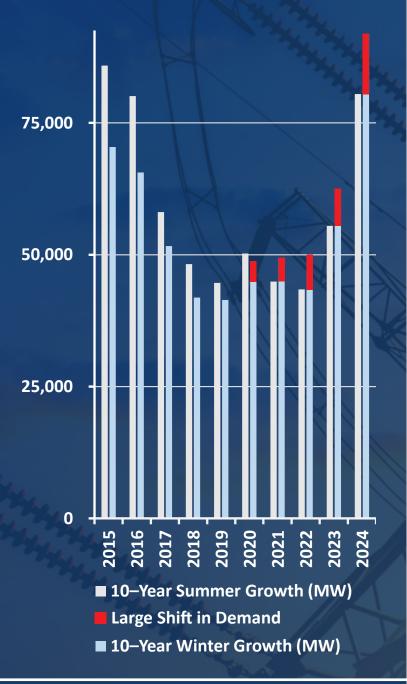
しと出て

Long-Term Reliability Assessment 2023

The LTRA identifies reliability trends, emerging issues, and potential risks to the bulk power system (BPS) over a 10-year assessment period. Industry faces mounting pressure to keep pace with accelerating electricity demand, energy needs, and transmission system adequacy as the resource mix transitions.

LTRA | Video







MISO

2028: Capacity shortfall; winter generator and fuel risk

SERC-Central

2025-2027: Capacity shortfall

Elevated Risk Areas

Maritimes

2026: Low capacity reserves

New England

2024: Winter fuel supply risk

New York

2025: Low capacity reserves

Ontario

2028: Low capacity reserves

SPP

2024: Winter generator and fuel risk; insufficient dispatchable resources

ERCOT

2024: Winter generator and fuel risk; insufficient dispatchable resources

WECC-BC

2026–2027: Low capacity reserves

WECC-CA/MX

2026: Insufficient dispatchable resources

WECC-NW

2026: Insufficient dispatchable resources

WECC-SW

2026: Insufficient dispatchable resources

 Add new resources with reliability attributes, manage retirements, and make existing resources more dependable

High Risk

■ Elevated Risk■ Normal Risk

- Expand the transmission network to provide more transfer capability and deliver supplies from new resources and locations to serve changing loads
- Adapt BPS planning, operations, resource procurement markets, and processes to a more complex power system
- Strengthen relationships among reliability stakeholders and policy makers

Demand Growth

The BPS is currently forecast to have its highest demand and energy growth rates since 2014, mainly driven by electrification and projections for growth in electric vehicles over this assessment period.

Generation Trends

As fossil generation is retired, resource growth is becoming more challenging. More than 83 GW of generator retirements are planned through 2033, and more are expected. Generation plans need to consider growing energy needs and grid stability.

Resource Adequacy Risk

Capacity shortfalls are projected in areas where future generator retirements are expected before replacement resources can be put in service to meet rising electricity demand.

Priority Actions

Natural gas supply infrastructure and the BPS form an interconnected energy system. NERC endorses actions to establish reliability rules for the natural gas infrastructure that is necessary for an interconnected energy system.