2025 RTP Assumptions

July 2025 RPG

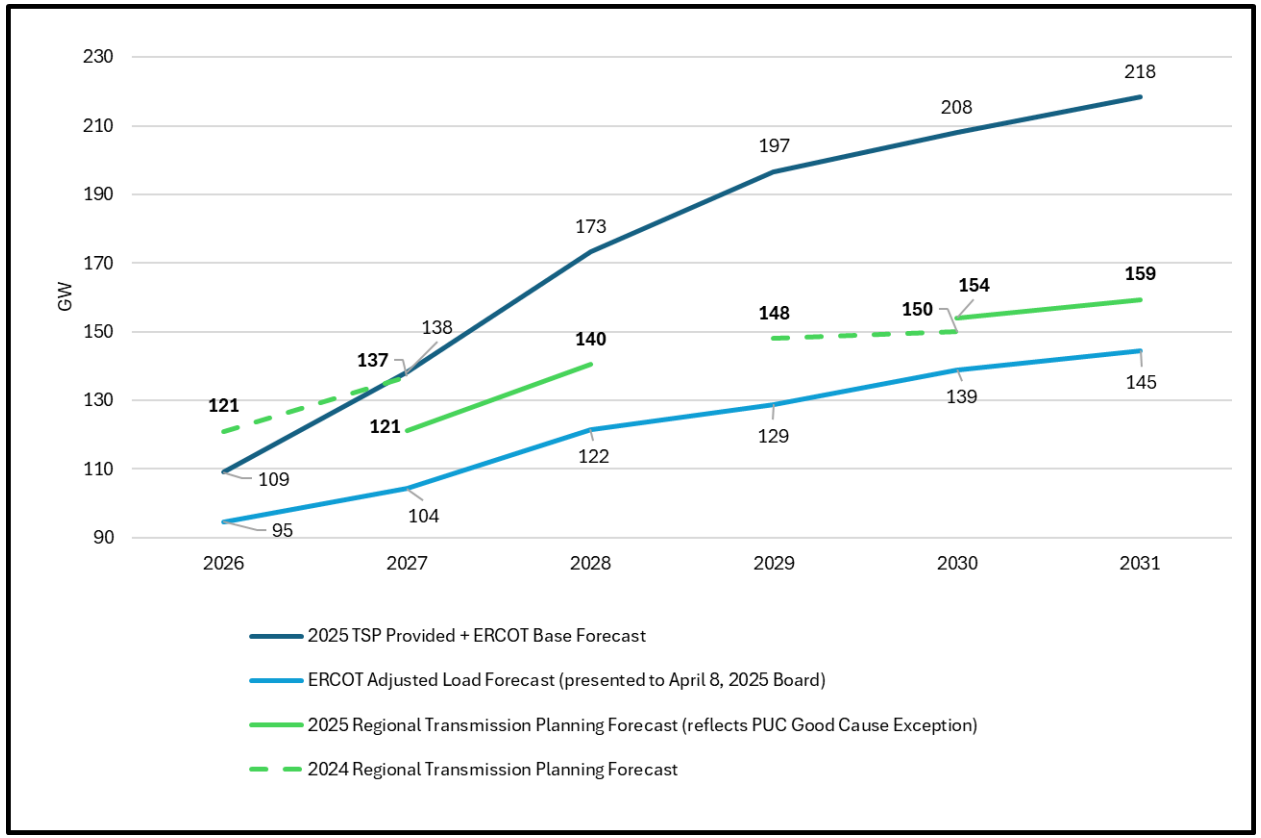
ERCOT
Regional Transmission Planning

July 29, 2025

ERCOT Transmission Planning Adjusted Load Forecast (ETPALF)

PUC approved Good Cause Exception to use the ETPALF, which includes the following adjustments:

- All contracted loads will be added to the case at 100%.
- In-service date delay of 180 days removed for both Contracts and Officer Letter loads (OLLs).
- OLLs will be reduced using the percentages from the ERCOT Adjusted Load Forecast.
  - All OLLs will be reduced to 55.4%[1].
  - Data center OLLs are further reduced to 49.8%[2] of the initial OLL reduction.
- For example: a 100 MW data center OLL will be reduced to 100 MW * 55.4% * 49.8% = 27.6 MW
- Transmission-only TSP loads only added if certificated provider submitted Contract, Officer Letter, or Agency Letter



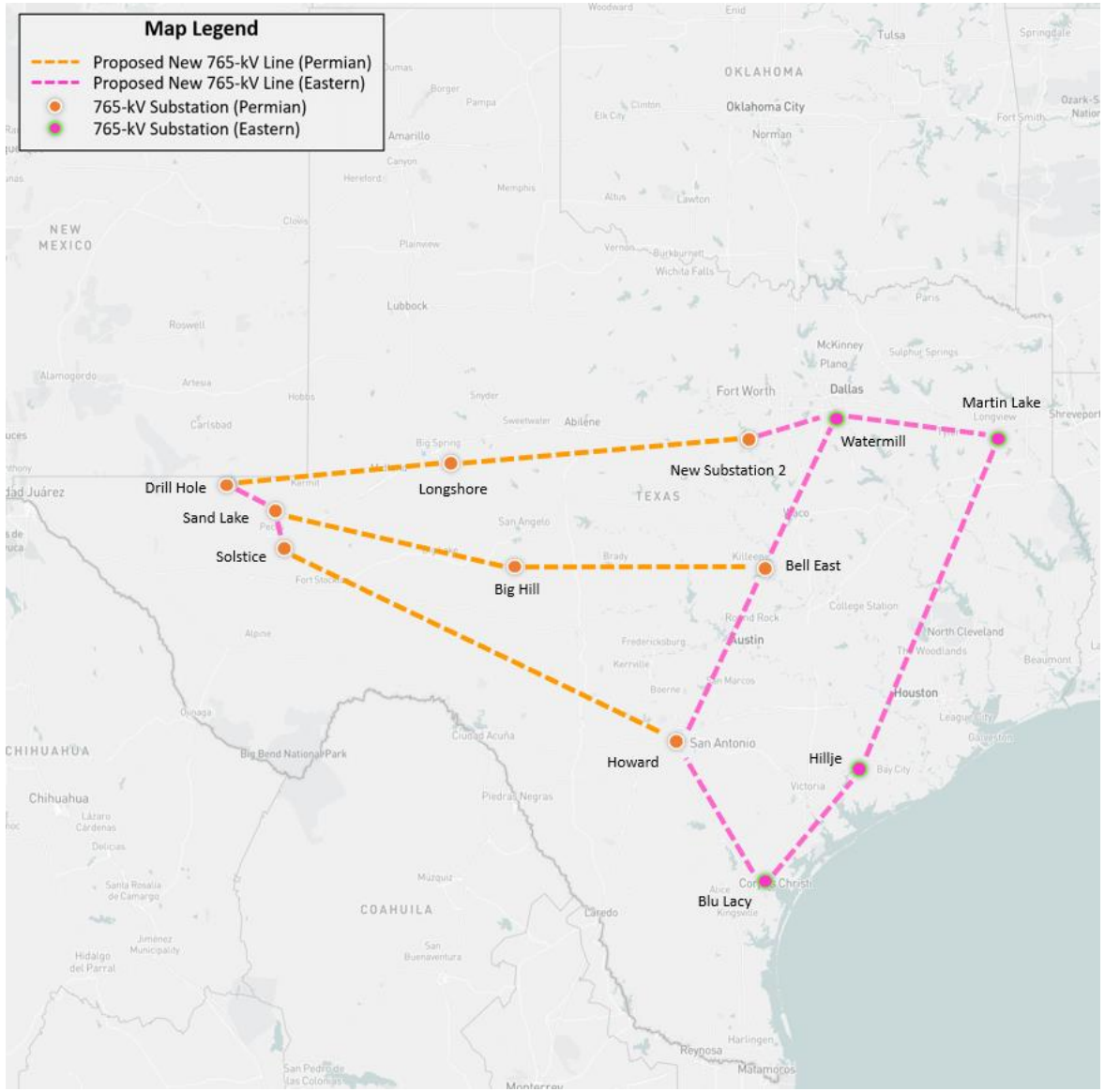
Key Takeaway: The 2031 ERCOT Transmission Planning adjusted load forecast is approximately 159 GW.

[1] Actual experience for Officer Letter loads with 2024 in-service dates show 55.4% of the project's load was in-service by February 2025
[2] Actual experience for data centers that had 2022-2024 in-service dates show load was 49.8% of the requested amount

Texas 765-kV Strategic Transmission Expansion Plan (STEP)

- April 24: Public Utility Commission of Texas approved 765-kV Permian Basin import paths.
- July 17: Texas 765-kV STEP Eastern Backbone Project submitted to RPG.

- 765-kV STEP, as proposed in the 2024 RTP, will be included in the 2025 RTP 2030 and 2031 starting base cases to address base case violations.
- Potential additional 765-kV equipment will be studied as a part of the 2025 RTP to address additional new load growth.



Generation Summary

- Generation added to serve load and losses and provide reserves of approximately 3,000 MWs.
- Generation added from the May Generator Interconnection Status (GIS) report (published June 2).
- Generation beyond Planning Guide 6.9(1) added to balance load in the order currently outlined in paragraph (5) of Planning Guide Revision Request (PGRR) 127.

2027 SUM	2028 MIN & SUM	2030 SUM	2031 SUM
6.9(1)	6.9(1) IA	6.9(1) IA FIS Completed	6.9(1) IA FIS Completed FIS Started – TEF

Key Takeaway: No generation outside of ERCOT's generation interconnection queue was added in the 2025 RTP start cases.

Questions/Comments

- Please send to:

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APPENDIX

2025 RTP – Load Timeline

- April 8 – ERCOT Adjusted Load Forecast presented at the Board of Directors meeting.
- May 1 – ERCOT filed *Update on ERCOT's Adjusted Load Forecast and Request for Good Cause Exception for 2025 Regional Transmission Plan* under PUCT Project No. 55999.
- June 4 – ERCOT filed *Revisions to Adjusted Load Forecasts* under PUCT Project No. 55999.
- June 5 – The PUC granted ERCOT Good Cause Exception authorizing the use of the ERCOT Transmission Planning Adjusted Load Forecast.

Final Load by Weather Zone

Weather Zone	2027 SUM (MW)	2028 MIN (MW)	2028 SUM (MW)	2030 SUM (MW)	2031 SUM (MW)
East	3,051	1,427	3,110	3,187	3,235
Coast	24,369	14,809	28,317	30,936	32,091
North	10,554	10,653	12,158	12,479	12,529
North Central	32,619	17,195	35,448	37,993	39,581
South	8,737	9,717	12,889	14,602	14,976
South Central	21,903	14,386	24,869	28,515	29,325
West	4,745	5,707	7,023	7,575	7,901
Far West	15,273	12,513	16,744	18,916	19,922
Total	**121,251**	**86,407**	**140,560**	**154,205**	**159,560**

Load numbers exclude self-served and losses

Wind Dispatch

- **Summer Peak Cases:**
  - CDR weighted average capacity factor for each wind region (Coastal, Panhandle, Other)
  - Based on top 20 load hours of each year (past 10 years)
- **Minimum Load Case:**
  - Weighted average capacity factor for each wind region (Coastal, Panhandle, Other)
  - Based on bottom 20 load hours of each year (past 3 years)
  - Each wind region then scaled up 4% to allow Quick Start units to be turned off

Case	2025 RTP Wind Capacity Factors		
	Coastal	Panhandle	Other
Summer Peak	55%	28%	21%
Minimum Load	36%	54%	48%

Solar Dispatch

- **Summer Peak Cases:**
  - CDR weighted average capacity factor for all ERCOT
  - Based on top 20 load hours of each year (past 5 years)
- **Minimum Load Case:**
  - All solar offline

Case	2025 RTP Solar Capacity Factor
Summer Peak	73%
Minimum Load	Offline

Battery Dispatch

- **Summer Peak Cases:**
  - All battery energy storage will be dispatched regardless of duration
    - Except those registered as SODG
    - Including distribution connected battery energy storage
  - Dispatch level will be up to 20.3% of their maximum discharging capacity
    - Consistent with the methodology described in note [3] on the “Peak v High Net Load Hour 2024” tab of the December 2023 CDR report
  - Subject to Security-Constrained Optimal Power Flow (SCOPF)

- **Minimum Load Case:**
  - All battery energy storage will be set to zero

DC Tie Dispatch

- **Summer Peak Cases:**
  - Analyzed DC tie flows during the top 20 load hours for the past 3 years (60 hours total)
- **Minimum Load Case:**
  - Analyzed DC tie flows during the bottom 20 load hours for the past 3 years (60 hours total)

DC Tie	Summer Peak Cases			Minimum Load Case		
	2025 RTP	2024 RTP	2023 RTP	2025 RTP	2024 RTP	2024 RTP
East	600 MW (IMPORT)	600 MW (IMPORT)	600 MW (IMPORT)	0 MW	0 MW	0 MW
North	220 MW (IMPORT)	220 MW (IMPORT)	220 MW (IMPORT)	0 MW	0 MW	0 MW
Laredo	0 MW	0 MW	0 MW	0 MW	0 MW	0 MW
Railroad	0 MW	0 MW	0 MW	0 MW	0 MW	0 MW

Hydro Dispatch

- **Summer Peak Cases:**
  - CDR weighted average capacity factor for all ERCOT
  - Based on top 20 load hours of each year
- **Minimum Load Case:**
  - All hydro offline

Case	2025 RTP Hydro Capacity Factor
Summer Peak	76%
Minimum Load	Offline