



## Oncor Delaware Basin Stages 3 and 4 Project – ERCOT Independent Review Status Update

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RPG Meeting  
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# Recap – Introduction

- Oncor submitted the Delaware Basin Stages 3 and 4 Project for Regional Planning Group (RPG) review in March 2024
  - This Tier 1 project is estimated to cost \$202.2 million
  - Filing of Certificate of Convenience and Necessity (CCN) will be required
  - Estimated in-service date (ISD) is Summer 2027
- Project need and solution was identified in the 2019 ERCOT Delaware Basin Load Interconnection Study
- Oncor presented a project overview and ERCOT presented a study scope for this ERCOT Independent Review (EIR) at the May RPG Meeting
  - <https://www.ercot.com/calendar/05142024-RPG-Meeting>
- ERCOT provided status update at the September RPG meeting
  - <https://www.ercot.com/calendar/09252024-RPG-Meeting>
- This project is currently under ERCOT Independent Review (EIR)

# Recap – Results of Reliability Assessment

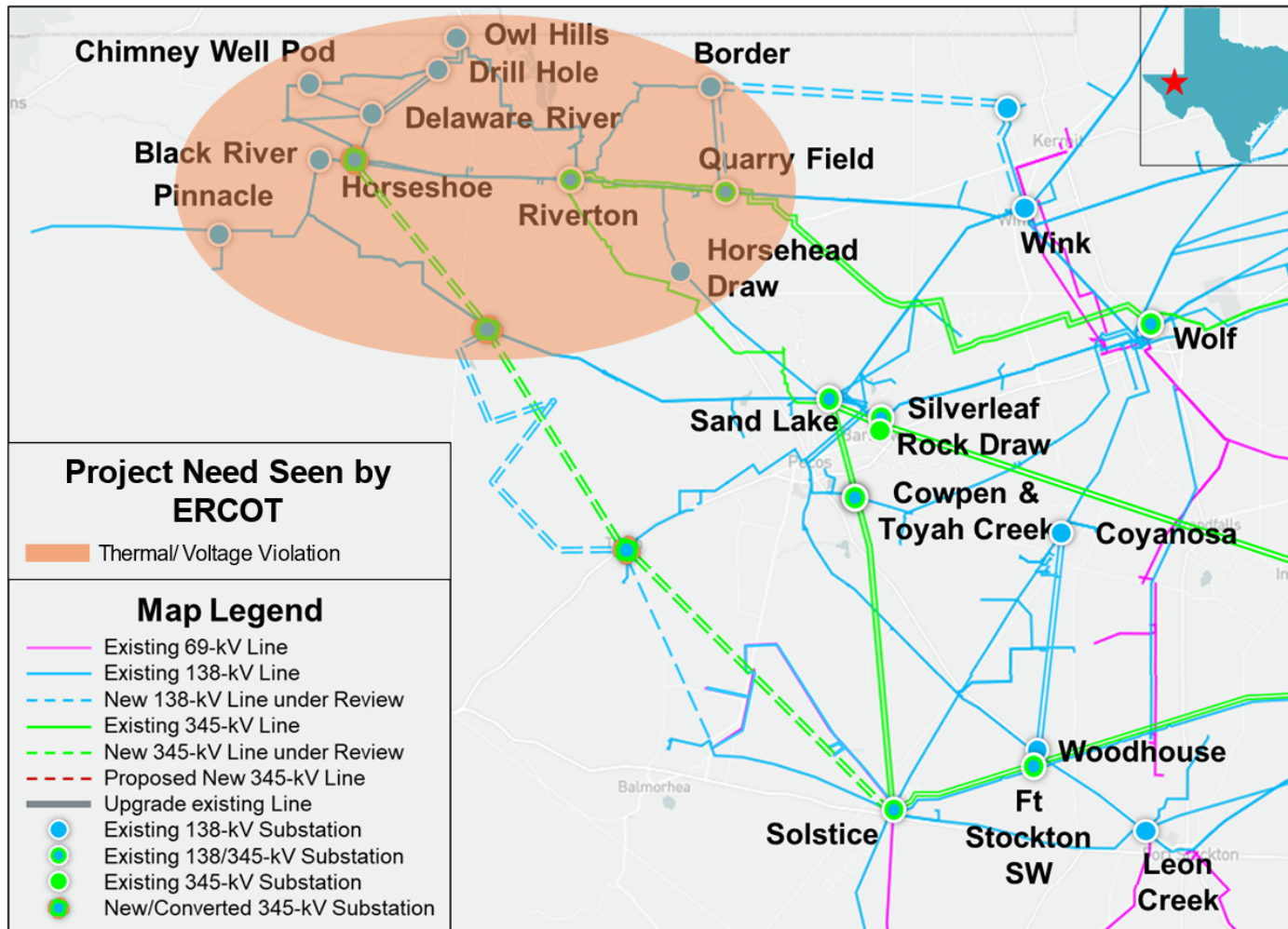
- ERCOT conducted steady-state load flow analysis for the study base case according to the NERC TPL-001-5.1 and ERCOT Planning Criteria to identify the project need and evaluate the preferred option

Contingency Category	Voltage Violations		Thermal Overloads		Unsolved Power Flow	
	Pre-Project	Post-Project	Pre-Project	Post-Project	Pre-Project	Post-Project
N-0 (P0)	None	None	None	None	None	None
N-1 (P1, P2-1, P7)	16	None	None	None	3	None
G-1+N-1 (P3)*	2	None	None	None	1	None
X-1+N-1 (P6-2)**	2	None	None	None	None	None
<b>Total</b>	<b>20</b>	<b>None</b>	<b>None</b>	<b>None</b>	<b>4</b>	<b>None</b>

\* G-1: Odessa Ector CC Train, and Permian Basin all five units

\*\* X-1: Riverton, Sand Lake, and Quarry Field 345/138-kV transformers

# Recap – Map of Project Need Seen by ERCOT



# Status Update

- Congestion Analysis
- Updated Cost Estimate

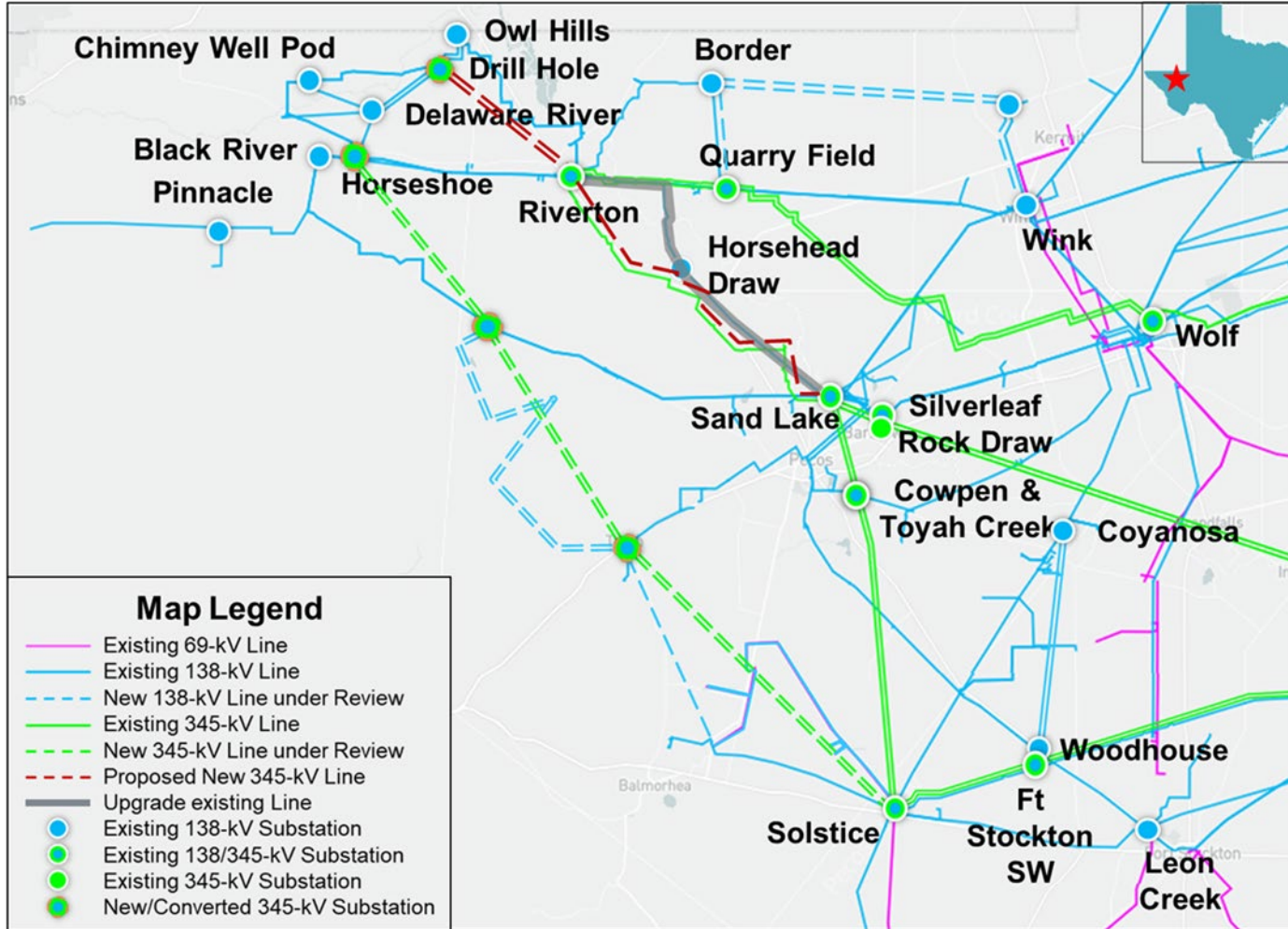
# Congestion Analyses

- Congestion analysis was performed for the preferred option using the 2023 RTP 2028 economic case
- The preferred option did not result in any new congestion within the study area

# ERCOT Recommendation

- ERCOT recommends Oncor Proposed Option
  - Estimated Cost: approximately \$202.2 million
  - Expected ISD: 6/1/2027
    - The expected ISD is tentative and are subject to change based on requirements for various approvals, ROW acquisition, and/or construction progress
  - CCN filling will be required to
    - Construct the new Drill Hole – Riverton 345-kV double-circuit transmission line on new right of way (ROW), approximately 22.0-mile
    - Construct the new Riverton – Sand Lake 138-kV transmission line on 138-kV double-circuit structures, with one circuit in place, using the existing ROW, approximately 40.8-mile

# ERCOT Recommendation – Map





# ERCOT Recommendation (cont.)

- Expand the existing Drill Hole capacitor station into a 345/138-kV Switch by installing a 345/138-kV Switch and two 600 MVA 345/138-kV autotransformers. The Drill Hole 345/138-kV Switch will initially be constructed with an 8-breaker, 345-kV breaker-and-a-half bus arrangement, and a 10-breaker, 138-kV breaker-and-a-half bus arrangement. All terminal and associated equipment will meet or exceed 5000 A for 345-kV and 3200 A for 138-kV
- Construct a loop of the existing Riverton – Owl Hills – Horseshoe Springs 138-kV double-circuit transmission line into the new Drill Hole 138-kV Switch, with normal and emergency rating of at least 614 MVA, approximately 0.1-mile
- Connect the existing Drill Hole 138-kV capacitors to the expanded Drill Hole 138-kV Switch
- Construct a new Drill Hole – Riverton 345-kV double-circuit transmission line, normal and emergency rating of at least 2988 MVA, which will require new ROW, approximately 22.0-mile
- Install five 5000 A, 345-kV circuit breakers at the existing Riverton 345-kV Switch
- Install one 5000 A, 345-kV circuit breaker at the existing Sand Lake 345-kV Switch
- Convert the existing Riverton – Sand Lake 138-kV transmission line to 345-kV operational by terminating both endpoints into the existing 345-kV Riverton and the existing 345-kV Sand Lake stations, with normal and emergency rating of at least 2988 MVA, 40.8-mile
- Construct a new Riverton – Sand Lake 138-kV transmission line on 138-kV double-circuit structures, with one circuit in place, with normal and emergency rating of at least 614 MVA, approximately 40.8-mile
- Construct a loop of the new Riverton – Sand Lake 138-kV transmission line into the existing Horsehead Draw 138-kV substation, with normal and emergency rating of at least 614 MVA, approximately 0.1-mile

# Deliverables

- Tentative timeline
  - EIR report to be posted in the MIS in November 2024
  - EIR recommendation to TAC in November 2024
  - EIR recommendation to R&M in December 2024
  - Seek ERCOT Board of Directors endorsement in December 2024

*Thank you!*



Stakeholder comments also welcomed through:

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