



**Oncor Paris Switch to Monticello Switch
345-kV Line Rebuild Project – ERCOT
Independent Review (EIR) Project Status
Update**

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RPG Meeting
March 17, 2026

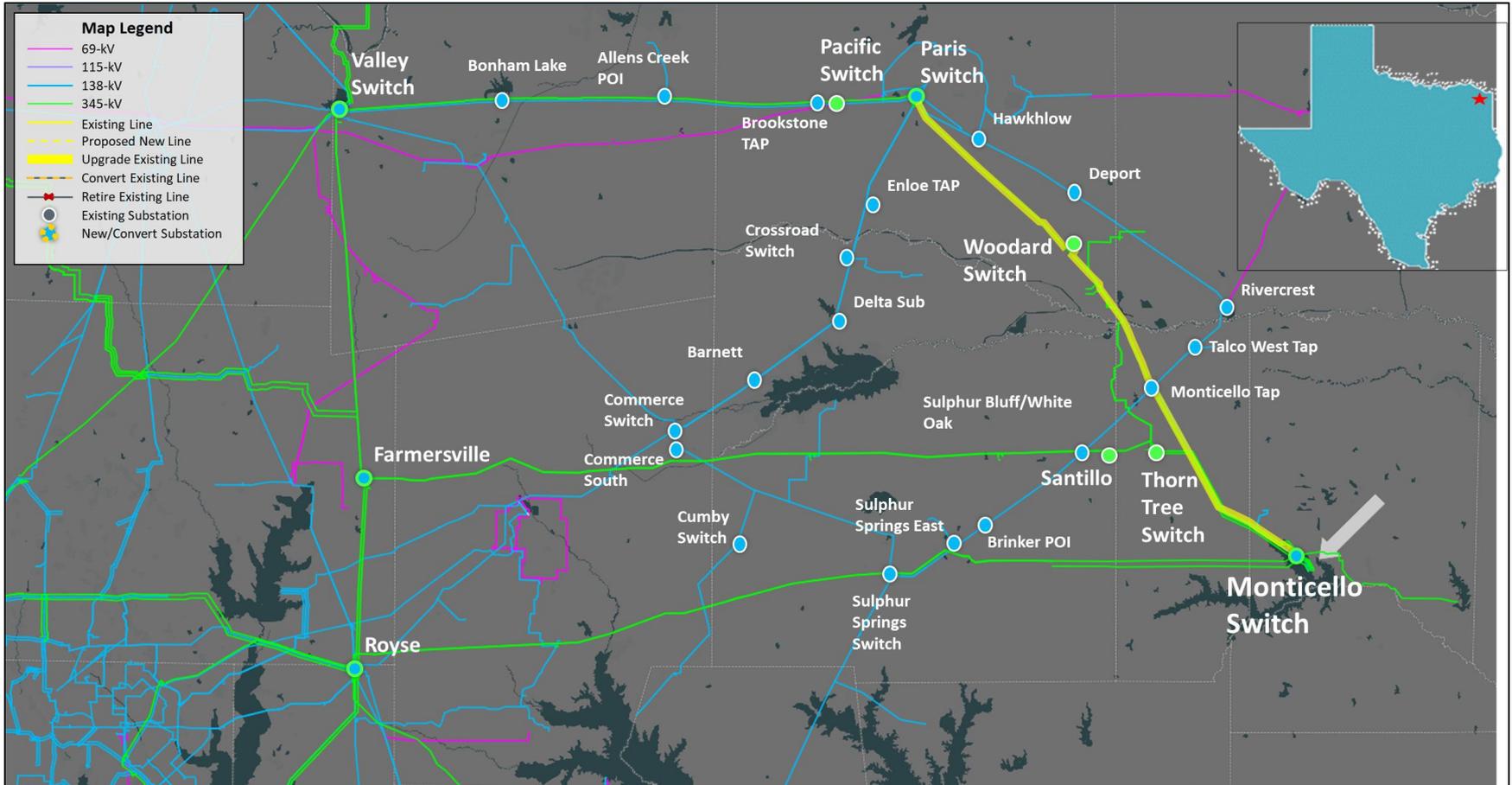
Introduction

- 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>
- ERCOT provided status update at the January and February 2026 RPG Meeting
 - <https://www.ercot.com/calendar/01162026-RPG-Meeting>
 - <https://www.ercot.com/calendar/02022026-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 miles; and
- Upgrade all terminal and associated equipment to meet or exceed 1792 MVA.

Recap – 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

Recap – 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

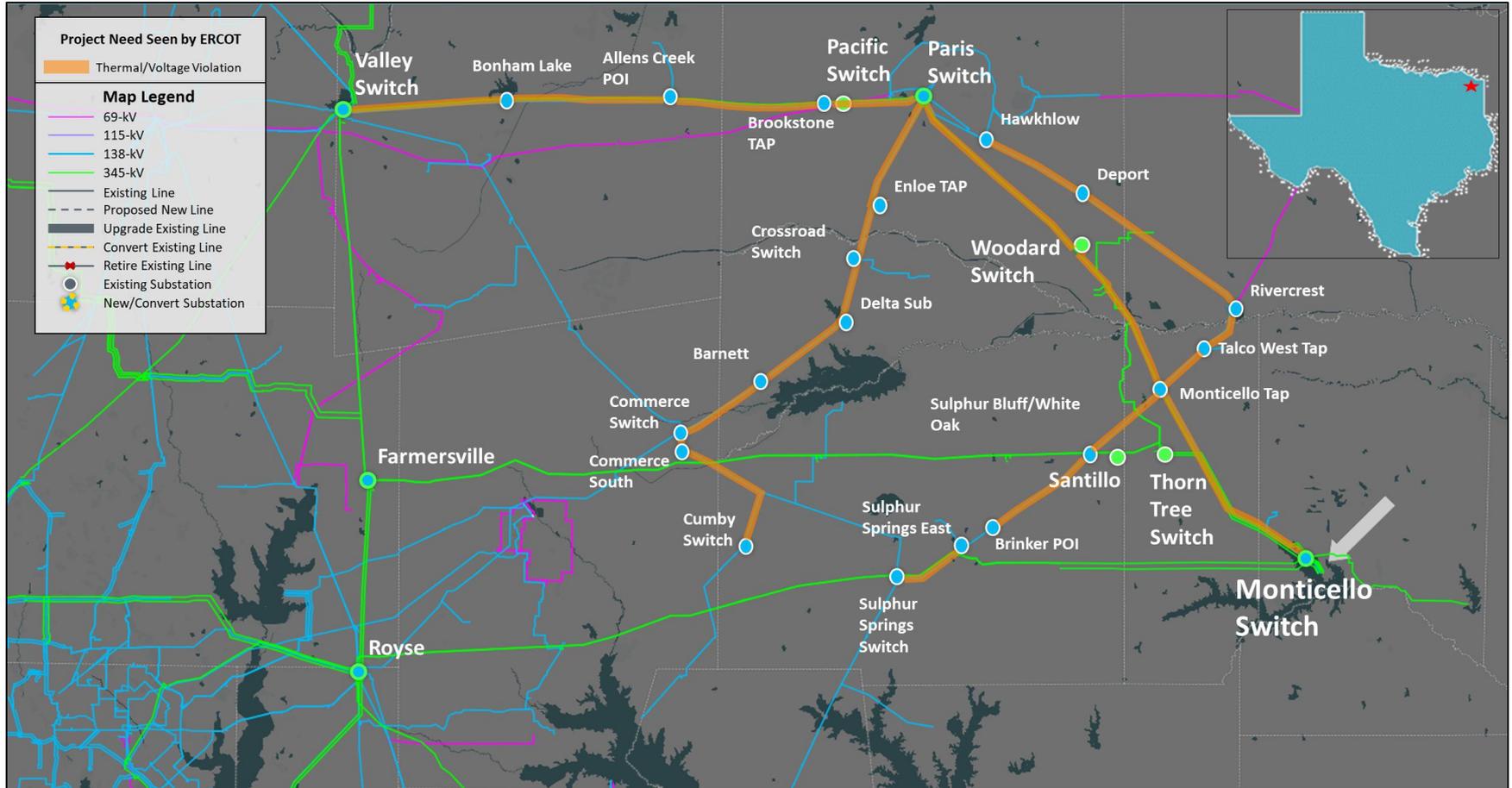
Recap - Preliminary Results of Reliability Assessment – Need Analysis under Minimum Deliverability Criteria

- Assessed potential reliability concerns under Planning Guide Section 4.1.1.7
 - The minimum percentage of capacity is set to 100% for any Generation Resource utilizing combined cycle, steam turbine, combustion turbine, hydro, or reciprocating engine technology
 - The minimum duration threshold for Energy Storage Resources (ESRs) is set to 2 hours (100% minimum percentage of capacity for ESRs with duration greater than or equal to 2 hours); and lower duration Resources will be prorated to their continuous real power capability for 2 hours
- Preliminary need analysis results under Minimum Deliverability Criteria

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	None	None
X-1+N-1 (P6-2)*	None	6	None

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

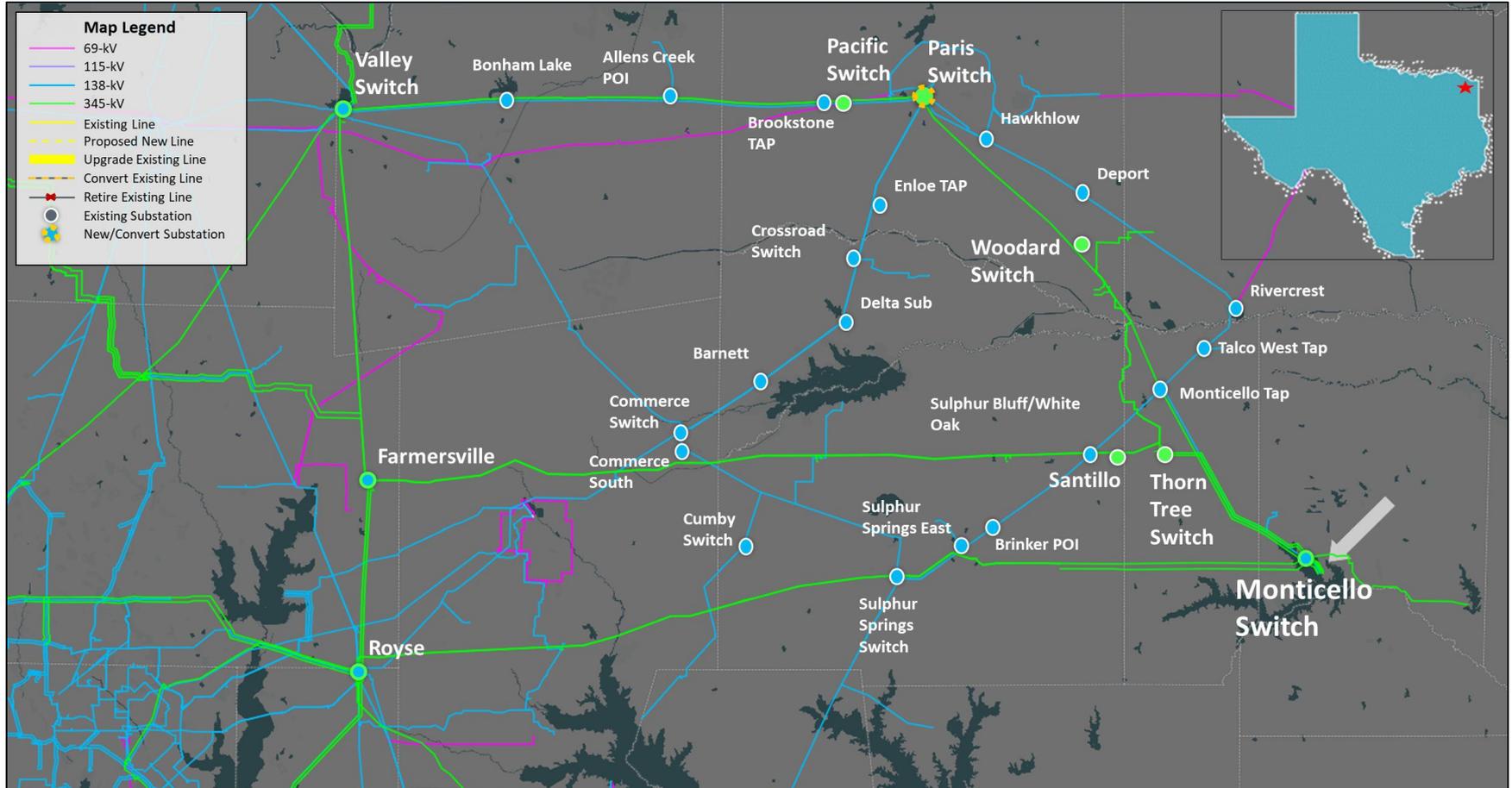
Recap – Study Area Map with Violations seen by ERCOT



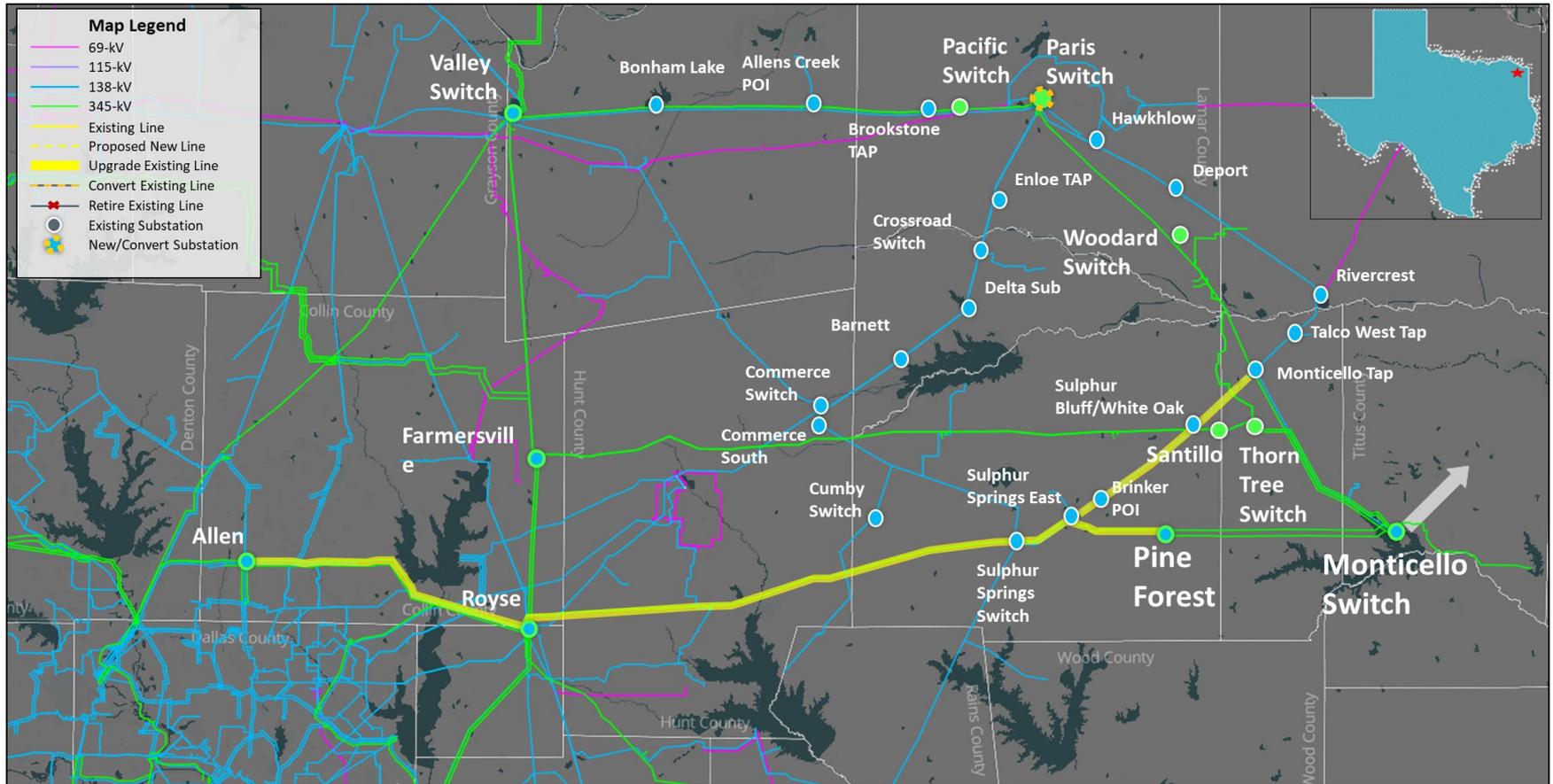
Option 1 – Oncor Proposed Option



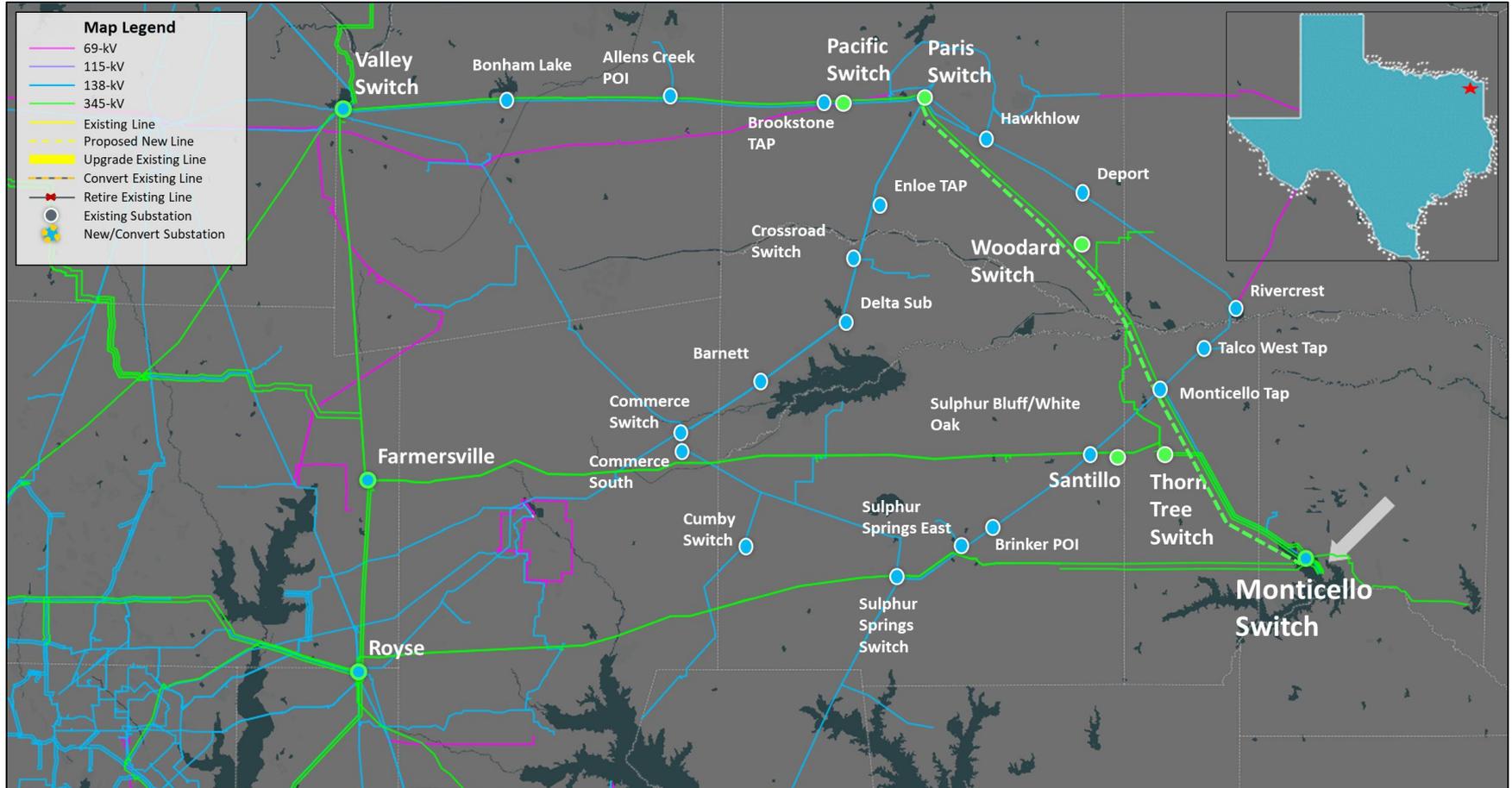
Option 2 – ERCOT Alternative Option



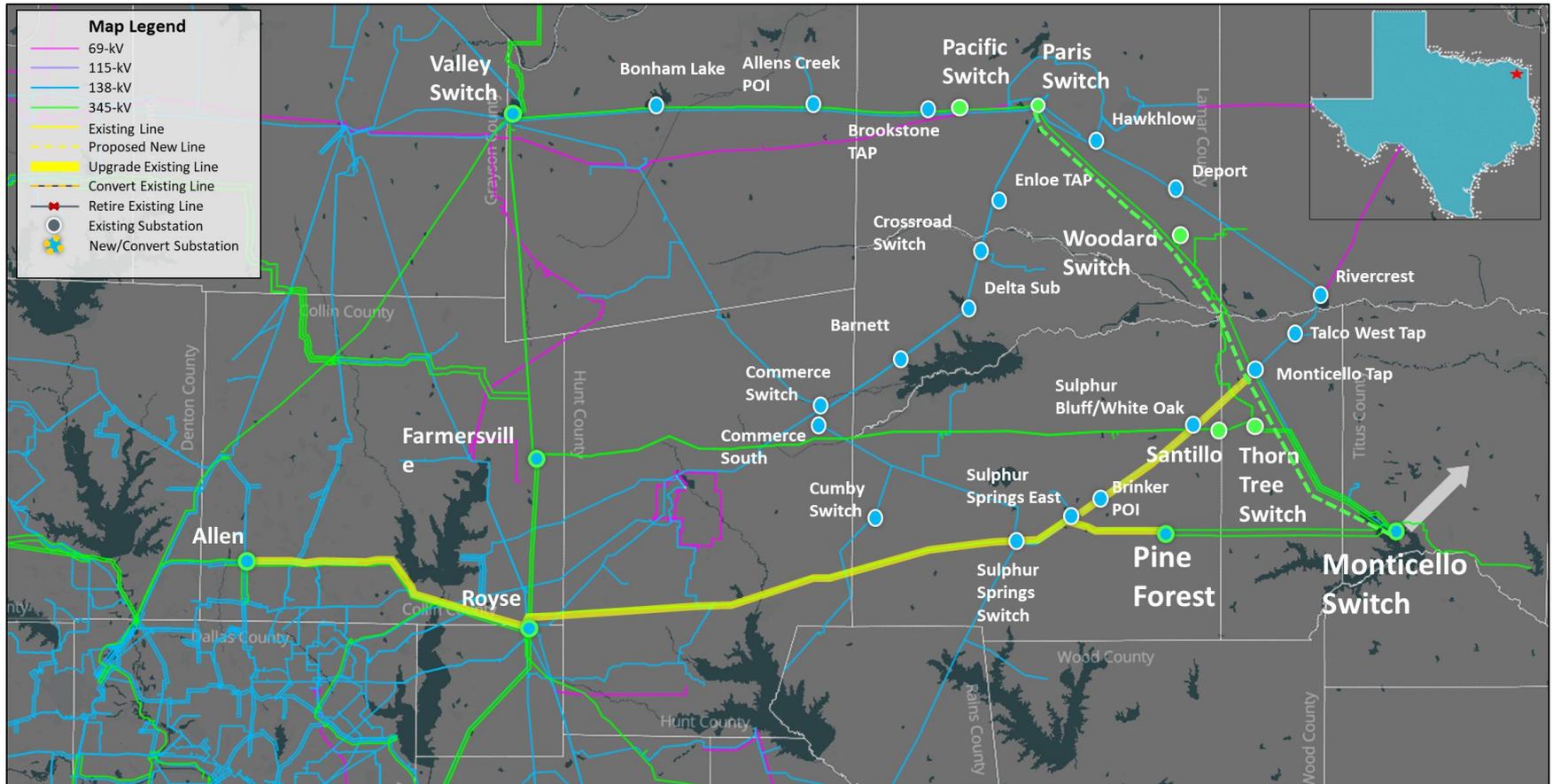
Option 2A – ERCOT Alternative Option



Option 3 – ERCOT Alternative Option



Option 3A – ERCOT Alternative Option



Results of Reliability Assessment – Options

- ERCOT conducted planned maintenance outage analysis on the five options to determine relative performance between the options

	N-1		G-1**+N-1		X-1**+N-1	
Option	Thermal Violations	Voltage Violations	Thermal Violations	Voltage Violations	Thermal Violations	Voltage Violations
1	None	None	None	None	None	None
2	None	None	3	None	3	None
2A	None	None	None	None	None	None
3	None	None	4	None	1	None
3A	None	None	None	None	None	None

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

- Option 1, Option 2A, and Option 3A are short-listed for further evaluation.

Results of Maintenance Outage Analysis – Options

- ERCOT conducted maintenance outage analysis on the three short-listed options to determine relative performance between the options

Option	Thermal Violations	Voltage Violations	Unsolvable Contingencies
1	None	None	None
2A	20+	None	None
3A	None	None	None

Cost Estimate and Feasibility Assessment

- Transmission Service Providers (TSPs) performed feasibility assessments and provided preliminary cost estimates for the three sort-listed options

Option	Cost Estimates (~\$M)	CCN Required	Feasibility
1	233	No	Yes
2A	297	No	Yes
3A	286	No	No

- Option 3A was deemed to be infeasible due to expansion restrictions at an existing 345-kV facility

Comparison of Short-Listed Options

	Option 1	Option 2A	Option 3A
Meets ERCOT and NERC Reliability Criteria	Yes	No	Yes
Requires CCN	No	No	No
Project Feasibility	Yes	Yes	No
Cost Estimate* (~\$M)	233	297	286

*Cost estimates were provided by the TSPs

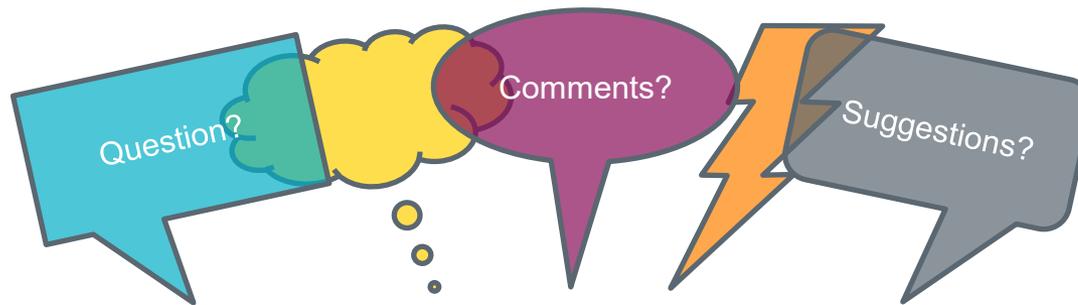
ERCOT Preferred Option

- Option 1 is selected as the preferred option because it
 - Addresses NERC and ERCOT reliability issues
 - Is the least cost option
 - Feasible option

Next Steps and Tentative Timelines

- 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
- Tentative Timelines
 - Status updates at future RPG meetings
 - Final recommendation – Q2 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
KMCHI Unit 1	Sulfur Spring Switch – Ckt 1 345/138-kV
Stamped Solar	Valley – Ckt 1 345/138-kV
Samson Solar	
Rowdy Creek Solar	
East DC Tie	
Impact Solar	
Pineforest Solar	

Option 1 – 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 miles; and
- Upgrade all terminal and associated equipment to meet or exceed 1792 MVA.

Option 2 – ERCOT Alternative Option

- Install a new 345/138-kV Auto transformer at Paris Switch with a normal and emergency ratings of 700 MVA and 750 MVA.

Option 2A – ERCOT Alternative Option

- Install a new 345/138-kV Auto transformer at Paris Switch with a normal and emergency ratings of 700 MVA and 750 MVA;
- Rebuild the existing Allen to Pineforest 345-kV transmission line using double-circuit capable structures with one circuit in place with a conductor rated 2987 MVA or greater, approximately 80.9 miles; and
- Rebuild the existing Monticello Tap to Sulphur Bluff, Sulphur Bluff to White Oak POI, White Oak POI to Brinker POI and Brinker POI to Sulphur Springs East Tap 138-kV transmission lines using double-circuit capable structures with one circuit in place with a conductor rated 390 MVA or greater, approximately 20.8 miles.

Option 3 – ERCOT Alternative Option

- Construct a new second circuit from Paris Switch to Monticello Switch 345-kV transmission line in parallel to the existing Paris Switch to Monticello Switch 345-kV transmission line on separate structures with a conductor rated 2987 MVA or greater, approximately 49.8 miles. This would require a new right of way (ROW); and
- Upgrade all terminal and associated equipment to meet or exceed 1792 MVA.

Option 3A – ERCOT Alternative Option

- Construct a new second circuit from Paris Switch to Monticello Switch 345-kV transmission line in parallel to the existing Paris Switch to Monticello Switch 345-kV transmission line on separate structures with a conductor rated 2987 MVA or greater, approximately 49.8 miles. This would require a new right of way (ROW); and
- Upgrade all terminal and associated equipment to meet or exceed 1792 MVA.
- Rebuild the existing Allen to Pineforest 345-kV transmission line using double-circuit capable structures with one circuit in place with a conductor rated 2987 MVA or greater, approximately 80.9 miles; and
- Rebuild the existing Monticello Tap to Sulphur Bluff, Sulphur Bluff to White Oak POI, White Oak POI to Brinker POI and Brinker POI to Sulphur Springs East Tap 138-kV transmission lines using double-circuit capable structures with one circuit in place with a conductor rated 390 MVA or greater, approximately 20.8 miles.