



**LCRA TSC and CEHE Euclid 765-kV  
Substation and Transmission Line Addition  
Project – ERCOT Independent Review (EIR)  
Scope**

Ben Richardson

RPG Meeting  
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# Introduction

- LCRA Transmission Services Corporation (LCRA TSC) and CenterPoint Energy Houston Electric, LLC (CEHE) submitted the Euclid 765-kV Substation and Transmission Line Addition Project for Regional Planning Group (RPG) review in January 2026
  - This Tier 1 project is estimated to cost \$1.831 billion and will require a Certificate of Convenience and Necessity (CCN) filing
  - Estimated in-service date (ISD) is June 30, 2031
  - This project was identified and included in 2025 Regional Transmission Plan (RTP) in Caldwell, Colorado, Gonzales, Lavaca, Wharton counties in the South-Central and Coast Weather Zones
  - This project aligns with the 2025 RTP Euclid 765-kV Station and Euclid to Hillje 765-kV Line Addition Project
- This project is currently under ERCOT Independent Review (EIR)

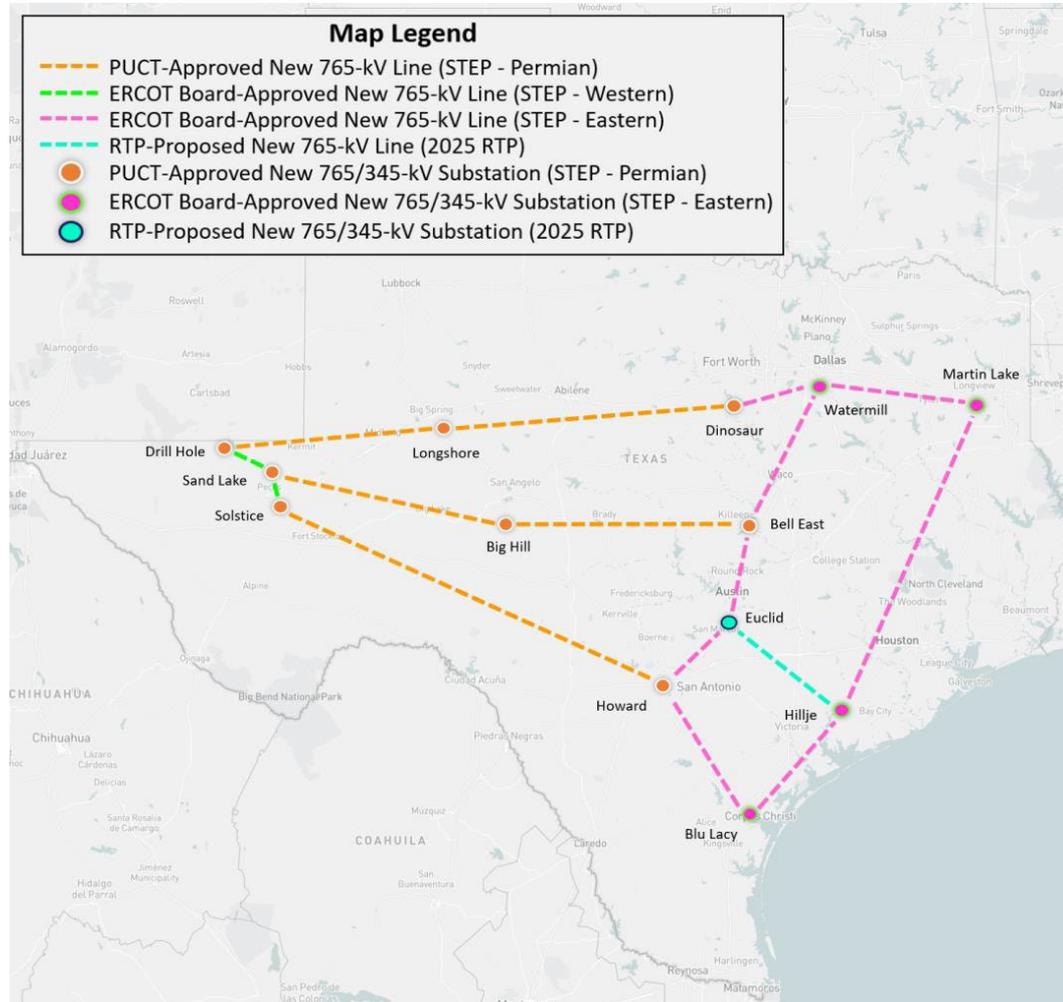
# Project Proposed by LCRA and CEHE

- Construct a new Euclid 765-kV Substation
  - Install adjacent to existing Euclid 345-kV Station expanding Euclid Station
  - Install two (2) new 765/345-kV transformers rated to at least 2,403 MVA Normal and 2,772 MVA Emergency;
  - Connect Euclid 765-kV as cut-in to planned Bell County East to Howard Road 765-kV transmission line; and
  - Install 765-kV Switch Shunt Reactors sufficient to ensure voltage remains within acceptable operating limits.
- At Planned Hillje 765/345-kV Substation
  - Install or modify existing Switch Shunt Reactors sufficient to ensure voltage remains within acceptable operating limits; and
  - Upgrade existing 345-kV circuit breakers to 80 kA interrupting capability.

# Project Proposed by LCRA and CEHE (cont.)

- Construct a new Euclid to Hillje 765-kV single-circuit transmission line, with normal and emergency ratings of at least 7,602 MVA, which will require a new ROW, approximately 131.4 miles
  - LCRA to construct approximately 65.7 miles segment from Euclid to point-of-interconnection with CEHE; and
  - CEHE to construct approximately 65.7 miles segment from Hillje to point-of-interconnection with LCRA.
- At Existing Euclid 345-kV Substation
  - Connect Euclid 345-kV as Cut-in to the existing John Dumas to Hornsby 345-kV transmission line;
  - Construct two (2) new Euclid to Misty 345-kV transmission lines rated to at least 2,988 MVA on separate structures, which will require a new ROW, approximately 2.0 miles;
  - All equipment will be rated at 2,988 MVA (5000 Amps); and
  - Install new 345-kV circuit breakers with 80 kA interrupting capability.
- At Existing Misty 345-kV Substation
  - All equipment will be rated at 2,988 MVA (5000 Amps); and
  - Install new 345-kV circuit breakers with 80 kA interrupting capability.

# Euclid 765-kV Station and Euclid to Hillje 765-kV Line Addition Proposed in 2025 RTP



# Study Assumptions and Methodology

- The reliability need of this RPG project was identified and included in the 2025 RTP
- This RPG project aligns with the 2025 RTP Euclid 765-kV Station and Euclid to Hillje 765-kV Line Addition
- ERCOT will utilize the 2025 RTP study for this Independent Review and will assess the need for further analysis
  - Steady-state reliability analysis
  - Dynamic stability reliability analysis
  - Congestion Analysis
- ERCOT will perform additional evaluations in accordance with NERC TPL-001-5.1 and ERCOT Planning Criteria
  - Generation Addition and Load Scaling Sensitivity Analyses
    - Planning Guide Section 3.1.3(4)
  - Subsynchronous Oscillations (SSO) Assessment
    - Nodal Protocol Section 3.22.1.3(2)

# Next Step and Tentative Timeline

- Tentative timeline
  - EIR report to be posted in the MIS in May 2026
  - EIR recommendation to TAC in May 2026
  - Seek ERCOT Board of Directors endorsement in June 2026

*Thank you!*



Stakeholder comments also welcomed through:

[Ben.Richardson@ercot.com](mailto:Ben.Richardson@ercot.com)

[Robert.Golen@ercot.com](mailto:Robert.Golen@ercot.com)