

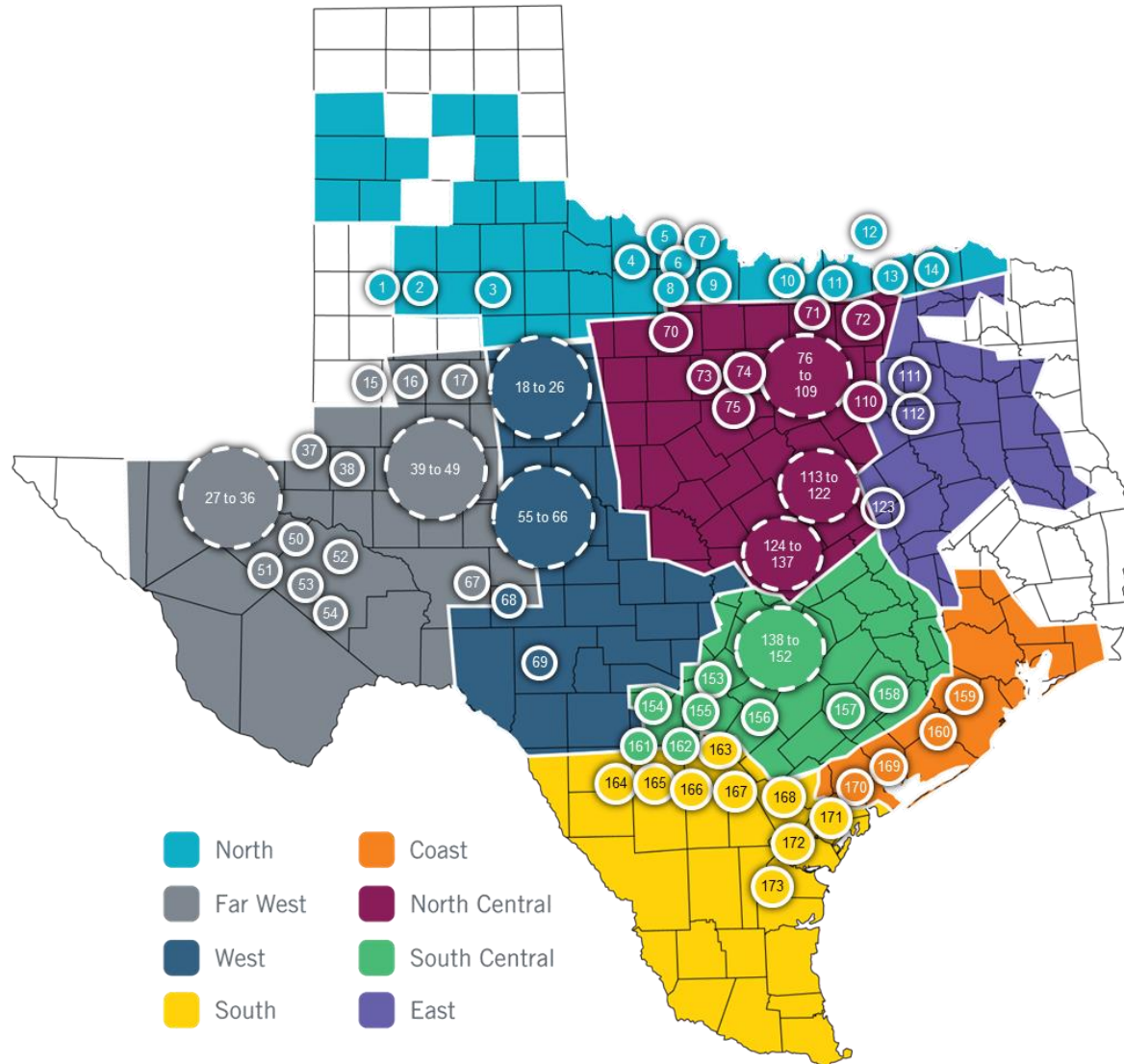


2023 RTP – Final Update

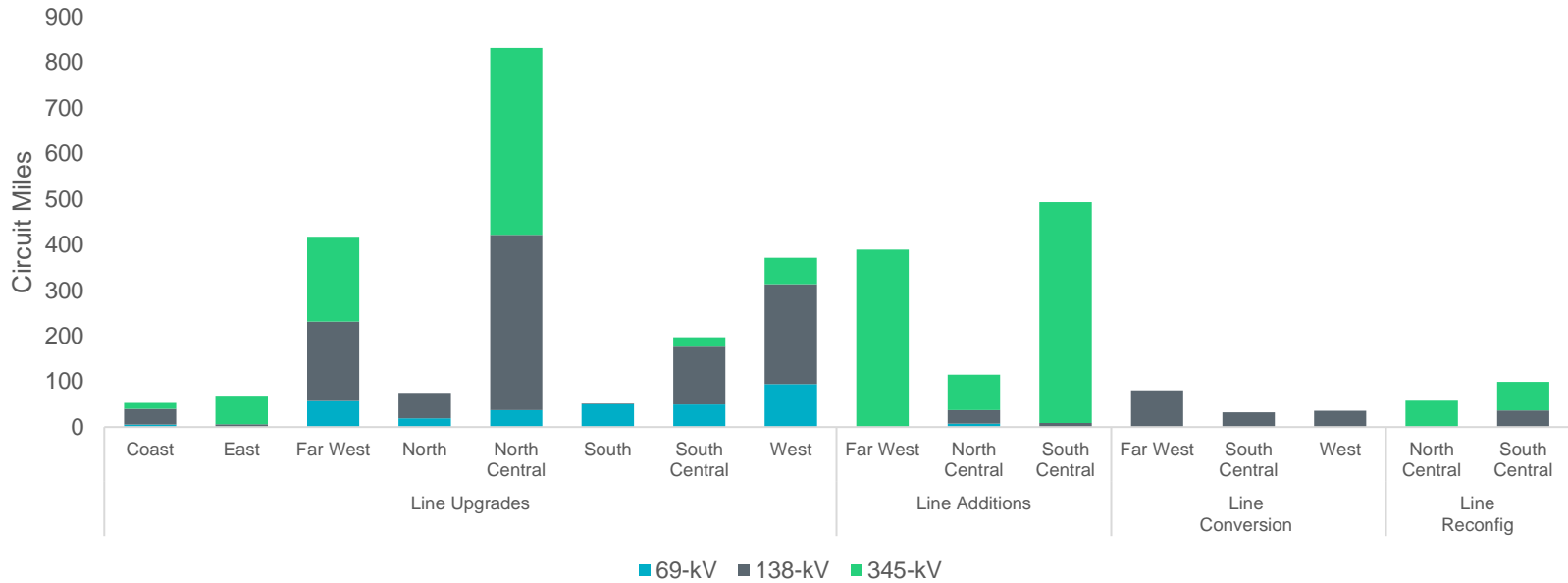
ERCOT
Regional Transmission Planning

January 2024

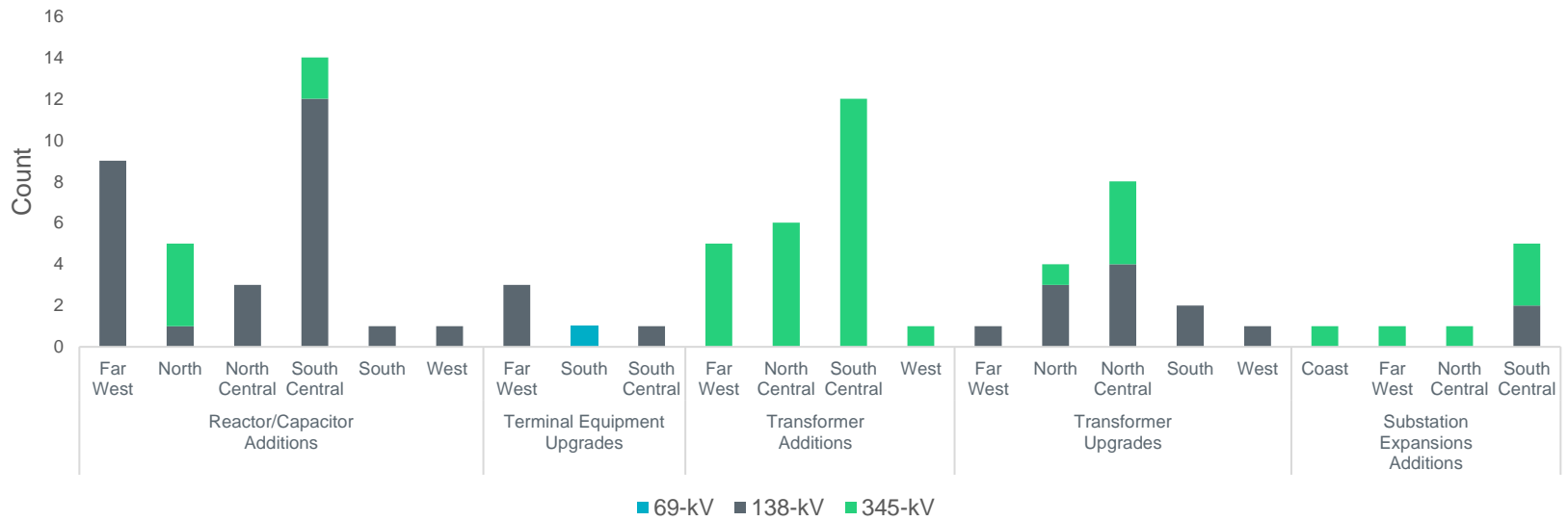
2023 RTP Reliability Project Locations



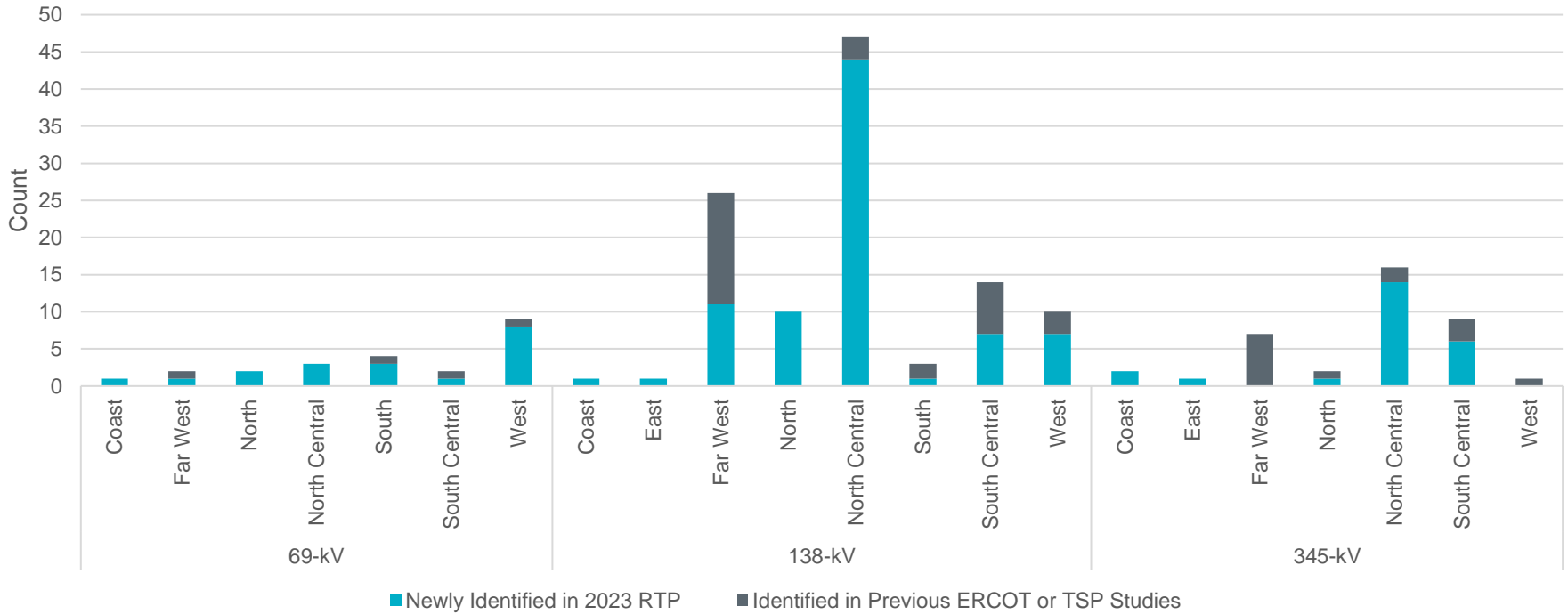
Line Upgrades, Additions, and Conversions



Other Upgrades and Additions



Previously VS. Newly Identified Projects



ERCOT On-Peak Sensitivity

- The focus of this sensitivity analysis was:
 - (1) to test the robustness of the transmission projects identified under the summer peak load conditions; and,
 - (2) identify any additional reliability needs to reliably serve the net peak load when solar is ramping down rapidly in the early evenings.
- Assumptions were presented at the October 2023 RPG meeting
 - [On-peak sensitivity assumptions](#)

ERCOT On-Peak Sensitivity – Continued

- The results showed:
 - Most challenges were in the West and Far West study region.
 - The need for additional import capability to the Far West region was observed.
 - Stage 3 from the ERCOT Delaware Basin Load Integration study was needed.
 - New Riverton Switch – Owl Hill Sub 345-kV line addition and two 345/138-kV transformer additions at Owl Hill
 - This was also found to be needed in the 2022 RTP winter peak sensitivity analysis, which likewise represented a low solar high load condition.
 - The low solar resulted in more load in central Texas served by wind generation from south Texas, stressing the south to central Texas corridor.

High Renewable Light Load Off-Peak Sensitivity Analysis

- The purpose of this sensitivity is to provide understanding of potential system impacts under the assumed system conditions rather than recommend specific projects.
 - Assumptions were presented at the October 2023 RPG meeting.
[High Renewable Light Load sensitivity assumptions](#)
- Key takeaways:
 - Additional local transmission upgrades were needed to ensure the availability of the assumed renewable dispatch level (50 GW, 84% penetration).
 - Under these renewable and load conditions, the need was seen to add the CPS San Antonio South Reliability Project.
 - Transmission upgrades were mainly concentrated in the Coast, North Central, South Central and Southern weather zones.

2023 RTP Report Posting

- 2023 RTP report and final reliability cases were posted on December 22, 2023.
- Public version of the report was posted to the following location (<http://www.ercot.com/gridinfo/planning>).

Questions / Comments

- Please send questions and/or comments to:
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