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\textsuperscript{nd} 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, **1st 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

OPPD SAIFI: 3-Year Rolling Average*

* Excludes MEDs: unusual large outage events.

There were no MEDs in 2022

2022 SAIFI 0.53 incidents, 1st Quartile Performance

- OPD 3-Year Average SAIFI
- First Quartile Performance
- Annual SAIFI
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