OTTER TAIL POWER COMPANY Docket No: EL16-020

Response to: South Dakota Public Utilities Commission

Analyst: SDPUC Staff
Date Received: 11/01/2016
Date Due: 11/11/2016

Date of Response: 11/09/2016

Responding Witness: Jason A. Grenier, Manager Market Planning - (218) 739-8639

Information Request:

For each of the programs, please explain how participant costs were calculated as provided in the Participation and Total Participant Costs tables provided in the DSMore tables. Further, please provide how the individual participant costs were determined for each program.

Attachments: 0

Response:

Participant Costs are determined through extensive research and historical data. These costs are the incremental costs a customer incurs for choosing a more energy efficient technology. The Total Participant costs equal the Participant Cost times the number of participants in a program.

Residential Programs:

- 1) Air Conditioning Control No participant costs. Otter Tail installs the radio at no cost to the Air Conditioning Control program.
- 2) Air Source Heat Pumps (ASHP) The cost is the difference between electric baseboard heating and purchasing an ASHP. Otter Tail reviews the average cost per ton based on the rebates submitted and the average historical costs seen in the field and verifies costs with contractors in our area.
- 3) Geothermal Heat Pumps (GHP) The cost is the difference between electric baseboard heating and purchasing a GHP. Otter Tail reviews the average cost per ton based on the rebates submitted and the average historical costs seen in the field and verifies cost with contractors.
- 4) Lighting –The large majority of LEDs are planned to be given to students and customers at no cost. Otter Tail also offers a customer option where the customer can purchase LEDs at a retailer and mail in a rebate form for reimbursement up to 75 percent of project costs. This option has much fewer participants. If customers participate, Otter Tail will include them as a separate lighting measure with participant costs when evaluations are completed using actual results.

Commercial Programs:

- 1) Air Source Heat Pumps (ASHP) The cost is the difference between electric baseboard heating and purchasing an ASHP. Otter Tail reviews the average cost per ton based on the rebates submitted and the average historical costs seen in the field and verifies cost with contractors.
- Custom Efficiency Otter Tail tracks actual project costs on all customer applications for Custom Efficiency incentives. Participant costs for commercial and industrial Custom Efficiency measures are based on actual historical cost data as recorded for past Custom Efficiency projects.
- 3) Drive Power Otter Tail tracks actual project costs on rebate applications for adjustable speed drives. Participant costs for commercial and industrial adjustable speed drive measures are based on actual historic cost data as recorded for adjustable speed drive measures. Projected costs for the DrivePower motor measures are based cost data featured in the U.S. Department of Energy Motor Master software, along with the Minnesota Department of Commerce-Division of Energy Resources Technical Resource Manual. Otter Tail also gathers and tracks and reports actual cost data for qualifying motor installations for purposes of calculating and reporting actual cost effectiveness for qualifying motor measures.
- 4) Geothermal Heat Pumps (GHP) The cost is the difference between electric baseboard heating and purchasing a GHP. Otter Tail reviews the average cost per ton based on the rebates submitted and the average historical costs seen in the field and verifies cost with contractors.
- 5) Lighting Otter Tail tracks actual project costs on rebate applications for the Lighting program. Participant costs for commercial and industrial lighting measures are based on actual historical cost data as recorded for each lighting project and measure.