

OTTER TAIL POWER COMPANY  
Docket No. EL13-016

Response to: South Dakota Public Utilities Commission  
Analyst: SDPUC Staff  
Date Received: 9/20/2013  
Date Due: 9/30/2013  
Date of Response: 09/30/2013  
Responding Witness: Kim Pederson, Manager Market Planning - (218) 739-8303

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Information Request No: SD-PUC-02-01

Please describe the extent to which the portfolio provides opportunities for all ratepayers.

**RESPONSE:**

Otter Tail's biennial plan offers energy efficiency programs to all South Dakota ("SD") ratepayers. On Page 3 of the May 1, 2013 filing Otter Tail included a table that lists the proposed EEP portfolio for both residential and commercial customers. This table shows that Otter Tail is projecting 405 customers participating in residential programs and 99 customers participating in commercial programs.

One goal of Otter Tail's biennial plan is to boost participation by residential customers. By offering low customer cost programs which are easy to implement, residential customers should respond. Otter Tail's portfolio covers most major end uses and all customer segments.

Residential Lighting

For the biennial plan Otter Tail added a residential lighting program through an expansion of our Commercial Lighting program. Promotion of low cost energy efficiency lighting to residential customers should encourage them to purchase energy efficient lighting, such as light-emitting diode "LED", and compact fluorescent lamps (CFLs).

In 2012 Otter Tail performed an end-use survey to gather data on how our residential customers use electricity in their homes. The sampling from SD indicates that residential customers still have room to grow in fully adopting CFLs. A summary of CFL penetration in Otter Tail's SD service territory is shown in Table 1. Otter Tail believes that by offering education and incentives through a lighting program, residential customers can easily participate in the SD program, switch out inefficient lights, and save significant energy with very minimal out-of-pocket costs.

Table 1

<b>South Dakota CFL Penetration</b>		
0	14	33%
1-5	16	38%
6-10	5	12%
11-15	1	2%
16+	1	2%
Didn't answer	5	12%
Total	42	100%

Air Conditioning

Otter Tail’s Air Conditioning Control program is free to participating customers. Customers receive a \$7 month bill credit during the four summer months.

Otter Tail’s end-use survey shows that approximately 55% of SD customers have electric central air conditioning in their homes, illustrated in Table 2.

Participation in the program is a win-win for Otter Tail and its customers. Customers receive an incentive for participating, and the company saves money by avoiding new capacity resources during the peak summer demand hours.

Table 2

<b>South Dakota Cooling System type</b>		
Air-source heat pump	2	5%
Geothermal heat pump	0	0%
Electric central air	23	55%
Natural gas central air	2	5%
Electric window unit or wall	11	26%
Ductless or split system	0	0%
Whole house attic fan	0	0%
Other	1	2%
None	3	7%
Don't know	0	0%
total	42	100%

Heating and Cooling

Otter Tail also offers rebates to residential and commercial customers for installing qualified air-source and ground-source heat pumps. While these technologies do have higher up-front costs, the associated energy savings, rebates, and tax incentives improve the payback of these year-round heating and cooling systems.

### Commercial Lighting

Otter Tail has offered a Retrofit Lighting program to commercial customers since the first year of our energy efficiency partnership in South Dakota. This successful program has been utilized by many commercial customers from churches and small commercial “mom & pop shops” all the way up to large industrial customers. Customer costs to participate in this program can vary depending upon the customer’s facilities and operational needs.

### Custom Programs

Otter Tail’s Custom Efficiency Project program is available to any commercial customer. In the past churches, farmers, schools, small commercial and industrial customers have participated.

### Motors and Drives

Otter Tail is also proposing a Drive Power program. This program offers incentives to customers to install efficient motors and variable speed drives. In the past many different sized customers have participated in these programs. Participants include farmers, irrigators, elevators, and large agricultural processing facilities.

### Advertising and Education

Educational assemblies for school aged children and teachers, literature, newsletters, education, bill analysis tools, and online resources make energy efficiency tips and tools accessible to all customers.

### Summary

Additional programs may be considered in the future. For example, refrigeration and insulation programs offer significant energy saving opportunities for customers. As our portfolio matures Otter Tail will continue to bring ideas to Staff for consideration, while keeping in mind the budgets and infrastructure that some programs require.

Otter Tail understands that not every residential and commercial customer will participate in all programs offerings. But Otter Tail has made it a priority to ensure there is a least one program that nearly all customers can participate in if they choose. All program offerings included in the biennial plan are cost effective and will save customers money over the long-term.