Americans for a Clean Energy Grid

Interregional Transmission Planning

Facts and Figures About the Benefits

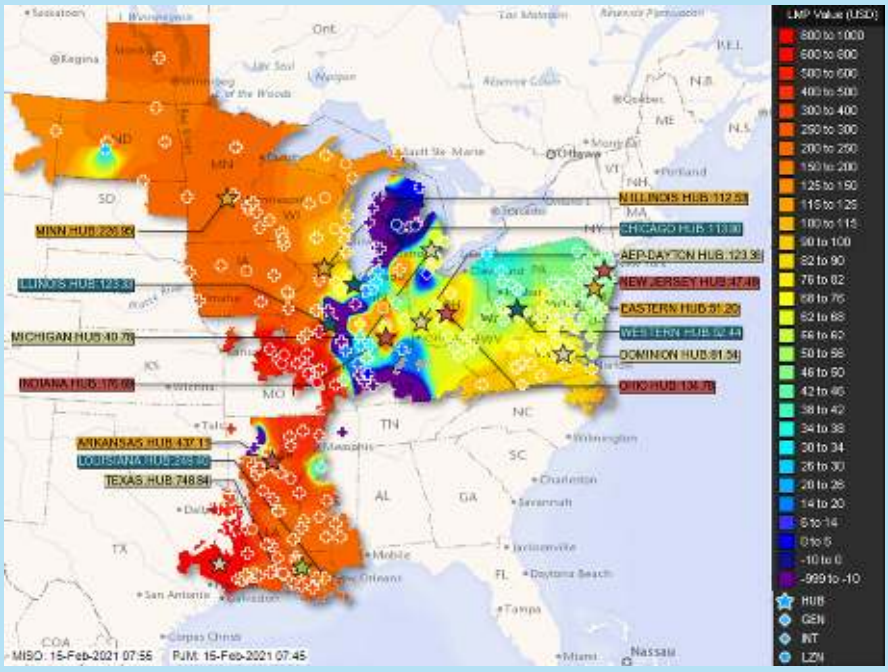
Benefits of Interregional Transmission: Reliability[1]

- **Adequacy:** Incremental interregional transmission can enable higher generation diversity and access in the face of uncertainties such as: fuel or generation loss, transmission outages, or extreme weather events.
- **Operational:** Incremental interregional transmission can improve reliability on systems with high variability.
- **Stability:** Incremental interregional transmission can enable greater system frequency and voltage stability.

Winter Storm Uri: Impact of Interregional Transfer Capacity

- MISO and SPP: Power loss limited to a "handful of short duration events."
- ERCOT: Capacity outages averaging 34,000 MW for two consecutive days. **More than 4.5 million people lost power**—some for four days—while temperatures were below freezing. More than 200 deaths, the majority from power outage-related causes (e.g. hypothermia, carbon monoxide poisoning, and medical conditions exacerbated by freezing conditions.)

Differences in Interregional Transfer Capacity



- ERCOT: has only 2 DC transmission tie lines to the Eastern Interconnection and imported only 800 MW of power from SPP over the week.

- MISO: has 193 tie lines with SPP and 263 additional tie lines to other balancing areas. At the max of the event, MISO's imports peaked at 13,000 MW (largely from PJM but also from, TVA, Southern Company, Louisville Gas and Electric and Kentucky Utilities Company, and Canada). MISO also exported over 7,000 MW to SPP and Associated Electric Cooperative.

Sources: Goggin, Michael et al, Fleetwide Failures: How Interregional Transmission Tends to Keep the Lights on When There Is a Loss of Generation (November 2021), https://gridprogress.files.wordpress.com/2021/11/fleetwide-failures-how-interregional-transmission-tends-to-keep-the-lights-on-when-there-is-a-loss-of-generation.pdf; MISO, The February Arctic Event: February 14-18, 2021, https://cdn.misoenergy.org/2021%20Arctic%20Event%20Report554429.pdf; FERC - NERC - Regional Entity Staff Report: The February 2021 Cold Weather Outages in Texas and the South Central United States (November 2021) https://www.ferc.gov/media/february-2021-cold-weather-outages-texas-and-south-central-united-states-ferc-nerc-and

Benefits of Interregional Transmission: Cost Savings[2]

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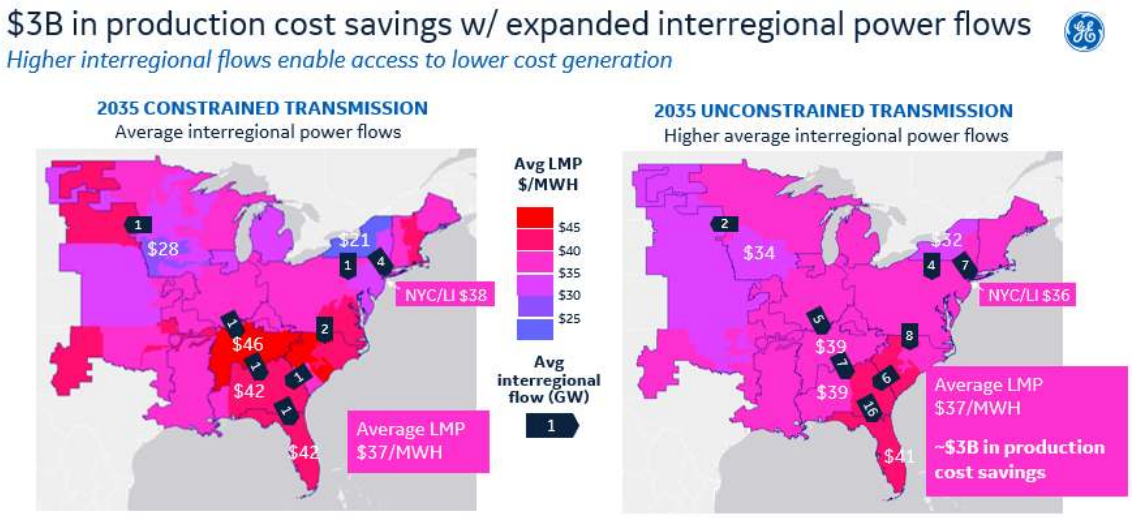

What Is Needed?

Federal Action

- **Minimum Interregional Transmission Capacity Requirements:** ACEG recommends that FERC start with a setting a basic transmission capacity requirement, such as 15% of load, to ensure that all regions have some capability to share power with neighbors.
- **Interregional Transmission Planning Requirements:** ACEG recommends that FERC adopt minimum planning standards to facilitate joint planning. ACEG further recommends that FERC require regional transmission planners to jointly develop interregional transmission plans using common assumptions about the future resource mix and common methods.

State Action

- **Advocacy:** ACEG recommends that state commissions—especially commissions representing states that cross or border more than one region—advocate for transmission planners in their region to engage in interregional planning.
- **Collaboration** [3]**:** ACEG recommends that state commissions coordinate with adjacent jurisdictions to develop and implement policies that will allow for interstate and interregional coordination, especially in the following areas: **jointly identifying transmission needs, developing cost-allocation methodologies, and streamlining permitting procedures.**

References

1. GE International, Inc., Potential customer benefits of interregional transmission (Nov. 2021), https://acore.org/wp-content/uploads/2021/12/02-GEEnergyConsulting_ACORE_InterregionalTransmissionMemo_211129.pdf.
2. GE International, Inc., Interregional Transmission Requirement Study (publication forthcoming).
3. In collaborating, state commissions should take a broad view of their public interest regulatory responsibilities. E.g. Iowa Code §478.3(3) (stating for transmission line petitions that "In considering the public interest, 'the term 'public' shall not be interpreted to be limited to consumers located in this state.").