

OTTER TAIL POWER COMPANY
 Docket No. EL13-015

Response to: South Dakota Public Utilities Commission
 Analyst: SDPUC Staff
 Date Received: 5/20/2013
 Date Due: 5/30/2013
 Date of Response: 06/04/2013
 Responding Witness: Kim Pederson, Manager Market Planning - (218) 739-8303

Information Request No: SD-PUC-01-03

Is there an explanation as to why the calculated 2012 total cost per participant of Residential Air Source Heat Pumps and Geothermal Heat Pumps was higher than the previous two years?

RESPONSE:

The higher program costs are a result of several different factors. As shown in the below table the Average tons per a unit for both residential air-source and ground-source heat pumps has increased each year. Customer incentives are paid based on unit tonnage. Since the tonnage has increased the average customer incentive has also increased each year. The table below shows that average administrative expense per a participant has increased each year. The higher administrative costs are due partly to Otter Tail's engineering staff performing a deeper evaluation of heat pump energy savings. Another factor that contributes to these higher costs could be that some projects just require more involvement from Otter Tail and need more guidance to ensure that projects are completed satisfactorily.

| Residential Air-Source Heatpump | | | | | | |
|---|--------------------|---------------------|-------------------|-----------------------|----------------------|--------------------|
| | Total Costs | Participants | Avg. Admin | Avg. Incentive | Avg. Ton/unit | kWh Savings |
| 2010 | \$11,140.08 | 22 | \$163.18 | \$343.19 | 2.38 | 107,941 |
| 2011 | \$18,710.20 | 29 | \$239.04 | \$406.13 | 2.82 | 275,030 |
| 2012 | \$25,393.01 | 28 | \$453.63 | \$453.26 | 2.86 | 268,897 |
| Residential Ground-Source Heatpump | | | | | | |
| | Total Costs | Participants | Avg. Admin | Avg. Incentive | Avg. Ton/unit | kWh Savings |
| 2010 | \$8,220.93 | 10 | \$163.10 | \$658.99 | 3.05 | 120,400 |
| 2011 | \$7,854.64 | 8 | \$277.19 | \$704.65 | 3.26 | 88,017 |
| 2012 | \$14,867.05 | 9 | \$453.63 | \$1,198.26 | 3.96 | 120,262 |