PUBLIC

Lubbock Power & Light (LP&L) – West Loop Project (25RPG037) – ERCOT Independent Review (EIR) Status Update

Travis Head

Regional Planning Group (RPG) Meeting
June 22, 2026

Introduction

Lubbock Power & Light (LP&L) submitted the West Loop Project (25RPG037) for Electric Reliability Council of Texas' (ERCOT) Regional Planning Group (RPG) review in October 2025

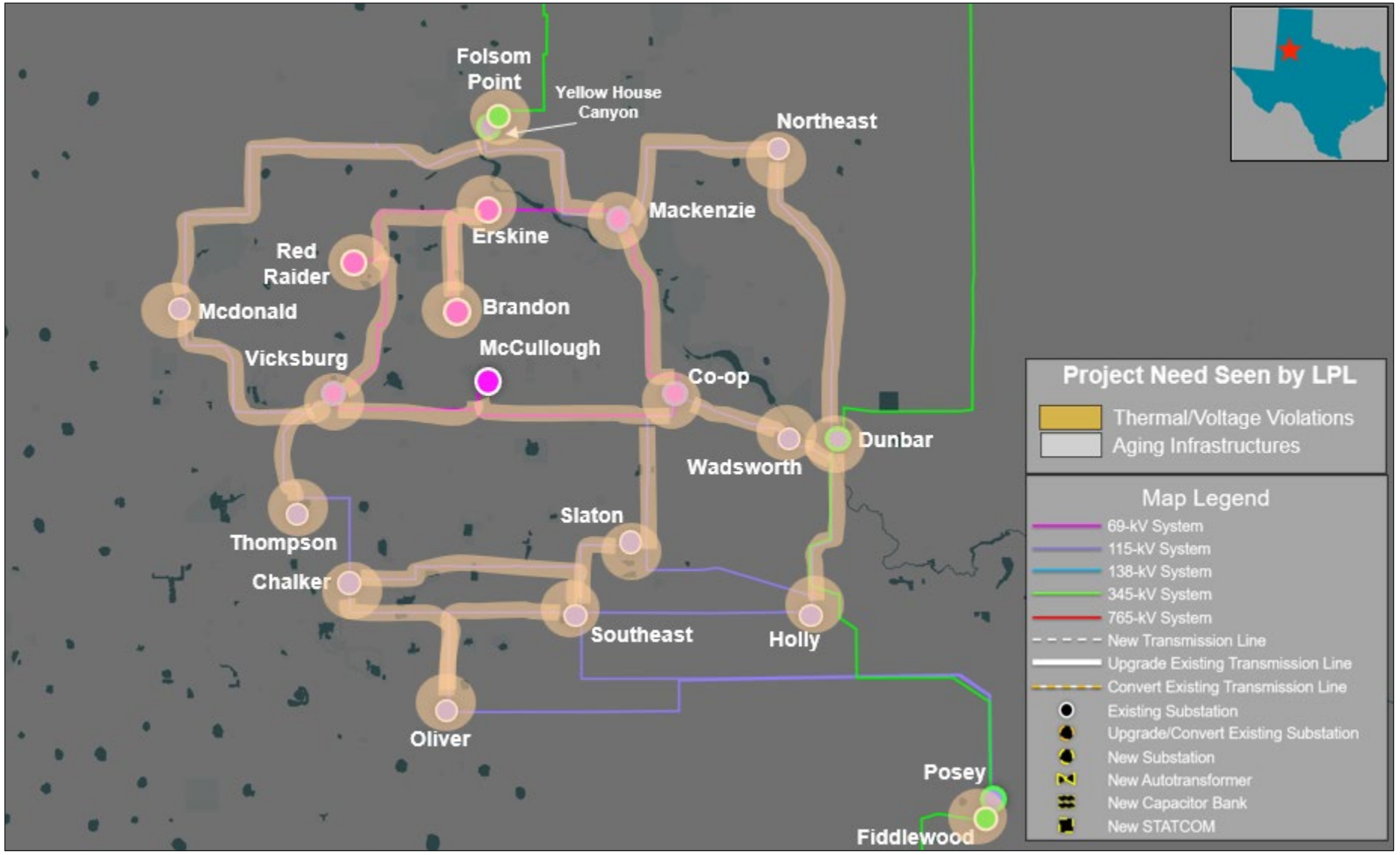
- This is a Tier 1 project with an estimated cost of approximately $309.0 million and would require a Certificate of Convenience and Necessity (CCN)
- Estimated in-service date (ISD) is Summer 2030
- Addresses post-contingency thermal overloads and voltage violations seen by LP&L in the Lubbock County in the North Weather Zone

This project is currently under ERCOT Independent Review (EIR)

- LP&L presented a project overview and ERCOT provided the EIR scope at the January 2026 RPG Meeting

PUBLIC

Recap: Study Area Map with Project Needs Seen by LP&L

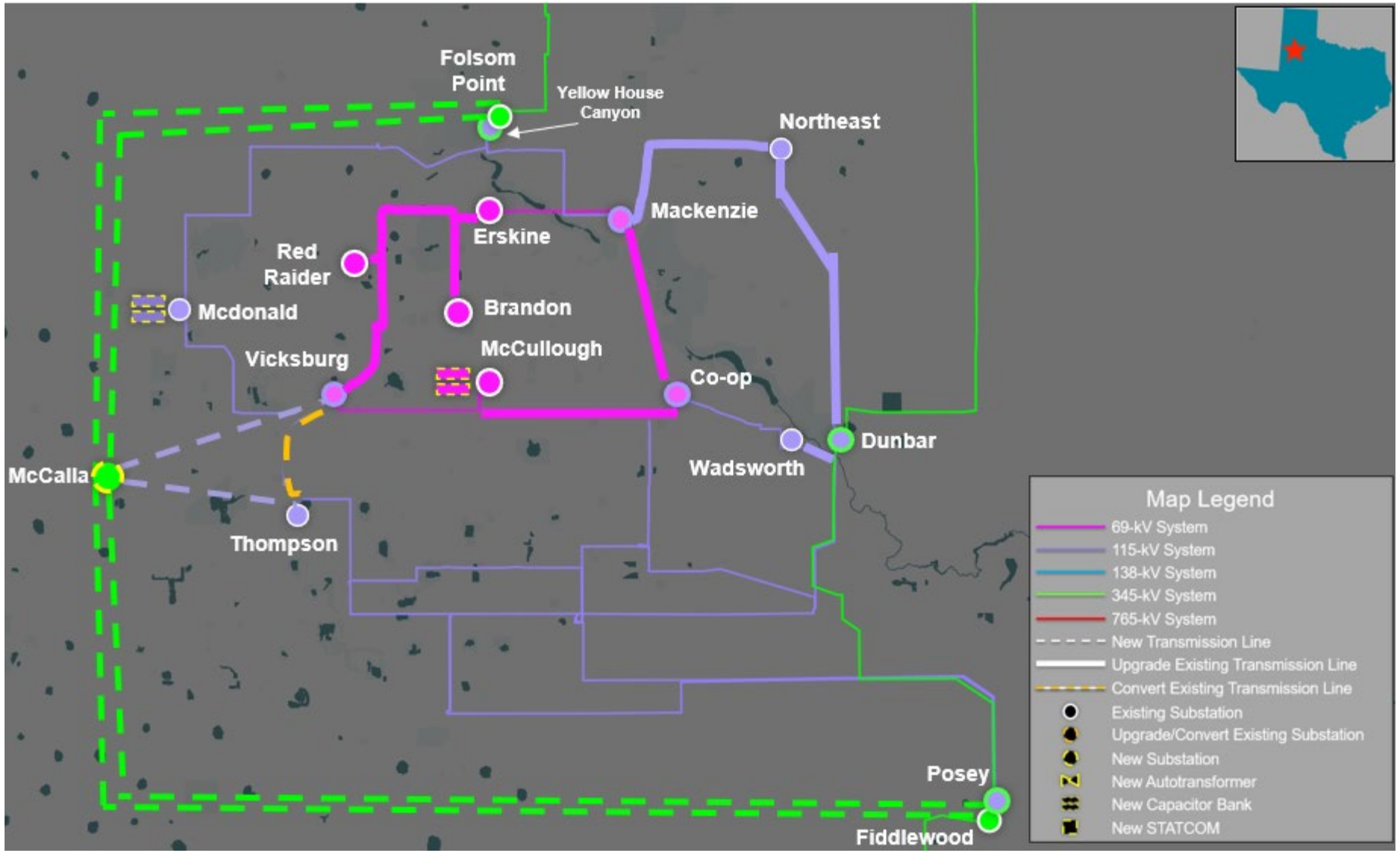


Recap: Proposed Project by LP&L

Overall Project Summary

- One (1) new 345-kV substation
- Two (2) new 345/115-kV autotransformers
- Construct approximately 64.0 circuit-miles of new 345-kV double-circuit transmission lines
- Construct approximately 10.0 circuit-miles of new 115-kV transmission lines on double-circuit capable structures
- Rebuild approximately 9.4 circuit-miles of existing 115-kV single-circuit transmission lines
- Rebuild approximately 9.1 circuit-miles of existing 69-kV on double-circuit capable structures
- Rebuild approximately 5.4 circuit-miles of existing 69-kV single-circuit transmission lines
- Two (2) sized capacitors (70 MVAr total)
- Disconnect one (1) existing 115-kV transmission line

Recap: Proposed Project by LP&L



Update: Study Assumptions

Study Region

- This project is located in the Lubbock County in the North Weather Zone and all the transmission elements that are electrically close were monitored

Steady-State Base Case

- Final 2025 Regional Transmission Planning (RTP) 2030 summer peak load case, published on Market Information System (MIS) on December 22, 2025, was updated to construct the study base case

Transmission Updates

- No new transmission projects, based on February 2026 Transmission Project and Information Tracking (TPIT) report or recently approved RPG projects, were added to the base case
- No transmission projects identified in the 2025 RTP in the study area that have not been approved by RPG were removed

Generation Updates

- No new generation that met ERCOT Planning Guide Section 6.9(1) condition with Commercial Operation Date (COD) before the June 2030 (ISD) in the study area at the time of the study, but not already modeled in the RTP cases, was added to the case based on April 2026 Generator Interconnection Status (GIS) report published in MIS in May 2026
- All generation was dispatched consistent with the 2025 RTP methodology

Load and Reserve Updates

- Loads in the study region were revised based on Transmission Service Provider (TSP) Attestation Letter provided by LP&L in April 2026, approximately 198 MW of load in the study region was updated to create the study base case
- The reserve was kept consistent with the 2025 RTP

Status Update

Studies performed since the January RPG meeting

- Reliability Analysis N-1, (G-1+N-1), and (X-1+N-1)
- Maintenance Outage Evaluation on Base Case

Preliminary Results of Reliability Assessment – Base Case

ERCOT conducted steady-state load flow analysis for the study base case according to the NERC Reliability Standard TPL-001-5.1 and ERCOT Planning Criteria to identify the project need

Contingency Category	Thermal Overloads	Voltage Violations	Unsolved Power Flow
P1	None	None	None
P2, P4, P5	None	None	None
P3: (G-1+N-1)*	None	None	None
P6-2: (X-1+N-1)*	4	5	None
P7	None	None	None
Total	**4**	**5**	**None**

* See Appendix C for the list of generators and transformers being tested for (G-1+N-1) and (X-1+N-1) analyses, respectively

Preliminary Results of Maintenance Outage Evaluation – Base Case

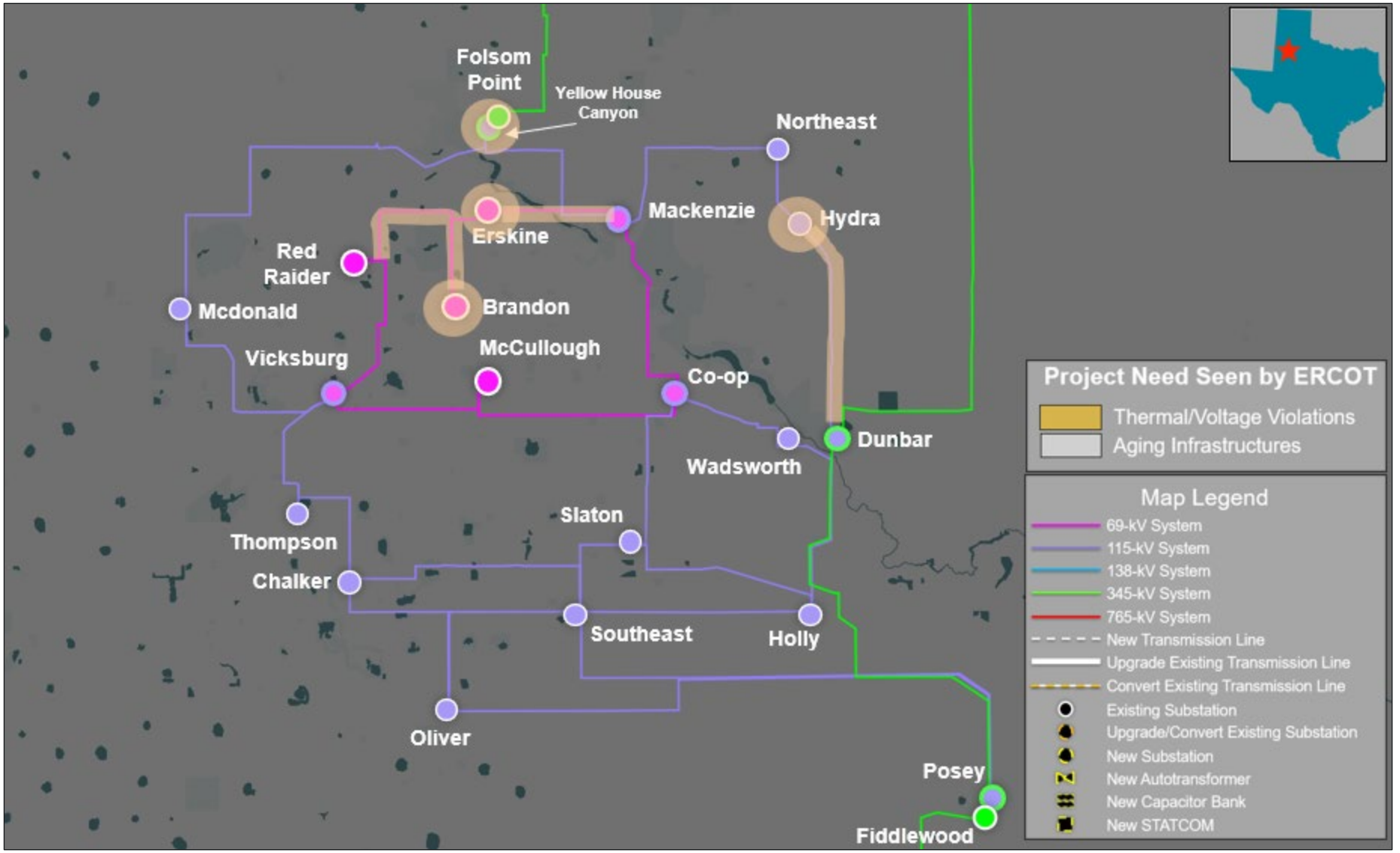
ERCOT conducted maintenance outage analyses on the study base case to identify the project need

- Load levels the North, North Central, West, and Far West Weather Zones were scaled down based on the historical non-summer peak data to 81.7%, 75.5%, 83.3%, and 96.2%, respectively, in order to mimic the non-summer peak load condition
- Based on the review of system topology of the study area, ERCOT tested N-2 contingency combinations, and then tested all applicable contingency violations with system adjustments (N-1-1)

Option	Thermal Violation	Voltage Violation	Unsolved Power Flow
Base Case	None	None	None

Key Takeaway: No violations were observed in the N-1-1 analysis of the study base case

Study Area Map with Project Needs Seen by ERCOT



Deliverables and Next Step

Tentative Timelines

- ERCOT will continue to evaluation proposed upgrades and the alternatives
  - ERCOT may also perform the following studies
    - Maintenance Outage Evaluation
    - Long-Term Load-Serving Capability Assessment
    - Peak-Load Maintenance Outage Sensitivity
  - TSP(s) will provide Cost Estimates and Feasibility Assessment
- Provide status updates at the future RPG meetings
- ERCOT recommendation in Q3 2026

Key Takeaway: ERCOT recommendation in Q3 2026

ercot

PUBLIC

Thank you!
Questions/Comments?

Travis.Head@ercot.com
Robert.Golen@ercot.com

Learn More

www.ercot.com

Download ERCOT Mobile App

GET IT ON Google Play

Download on the App Store

Connect With Us

facebook.com/ERCOTISO

x.com/ercot_iso

linkedin.com/company/ercot

instagram.com/ercot_iso

Appendix

- Appendix A: G-1 Generators and X-1 Transformers List
- Appendix B1: Option 1 Details – LP&L Proposed Project

Learn More

www.ercot.com

Download ERCOT Mobile App

GET IT ON Google Play

Download on the App Store

Connect With Us

facebook.com/ERCOTISO

x.com/ercot_iso

linkedin.com/company/ercot

instagram.com/ercot_iso

Appendix A: List of G-1 Generators and X-1 Transformers Tested

Generator	Transformer
South Plains Wind 2 U1	Dunbar 345/115-kV
Tahoka Wind 1	Posey 345/115-kV
	Yellow House Canyon 345/115-kV

Back to Reliability Analysis Results

Appendix B1: Option 1 Details – LP&L Proposed Project

Option 1 Details

- 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;
- 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;

Back to Option 1 Summary

Appendix B1: Option 1 Details – LP&L Proposed Project (Continued)

Option 1 Details

- 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;
- 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;

Back to Option 1 Summary

Appendix B1: Option 1 Details – LP&L Proposed Project (Continued)

Option 1 Details

- 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;
- 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;

Back to Option 1 Summary

Appendix B1: Option 1 Details – LP&L Proposed Project (Continued)

Option 1 Details

- 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.

Back to Option 1 Summary