Federal Energy Regulatory Commission

Reliability Technical Conference

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Remarks of Commissioner Mary Throne, Wyoming Public Service Commission,

on behalf of the

Western Interconnection Regional Advisory Body (WIRAB)

Good afternoon, Chairman, Commissioners, and FERC Staff. My name is Mary Throne. I serve as a Chairman of the Wyoming Public Service Commission, but I am here today in my capacity as the Chair of the Western Interconnection Regional Advisory Body (WIRAB) and speaking on behalf of WIRAB.

WIRAB is the Regional Advisory Body recognized by FERC under Section 215(j) of the Federal Power Act to provide advice to the Commission on reliability matters in the Western Interconnection. WIRAB serves a unique role in the West. All appointed WIRAB members represent the public interest of their respective states and provinces, and WIRAB strives to speak with a single voice on behalf of all the states and provinces of the Western Interconnection on bulk electric system reliability matters.

I am going to focus my remarks today on three key messages:

1. Policy and regulations impacting reliability because they may drive rapid changes in the energy sector. Long term studies of future scenarios are helpful when conducted transparently and independently to determine how policy and regulations will impact the reliability of the electric grid. Stakeholders throughout the industry should come together to discuss the best way to mitigate adverse impacts.
2. Resource adequacy programs and expanding markets in the West improve situational awareness and optimizes diversity of loads and resources. Robust resource adequacy programs and markets in the West should consider federal regulations as well as state and local policy objectives.
3. Transmission optimization and ultimately expansion will help ensure reliability as the West grapples with policy and regulations that impact the resource mix in the Western Interconnection.

1. Policy and regulations impact reliability.

The North American Electric Reliability Corporation (NERC) has recently identified Energy Policy as a new Risk Profile in its 2023 Reliability Risk Priorities Report. The implications of this development are significant; proposed regulations, such as the Environmental Protection Agency's (EPA) Greenhouse Gas Standards and Guidelines for Fossil Fuel-Fired Power Plants, have the potential to have a profound impact on the energy landscape. Policies and proposed regulations are catalysts for rapid changes within the energy sector, making it imperative to thoroughly assess their effects on grid reliability prior to final adoption.

Ensuring grid reliability is fundamental even as some states and federal policies pursue decarbonization goals. Policies and proposed regulations should be designed and implemented with an understanding of their potential impacts on energy grid stability.

To comprehend the implications of policy and regulatory changes on grid reliability within the Western Interconnection, it is crucial to conduct long-term studies and to rely on those studies in developing new policy or regulatory proposals. The Western Electricity Coordinating Council (WECC) is well-positioned to lead these studies, ensuring transparency and independence to build credibility and trust in their findings. The WECC's stakeholder process guarantees that all stakeholders can access information, methodologies, and assumptions used in the studies, promoting transparency and accountability.

One noteworthy study conducted by WECC in 2021 examined the reliability impacts resulting from changes in system inertia.[1] This study explored scenarios where conventional synchronous generators, like coal and natural gas resources, were replaced by inverter-based resources, leading to reduced system inertia. WECC found a scenario where underfrequency load shed may occur. Studies such as this can serve as a foundation for exploring the reliability implications of the proposed regulations.

The primary objective of these long-term studies is to assess how existing and proposed policies and regulations may affect grid reliability and provide recommendations for mitigating or avoiding adverse impacts. This includes evaluating potential challenges, vulnerabilities, and opportunities arising from these policy changes, and identifying proactive measures to maintain or enhance grid

[1] Western Electricity Coordinating Council. Changes in System Inertia. (2021). https://www.wecc.org/Reliability/Changes%20in%20System%20Inertia%20(Final).pdf

reliability while achieving policy objectives. Active participation from all stakeholders, including regulators, utilities, grid operators, non-governmental organizations, and the public, is essential for a comprehensive and well-rounded evaluation of policy impacts and ensures that solutions are practical, well-informed, and consider a wide range of interests. Coordination between regulators with overlapping jurisdictional responsibilities is also essential.

Continuous monitoring of the effects of policies on grid reliability is vital. Regulatory authorities, such as the Commission and the Electric Reliability Organization, should look for opportunities to actively engage with their sister agencies to proactively assess proposed policy impacts and adapt regulations to changing circumstances and emerging technologies.

Furthermore, educating public officials about the complexities of grid reliability and the implications of policy changes is essential. Reports such as WECC's State of the Interconnection and NERC's State of Reliability Reports serve as valuable objective and non-partisan assessments that establish a common understanding of the reliability challenges faced by stakeholders across the industry.

WIRAB advises and works with WECC to provide state and provincial regulators and policymakers in the West with data to better inform them of the potential reliability impacts energy policymaking can have on the electric grid. This forward-looking approach is intended to encourage the preservation of a reliable energy infrastructure for generations to come.

2. Resource adequacy programs and expanding markets in the West must consider sometimes competing federal regulations, state, and local policy objectives.

In the West, electric utilities have traditionally relied on the bilateral wholesale electricity market for the exchange of capacity and energy to meet their resource adequacy requirements. This approach was seasonal in nature, leveraging the region's resource diversity. For instance, during the summer, California imported capacity and energy, while the Pacific Northwest did so in the winter. These transactions were straightforward and required minimal oversight, largely due to the Western region's surplus generating capacity. However, with the retirement of coal units and the growing demand for electricity, the surplus capacity has diminished, making resource trading more complex.

The critical need for information sharing has emerged. Forward procurement in the bilateral wholesale market is no longer reliable due to the lack of information about the capacity positions of neighboring utilities. Additionally, there's uncertainty surrounding market imports, as there's no guarantee of the counterparties' ability to deliver. In times of supply and demand constraints across

the Western footprint, this lack of information raises concerns. To ensure reliability in the face of evolving energy policies, such as the EPA's GHG Standards, it's imperative to enhance our information sharing mechanisms and institutions.

Two solutions intended to address resource adequacy and improve information sharing are emerging in the West. The Western Power Pool (WPP) is actively working on implementing the Western Resource Adequacy Program (WRAP), encompassing numerous load-serving entities in the Western region. This program is designed to provide the assurances needed to support continued capacity and energy exchange across the diverse Western landscape. In addition to WRAP, California continues to evolve the resource adequacy program within its jurisdiction.

Optimizing capacity and energy exchange is crucial for maintaining resource adequacy in the Western Interconnection while keeping power costs low for consumers. The governance and oversight of the resource adequacy programs is of utmost importance in building public trust and ensuring the program's long-term viability. It is essential for all Western states and provinces to have confidence that the programs operate in the public interest, prioritizing electric system reliability over individual interests.

Resource adequacy programs in the West must be flexible and adaptable to align with evolving policy landscapes, technological advancements, and shifts in energy demand. Continuous evaluation of these programs is necessary to ensure alignment with differing state policy objectives and effective support for grid reliability. WIRAB in its advisory role encourages WECC, as the Regional Entity, to work collaboratively with the resource adequacy programs to ensure interconnection-wide resource adequacy is maintained.

Organized markets are also steadily expanding within the Western Interconnection. For example, the California Independent System Operator (CAISO) and the Southwest Power Pool (SPP) have existing real-time markets and are planning to offer day-ahead market services. Some Western utilities are even considering joining SPP's full RTO. These reforms could lead to significant changes in system operations, including transmission scheduling and congestion management, thus creating new reliability challenges and opportunities within the Western Interconnection. However, it is important to note that there are differing points of view among the western states regarding market development, governance structures, and the path forward in the face of diverging and sometimes conflicting state policies.

A study conducted by WECC suggests that expanding real-time markets into the day-ahead timeframe could enhance reliability.[2] This expansion would improve day-ahead unit commitment and the system's responsiveness to contingencies. By coordinating resources within a large regional market footprint, this approach could reduce net load variability and reduce the need for fast-ramping resources. Furthermore, this expansion could enable market operators to mitigate transmission constraints through a more coordinated commitment of generating resources. The reliability improvements facilitated by organized markets call for continuous evaluation and the development of opportunities to enhance the Western region's wholesale electricity markets.

3. **Transmission optimization and expansion will help ensure reliability in the West**.

Ensuring the reliability of the Western Interconnection's grid heavily relies on the optimization of its transmission infrastructure. With ongoing changes in policy and regulations driving shifts in the resource mix, the need for transmission optimization becomes increasingly critical. Transmission expansion, specifically, is vital to ensure the seamless flow of energy, ultimately promoting energy reliability throughout the Western Interconnection. The resilience of the grid hinges on its ability to transmit energy reliably, particularly in the face of policy-induced changes in the resource mix.

Given the inherently cross-jurisdictional nature of the energy sector, regional collaboration and coordination are indispensable for effective transmission optimization. It's a complex process that necessitates the input and cooperation of multiple stakeholders, including utilities, regulators, grid operators, and local communities. Long-term planning plays a crucial role in assessing transmission optimization. Effective transmission optimization and expansion should be guided by principles of cost-effectiveness and aim to provide the best value for consumers.

There remain unanswered policy questions regarding the future of transmission planning in the Western Interconnection. How will new transmission lines need to be developed to achieve policy goals? Whom should policymakers and utility regulators turn to for comprehensive analysis and assessment of west-wide transmission needs? Are the regional transmission planning entities independent enough in their operations to produce results acceptable to a diverse set of stakeholders? Is there a need for a new regional entity dedicated to conducting comprehensive

[2] Western Electricity Coordinating Council. Reliability Implications of Expanding the EIM to Include Day Ahead Market Services: A Qualitative Assessment (2020). https://www.wecc.org/Reliability/EIM%20DAMS%20Market%20Paper.pdf

west-wide transmission planning? Valuable lessons can be derived from past experiences, serving as guides to achieving success in the future.

To address these questions and make informed decisions, it is crucial to understand the successes and shortcomings of the current transmission expansion policy. There exists a notable lack of unbiased and transparent information regarding the future need for transmission. Recognizing these shortcomings, the Western Power Pool and other stakeholders recently initiated an effort to conduct a Western Interconnection-wide transmission study that goes beyond the traditional regional planning requirements for Order 1000. WIRAB encourages FERC to support and actively monitor this effort to see if it satisfies the need for joint inter-regional transmission planning in the West.

Conclusion

In summary, WIRAB believes that the solution to addressing reliability risks in the Western Interconnection is multi-faceted. It will ultimately take greater regional coordination and cooperation. Long-term studies are essential for understanding the potential implications of policy and regulatory changes on the reliability of the electric grid. Development of resource adequacy programs is critical to maintaining resource adequacy within the Western Interconnection. Expansion of real-time electricity markets in the West to include the day-ahead timeframe may enhance reliability and improve situational awareness across the West. Finally, the West needs to optimize its existing transmission system while it works to effectively and transparently expand the system where needed across the Western Interconnection.

The EPA's Greenhouse Gas Standards and Guidelines for Fossil Fuel-Fired Power Plants is only one of many policies and regulations impacting the electric grid in the West. As these policies are developed, considered, or adopted, the reliability of the grid must not be jeopardized. To avoid this possibility, all relevant regulatory entities, as well as stakeholders, need to be proactively engaged in the process, prior to the final adoption of any policy with the potential to impact grid reliability. To state it another way, entities such as FERC at the federal level and utility commissions at the state level should be actively engaged early in the development and analysis of these proposed policies and regulations when meaningful input can occur. I appreciate the Commission's focus on this important topic and the opportunity to participate in a constructive dialogue for solutions.