



MEMORANDUM

February 10, 2024

TO: Members of the Subcommittee on Energy, Climate, and Grid Security

FROM: Committee Majority Staff

RE: Hearing entitled “Powered Up: State Utility Regulators on Challenges to Reliable, Affordable Electricity”

I. INTRODUCTION

On Wednesday, February 14, 2024, at 10:30 a.m. (ET) in 2322 Rayburn House Office Building, the Subcommittee on Energy, Climate, and Grid Security will hold a hearing titled “Powered Up: State Utility Regulators on Challenges to Reliable, Affordable Electricity.” The hearing will provide an opportunity to hear State commissioners’ perspectives on threats to affordable and reliable electricity.

II. WITNESSES

- **Jim Huston**, Chairman, Indiana Utility Regulatory Commission;
- **Nick Myers**, Commissioner, Arizona Corporation Commission;
- **Tricia Pridemore**, Commissioner, Georgia Public Service Commission; and,
- **Keith Hay**, Senior Director of Policy, Colorado Energy Office.

III. BACKGROUND

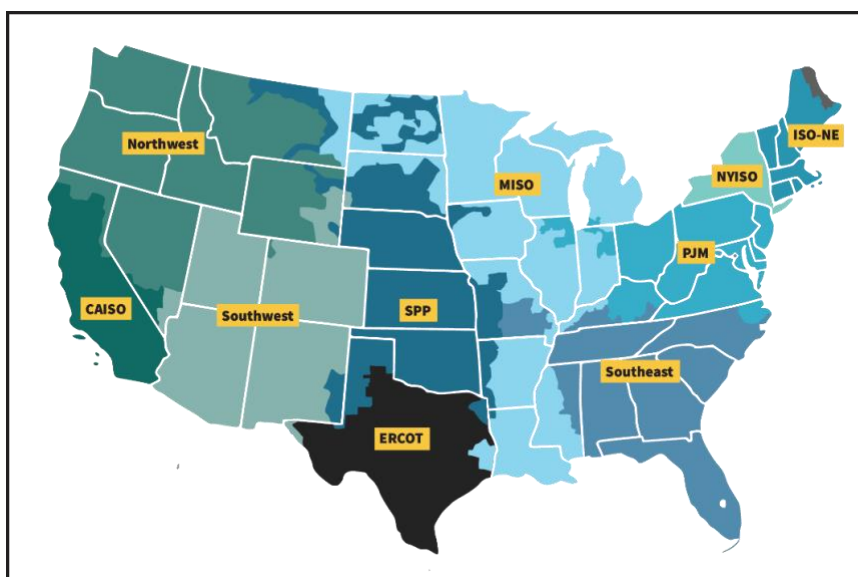
A. Changes in Electricity Regulation

Historically, vertically integrated utilities provided all three components of electricity – generation, transmission, and distribution – to their customers through integrated resource planning. Under this structure, utilities and State commissions, the utility regulators, would examine and update plans and rates for generation, transmission, and distribution. This resulted in transparent planning and relatively stable and predictable, total costs for delivered power.

In the late 1990s and early 2000s, some States restructured electric service through the concept of retail choice. States with retail choice allow end-use customers – commercial, industrial, and residential – to select their generation provider(s). In other words, utilities and non-utility companies compete to provide generation to customers. In retail choice States, utilities still provide distribution power delivery through wires as regulated by the State and/or other municipality.

In addition to the changes at the retail level, many changes have taken place at the wholesale level. The Federal Energy Regulatory Commission (FERC) regulates transmission and wholesale sales of electricity in interstate commerce under its authority in the Federal Power Act. Through legislation and major Orders issued by FERC, namely Order Nos. 888, 889, and 2000, utilities were encouraged to open access to their transmission system to generation and power producers not owned by the incumbent utility.

Open access and competition at the wholesale level ultimately led to the formation of Regional Transmission Organizations (RTO) and Independent System Operators (ISO), otherwise known as RTOs/ISOs.¹ A primary function of RTOs/ISOs is to coordinate dispatch and operation of the electrical system. In recent years, RTOs/ISOs have taken on a greater direct role in planning the transmission system and (in)direct role over the adequacy of generation resources (known as resource adequacy) in their respective footprints, a role that historically was undertaken exclusively by State commissions.



The goal of open access and competition at the wholesale and retail levels was to reduce costs paid by consumers, promote economic efficiency, shift risk from ratepayers to private investors, and promote reliability. However, questions remain whether these structural changes have delivered their intended benefits, especially cost savings to retail customers. In contrast to the long-term integrated resource planning of vertically integrated utilities overseen by the state utility commissions, several RTOs/ISOs operate so-called capacity markets for resource adequacy. While varied among the RTOs/ISOs, capacity markets solicit competitive bids from generators in return for a promise to provide electricity during a future period, generally one to three years.

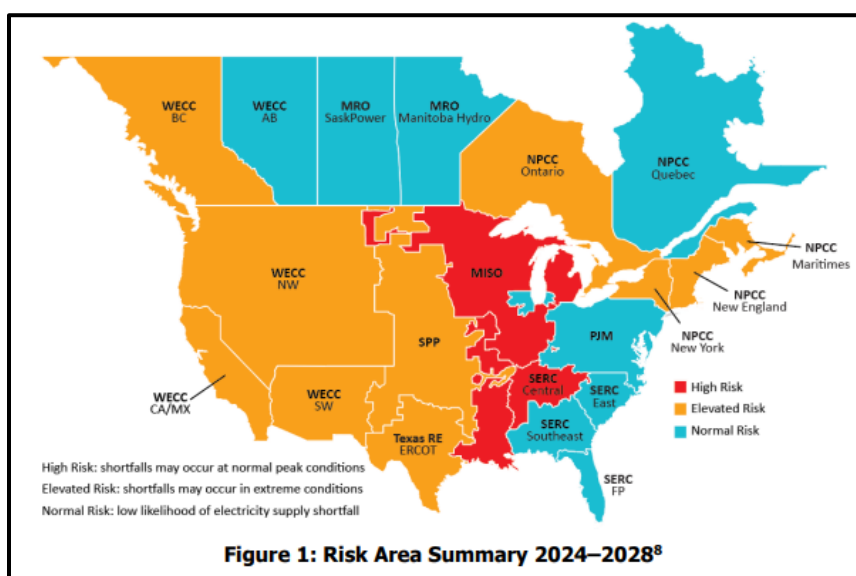
¹ To date, there are seven RTOs/ISOs in the United States: California ISO (CAISO), Electric Reliability Council of Texas (ERCOT), ISO New England (ISO-NE), Midcontinent Independent System Operator (MISO), New York ISO (NYISO), PJM Interconnection (PJM), and Southwest Power Pool (SPP).

Differing priorities under RTOs/ISOs create challenges for State regulators to ensure stable and predictable costs, regulatory certainty, and reliability. For example, unlike the comprehensive and long-term consideration of integrated resource planning by States and vertically integrated utilities, capacity markets consider short-term costs and revenues for investors. Additionally, transmission costs in RTOs/ISOs can be spread across the entire footprint, even when some utilities and ratepayers see little to no direct benefits.

B. Electric Reliability

Reliability is the normal operation of the electric grid to meet customer demand. At its core, electric reliability is the ability to meet demand for electricity continuously while operating within the engineering boundaries of the electric grid. A common planning metric for reliability is resource adequacy, which establishes the need for a minimum amount of generation capacity plus a reserve margin to meet expected peak demand. However, changes in the resource mix and resource availability complicate this process. While resource adequacy requires minimum levels of generation capacity, not all such capacity is interchangeable. Weather-dependent generation such as wind and solar is not always interchangeable with thermal or fossil generation.

The North American Electric Reliability Corporation (NERC) regularly assesses the state of electric reliability and resource adequacy across regions of the United States. For years, NERC has warned of resource shortfalls that could lead to severe consequences for reliability. As indicated in the map below, most regions surveyed by NERC in its 2023 Long-Term Reliability Assessment show elevated reliability risk in the near future during peak periods, generally summer. However, changes to generation sources and load patterns have also created risks in other seasons, such as winter; many regions that historically had adequate generation capacity in winter now face additional challenges as their generation mixes have changed.²



² https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_WRA_2023.pdf. NOTE: Despite the designation of “Normal Risk”, PJM has warned that 40 GW of existing generation is at risk of retirement by 2030, just two years after the NERC study period.

Regions of the country primarily served by vertically integrated utilities and overseen by State regulators are not immune to reliability and resource adequacy challenges. However, while the western United States shows elevated risk, much of the southeastern United States is classified as being at “Normal Risk.” In these regions, States continuously examine their portfolio and make retirement and investment decisions that benefit their ratepayers.

C. Policies and Regulations

In its 2023 Reliability Risk Priorities Report, NERC identified implementation of energy policy at varying levels of government as a reliability risk factor.³ Mandates for certain types of generation require additional costs and nuances for system planners, including States. New generation types are intermittent and require additional back-up capacity, largely in the form of natural gas-fired generation. In addition to the costs to build new infrastructure, prescriptive policy mandates introduce issues with stranded costs when these decisions require premature retirement of dispatchable generation.

NERC also notes that the suite of proposed rules by the U.S. Environmental Protection Agency (EPA) increase the risk of fossil-fuel powerplant retirements.⁴ The EPA’s May 2023 proposal for fossil-fuel fired power plants – the Clean Power Plan 2.0 – would set limits for new gas-fired combustion turbines, certain existing gas-fired combustion turbines, and existing coal, oil, and gas-fired steam generating units. Serious questions have been raised about the commercial viability of compliance technologies of the proposal as well as the ability of States to comply with the proposed standards within prescribed timelines.⁵ The proposed rule presents issues for States that would have to implement the standards and ratepayers that must pay for them.

D. State Perspectives

Various federal and state policies may create challenges for State regulators when planning and setting rates. Additionally, risk and uncertainty for ratepayers may be created by the increased retirement of dispatchable generation sources such as coal, natural gas, and nuclear, the growth of intermittent solar and wind generation, and the influence of RTOs/ISOs on the mix of electricity-generating resources. These changes are occurring at a time when electricity demand is projected to grow across the United States. For decades, customers were able to depend on State utility commissions and knew that the utility and State utility commission were ultimately responsible when issues arose. Now when the lights go out, it may be unclear who is ultimately responsible in today’s complex web of planning and regulatory compliance.

³https://www.nerc.com/comm/RISC/Related%20Files%20DL/RISC_ERO_Priorities_Report_2023_Board_Approved_Aug_17_2023.pdf.

⁴ https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_LTRA_2023.pdf.

⁵ See House Energy and Commerce Committee hearings on the Clean Power Plan 2.0, <https://energycommerce.house.gov/events/environment-manufacturing-and-critical-materials-subcommittee-hearing-clean-power-plan-2-0-epa-s-effort-to-jeopardize-reliable-and-affordable-energy-for-states>, and <https://energycommerce.house.gov/events/environment-manufacturing-and-critical-materials-subcommittee-hearing-clean-power-plan-2-0-epa-s-latest-attack-on-america-s-electric-reliability>.

These challenges are exacerbated by environmental and regulatory policies that are leading to the premature retirement of reliable and dispatchable generation. While legal and technological questions remain, States may be required to comply with environmental mandates, including trying to justify costs for ratepayers. These include stranded costs of retiring resources, costs of replacement generation, costs of transmission, as well as costs of compliance technologies that may drastically raise retail rates on utility customers. The true costs for the environmental policies driving an “energy transition” cannot be calculated.

IV. ISSUES

The following issues may be examined at the hearing:

- The changes in regulatory structures in the United States and their impact on the roles and responsibilities of State utility commissions.
- The current state of electricity costs and electric reliability.
- The pace of electric generating unit retirements and the costs to ratepayers associated with retiring resources and building new infrastructure.
- The impacts of the proposed standards on State responsibilities concerning the power sector and regulation of existing electric generating sources.
- The technical challenges and cost considerations relating to the implementation of EPA regulations (proposed and final) on the power sector, including the Clean Power Plan 2.0.

V. STAFF CONTACTS

If you have any questions regarding this hearing, please contact David Burns, Peter Spencer, or Mary Martin of the Committee staff at (202) 225-3641.