2025 RTP Economic Analysis Update

Top Constraints – Preliminary Results

Economic Analysis & Long-Term Planning Studies

Nov 11, 2025

Preamble

- ERCOT created the 2025 RTP economic cases for 2027 and 2030 study years

- This year, two sets of cases were developed for each study year named as Base Cases and Sensitivity Cases
  - Base Cases: Large Loads with a signed Interconnection Agreement or an Officer Letter were included and PUCT approved Good Cause Exception applied
  - Sensitivity Cases: only Large Loads with a signed Interconnection Agreement were included

- Other study assumptions and approaches were presented at previous RPG meetings
  - Generation and demand study assumptions at October 2025 RPG Meeting
  - Stability Interface Limits at July 2025 RPG meeting
  - Financial assumptions at the April 2025 RPG meeting
  - Weather year study assumptions at March 2025 RPG meeting

Base and Sensitivity Cases Assumptions Recap*

	Base Cases	Sensitivity Cases

Large Loads	Large load profiles from 2024 RTP were used
	▪ Contracted loads were included at 100% and Officer Letter loads (OLLs) were adjusted accordingly [1]
	  ○ OLLs were reduced to 55.4%
	  ○ Data center OLLs are further reduced to 49.8% of the initial OLL reduction
		Large load profiles from 2024 RTP were used
		▪ Contracted loads were included at 100% and all OLLs were removed

Added Generation Capacity	Added from the May 2025 Generator Interconnection Status (GIS) report [2] ▪ Planning Guide Section 6.9(1) ▪ IA signed ▪ FIS Completed ▪ FIS Started (partial)	Added from the May 2025 Generator Interconnection Status (GIS) report ▪ Planning Guide Section 6.9(1) ▪ IA signed ▪ FIS Completed (partial)

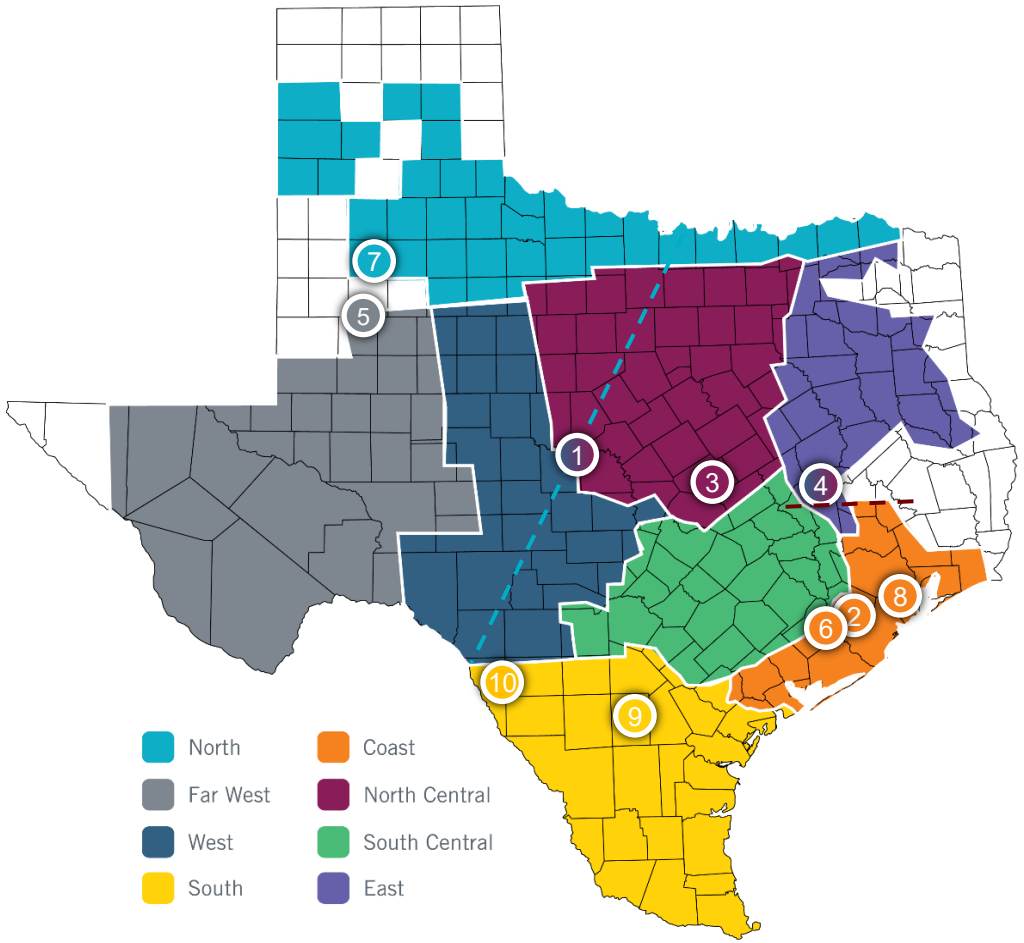
*From October 2025 RPG meeting (2025 RTP Economic Analysis Update).

[1] https://www.ercot.com/files/docs/2025/06/17/2025_RTP_Load_Update_June_2025_RPG.pdf
[2] added in the order currently outlined in paragraph (5) of Planning Guide Revision Request (PGRR) 127

Top Congested Constraints from 2027 Study Year

- Total congestion rent for 2027 Base and Sensitivity Cases are $1.16B and $1.11B respectively.

		Congestion Rent* (M$)	
Index	Constraint	Base	Sensitivity
1	West Texas Export	130	245
2	Houdini - W A Parish 345-kV Line	155	150
3	Bell County East Switch - Voss Lake 345-kV Line	112	106
4	North - Houston Interface	26	48
5	Farmland - Holly POI 345-kV Line	47	35
6	Elmato to Houdini 345-kV Line	16	33
7	MacKenzie Substation - Northeast Substation 115-kV Line	48	31
8	PH Robinson to Meadow 345-kV Line	15	27
9	George West SW to Sigmor 138-kV Line	19	20
10	Cotulla to Reveille138-kV line	27	17

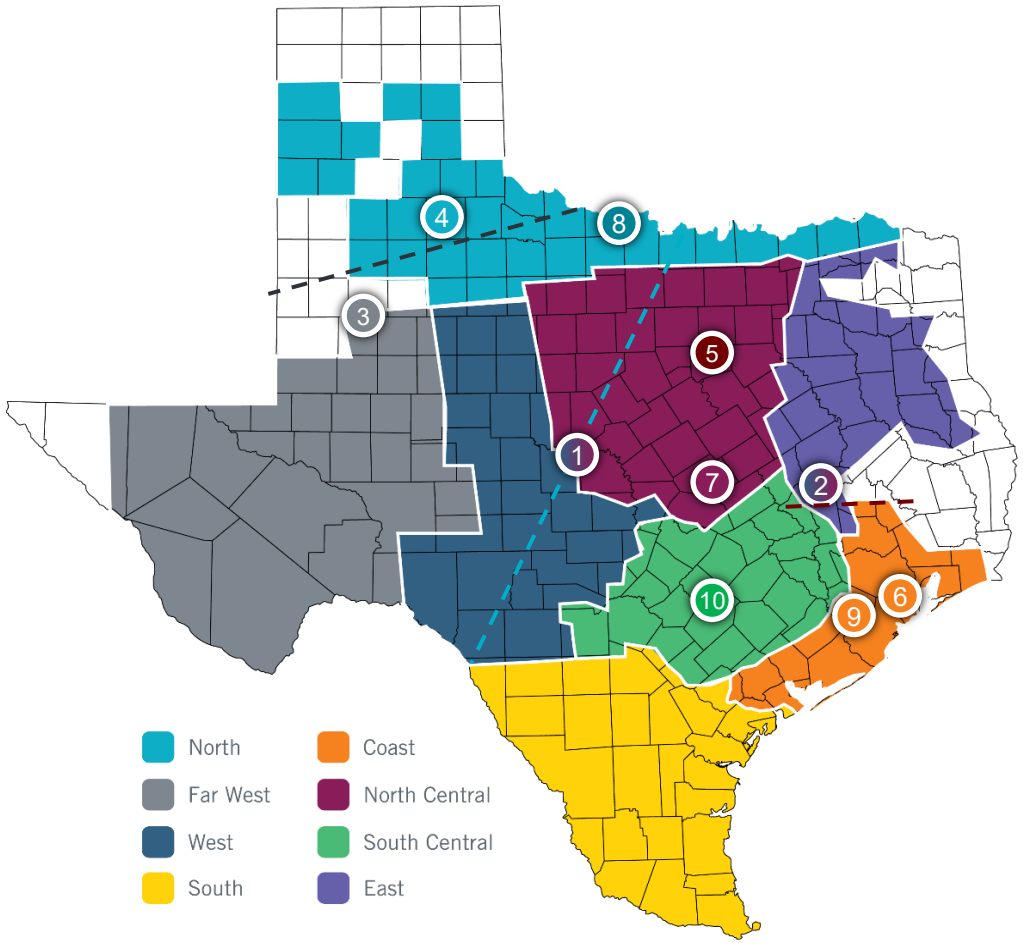


*Congestion rent indicates areas of the system where economic transmission projects may be beneficial. It is not an indication of whether a project to reduce specific congestion would or would not meet the ERCOT economic planning criteria.

Top Congested Constraints from 2030 Study Year

- Total congestion rent for 2030 Base and Sensitivity Cases are $722M and $843M respectively.

		Congestion Rent* (M$)	
Index	Constraint	Base	Sensitivity
1	West Texas Export	145	203
2	North - Houston Interface	57	132
3	Holly POI - Wett Long Draw 345-kV Line	68	50
4	Panhandle Interface	72	47
5	Buntin Drive - Simpson Stuart 138-kV Line	1	39
6	PH Robinson to Meadow 345-kV Line	13	39
7	Four Brothers to Trading House 345-kV Line	26	37
8	Fisher Road Switch - Short Creek Solar POI 345-kV Line	25	24
9	Elmato to Houdini 345-kV Line	4	21
10	Temple Pecan Creek - Temple Switch 345-kV Line	21	21



*Congestion rent indicates areas of the system where economic transmission projects may be beneficial. It is not an indication of whether a project to reduce specific congestion would or would not meet the ERCOT economic planning criteria.

Next Step:

- ERCOT is evaluating the potential economical transmission projects for key congestions observed in the Sensitivity Cases
- The results will be presented in future RPG meetings

Questions

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