

# Nebraska Public Power Utilities CEO Luncheon

John McClure, *Nebraska Public Power District*

Javier Fernandez, *Omaha Public Power District*

Kevin Wailes, *Lincoln Electric System*

**Moderator:** Stephen Bruckner, *Fraser Stryker*



Nebraska  
Wind & Solar  
CONFERENCE & EXHIBITION

# POWERING THE FUTURE:

## The Coming Energy Expansion

October 2023



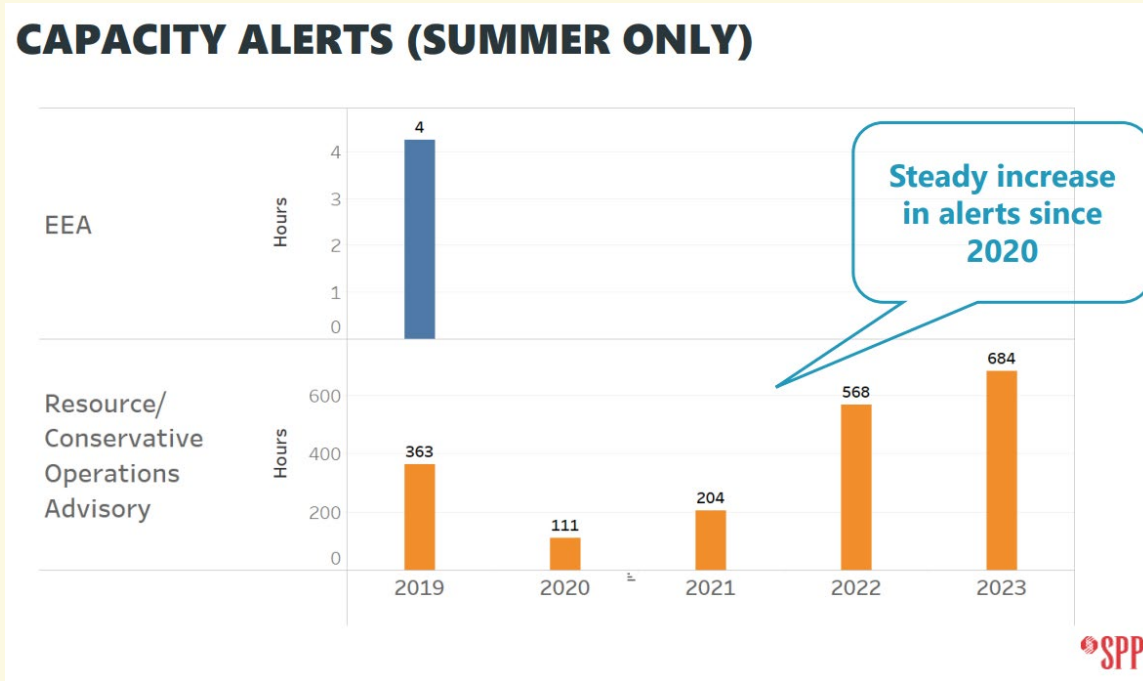
# Impacts on growth

## ENERGY CONSUMPTION IN THE U.S.



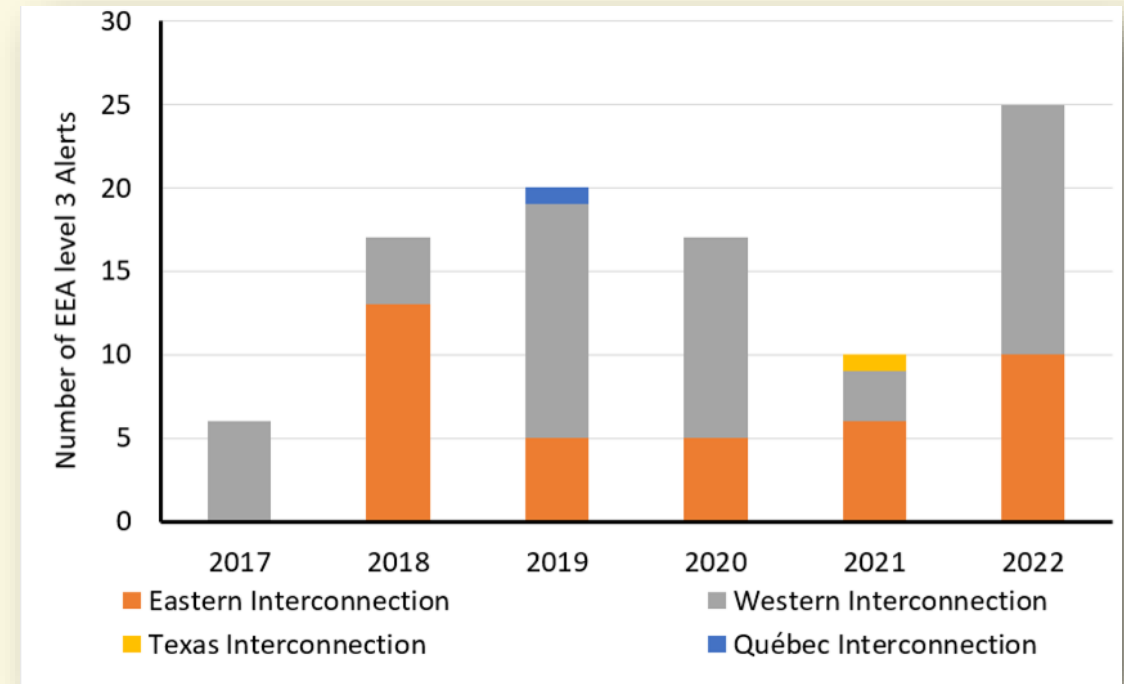
**Figure 2.** As the U.S. transitions toward net-zero, electricity is projected to grow from 20% of final energy in 2020 to ~40–60% by 2050.

## Southwest Power Pool Summer Alert Hours



Source: SPP Summer 2023 Update

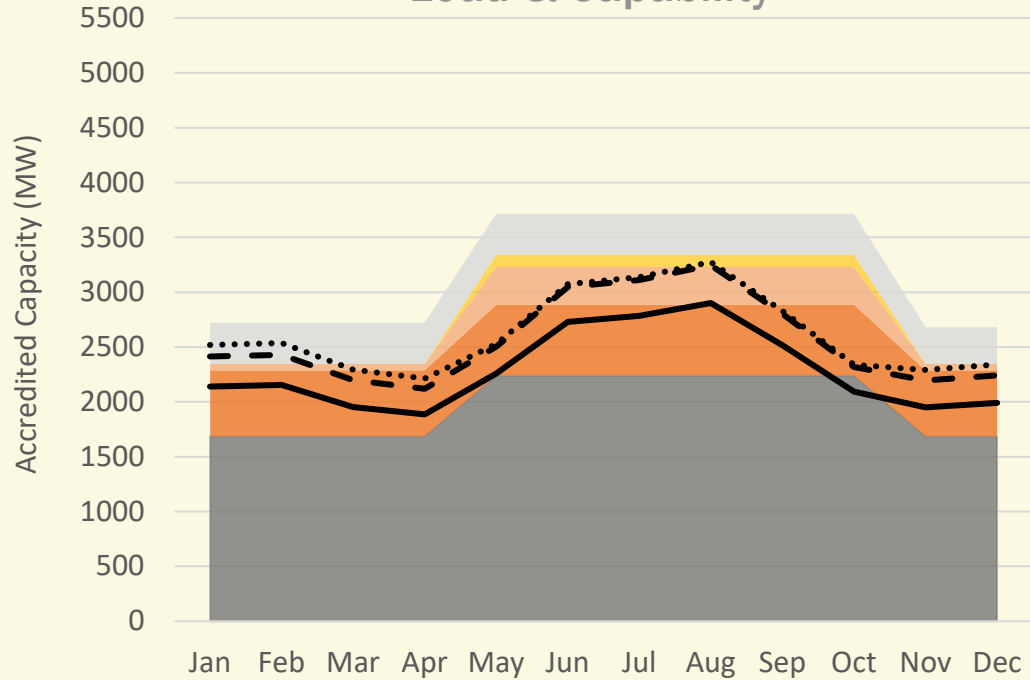
## Energy Emergency Alerts Since 2017



Source: NERC State of Reliability, 2023

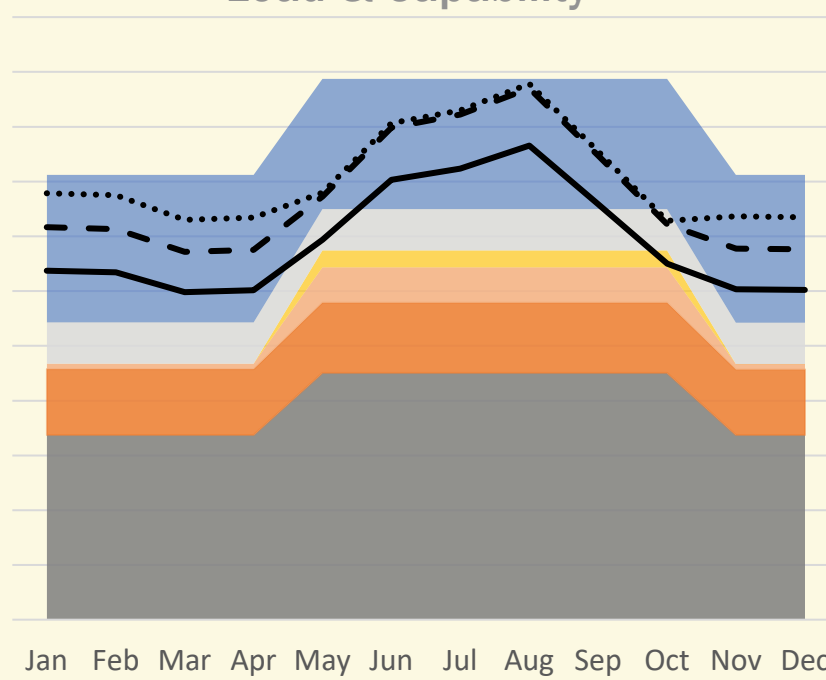
# 2022 Forecast

OPPD 2027 Monthly Load & Capability



# 2023 Forecast

OPPD 2032 Monthly Load & Capability



- Near Term Generation
- Short Term Capacity
- Demand Response
- Planned PwP Resources
- Committed PwP Resources
- Existing Resources
- Peak Demand
- - - Current PRM
- ..... Anticipated PRM

Season	2022	2023	% Growth
Winter	2,535 MW	3,893 MW	54%
Summer	3,274 MW	4,892 MW	49%

Total Load Obligation = Forecasted Load Plus Anticipated Reserve Margin

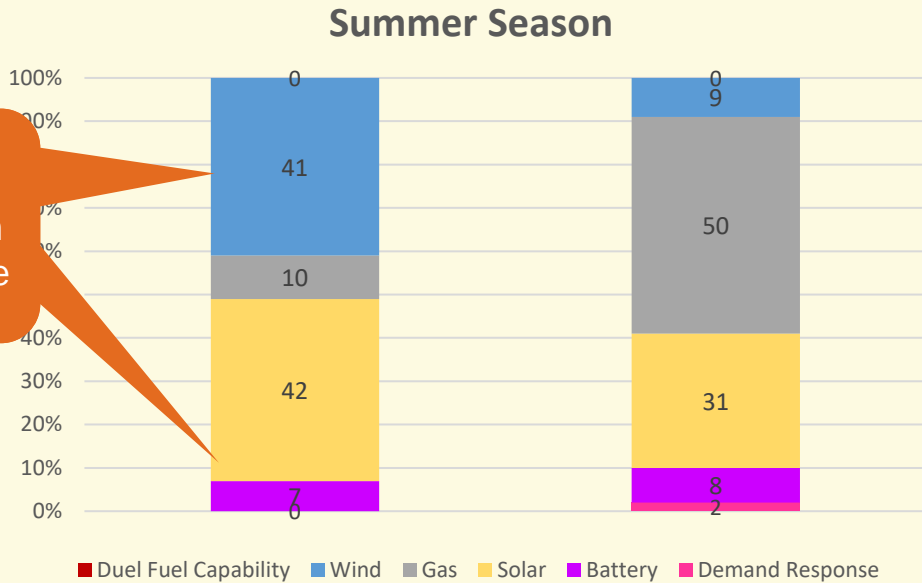
# New generation is guided by our mission

Resources	Range of Incremental Additions (MW)
Turtle Creek Station (Gas)	450
Standing Bear Lake Station (Gas)	150
Platteview Solar	81
Renewables (Solar and/or Wind)	1,000 – 1,500
Storage (4-hour equivalent)	Up to 125
Dual Fuel Combustion Turbine	600 – 950
Demand Response	32+
Added fuel oil capability and storage at existing facilities	Approximately 320

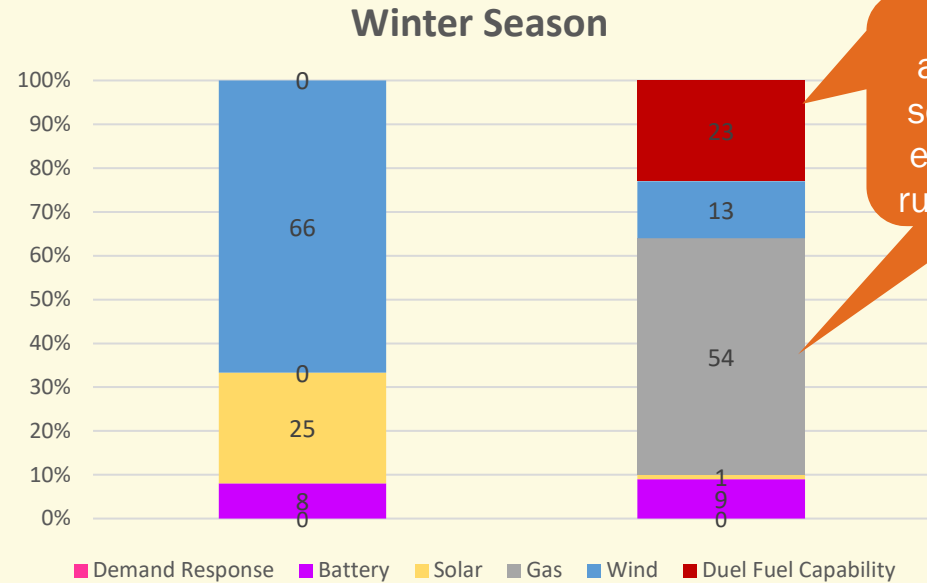
- Affordable**  
 Minimize total costs given our goals and assumptions
- Reliable**  
 Create enough accredited capacity to meet regulatory requirements, and predictable serve customers while reducing risk associated with importing energy.
- Environmentally sensitive**  
 Provide realistic pathway to achieving net-zero carbon by 2050.

# We expect renewables to provide ~90% of energy from the new generation, while ensuring reliability as well

~90% of energy will come from carbon-free sources



*Energy sold to Customers*      *Resource value to SPP*



77% of accredited sources are expected to run very little

*Energy sold to Customers*      *Resource value to SPP*





*Platteview Solar – Aerial of South Parcel*



*Platteview Solar – Aerial of Central Parcel*