



LPL West Loop Project – ERCOT Independent Review Scope

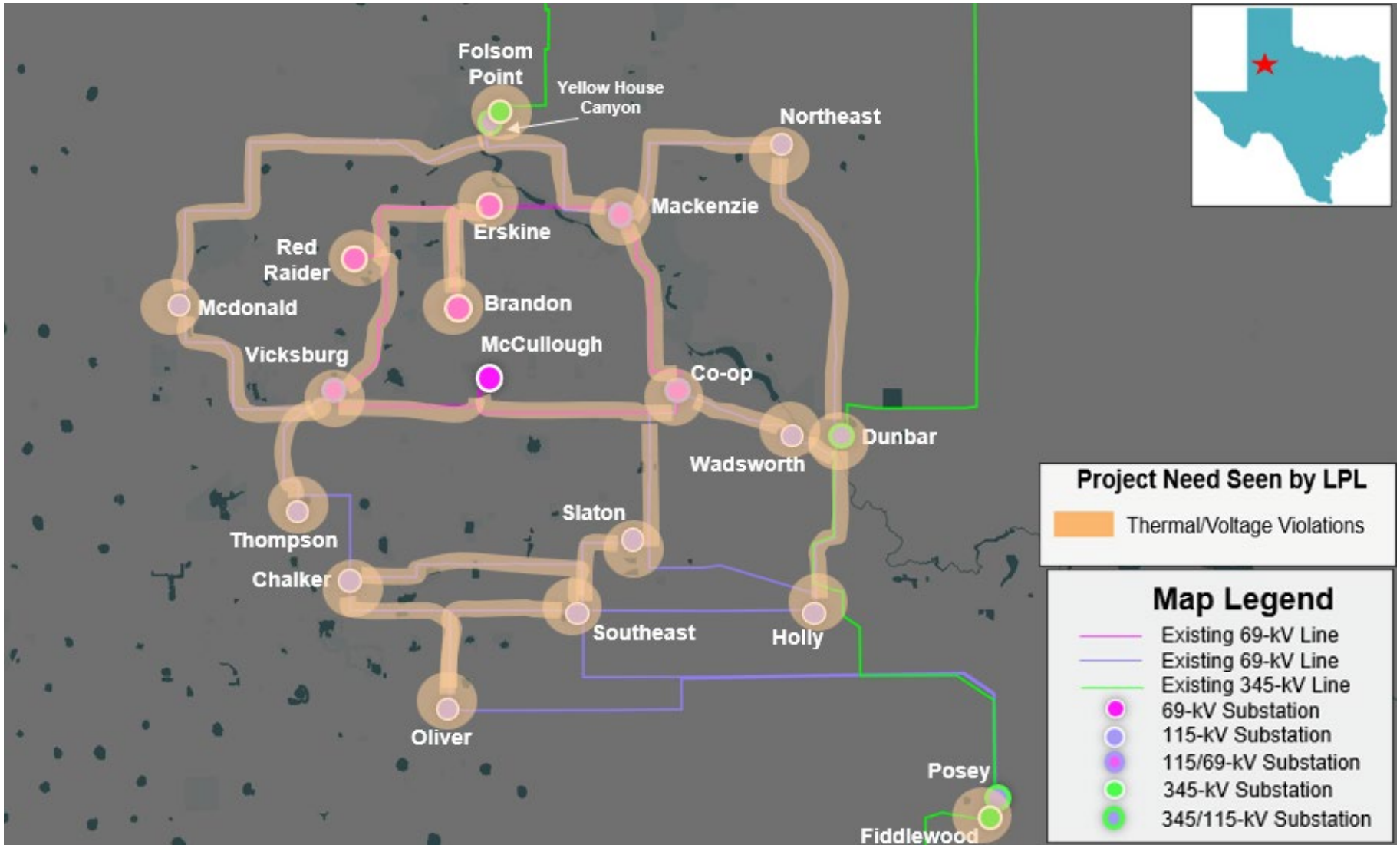
Travis Head

RPG Meeting
January 16, 2026

Introduction

- LPL submitted the West Loop Project for Regional Planning Group (RPG) review in October 2025
 - This is a Tier 1 project with an estimated cost of \$309.0 million and will require a Certificate of Convenience and Necessity (CCN)
 - Estimated in-service date (ISD) is Summer 2030
 - This project is needed to address post-contingency thermal and voltage violations in the Lubbock County
- This project is currently under ERCOT Independent Review (EIR)

Study Area Map with Project Need Seen by LPL



Proposed Project by LPL

- Construct a new McCalla 345/115-kV substation with a breaker and a half configuration with nine 345-kV breakers and six 115-kV breakers with room to expand to a third row at the 115-kV voltage level. All terminals and associated equipment will meet or exceed 3200 A for 345-kV and 3000 A for 115-kV;
- Install two new 345/115-kV autotransformers at the new McCalla 345/115-kV substation with normal and emergency ratings of at least 350 MVA and 420 MVA respectively;
- Construct a new Folsom Point to McCalla 345-kV double-circuit transmission line on double-circuit structures with normal and emergency ratings of at least 1912 MVA, approximately 14.0-mile;
- Construct a new Fiddlewood to McCalla 345-kV double-circuit transmission line on double-circuit structures with normal and emergency ratings of at least 1912 MVA, approximately 18.0-mile;

Proposed Project by LPL

- Install two 345-kV circuit breakers at the existing Folsom Point 345-kV substation with ratings of at least 3200 A;
- Install two 345-kV circuit breakers at the existing Fiddlewood 345-kV substation with ratings of at least 3200 A;
- Disconnect the existing Vicksburg to Thompson 115-kV transmission line;
- Construct a new Vicksburg to McCalla 115-kV transmission line on double-circuit structures with normal and emergency ratings of at least 391.8 MVA and 431 MVA respectively, approximately 5.5-mile;
- Construct a new Thompson to McCalla 115-kV transmission line on double-circuit structures with normal and emergency ratings of at least 391.8 MVA and 431 MVA respectively, approximately 4.5-mile;
- Rebuild the existing Vicksburg to Red Raider 69-kV transmission line on single-circuit structures to 115-kV capable, but operational at 69-kV, with normal and emergency ratings of at least 391.8 MVA and 431 MVA respectively, approximately 1.9-mile;

Proposed Project by LPL

- Rebuild the existing Mackenzie to Northeast 115-kV transmission line on single-circuit structures with normal and emergency ratings of at least 391.8 MVA and 431 MVA respectively, approximately 3.4-mile;
- Rebuild the existing Northeast to Dunbar 115-kV transmission line on single-circuit structures with normal and emergency ratings of at least 391.8 MVA and 431 MVA respectively, approximately 4.7-mile;
- Upgrade the existing Wadsworth to Dunbar 115-kV transmission line on single-circuit structures with normal and emergency ratings of at least 391.8 MVA and 431 MVA respectively, approximately 1.3-mile;
- Rebuild the existing Erskine to Brandon 69-kV transmission line on double-circuit structures to 115-kV capable, but operational at 69-kV, with normal and emergency ratings of at least 118.8 MVA and 130.6 MVA respectively, approximately 2.0-mile;

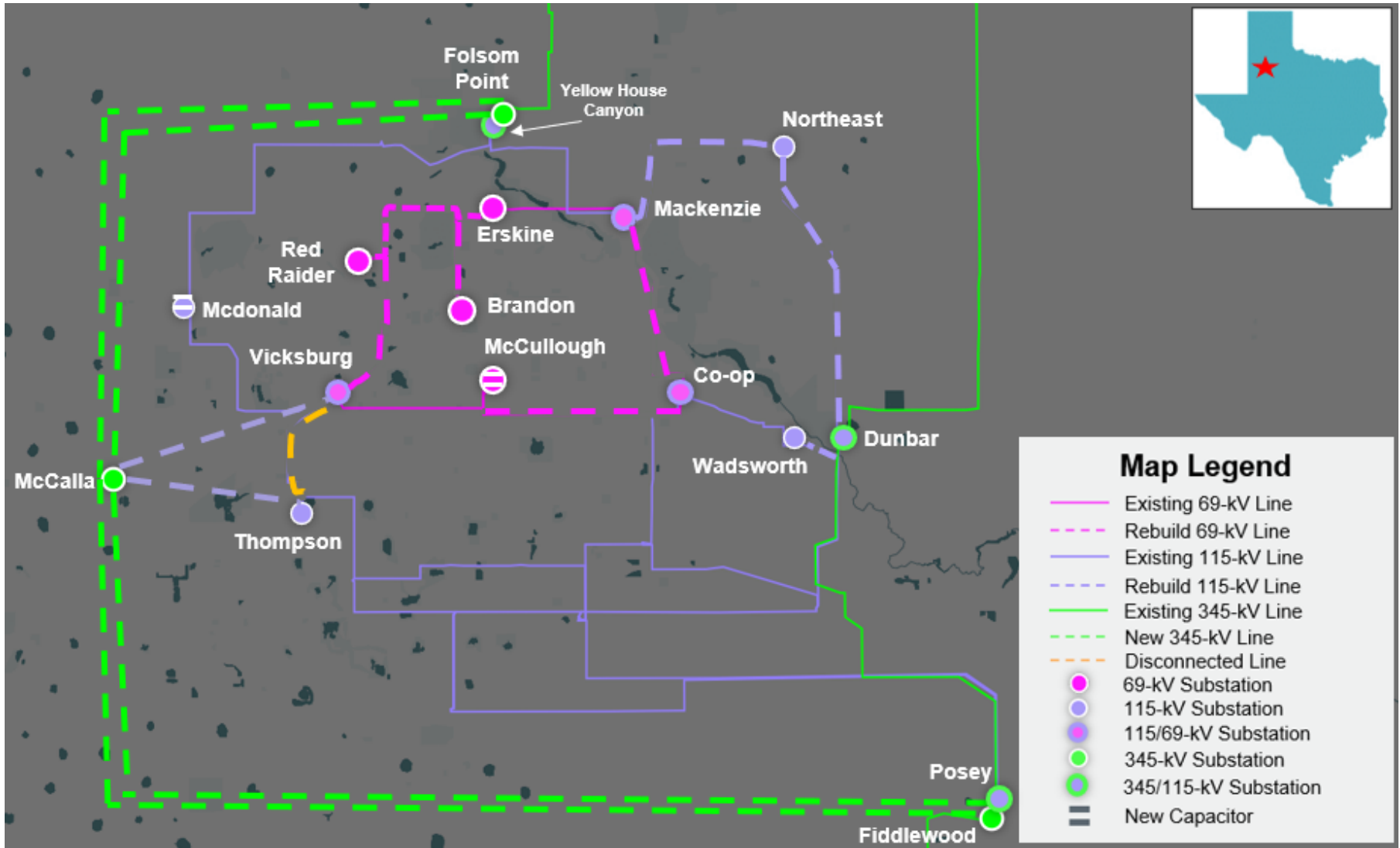
Proposed Project by LPL

- Rebuild the existing McCullough to Co-op 69-kV transmission line on double-circuit structures to 115-kV capable, but operational at 69-kV, with normal and emergency ratings of at least 235 MVA and 258.6 MVA respectively, approximately 3.5-mile;
- Rebuild the existing Red Raider to Brandon 69-kV transmission line on double-circuit structures to 115-kV capable, but operational at 69-kV, with normal and emergency ratings of at least 118.8 MVA and 130.6 MVA respectively, approximately 3.6-mile;
- Upgrade the existing Mackenzie to Co-op 69-kV transmission line on single-circuit structures to 115-kV capable, but operational at 69-kV, with normal and emergency ratings of at least 235 MVA and 258.6 MVA respectively, approximately 3.5-mile;
- Install a 115-kV circuit breaker at the existing McDonald 115-kV substation with ratings of at least 3000 A;
- Install a 69-kV circuit breaker at the existing McCullough 69-kV substation with ratings of at least 2000 A;

Proposed Project by LPL

- Install a 40 MVAR sized capacitor at the existing McDonald 115-kV substation; and
- Install a 30 MVAR sized capacitor at the existing McCullough 69-kV substation.

Map with Proposed Project by LPL



Study Assumptions – Base Case

- Study Area
 - Lubbock County in North Weather Zone is considered for this study
 - Borden, Floyd, Hale, and Lynn Counties which are electrically close to project location
- Steady-State Base Case
 - Final 2025 Regional Transmission Planning (RTP) 2030 summer peak load case published on Market Information System (MIS) in December 2025, will be updated to construct the study base case
 - Case: 2025RTP_2030_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 2030 within the study area that are not already modeled in the case
 - TPIT Link: <https://www.ercot.com/gridinfo/planning>
- There are no transmission projects identified in the 2025 RTP in the study area that have not been approved by RPG

Study Assumptions – Generation

- No new generation that met the Planning Guide Section 6.9(1) condition with Commercial Operation Date (COD) before June 2030 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 published in MIS 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
 - Load level in the study area will be maintained consistent with the Final RTP cases
- 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 South Plains Wind 2 U1 and Tahoka Wind 1)
 - P6-2 (X-1+N-1: X-1 of Dunbar X1, Posey X1, and Yellow House Canyon 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

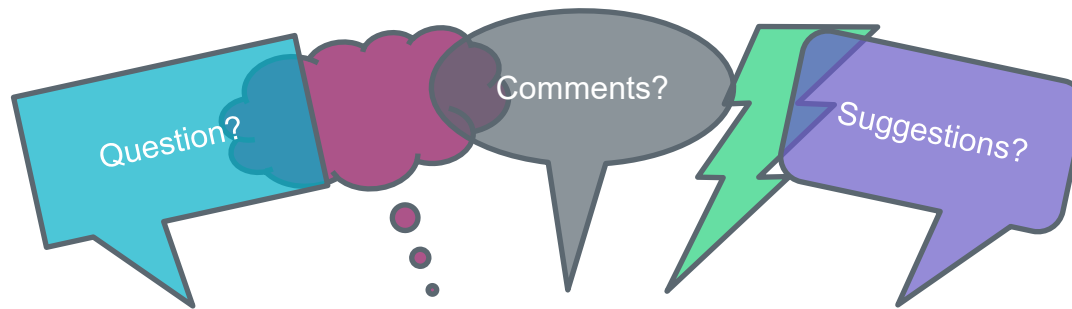
Study Procedure

- 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
 - Generation Addition and Load Scaling Sensitivity Analyses
 - Subsynchronous Resonance (SSR) Assessment
 - TSP(s) will provide Cost and Feasibility Assessment
- 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:

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