UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Interregional Transfer Capability Study: Strengthening Reliability Through the Energy Transformation	**)** **)** **)**	**Docket No. AD25-4-000**

WIRES COMMENTS

WIRES,[1] on behalf of its members, submits these comments[2] in support of the Interregional Transfer Capability Study ("ITCS" or "Study")[3] conducted by the North American Electric Reliability Corporation ("NERC") in accordance with the Fiscal Responsibility Act of 2023.[4] WIRES commends the efforts of NERC, as the Electric Reliability Organization ("ERO"), working in consultation with the Regional Entities[5] and transmitting utilities to complete the ITCS,

[1] WIRES is a non-profit trade association of investor-, publicly-, and cooperatively-owned transmission providers and developers, transmission customers, regional grid managers, and equipment and service companies. WIRES promotes investment in electric transmission and consumer and environmental benefits through development of electric transmission infrastructure. This filing is supported by the full supporting members of WIRES but does not necessarily reflect the views of the Regional Transmission Organization/Independent System Operator ("RTO/ISO") members of WIRES. For more information about WIRES, please visit www.wiresgroup.com.

[2] *Interregional Transfer Capability Study: Strengthening Reliability Through the Energy Transformation*, Notice of Request for Comments, Docket No. AD25-4-000 (Nov 25, 2024).

[3] *Interregional Transfer Capability Study: Strengthening Reliability Through the Energy Transformation*, NERC Interregional Transfer Capability Study as Directed in the Fiscal Responsibility Act of 2023, Docket No. AD25-4-000 (Nov. 19, 2024) ("NERC ITCS Filing Letter"); *see also* Appendix A, Interregional Transfer Capability Study 2024 – Final Report ("ITCS" or "Study").

[4] Fiscal Responsibility Act of 2023, Public Law 118-5, 137 Stat 10, sec. 322 (2023) ("Fiscal Responsibility Act" or "Act"). *See* section 322 of the Act directing NERC, in consultation with each regional entity and transmitting utility that has facilities interconnected with a transmitting utility in a neighboring transmission planning region, to prepare a study of total transfer capability, as defined in 18 C.F.R. § 37.6(b)(1)(vi), that contains the following: (i) current total transfer capability, between each pair of neighboring transmission planning regions; (ii) a recommendation of prudent additions to total transfer capability between each pair of neighboring transmission planning regions that would demonstrably strengthen reliability within and among such neighboring transmission planning regions; and (iii) recommendations to meet and maintain total transfer capability between each pair of neighboring transmission planning regions.

[5] The Regional Entities are: (i) Midwest Reliability Organization; (ii) Northeast Power Coordinating Council, Inc.; (iii) ReliabilityFirst Corporation; (iv) SERC Reliability Corporation; (v) Texas Reliability Entity, Inc.; and (vi) Western Electricity Coordinating Council.

a "first-of-its-kind assessment of transmission transfer capability under a common set of assumptions."[6]

I. INTRODUCTION

Electric transmission infrastructure is the backbone of the nation's electricity grid, which itself underpins much of the nation's economy. The transmission system provides flexibility by ensuring access to diverse generation resources that allow the electrical grid to adapt to changing conditions. Given the country's rapidly changing resource mix, a robust and flexible transmission system capable of accommodating multi-directional power flows is essential for reliable and efficient delivery of electricity. When considering extreme weather events and increasing electricity demand, interregional energy transfers continue to play an increasingly key role in providing greater access and a wider range of deliverable resources between neighboring systems to maintain reliability.

Transmission assessments, like the ITCS, can be important tools for identifying and mitigating future risks to the reliability of the Bulk Power System. The Study's focus on transfer capability provides valuable insights into the potential for additional electric transmission transfer capability to enhance reliability. The ITCS, in particular, offers an analysis with several important features: (i) an independent, reliability-focused assessment of existing transfer capability between each pair of neighboring transmission planning regions; (ii) identification of "prudent" additions for regions at risk of energy inadequacy ("deficiency"); and (iii) recommendations that offer directional guidance, rather than prescriptive instructions, on how to meet and maintain transfer capability.[7] In addition, the ITCS recognizes that a one-size-fits-all approach across the United

[6] NERC ITCS Filing Letter at 2.

[7] *Id.* at 5-6.

States may be inefficient and ineffective and, therefore, recommends region-specific enhancements to transfer capability.[8]

WIRES supports the Study's findings and recommendations. Given the changing resource mix, increased frequency of extreme weather events, and rising demand from load, greater access to and deliverability of resources between neighboring regions will be needed to maintain reliability, particularly during widespread, extreme weather conditions.[9] Furthermore, the ITCS not only reinforces the value of interregional transmission for managing extreme conditions and supporting an evolving energy mix, the Study also makes clear transmission is not the only solution.[10]

As explained in more detail below, WIRES agrees with NERC's determination not to recommend specific projects or a minimum level of transfer capability, nor to suggest that FERC impose such mandates. WIRES also supports NERC's recommendation to use the ITCS as a guide for RTOs/ISOs and transmitting utilities looking to undertake further analysis to identify where regions may benefit from enhancements to support a reliable future grid and how each pair of neighboring regions should address this need.[11] Finally, WIRES strongly supports NERC's recommendation that the Commission adopt a flexible approach that encourages pairs of neighboring regions to collaborate on how to address their specific regional and interregional needs and characteristics specific to transfer capability.

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[8] *Id.* at 3.

[9] *Id.* at 4.

[10] *See* ITCS, Part D, Chapter 10: Meeting and Maintaining Transfer Capability (Part 3) at 134 (noting that while the ITCS recommends increases to transfer capability on particular interfaces, it intentionally does not specify a particular set of projects or approach, as planners have multiple options for mitigating identified energy adequacy risks).

[11] ITCS, Executive Summary at xix–xx.

II. BACKGROUND

A. Docket No. AD23-3 Staff-Led Workshop on Interregional Transfer Capability

The ITCS was preceded by a two-day staff-led workshop to consider whether and how the Commission could establish a minimum requirement for interregional transfer capability for public utility transmission providers.[12] Following the workshop, the Commission invited all interested persons to file post-workshop comments on issues raised during the workshop.[13] Both prior to and following the workshop, the Commission received a substantial number of comments from all sectors of the industry and beyond.

While the docket was still open to receive post-technical comments, Congress enacted the Fiscal Responsibility Act of 2023.[14] Section 322 of the Act required NERC, in consultation with the regional entities and transmission owners at regional borders, to prepare a study of the existing total transfer capability between each pair of transmission planning regions and to make recommendations on: (i) prudent additions to total transfer capability between each pair of neighboring regions that would "demonstrably strengthen reliability within and among such neighboring transmission planning regions;" and (ii) how to meet and maintain total transfer capability between each pair of neighboring regions.[15]

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[12] *Establishing Interregional Transfer Capability Transmission Planning and Cost Allocation Requirements*, Notice of Staff-Led Workshop, Docket No. AD23-3-000 at 1 (Oct. 6, 2022) ("October 6 Notice"); *see also* Supplemental Notice, Docket No. AD23-3-000 (Nov. 18, 2022); and Supplemental Notice, Docket No. AD23-3-000 (Nov. 30, 2022).

[13] *Establishing Interregional Transfer Capability Transmission Planning and Cost Allocation Requirements*, Notice Requesting Post-Workshop Comments, Docket No. AD23-3-000 (Feb. 28, 2023).

[14] *Supra* n.4

[15] Fiscal Responsibility Act of 2023, sec. 322(a).

B. NERC's ITCS

On November 19, 2024, NERC filed the ITCS in the captioned docket.[16] The ITCS establishes that sufficient transfer capability and resources currently exist to maintain energy adequacy under most scenarios.[17] The ITCS also confirms concerns that the existing transmission infrastructure in the United States may become insufficient to maintain energy adequacy when calculating current transfer capability and projected future conditions such as changing resource mix, extreme weather events, and increasing demand.[18] Based on the assumptions underlying the analysis, the ITCS recommends an aggregate increase of 35 GW of transfer capability across different regions as prudent additions to strengthen reliability.[19] However, based on ITCS findings that indicate (i) transfer capability varies "seasonally, regionally and under different system conditions,"[20] and (ii) import capability required during extreme conditions varied significantly across the country,[21] the ITCS recommends allowing each pair of neighboring regions flexibility to develop a process that will allow for region-specific considerations rather than a uniform, one-size-fits-all approach, across the United States.

NERC described the Study as "a tool for envisioning and planning the future of a more resilient and reliable grid,"[22] The findings and recommendations are offered as directional

[16] *Supra* n. 2.

[17] ITCS, Part D, Chapter 7: Prudent Additions (Part 2) Process and Recommendations at 91-94.

[18] *Id.* at 94-97.

[19] *Id.* at 98.

[20] NERC ITCS Filing Letter at 5; ITCS, Chapter 3: Transfer Capability (Part 1) Study Results at 13-73.

[21] NERC ITCS Filing Letter at 5; ITCS, Chapter 7: Prudent Additions (Part 2) Recommendations at 98.

[22] ITCS, Executive Summary at xix.

guidance intended to serve as "foundational insights for further study, discussions, and decisions on regulatory and legislative solutions."[23]

NERC further emphasizes that the ITCS is a unique assessment focused solely on reliability.[24] NERC explains that, by taking such a focused approach, the Study allows transmission planners, RTOs/ISOs, and policymakers to consider other region-specific factors, such as economics, environmental effects, and broader policy objectives, when considering transfer capability solutions to address reliability issues.[25]

Finally, the ITCS notes that transmission is only one part of the overall equation. Other factors, such as generation resource availability, new load projections, additional weather information, and demand response, should also be considered.[26] NERC also instructs that "further studies are needed for implementation,"[27] but does not recommend addressing this issue through rulemaking or adopting NERC Reliability Standards at this time.[28] Instead, NERC urges neighboring regions to collaborate and coordinate system studies to ensure careful deployment of

[23] NERC ITCS Filing Letter at 8, 22; and ITCS, Executive Summary at viii, xiii, and xix (noting that the ITCS does not prescribe "how" prudent additions to transfer capability should be realized but rather provides information on what would be desirable to improve reliability).

[24] ITCS, Part B, Chapter 2: Overview of ITCS Scope and Terminology at 11 ("[r]eliability, in the form of energy adequacy and operating reliability, is the sole focus of the ITCS"); *see also* Part D(2), Chapter 6: Prudent Additions (Part 2) Process at n. 89 (clarifying "[s]ince ITCS is a reliability study, economic and policy objectives were not considered when making recommendations.").

[25] ITCS, Part D(6), Chapter 10: Meeting and Maintaining Transfer Capability (Part 3) at 134 (stating that "planners need to perform detailed studies to select projects and implement enhancements that will not result in other reliability issues, *e.g.*, increased transfers between [transmission planning regions] can improve energy adequacy in some situations, but large transfers also have reliability implications that must be considered.").

[26] ITCS, Part D(3), Chapter 7: Prudent Additions (Part 2) Recommendations at 102-103; Part D(6), Chapter 10: Meeting and Maintaining Transfer Capability (Part 3) at 134.

[27] *Id.* at 136.

[28] *Id.* at 137.

the ITCS recommendations.[29] In particular, NERC encourages "wide-area studies that holistically integrate transmission and resource planning."[30]

III. COMMENTS

WIRES appreciates the opportunity to comment on the ITCS. WIRES agrees with NERC that "[e]nsuring a transmission system with sufficient transfer capability between transmission planning regions is important to support energy adequacy," particularly given the changing resource mix, extreme weather, and increasing electricity demand.[31]

WIRES agrees with NERC's view of the ITCS as a roadmap, not a plan, that offers guidance for the industry and policymakers on where enhancements to transmission may be beneficial in supporting a reliable future grid, without mandating specific projects or a minimum level of transfer capability.[32] Although NERC's assessment relied on historical data, WIRES agrees with incorporating NERC's approach used in the ITCS in future Long-Term Reliability Assessments to provide a more comprehensive view of each transmission planning region's reliability risks.[33] Based on the substantial record developed under Docket No. AD23-3 and the ITCS Report, there exists an extensive body of evidence for the Commission to consider in addressing this issue as recommended by NERC. Recognizing the importance of this matter and the need for transmission planning regions to act, WIRES submits the following comments in support of the ITCS recommendations.

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[29] NERC ITCS Filing Letter at 21-22.

[30] ITCS, Part D(6), Chapter 10: Meeting and Maintain Transfer Capability (Part 3) at 136.

[31] NERC ITCS Filing Letter at 4.

[32] ITCS, Executive Summary at xix; ITCS, Part B, Chapter 2: Overview of ITCS Scope and Terminology at 11; *see also* NERC ITCS Filing Letter at 6, 18, and 21 (noting that "transmission planners, RTOs/ISOs, and policymakers might consider other factors such as economics, environmental effects, and broader policy objectives when deciding which solutions to implement to address reliability issues.").

[33] ITCS, Part B, Chapter 2: Overview of ITCS Scope at 3; ITCS, Part D(6), Chapter 10: Meeting and Maintain Transfer Capability (Part 3) at 136.

In response to the format request in the Commission's Notice of Request for Comments published in the Federal Register,[34] WIRES' comments are primarily responsive to the recommendations set forth in Parts B (Chapter 2), D (Chapters 6, 7 and 10), and E. These comments cite the relevant portions of NERC's Filing Letter, the ITCS Executive Summary and the correlated headings of the ITCS in the footnotes to this filing.

A. The ITCS Provides Important Insights Into Existing and Future Interregional Transfer Capability

NERC has consistently stressed the need for more transmission to support energy transformation, grid reliability, and resilience. The ITCS provides important insights for industry, regulators, and policymakers into the amount of power that can be moved or transferred reliably from one transmission planning region to another. However, the ITCS is a snapshot in time;[35] and, as NERC acknowledges, the Study does not account for transmission projects in planning, permitting, or construction phases (in-progress projects), which projects may reduce some needs identified in the ITCS.[36] The ITCS also highlights the importance of integrated transmission and resource planning, noting that increasing transfer capability without surplus available energy would not improve energy adequacy during critical periods.[37] Thus, WIRES agrees with the

[34] *Interregional Transfer Capability Study: Strengthening Reliability Through the Energy Transformation*, 89 Fed. Reg. 105790 (Dec. 27, 2024).

[35] ITCS, Part B, Chapter 2: Overview of ITCS Scope and Terminology at 12 (because the ITCS represents a "point-in-time analysis using the best available time-synchronized data," the study team recommends performing the study on a periodic basis to identify trends).

[36] ITCS, Executive Summary at viii, xiii, and xix (noting that before pursuing new transmission projects, system planners and stakeholders should first identify existing in-progress projects that could address some or all the transmission needs outlined in the ITCS).

[37] Executive Summary at viii, xiii, xviii, xx, xxi; *see also* Part D(2) Chapter 6. Prudent Additions (Part 2) Process at 92 and Part D(3), Chapter 7: Prudent Additions (Part 2) Recommendations at 102 (If multiple neighboring transmission planning regions lack resources, additional transfer capability offers limited help because there is not enough surplus energy to share).

Study's findings that in order to meet each planning region's load it is essential to strike the right balance between generation and transmission.[38]

Recognizing the impact regional differences will have on each pair of regions' transfer capability, NERC intentionally did not specify a particular set of projects or approach in its Study.[39] Instead, NERC noted that planners have multiple options to mitigate the identified energy adequacy risk, including but not limited to: (i) increasing transfer capability to neighbors with surplus resources; (ii) constructing local generation; (iii) increasing demand response resources; and (iv) accepting the identified risks during extreme events (assuming other reliability thresholds are met).[40]

WIRES agrees with this framing but suggests that enhanced operational visibility should also be factored into the mix.[41] Importantly, WIRES would not support an approach to address increased energy security risks that would involve lowering levels of reliability in the provision of service to customers.

B. WIRES Supports ITCS's Recommendation for Region-Specific Enhancements to Transfer Capability

WIRES supports ITCS's recommendation advising against a one-size fits all approach to a minimum transfer capability requirement, advocating instead for a diverse and flexible approach that allows solutions tailored to each transmission planning region's vulnerabilities, risk tolerance, economics, and policies."[42] Based on its analysis, NERC concludes that a universal minimum

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[38] *Id.*

[39] ITCS, Part D(6), Chapter 10: Meeting and Maintaining Transfer Capability (Part 3) at 134.

[40] *Id*.

[41] *Id.* at 136; *see also* ITCS, Executive Summary at viii (noting that the analysis did not evaluate operational mitigations through re-dispatch or other actions).

[42] ITCS, Executive Summary at xiii and xx; *see also* ITCS, Part B, Chapter 2: Overview of ITCS Scope and Terminology at 10-11.

transfer capability may not be effective in achieving needed transfer capability and, in fact, could lead to inefficient investments in areas where transmission needs are already met or could fail to address a region's identified deficiency risks.[43] NERC's findings were based on observations that: (i) reliability risks are highly dependent on regional conditions; and (ii) the amount of transfer capability required to reliably serve customers during extreme conditions varied significantly across the United States.[44] The ITCS also found that such variances were a direct result of the unique challenges facing each transmission planning region, such as energy availability due to the region's resource mix, as well as its neighbor's resource mix, and probable weather impacts.[45]

Given the ITCS's findings, WIRES strongly supports adoption of a diverse and flexible approach, including enhanced collaboration with regional planning entities, that will allow region-specific enhancements and solutions tailored to each transmission planning region's "vulnerabilities, risk tolerance, economics, and policies."[46] As noted by NERC, such an approach would also provide regions the opportunity to maximize the use of local resources.[47] WIRES urges the Commission to heed NERC's advice and recommend in its report to Congress a diverse and flexible approach that encourages each pair of neighboring transmission planning regions to drive the development of new interregional transmission where data and analysis take into account each region's specific needs for and benefits from additional interregional transfer capability.

[43] ITCS, Executive Summary at xx.

[44] *Id.* at xiii; *see also* ITCS, Part D(5), Chapter 9: Prudent Additions (Part 2) Transmission Planning Region-Specific Results, at 109-133.

[45] ITCS, Part D(3), Chapter 7: Prudent Additions (Part 2) Recommendations at 98.

[46] ITCS, Executive Summary at xiii.

[47] NERC ITCS Filing at 3.

C. Collaboration Between Neighboring Regions is Key to Developing and Implementing Needed Interregional Transfer Capability

As stated above, WIRES supports the balanced, flexible approach recommended by NERC in the ITCS. Given the complexities associated with determining the amount of interregional transfer capability needed within and between transmission planning regions, WIRES agrees with NERC's determination not to endorse specific projects or particular approaches[48] but, instead, recommends that each transmission planning region drive those decisions based upon their respective needs and characteristics.[49] Allowing each transmission planning region to identify and address its specific vulnerabilities will help ensure that such costly investments are "efficient, targeted, and effective in achieving the desired level of reliability."[50] Encouraging each pair of neighboring regions to collaborate on equitable approaches to cost-sharing and to address regulatory hurdles for large, multi-regional transmission projects can help ensure that investments are balanced consistent with each region's collective needs.[51]

Addressing transfer capability needs between regions through collaboration aligns with the conclusions of the Grid Strategies Report titled "*Fostering Collaboration Would Help Build Needed Transmission.*"[52] The Report emphasized that collaboration is an essential element of

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[48] ITCS, Part B: Overview of ITCS Scope and Terminology at 11; Part D(3), Chapter 7: Prudent Additions (Part 2) Recommendations at 98 and Part D(6), Chapter 10: Meeting and Maintaining Transfer Capability (Part 3) at 134.

[49] *Id.*

[50] ITCS, Executive Summary at xx.

[51] Examples of such collaborative efforts by pairs of neighboring regions include adoption of the MISO-PJM Targeted Market Efficiency Project process used to identify relatively inexpensive and readily implementable solutions to address historic congestion along the MISO-PJM seam. *See PJM Interconnection, L.L.C., et al.,* 161 FERC ¶ 61,005 (2017). Additionally, SPP and MISO collaborated on filing the Joint Targeted Interconnection Queue ("JTIQ") proposal to address certain transmission system needs along the SPP-MISO seam. *See Midcontinent Indep. Sys. Operator, Inc., et al.*, 189 FERC ¶ 61,108 (2024).

[52] Rob Gramlich, Richard Doying and Zach Zimmerman, *Fostering Collaboration Would Help Build Needed Transmission* (Feb. 20, 2024) ("Grid Strategies Report" or "Report") at https://wiresgroup.com/wp-content/uploads/2024/02/GS_WIRES-Collaborative-Planning.pdf.

successful transmission expansion.[53] Furthermore, the Report included multiple examples of how facilitating collaboration paved the way for important transmission investments to address reliability, resilience, and energy policy needs.[54] The Grid Strategies Report also highlighted that a key feature of effective collaboration is the exchange of information, particularly the sharing of insight and expertise of experienced system planners.[55]

D. WIRES Supports the Study's Approach to Identify Directional (Rather Than Prescriptive) Guidance for Policymakers and Industry

As stated above, WIRES agrees with NERC's recommendation to use the ITCS as a roadmap. This approach enables transmission planners, RTOs/ISOs, and policymakers to consider other factors unique to their regions when deciding which solutions to implement to address the transfer capability needs of neighboring regions. For example, planners must be able to evaluate potential downstream impacts of increased transfer capability. The results will vary by region, as well as pairs of neighboring regions. Allowing neighboring regions flexibility to collaboratively identify their transfer capability needs based on the unique circumstances at their regional interfaces will facilitate a holistic evaluation of interregional transfer considerations, resource adequacy requirements, and other system needs, including available alternatives.

WIRES also supports NERC's decision to develop the Study with the expectation that each pair of neighboring regions would use it as part of a broader evaluation specific to those regions.[56] This approach will help regions achieve effective, efficient, and reliable solutions for customers.

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[53] *Id.* at II and 11.

[54] *Id.* at 11-30.

[55] *Id.* at II-III (finding "Information about system needs, solutions, and potential alternatives is critical to assessing benefits of various solutions and arriving at an actionable path forward. This information is almost always held by multiple entities, none of whom has the whole picture or all the necessary information about interconnected regional grids to arrive at the ideal planning outcome, so this crucial information must be shared.").

[56] NERC ITCS Filing at 7; ITCS, Part E: Future Work at 136. Should the Commission determine that some action is needed to encourage neighboring regions to collaborate on how to address interregional transfer capability issues,

Additionally, using the ITCS as a roadmap will not only help policymakers, and the electric industry, identify areas where enhancing transmission could support a reliable future grid, it also provides policymakers and the electric industry the flexibility to leverage the ITCS's findings with other more specific regional, economic, environmental effects, and broader policy objectives when deciding which solutions to implement.[57]

IV. CONCLUSION

WIRES requests that the Commission accept and consider these comments in support of NERC's ITCS findings and recommendations.

Respectfully submitted,

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WIRES recommends that the Commission convene conferences between neighboring planning regions across the country to engage planners and relevant stakeholders on issues specific to their seam.

[57] ITCS, Part B, Chapter 2: Overview of ITCS Scope and Terminology at 11.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that I have this day had served the foregoing document upon each person designated on the official service compiled by the Secretary in these proceedings.

Dated at Washington, D.C., this 25th day of February 2025.

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