



# SD-4: Reliability Monitoring Report

System Management & Nuclear Oversight Committee Report

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# Summary SD-4: Reliability

Generation and delivery systems must perform at a high level to provide reliable service to customer-owners. The Energy Delivery, Energy Production and Marketing, and Nuclear Business Units of OPPD contribute top reliable electric service to customer-owners.

Specifically, OPPD shall:

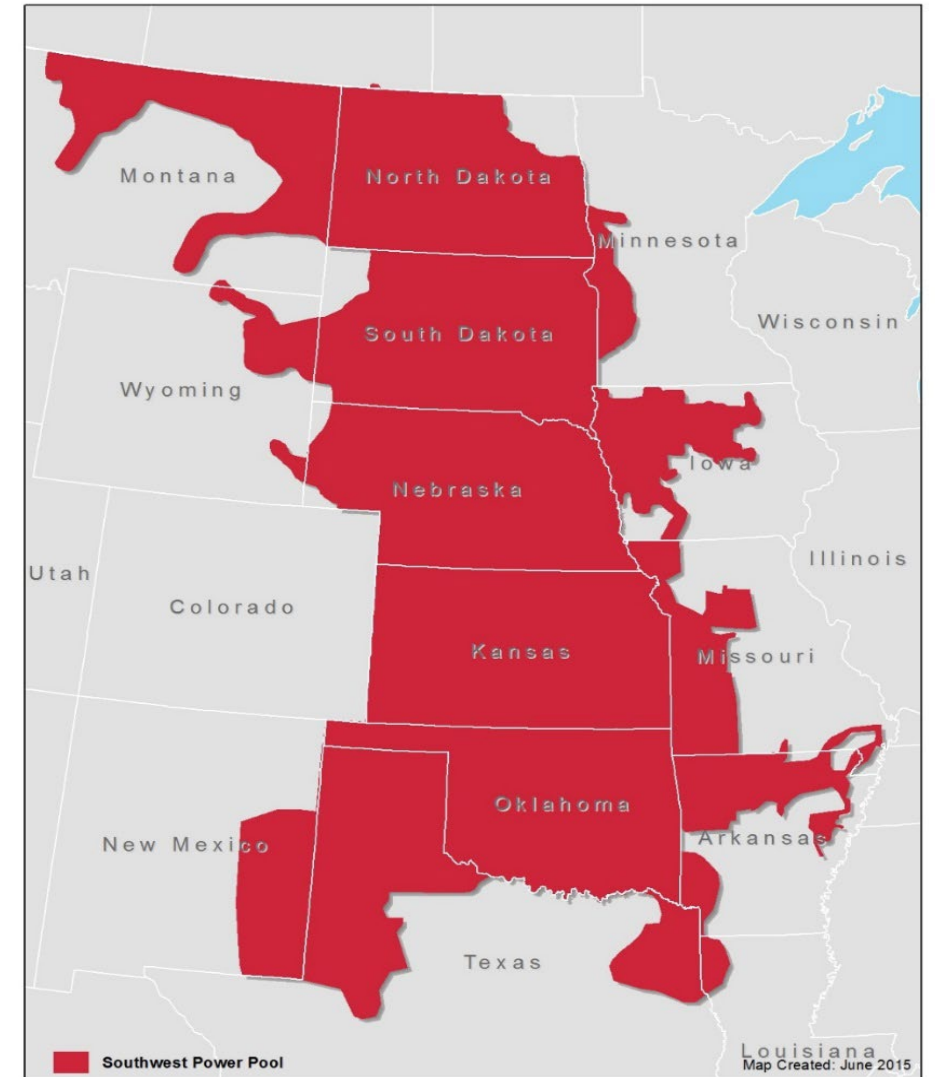
- Assure all customer energy requirements are met through the use of its generation resources and purchase power portfolio 100 percent of the time.
- Achieve generation reliability by:
  - Maintaining steam unit equivalent availability factor at or above 90% on a three year rolling average; and,
  - Maintaining unit availability above benchmark levels per industry measures such as the NERC GADS.
- Achieve electric system reliability by:
  - Limiting SAIDI to 90 minutes. This is the average outage duration per customer per year, excluding declared major storms; and,
  - Maintaining a reliable transmission and distribution system. This will be achieved through performing the necessary maintenance and upgrades in accordance with NERC standards.



*OPPD shall assure generation resources and purchase power portfolio meets customer energy demand 100% of the time.*

# Energy Supply

- ✓ SPP real time balancing of generation and load
- ✓ SPP 112% planning reserve margin
- ✓ Transmission reservations under SPP tariff provide a firm “lane in the highway” to deliver energy to load
- ✓ Access to SPP liquid power markets



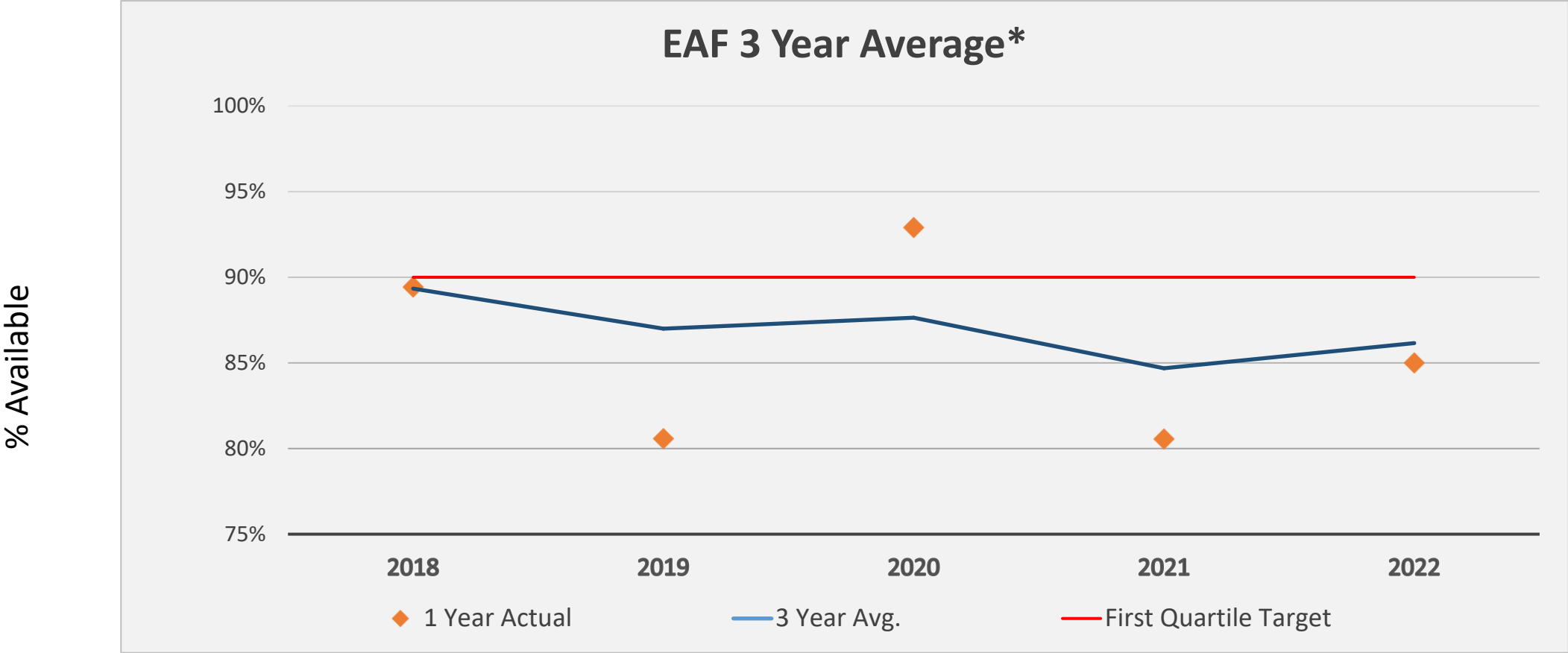


OPPD shall achieve generation reliability



# Equivalent Availability Factor (EAF):

Percentage of time generation was available



2022 EAF was **86.2** %, 2<sup>nd</sup> Quartile Performance

\* Coal Stations Only



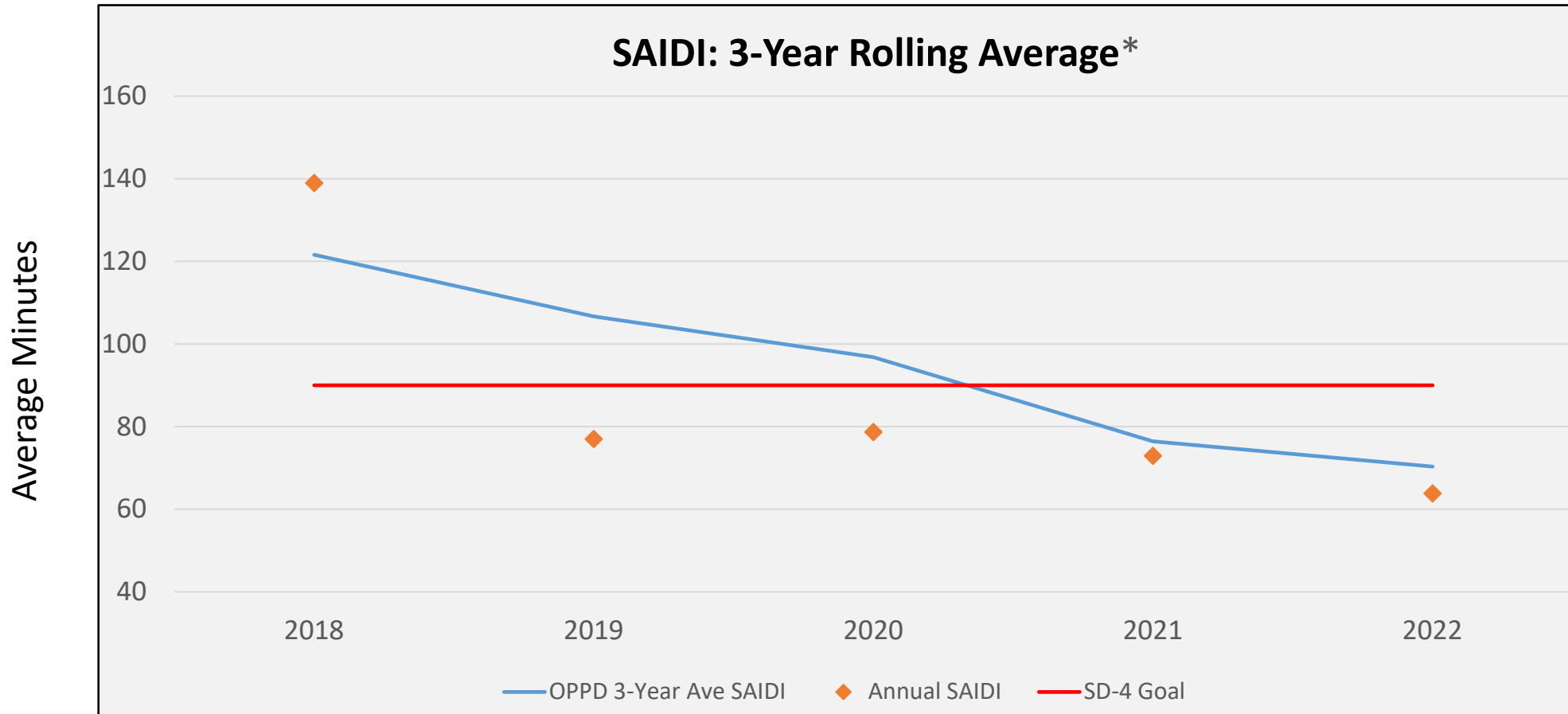
OPPD shall achieve electric system reliability





# System Average Interruption Duration Index (SAIDI):

Average outage length across the system per customer



2022 SAIDI **70.3** minutes, **1<sup>st</sup> Quartile Performance**

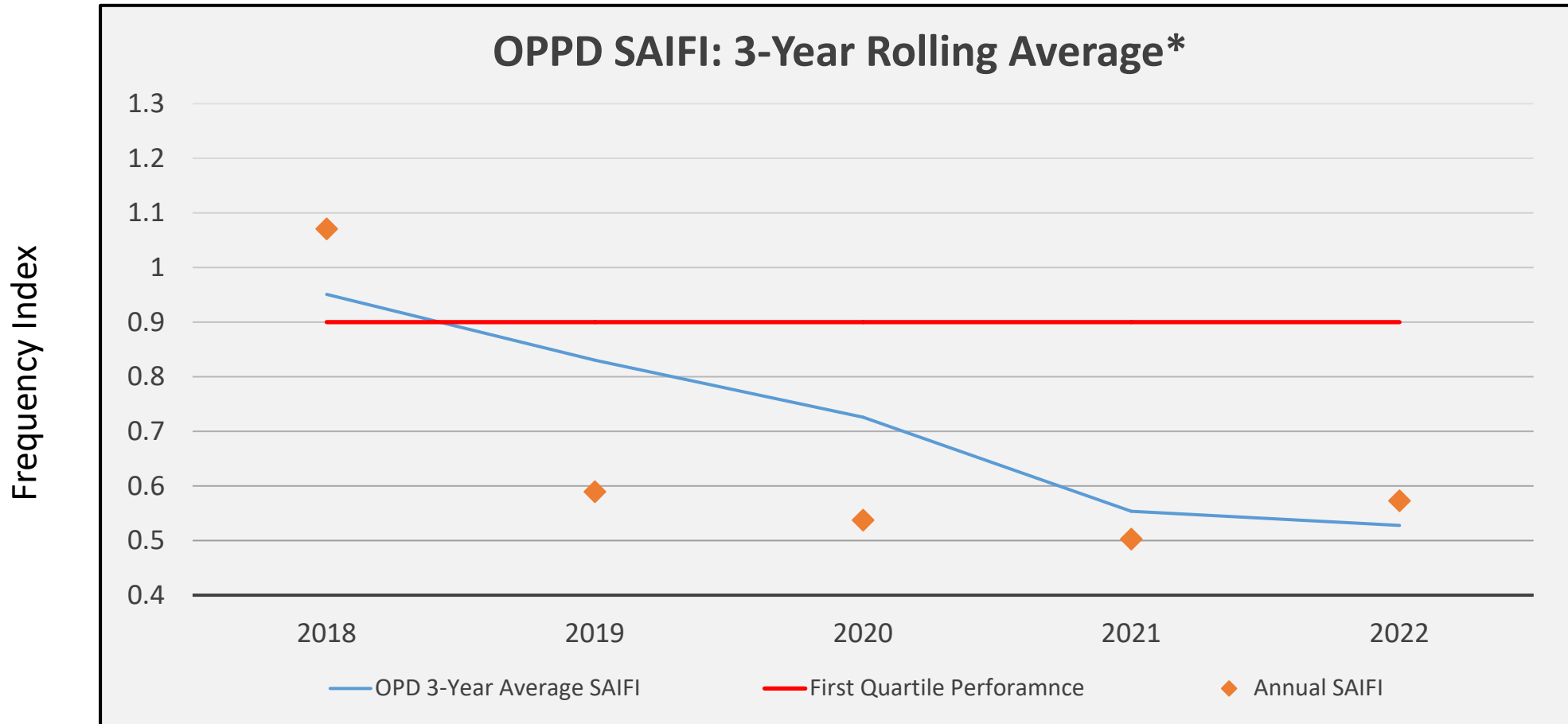
\* Excludes MEDs: unusual large outage events.

There were no MEDs in 2022



# System Average Interruption Frequency Index (SAIFI):

Average frequency of outages across the system



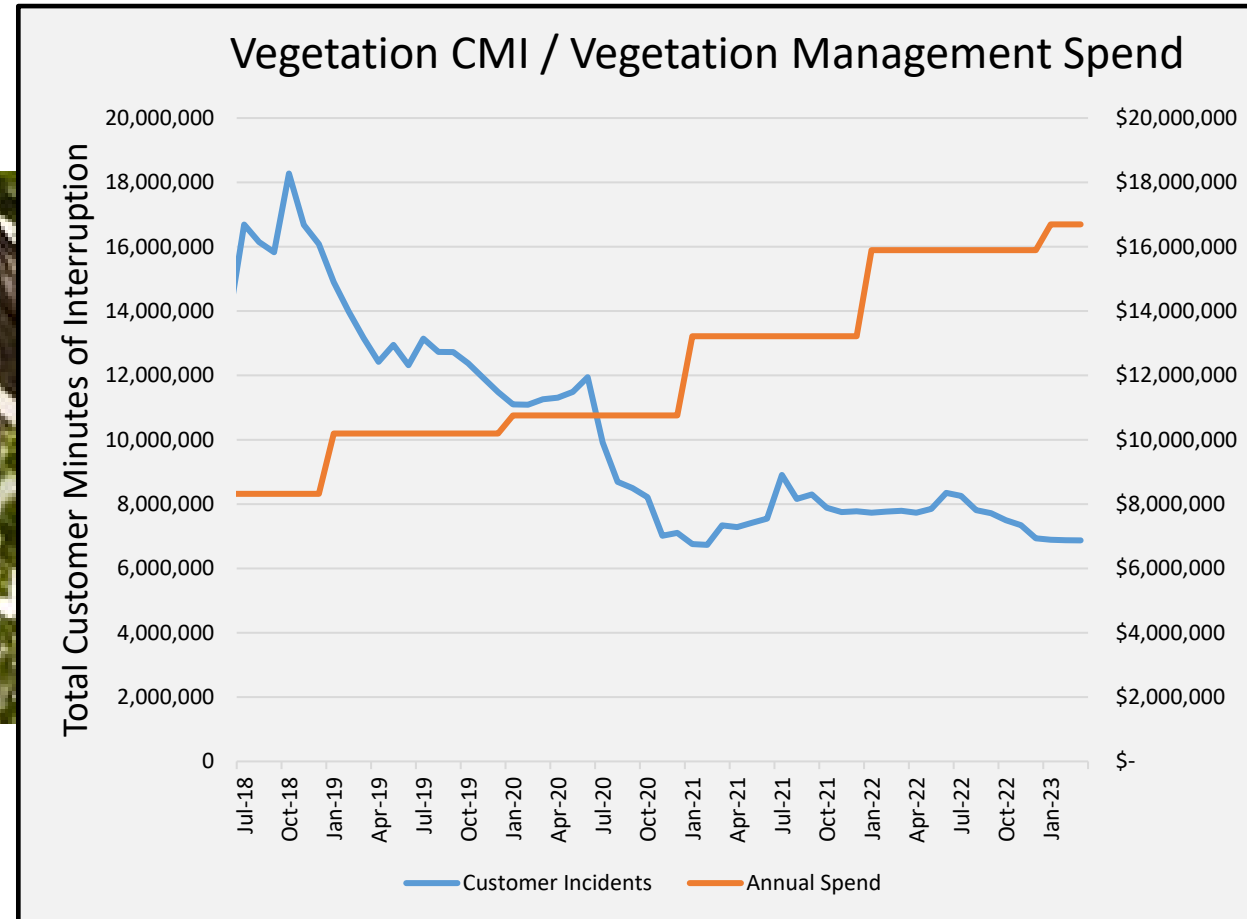
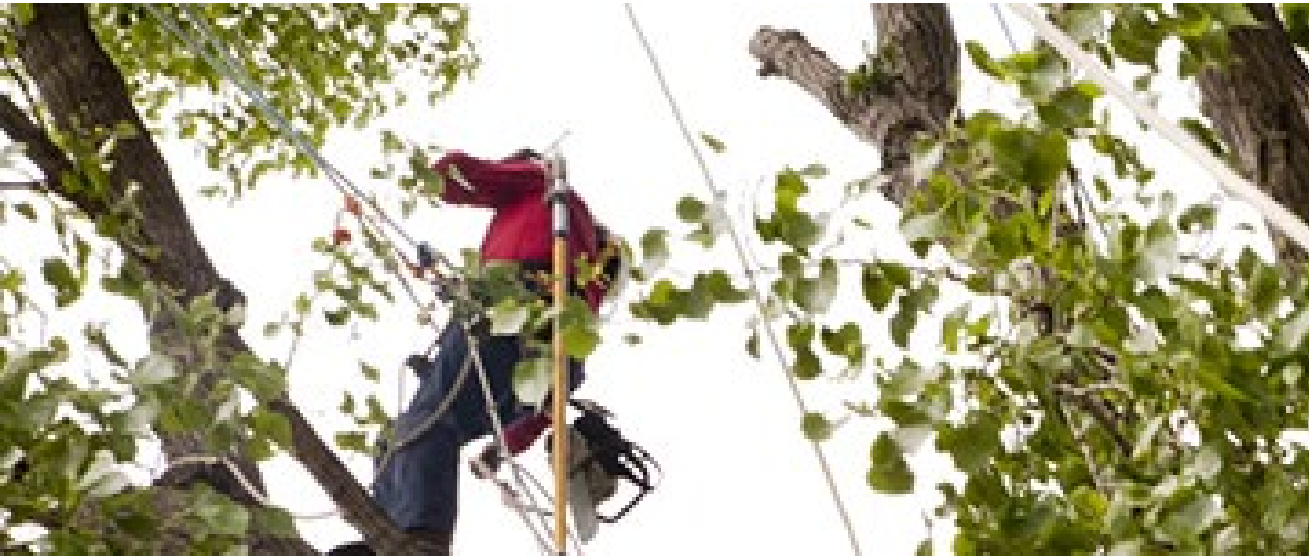
2022 SAIFI **0.53** incidents, **1st Quartile Performance**

\* Excludes MEDs: unusual large outage events.

There were no MEDs in 2022

# Key Program in Action

*Increased funding and focus on vegetation continues to drive overall reduction in customer minutes of interruption. The program is continuously monitored to enhance reliability for our customers.*



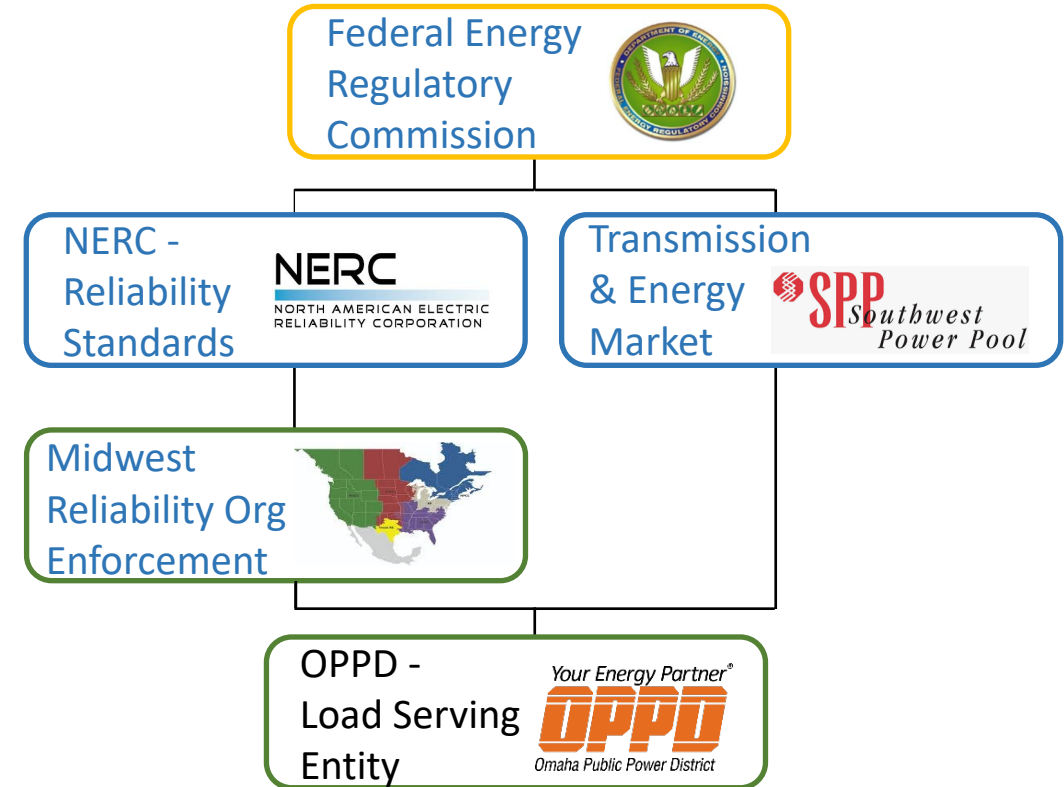


*Maintain a reliable transmission and distribution system in accordance with NERC standards*



# Transmission reliability

- ✓ MRO 2022 audits
  - off-site (quarterly) → no enforceable violations\*
  - on-site (every 3-years) → no enforceable violations\*
- ✓ OPPD performs continuous monitoring
- ✓ No enforceable NERC violations since the last SD-4 update



\* Reviews continue

# Recommendation

The System Management & Nuclear Oversight Committee has reviewed and accepted this Monitoring Report for SD-4 and recommends that the Board find OPPD to be sufficiently in compliance with Board Policy SD-4.

## SD-4 Performance

- ✓ Meet customer demands 100% of the time
- ✗ Baseload Generation EAF > 90%
- ✓ SAIDI < 90 Minutes
- ✓ Meet applicable NERC reliability standards