



# Oncor and Lone Star Navarro and Ellis Area Reliability Project – ERCOT Independent Review (EIR) Scope

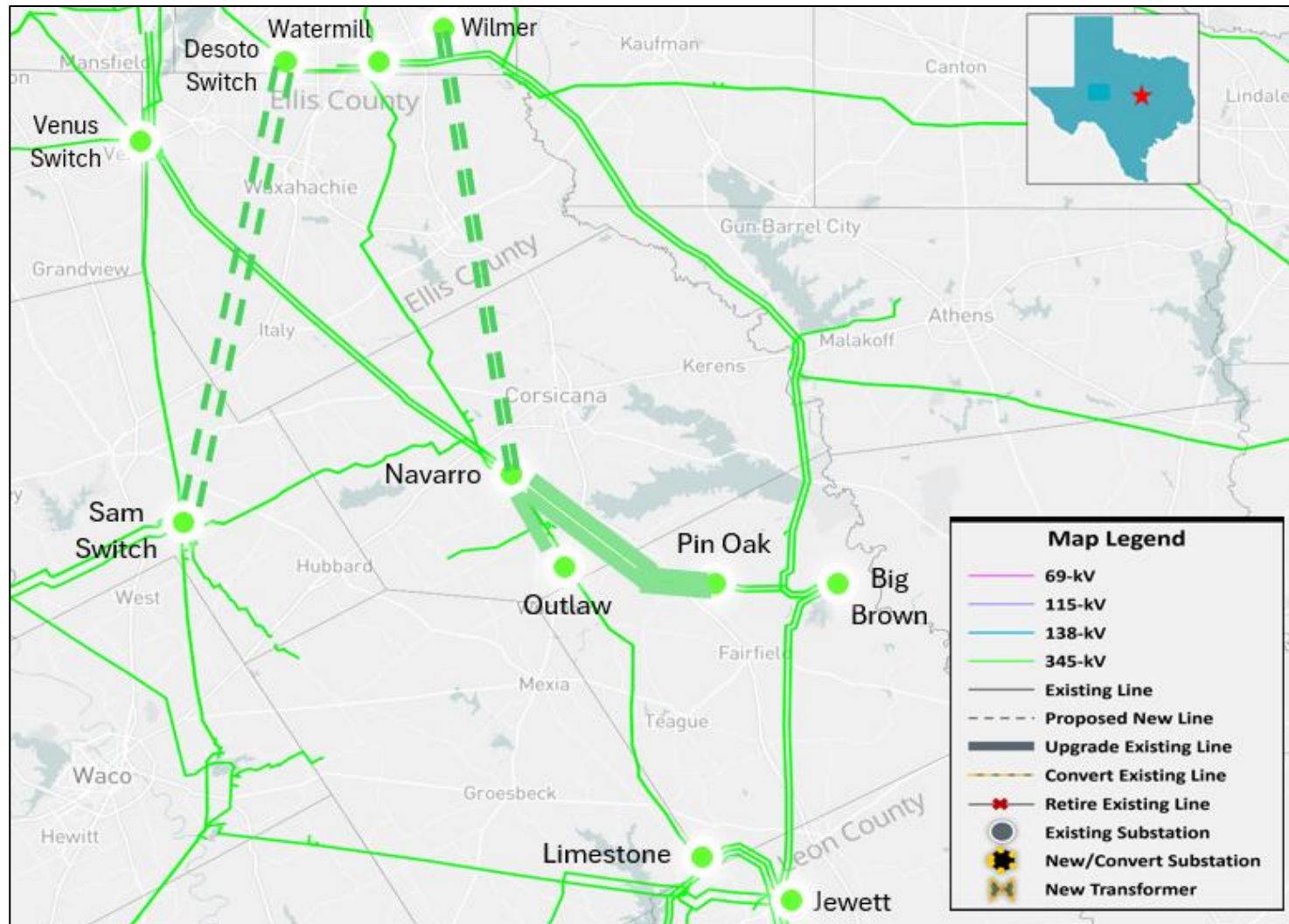
Ben Richardson

RPG Meeting  
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# Introduction

- Oncor and Lone Star (LST) submitted the joint Navarro and Ellis Area Reliability Project for Regional Planning Group (RPG) review in November 2025
  - This is a Tier 1 project with an estimated cost of \$759.95 million and will require a Certificate of Convenience and Necessity (CCN)
  - Estimated in-service date (ISD) is planned in phases between 2028 and 2034
  - This project is needed to address post-contingency thermal and voltage violations caused by load growth in the Dallas, Ellis, Freestone, Hill and Navarro Counties
  - This project was identified and included in the 2024 Regional Transmission Plan (RTP)
- Oncor presented a project overview at the January 2026 RPG Meeting
  - <https://www.ercot.com/calendar/01162026-RPG-Meeting>
- This project is currently under ERCOT Independent Review (EIR)

# Study Area Map with Proposed Project by Oncor & LST



# Proposed Project by Oncor & LST

- Upgrade the existing Navarro Switch to Pin Oak Switch 345-kV double-circuit transmission lines with normal and emergency ratings of at least 2,987 MVA, approximately 28.0-miles;
- Upgrade a section of the existing Navarro Switch to Outlaw Switch 345-kV double-circuit transmission lines with normal and emergency ratings of at least 2,987 MVA, approximately 5.6-miles;
- Construct a new Desoto Switch to Sam Switch 345-kV double-circuit transmission line on double-circuit structures with normal and emergency ratings of at least 2,987 MVA, approximately 56.0-mile;
- Install four 345-kV circuit breakers at the existing Desoto 345-kV substation with ratings of at least 5000 A;
- Install four 345-kV circuit breakers at the existing Sam 345-kV substation with ratings of at least 5000 A;
- Construct a new Wilmer Switch to Navarro Switch 345-kV double-circuit transmission line on double-circuit structures with normal and emergency ratings of at least 2,987 MVA, approximately 53.0-mile;
- Install three 345-kV circuit breakers at the existing Wilmer 345-kV substation with ratings of at least 5000 A;
- Install three 345-kV circuit breakers at the existing Navarro 345-kV substation with ratings of at least 5000 A;

# Study Assumptions – Base Case

- Study Area
  - Dallas, Ellis, Freestone, Hill and Navarro Counties in the North-Central Weather Zone will be considered for this study
- Steady-State Base Case
  - Final 2025 Regional Transmission Planning (RTP) 2031 summer peak load case published on Market Information System (MIS) in December 2025, will be updated to construct the study base case
    - Case: 2025RTP\_2031\_SUM\_12222025
    - Link: <https://mis.ercot.com/secure/data-products/grid/regional-planning>

# Study Assumptions – Transmission

- Based on the October 2025 Transmission Project and Information Tracking (TPIT) posted on the ERCOT website there are no projects within the study area with in-service dates before June 2031 within the study area that are not already modeled in the case
  - TPIT Link: <https://www.ercot.com/gridinfo/planning>
- The following placeholder project will be removed from the case:
  - (2024-NC55) Outlaw Switch to Navarro 345-kV Line Upgrade

# Study Assumptions – Generation

- No new generation that met the Planning Guide Section 6.9(1) condition with Commercial Operation Date (COD) before June 2031 in the study area at the time of the study that are not already modeled in the RTP case based on December 2025 Generator Interconnection Status (GIS) report posted on the ERCOT website in January 2026
  - GIS Link: <https://www.ercot.com/gridinfo/resource>
- All generation will be dispatched consistent with the 2025 RTP methodology
- All recent retired/indefinitely mothballed units will be reviewed and opened (turned off), if not already reflected in the 2025 RTP Final cases

# Study Assumptions – Load & Reserve

- Loads in study area
  - Loads may be updated
- Reserve
  - The reserve will be maintained consistent with the 2025 RTP

# Contingencies & Criteria

- Contingencies

- NERC TPL-001-5.1 and ERCOT Planning Criteria
- (<http://www.ercot.com/mktrules/guides/planning/current>)
  - P0 (System Intact)
  - P1, P2-1, P7 (N-1 conditions)
  - P2-2, P2-3, P4, and P5 (345-kV only)
  - P3 (G-1+N-1: G-1 of Big Brown U5, Navarro Unit 1, MCSES\_UNIT8 and LH2SES\_UNIT2)
  - P6-2 (X-1+N-1: X-1 of Seagoville X1 345/115-kV transformers)

- Criteria

- Monitor all 60-kV and above busses, transmission lines, and transformers in the study region (excluding generator step-up transformers)
- Thermal
  - Use Rate A for normal conditions
  - Use Rate B for emergency conditions
- Voltage
  - Voltages exceeding their pre-contingency and post-contingency limits
  - Voltage deviations exceeding 8% on non-radial load buses

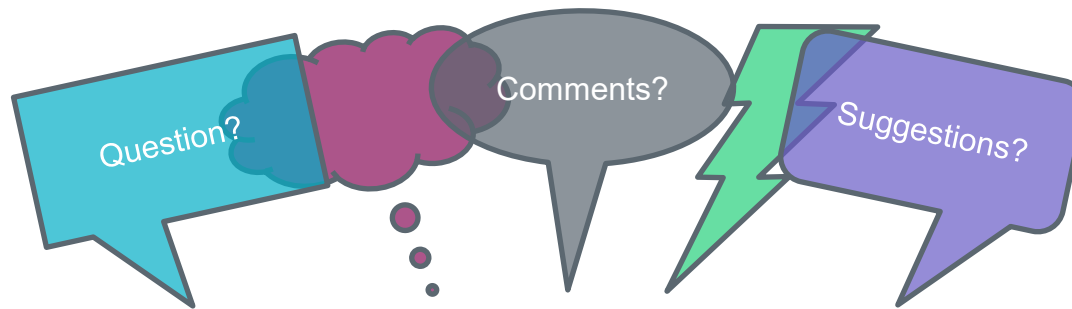
# Study Procedure

- Need Analysis
  - The reliability analysis will be performed to identify the need to serve the projected area load using the study base case
- Project Evaluation
  - Project alternatives will be tested to satisfy the NERC and ERCOT reliability requirements
  - ERCOT may also perform the following studies
    - Planned maintenance outage
    - Long-Term Load-Serving Capability Assessment
  - TSP(s) will provide Cost and Feasibility Assessment
- Generation Addition and Load Scaling Sensitivity Analyses
  - Planning Guide Section 3.1.3(4)
- Subsynchronous Oscillation (SSO) Assessment
  - Nodal Protocol Section 3.22.1.3(2)
- Congestion Analysis
  - Congestion analysis may be performed based on the recommended transmission upgrades to ensure that the identified transmission upgrades do not result in new congestion within the study area

# Deliverables

- Tentative Timelines
  - Status updates at the future RPG meetings
  - Final recommendation – Q2 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)