UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Interregional High Voltage Direct Allocation and Generator Interconnection	)	Docket No. AD22-13-000

COMMENTS OF PUBLIC INTEREST ORGANIZATIONS IN SUPPORT OF PETITION

On November 10, 2022, Invenergy Transmission, LLC ("Invenergy") requested that the Federal Energy Regulatory Commission ("Commission") hold a technical conference to explore ways to remove barriers to the development of interregional merchant high voltage direct current ("MHVDC") transmission.[1] Sustainable FERC Project, the Natural Resources Defense Council ("NRDC"), National Wildlife Federation, Western Resource Advocates, RMI, Earthjustice, and the Sierra Club (together the "Public Interest Organizations" or "PIOs") submit these comments in support of Invenergy's request.

Insufficient high voltage interregional transmission has led to significant reliability and resiliency issues regarding the transmission system, particularly during severe weather events. As PIOs mentioned in our comments to the Commission's July 15, 2021, Advanced Notice of Proposed Rulemaking,[2] the failure to adequately consider the implications of insufficient interregional transfer capability played a significant role in the August 2020 blackouts in California.[3] In 2021, Winter Storm Uri demonstrated the critical importance of interregional

[1] Request for Technical Conference of Invenergy Transmission LLC, Docket No. AD22-13 (Nov. 10, 2022) ("Invenergy Transmission Request").
[2] Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection, 176 FERC ¶ 61,024 (2021), 86 Fed. Reg. 40266 (July 27, 2021).
[3] A root cause analysis of the event determined that while there was energy availability in the north that could have alleviated the crisis, "transmission constraints ultimately limited the amount of physical transfer capability into

transmission in ensuring reliability. Because of its interconnection with the East, MISO was able to import 13 GW of power and deliver some of that to SPP and to the West, enabling those regions to largely avoid blackouts.[4] Some of these lines had been built as part of MISO's MVP process, where power flows had assumed to flow on a prevailing West-to-East flow, but ultimately provided critical reliability benefits that had not even been considered.[5] On the other hand, ERCOT had limited its import capacity to a maximum of 0.8 GW—to catastrophic and deadly effect.[6] In addition to the hundreds of lives lost due to the power outage,[7] post-storm analysis estimated that additional interregional transmission capacity would have paid for itself in days.[8] More recently, Winter Storm Elliott plunged much of the Eastern U.S. into sub-zero temperatures in late December 2022. Parts of the Southeast experienced rolling blackouts as electricity demand exceeded supply, while power prices spiked to unprecedented levels in many regions. A study issued by Grid Strategies found that in some areas a modest investment of 1 GW of interregional transmission capacity would have yielded nearly $100 million in benefits, while most areas could

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the CAISO footprint." *See* The Brattle Group and Grid Strategies, *Transmission Planning for the 21st Century: Proven Practices that Increase Value and Reduce Cost*, at 10 (Oct. 2021) ("Brattle-Grid Strategies Report") (citing California Independent System Operator (CAISO), California Public Utilities Commission (CPUC), and California Energy Commission (CEC), *Root Cause Analysis: Mid-August 2020 Extreme Heat Wave*, Final, January 13, 2021, p 48, at http://www.caiso.com/Documents/Final-Root-Cause-Analysis-Mid-August-2020-Extreme-Heat-Wave.pdf).

[4] *Id*. at 42.

[5] *Id*.

[6] *Id*.

[7] Peter Aldhous et al., *The Texas Winter Storm And Power Outages Killed Hundreds More People Than The State Says*, BuzzFeed News (May 26, 2021), https://www.buzzfeednews.com/article/peteraldhous/texas-winter-stormpower-outage-death-toll. In addition to the lives lost in Uri, power outages due to extreme weather events also led to the deaths of over 1,000 people in Puerto Rico from Hurricane Maria. *See* Eliza Barclay*, 1,427 deaths: Puerto Rico is coming clean about Hurricane Maria's true toll*, Vox (Aug. 9, 2018), at https://www.vox.com/2018/8/9/17670762/puerto-rico-hurricane-maria-death-toll-congress. Eleven people are estimated to have died as a result of power outages in New Orleans during Hurricane Ida linked to the failure of all 8 transmission lines serving the city as well as the natural gas plant Entergy claimed would serve as a blackstart resource. *See* Max Blau et al., *Entergy Resisted Upgrading New Orleans' Power Grid. Residents Paid The Price*, NPR (Sept. 22, 2021), https://www.npr.org/2021/09/22/1039110522/entergy-resisted-upgrading-new-orleans-power-grid-residents-paid-the-price.

[8] Brattle-Grid Strategies Report at 42, 59-60.

have saved tens of millions of dollars.[9] Recent studies have shown that that severe weather events are likely to increase in the future.[10]

A broad coalition of stakeholders agree that more interregional transmission will improve reliability and resiliency in the face of increasing extreme weather events and will maximize benefits across regions.[11] However, existing barriers to interregional transmission planning make it virtually impossible to do so. As PIOs pointed out in our reply comments in response to initial comments to the Commission's July 15, 2021 Advanced Notice of Proposed Rulemaking ("ANOPR Reply Comments"), this is primarily because of the current structure in most planning regions of first addressing local, then regional, then (if even considered at all) interregional needs. As a result, local and regional reliability-only needs drive more than 90% of transmission projects, which are then implemented without a comparative assessment of economic costs and benefits of larger, interregional projects.[12]

The multistage approval process creates another barrier in implementing interregional projects that requires a proposed solution to go through a coordinated interregional process as well as two separate regional approval processes, the so-called "triple hurdle" problem.[13] Because potential solutions must successfully meet three separate benefit-to-cost ratios, it is almost

[9] Grid Strategies, *The Value of Transmission During Winter Storm Elliott* (Feb. 2023), *available at* https://acore.org/wp-content/uploads/2023/02/The-Value-of-Transmission-During-Winter-Storm-Elliott-ACORE.pdf.
[10] *See* Unnatural Disasters Report, Nat'l Wildlife Fed'n (Sept. 2021), https://storymaps.arcgis.com/stories/c09c2ae66647464d9db29d4818daed55 (finding severe weather events will increase in frequency without immediate action); *see also* Bureau of Ocean and Energy Management (BOEM)'s open docket, BOEM–2023–0005 (revising BOEM regulations to Multiple Factor Auctions and Bidding Credits and how to maximize the utility of land-based points of interconnection to minimize impacts to environmental and cultural resources).
[11] ANOPR Reply Comments at 21-22.
[12] *Id*. at 23-24, citing Brattle Roadmap Report at B9.
[13] 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)).

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

As Invenergy points out in its Request, unlike traditionally planned, cost-of-service interregional transmission, merchant transmission developers negotiate directly with customers seeking to use the line, meaning the costs of that line are generally not allocated across the regions and are instead borne by investors.[14] Thus, these projects are unlikely to get involved in drawn out cost allocation proceedings and are capable of responding more quickly to changing grid needs.

MHVDC projects operate like both transmission and generation but do not fit neatly within the existing processes for either. There is no standardized process for MHVDC projects to interconnect to the transmission grid. Some transmission providers require the project to enter the generator interconnection queue while others have a wires-to-wires interconnection process.[15] As a result, a MHVDC line may face two different processes for interconnecting each end of its line,

[14] Invenergy Request at 15 (*citing Allocation of Capacity on New Merchant Transmission Projects and New Cost-Based, Participant-Funded Transmission Projects*, Final Policy Statement, 142 FERC ¶ 61,038, at P 2 ("Unlike traditional utilities recovering their costs-of-service from captive and wholesale customers, investors in merchant transmission projects assume the full market risk of development.")).
[15] *Id*. at 20.

which disincentivizes the buildout of transmission projects and leads to exacerbated reliability and resiliency issues on the transmission system.

Granting Invenergy's request for a technical conference can help build the record and assist the Commission in examining and standardizing the interconnection procedures for MHVDC transmission lines in a way that addresses the unique characteristics of these lines, including providing a clear process for MHVDC developers to engage with transmission planners via regional and interregional transmission planning processes to ensure parties are not working at cross purposes and planning duplicative or inefficient system upgrades.

Respectfully submitted,

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