



Committee: House Energy & Commerce Subcommittee on Energy
Event: [Winter Storm Fern Lessons: Supplying Reliable Power to Meet Peak Demand](#)
Date: March 17, 2025
Time: 10:00 AM
Place: 2123 Rayburn House Office Building

Executive Summary: Members on both sides highlighted growing electricity demand and the strain placed on the system during Winter Storm Fern. Much of the discussion focused on lessons from the storm as a “near miss,” with witnesses and Members pointing to transmission congestion, fuel supply challenges, and delays in bringing new resources online as vulnerabilities. While there was broad agreement on the need to build more generation and transmission, Members and witnesses diverged in their interpretation of grid performance. Republicans emphasized the importance of dispatchable resources and raised concerns about premature retirements of baseload generation. Democrats pointed to strong renewable performance relative to expectations and the role of transmission expansion in improving both reliability and affordability.

Member Toplines:

Chair Bob Latta (R-OH-05): Latta emphasized the severity of Winter Storm Fern while noting overall grid resilience despite some outages, and highlighted the role of the witnesses in maintaining that resilience. He argued that baseload and dispatchable resources were more critical during the storm than intermittent resources. Latta noted that the Northeast’s fuel mix relied on natural gas, coal, and nuclear, but constrained natural gas pipeline capacity limited system performance. Latta framed the storm as a warning for future grid challenges amid rising electricity demand, and underscored the need for additional dispatchable power. Latta also pointed to geopolitical risks, including Iran and the Strait of Hormuz, to emphasize the importance of leveraging domestic energy resources.

Representative Scott Peters (D-CA-50)¹: Peters delivered an opening statement on behalf of Ranking Member Kathy Castor (D-FL-14), emphasizing that electricity demand and costs are rising across all regions, risking U.S. competitiveness. He highlighted that other countries, including China, India, and those in Europe, are rapidly expanding transmission capacity and deploying advanced conductors, outpacing the U.S. Peters argued that limiting development to preferred generation types constrains grid performance, and stressed that while all available resources are needed, uneconomic generation should not be artificially maintained. He pointed to Texas’s response following Winter Storm Uri, noting that increased deployment of solar and battery storage reduced blackout risk by diversifying the resource mix. Peters also identified interconnection queue backlogs and transmission congestion as harming reliability challenges, underscoring the need for expanded grid infrastructure and increased interregional transfer

¹ Opening statements were available online at the time of memo composition.

capability. He cited the North American Electric Reliability Corporation's (NERC) Interregional Transfer Capability Study (ITCS) findings.

*Full Committee Chair Brett Guthrie (R-KY-02)*²: Guthrie highlighted recent winter storms, including Elliott, Uri, and Fern, as stress tests for the energy system that offered reliability lessons. He emphasized that during periods of peak demand in winter storms, eighty to ninety percent of additional generation came from dispatchable resources, arguing that intermittent resources like wind and solar cannot be relied upon in winter conditions. Guthrie stressed the importance of improved grid planning and coordination, noting that grid operators underestimated demand during Winter Storm Elliott, contributing to outages, while greater dispatchable capacity helped mitigate impacts during Winter Storm Fern. He called for policies that support a generation mix capable of delivering reliable and affordable energy.

Full Committee Ranking Member Frank Pallone (D-NJ-06): Pallone framed the discussion around the committee's role in ensuring energy affordability and reliability, arguing that rising oil prices linked to the Iran war are increasing costs for American consumers. He criticized Republican energy and foreign policies as contributing to higher oil and electricity prices. Despite the severity of Winter Storm Fern, he noted that the bulk power system remained resilient and that renewable resources generally performed well. He pointed to approximately 20 gigawatts (GW) of baseload capacity, largely natural gas, that was lost due to freeze-offs. Pallone also cited NERC's Interregional Transfer Capability Study (ITCS), emphasizing the need for an additional 35 GW of interregional transmission capacity, and argued that meaningful grid reliability efforts should prioritize transmission buildout. He concluded by highlighting what he described as the irony of relying on carbon-intensive resources to remedy extreme weather events caused by the overuse of carbon-intensive resources.

Witness Toplines:

Jim Robb, President and Chief Executive Officer, NERC: Robb argued that FERN was a near-miss event that reflects the findings in NERC's 2025 Long-Term Reliability Assessment (LTRA). Robb pointed to three key findings of the LTRA: that much of the U.S. could face energy shortfalls within the next five years due to rapid load growth, delays in new generation and transmission being built, and the retirement of dispatchable resources. At the same time, the grid is becoming more dependent on weather-driven resources such as wind, solar, and battery storage, which can complicate reliability planning. Robb emphasized that maintaining grid reliability will require faster deployment of energy infrastructure, careful management of generator retirements, and stronger coordination across the electric and natural gas systems.

Brett Mattison, President and Chief Operating Officer, Southwestern Electric Power Company (SWEPCO): Mattison argued that grid reliability during extreme weather depends on dispatchable generation resources such as coal and natural gas that can operate regardless of weather conditions. Drawing on SWEPCO's experience during Winter Storm Fern, he emphasized that these resources provided the majority of power during the event, while wind contributed but remained weather-dependent. Mattison also warned that rapid electricity

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demand growth, driven in part by large data centers, will require major investment in generation, transmission, and natural gas infrastructure. He argued that preventing premature retirements of existing baseload resources while expanding natural gas, nuclear, and transmission capacity and improving permitting processes will ensure reliability and affordability as demand increases.

[Michael Goggin, Executive Vice President, GridStrategies](#): Goggin argued that renewable energy performed well during Winter Storm Fern while fossil fuel generators, particularly natural gas, experienced significant outages and underperformance. He contended that gas supply disruptions and price spikes during extreme cold events expose consumers to high costs and reliability risks. He pointed to liquified natural gas (LNG) exports as increasing price volatility by tethering the domestic gas price to global prices, exposing ratepayers to the price impacts of geopolitical events. Goggin emphasized that a diverse generation mix that includes renewable resources improves grid resilience because different technologies face different outage risks. He also argued that expanding transmission and removing barriers to wind, solar, and storage development would lower costs and improve reliability.

[José Costa, President and Chief Executive Officer, Northeast Gas Association](#): Costa argued that Winter Storm Fern demonstrated the critical role of natural gas infrastructure in maintaining energy reliability in the Northeast, as pipelines, storage, and LNG facilities helped meet record demand and avoid major outages. However, the event also revealed that regional natural gas infrastructure is operating near capacity, forcing greater reliance on oil and trucked fuels during peak demand and contributing to higher prices and emissions. Costa emphasized that pipeline constraints and limited storage drive energy price spikes and reliability risks, particularly during extreme winter weather. He argued that expanding natural gas pipeline and storage infrastructure is necessary to improve reliability and affordability in the Northeast.

Major Takeaways:

Infrastructure Needs and Permitting Reform

- Reps. Peters and **Kevin Mullin** (D-CA-15) both referenced the finding in NERC's ITCS of the need for an additional 35 GW of interregional transfer capability.
 - Peters focused on the idea that, regardless of the generating source, transmission congestion impacts reliability. Robb emphasized the idea that there are regions of the country that would benefit from expanded transmission irrespective of the generation source.
- Rep. McClellan briefly commented on the administration's issuance of stop-work orders to offshore wind projects, framing it as unhelpful to permitting reform discussions if permitted projects can erroneously be asked to pause construction.
- Rep. Latta asked the witnesses what their number one ask to Congress would be; Costa pointed to permitting reform.
 - Robb echoed this sentiment, noting that for large loads such as data centers, the timeline for coming online is significantly shorter than the time it takes to permit and bring new generation and transmission capacity online to serve those loads.

- Costas noted that pipeline constraints in the Northeast limited gas delivery to power plants without firm transportation contracts, which most generators lack. As a result, dual-fuel units switched to oil and gas-only plants went offline, contributing to supply challenges. These constraints also forced the region to rely on LNG imports, not due to a lack of domestic supply, but because New England sits at the end of the pipeline network.
- Gas-electric coordination was identified as a reliability challenge. Robb noted that gas and power systems are increasingly interdependent but planned separately. Costa emphasized that generators without firm contracts are vulnerable to curtailment during peak demand.

Baseload vs. Intermittent Resources

- The ongoing war in Iran was a continued point of concern, with Democratic members pointing to the resulting increase in oil prices, compounding affordability issues. Reps. Mullin, **Jennifer McClellan** (D-VA-04), and **Rob Menendez** (D-NJ-08) all pointed to the war as an example of the volatile nature of fossil fuel markets.
- Rep. Guthrie highlighted discrepancies in testimony regarding the role of dispatchable generation compared to intermittent resources in ensuring grid reliability during Winter Storm Fern.
 - Mattison clarified that their portfolio relies on a diverse resource mix, but during a winter storm like Fern, dispatchable generation is what they depend on most. He noted that while wind performed relatively well during Fern, it did not perform as well during Winter Storm Heather, when icing was significantly more severe.
 - When later asked, Goggin emphasized that renewables performed strongly during the storm, exceeding projections during peak demand days, while baseload generation underperformed. He noted that performance relative to expectations is a relevant metric, as resources are compensated based on the capacity they are expected to provide.
- NERC's LTRA's findings regarding the risks of premature baseload retirements were a consistent focus of Republican Members, with Reps. **Diana Harshbarger** (R-TN-01) and **Gabe Evans** (R-CO-08) warning that retiring coal and natural gas resources are outpacing replacement capacity. Robb emphasized that these resources provide reliability services considering the structure of the grid at present and that continued retirements can increase reliability risk.

Emergency Orders

- The use of 202c emergency authorities during Winter Storm Fern emerged as a point of discussion, with Reps. **Russel Fry** (R-SC-07), **Mariannette Miller-Meeks** (R-IA-01), and **Laurel Lee** (R-FL-15) noted that the orders helped keep dispatchable resources online and prevent outages.
 - Robb warned that increasing reliance on emergency measures may indicate underlying infrastructure and resource adequacy gaps.
 - Democratic members raised concerns about the cost and necessity of these emergency interventions, and Goggin argued that keeping uneconomic plants online through emergency orders can increase costs for ratepayers.