

OTTER TAIL POWER COMPANY

Docket No: EL25-021

Response to: SD Public Utilities Commission

Analyst: Pat Steffensen

Date Received: May 27, 2025

Date Due: June 10, 2025

Date of Response: May 30, 2025

Responding Witness: Cristina Zuniga, Supervisor, DSM Administration - 218-739-8240

Data Request:

Refer to the Residential Heat Pump benefit cost ratios on Table 3 of Appendix A. Provide ratios for the measures within this group, including the Energy Star A/C, Buffer Tank/Desuperheater, Quality Installation, and Equipment Tune-Ups measures that were new in 2024. Provide an explanation for any measures that had a Total Resource Cost test ratio less than 1.0, including whether Otter Tail believes it is appropriate to continue the measure.

Attachments: 0Response:

Residential HP Measures	UCT	TRC	RIM	SCT	PCT
Energy Star A/C	21.99	3.70	2.17	4.82	2.20
Energy Star A/C Tune - Up	6.70	1.68	1.86	1.94	1.01
Air Source Heat Pump - Ducted	6.46	1.24	0.34	1.64	4.74
Air Source Heat Pump - Ductless	6.98	1.16	0.37	1.54	4.06
Cold Climate Heat Pump - Ducted	3.93	1.78	0.34	2.36	6.81
Cold Climate Heat Pump - Ductless	6.20	1.18	0.37	1.56	4.15
Quality Installation - A/C	4.75	0.63	1.15	0.83	0.69
Quality Installation - Air Source HP	1.51	3.32	0.33	4.40	12.65
Quality Installation - CC HP	1.51	3.12	0.33	4.13	11.88
Heat Pump Tune-Up	N/A	N/A	N/A	N/A	N/A
Air to Water Heat Pump	N/A	N/A	N/A	N/A	N/A
Geothermal Heat Pump	N/A	N/A	N/A	N/A	N/A
Pre- Heating Water Heater	N/A	N/A	N/A	N/A	N/A

The only measure under the Residential Heat Pump Program that did not achieve a Total Resource Cost (TRC) ratio above 1.0 in 2024 was the Quality Installation of an ENERGY STAR® air conditioning unit. Otter Tail Power had only one participant for this measure during

the year and it was the first year offering this measure to customers. These rebates—both for ENERGY STAR® air conditioning units and quality installations—are not heavily marketed. The primary goal of this measure is to identify missed opportunities for installing heat pumps. This information is valuable for assessing program success, uncovering educational opportunities about the benefits of heat pumps, and, in the case of quality installations, identifying the contractors involved. This enables further engagement with contractors to help them better communicate the advantages of heat pumps to customers.

The measure generated \$237.39 in TRC benefits, while the TRC costs were driven solely by an estimated incremental cost of \$375. Despite the low participation, Otter Tail Power believes the measure should be continued as part of its broader Residential Heat Pump Program. The Company believe future participation will increase resulting in improved cost-effectiveness, and the measure allows the Company to engage with contractors that are installing ENERGY STAR® units.