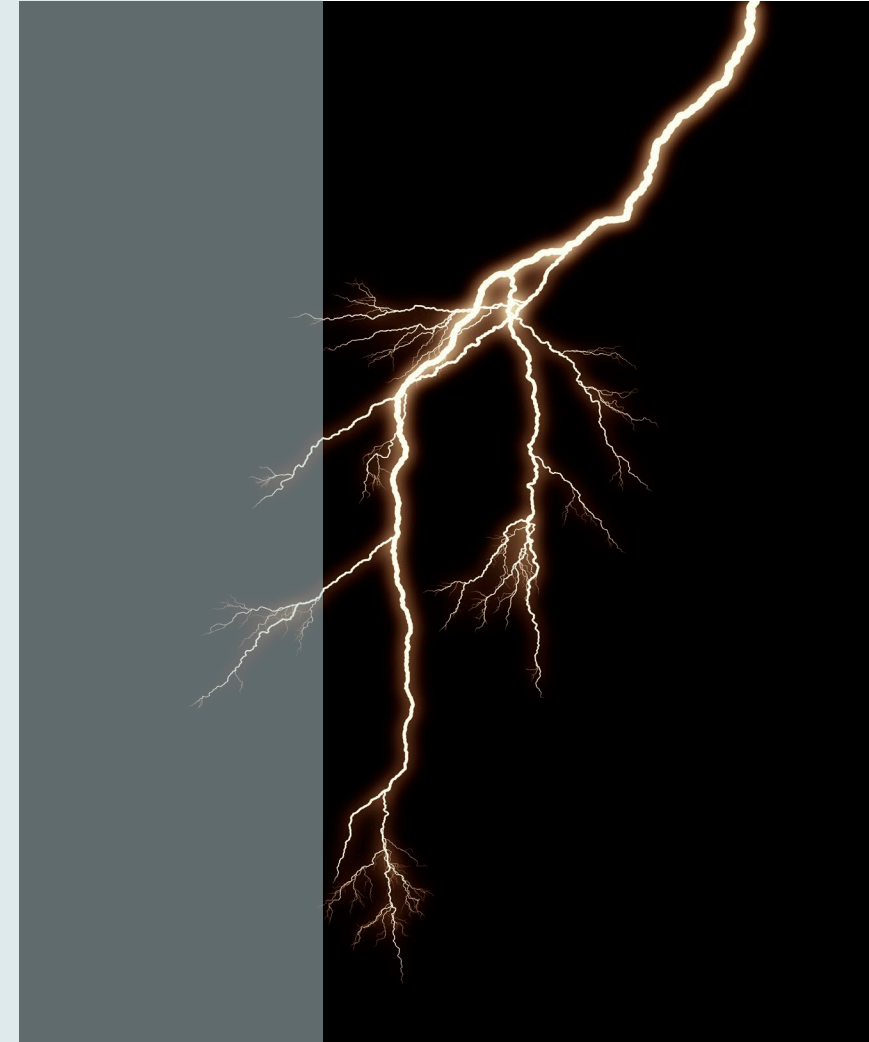


ELECTRIC RELIABILITY – FEDERAL POLICY

Ohio Manufacturer's Energy Conference
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ELCON





ELCON is the national association representing large industrial and commercial consumers of electricity focusing on policies that affect availability, reliability, and affordability of electricity service.

ELCON represents its members before FERC, NERC, Congress, and other state and federal agencies. ELCON members benefit from ELCON's advocacy efforts, its technical resources and educational Workshops, and the ability to network with others involved in corporate energy management.

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THE CHANGING LANDSCAPE

Policy Impacts on Reliability



Reliability Challenges



95% of PJM
Interconnection Queue

21% of PJM installed capacity
retiring by 2030



The projections in this study indicate that the current pace of new entry would be insufficient to keep up with expected retirements and demand growth by 2030.



Image courtesy of Dan Koeck for The Washington Post

EPA

New Source Performance Standards for Greenhouse Gas Emissions

88 Fed. Reg. 33240 (May 23, 2023)

Starting in 2030, the proposal would generally require more CO₂ emissions control at fossil fuel-fired power plants that operate more frequently and for more years and would phase in increasingly stringent CO₂ requirements over time. The proposed requirements vary by the type of unit (new or existing, combustion turbine or utility boiler, coal-fired or natural gas-fired), how frequently it operates (base load, intermediate load, or low load (peaking) and its operating horizon (i.e., planned operation after certain future dates).

PERFORMANCE AND RESOURCE ADEQUACY



1 megawatt of variable generation \neq 1 megawatt of baseload generation

PERFORMANCE AND RESOURCE ADEQUACY

Inverter based resources (IBRs) - generating facilities that connect to the electric power system using power electronic devices that change direct current (DC) power produced by a resource to alternating current (AC) power compatible with distribution and transmission systems.

FERC:

- RD22-4-000: Requires NERC to register IBRs with an aggregate impact on the bulk power system
- RM22-12: Proposed rule to develop new or modified Reliability Standards that address reliability gaps related to inverter-based resources (IBR): data sharing; model validation; planning and operational studies; and performance requirements
- Order No. 2023: provide accurate and validated models to transmission providers during the generator interconnection process that provide a comparable degree of accuracy as the models required of a synchronous generator.
- Wholesale Market Reforms: accreditation, price signals, minimum offer price rule (MOPR), ancillary services



INFRASTRUCTURE

“To meet our ambitious clean energy goals, we need to expand the nation’s transmission capacity by 60% over the next seven years,” U.S. Secretary of Energy Jennifer M. Granholm



FERC:

- Order No. 2023: Generator Interconnection Process Reforms
- RM21-17: Proposed revisions to transmission planning and cost allocation
- AD23-3: minimum interregional transfer capability

DOE:

- National Transmission Needs Study
- National Transmission Planning Study
- Grid Resilience and Facilitation Grants
- Transmission Siting and Economic Development Grants



INFRASTRUCTURE



- Debt Ceiling Bill: Requires NERC to perform Interregional Transfer Capability Study
- BIG WIRES: minimum interregional transfer capability requirements
- CHARGE Act: interregional, grid enhancing technologies, cost allocation
- Grid Resiliency Tax Credit Act
- Permitting reform

GET THE BALANCE RIGHT

The core threat is this: dispatchable generating resources, even with many years of useful life remaining, are retiring far too quickly and in quantities that threaten our ability to keep the lights on. The problem generally is not the addition of intermittent resources such as wind and solar, but the far too rapid subtraction of dispatchable resources, especially coal and gas

FERC Commissioner
Mark Christie

In terms of capacity value... one nameplate megawatt of wind or solar is simply not equal to one megawatt of gas, coal or nuclear...[t]he numbers just do not balance

FERC Commissioner
Mark Christie

As the wholesale markets' prices are distorted by subsidies, the generation assets with the attributes required for system stability will retire and system stability will be imperiled

FERC Commissioner
James Danly

The central challenge is calibrating the pace of change with the reliability needs of a transforming system that must remain reliable and resilient at all times and under all conditions. As it exists today, this balance is out of calibration and must be corrected

NERC President &
CEO Jim Robb

New generation is coming online slower than anticipated. If these trends continue, our models show increased risk of having insufficient resources later in this decade to maintain the reliable electric service that consumers expect

PJM President &
CEO Manu Asthana

QUESTIONS?

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