STATE OF SOUTH DAKOTA BEFORE THE SOUTH DAKOTA PUBLIC UTILITIES COMMISSION

In the Matter of Otter Tail Power Company's 2012 South Dakota Energy Efficiency Plan Status Report and 2013 Annual Filing to Update the Energy Efficiency Adjustment Rider

Docket No. EL13-____

SUMMARY OF FILING

Status Report

Overall results for the 2012 South Dakota Energy Efficiency Plan ("EEP") Program show Otter Tail Power Company ("Otter Tail", "Company") achieved 111 percent of budget, 162 percent of participation goals, 172 percent of projected energy savings goals, and 159 percent of proposed demand savings. A brief summary of each of the programs offered to South Dakota customers in 2012 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 ("Commission") approved a "percent of approved budget" method for calculating the financial incentive, which would equal \$84,000. A summary spreadsheet is presented in Appendix A, Table 4.

Energy Adjustment Rider

The Company is also requesting Commission approval of an increase of the Energy Efficiency Adjustment Rider to \$0.00103. This adjustment is to be reflected on customer's bills as a separate line item starting with bills rendered (dated) on or after July 1, 2013. 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 2012 Financial Incentive, totaling \$84,000. The Company also requests approval to increase the energy adjustment surcharge to \$0.00103 on customer's bills. The next status report will be filed on May 1, 2014, 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 2012 Status Report

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INTRODUCTION

The purpose of this Status Report is to present the results of direct impact, indirect impact, and miscellaneous programs completed from January 1, 2012 through December 31, 2012 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 fourth Status Report provided to the South Dakota Public Utilities Commission ("Commission") and summarizes the results of the fourth 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

• EEP Development

Miscellaneous and Inactive Programs

Financial Incentive

Regulatory Requirements

• Geothermal Heat Pumps

LightingMotors

Background

- On May 25, 2011, Otter Tail requested approval of its 2012-2013 EEP.
- On August 24, 2011, the Commission approved Otter Tail's request for a financial incentive of \$73,145, approval to continue the Energy Efficiency Adjustment Rider of \$0.00063, and approved the 2012-2013 EEP. The written Order was issued on August 26, 2011.
- On April 30, 2012, Otter Tail requested approval for a financial incentive of \$78,900, and approval to increase the Energy Efficiency Adjustment Rider to \$0.00088, commensurate with the company achieving 138 percent of projected energy savings, 92 percent of proposed demand savings, 103 percent of budget and 161 percent of participation goals.
- On June 19, 2012, the Commission approved Otter Tail's request for a financial incentive of \$78,900, and approval to increase the Energy Efficiency Adjustment Rider to \$0.00088. The written Order was issued on June 26, 2012.

Approved 2012 South Dakota EEP goals and budgets are listed in Appendix A, Tables 1 through 3, along with actual results for 2012.

Overview

Overall results for the 2012 South Dakota EEP Program show the Company achieved 111 percent of the budget, 162 percent of projected participation goals, 172 percent of projected energy savings goals, and 159 percent of projected demand savings.

SUMMARY OF BUDGET TO ACTUALS – 2012					
BUDGET RESULTS BUDGE					
Expenses All Programs	\$280,000	\$309,911	111%		
Participation	1,040	1,682	162%		
Energy Savings - kWh	2,274,260	3,910,104	172%		
Demand Savings - kW	671.3	1,066.2	159%		

The Company's 2012 EEP was a cost-effective effort that achieved significant energy savings. 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 create a sustainable energy future for South Dakota, of which energy efficiency will play a critical role.

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 2012, Otter Tail controlled air conditioning on 23 separate occasions for a total of 51 hours and 19 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.

- Bill inserts sent in March and May of 2012
- Television and radio campaign conducted in conjunction with the Advertising and Education program.
- Customer care booklet that is sent to all new customers
- Flash Ad at <u>www.otpco.com</u> home page during February, March, and April
- 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 2013 EEP.

Participation & Budget

PARTICIPATION AND BUDGET – 2012				
AIR CONDITIONING ACTUAL % OF				
CONTROL	BUDGET RESULTS BUDG			
Participation	30	18	60%	
Budget \$	\$10,000	\$7,695	77%	

Evaluation Methodology

Company-specific load shapes were developed for summer air conditioning control analysis.

Energy Savings & Adjustments

Air conditioning control per participant produces energy savings of approximately 45 kWh per household, and impacts summer peak demand by nearly 1.0 kW at the meter.

Budgeted Savings at the Generator	Actual Savings at the Generator	% of Budget
1,464	878	60%
31.22	18.73	60%
	Budgeted Savings at the Generator 1,464 31.22	Budgeted Savings at the GeneratorActual Savings at the Generator1,46487831.2218.73

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 2012, 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, financing, and rebates
- 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 2013 EEP.

Participation & Budget

PARTICIPATION AND BUDGET – 2012				
AIR SOURCE ACTUAL % OF				
HEAT PUMPS (R)	BUDGET RESULTS BUDGET			
Participation	20	28	140%	
Budget \$	\$14,000	\$25,393	181%	

Evaluation Methodology

Energy savings estimates from the State of Minnesota's Division of Energy Resources ("DER") Deemed Savings Database 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

Ther 2012 average annual energy savings at the generator are 9,603 kWh per unit, with peak demand savings of 1.65 kW per unit installed. Average size unit installed in 2012 was 2.86 tons.

AIR SOURCE HEAT PUMPS (R)	Budgeted Savings at the Generator	Actual Savings at the Generator	% of Budget
Energy Savings – kWh	168,130	268,897	160%
Demand Savings – kW	17 11	46 29	271%
Winter Coincident Peak	17.11	10.27	27170

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 2012 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, tax credits, financing, and rebates
- Program, rate, and rebate descriptions within the Company's web site at <u>www.otpco.com</u>

Rising and volatile energy costs and energy efficiency emphasis coupled with federal tax incentives have helped drive participation in geothermal heat pump installations. Geothermal heat pumps require a significant customer investment, making achieving goals challenging and difficult to forecast.

This Program has been approved for continuation in the 2013 EEP. Required COP levels are the same for 2013 and will match Energy Star program requirements as listed above.

Participation & Budget

PARTICIPATION AND BUDGET – 2012			
GEOTHERMALACTUAL% OFHEAT PUMPS (R)BUDGETRESULTSBUDGET			
Participation	10	9	90%
Budget \$	\$21,000	\$14,867	71%

Evaluation Methodology

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

Energy Savings & Adjustments

On average the 2012 energy savings at the generator is 13,362 kWh per unit, with peak demand savings of 10.26 kW per unit installed. Average size unit installed in 2012 was 3.96 tons.

GEOTHERMAL HEAT PUMPS (R)	Budgeted Savings at the Generator	Actual Savings at the Generator	% of Budget
Energy Savings – kWh	120,398	120,262	100%
Demand Savings – kWh	86.00	02.34	107%
Winter Coincident Peak	80.00	72.34	107%

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 2012, 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, financing, and rebates
- 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 2013 EEP. Required equipment efficiency specification levels will be adjusted each year to match Energy Star program requirements.

Participation & Budget

PARTICIPATION AND BUDGET – 2012				
AIR SOURCE ACTUAL % OF				
HEAT PUMPS (C)	BUDGET	RESULTS	BUDGET	
Participation	22	7	32%	
Budget \$	\$25,000	\$6,615	26%	

Evaluation Methodology

Engineering estimates from the State of Minnesota Deemed Savings Database 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 2012 are 10,328 kWh with peak demand savings of 1.4 kW per unit installed. The average size unit installed was 3.1 tons in 2012.

AIR SOURCE HEAT PUMPS (C)	Budgeted Savings at the Generator	Actual Savings at the Generator	% of Budget
Energy Savings – kWh	314,403	72,296	23%
Demand Savings – kW	37.30	9.71	26%
Winter Coincident Peak	57.50	9.71	2070

CUSTOM EFFICIENCY PROGRAM

The Custom Efficiency Program pays incentives to commercial and industrial customers for energy saving installations including new energy-efficient equipment and process changes. The Program is intended to provide incentives to customers considering energy efficiency technologies or applications not currently available within the prescriptive rebate programs. Twelve efficiency projects were performed in 2012 as shown in the following table. As shown in the table below, variable speed drives drove participation in the program, an indicator that a new prescriptive program for drives may be appropriate.

Efficiency Custom Projects Type of System Installation	Quantity
Building Window and Insulation Upgrade	1
Variable Speed Drive	11

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 2013 Plan.

Participation & Budget

PARTICIPATION AND BUDGET – 2012				
CUSTOM EFFICIENCYBUDGETACTUAL RESULTS% OF BUDGET				
Participation	5	12	240%	
Budget \$	\$73,000	\$80,627	110%	

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, generally developed by thirdparty engineers and reviewed and verified by Otter Tail engineering staff.

Custom Efficiency Program	Budgeted Savings at the Generator	Actual Savings at the Generator	% of Budget
Energy Savings – kWh	806,250	2,259,798	280%
Demand Savings – kW	161.25	197.86	123%
Winter Coincident Peak			

The Custom Efficiency Program exceeded expectations for both energy (kWh) and demand (kW) savings in 2012. Otter Tail is pleased with continued interest from commercial and industrial customers in custom efficiency solutions and the energy and demand savings results from the custom efficiency projects.

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 2012, Otter Tail relied on Energy Star qualifications as the minimum equipment efficiency requirement for this program:

Туре	C	OP
	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, tax credits, financing, and rebates
- 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>

Rising and volatile energy costs, federal incentives, and energy efficiency emphasis has helped drive participation in geothermal heat pump installations.

This Program has been approved for continuation in the 2013 EEP. Required COP levels are the same for 2013 and will match Energy Star program requirements.

Participation & Budget

PARTICIPATION AND BUDGET – 2012				
GEOTHERMALACTUAL% OFHEAT PUMPS (C)BUDGETRESULTSBUDGET				
Participation	22	23	105%	
Budget \$	\$50,000	\$83,940	168%	

Participation in the Geothermal Heat Pumps Program is difficult to forecast. A single commercial customer can install 1 unit or 50 units, depending on the installation. In 2012,

participation was comprised of several schools, private businesses and a community center. One school did a large installation which included eight units that were 200 tons in total. The incentive to this customer followed limits that apply in the grant program, intended to manage the overall EEP budget.

Evaluation Methodology

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

Energy Savings & Adjustments

The 2012 average annual energy savings at the generator is 40,257 kilowatt-hours, with peak demand savings of 28.96 kW per unit installed. Due to one large school project, the average unit increased in size significantly, from 2.7 tons in 2011 to 12.76 tons in 2012.

GEOTHERMAL HEAT PUMPS (C)	Budgeted Savings at the Generator	Actual Savings at the Generator	% of Budget
Energy Savings – kWh	308,633	925,905	300%
Demand Savings – kW	206.56	666 16	373%
Winter Coincident Peak	200.50	000.10	52370

LIGHTING

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 2012 program again offered 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 2013 Plan.

Participation & Budget

PARTICIPATION AND BUDGET – 2012				
COMMERCIAL ACTUAL % OF				
LIGHTING	BUDGET	RESULTS	BUDGET	
Participation	15	22	147%	
Budget \$	\$37,000	\$43,189	117%	

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 Minnesota Deemed Savings Database 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 perform necessary verification.

COMMERCIAL LIGHTING	Budgeted Savings at the Generator	Actual Savings at the Generator	% of Budget
Energy Savings – kWh	522,671	251,218	48%
Demand Savings – kW	126.47	33.74	27%
Winter Coincident Peak	120.47	55.74	2170

Energy savings results were short of goal in 2012, reflected by a higher quantity of smaller lighting projects.

MOTORS

The goal of the Motors Program is to educate dealers and customers on the benefits of installing new and replacement electric motors that meet or exceed the National Electrical Manufacturers Association ("NEMA") Premium® efficiency requirements. The Program

provides incentives for customers to reduce peak demand and energy use by purchasing motors that meet or exceed NEMA Premium® efficiency.

Otter Tail promotes the Motors 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

For 2012-2013, Otter Tail has revised the Motors Program to reflect NEMA Premium® as the baseline efficiency in new and replaced-on-failure applications for motors from 1 to 200 horsepower. Otter Tail developed new rebate qualifying efficiency tables for use in 2012 with efficiency levels exceeding present NEMA Premium® efficiency ratings by at least one full NEMA efficiency band in new and replace-on-failure applications. Otter Tail proposed these modifications in response to the 2007 federal Energy Independence and Security Act that established NEMA Premium as the baseline efficiency for motors from 1 to 200 HP produced after December of 2010.

As part of Otter Tail's 2011-13 Minnesota CIP, Otter Tail interpreted an order from the Minnesota Department of Commerce that would require Otter Tail to discontinue offering rebates for motors ranging from 1 to 200 horsepower that just meet NEMA Premium efficiency levels. Otter Tail specifically interpreted this order to mean that customers had to install motors exceeding NEMA Premium in both new/replace-at-failure appications and in retrofit applications. With intentions of keeping program rules similar for both MN and SD customers, Otter Tail filed its 2012-13 SD EEP with the same proposed motor efficiency qualifications.

In the course of implementing the motors programs, Otter Tail notified the MN DOC that availability of motors exceeding NEMA Premium efficiency was a significant challenge. As expected by Otter Tail and pointed out to the MN DOC in the course of developing the Company's 2011-13 MN CIP, customers experienced difficiulties and frustration in procuring motors exceeding NEMA Premium efficiency in 2012. After further discussion with the MN DOC, staff issued a clarification stating that motors must just meet NEMA Premium efficiency in applications where customers choose to replace motors prior to failure. In new and replace-at-failure applications, motors must exceed NEMA Premium by one full NEMA efficiency band. After discussions with South Dakota Commission staff in 2012, Otter Tail implemented the same change in SD EEP guidelines for customers.

For 2013 Otter Tail proposes continuing with the Motors program as follows:

Application	Efficiency requirements
New/Replaced-at-Failure	Meet or exceed NEMA Premium
Replaced Prior to Failure	Exceed NEMA Premium by one full NEMA band

New/Replaced-at-Failure measures accounted for all motor installations completed through the Motors program in 2012.

This Program has been approved for continuation in the Company's 2013 Plan.

Participation & Budget

PARTICIPATION AND BUDGET – 2012					
MOTORS	MOTORSACTUAL BUDGET% OF BUDGETBUDGETRESULTSBUDGET				
Participation	16	4	25%		
Budget \$	\$17,000	\$12,930	76%		

The 2012 Motors Program did not achieve participation goals. The Company attributes this to challenges in customer procurement of motors exceeding NEMA Premium efficiency by one full NEMA efficiency band in many configurations.

Evaluation Methodology

The Company uses estimates from the State of Minnesota DER Deemed Savings Database, 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 State of Minnesota Deemed Savings Database 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.

	Budgeted Savings	Actual Savings	% of
MOTORS	at the Generator	at the Generator	Budget
Energy Savings – kWh	32,311	10,849	34%
Demand Savings – kW	5 36	1 34	25%
Winter Coincident Peak	5.50	1.34	2370

INDIRECT IMPACT ADVERTISING & EDUCATION - Residential

The residential Advertising & Education Program for 2012 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.
- Internet based resources available 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 six schools in the Otter Tail Power Company South Dakota service territory during May 2012. 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 2012 include five assemblies reaching 411 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 rebates and technology features, and the CoolSavings air conditioning cycling program.

Online resources included website updates and pages detailing EEP programs offered in South Dakota. During 2012, EEP program pages were accessed 1,148 times.

This Program is being submitted for continuation as a part of the 2014-2015 EEP.

Participation & Budget

PARTICIPATION AND BUDGET – 2012				
ADVERTISING & EDUCATION	BUDGET	ACTUAL RESULTS	% OF BUDGET	
Participation	900	1,559	173%	
Budget \$	\$8,000	\$8,380	105%	

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 – 2012					
EEP DEVELOPMENT	BUDGET	ACTUAL RESULTS	% OF BUDGET		
Participation	N/A	N/A	N/A		
Total EEP Development 2011	\$25,000	\$25,988	104%		

Participation & Budget

INACTIVE PROGRAMS

Residential Demand Control

The Residential Demand Control ("RDC") Program provides rebates for residential customers to purchase in-home demand response devices. Otter Tail directly controls the energy from end uses that customers have chosen such as water heaters, dryers, and electric space heating systems.

While the RDC rate is still available, the Company is not actively promoting the program. The rate is under evaluation based on changes in the Midwest Independent System Operator region which is primarily summer peaking. The RDC rate as designed targets winter demand reduction.

The RDC program was not part of Otter Tail's 2012 – 2013 Biennial filing. Otter Tail incurred \$287 of RDC costs in 2012 which were from 2011 program evaluations performed in 2012. Otter Tail does not expect any RDC program costs in 2013.

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 \$309,911 in 2012. The approved budget for 2012 was \$280,000. The maximum incentive that can be awarded is 30 percent of \$280,000, or \$84,000. Total net benefits provided to South Dakota customers by 2012 EEP projects was \$3,823,449. The proposed incentive is only 2.2 percent of net benefits provided by the program.

Otter Tail requests approval of a financial incentive of \$84,000 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, 2012. 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 \$0.00088/kWh. Otter Tail proposes to increase the EEP factor to \$0.00103/kWh. Appendix A, Table 6 presents the EEP tracker account balances for year-end 2012 and projections for 2013 through June 2014. When including the financial incentive amount of \$84,000 in the tracker, and approval of the increase to the EEP factor, Otter Tail forecasts the tracker balance to be approximately \$39,255 on July 1, 2014. The following table summarizes the expenses and revenues discussed above.

	Jan. 2013- June 2013	July 2013 - June 2014
Beginning Balance	\$134,194	\$64,535
Carrying Charges	\$3,973	\$8,702
EEP Program Expenses	\$110,315	\$284,922
EEP Incentive Proposed	0	\$84,000
EEP Rider Revenue	-\$183,947	-\$402,903
Ending Balance	\$64,535	\$39,255
EEP Factor	\$0.00088/kWh	\$0.00103/ 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, 2013 effective date (Appendix C: Energy Efficiency Adjustment Rider). The EEP cost recovery rider included in this filing reflects the proposed EEP factor of \$0.00103/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.