215 South Cascade Street PO Box 496 Fergus Falls, Minnesota 56538-0496 218 739-8200 www.otpco.com (web site)



June 16, 2010

Patricia Van Gerpen Executive Director South Dakota Public Utilities Commission 500 East Capitol Avenue Pierre, South Dakota 57501-5070

Re: 2010 and 2011 South Dakota Energy Efficiency Plan Update

Docket No: EL09-022

Dear Executive Director Gerpen:

Otter Tail Power Company ("Otter Tail" or the "Company") submits for approval updated energy and demand savings goals for 2010 South Dakota Energy Efficiency Plan and request approval of continuation of the program into 2011.

The Company received approval of our 2010 proposed plan and budget from the South Dakota Public Utilities Commission on February 23, 2010. Otter Tail is recommending an increase to our energy and demand savings goal commensurate with the approved budget, and an increase to our participation goals for 2010 and 2011. In addition, we are including an update to the 2010 Financial Incentive based on our proposed higher energy savings goals and previously approved budget. The 2010 and 2011 proposed budgets, goals, net benefits, and resulting incentive levels are included on the attached spreadsheets.

Otter Tail Power Company appreciates this opportunity to collaborate with the South Dakota Commission on a long-term vision for energy efficiency in South Dakota. We are cognizant of the fact that we are in period of development. Key to long-term success will be common goals based on a shared vision and understanding. It is in that spirit that we request an increase to our goals commensurate with the previous year's accomplishments and the current budget.

We are available to answer any questions the Commission or Commission Staff may have. Please contact Ms. Kim Pederson at (218) 739-8303 if you have any questions.

Sincerely,

/s/ Kim Pederson, Manager Market Planning



STATE OF SOUTH DAKOTA BEFORE THE SOUTH DAKOTA PUBLIC UTILITIES COMMISISON

June 16, 2010

In the Matter of Otter Tail Power Company's Energy Efficiency Plan

Docket No. EL09-022

Introduction

- On March 29, 2007, Otter Tail Power Company filed its first EEP Proposal with the South Dakota Public Utilities Commission.
- After Commission Staff review, Otter Tail filed a revised EEP plan on May 8, 2008, with a
 budget of \$157,100, along with an allocation of \$46,788 for development costs, totaling
 \$203,888. The Company also filed for cost recovery and a financial incentive mechanism
 based on these figures.
- On August 27, 2008, Otter Tail filed for an additional budget revision, resulting in a slight change to the EEP budget of \$209,600 for programs and development costs.
- On October 26, 2009, Otter Tail filed an application to update the Commission on its 2009
 Energy Efficiency Program and to request approval of its 2010 portfolio. The filing also
 requested a budget modification of \$263,000 and financial incentive mechanism
 modification.
- On February 23, 2010, the Commission granted approval of Otter Tail Power's request including budget and financial incentive modifications for 2010 as requested.
- On March 1, 2010, Otter Tail filed its 2008/2009 South Dakota Energy Efficiency Plan Status Report.
- On May 11, 2010, the Commission granted approval of the 2008/2009 Status Report and financial incentive.

Formal Request to Increase Energy, Demand, Participation Goal for 2010 and 2011

Otter Tail is pleased with the performance of its 2008-2009 Energy Efficiency Plan. As the Commission is aware, the portfolio performed well achieving 4,021,300 kWh savings over the program's approximately 16 month period.

The 2010 Plan as approved includes a variety of programs covering the majority of major end uses and customer classes.

In late 2009 when the 2010 annual budget of \$263,000 was approved no modifications were made to the energy, demand and participation goals for 2010. The Company is requesting to increase its goals for 2010 and 2011 at this time, based on the following:

South Dakota EEP	2010 Approved	2010 Proposed	2011 Proposed	Increase	
Energy Savings (kWh)	1,143,446	2,114,570	2,114,570	84.93%	
Demand Savings (kW)	416	649	649	56.01%	
Participants	730	771	771	5.62%	

The energy, demand, and participation goal details for 2010 and 2011 can be found in Appendix A, Table 1 and Appendix B, Table 1.

The Company offers the following primary reasons for this increase in goals:

- 2008/2009 participation in air-source and geothermal heat pump programs was significant and is projected to continue.
- Recent engineering analysis regarding energy savings associated with air-source heat pump indicates a higher energy savings per unit in the winter season than previously estimated. A summary of the analysis is available upon request. The updated energy savings has also been filed for approval in our 2011-2013 Minnesota Conservation Improvement Program.
- 2008/2009 custom grant energy savings was significant and is projected to continue.
- 2008/2009 participation and savings in lighting was strong. While no budget modification is requested at this time, we anticipate solid performance of this program.
- Overall strong performance of the 2009 portfolio.

The goal represents approximately .52% of South Dakota's 2007-2009 average annual retail kilowatt hour sales. We believe this is a reasonable ramp up from our initial filing which represented approximately .36% of retail sales for a comparable preceding period, and was a defendable starting point for a first-year program. The Company is developing better information on South Dakotans' response to energy efficiency programs. As the program matures and evolves, forecasting participation and energy savings will become more reliable.

It is important to note that the Company seeks no approval for an increase in budget at this time. Our proposal brings energy and demand savings goals in line with the current budget. In addition, the Company is not proposing any changes to its program portfolio. We believe the programs and rebate levels are appropriate.

With the proposed increase in energy and demand goals comes a corresponding increase in the net benefits. The net benefits calculations for 2010 and 2011 can be found in Table 2 of Appendix A and Appendix B respectively. The detailed program cost-effectiveness of the South Dakota Energy Efficiency Plan portfolio for 2010 and 2011 can be found in Appendix A, Table 1 and Appendix B, Table 1. The overall program portfolio cost effectiveness is included below:

Year	Participant	Ratepayer Impact	Total Resource	Societal	Utility	
2010	1.95	1.40	3.06	3.13	8.78	
2011	2.01	1.45	3.24	3.31	9.34	

Financial Incentive

The current shared savings financial incentive mechanism for cost-effective energy efficiency programs in South Dakota rewards Otter Tail for achieving energy savings levels and for increasing cost-effectiveness of energy efficiency programs. The incentive mechanism achieves this goal by rewarding a utility with a small percentage of net benefits created by the utility's investments in energy efficiency. Net benefits increase every time the utility achieves effective energy efficiency and when a project's costs are reduced. As the level of energy savings increases, so does the percentage of net benefits awarded, until the incentive cap is reached. The cap is based on 30% of approved budget.

Because the budget has changed from the 2008/2009 original approved filing, and because the net benefits have also changed, the Company has included the modified financial incentive based on these changes. The calculations are found on Table 3 of Appendix A and Appendix B for 2010 and 2011 respectively.

Transition Period

We are in a period of transition with all of our energy efficiency plans. We want to update the Commission on items impacting our South Dakota plan.

- Otter Tail proposed its first Energy Efficiency Plan to the South Dakota Public Utilities Commission on March 29, 2007, for implementation in 2008 and 2009. Avoided cost and system data was based on information and approved resource plans that existed at that time. We had not had a formal rate case in South Dakota for decades.
- In addition, previous analysis was conducted using DSManager, which at the time was considered the industry standard for DSM evaluation, and was the tool used in our other jurisdictions.

Since that time there have been a number of changes.

- In 2008 and 2009 we transitioned away from DSManager[™] to DSMore[™], which uses the same basic modeling and evaluation techniques, but is more robust and can take into account a variety of circumstances from weather variation to price changes. While the same analytical basics apply, there are subtle differences between the two modeling tools.
- We have completed our first formal rate case in South Dakota in decades. This creates
 differences in customer rates, which impacts both customer paybacks as well as the
 ratepayer impact tests.
- We are filing an Integrated Resource Plan in Minnesota on July 1, 2010. Avoided cost
 data used in this proposed modification is based on the most recently approved resource
 plan. Our next energy efficiency biennial filing for South Dakota will be based on the
 most recently approved plan, which will likely be the one filed on July 1, 2010.

These factors do create some differences in the cost/benefit analysis. A comparison analysis was conducted with the previous baselines and system data, as well as software and analysis, to test for reasonability. Future filings will reflect updated information as it is approved and available.

Otter Tail Power Company staff and Commission Staff have been working together through this transition period. All parties recognize the need to establish guidelines for filing new programs,

status reports, and incentive and recovery mechanism. We are looking forward to active involvement in the State's Energy Efficiency workshop on June 23, 2010. As we work together to lay out a pathway for energy efficiency in South Dakota, we are cognizant of the fact that we all have the same goal and that development of guidelines for filings will help efficiencies for all stakeholders. We also recognize the responsibility that is ours as one of the first utilities to receive an approved plan in South Dakota.

Conclusion

Otter Tail Power Company requests approval for its 2010-2011 plan including increased energy, demand, and participation goals for 2010 and 2011. In addition, we request approval of the new updated financial incentive based on cost-effective achievement of energy efficiency goals.

Table 1

SOUTH DAKOTA ENERGY EFFICIENCY PLAN - 2010 Otter Tail Power Company

June 16, 2010

	PROPOSED 2010 GOALS			PROPOSED BENEFIT / COST TEST RESULTS					
DIRECT IMPACT PROJECTS	ENERGY SAVINGS (KWH)	DEMAND SAVINGS (KW)	PROPOSED BUDGET	PART.	PART. TEST	RATEPAYER IMPACT TEST	TOTAL RESOURCE TEST	SOCIETAL TEST	UTILITY TEST
RESIDENTIAL									
Residential Demand Control	3,587	46.85	\$5,000	6	8.40	1.60	10.86	11.10	14.24
Air Source Heat Pumps -Residential	168,130	28.94	\$14,000	20	4.92	0.87	4.23	4.40	8.07
Geothermal Heat Pumps -Residential	120,400	86.00	\$19,000	10	1.45	2.35	4.01	4.06	14.33
Air Conditioning Control *	1,464	31.22	\$6,000	30	INF.	8.13	12.38	12.39	9.75
Total -Residential	293,581	193.01	\$44,000	66					
COMMERCIAL									
Grant	967,500	121.59	\$74,000	6	1.74	1.01	2.07	2.14	8.84
Motors	37,733	6.00	\$10,000	15	6.21	0.92	3.58	3.69	3.05
Lighting	280,094	69.03	\$30,000	12	2.43	1.25	3.03	3.11	7.65
Air Source Heat Pumps -Commercial	184,943	24.84	\$25,000	22	2.93	0.90	2.68	2.77	5.12
Geothermal Heat Pumps -Commercial	350,719	234.73	\$45,000	25	1.49	2.47	4.35	4.41	16.69
Total -Commercial	1,820,989	456.18	\$184,000	80					
Total -Direct Impact	2,114,570	649.19	\$228,000	146					
INDIRECT IMPACT PROJECTS									
Advertising & Education			\$10.000	625	N/A	N/A	N/A	N/A	N/A
Total - Indirect Impact			\$10,000	625					
Total - Without Development Costs	2,114,570	649.19		771					
DEVELOPMENT									
EEP Development			\$25,000		N/A	N/A	N/A	N/A	N/A
Total Development			\$25,000						
TOTAL - ALL PROGRAMS (INC. DEVL)	2,114,570	649.19	\$263,000	771	1.95	1.40	3.06	3.13	8.78

^{*} Air conditioning programs include summer load reductions, which are not coincident to the system winter-peak Programs evaluted using DSMore software, no environmental externalities used, all dollars discounted to 2010

Table 1

SOUTH DAKOTA ENERGY EFFICIENCY PLAN - 2011 Otter Tail Power Company

June 16, 2010

PROPOSED 2011 GOALS PROPOSED BENEFIT / COST TEST RESULTS **ENERGY** RATEPAYER TOTAL **SAVINGS DEMAND PROPOSED** PART. IMPACT RESOURCE **SOCIETAL** UTILITY DIRECT IMPACT PROJECTS (KWH) SAVINGS (KW) BUDGET PART. **TEST TEST TEST TEST** TEST RESIDENTIAL Residential Demand Control 3,587 46.85 \$5,000 6 8.66 1.67 11.54 11.78 15.27 Air Source Heat Pumps -Residential 168.130 28.94 \$14.000 20 5.07 0.90 4.46 4.64 8.53 Geothermal Heat Pumps -Residential \$19.000 10 4.26 4.32 120,400 86.00 1.49 2.45 15.39 Air Conditioning Control * INF. \$6,000 30 8.72 13.21 13.22 10.52 1,464 31.22 Total -Residential 293,581 193.01 \$44,000 66 COMMERCIAL Grant 1.02 9.25 967,500 121.59 \$74,000 6 1.79 2.16 2.24 Motors 37.733 6.00 \$10.000 15 6.38 0.94 3.75 3.86 3.21 Lighting 280,094 69.03 \$30,000 12 2.50 1.31 3.24 3.32 8.21 Air Source Heat Pumps -Commercial 22 24.84 \$25.000 0.93 2.82 2.92 5.39 184.943 3.01 Geothermal Heat Pumps -Commercial 350,719 \$45.000 1.54 234.73 25 2.58 4.63 4.69 17.91 Total -Commercial 1,820,989 456.18 80 \$184,000 Total -Direct Impact 2,114,570 649.19 \$228,000 146 INDIRECT IMPACT PROJECTS Advertising & Education \$10,000 625 N/A N/A N/A N/A N/A Total - Indirect Impact \$10,000 625 **Total - Without Development Costs** 2,114,570 649.19 771 DEVELOPMENT EEP Development \$25,000 N/A N/A N/A N/A N/A Total Development \$25,000 TOTAL - ALL PROGRAMS (INC. DEVL) 2,114,570 649.19 \$263,000 771 2.01 1.45 3.24 9.34 3.31

^{*} Air conditioning programs include summer load reductions, which are not coincident to the system winter-peak Programs evaluted using DSMore software, no environmental externalities used, all dollars discounted to 2011