This question is: ___ **Trade Secret**
_x_ **Public**

State of Minnesota
Public Utilities Commission

Utility Information Request

Docket Number: E-015/M-23-258 Date of Request: April 30, 2024

Requested From: Minnesota Power Response Due: May 10, 2024

Analyst Requesting Information: Austin Northagen

Type of Inquiry:

	Financial		Rate of Return		Rate Design
	Engineering		Forecasting		Conservation
	Cost of Service		CIP	x	Other: IDP

If you believe your responses are proprietary, please indicate.

Request Number 1	How is the utility considering equipment design standards regarding modernizing infrastructure to withstand increasing extreme weather events, including but not limited to higher and longer duration heat waves, heavy rainfall events, higher winds, and increased ice storms? For example, how is the utility considering how increased and longer duration heat waves might impact increased stress on the distribution system from both higher temperatures and higher electricity use?

Response:

The Company's commitment to asset renewal and grid modernization is driven in part by concerns for grid resiliency during an increase in extreme weather events. For instance, the Company began strategic undergrounding overhead lines in 2020 to protect them from fire, weather, and vegetation exposure. There are currently 1,616 miles of underground wire on the Minnesota Power distribution system. Strategic Undergrounding is described in greater detail in Section III.A.4 of the Company's 2023 IDP. The Company is also upgrading its Outage Management System as detailed in II.E.1. The upgraded OMS will further enhance the Company's ability to respond to unplanned outages and coordinate resources to address them. The company builds all infrastructure to meet or exceed the National Electrical Safety Code (NESC) heavy loading requirements for ice and wind. In addition, the company has developed standards for materials such as transformers, cables, and wires that provide additional capacity for increased demand in extreme heat and cold events.