

OTTER TAIL POWER COMPANY

Docket No: EL20-022

Response to: SD Public Utilities Commission

Analyst: SD PUC Staff

Date Received: October 20, 2020

Date Due: November 03, 2020

Date of Response: November 03, 2020

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

Data Request:

2-4. Refer to the Company’s response to Staff DR 1-4, Attach1.4.xlsx. The table shows the following regarding heat pump incentives:

Program	Measure	Proposed Incentive	Current Incentive
Heat Pumps	ASHP	\$400/ton	\$250/ton
Heat Pumps	Cold climate ASHP ducted	\$900/ton	
Heat Pumps	Cold climate ASHP ductless	\$700/ton	
Heat Pumps	Geothermal heat pump	\$1,200/ton	\$900/ton
Heat Pumps, Commercial	ASHP	\$400/ton	\$250/ton
Heat Pumps, Commercial	CCHP ducted	\$900/ton	
Heat Pumps, Commercial	CCHP ductless	\$700/ton	
Heat Pumps, Commercial	Geothermal heat pump	\$1000/ton	\$900/ton

- a) It appears from the table that under the current plan, customers are eligible to receive a \$250/ton rebate for air-source heat pumps and a \$900/ton rebate for geothermal heat pumps. The Company’s website accurately depicts these two rebates. However, the Company’s website (<https://www.otpco.com/ways-to-save/rebates-and-savings/heat-pumps-res-and-com/>) also shows a \$700/ton rebate available for a ductless cold-climate heat pump (CCHP) – ductless mini split configuration, not limited by rate on which the unit is served, and a \$900/ton rebate for a cold-climate heat pump (CCHP) - ducted configuration, not limited by rate on which the unit is served. In addition, slightly smaller rebates are available for ductless CCHP or ducted CCHP systems served through a dual fuel, deferred load, or residential demand control rate. Under the Company’s current EEP, are South Dakota customers eligible for the CCHP rebates?
- b) Are the costs for the CCHP rebates included in the current EEP? If not, are they recovered through general rates?

- c) Please explain when the Geothermal heat pump incentive changed from \$500/ton approved in Docket EL16-020 to \$900/ton.
- d) Explain why the proposed incentive for commercial geothermal heat pumps is \$1,000/ton whereas the proposed incentive for residential geothermal heat pumps is \$1,200/ton.

Attachments:

Response:

- a) Under the Company’s current EEP program, South Dakota customers are eligible for cold climate heat pump (CCHP) rebates. CCHP rebates are also available as part of the Company’s demand control program. The CCHP was first offered in the Company’s EEP program in 2018 at the same rebate level as a standard ASHP. The CCHP first received a different rebate from a standard ASHP in 2019. The error in the original table has been corrected in the modified table below with some added information on past incentive amounts. Not highlighted in the table below is the slightly smaller rebates offered for CCHPs installed on the Company’s demand response rates. The smaller rebates for demand response equipment are a result of different minimum equipment performance requirements that gives the customer the option to select a slightly lower performing unit vs the EEP efficiency program.

Program	Measure	Proposed Incentive	2020 Incentive	2019 Incentive	2018 Incentive
Heat Pumps	ASHP	\$400/ton	\$250/ton	\$250/ton	\$250/ton
Heat Pumps	Cold climate ASHP ducted	\$900/ton	\$900/ton	\$600/ton	\$250/ton
Heat Pumps	Cold climate ASHP ductless	\$700/ton	\$700/ton	\$600/ton	\$250/ton
Heat Pumps	Geothermal heat pump	\$1,200/ton	\$900/ton	\$600/ton	\$500/ton
Heat Pumps, Commercial	ASHP	\$400/ton	\$250/ton	\$250/ton	\$250/ton
Heat Pumps, Commercial	CCHP ducted	\$900/ton	\$900/ton	\$600/ton	\$250/ton
Heat Pumps, Commercial	CCHP ductless	\$700/ton	\$700/ton	\$600/ton	\$250/ton
Heat Pumps, Commercial	Geothermal heat pump	\$1000/ton	\$900/ton	\$600/ton	\$500/ton

- b) CCHP customer rebates offered through the EEP are also recovered through the EEP surcharge on a customer's bill.
- c) The geothermal heat pump incentive increased to facilitate higher participation. Participation remains low as geothermal heat pumps have the highest initial cost to customers but provide the highest heating and cooling savings over the life cycle of the equipment.
- d) The increase in the proposed incentive for geothermal heat pumps is due to continued low participation, to decrease the high initial cost of geothermal, and to address a concern brought up by the South Dakota Public Utility Commission Staff during the company's annual program filing that ASHP participation could be affecting geothermal heat pump participation after the 2019 rebate modification with CCHP. The proposed incentive for commercial and residential is different based on the differences in savings and performance of equipment being installed. The performance of equipment being installed is based on data the company collects from rebate applications over the past several years or the minimum requirements the company selects to meet rebate qualifications.