



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

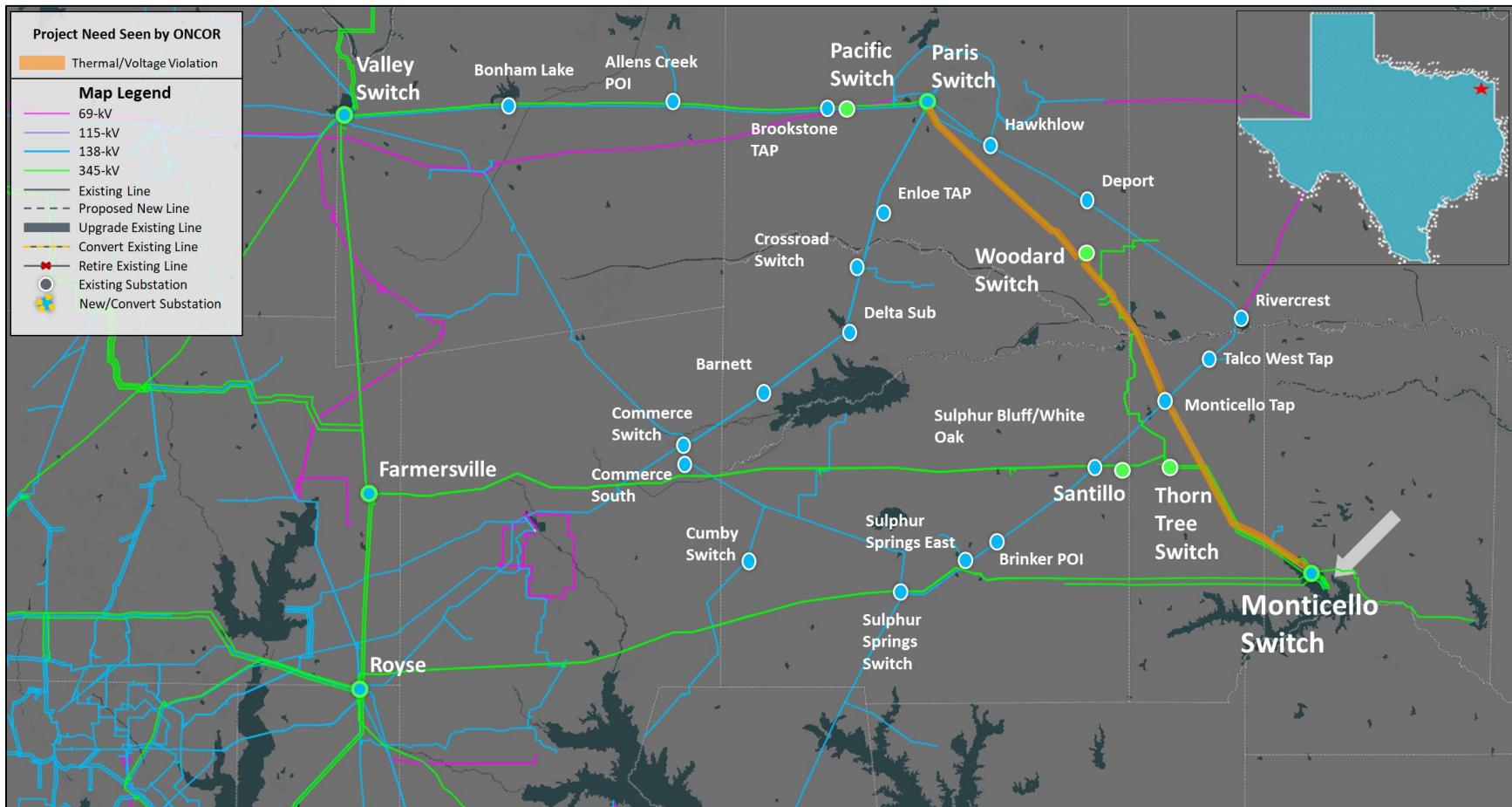
Abishek Penti

RPG Meeting
January 16, 2025

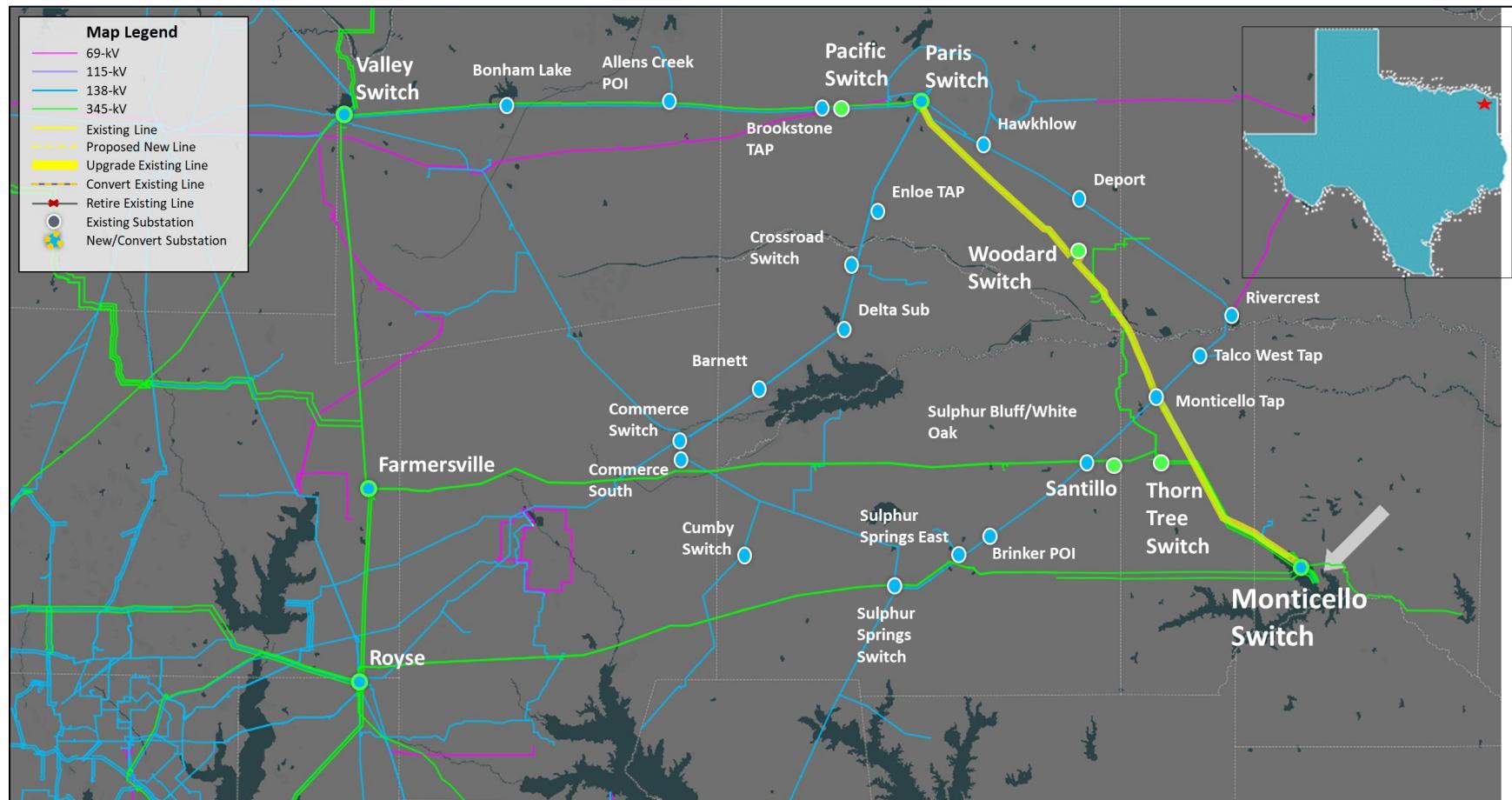
Introduction

- 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.
- Oncor provided an overview presentation and ERCOT provided the study scope at the September RPG Meeting
 - <https://www.ercot.com/calendar/09252025-RPG-Meeting>
- This project is currently under ERCOT Independent Review (EIR)

Recap - Study Area Map with Violations Seen by Oncor



Recap - Project Proposed by Oncor



Recap - 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 – Load, Reserve, Transmission & Generation

- 2024 Regional Transmission Planning (RTP) 2029 summer peak case was used as the start case
- Load in study area
 - No additional Loads in study area were added to the study base case
- Reserve
 - Reserve levels are consistent with the 2024 RTP
- Transmission
 - See Appendix A for a list of transmission projects added
 - See Appendix B for a list of RTP placeholder projects that were removed
- Generation
 - See Appendix C for a list of generation projects added

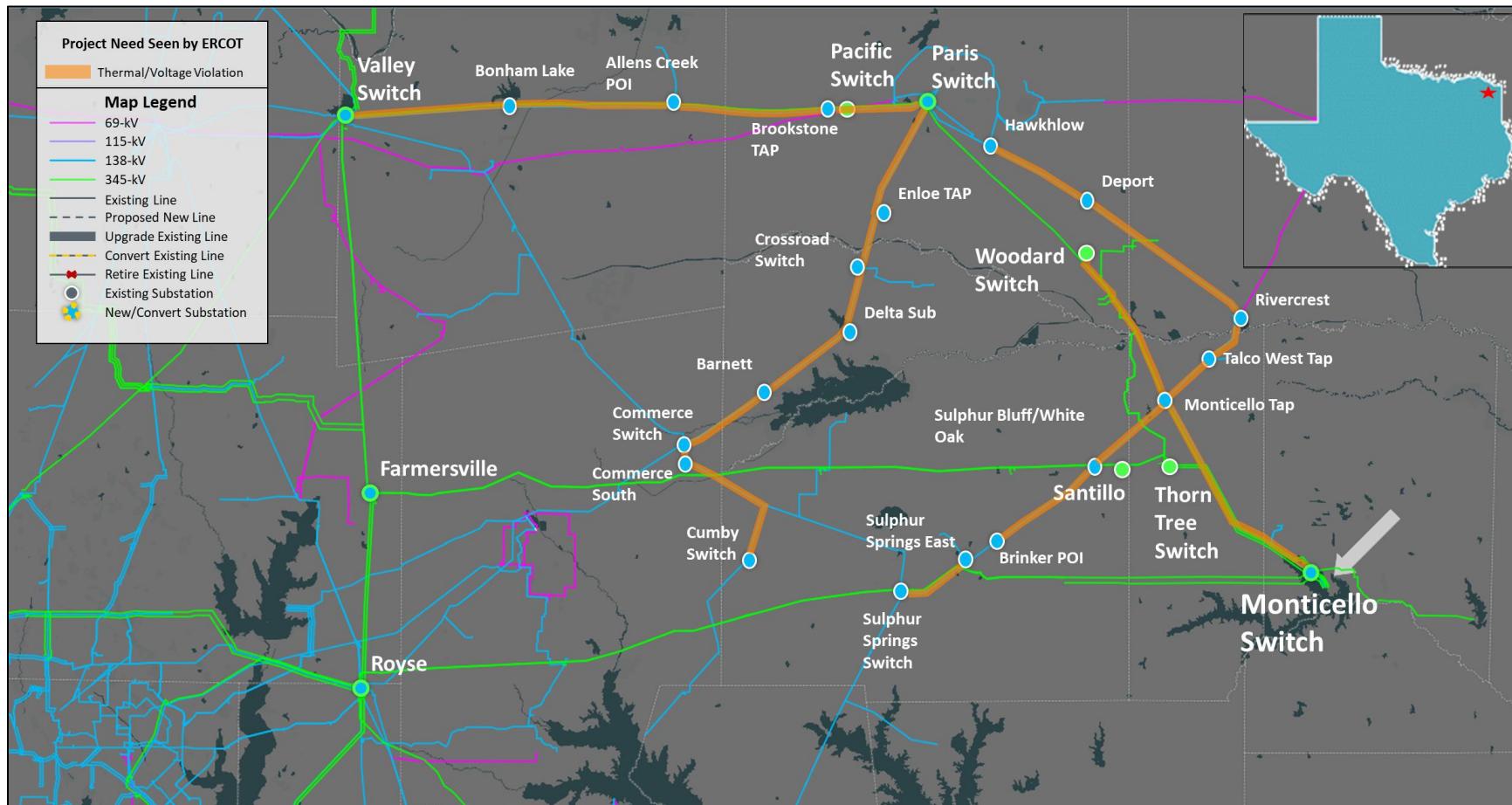
Preliminary Results of Reliability Assessment – Need Analysis

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

Contingency Category	Voltage Violations	Thermal Violations	Unsolved Power Flow
N-0 (P0)	None	None	None
N-1 (P1, P2-1, P7)	None	None	None
G-1+N-1 (P3)*	None	3	None
X-1+N-1 (P6-2)*	None	23	None

* See Appendix D for list of G-1 generators and X-1 transformers tested

Study Area Map with Violations seen by ERCOT



Next Steps and Tentative Timelines

- ERCOT will evaluate options and provide status updates at future RPG meetings
 - 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
 - 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 Oscillations (SSO) Assessment
 - Nodal Protocol Section 3.22.1.3(2)

Next Steps and Tentative Timeline

- Tentative Timelines
 - Status updates at future RPG meetings
 - Final recommendation – Q1 2026

Thank you!



Stakeholder comments also welcomed through:

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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-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-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
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-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

Appendix D – G-1 Generators and X-1 Transformers

G-1 Generators	X-1 Transformers
Eiffel Solar	Paris Switch – Ckt 1 345/138-kV
LPCC Unit 1	Monticello Switch – Ckt 1 345/138-kV
Pine Forest Solar	Sulfur Spring Switch – Ckt 1 345/138-kV
Stamped Solar	
Samson Solar	
Rowdy Creek Solar	
East DC Tie	
Impact Solar	
Pineforest Solar	