

OTTER TAIL POWER COMPANY

Docket No: EL23-027

Response to: SD Public Utilities Commission

Analyst: Pat Steffensen

Date Received: October 02, 2023

Date Due: October 17, 2023

Date of Response: November 03, 2023

Responding Witness: Matthew J. Olsen, Manager, Regulatory Strategy/Compliance,  
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Data Request:

Does the AMI meter maintain backup to verify usage if the AMI meter experiences a malfunction, usage is not properly captured, or if the interval data is lost? Explain.

Attachments: 0

Response:

There is a non-volatile memory built into each meter. This memory can hold up to 3 years of customer energy usage, power quality and event information. Once a meter is energized in the socket the information is written to this memory. If the memory fills up the oldest data is dropped and the most recent information is retained in the meter.

The AMI system is configured to bring interval energy consumption, power quality and event data back to the central systems every 4 hours. There are times when loss of communications could result in a gap of data. Once communications are established to the meter, the system will automatically retrieve data from the missing period and verify the validity of the customer's usage against the history. Technicians can also retrieve this information directly from the meter and upload into the systems.

If communications with a meter are interrupted for an extended period of time, the system will flag this occurrence and Otter Tail will investigate the meter. In this instance, the data stored locally on the meter will be captured so customer usage data will remain complete and billing will be accurate.