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May 8, 2008



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

Dear Executive Director Gerpen:

On March 29, 2007 Otter Tail Power Company proposed its South Dakota Energy Efficiency Partnership Plan to the South Dakota Public Utilities Commission. After numerous discussions with Commission Staff as well as the Commission, the Company is pleased to present modifications to that plan.

We are available to meet with the Commission as well as Staff on the details of this filing, and any other ideas the Commission may have to foster wise energy use by South Dakotans.

The Company has enclosed in this filing our proposed Energy Efficiency Partnership (EEP) Cost Recovery Rider M-62S.

If you have any questions, please feel free to contact me at 218-739-8303.

Sincerely,

/s/ Kim Pederson, Manager
Market Planning

Attachment

May 7, 2008

SOUTH DAKOTA ENERGY EFFICIENCY PARTNERSHIP

Otter Tail Power Company Energy Efficiency Plan

Otter Tail Power Company is pleased to present for the South Dakota Public Utilities Commission's consideration a revised plan to market energy efficiency to our South Dakota customers. The South Dakota Public Utilities Commission (PUC) has encouraged all investor-owned electric and natural gas utilities in South Dakota to be part of an Energy Efficiency Partnership (EEP) to significantly reduce energy use. Otter Tail Power Company looks forward to being part of that partnership.

We are in support of fostering wise energy use by South Dakotans. Our Energy Efficiency Plan, as modified, includes programs for all customer classes and major end uses showing for energy savings. The Plan includes 8 programs intended to achieve approximately 1,143,446 kWh in annual energy savings at an approximate total cost of \$157,100. We would propose launching these programs approximately 3 months after final approvals are received.

It would be our intention to evaluate this plan on an ongoing basis and propose any major modifications to the PUC in a timely fashion. Major modifications would include new programs, increases to proposed budgets by more than 30%, or closing programs. One of the most difficult to predict variables in our proposal is estimating labor. We have based our labor estimate on our history in Minnesota. However, we are not sure how South Dakotans will respond to the opportunity to participate in energy savings programs, and it may initially require more labor than our proposal indicates. As indicated, we'll monitor it closely and if we find our budgets need to be increased by more than 30%, we'll notify the South Dakota Commission Staff. We propose that the plan remain fairly flexible and dynamic, with minimal administrative overhead required both on our part and the PUC's.

We would anticipate continuation of this effort as long as it remains cost-effective for us to do so, and adequate cost recovery is in place. We propose that unless otherwise notified for the reasons stated above, the PUC can expect a rollover of the proposed portfolio, including approximate budgets and goals, into 2009 and 2010. Based on our practical experience, we likely would want to refile programs and budgets for 2011 and beyond, sometime in mid 2010.

The format of this proposal is as follows:

- Executive Summary and Goals
- Program descriptions
- Cost recovery mechanism and financial incentives
- Evaluation

I. EXECUTIVE SUMMARY

Programs

Otter Tail Power Company is proposing to launch a full portfolio of energy efficiency programs in South Dakota modeled after cost-effective programs with a proven track record currently operating in Minnesota. We have also analyzed our most recent 2002 DSM Potential Study to verify the potential for energy savings associated with these programs in South Dakota. A full program description is included as part of this plan. Briefly, the portfolio includes:

Residential/Farm

- Residential Demand Control (promotes efficient whole house energy management)
- Air source and Geothermal heat pumps (promotes efficient heating and cooling)
- Air Conditioning Control (promotes managing demand of cooling systems)

Commercial/Industrial/Farm

- Grants (promotes efficient energy use in large customer facilities, such as adjustable speed drives, heat recovery, and process improvements)
- Motors (promotes high efficient motor installation)
- Lighting (promotes efficient lighting)
- Air source and Geothermal heat pumps (promotes efficient heating and cooling)

All sectors

- Advertising & Education

Goals

South Dakota Data (Source: OTPCO 2006 Statistical Report)	
Customers	11,669
MWH sales	364,520 MWH
Retail revenue	\$22,885,568

2008-2009 South Dakota Energy Efficiency Plan				
Customer Class	Budget	Annual KWH Savings	Annual KW Savings	Annual Participants
Residential	\$36,900	87,286	169.8	55
Commercial	\$102,200	1,056,160	246.5	45
Indirect impact (all sectors)	\$18,000			625
Totals	\$157,100	1,143,446	416.2	725

BENEFIT / COST TEST RESULTS				
PART. TEST	RATEPAYER IMPACT TEST	TOTAL RESOURCE TEST	SOCIETAL TEST	UTILITY TEST
2.58	1.06	3.32	3.16	8.23

Appendix A, page 1 details the proposed goals and benefit cost test results for each individual program.

II. PROGRAM DESCRIPTIONS

The following individual programs are outlined in detail below:

Residential:

- Air Conditioning Control
- Residential Demand Control (RDC)

Residential & Commercial:

- Heat pumps – air source and geothermal

Commercial, Industrial & Farm:

- Lighting
- Motors
- Grants

Indirect impact projects – all sectors

- Advertising & Education

AIR CONDITIONING CONTROL
(New, Residential)

A. PROJECT DESCRIPTION AND JUSTIFICATION

The Air Conditioning Control program will add to Otter Tail Power Company’s extensive portfolio of demand and price response programs. About one-third of the Company’s residential and small commercial customers in South Dakota are participating in one or another of the Company’s demand response programs. Through these programs, the Company has made significant progress in ensuring that its winter and summer demand is responsive to electric prices.

Residential customers who enroll in the program will receive a \$5 credit for 4 months – June, July, August, and September. A controller is installed to cycle customer-cooling loads on a schedule of 15 minutes on followed by 15 minutes off throughout peak periods. Otter Tail cycles load to both maintain system reliability and to reduce the need to purchase high-priced spot market electricity. During normal summers, control of air conditioners is projected to occur for no more than 300 hours, controlling at an average of six to eight hours at a time. However, these are both estimates.

The Company currently offers a similar program in Minnesota, and has proposed a change to the incentive from \$5 monthly credit to \$7 monthly credit. The Company is willing to discuss changing the South Dakota incentive from \$5 a month to \$7 a month as well. The Company will be filing the appropriate rider for the program. Given the likely fall 2008 launch of this portfolio, this program would likely not be marketed until 2009.

Research conducted by other utilities has shown that load control customers are not aware that their air conditioners are being cycled. These results were substantiated by us through a participant survey conducted in 2002, and has allowed us to conclude that cycling air-conditioning units did not normally inconvenience customers. An additional finding of Otter Tail’s survey was that customers signed up for the program in response to their belief that it was a way to positively impact environmental concerns.

Promotion

The program will target residential customers with central air conditioning systems that are not currently controlled. Commercial customers will not be targeted for this program. The target group will be found through analysis of summer usage. Direct mail or bill inserts may be used as our primary marketing methods.

B. LONG TERM DEMAND SIDE MANAGEMENT GOALS

	2008
KWH – Generator	1,468
Cost / KWH	\$8.58
KW – Generator *	31.830
Cost / KW	\$396

* The DSManager modeling software provides coincident peak-load reduction information, which is reported for all projects. Since Otter Tail Power Company is currently a winter-peaking utility, air conditioning projects - such as air-source heat pumps and air-conditioning control do not affect our winter peak. However, we have included summer on-peak demand reduction for these programs in our tables.

C. PROJECT BUDGET & PARTICIPATION

	2008
Project Delivery & Administration	\$12,000
Incentives	\$600
Total	\$12,600
Participation	30

RESIDENTIAL DEMAND CONTROL

(New, Residential)

A. PROJECT DESCRIPTION AND JUSTIFICATION

The Residential Energy and Demand Control (RDC) Project is a close-to-real-time pricing project based on the installation and use of a special monitoring device that will notify customers of the need to curtail or reduce energy demand from major energy-consuming appliances in their homes during periods of high demand on Otter Tail's generation, transmission, and distribution systems. Customers benefit from a reduced energy rate as well as a cash incentive to help offset the costs of installing the Residential Energy and Demand Control equipment in their home.

The rate structure applying to customers who install the RDC system is based on separate charges for demand (capacity) and energy. The rate encourages customers to better manage their energy use, especially by limiting energy use during utility peak demand periods. This Project is particularly beneficial in helping customers understand how they can respond to wholesale market fluctuations and reduce overall demand for energy and capacity.

The RDC technology itself is highly effective because it enables customers to retain control over which end uses in their homes are interrupted by the RDC system. Customers can choose to pay a higher price in order to use more energy during periods of high demand if they desire, or they can pay less for their home energy use by using less energy during times of peak demand.

The Project assists Otter Tail in controlling its load during system peak times and in emergency conditions and continues to offer significant demand savings potential. Load management in general offers the utility an exceptional opportunity to make better use of existing generation facilities, reduce the costs of service, and better recognize and meet customer needs. In addition, the RDC Project significantly alters consumers' electricity consumption patterns, thereby making them a partner in the energy efficiency business.

South Dakota has an existing approved electric rate for residential demand control customers (Rate Designation R-03S, Code 42-241). Through this Project as part of South Dakota Energy Efficiency Partnership, Otter Tail Power Company is proposing that customers would receive a cash rebate incentive of \$300 for installing an RDC on the 241 rate.

Promotion

We plan to capitalize on existing customer awareness of the RDC program in South Dakota through bill inserts and printed materials.

B. LONG TERM DEMAND SIDE MANAGEMENT GOALS

	2008
KWH – Generator	4,836
Cost / KWH	\$2.05
KW – Generator	52.754
Cost / KW	\$188

C. PROJECT BUDGET & PARTICIPATION

	2008
Project Delivery & Administration	\$7,500
Incentives	\$2,400
Total	\$9,900
Participation	8

HEAT PUMPS

(New, Residential & Commercial)

A. PROJECT DESCRIPTION AND JUSTIFICATION

End-use market

Space heating accounts for about 8% of total energy use in the U.S. In the residential sector, energy use for space heating accounts for nearly half of U.S. household site energy consumption. About one-third of residences in the U.S. are electrically heated, with 2/3 of homes relying on standard efficiency resistance heating technologies and 1/3 relying on higher efficiency heat pumps.

Commercial space heating also offers an opportunity for energy savings. In any typical year, the total amount of energy used for commercial space heating in the U.S. doubles that used for space cooling. Electricity accounts for heating 29% of all commercial floor space in the U.S. with packaged HVAC systems being the most popular heating plant for commercial customers in the U.S.

The Heat Pump Project targets residential and commercial customers currently using or considering the installation of standard efficiency resistance heating and cooling systems. The program offers cash rebate incentives to customers for replacing standard efficiency electric systems with higher efficiency heat pump systems or for purchasing high efficiency equipment for first-time retrofit or new construction installations.

Otter Tail has structured the Heat Pumps Project with separate energy, demand, and cost effectiveness goals for the following market segments:

1. Residential air source heat pumps;
2. Commercial air source heat pumps;
3. Residential geothermal heat pumps; and,
4. Commercial geothermal heat pumps.

Energy Star standards will be used to meet rebate qualifications.

Technology

The definition of a heat pump is “a device that extracts energy from one substance and transfers it to another at a higher temperature. A heat pump takes low-temperature heat from an outdoor source (such as the air, ground, groundwater, or surface water) and mechanically concentrates it to produce high-temperature heat. Since most of the heat is simply moved (pumped) from the outdoor source to the indoors, the amount of electricity required to deliver it is typically less than would be required if using electric heat directly.

Heat pumps are available in a number of configurations, with the following two being the most popular:

1) *Air to air*

The most common type of heat pumps, air-to-air (air source) units are used widely for residential heating and cooling. Outdoor air is the source of heat, with this heat delivered to the house as hot air, either through duct systems or air handlers. Air to air heat pumps that heat the home year-round without supplemental resistance electric heat are not yet widely available. However, an all-electric heating system taking advantage of

a heat pump's high efficiency characteristics and resistance electric heat for severe weather operates at an average over-all efficiency of about 140%, compared to a standard electric resistance heating system operating at 100% efficiency.

2) Ground source heat pump (GSHP).

Also called geothermal heat pumps, these devices 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 often boast efficiencies of up to 400%.

Promotion

The Heat Pump Project will be promoted through bill stuffers, printed materials and DVDs, as well as newspaper ads and articles.

B. LONG TERM DEMAND SIDE MANAGEMENT GOALS

2008	Residential Air Source	Residential Geothermal	Commercial Air Source	Commercial Geothermal
KWH – Generator	32,621	48,361	16,520	14,066
Cost / KWH	\$0.27	\$0.12	\$0.42	\$0.19
KW – Generator *	50.232	34.934	9.738	9.724
Cost / KW	\$175	\$160	\$719	\$278

* The DSManager modeling software provides coincident peak-load reduction information, which is reported for all projects. Since Otter Tail Power Company is currently a winter-peaking utility, air conditioning projects - such as air-source heat pumps and air-conditioning control do not affect our winter peak. However, we have included summer on-peak demand reduction for these programs in our tables.

C. PROJECT BUDGET & PARTICIPATION

2008	Residential Air Source	Residential Geothermal	Commercial Air Source	Commercial Geothermal
Project Delivery & Administration	\$3,730	\$2,500	\$3,280	\$1,860
Incentives	\$5,070	\$3,100	\$3,720	\$840
Total	\$8,800	\$5,600	\$7,000	\$2,700
Participation	13	4	6	1

LIGHTING

(New, Commercial, Industrial & Farm)

A. PROJECT DESCRIPTION AND JUSTIFICATION

Lighting in the United States uses 656 terrawatt hours of electricity annually, accounting for about 18 percent of the nation’s total electricity use. Of this total, the commercial and industrial sectors account for about 88 percent. Although electricity used for lighting purposes continues to grow annually, electricity demand for other end uses has been growing faster, so lighting as a percentage of total electricity use has actually declined in recent years.

The energy efficiency of specific *new* lighting products has improved, but opportunities still exist for improvements in existing commercial, industrial, and farm buildings. An estimated half a billion incandescent downlights operate in the United States. Converting 2/3 of these fixtures used in residential markets alone would save customers \$3 billion per year in energy costs and free up approximately seven MW of electric capacity.

Otter Tail’s Lighting Project focuses on replacing inefficient lighting systems with new and retrofit systems based on more efficient technology. Typical retrofit applications include:

- Inefficient incandescent to screw-in compact fluorescent lamp;
- Inefficient fluorescent systems (T12 lamps and magnetic ballasts) to high efficiency fluorescent systems (electronic ballasts with T5 and T8 lamps);
- LED lighting; and,
- High efficiency pulse start metal halide.

Promotion

Otter Tail plans to use the following resources to promote the Lighting Project: print and mail resources to educate consumers and vendors, and personal contacts with energy management representatives from Otter Tail Power Company,

B. LONG TERM DEMAND SIDE MANAGEMENT GOALS

	2008
KWH – Generator	280,176
Cost / KWH	\$0.08
KW – Generator	69.991
Cost / KW	\$320

C. PROJECT BUDGET & PARTICIPATION

	2008
Project Delivery & Administration	\$10,403
Incentives	\$11,997
Total	\$22,400
Participation	12

MOTORS

(New, Commercial, Industrial & Farm)

A. PROJECT DESCRIPTION AND JUSTIFICATION

About half of the world's electricity flows through electric motors, resulting in a total electric bill of \$90 billion for motor-driven systems in the U.S. Since such an immense amount of energy and money are devoted to motor-driven systems, even seemingly small improvements in motor efficiency can yield huge savings.

Many devices in the world today that use energy cost much more to purchase than the energy they use in a single year. For example, a typical automobile costs about 20 times as much to purchase as it costs in fuel to run each year. The lifetime costs of electric motors are completely opposite. A motor running 4,000 hours per year will consume on order of ten times its capital cost's worth of electricity every year, and roughly two hundred times its capital cost over a 20-year lifetime.

The goal of the Motor Project is to educate dealers and customers on the benefits of installing new and replacement electric motors that meet the NEMA Premium efficiency requirements. The Project provides cash incentives to customers for the purchase of NEMA Premium rated electric motors.

Promotion

Otter Tail will print and mail resources to educate consumers and vendors, and personal contacts with energy management representatives from Otter Tail Power Company to promote the motors program.

B. LONG TERM DEMAND SIDE MANAGEMENT GOALS

	2008
KWH – Generator	57,594
Cost / KWH	\$0.23
KW – Generator	8.555
Cost / KW	\$1,531

C. PROJECT BUDGET & PARTICIPATION

	2008
Project Delivery & Administration	\$7,600
Incentives	\$5,500
Total	\$13,100
Participation	22

GRANTS

(New, Primary Market Public Entities)

Modified from original filing dated March 29, 2007

A. PROJECT DESCRIPTION AND JUSTIFICATION

The Grant project pays incentives to public entities (schools, government, etc.) for energy saving installations, including new energy-efficient equipment and process changes. This modification of the target market was made by Commission Staff. The Company had originally proposed that the grant program be open to all commercial and industrial customers.

The Grant Project is a comprehensive project, designed to cover energy saving applications outside of normal project guidelines.

The Company will seek requests for grants from companies, organizations or individuals that improve the energy efficiency of the facility. Grants will be awarded on a cost per kwh saved basis along with overall energy savings, with preference given to public entities.

The Company will work with South Dakota Commission Staff on the details of the process, timelines, and criteria. Preliminary discussions with staff have revolved around a grant application period of three months, with a period of time to analyze the applications for cost-effectiveness and potential, and then awarding of the grants within a relatively short time period. As indicated the details of this process still need to be determined.

A total of \$40,000 in grants is available starting in 2008, and the maximum award per grant is \$10,000. Impact savings estimates from Energy Grants come directly from the customer, who submits detailed information showing demand and energy savings for each proposed measure. The Company then verifies the feasibility of the proposed savings, and if necessary, makes modifications to the submitted figures. Otter Tail Power Company offers assistance to our customers to help them determine the energy and demand savings necessary in developing a grant proposal.

End-use metering is also an option for verifying impact savings. In addition, the customer often works with internal or third party engineers to determine and verify savings. Each Grant Proposal will be studied to see if the existing metering arrangement is appropriate for the proposed measure, or if additional equipment should be employed.

Since the design of this project is relatively new to the Company, we will evaluate the Grant Project's delivery mechanism and make proposed modifications as necessary.

Promotion

Otter Tail will use print and mail resources to educate consumers and vendors, and will utilize personal contacts between customers and energy management representatives from Otter Tail Power Company to promote the Grant program.

B. LONG TERM DEMAND SIDE MANAGEMENT GOALS

	2008
KWH – Generator	687,804
Cost / KWH	\$0.08
KW – Generator	148.472
Cost / KW	\$384

C. PROJECT BUDGET & PARTICIPATION

	2008
Project Delivery & Administration	\$17,000
Incentives	\$40,000
Total	\$57,000
Participation	4

ADVERTISING, EDUCATION, and TRAINING

(New, Residential, Commercial, Industrial & Farm, Builders, Architects, Suppliers)

A. PROJECT DESCRIPTION AND JUSTIFICATION

The goal of advertising and education efforts is to inform, persuade, remind, and add value. Advertising and education makes individuals aware of product options, informs them about those options, and assists the individual in making decisions about a course of action or purchase. Effective advertising and education prepares an individual to respond when a need or opportunity arises. This likely does not occur simultaneously with the message being received, but has an effect, non-the-less, on decisions made.

Energy-efficiency advertising and education programs can (1) inform customers about available programs offered, (2) persuade them to contact Otter Tail Power Company for assistance, or try a particular energy-efficient product such as energy-efficiency appliances or lighting, (3) teach energy efficient behaviors and the benefits of those behaviors.

The range and complexity of energy related decisions consumers must 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 housing stock; and the number of options available for heating, cooling, and ventilation systems.

In addition, Commission Staff has asked that the Company increase its education for builders, architects, HVAC supplier/installers, and building suppliers.

The primary purpose of this project is educational outreach targeting residential customers and children across economic groups from within the Otter Tail Power Company customer base. The program objective is to promote consumer awareness of energy-saving practices and to educate both today's consumers and future consumers to help prepare them to make lifestyle choices and buying decisions that maximize energy efficiency and savings.

Primary program components include educational materials including newsletter articles and literature; web based educational information, and offering educational assemblies to school aged children and their teachers.

1. Literature, newsletters, general information.

Appropriate literature and material will be located and ordered or developed and produced as companion pieces to the education effort that will take place through media advertising campaigns and web-based education. Customers will be offered educational materials as free resources as a part of two conservation focused advertising campaigns, in educational displays at home shows, school visits, in local company office in the South Dakota service territory, and online through the Company web sites at otpc.com or conservingelectricity.com. In addition, conservation information will be published through a bimonthly newsletter for residential customers.

2. Educational assemblies in school settings for students and teachers.

The Energy Connection program is a production and tour offered by the Minnesota Science Museum. The energy tour will be offered free to selected schools in South Dakota in the fall of 2008. The goal will be to provide the assembly program to at least

4 schools. The assembly program targets students in grades 4 – 6 with interactive presentation, displays, and activities to develop an understanding of energy, alternative fuels and energy resources used to generate electricity, and energy conservation methods to use at home and at school. The program material is aimed to assist teachers in meeting their energy education requirements for grades 4 – 6.

3. Training workshops for builders, contractors, architects, and suppliers.

To ensure that customers that attempt to make energy efficient installations and improvements to their properties can succeed requires that professionals in the building trades be armed with the most current information on energy efficient practices and equipment. A secondary objective of the program is to conduct training for builders, HVAC supplier/installers, architects, and building suppliers on the Company’s programs, rates, and about the energy efficiency opportunities and technologies in general. The Company proposes to accomplish this through a combination of mailers and workshops.

The objective of the program is to educate approximately 400 students on energy use, its impact on the environment, and how behavior and technology interact. A minimum of 200 pieces of energy efficient literature will be distributed to customers upon their request in response to advertising efforts. And a minimum of 25 building trade professionals will participate in training.

The project will also support other advertising efforts in specific projects.

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

	2008
Project Delivery & Administration	
School presentations	\$3500
Conservation Advertising	\$10,000
Literature	\$750
Contractor Workshops	\$3,750
Total	\$18,000
Participation	625

III. COST RECOVERY AND FINANCIAL INCENTIVE

Cost recovery, tracker account, and carrying charge

As discussed with the South Dakota Commission and staff and consistent with our current Minnesota Conservation Improvement Program process, Otter Tail Power Company 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 projects, incurred by the Company. The tracker will also account for amounts collected from customers through the conservation cost recovery charge. The conservation cost recovery charge would be collected monthly on a cost per kwh basis. All customers would pay the same cost recovery charge.

For billing purposes, the cost recovery charge will be a separate line item that appears on customers' electric service bills. We are not currently recovering any of these costs in base rates; therefore, we propose the conservation cost recovery mechanism as an appropriate means to recover costs associated with developing and implementing the South Dakota Energy Efficiency Partnership.

The conservation cost recovery charge factor reflects the following assumptions:

- The existing tracker balance that includes costs of development of the energy efficiency plan to date would be included in the calculation of the recovery factor. As indicated in our initial filing, the Company began tracking costs associated with the Energy Efficiency Plan on February 1, 2007.
- The estimated annual program budgets have been used to estimate the adjustment factor. Actual program budgets may vary slightly.
- The tracker account would be allowed to build through December 31, 2009.
- On March 1, 2010, the Company will notify the South Dakota Commission via a formal status filing the results of the 2008 and 2009 energy efficiency plan, actual budgets including carrying charges and any applicable incentives, as well as any offsets or adjustments.
- The factor calculation in our illustrative example uses 400,000 MWH for South Dakota which is close to actual 2007 South Dakota MWH sales. The actual previous year's MWH sales will be used (if cost recovery adjustment begins in 2010, 2009 mwh sales will be used.)
- The Company proposes that the adjustment factor would be implemented effective July 1, 2010. Every year after adjustments will be made on July 1.
- All customer classes should be subject to the same adjustment factor and all customers should pay equally because all customers benefit through the energy efficiency partnership. The Company strongly believes this is the most prudent application since all customers benefit from the energy efficiency plan, not just those customers who participate. The basic premise behind these programs is delaying the need for additional generation resources. Since all customers pay for the addition of these generation resources, all customers should pay for the programs that defer the need to build resources. In addition, the Company and the Commission Staff have worked hard to make sure that programs are available for all customer classes so that all customers have access to and the ability to participate in this partnership.

Appendix B shows the accrued and forecasted costs, including carrying charge and incentive ranges.

If the Commission determines that the Energy Efficiency Partnership should stay in place for subsequent years, the Company proposes providing a report to the Commission every March 1, thereafter. The report will show the EEP expenses, including carrying charges and incentives that are accounted for yearly in the tracker, and the amount recovered from customers through the cost recovery charge. The report will develop a new cost recovery charge based on the outstanding balance of the tracker account and request approval to implement the new charge effective each July 1.

Financial incentive for kilowatt-hours conserved

Otter Tail Power Company is requesting a shared-savings incentive that awards the Company a small share of the total net benefits from investments in demand-side management corresponding to the EEP proposal. These benefits include avoided costs from investments in DSM. This incentive is capped at 30% of the Company's proposed annual spending.

This shared-savings incentive mechanism is also currently being implemented in Minnesota for conservation programs regulated by the Minnesota Public Utilities Commission.

The implementation of the incentive mechanism is as follows:

1. Otter Tail Power Company files its proposed savings, costs, and net benefits as part of the proposed EEP filing. This is detailed in Appendix A, page 2.

Net benefits are the utility net benefits from the program analysis. These include benefits from production costs decreases, generation, transmission, and distribution credits, and sales tax cost decreases. From these total benefits, we subtract the program costs, including rebates and administrative costs.

For 2008, the utility's total benefits were determined to be \$1,292,464. Total EEP program costs proposed are \$157,100. Net benefits are \$1,135,765.

2. The incentive is designed to engage if the Company reaches 100% of the proposed energy savings goal. At anything less than 100% of the energy savings goal, the incentive is zero dollars. The financial incentive is capped at 30% of the utility's approved CIP expenditures. For 2008, the incentive is capped at 30% of \$157,100 or \$47,130.

Appendix A, page 3 details the actual calculation. The first step is to calculate an estimated incentive using a percentage of net benefits based on 6 steps: 100%, 110%, 120%, 130%, 140% and 150% of savings goal. The maximum incentive allowed (30% of the proposed budget or \$47,130) is assigned to achieving 150% of the net benefits.

The calculation is: \$47,130 (max incentive) is divided by \$1,703,648 (150% of \$1,135,765) and is then divided by 6 (for six steps). This determines a percentage of net benefits for each step. In this case, that percentage to be used in 2008 is .46%. This percentage will be used with the actual results at year-end to determine the incentive achieved by the Company.

3. At year-end, the utility calculates the net benefits for the CIP projects based on actual participation and costs. The net benefits are the avoided costs less the total CIP costs, including both direct and indirect projects. Appendix A, page 2 will be updated with actual year-end results for 2008.

The Company files these results by March 1st of the following year with the South Dakota Commission, including the calculated incentive achieved. The Company will receive a portion (in 2008 this will be .46% as determined in step 2) of the actual net benefits achieved.

This incentive mechanism was designed to reduce the likelihood of a utility to over-estimate its actual results to achieve a larger bonus amount by pre-determining the percentage (.46%) based on the proposed figures, and by incorporating a capped amount.

Appendix B illustrates a simplified version of the cost recovery calculation based on a per kwh charge.

IV. EVALUATION

Cost effectiveness

Otter Tail Power Company is pleased with the long-term cost-effectiveness of the proposed 2008 offering as is reflected in the benefit/cost ratios below:

BENEFIT / COST TEST RESULTS				
PART. TEST	RATEPAYER IMPACT TEST	TOTAL RESOURCE TEST	SOCIETAL TEST	UTILITY TEST
2.58	1.06	3.32	3.16	8.23

Commission Staff have asked the Company to perform a yearly evaluation of the Energy Efficiency Plan. The Company has agreed and believes adequate budgets exist within the programs for the survey instrument discussed with staff.

DSManager Analysis and DSMore Analysis

Otter Tail Power Company has used DSManager as the analysis tool for conservation programs. This tool uses IRP-Manager inputs to model our system demand and marginal costs. Currently the Company is reviewing other modeling tools for future use in DSM analysis. The Company is in the process of moving toward DSMore. At some point in the future we transition completely to DSMore which may result in slightly different baselines and outcomes. The Company will keep staff apprised of these developments.

Discount Rates – 2008

Otter Tail Power Company has used the following discount rates as inputs to DSManager. The Societal discount rate uses the 20-year T-bill rate as of March 1, 2007.

Participant Test	Ratepayer Impact Test	Total Resource Test	Societal Test	Utility Test
10.75%	8.0%	4.78%	4.78%	8.0%

Externality Values

No externality values were used in this analysis.

Electronic Transfer of Data

Electronic data will be supplied to you upon request. Please notify the Company of your specific data requirements.

Confidentiality of Data

Much of the data used in EEP analysis, specifically that which would be transferred electronically, is considered proprietary. Such data is considered confidential and for Commission use only.

V. SUMMARY

Otter Tail Power Company is pleased to be a partner in South Dakota's Energy Efficiency Plan. Our plan as proposed includes:

- 8 programs covering major end uses in residential, commercial, industrial and farm sectors
- Annual energy savings of 1,143,446 kwh
- Budget of \$157,100
- Cost recovery
- Financial incentive
- Minimal administrative overhead

2008 SOUTH DAKOTA ENERGY EFFICIENCY PLAN (REVISED)

APPENDIX A

OTTER TAIL POWER COMPANY

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May 8, 2008

	PROPOSED 2008 GOALS						BENEFIT / COST TEST RESULTS				
	ENERGY SAVINGS (KWH)	DEMAND SAVINGS (KW)	PROPOSED BUDGET	PART.	COST / KWH	COST / KW	PART. TEST	RATEPAYER IMPACT TEST	TOTAL RESOURCE TEST	SOCIETAL TEST	UTILITY TEST
DIRECT IMPACT PROJECTS											
RESIDENTIAL											
Residential Demand Control	4,836	52.754	\$9,900	8	\$2.05	\$188	9.94	0.87	6.45	6.07	7.44
Air Source Heat Pumps - Residential *	32,821	50.232	\$8,800	13	\$0.27	\$175	3.21	1.58	6.17	5.97	11.68
Geothermal Heat Pumps - Residential	48,361	34.934	\$5,600	4	\$0.12	\$160	2.29	1.17	3.60	3.43	16.82
Air Conditioning Control *	1,468	31.830	\$12,600	30	\$8.58	\$396	INF.	4.02	5.54	5.54	4.23
Total - Residential	87,286	169.750	\$36,900	55	\$0.42	\$217					
COMMERCIAL											
Grant	687,804	148.472	\$57,000	4	\$0.08	\$384	2.10	1.10	3.11	2.96	11.70
Motors	57,594	8.555	\$13,100	22	\$0.23	\$1,531	9.53	0.56	3.85	3.51	3.39
Lighting	280,176	69.991	\$22,400	12	\$0.08	\$320	2.85	0.93	3.06	2.88	9.68
Air Source Heat Pumps - Commercial *	16,520	9.738	\$7,000	6	\$0.42	\$719	3.20	0.89	2.91	2.77	3.11
Geothermal Heat Pumps - Commercial	14,066	9.724	\$2,700	1	\$0.19	\$278	2.24	0.96	2.65	2.51	6.98
Total - Commercial	1,056,160	246.480	\$102,200	45	\$0.10	\$415					
Total - Direct Impact	1,143,446	416.230	\$139,100	100	\$0.12	\$334					
INDIRECT IMPACT PROJECTS											
Advertising & Education			\$18,000	625			N/A	N/A	N/A	N/A	N/A
Total - Indirect Impact			\$18,000	625							
TOTAL - ALL PROGRAMS	1,143,446	416.230	\$157,100	725	\$0.14	\$377	2.58	1.06	3.32	3.16	8.23

* Air conditioning programs include summer load reductions, which are not coincident to the system winter-peak Programs evaluated using DSManager software, no environmental externalities used, all dollars discounted to 2008

2008 SOUTH DAKOTA ENERGY EFFICIENCY PLAN (REVISED)

OTTER TAIL POWER COMPANY

April 15, 2008

	2008 Proposed Savings, Costs and Benefits				2008 Actual Savings, Costs and Benefits			
	ENERGY SAVINGS (KWH)	PROPOSED BUDGET	TOTAL BENEFITS	UTILITY NET BENEFITS	ENERGY SAVINGS (KWH)	ACTUAL EXPENSES	TOTAL BENEFITS	UTILITY NET BENEFITS
DIRECT IMPACT PROJECTS								
RESIDENTIAL								
Residential Demand Control	4,836	\$9,900	\$73,640	\$63,740				\$0
Air Source Heat Pumps - Residential *	32,621	\$8,800	\$102,766	\$93,966				\$0
Geothermal Heat Pumps - Residential	48,361	\$5,600	\$94,181	\$88,581				\$0
Air Conditioning Control *	1,468	\$12,600	\$53,357	\$40,757				\$0
Total - Residential	87,286	\$36,900	\$323,945	\$287,045	0	\$0	\$0	\$0
COMMERCIAL								
Grant	687,804	\$57,000	\$666,966	\$609,966				\$0
Motors	57,594	\$13,100	\$44,389	\$31,289				\$0
Lighting	280,176	\$22,400	\$216,856	\$194,456				\$0
Air Source Heat Pumps - Commercial *	16,520	\$7,000	\$21,855	\$14,855				\$0
Geothermal Heat Pumps - Commercial	14,066	\$2,700	\$18,854	\$16,154				\$0
Total - Commercial	1,056,160	\$102,200	\$968,920	\$866,720	0	\$0	\$0	\$0
Total - Direct Impact	1,143,446	\$139,100	\$1,292,865	\$1,153,765	0	\$0	\$0	\$0
INDIRECT IMPACT PROJECTS								
Advertising & Education	0	\$18,000	\$0	(\$18,000)	0	\$0	\$0	\$0
Total - Indirect Impact	0	\$18,000	\$0	(\$18,000)	0	\$0	\$0	\$0
TOTAL - ALL PROGRAMS	1,143,446	\$157,100	\$1,292,865	\$1,135,765	0	\$0	\$0	\$0

* Air conditioning programs include summer load reductions, which are not coincident to the system winter-peak Programs evaluated using DSManager software, no environmental externalities used, all dollars discounted to 2008

Otter Tail Power Company		APPENDIX A		
2008 Incentive Plan Forecast			Page 3	
Calculated Values Based on Pre-Year Inputs				
Original Budget	\$157,100			
Energy Savings Goal at Original Budget	1,143,446			
Multiplier for each 10% of energy savings goal (3)	0.461070%	((Budget x 30 percent) / Projected Net benefits @ 150% of goal) / 6		
Estimated Net Benefits at Proposed Filing	\$1,135,765			
Calculation of Estimated Incentive				
Derived Numbers Give the Percent of Net Benefits Awarded at Different Percentages of Energy Savings Goal				
Percent of KWH Savings Goal	kWh Savings	Percent of Base	Estimated Benefits Achieved	Estimated Incentive
100 % of savings goal	1,143,446	0.46107%	\$1,135,765	\$5,237
110 % of savings goal	1,257,791	0.92214%	\$1,249,342	\$11,521
120 % of savings goal	1,372,135	1.38321%	\$1,362,918	\$18,852
130 % of savings goal	1,486,480	1.84428%	\$1,476,495	\$27,231
140 % of savings goal	1,600,824	2.30535%	\$1,590,071	\$36,657
150 % of savings goal	1,715,169	2.76642%	\$1,703,648	\$47,130
Incentive cap = 30% of budget	\$157,100			
	30%			
	\$47,130			
Determine incentive - post year				
Inputs from previous sheet actual results (or enter arbitrary numbers for calculating and viewing)				
2008 Actual Energy Savings Achieved (=Net Benefits!G28)	1,143,446	100.00%		
2008 Actual Expenditures (=Net Benefits!H28)	\$157,100		(assume we achieve 100% of spending and all net benefits)	
2008 Actual Net Benefits (=+Net Benefits!J28)	\$1,135,765			
Actual percentage applied to net benefits	0.46%			
Percent of actual net benefits	\$5,237			
	Incentive not to go negative or to exceed incentive CAP			
Calculated Incentive	\$5,237			

Appendix B

EEP Tracker Account - Example for Illustration Only

EEP Expenditures (Feb 07-Mar 08)	\$31,220	(1)
EEP Estimated 2008-2009 SD Budget	\$157,100	(1)
Carrying cost	16,742	(2)
Maximum Incentive	47,130	(3)
Total for recovery	<u>\$252,192</u>	(4)
Less recovered amount	<u>0</u>	(5)
Balance	<u><u>\$252,192</u></u>	(6)
Sales budget	400,000,000	(7)
Rate per kWh (cents)	0.063	(8)

- (1) Total EEP expenditures
- (2) OTP's current proposed ROR;
last SD OTP rate case allowed
ROR of 9.964% 8.89%
- (3) Maximum incentive possible
- (4) Total for recovery
- (5) Credit for amount previously recovered through Rider
- (6) Net unrecovered amount
- (7) OTP's SD retail sales estimate for Rider period
- (8) Item (5) divided by (6); the rate is applied to all billed kWh