

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Reliability Technical Conference)

Docket No. AD22-10-000

**PRE-CONFERENCE STATEMENT OF
TRAVIS FISHER
PRESIDENT AND CEO
ELECTRICITY CONSUMERS RESOURCE COUNCIL
(ELCON)**

The Electricity Consumers Resource Council (ELCON) appreciates the opportunity to provide its pre-conference statement in advance of the Federal Energy Regulatory Commission’s (FERC or Commission) Commissioner-led Reliability Technical Conference scheduled to take place in the above-captioned docket on November 10, 2022. As outlined in the agenda for the panel discussions, the Commission and its staff have identified a number of important and timely policy questions related to the reliability and security of the Bulk Power System, and ELCON looks forward to a robust discussion.

ELCON is the national association representing large industrial consumers of electricity. ELCON member companies create a wide range of products from virtually every segment of the industrial manufacturing community. ELCON members own and operate hundreds of major facilities and are significant consumers of electricity within the footprints of all organized markets and other regions throughout the United States. Many of ELCON’s members generate electricity and operate facilities that are NERC Registered Entities.¹ ELCON members also purchase electricity from and rely on the transmission of electricity by Commission-jurisdictional utilities.

¹ Section 215 of the Federal Power Act (FPA) authorizes the Commission to approve reliability standards that apply to “users, owners, and operators” of the Bulk Power System, which are required to comply with approved reliability standards. *See* 16 U.S.C. § 824o(b)(1) (2018). NERC has defined “Registered Entities” as “owner[s], operator[s], or user[s] of the Bulk Power System,” or the designees of such entities, included in the NERC Compliance Registry. *See* N. Am. Elec. Reliability Corp., Rules of Procedure –

ELCON members have a unique perspective on reliability issues. Our members' views on reliability are driven by the need to protect billion-dollar assets and maintain around-the-clock operations. In all instances, reliable electricity supply at just and reasonable rates is essential to the operations of ELCON's members. ELCON members therefore have a strong interest in the ongoing work of the Commission, the North American Electric Reliability Corporation (NERC) as the Electric Reliability Organization (ERO), and the Regional Entities to oversee implementation of and compliance with Section 215 of the FPA.²

ELCON responds below to a selection of the questions posed to Panel I that are most pertinent to the interests of industrial consumers.³

Panel I: Managing the Electric Grid to Advance Reliability

- a. What should the Commission's top reliability priorities be for the next one to three years? What further actions should the Commission take to improve reliability with regard to these priorities? What trends and risks identified in NERC's 2022 State of Reliability Report warrant the most attention and effort?**

ELCON ranks the Commission's priorities for the Bulk Power System as reliability, affordability, and sustainability, in that order. Reliability is job one, and FERC should maintain its active focus on Bulk Power System reliability. However, from the perspective of electricity consumers, it is vital that the Commission strive to achieve and maintain reliability at least cost. In ELCON's view, NERC should continue to take an engineering and technical approach to reliability issues, and the Commission should provide a cost-effectiveness check on any new rule changes. The Commission's role to ensure that reliability standards are just and reasonable is particularly important

App. 2 (eff. May 19, 2022), at 19, available at: [ROP Appendix 2 20220519.pdf \(nerc.com\)](#). The Compliance Registry is a NERC-maintained list of the "owners, operators and users of the Bulk Power System, and the entities registered as their designees, that perform one or more functions in support of reliability of the Bulk Power System and are required to comply with one or more Requirements of Reliability Standards" *Id.* at 14.

² 16 U.S.C. § 824o.

³ In certain instances, ELCON has grouped questions that raise related issues.

regarding changes that trigger new capital expenditures, increased variable costs, or new allocations of cost to load. Such changes may be proposed in the name of reliability, but the Commission should modify or reject them if they do not achieve reliability objectives in a cost-effective manner.

Although having a reliable Bulk Power System is critical to ELCON members' operations, ELCON members are very sensitive to cost increases. For example, in recent months, ELCON joined with organizations representing residential customers and public policy research organizations in calling for Congress to undertake a detailed and objective study of nationwide electricity costs.⁴ This would necessarily entail an assessment of whether the Commission's policies are ensuring reliable electricity at least cost, which is critical to keeping American business competitive in domestic and international markets. While the Commission's implementation of Section 215 of the FPA arguably reflects a different set of policy objectives relative to its oversight of energy markets, ELCON stresses that reliability-related costs likewise merit scrutiny by the Commission to ensure that the consumers who are ultimately responsible for these costs are benefiting from meaningful and cost-effective improvements in reliability.

Regarding trends and risks identified in the 2022 State of Reliability Report,⁵ ELCON shares NERC's concerns about the rapid pace of change in the transition to non-dispatchable resources.⁶ As markets and public policy continue to shape the resource mix, it is imperative that FERC remain committed to its statutory charge, which is to provide an "adequate level of reliability" as laid out in Section 215 of the

⁴ See Letter to Leadership of the U.S. Senate Committee on Energy and Natural Resources and the U.S. House of Representatives Committee on Energy and Commerce from ELCON, *et al.* (July 8, 2021), available at: [Independent Study of the Cost of Electricity - ELCON | Electricity Consumers Resource Council](#) (requesting independent study of electricity cost).

⁵ See N. Am. Elec. Reliability Corp., 2022 State of Reliability: An Assessment of 2021 Bulk Power System Performance (July 2022) (State of Reliability Report), available at: https://www.nerc.com/pa/RAPA/PA/Performance%20Analysis%20DL/NERC_SOR_2022.pdf.

⁶ See, e.g., State of Reliability Report at vii (discussing the need to reliably integrate inverter-based resources, including through industry guidelines and reliability standards); *see also id.* at 25-30 (discussing the changing resource mix and the challenges associated with renewable resource integration).

FPA,⁷ at rates that are just and reasonable as required by Sections 205 and 206.⁸ ELCON therefore urges the Commission and the ERO Enterprise to work with stakeholders, including consumer interests, and incorporate input from under-represented stakeholders (such as end users) regarding how best to achieve this balance.

The State of Reliability Report also identifies, and correctly so, that there are risks to reliability from extreme weather events.⁹ ELCON members can face significant consequences, including multi-million-dollar financial losses, due to extreme events causing or contributing to power outages that, in turn, may damage manufacturing facilities and cause interruption of critical equipment and processes. Importantly, these outages can occur both on Bulk Power System facilities and distribution systems that fall outside the scope of Section 215 of the FPA.¹⁰ Regardless of where an outage arises, sustained reliable service is critical to the ability of large manufacturers to maintain continuing operations and avoid damage to equipment and products that may take weeks to repair and return to service.

Beyond facing risks due to extreme weather events, ELCON notes that large industrial consumers, through their participation in demand response, may play an augmented role in helping to mitigate some of the most severe impacts to grid reliability. ELCON urges the Commission and the ERO Enterprise to explore ways in which increased use of demand response may aid in responding to and mitigating some of the risks of extreme weather.¹¹ While large industrial consumers stand ready to

⁷ 16 U.S.C. § 824o(c)(1) (authorizing the Commission to certify an ERO that can develop and enforce reliability standards providing an adequate level of reliability of the Bulk Power System).

⁸ 16 U.S.C. §§ 824d, 824e.

⁹ State of Reliability Report at viii-ix, 3-8 (discussing challenges faced by the grid during the 2021 assessment period, including extreme cold, extreme heat, drought, hurricanes, wildfires, and storms), and 15-21.

¹⁰ See 16 U.S.C. § 824o(a)(1)(B).

¹¹ See Cal. Indep. Sys. Operator Corp. Dept. of Market Monitoring, Annual Report on Market Issues and Performance 2021 (July 27, 2022), at 26-27, available at: [2021-Annual-Report-on-Market-Issues-Performance.pdf \(caiso.com\)](https://www.caiso.com/2021-Annual-Report-on-Market-Issues-Performance.pdf) (noting increase in reliance on demand response to curtail load during peak time periods and discussing areas for improvement in the use of demand response).

participate in providing assistance during times of extreme grid stress, ensuring that demand response market participation rules can accommodate the unique needs of industrial manufacturers will be critical, as will ensuring that participation in demand response programs by these providers is properly incentivized.

- b. Discuss whether NERC's current tools to address reliability risks (e.g., whitepapers, alerts, guidelines, workshops, standards) are adequate, timely, and effective in identifying and addressing emerging risks. How can these tools be improved? What other tools could be useful?**
- c. What additional information and data do industry and other stakeholders need to evaluate and address reliability and security risks (e.g., severe weather, correlated outages, cybersecurity threats, etc.)? Who needs these information and data and what steps can be taken to improve access?**

ELCON observes that NERC has available numerous and varied tools to identify, evaluate, and apprise the industry of new and emerging risks. At this time, ELCON has not identified that additional tools are needed, because ELCON perceives that, in general, NERC makes effective use of the tools it already has. In particular, alerts and guidelines enable NERC to communicate imminent or near-term risks and concerns, while whitepapers provide a means to engage in a deep and nuanced discussion of particular issues and to offer solutions for industry to consider. Standards are appropriate when issues do not require immediate action (given the time that is usually needed to develop new standards) and where the risks that the standard is designed to address are best mitigated through a mandatory compliance requirement.

ELCON urges NERC and the Regional Entities to engage in continued dialogue with stakeholders regarding the tools that would be most useful to users, owners, and operators of the Bulk Power System in addressing reliability risks. Workshops, committees,¹² and meetings provide a forum for this dialogue. ELCON also supports continued engagement by NERC and the Regional Entities with industry associations, such as ELCON, as another useful tool to convey and obtain information regarding

¹² On behalf of ELCON, Travis Fisher serves on the NERC Member Representatives Committee and the Reliability and Security Technical Committee, and he is an observer on the Energy Reliability Assessment Task Force.

reliability risks.

Rather than adopting new tools, it may be appropriate for NERC and the Regional Entities to consider ways in which to promote wider awareness of existing tools. For example, NERC has done extensive work on distributed energy resource deployment,¹³ both within and outside of its Working Group on System Planning Impacts of Distributed Energy Resources.¹⁴ This work is important, and the analyses that have been undertaken to date illustrate a need for the industry to respond to concerns relating to planning and operability of distributed resources.¹⁵ Further effort to highlight and promote this work, engage in dialogue with the industry concerning responsive actions, and identify implementation steps is likely necessary.

- d. NERC has highlighted essential reliability services (e.g., frequency response, voltage control, and ramping capability) as core to maintaining reliable operations now and in the future. How does the changing resource mix affect the needed amount and provision of these essential reliability services? What action, and by whom, is necessary to ensure adequate levels of these services? How is NERC's ongoing project regarding energy adequacy related?**
- f. Both NERC and individual RTOs have warned that the rapid pace of retirements of dispatchable resources may be leading to increased reliability risks in the future. As the resource mix changes, what actions should the Commission, NERC, states, industry, and other stakeholders consider to ensure the continued reliability of the grid?**
- g. How is industry preparing for the changing demands on the Bulk-Power System in light of the changing resource mix and growth of new technologies (e.g., inverter-based resources, distributed energy resources, energy storage, etc.)? How can these, and other supporting, technologies be**

¹³ See N. Am. Elec. Reliability Corp., Quick Reference Guide: Distributed Energy Resource Activities (Oct. 2022), available at: https://www.nerc.com/pa/Documents/DER_Quick%20Reference%20Guide.pdf (summarizing “the work the ERO Enterprise has done regarding [distributed energy resources] over the past seven years to ensure the continued reliability of the North American power grid”).

¹⁴ See generally [System Planning Impacts from DER Working Group \(SPIDERWG\) \(nerc.com\)](https://www.nerc.com/comm/RSTC/SPIDERWG/SPIDERWG%20Scope.pdf). The scope of this working group includes addressing system planning, modeling, and reliability impacts on the Bulk Power System arising from wider deployment of distributed resources. See SPIDERWG Scope Document (Dec. 2018), available at: <https://www.nerc.com/comm/RSTC/SPIDERWG/SPIDERWG%20Scope.pdf>.

¹⁵ See, e.g., N. Am. Elec. Reliability Corp., Distributed Energy Resources: Connection Modeling and Reliability Considerations (Feb. 2017), available at: [Report \(nerc.com\)](https://www.nerc.com/comm/RSTC/DER/DER%20CMR%20Report.pdf).

deployed to improve reliability and resilience? How well do the Reliability Standards account for these newer technologies?

ELCON agrees that the changing resource mix raises concerns regarding essential reliability services (such as certain ancillary services and flexible capacity) and that further work in this area is needed. Managing increased penetration of renewable resources does implicate increased requirements for these core services, which are needed to assure reliability. At the same time, the Commission and the industry will need to address the costs associated with procurement of these services. Consistent with the comments above, ELCON reiterates the need for a comprehensive assessment of the cost of electricity, including the costs associated with achieving the policy objectives of state resource requirements and federal tax credits of enhanced renewable integration. The Commission should consider whether, following the principle of cost causation, the increasing costs of essential reliability services driven by the increased penetration of renewable resources should be assigned to load.

In addition to considerations of cost, ELCON recommends the following:

- Resource Retirements: As traditional resources retire, whether for life-cycle or policy reasons, appropriate planning will be critical to ensure that the timing for planned retirements aligns with new resources becoming commercially operational. Evaluating plausible retirement scenarios will help inform the stakeholders at all levels – including policymakers, regulators, electric utilities, and consumers – regarding the reliability and operational impacts of resource retirements. Robust information will be key in facilitating an orderly transition in the resource mix and encouraging reliability-enhancing decisions at all levels.¹⁶
- Capacity Accreditation: Consumers face risks on both sides of the question of capacity accreditation. Too much credit for resources and we face reliability problems and price volatility stemming from resource

¹⁶ See, e.g., State of Reliability Report at 26 (observing increased need for retention of flexible resources, such as natural gas, pending widespread deployment of storage technologies).

shortfalls. Too little credit for resources and we face systemic high costs stemming from over-procurement. Differences among states and regions in capacity accreditation methods for variable resources can significantly impact Bulk Power System reliability, and utility and regional procurement processes would benefit from enhanced information. In this way, NERC plays an important role by monitoring and informing procurement processes without necessitating standards that restrict procurement flexibility.

- Planning Reserve Margins: Evaluation of the changing resource mix continues to rely on an overemphasis on reserve margins during peak conditions. Peak reserve margins are becoming less indicative of loss of load probability than other indicators. As such, metrics should focus more on coincident performance of resources throughout the year and across the suite of essential reliability services. ELCON supports the important work of the Energy Reliability Assessment Task Force in establishing a new and more appropriate paradigm for assessing resource adequacy.
- Storage Integration: With increased deployment of energy storage,¹⁷ there is a need to consider how to best leverage the range of services that these resources can provide. Closely examining the economic case for storage resources and assuring that the required market structures are in place to enable effective use of these resources will be a critical element in managing evolution of the resource mix. As with capacity accreditation

¹⁷ For example, within the California Independent System Operator (CAISO) region, there is currently “just over 3,500 MW of storage capacity available for dispatch in the market.” Cal. Indep. Sys. Operator Corp., Energy Storage Enhancements Final Proposal (Oct. 27, 2022), available at: [FinalProposal-EnergyStorageEnhancements.pdf \(caiso.com\)](#). As of July 2021, the CAISO reported more than 147,000 MW of energy storage capacity in its interconnection queue. See Memo. to ISO Board of Governors from N. Millar, Vice President, Infrastructure & Operations Planning Re: Briefing on Renewable and Energy Storage in the Generator Interconnection Queue (July 7, 2021), available at: [Microsoft Word - Briefing-Renewables-Generator-Interconnection-Queue-Memo-July-2021 \(caiso.com\)](#).

generally, it is vital that we accurately assess the performance characteristics of energy storage resources to take full advantage of their contributions to a reliable system without over-procuring them.

- e. **NERC's Reliability Standards create a baseline level of reliability of the Bulk-Power System. Increases in extreme weather events due to climate change are putting new pressures on the Bulk-Power System. While NERC and the Commission have taken some actions in this area, such as the recently issued Notice of Proposed Rulemaking to modify Reliability Standard TPL-001-5.1 to address long-term planning for extreme weather events, what additional changes to the Reliability Standards are needed to address the risk to reliability?**

Specifically with respect to extreme weather, ELCON commends NERC on its work to expedite development of new requirements and to evolve existing requirements.¹⁸ Upon full implementation of these new and revised standards, ELCON urges the Commission to closely monitor whether these requirements are adequate to aid in mitigating the risk of severe grid and infrastructure impacts due to extreme weather. It would then be appropriate to consider if further actions are needed to address extreme weather.

ELCON also urges that the Commission carefully balance its assessment of the need for further changes to reliability standards with the cost impacts of implementing added compliance obligations. To be clear, ELCON members can be severely impacted by impairments to electric service resulting from extreme weather events, particularly when those events result in sustained outages, and the costs of such events to industrial consumers can be high. It is critical to ensure that any future changes to reliability standards reflect a careful and deliberate balance between the costs of new compliance measures and the benefits of expected reliability improvements.

- h. **In recent years, reliance on natural gas as a fuel for electric generation has steadily increased. This trend is expected to continue in the future, leading**

¹⁸ NERC recently filed for approval of a new reliability standard, EOP-012-1 (Extreme Cold Weather Preparedness and Operations) related to cold weather events. See Pet'n of the N. Am. Elec. Reliability Corp. for Approval of Proposed Reliability Standards EOP-011-3 and EOP-012-1 and Request for Expedited Action, *N. Am. Elec. Reliability Corp.*, Docket No. RD23-1-000 (filed Oct. 28, 2022).

to greater interdependence between the natural gas and electric sectors. The February 2021 cold weather outages in Texas and the South-Central United States demonstrated the interdependence of, and need for better coordination between, these sectors. What efforts should be undertaken to help ensure the reliable and efficient operation of both the interstate natural gas pipeline and also the electricity systems? Does current reliability planning adequately account for fuel availability of natural gas resources? Are there specific additional improvements to coordination between the sectors needed? How can the NAESB Gas-Electric Forum help in furthering this coordination?

A dependable and adequate natural gas supply is critically needed to maintain electric system reliability.¹⁹ NERC has previously observed that “[w]ith increasing levels of variable renewable generation in the resource mix, there is a growing need to have resources available that can be reliably called upon on short notice to balance electricity supply and demand if shortfall conditions occur.”²⁰ And as NERC has further explained, “[u]ntil storage technology is fully developed and deployed at scale, . . . natural gas-fired generation will remain a necessary balancing resource to provide increasing flexibility needs.”²¹

Moreover, industrial use of natural gas is very common, both as a fuel in cogeneration facilities and as a chemical feedstock.²² For example, natural gas is the most-used fuel for industrial energy, while the second-most-used “fuel” (*i.e.*, electricity) is generated using natural gas more than any other primary energy source.²³ Further,

¹⁹ See N. Am. Elec. Reliability Corp., December 2021 Long-Term Reliability Assessment (Dec. 2021) (NERC 2021 LTRA), at 5-6, available at: https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_LTRA_2021.pdf (explaining that “[n]atural gas is the reliability ‘fuel that keeps the lights on,’ and natural gas policy must reflect this reality”).

²⁰ N. Am. Elec. Reliability Corp., 2021 State of Reliability: An Assessment of 2020 Bulk Power System Performance (Aug. 2021), at 52, available at: https://www.nerc.com/pa/RAPA/PA/Performance%20Analysis%20DL/NERC_SOR_2021.pdf.

²¹ NERC 2021 LTRA at 6.

²² Nat’l Renewable Energy Laboratory, Industrial Energy Data Book (2018) (NREL 2018 Industrial Energy Data Book), at 12-13, available at: <https://www.nrel.gov/docs/fy20osti/73901.pdf>.

²³ *Id.* at 12. In 2021, natural gas produced 38.3% of electricity, followed by coal (21.8%), nuclear energy (18.9%), wind (9.2%), and hydro (6.3%). See U.S. Energy Information Administration, Frequently Asked

combined cycle natural gas units are the leading technology for combined heat and power systems, which are used by many industrial consumers.²⁴ In addition to the critical need for natural gas to keep our power supply reliable, an adequate and dependable supply of natural gas is critically needed for industrial consumption and generation of electricity.

For all of these reasons, ELCON strongly supports FERC's efforts to enhance coordination between the natural gas and electricity sectors, including through the NAESB Gas-Electric Forum. Additionally, ELCON observes that the NERC Reliability and Security Technical Committee has developed a Reliability Guideline on Natural Gas and Electrical Operational Coordination Considerations,²⁵ and the measures that are identified in the guideline appear to be sound. Finally, ELCON remains concerned that the Commission may harm the long-term availability of natural gas by reinstating the natural gas certification policy statements it issued earlier this year.²⁶

Although ELCON does not currently perceive a need for prescriptive actions such as new reliability standards, ELCON encourages the Commission and the ERO Enterprise to continue efforts to communicate with industry regarding the need for enhanced coordination and to engage in a dialogue with stakeholders regarding best practices.

Questions (FAQs) (last visited Apr. 17, 2022), available at: <https://www.eia.gov/tools/faqs/faq.php?id=427&t=3>.

²⁴ NREL 2018 Industrial Energy Data Book at 66.

²⁵ See N. Am. Elec. Reliability Corp., Reliability Guideline: Natural Gas and Electrical Operational Coordination Considerations (June 8, 2021), available at: [Gas and Electrical Operational Coordination Considerations \(nerc.com\)](https://www.nerc.com/Reliability-Guideline-Natural-Gas-and-Electrical-Operational-Coordination-Considerations).

²⁶ Comments of the Electricity Consumers Resource Council, Docket Nos. PL18-1-000 and PL21-3-000 (filed Apr. 25, 2022), available at: [Consideration of Greenhouse Gas Emissions in Natural Gas Infrastructure Project Reviews](https://www.elcon.org/Consideration-of-Greenhouse-Gas-Emissions-in-Natural-Gas-Infrastructure-Project-Reviews) (elcon.org)

CONCLUSION

ELCON and its members thank the Commission for its attention to and oversight of the issues addressed during this technical conference and look forward to continued engagement on these issues.

Respectfully submitted,

/s/ Travis Fisher

Travis Fisher

President and CEO

Electricity Consumers Resource Council

1101 K Street NW, Suite 700

Washington, DC 20005

tfisher@elcon.org

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