

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

Establishing Interregional Transfer)
Capability Transmission Planning and) Docket No. AD23–3–000
Cost Allocation Requirements)
)

REPLY COMMENTS OF CLEAN ENERGY ADVOCATES

Natural Resources Defense Council, Sustainable FERC Project, Environmental Defense Fund, Sierra Club, Western Resource Advocates, American Clean Power Association,¹ American Council on Renewable Energy,² and NW Energy Coalition (together “Clean Energy Advocates” or “CEAs”) submit these reply comments in response to the March 6, 2023 notice inviting comments to the December 5-6, 2022 technical conference (“Technical Conference”) convened by the Federal Energy Regulatory Commission (“Commission” or “FERC”) regarding whether and how the Commission could establish a minimum requirement for Interregional Transfer Capability for public utility transmission providers in transmission planning and cost allocation processes.³

¹ ACP is a national trade association representing a broad range of entities with a common interest in encouraging the expansion and facilitation of wind, solar, energy storage, and electric transmission in the United States. The views and opinions expressed in this filing do not necessarily reflect the official position of each individual member of ACP.

² ACORE is a national nonprofit organization that unites finance, policy, and technology to accelerate the transition to a renewable energy economy, supported by members that include developers, manufacturers, top financial institutions, major corporate renewable energy buyers, grid technology providers, utilities, professional service firms, academic institutions and allied nonprofit groups. The views and opinions expressed in this filing do not necessarily reflect the official position of each individual member of ACORE.

³ Staff-Led Workshop Concerning Establishing Interregional Transfer Capability Transmission Planning and Cost Allocation Requirements, Docket No. AD23–3–000 (Dec. 5-6, 2022).

I. Introduction

CEAs are encouraged that many comments support FERC establishing a minimum Interregional Transfer Capability requirement.⁴ As we mentioned in our initial comments, since the December 2022 workshop, the need for Commission action to establish a minimum requirement has only grown more compelling.⁵ In the NOPR preceding FERC’s recent rule requiring the North American Electric Reliability Corporation (“NERC”) to set Reliability Standards for extreme weather, FERC stated that “[i]ncreasing interregional transfer capability may be a particularly robust option for planning entities attempting to mitigate the risks associated with concurrent generator outages over a wide area”⁶ and explicitly said that transmission can mitigate reliability concerns caused by extreme weather in the final rule.⁷ Moreover, the comments show that there is a general consensus that more interregional transmission will improve reliability and resiliency and will maximize benefits across regions. A broad and diverse group of parties filing comments in this proceeding—including utilities, elected officials, the Department of Energy, and industry—are in agreement concerning the need for increased interregional

⁴ See, e.g., Comments of the U.S. Dept. of Energy, Docket No. AD23–3–000, May 15, 2023, Accession No. 20230515-5184 (“DOE Comments”) at 13; Comments of U.S. Sen. John Hickenlooper et al., Docket No. AD23-3-000, May 22, 2023, Accession No. 20230522-4000 (“Hickenlooper et al. Comments”) at 1; Comments of the Working for Advanced Transmission Tech. Coal., Docket No. AD23-3-000, May 15, 2023, Accession No. 20230515-5231 (“WATTS Comments”) at 1; Comments of the American Clean Power Ass’n, Docket No. AD23-3-000, May 15, 2023, Accession No. 20230515-5235. (“ACP Comments”) at 2; Comments of the American Council on Renewable Energy, Docket No. AD23-3-000, May 15, 2023, Accession No. 20230515-5266 (“ACORE Comments”) at 4.

⁵ See Comments of Nat. Res. Def. Couns. et al., Docket No. AD23-3-000, May 15, 2023, Accession No. 20230515-5136 (“PIOs’ ITC Comments”) at 1-2.

⁶ *Transmission System Planning Performance Requirements for Extreme Weather*, Notice of Proposed Rulemaking, 87 FR 38,020 (June 27, 2023), 179 FERC ¶ 61,195 at P 85 (2022).

⁷ *Transmission System Planning Performance Requirements for Extreme Weather*, 183 FERC ¶ 61,191 at P 162 (2023).

transmission.⁸ In addition, there is broad support for the implementation of a Minimum Transfer Capacity Requirement.⁹

II. The Commission Should Not Delay Action on this Issue

FERC should act expeditiously to establish a minimum Interregional Transfer Capacity requirement. Calls by several parties for further study and analysis on this issue are misplaced,¹⁰ as are requests by some Regional Transmission Organizations for a reliance on current planning processes.¹¹ CEAs reiterate our concerns that the increasing frequency of extreme weather events, the necessity to prepare for long-term changes to our electric system, and the need to increase access to low-cost renewable energy necessitates prompt action by the Commission on this issue.

As we documented in our initial comments, extreme weather events are on the rise, presenting a continuing threat to the reliability of our electric grid.¹² NERC's most recent State of Reliability Report found that over the past five years, the eight days with the greatest Severity Risk Index (SRI) all occurred within the last two years, and the total number of days that qualify as extreme increased from 17 to 22 between 2021 and 2022.¹³

⁸ See, e.g., Comments of the Org. of MISO States, Docket No. AD23-3-000, May 15, 2023, Accession No. 20230515-5236 ("OMS Comments") at 3; Comments of the Int'l Transmission Co., Docket No. Ad23-3-000, May 15, 2023, Accession No. 20230515-5230 ("ITC Comments") at 2; Comments of PJM Interconnection L.L.C., Docket No. AD23-3-000, May 15, 2023, Accession No. 20230515-5216 ("PJM Comments") at 2.

⁹ See, e.g., DOE Comments at 13; Hickenlooper et al. Comments at 1; WATTS Comments at 1; ACP Comments at 2.

¹⁰ Comments of the Midcontinent Independent System Operator, Inc., Docket No. AD23-3-000, May 15, 2023, Accession No. 20230515-5234 ("MISO Comments") at 4; Comments of the California Independent System Corporation, Docket No. AD23-3-000, May 15, 2023, Accession No. 20230515-5217 ("CAISO Comments") at 3; PJM Comments at 3.

¹¹ See OMS Comments at 2; see also Comments of Vistra Corp. et al, Docket No. AD23-3-000, May 15, 2023, Accession No. 20230515-5264 ("Vistra Comments") at 4.

¹² See PIOs' ITC Comments at 1-2.

¹³ North American Electric Reliability Corporation, *State of Reliability Technical Assessment* (June 2023) at 15 and 18. The SRI measures the severity of daily conditions based on the combined impact of load loss, loss of generation, and loss of transmission. See https://www.nerc.com/pa/RAPA/PA/Performance%20Analysis%20DL/NERC_SOR_2023_Technical_Assessment.pdf.

Expanded interregional transmission could have greatly reduced if not eliminated the reliability risks during these events, providing a lifeline to those for whom reliable power is a matter of life and death. In addition, transmission is a far less costly and superior solution to building additional fossil capacity resources.¹⁴ Especially during extreme weather events or potential infrastructure disruptions, fossil-based resources offer a reduced capacity contribution because their reliance on fuel deliveries makes them subject to the same correlated outage risk as existing fossil generators.¹⁵

Several commenters state that there is limited benefit to interregional transmission without available generation.¹⁶ These comments ignore that resource adequacy and transmission are intertwined, and that the capacity valuation of generation can be improved by greater transmission – especially interregional transmission.¹⁷ This is confirmed by the findings of the Grid Strategies analysis, submitted with the comments of Americans for a Clean Energy Grid, that “a certain megawatt (MW) amount of interregional transmission allows the component regions to achieve the same level of reliability with that many fewer MW of generating capacity by accessing geographic diversity.”¹⁸ Moreover, there is no shortage of generation under development with two terawatts of primarily wind, solar, and battery storage waiting in interconnection queues across the

¹⁴ See Grid Strategies Report at 4 (https://gridstrategiesllc.com/wp-content/uploads/2023/05/GS_Interregional-Transfer-Requirement-Analysis-final54.pdf).

¹⁵ See PIOs’ ITC Comments at 3.

¹⁶ See, for example, MISO Comments at 7; CAISO Comments at 6; Vistra Comments at 10; Southeastern Regional Transmission Planning Process Sponsors’ Comments, Docket No. AD23-3-000, May 15, 2023, Accession No. 20230515-5225 (“SERTP Sponsors’ Comments”) at 9.

¹⁷ See, for example, Energy Systems Integration Group, *New Design Principles for Capacity Accreditation* (February 2023) at 37, finding that “other resources, like new transmission, can provide significant capacity contributions to improve resource adequacy, but are often excluded from capacity accreditation techniques altogether.” See <https://www.esig.energy/new-design-principles-for-capacity-accreditation/>.

¹⁸ Grid Strategies Report at 1.

country.¹⁹ Interregional transmission will increase the capacity value of these resources and further enable their use in addressing the growing risks of extreme weather.

Moreover, the requirement in the debt ceiling legislation that NERC prepare an interregional transfer capacity study should not be the basis for Commission inaction or delay. According to the timeline set forth in the legislation, NERC is required to prepare a report within eighteen months examining whether more transmission capacity is needed between regions. The Commission must then seek comment and provide Congress a report on its conclusions and include recommendations, if any, for statutory changes.²⁰ Although this report is largely unnecessary given numerous previous studies documenting the lack of interregional connections between Order No. 1000 planning regions, including the recently released Department of Energy draft Transmission Needs Study,²¹ the NERC study could be used by some to ask FERC to delay any action on this issue until FERC issues its report, effectively delaying any action on this issue for several years.

CEAs are encouraged by Chairman Phillips' recent testimony before the House Energy, Climate, and Grid Security Subcommittee Hearing that he is "not aware of any requirement that [FERC] wait" for completion of the NERC study and that it is "not [his] intention to wait."²² While CEAs strongly encourage the Commission to work in tandem with NERC to ensure that the study process moves quickly, FERC need not wait for this process to play out. It can and should move forward with a rule establishing a minimum Interregional Transfer Capability requirement now.

¹⁹ See Lawrence Berkley National Laboratory, *Queued Up: Characteristics of Power Plants Seeking Transmission Interconnection* (April 2023), available at <https://emp.lbl.gov/queues>.

²⁰ Fiscal Responsibility Act of 2023, Pub. L. No. 118-5, § 322, Stat. 46, 137 (2023).

²¹ See Department of Energy, *Draft Transmission Needs Study*, 88 Fed. Reg. 13811 (March 6, 2023).

²² *Oversight of FERC: Adhering to a Mission of Affordable and Reliable Energy for America: Hearing Before Energy, Climate, and Grid Sec. Subcomm.*, 118TH CONG. (2023) (statement of Willie Phillips, Chairman, Federal Energy Regulatory Committee) available at <https://www.youtube.com/watch?v=BZu41UWWwrl&t=3199s> beginning at 52:15.

III. FERC Should Establish a Mandatory Minimum Interregional Transfer Capability Requirement of 20-25% for All Regions

As CEAs stated in our initial comments, the Grid Strategies Report shows all regions have a similar need for interregional transmission, supporting the case for FERC to adopt a single straightforward minimum Interregional Transfer Capability requirement of 20-25% for all regions. Given the significant intractable uncertainty regarding how weather and climate patterns, the generation mix, load profiles, the natural gas system, and other factors that affect the need for interregional transmission will evolve in the future, a modeling-based effort to set an exact amount of interregional transfer capacity for each region becomes excessively difficult. However, it is absolutely certain that ensuring reliability for *all regions* has required and will increasingly require the ability to transfer power not just from immediately adjacent neighbors but across entire interconnects. As a result, ratepayers are better served by the Commission setting a baseline standard that gets close to the right answer for all regions instead of spending years of lawyers' and technical consultants' time debating the intractable uncertainties inherent to setting a specific requirement for each region.

The adoption of a minimum Interregional Transfer Capacity requirement of 20-25% of peak load in each region conservatively approximates the need for and reliability benefit of interregional transmission for all regions and ensures enough capacity to serve multiple regions during large-scale events. Such a minimum requirement shares the same rationale as minimum generation reserve margin determination and the underlying one-day-in-ten-years LOLE standard, which are widely employed by utilities and grid operators.

As we indicated in our initial comments, we are not opposed to allowing regions to conduct their own analysis to demonstrate that their interregional transfer requirement should be different than the default *pro forma* standard—provided the Commission sets a high bar for such exceptions

to prevent actors from abusing inherent uncertainty to advance self-interested outcomes or slow down interregional cooperation.²³ By applying the “Consistent With or Superior To” approach used in Order No. 888 to individual regional analysis, the Commission can grant utilities the opportunity to demonstrate true need while maintaining a level of interregional transmission that will benefit consumers broadly. Regions seeking an individual exemption should be required to file their analysis in a contested proceeding at the Commission, where intervenors and FERC staff can review their model, assumptions, and conclusions from an independent perspective.²⁴

Finally, this methodology has the advantage of being adopted elsewhere. Europe uses a similar default minimum with a target for each country’s interregional transfer capacity to cover 15% of its installed generating capacity by 2030.²⁵ In the U.S. installed generating capacity is about 67% greater than peak load,²⁶ so Europe’s 15% minimum transfer requirement based on installed generating capacity would equate to a 25% requirement based on peak load in the U.S.

IV. FERC Must Require Interregional Transmission Planning to Replace Order No. 1000 Transmission Coordination

As FERC acknowledged in its recent order requiring NERC to develop standards to address extreme weather events, interregional transmission can be a powerful mitigation tool against the reliability issues caused by extreme weather.²⁷ But as some members of Clean Energy Advocates detailed thoroughly in our comments to FERC’s transmission Advance Notice of Proposed Rulemaking, there is currently no interregional transmission planning process, and the

²³ See PIOs’ ITC Comments at 7.

²⁴ See *id.*

²⁵ See European Commission, “Electricity interconnection targets,” *available at*

https://energy.ec.europa.eu/topics/infrastructure/electricity-interconnection-targets_en.

²⁶ The U.S. has 1,241,578 MW of installed capacity to meet 742,000 MW of peak demand. Thus, installed capacity is 1.6733 times greater than peak demand, per <https://www.eia.gov/electricity/data/eia860m/> and <https://www.eia.gov/electricity/gridmonitor/expanded-view/custom/pending/ElectricityOverview-2/edit>.

²⁷ See *Transmission System Planning Performance Requirements for Extreme Weather*, Notice of Proposed Rulemaking, 87 FR 38,020 (June 27, 2023), 179 FERC ¶ 61,195 at P 85 (2022).

interregional coordination process has not produced any meaningful interregional transmission development.²⁸

Because of the incredible reliability, resilience, and economic benefits that interregional transmission can bring, the Commission must move forward as quickly as possible to require robust interregional transmission planning to replace the Order No. 1000 interregional coordination process. While we have demonstrated in this and other proceedings that more interregional transmission will improve reliability and resiliency in the face of increasing extreme weather events and will maximize benefits across regions, existing barriers to interregional transmission planning make it virtually impossible to plan for interregional transmission.²⁹

Any new interregional transmission planning process must solve the so-called “triple hurdle” problem. The multistage interregional transmission approval process that requires a proposed interregional transmission, as well as two separate regional approval processes, creates a nearly insurmountable barrier to interregional transmission.³⁰ Because potential solutions must successfully meet three separate benefit-to-cost ratios, it is almost impossible for all three processes to result in one agreed-upon solution, and thus these projects are almost never built. In addition, interregional coordination processes only allow for the evaluation of projects that address an identical need in both regions. Thus, an interregional project meeting a reliability need in one

²⁸ See Federal Energy Regulatory Commission, *Building the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Comments of Public Interest Organizations, Sec. V, Docket No. RM21-17-000, Accession No. 20211012-5519 (“PIOs’ ANOPR Comments”).

²⁹ See *Comments of Pub. Interest Orgs.* at 75-76 (Aug. 17, 2022), Accession Nos. 20220817-5270 (“PIOs’ NOPR Comments”).

³⁰ See PIOs’ ANOPR Reply Comments at 24-25 (noting that MISO and SPP have a joint planning committee responsible for carrying out a process that may arrive at identified solutions, at which point “each RTO considers the recommended inter-regional transmission solutions in its respective regional transmission planning process.” Midcontinent Independent System Operator, Inc., Southwest Power Pool, Inc., 168 FERC ¶ 61,018, ¶ 2 (July 16, 2019)).

region but not a reliability need in another region cannot be considered, even if it provides some other benefit in the second region.

Finally, cost allocation for interregional projects is especially challenging given that regions have different approaches to cost-allocation for projects that are within their borders, and because of the risk that one region may seek to unfairly impose costs on a neighboring region through this process. The Commission must signal its commitment to increase connections between planning regions by issuing a rulemaking that supplants Order No 1000's interregional coordination with true interregional transmission planning.

V. Conclusion

CEAs appreciate the opportunity to provide these reply comments in response to the comments gathered by the Commission regarding the Technical Conference on whether and how the Commission could establish a minimum requirement for Interregional Transfer Capability for public utility transmission providers in transmission planning and cost allocation processes and ask that the Commission consider the recommendations made herein in any future rulemaking.

Respectfully submitted,

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