Company's engineering estimates are being used to calculate impact savings in the Motors Program. 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.

Drive Power	Actual Savings at the Generator	Proposed Savings at the Generator	% of Goal
Energy Savings – kWh	2,044,426	482,713	424%
Demand Savings – kW Summer Coincident Peak	343.775	104.760	328%

GEOTHERMAL HEAT PUMPS (Commercial)

Geothermal heat pumps are most often used in the coldest climates where the ground temperature is significantly warmer and less variable than outside air temperatures. Because of the consistent, steady ground temperatures, geothermal heat pumps can achieve efficiencies of up to 400 percent. The Geothermal Heat Pump Program capitalizes on a renewable technology and targets customers currently using or considering the installation of less efficient resistance electric heating and cooling systems. For 2014, Otter Tail relied on Energy Star qualifications as the minimum equipment efficiency requirement for this program:

Туре	СОР		
	Open	Closed	
Water to air	4.1	3.6	
Water to water	3.5	3.1	
Direct exchange	3.6		

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

- Presentations and literature distribution at Builder and Electrical Workshops for contractors
- *Guide to Programs and Services* available to contractors
- Brochures available in customer service center lobbies and by request
- Bill messages included on customer statements
- Bill inserts about heat pump efficiency and rebates
- Website Hero Spots at <u>www.otpco.com</u> home page
- Training material covered with service representatives in annual and monthly training
- Program, rate, and rebates described within the Company's web site at <u>www.otpco.com</u>

This Program has been approved for continuation in the 2015 EEP. Required COP levels are the same for 2015 and will match Energy Star program requirements.

Participation & Budget

PARTICIPATION AND BUDGET – 2014				
Geothermal Heat Pumps (C) Actual Proposed % of Goal				
Participation	10	25	40%	
Budget \$	\$57,000	\$30,079	53%	

Evaluation Methodology

Engineering estimates are used to determine energy savings from each geothermal heat pump system installed.

Energy Savings & Adjustments

The 2014 average annual energy savings at the generator is 29,341 kilowatt-hours, with summer peak demand savings of 17.44 kW per unit installed. The average unit size was 6.3 tons in 2014.

Geothermal Heat Pumps (C)	Actual Savings at the Generator	Proposed Savings at the Generator	% of Goal
Energy Savings – kWh	293,405	523,938	56%
Demand Savings – kW Summer Coincident Peak	17.438	43.590	40%

LIGHTING (Commercial)

The Lighting Program provides rebates to commercial and industrial customers for retrofit installations of energy-efficient lighting technologies. Possible measures implemented by customers include retrofits from inefficient incandescent, high intensity discharge, and linear fluorescent lighting systems to the following efficient technologies: screw-in compact fluorescent; fluorescent fixtures with T-8 and T-5 lamps and various electronic ballast configurations; and LED lighting systems. The 2014 program continued offering customers a tremendous opportunity to accelerate change-out of their old, inefficient lighting systems.

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

- Presentations and literature distribution at Builder, Electrical and Electric Technologies Workshops for contractors
- *Guide to Programs and Services* sent to contractors
- *Make It Electric* newsletter for commercial and industrial customers
- Program, technology, and rebate information available on the Company's web site at www.otpco.com
- EEP bill inserts for South Dakota customers

This Program has been approved for continuation in the Company's 2015 Plan.

Participation & Budget

PARTICIPATION AND BUDGET – 2014				
Lighting (C) Actual Proposed % of Goa				
Participation	18	23	78%	
Budget \$	\$61,632	\$54,000	114%	

Evaluation Methodology

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

The Company has documented all existing lighting wattage that is removed at each site, and compared that 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 type.

Energy Savings & Adjustments

For retrofit lighting, lighting systems being installed are compared with systems being removed to determine the change in wattage. The hours of operation are multiplied by the watts to determine energy savings. Company personnel conduct verification of retrofit projects as needed.

Lighting (C)	Actual Savings at the Generator	Proposed Savings at the Generator	% of Goal
Energy Savings - kWh	612.272	244.790	250%
Energy Savings – Kwii	012,272	211,790	25070
Demand Savings – kW Summer Coincident Peak	114.219	74.970	152%

INDIRECT IMPACT ADVERTISING & EDUCATION (Residential)

The residential Advertising & Education Program for 2014 includes:

- Educational outreach to South Dakota school children in grades four through six.
- General advertisement of energy efficiency program opportunities through bill inserts and through company newsletters.
- Promotion and education about energy efficient technologies through Internet based resources posted on the company website www.otpco.com.

The educational outreach program was operated through the Minnesota Science Museum, which was contracted to provide an energy-focused lyceum at four schools in the Otter Tail Power Company South Dakota service territory during May 2014. The *Energy Connections* assembly program is a 50-minute assembly focusing on the science of energy and energy conservation. Through dynamic demonstrations and audience participation using one-of-a-kind equipment displays, students are encouraged to use energy wisely. *Energy Connections* aims to help schools meet their academic standards for science. It delivers and reinforces messages to make conserving energy a lifestyle and includes a component to educate students about energy production. Program results for 2014 include four assemblies reaching 318 students. The program is offered to schools on a first-come, first-served basis for those schools that respond to the invitation.

The general advertisement component of the Advertising and Education program included support for developing and printing bill inserts promoting the EEP program portfolio specifically including promotion of heat pump, lighting, and Drive Power rebates, and the CoolSavings air conditioning cycling program.

Online resources included website updates and pages detailing EEP programs offered in South Dakota and the home energy analyzer tool that helps residential customers identify ways to improve energy use in their home. During 2014, EEP program pages were accessed 965 times.

This Program has been approved for continuation in 2015 EEP.

PARTICIPATION AND BUDGET – 2014				
Advertising and Education	Actual	Proposed	% of Goal	
Participation	318	400	80%	
Budget \$	\$8,084	\$10,000	81%	

Participation & Budget

MISCELLANEOUS / INACTIVE PROJECT COSTS EEP DEVELOPMENT

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

PARTICIPATION AND BUDGET – 2014			
EEP Development	Actual	Proposed	% of Goal
Participation	N/A	N/A	N/A
Budget \$	\$17,473	\$25,000	70%

Participation & Budget

FINANCIAL INCENTIVE

On June 26, 2012, the Commission's Order approved a financial incentive investments in energy efficiency based on a percent of budgeted spending. The Commission's approval was consistent with South Dakota Staff's June 8, 2012, letter which recommended, "...this method is the appropriate and most reasonable methodology based on prior mechanisms and recovery options."

As shown in Appendix A, Table 1, the Company spent \$351,483 in 2014. The approved budget for 2014 was \$353,000. The maximum incentive that can be awarded is 30 percent of \$351,483, or \$105,445. Total net benefits provided to South Dakota customers by 2014 EEP projects was \$2,919,961. The proposed incentive is only 3.61 percent of net benefits provided by the program.

Otter Tail requests approval of a financial incentive of \$105,445 as calculated and shown in Appendix A, Table 4.

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, 2014. 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.

The tracker will also account for amounts collected from customers through the "ENERGY EFFICIENCY ADJUSTMENT FACTOR." The energy efficiency adjustment factor was collected monthly based on a kWh charge on customers' bills. For billing purposes, the charge was a separate line item on customers' electric service bills. We are not currently recovering any of these costs in base rates; therefore, Otter Tail 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 \$0.00103/kWh. Otter Tail proposes changing the EEP factor to \$0.00152. Appendix A, Table 6 presents the EEP tracker account balances for year-end 2014 and projections for 2015 through June 2016. When including the financial incentive amount of \$105,445 in the tracker, carrying charges, and approval to increase the EEP factor, Otter Tail forecasts the tracker balance to be approximately \$0 on July 1, 2016. The proposed EEP surcharge will keep the tracker balance near zero, which keeps carrying charges for South Dakota customers as low as possible. The following table summarizes the expenses and revenues discussed above.

	January 2015- June 2015	July 2015 - June 2016
Beginning Balance	\$111,762	\$170,182
Carrying Charges	\$6,689	\$10,579
EEP Program Expenses	\$282,268	\$353,000
EEP Incentive Proposed	\$0	\$105,445
EEP Rider Revenue	(\$230,537)	(\$639,206)
Ending Balance	\$170,182	\$0
EEP Factor	\$0.00103/kWh	\$0.00152/ kWh

Otter Tail has included a redline and final version of the EEP cost recovery rider rate schedule in this filing with a July 1, 2015 effective date (Appendix B: Energy Efficiency

Adjustment Rider). The EEP cost recovery rider included in this filing reflects the proposed EEP factor of \$0.00152/kWh.

Pursuant to ARSD 20:10:13:18, Otter Tail will post a Notice of Proposed Changes (Appendix C, Attachment 1). This Notice will be placed in a conspicuous place in each business office in Otter Tail's affected electric service territory in South Dakota for at least 30 days before the change becomes effective.

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.