UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection	)	**Docket No. RM21-17-000**

PROPOSED JOINT STATEMENT

We, the undersigned, represent former military leaders and U.S. Department of Defense (DoD) officials with decades of collective experience. We welcome the opportunity to submit these reply comments, offering our security perspective regarding the Federal Energy Regulatory Commission's ("FERC" or "Commission") July 15, 2021 Advance Notice of Proposed Rulemaking regarding transmission planning, cost allocation, and generator interconnection ("Transmission ANOPR" or "ANOPR").[1]

I. Introduction

Because the electric system is paramount to every facet of our digital society, the economic and national security of the United States are at stake. The factors that our electric system will continue to encounter, combined with the unique circumstances facing each region, will require an increasingly flexible, reliable, resilient, and robust grid. Such factors include the addition of intermittent, clean energy resources, the

[1] *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, *Advanced Notice of Proposed Rulemaking*, 176 FERC ¶ 61,024 (2021) ("Transmission ANOPR" or "ANOPR").

evolution of the transportation system toward electrification, extreme weather events that are expected to increase in frequency and severity over time, and evolving cybersecurity and human-caused physical security threats.

This need is further highlighted by the National Intelligence Council's (NIC) latest *National Intelligence Estimate on Climate Change* (NIE) released in October, which states that, while the United States and other industrialized nations are in relatively better positions to address the major costs and impacts to critical infrastructure of forecasted change, nonetheless, "climate impacts, such as excessive heat, flooding, and extreme storms, will prove increasingly costly [and] will be massive, even if the worst human costs can be avoided."[2]

Thus, we are calling for transmission reforms and expansion in the form of a national "Macro Grid."

II. A Comprehensive, Strategic Approach to Transmission Planning Reform is Necessary

Reforming the nation's transmission system will require a comprehensive, strategic approach to ensure that we not only maintain, but enhance, the reliability and resilience of the electric grid. As part of such planning reforms, we encourage FERC to account for existing and anticipated future resource changes to the electric system and relevant

[2] National Intelligence Council's National Intelligence Estimate*, Climate Change and International Responses Increasing Challenges to US National Security Through 2040,* (National Intelligence Estimate on Climate Change), October 21, 2021, available at: https://www.dni.gov/files/ODNI/documents/assessments/NIE_Climate_Change_and_National_Security.pdf

federal, regional, and state policies and regulations. We also encourage FERC to bridge existing siloes between economic needs, public policy requirements, and reliability, as mentioned in the ANOPR.

Significantly, given the nature of ongoing and anticipated natural- and human-caused threats, incorporating resilience into such planning efforts from the outset is vital. Planning for such threats should include forecasting, modeling, and planning based not just on current and historical weather and climate data, but also on future forecasts that are better able to account for anticipated extreme weather events and the true impacts thereof.[3]

We are pleased that a number of entities emphasized the need to incorporate resilience and the growing threats posed by anticipated extreme weather events in their initial comments regarding this proceeding.[4] Along these lines, National Association of State Energy Officials' (NASEO) initial comments reflect that a holistic approach should consider "energy emergency preparedness and response[,] and cybersecurity."[5]

---

[3] Diffenbaugh, Noah (Stanford earth system scientist), "Verification of extreme event attribution: Using out-of-sample observations to assess changes in probabilities of unprecedented events," ***SCIENCE ADVANCES***, March 18, 2020, Volume 6, Issue 12, available at: DOI: 10.1126/sciadv.aay2368.

[4] E.g., Initial Comments of Americans for a Clean Energy Grid (ACEG), Electric Power Supply Association (EPSA), SAFE, R Street Institute, and WIRES.

[5] National Association of State Energy Officials (NASEO), Initial Comments on this ANOPR, available at: https://elibrary.ferc.gov/eLibrary/search, Document Accession #: 20211012-5626.

III. Call for Transmission Expansion, i.e., a "Macro Grid," to Help Solve Grid Resilience and Reliability Issues; Highlights the Importance of Undertaking Regional and Inter-Regional Planning Reforms

Regional and inter-regional planning efforts merit consideration as part of FERC's next steps in this proceeding and should occur across as broad of a geographic area(s) as possible to enhance electric system resilience and reliability. The recent NERC/FERC final reliability assessment of the February 2021 winter storm underscores the fact that large-scale transmission would help move power between regions and thereby help alleviate future emergencies. Specifically, the report notes that "strong connections . . . " allowed the MISO and SPP Independent System Operators (ISOs)/Regional Transmission Organizations (RTOs, hereinafter referred to as RTOs) "to import large quantities of [electricity] . . . to mitigate generation shortfalls and meet winter peak energy demands."[6] The report also states that "although additional transmission lines would not have been able to bring in enough additional energy to fill the deep shortfall ERCOT experienced on the morning of February 15, 2021, they could help to prevent or ameliorate future grid operational problems, particularly black-start energy that could be invaluable to rebuild the grid in the event of a future collapse."[7] While not the sole solution, we firmly believe that large-scale transmission could make a difference in enhancing the resilience and reliability of the electric system.

---

[6] FERC, NERC, Regional Entity Staff, *FERC - NERC - Regional Entity Staff Report: The February 2021 Cold Weather Outages in Texas and the South Central United States,* November 16, 2021 (Final February 2021 Winter Storm Report), available at: https://www.ferc.gov/media/february-2021-cold-weather-outages-texas-and-south-central-united-states-ferc-nerc-and.

[7] Ibid.

One of the most effective ways to achieve this goal would consist of creating a "Supergrid," or "Macro Grid," i.e., a nation-wide network of high-value, high-voltage transmission lines that could draw upon its "pool" of electricity resources (i.e., electrons) to move power from one area to supply other areas that have suffered widespread outages, due to bad weather events. Doing so would enable grid operators to move power in emergencies and in day-to-day operations to ensure that situations, such as occurred in Texas in February 2021, and as have occurred in other parts of the country, do not recur at such magnitudes or with such costly impacts to lives and the economy. A more robust transmission system would help every state and region to have "greater grid reliability and resilience to keep the heat and lights on in times of crisis."[8] Thus, a "Macro Grid" is a critical aspect of bolstering our energy, economic, and national security.

IV. Conclusion

RTOs and states are, of course, vital to regional and inter-regional transmission planning processes, as are other relevant stakeholder participants. To this end, we concur with NASEO that state-regional-federal "coordination of both policy and regulatory officials" is critical, and commend FERC and NARUC for the establishment of the Joint Federal-State Task Force on Electric Transmission, and the recent Technical Conference, as good

[8] Everhart, Carlton, General (Ret'd.), "Texas Tragedy Highlights Need to Increase Grid Resilience Nationwide," op-ed, published in Real Clear Energy, March 2, 2021, available at: https://www.realclearenergy.org/articles/2021/03/02/texas_tragedy_highlights_need_to_increase_grid_resilience_nationwide_765944.html.

first steps as part of such efforts.[9] Involving these key stakeholders from the outset also is vital, of course.

Again, we appreciate the opportunity to submit these comments. Should you have any questions, please contact Ladeene Freimuth, Senior Advisor to SAFE and its Grid Security Project, at: ladeene@freimuthgroup.com.

Respectfully Submitted,

/s/

[9] News Release, "FERC, NARUC to Establish Joint Federal-State Task Force on Electric Transmission," June 17, 2021, Docket No. AD21-15-000, available at: https://www.ferc.gov/news-events/news/ferc-naruc-establish-joint-federal-state-task-force-electric-transmission.