



2026 ERCOT TPL-001-5.1 Overview and Assumptions

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Outline:

- Overview
- Base and sensitivity cases
- Transmission, load, and generation assumptions
- Contingency analysis and performance requirements
- Other analyses

NERC Reliability Standard TPL-001-5.1 Overview

- As the Planning Coordinator for the ERCOT Region, TPL-001 requires ERCOT to prepare an annual Transmission Planning Assessment. (R2)
- In prior years, ERCOT used the Regional Transmission Plan (RTP) to meet the steady-state and short-circuit analysis requirements of TPL-001.
- On June 18, 2026, the Public Utility Commission (PUC) granted ERCOT a [good-cause exception](#) to not perform the 2026 RTP.
- ERCOT will meet its 2026 TPL-001 requirements in a study with a more limited scope than the RTP.

Base and Sensitivity Cases

The base cases will be the 25SSWG_U1 cases published in November 2025. (R1)

- **R2.1.1** – System Peak Load for either year one or year two, and for year five
 - 25SSWG_2028_SUM1_U1_Pass_Final_11132025_Set3.raw
 - 25SSWG_2031_SUM1_U1_Pass_Final_11132025_Set3.raw
- **R2.1.2** – System Off-Peak Load for one of the five years
 - 25SSWG_2029_MIN_U1_Pass_Final_11132025_Set3.raw
- **R2.1.3** – For the three cases in R2.1.1 and R2.1.2, ERCOT will create and study sensitivity cases to demonstrate the impact of changes to the model assumptions.
- **R2.2.1** – System Peak Load for one of the years in the Long-Term Transmission Planning Horizon
 - 25SSWG_2032_SUM1_U1_Pass_Final_11132025_Set3.raw

Transmission Assumptions (R1.1.1 & R1.1.2)

- Apply off-cycle IDEVs submitted by TSPs for the 25SSWG_U1 case build
- Apply other model corrections identified by ERCOT and TSPs during the case conditioning process
- Add or update all Tier 1, 2, and 3 projects that have received RPG acceptance and, if applicable, ERCOT endorsement
- Remove Tier 1, 2, and 3 projects that have not received RPG acceptance or, if applicable, ERCOT endorsement
- Model dynamic ratings based on the 90th percentile temperature in the weather zone associated with the transmission element

Load Assumptions (R1.1.3)

- **Large Loads** will be updated according to their provisional load classification in the Batch Zero study.
- **Medium Loads** will be added or updated according to the information that was submitted in the Medium Load RFI for the 2026 RTP.
- **Native Load** will be the ERCOT 90/10 load forecast.
 - Zonal load forecasts will account for impacts from rooftop solar and electric vehicles.
 - Zonal load forecasts in the Far West, North, and West weather zones will be adjusted to incorporate the S&P Global Permian Basin load forecast.
 - Load inside a weather zone will be allocated uniformly according to SSWG bus-level load forecasts and will not be allocated to individual TDSPs.
 - The minimum load case will not update the native load forecast in the base case load forecast unless ERCOT load review identifies the need for adjustment.

Generation Assumptions (R1.1.5)

- Model all generators that have met the ERCOT Planning Guide Section 6.9(1) requirements, based on the July 2026 Generator Interconnection Status (GIS) Report.
 - If necessary, model generators that have not met the ERCOT Planning Guide Section 6.9(1) requirements according to the guidelines in PGRR 127 such that sufficient generation is available to meet the forecasted demand.
- Generation assumptions will be determined using methodologies similar to prior RTPs. These assumptions include:
 - Generation additions, retirements, and mothballs
 - Renewable, battery, and SODG generation dispatch
 - Switchable generation and DC Tie status
 - System reserve requirements
 - Fuel prices

Contingency Analysis and Performance Requirements

Steady-state contingency analysis identifies violations of performance requirements in NERC TPL-001 and the ERCOT Planning Guide (R5, R6)

- Limit study to the NERC-defined Bulk Electric System (i.e., 100 kV and above)
- Study all contingency events defined in Table 1 of TPL-001 and ERCOT Planning Guide Sections 4.1.1.1 and 4.1.1.2 (R3)
 - Minimum Deliverability Criteria (Section 4.1.1.7) and Maintenance Outage Reliability Criteria (Section 4.1.1.8) are not included in this study
- Identify Corrective Action Plans (CAPs) and Constraint Management Plans (CMPs) to address identified system deficiencies and meet performance requirements in NERC TPL-001 and the ERCOT Planning Guide (R2.7)
 - Future studies (e.g., Batch Zero) will help confirm the need for these CAPs and CMPs prior to implementation

Other Analyses

- **Short circuit analysis** in the Near-Term Planning Horizon (R2.3, R2.8)
- **Known outages analysis** in the Near-Term Planning Horizon for the P0 and P1 categories with the System Peak or Off-Peak conditions that the System is expected to experience when the known outages are planned (R2.1.4)
 - RFIs have been issued and received for transmission & generation known outages
- **Long lead-time analysis** for the P0, P1, and P2 categories with the conditions that the System is expected to experience during the possible unavailability of the long lead-time equipment (R2.1.5)
 - RFIs have been issued and received for long lead-time transmission equipment

Summary and Conclusion

- ERCOT was granted a Good Cause Exception to not perform a 2026 Regional Transmission Plan (RTP).
- ERCOT will complete the NERC TPL-001 study by December 31, 2026.
- ERCOT will document and publish its study assumptions, analysis, and results similar to prior RTPs. (R8)

Thank you!

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