Oncor Paris Switch to Monticello Switch 345-kV Line Rebuild Project – ERCOT Independent Review Scope

Abishek Penti

RPG Meeting
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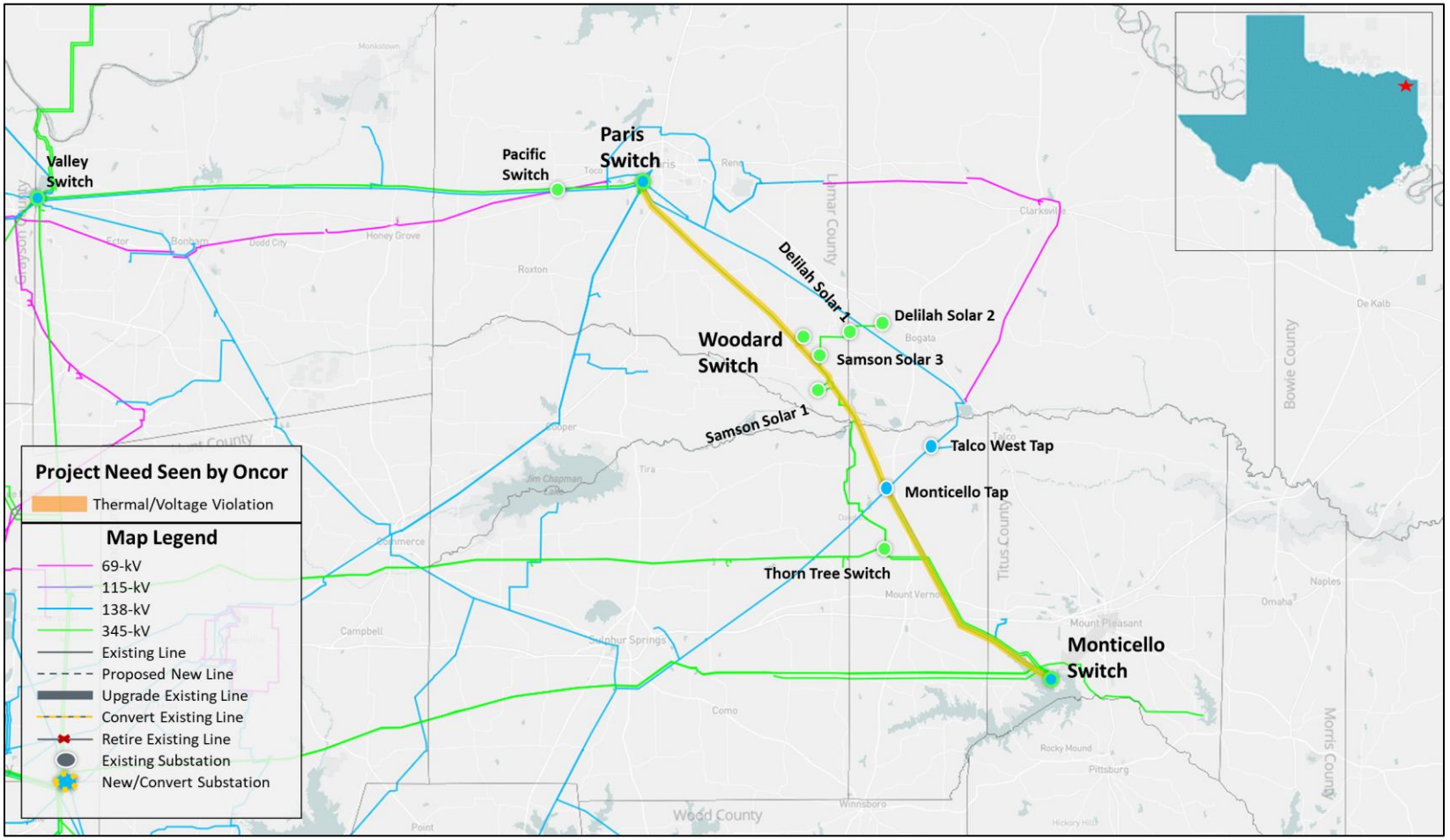
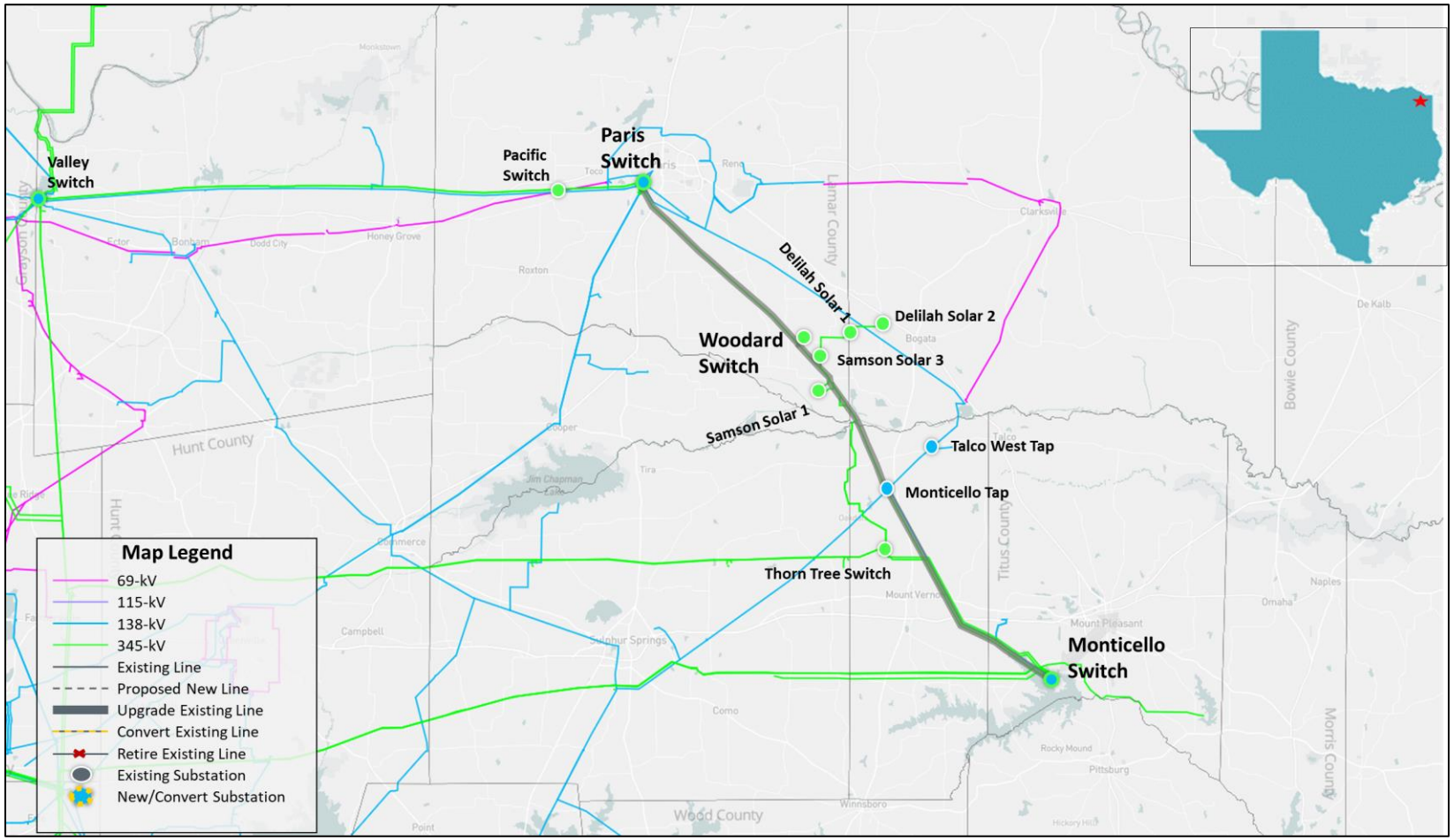
Introduction

- Oncor submitted the Paris Switch to Monticello Switch 345-kV Line Rebuild Project for Regional Planning Group (RPG) review in July 2025.
  - This Tier 1 project is estimated to cost $231.75 million and will not require a Certificate of Convenience and Necessity (CCN)
  - Estimated in-service date (ISD) is May 2027
  - To address the post-contingency thermal overloads on Paris Switch to Monticello Switch 345-kV line.
- This project is currently under ERCOT Independent Review (EIR)

Study Area Map with Violations Seen by Oncor



Project Proposed by Oncor



Project Proposed by Oncor

- Rebuild the existing Paris Switch to Monticello Switch 345-kV transmission line using double-circuit capable structures with one circuit in place with a conductor rated 2987 MVA or greater, approximately 49.8-mile; and
- Upgrade all terminal and associated equipment to meet or exceed 1792 MVA.

Study Assumptions Base Case

- Study Region
  - Lamar, Franklin and Titus counties in North, North Central and East Weather Zones, focusing on the transmission elements near the Delta, Fannin, Hopkins and Red River Counties.
  - Monitor surrounding counties that are electrically close to the area
- Steady-State Base Case
  - Final 2024 Regional Transmission Planning (RTP) 2029 summer peak case was used as a seed case, posted in Market Information System (MIS), will be updated to construct the summer peak load study base case
    - Case: 2024RTP_2029_SUM_12202024
    - Link: https://mis.ercot.com/secure/data-products/grid/regional-planning

Study Assumptions – Transmission

- Based on the June 2025 Transmission Project and Information Tracking (TPIT) posted on MIS, projects with in-service dates before May 1, 2027, within the study area will be added to the study base case if not already modeled in the case
  - TPIT Link: https://www.ercot.com/gridinfo/planning
  - See Appendix A for a list of transmission projects added
- Transmission projects identified in the 2024 RTP as placeholder projects within the study area will be removed to develop the study base case
  - See Appendix B for a list of placeholder projects removed

Study Assumptions – Generation

- New generation that met Planning Guide Section 6.9(1) condition with Commercial Operation Date (COD) before the end of May 1, 2027, in the study area at the time of the study, but not already modeled in the RTP cases, will be added to the case based on the August 2025 Generator Interconnection Status (GIS) report posted in MIS in September 2025
  - GIS Link: https://www.ercot.com/gridinfo/resource
  - See Appendix C for a list of generation projects added
- Generation will be dispatched consistent with the 2024 RTP methodology
- All recent retired/indefinitely mothballed units will be reviewed and opened (turned off), if not already reflected in the 2024 RTP final case

Study Assumptions – Load & Reserve

- Load in study area
  - New loads in the study area will be added to the study base case
- Reserve
  - Load outside of study Weather Zone(s) will be adjusted to maintain the reserve consistent with the 2024 RTP

Contingencies & Criteria

- Contingencies for Study Region
  - NERC TPL-001-5.1 and ERCOT Planning Criteria
  - Link: 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: Panda Generator Train, Stampede, Lamar Power, Pine Forrest Units)
    - P6: X-1+N-1 (X-1: Paris Switch, Monticello Switch, Sulphur Springs 345/138-kV transformer)
- 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 Franklin, Lamar, Titus and surrounding 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
  - The TSP will provide the Cost Estimate and Feasibility Assessment
- Additional analyses may be performed on the preferred option
  - Congestion Analysis to ensure that the identified transmission upgrades do not result in new congestion within the study area
  - Generation Addition and Load Scaling Sensitivity Analyses
    - Planning Guide Section 3.1.3(4)
  - Subsynchronous Resonance (SSR) Assessment
    - Nodal Protocol Section 3.22.1.3(2)

Next Steps and Tentative Timeline

- Tentative Timelines
  - Status updates at future RPG meetings
  - Final recommendation – Q4 2025

Thank you!

Stakeholder comments also welcomed through:

Abishek.Penti@ercot.com
Robert.Golen@ercot.com

Appendix A – Transmission Projects

- List of transmission projects added to study base case

RPG/TPIT No	Project Name	Tier	Project ISD	TSP
92655	Oncor_MNE_92655_Farm Road 138 kV Switch	Tier 4	Aug-26	ONCOR
92651	Oncor_MNE_92651_Barnett138 kV Switch	Tier 4	Feb-27	ONCOR
90353	Establish Sandy Ranch 345 kV Switch	Tier 4	Aug-25	ONCOR
87285	Establish Stouts Creek 345 kV Switch	Tier 4	Oct-25	ONCOR
88063	Valley South 345 kV Switch New POI (Platinum Storage)	Tier 4	Mar-25	ONCOR
91060	Establish Flying Tiger 138 kV Switch	Tier 4	May-25	ONCOR

Appendix B – Transmission Projects

- List of transmission projects removed from the study base case

TPIT No	Project Name	County
2024-E6	Cumby RC (6861) to Cumby (1812) to Cumby Tap (1813-1815) 138-kV Line and Breaker Upgrades	Hopkins
2024-E8	Monticello Tap (1794) to Sulphur Springs East (1797) 138-kV Line Upgrades	Titus, Hopkins
2024-E9	Monticello (1695) to Cartwheel POI (888847) 345-kV Line Upgrades	Titus, Hopkins
2024-E14	Umbra (888843) to Monticello (1695) 345-kV Line Upgrade	Franklin, Titus
2024-E15	Umbra (888843) to Woodard (11699) 345-kV Line Upgrade	Franklin, Lamar
2024-E16	Thorn Tree Switch (11688) to Saltillo (11700) 345-kV Line Upgrade	Titus, Hopkins
2024-E17	Sulphur Springs East (1797) to Martin Springs (1800) 138-kV Line Upgrade	Hopkins
2024-N07	Valley SES (1691) to Bells North POI (1699) to North Gate (12679) 138-kV Line Upgrade	Fannin, Grayson
2024-N10	Bonham (1808) to Copper Head Switch (11809) 138-kV Line Upgrade	Fannin
2024-N14	Hawk Hollow Switch (11768) to Monticello Tap (1794) 138-kV Line Upgrades	Franklin, Lamar, Red River, Titus
2024-N16	Delta Sub (1802) to Valley SES (1691) 138-kV Line Upgrades	Fannin, Hopkins, Hunt, Lamar

Appendix B – Transmission Projects

- List of transmission projects removed from the study base case

TPIT No	Project Name	County
2024-N17	Bonham Switch (1760) to Bonham (1808) 138-kV Line Upgrade	Fannin
2024-NC29	Allen Switch (2514) to Pineforest POI (888854) 345-kV Line Upgrade	Collin, Hopkins
2024-NC31	Royse Area 345-kV Line Upgrades	Collin, Hopkins, Rockwall, Fannin, Lamar
2024-NC36	Commerce Switch (1816) to Crossroads Switch (1844) 138-kV Line Upgrade	Delta, Hunt
2024-NC50	Crossroads 138-kV Area Line Upgrades	Delta, Hopkins, Hunt, Lamar

Appendix C – New Generation Projects to Add

GINR	Project Name	Fuel	Projected COD	Max Capacity (~MW)	County
20INR0203	Pine Forest Solar	SOL	12/01/2025	301.5	Hopkins
20INR0222	Tyson Nick Solar	SOL	09/19/2025	90.5	Lamar
22INR0526	Pine Forest BESS	OTH	10/29/2025	200.7	Hopkins
22INR0554	Platinum Storage	OTH	10/31/2025	309.5	Fannin
23INR0026	Baker Branch Solar	SOL	05/31/2026	469.4	Lamar
23INR0225	MRG Goody Solar	SOL	05/02/2026	170.8	Lamar
23INR0494	Cartwheel BESS 1	OTH	09/30/2025	154.2	Hopkins
24INR0186	Rowdy Creek Solar	SOL	04/01/2027	351.8	Lamar
24INR0187	Rowdy Creek BESS	OTH	04/01/2027	175.9	Lamar
24INR0305	MRG Goody Storage	OTH	05/02/2026	52.3	Lamar
24INR0490	Lupinus Storage 3	OTH	09/21/2026	50.9	Franklin
25INR0368	Echols Creek Solar	SOL	04/03/2027	201.2	Lamar