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: June 03, 2025
Responding Witness: Cristina Zuniga, Supervisor, DSM Administration - 218-739-8240

Data Request:
Refer to the Commercial Heat Pump benefit cost ratios on Table 3 of Appendix A. Provide ratios for the measures within this group, including the Buffer Tank/Desuperheater and Quality Installation 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: 0

Response:

Commercial HP Measures	UCT	TRC	RIM	SCT	PCT
Quality Installation - HP	1.32	4.49	0.39	5.65	11.62
Geothermal Heat Pump	3.04	1.02	0.44	1.29	2.30
Cold Climate Heat Pump - Ducted	2.65	1.78	0.39	2.24	4.58
Cold Climate Heat Pump - Ductless	3.84	0.77	0.42	0.97	1.84
Air Source Heat Pump - Ducted	N/A	N/A	N/A	N/A	N/A
Air Source Heat Pump - Ductless	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
Pre- Heating Water Heater	N/A	N/A	N/A	N/A	N/A

The only measure under the Commercial Heat Pump Program that did not have a TRC above 1.0 was the Ductless Cold Climate Heat Pump unit. Otter Tail Power had four participants in 2024 and averaged a 1.75 ton per rebate. This measure assumed an average of three tons per rebate in the initial triennial filing. The three-ton average assumption is based on historical averages of Otter Tail Power heat pump rebates over the last several years. Only having four participants in 2024 did not allow for the typical average to occur and has been noted by the Company. The measure provides $13,441 in TRC benefits while the TRC costs are solely driven by the estimated incremental cost of $17,524. As the estimated incremental cost is based on the assumed average three-ton system, the cost does not tie proportionally to smaller system with lower cost and lower benefits. Otter Tail Power believes it should continue to support and

promote this program as a part of its Commercial Heat Pump Program. The program has historically been cost-effective and is modeled to again be cost-effective with higher participation. During the next triennial filing each heat pump and air conditioning measures will be evaluated based upon a per ton basis to better showcase accurate TRC ratios when lower tons per unit participation occurs for specific measures.