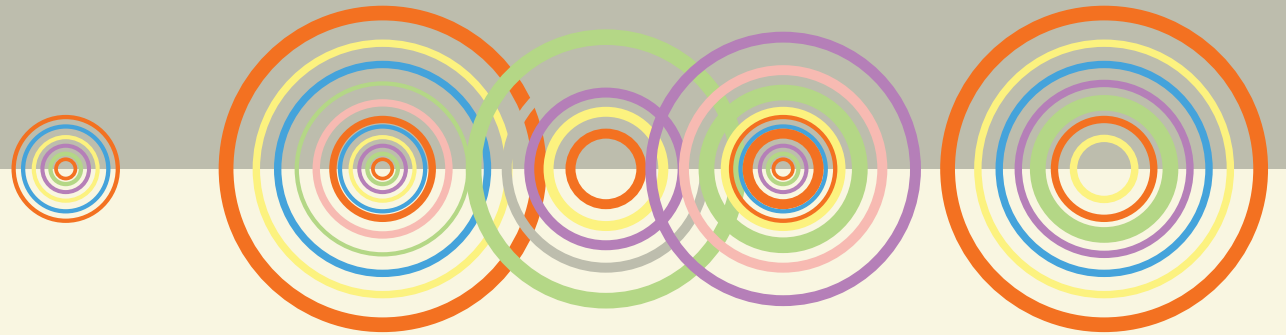


# SD-4: RELIABILITY MONITORING REPORT

➤ April 2025



System Management & Nuclear Oversight Committee Report  
Troy Via, COO & VP Utility Operations



# SUMMARY SD-4: RELIABILITY

As our communities become more reliant on electric services, reliability must also continue to improve. The generation fleet, transmission system, and distribution system are all elements of OPPD's vertically integrated systems to delivery energy services to our customer-owners. The reliability of each of these system elements contributes to the overall reliability of our service. Therefore, to demonstrate reliable operations of its electric utility system, OPPD shall:

- Assure all **customer energy requirements are met** through the use of its generation resources and purchased power portfolio **100 percent of the time**; and

## Generation

- Maintain OPPD's owned generation fleet **Equivalent Forced Outage Rate (EFOR\*)** at or below the middle of the **second quartile** of a benchmark fleet of comparable generation; and

## Transmission

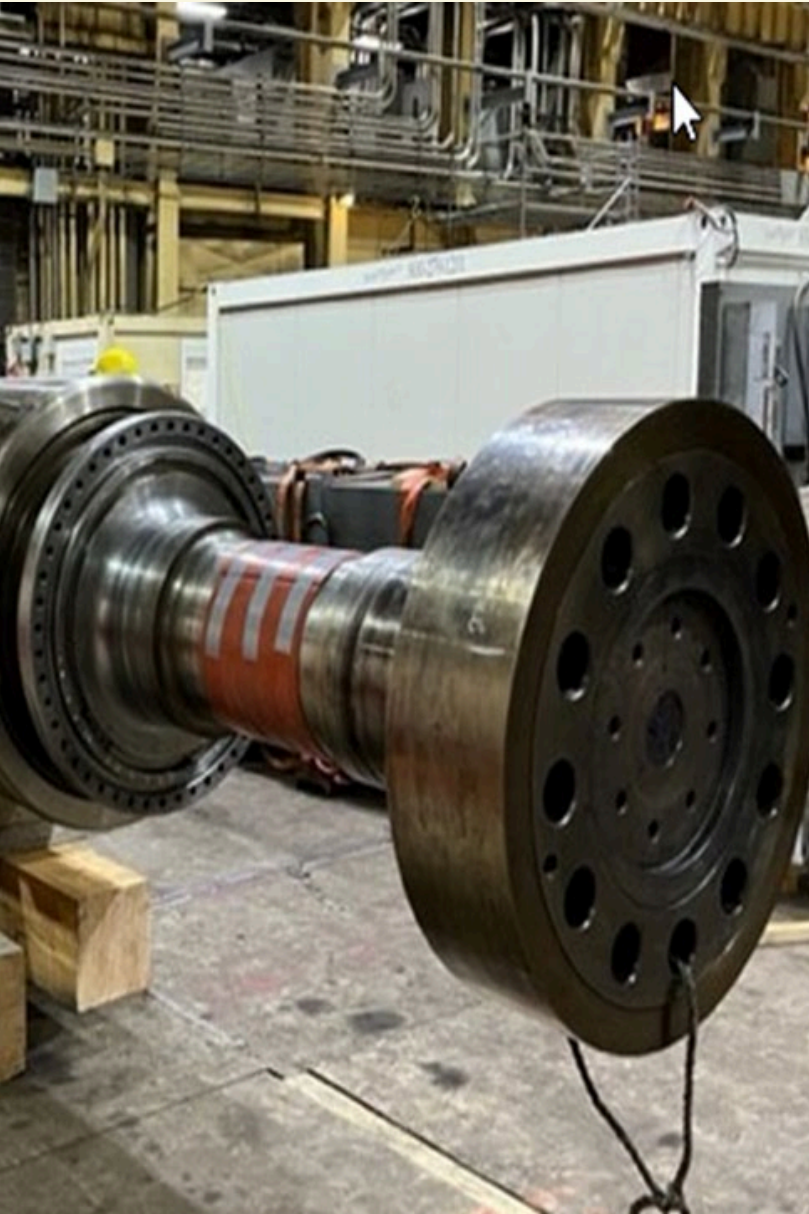
- **Operate and maintain** the system in accordance with all applicable **NERC Reliability Standards**; and

## Distribution

- Maintain the **System Average Interruption Duration Index (SAIDI\*)** to **top quartile performance** for a benchmark of comparable electrical utilities, excluding Major Event Days; and
- Maintain the **System Average Interruption Frequency Index (SAIFI\*)** to **top quartile performance** for a benchmark of comparable electric utilities, excluding Major Event Days.

All measures will be tracked on a 12-month rolling average basis.

\*Defined in glossary



# 2024 PERFORMANCE

## SD-4 Performance

- Met customer energy requirements 100% of the time
- More improvement needed to reduce forced generation outages
- Minimized duration of outages for customers
- Minimized frequency of outages for customers
- Met applicable NERC reliability standards

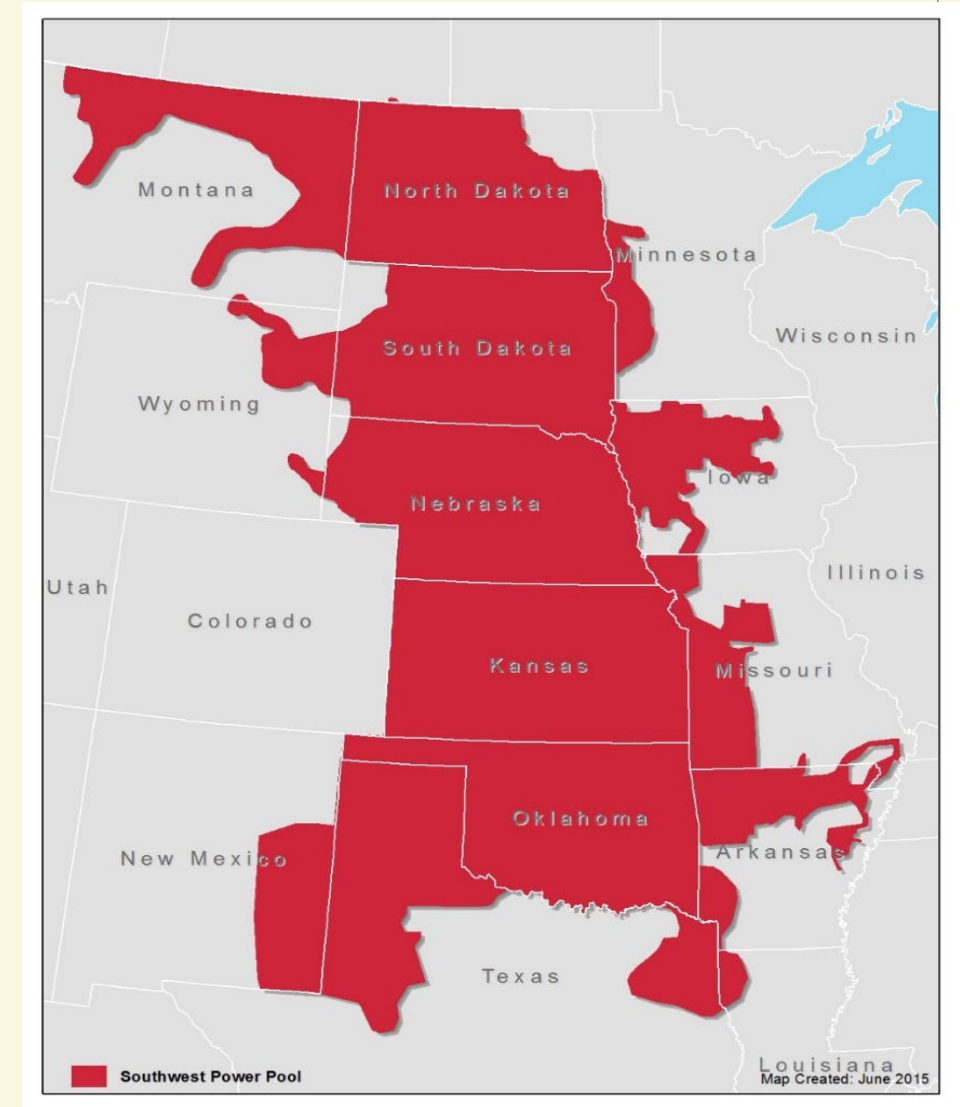
**OPPD SHALL  
ASSURE  
GENERATION  
RESOURCES AND  
PURCHASE POWER  
PORTFOLIO MEETS  
CUSTOMER  
ENERGY DEMAND  
100% OF THE TIME.**



# ENERGY SUPPLY

OPPD had generation and energy supply available to meet customer demands throughout 2024

- SPP real-time balancing of generation and load
- Set up with a Planning Reserve Margin and the criteria of SD9
- Transmission reservations under SPP tariff provide a firm “lane in the highway” to deliver energy to load



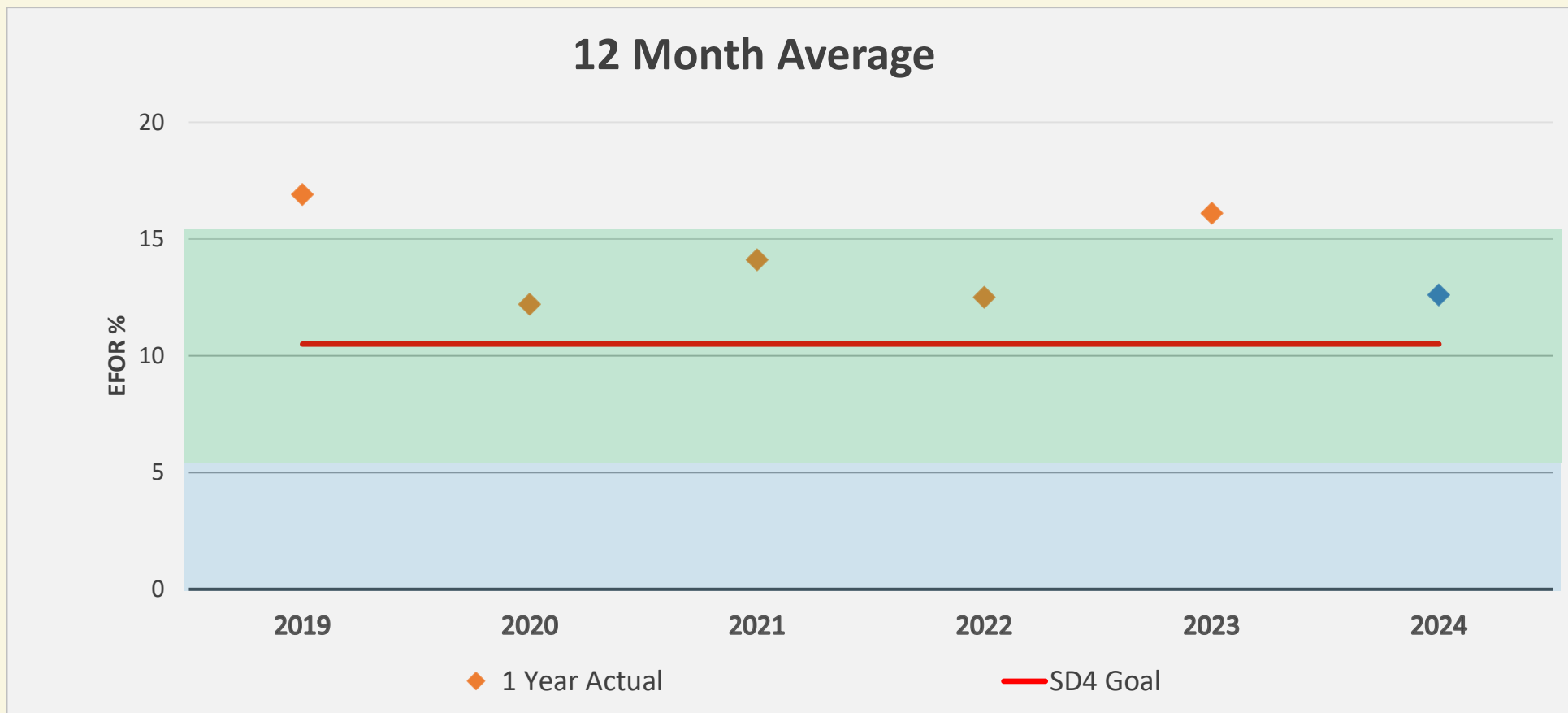
# GENERATION RELIABILITY



# GENERATION

## EQUIVALENT FORCED OUTAGE RATE (EFOR):

*Ratio of Forced Outage Hours to Service Hours*



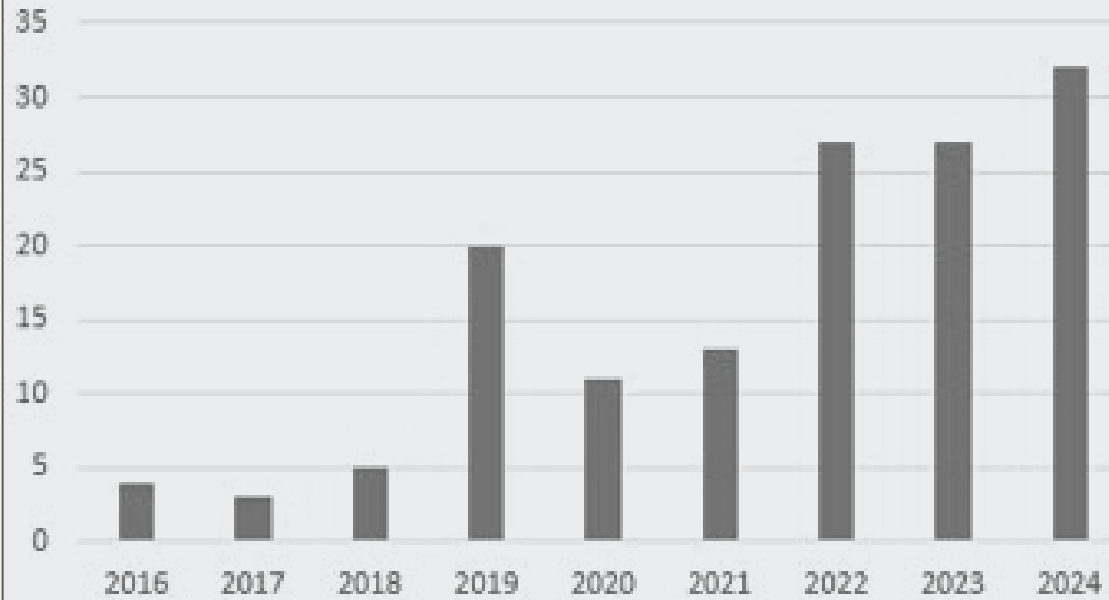
**2024 EFOR WAS 12.6% 2<sup>ND</sup> QUARTILE PERFORMANCE: GOAL NOT MET**

\*Includes all owned generation

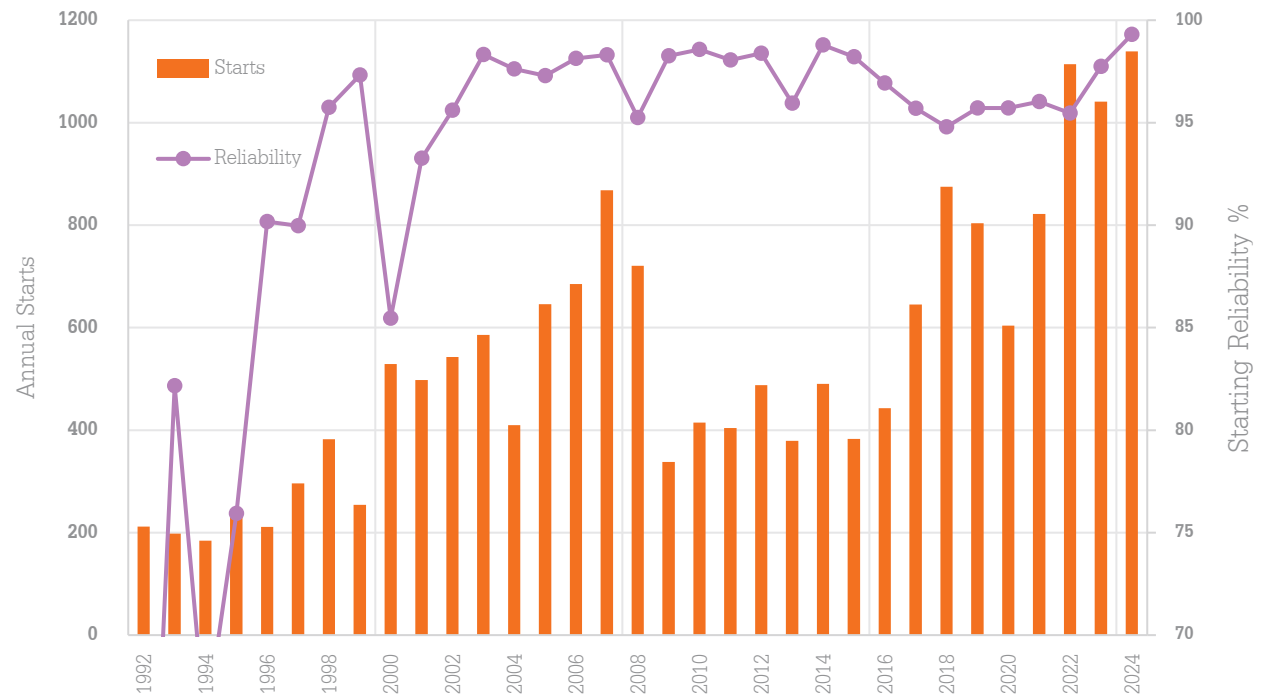
# GENERATION: A RECORD YEAR



### SPP Reliability Events Since 2016



### OPPD Fleet Annual Starts and Starting Reliability





# ELECTRIC SYSTEM RELIABILITY

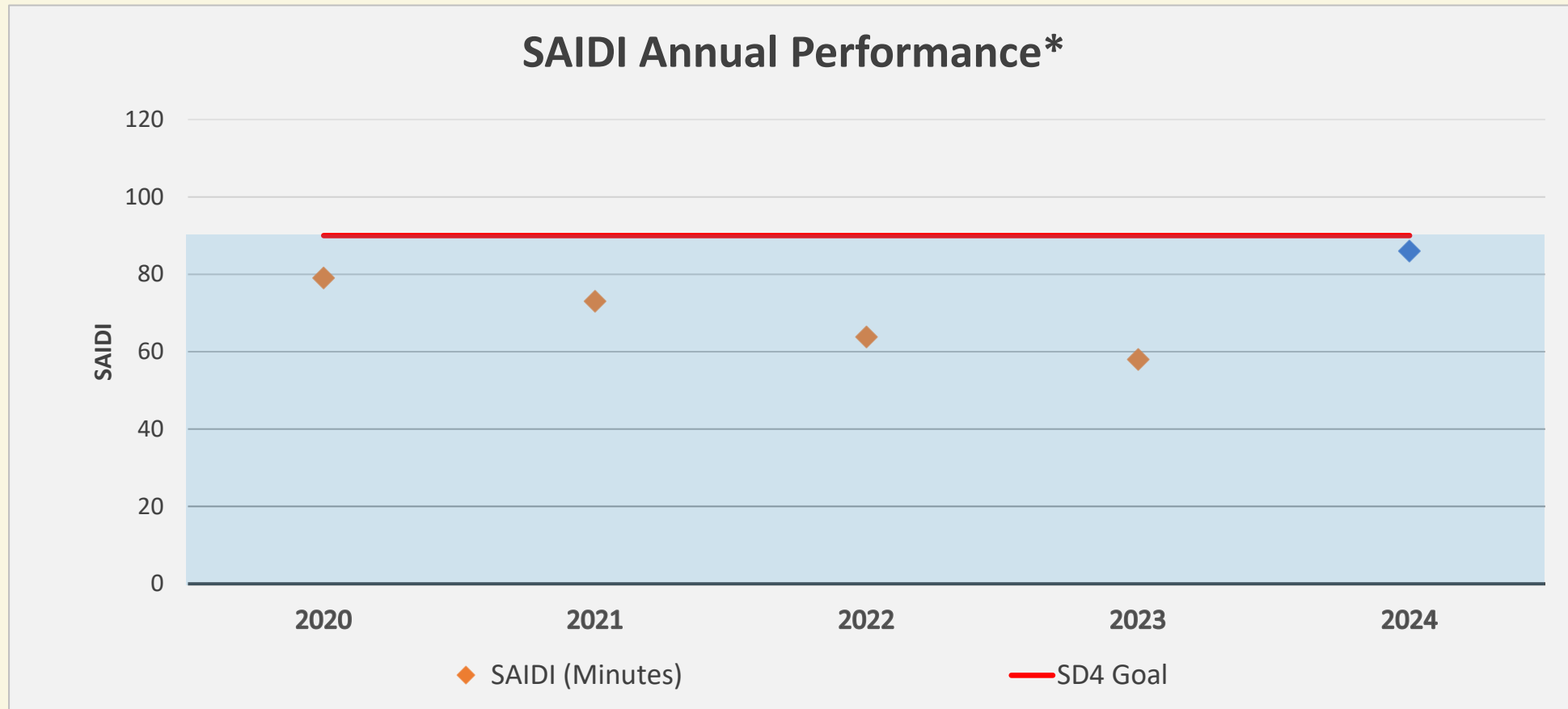




# CUSTOMER INTERRUPTIONS

## SYSTEM AVERAGE INTERRUPTION DURATION INDEX (SAIDI)

*Average outage length across the system per customer*



**2024 SAIDI WAS 86 MINUTES 1<sup>ST</sup> QUARTILE PERFORMANCE**

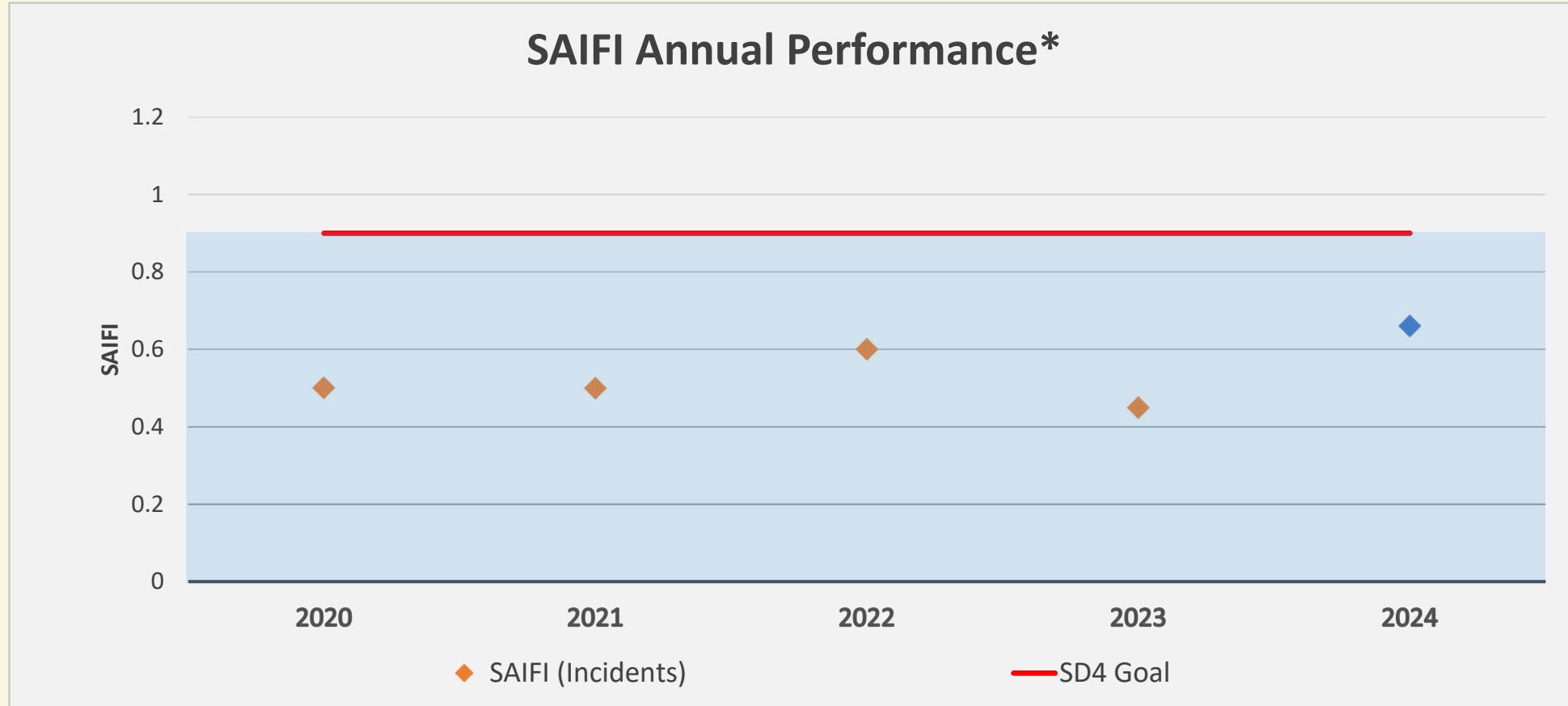
\*Excludes Major Event Days

# CUSTOMER INTERRUPTIONS



## SYSTEM AVERAGE INTERRUPTION FREQUENCY INDEX (SAIFI)

*Average frequency of outages across the system*



**2024 SAIFI WAS 0.66 INCIDENTS 1<sup>ST</sup> QUARTILE PERFORMANCE**

\*Excludes Major Event Days

## **STORM CHALLENGES**

- Significant storm impacts in 2024
- Evolving system design needs
- Mature urban tree canopy



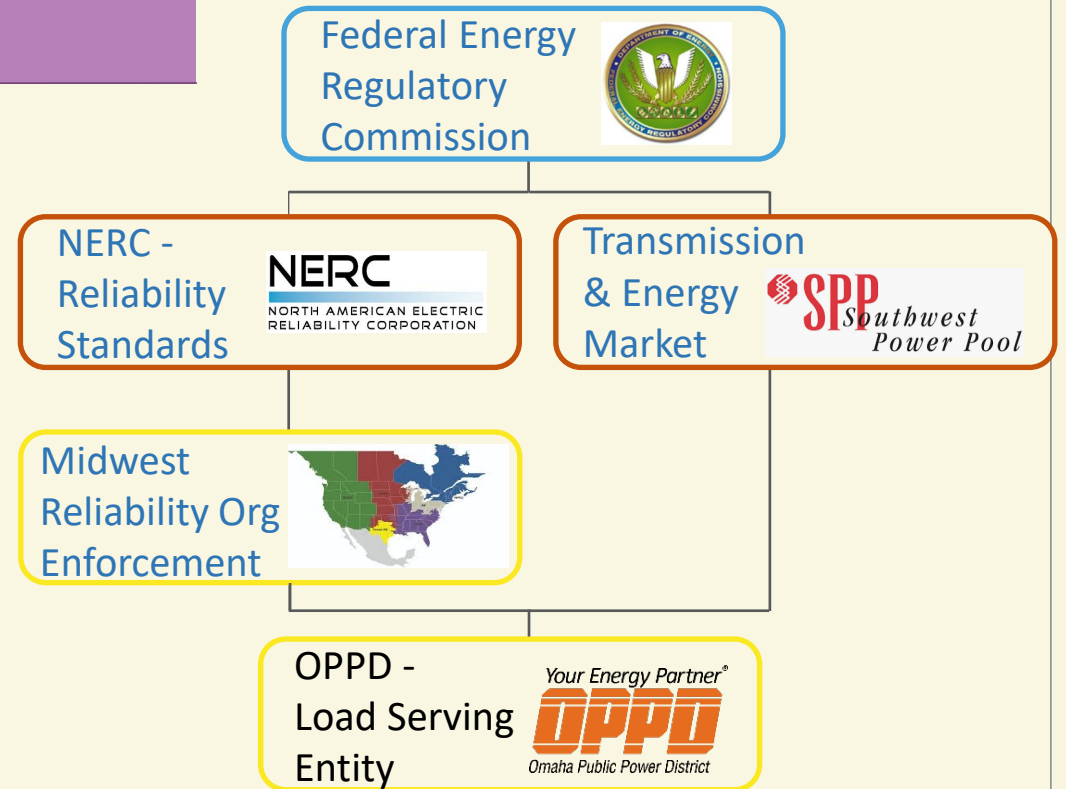
**MAINTAIN A  
RELIABLE  
TRANSMISSION  
SYSTEM  
IN ACCORDANCE  
WITH NERC  
STANDARDS**



# TRANSMISSION RELIABILITY

OPPD has met all regulatory requirements to ensure a reliable transmission system.

- MRO 2024 Compliance Activities
  - Rigorous Self-Monitoring Program
  - Quarterly Compliance self-certifications
  - On-site Audit every 3-years
- No material NERC violations since the last SD-4 update



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## RECOMMENDATION:

The System Management & Nuclear Oversight Committee has reviewed and accepted this Monitoring Report for SD-4 and **recommends that the Board finds OPPD is taking reasonable and appropriate measures to comply** with Board Policy SD-4.

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### SD-4 Performance

- Met customer energy requirements 100% of the time
- Improvement needed to reduce forced generation outages
- Minimized duration of outages for customers
- Minimized frequency of outages for customers
- Met applicable NERC reliability standards

# Any reflections on

- what has been accomplished, challenges and/or strategic implications?

