



**CNP P.H. Robinson to W.A. Parish
345-kV Hardening Project – ERCOT
Independent Review (EIR) Status Update**

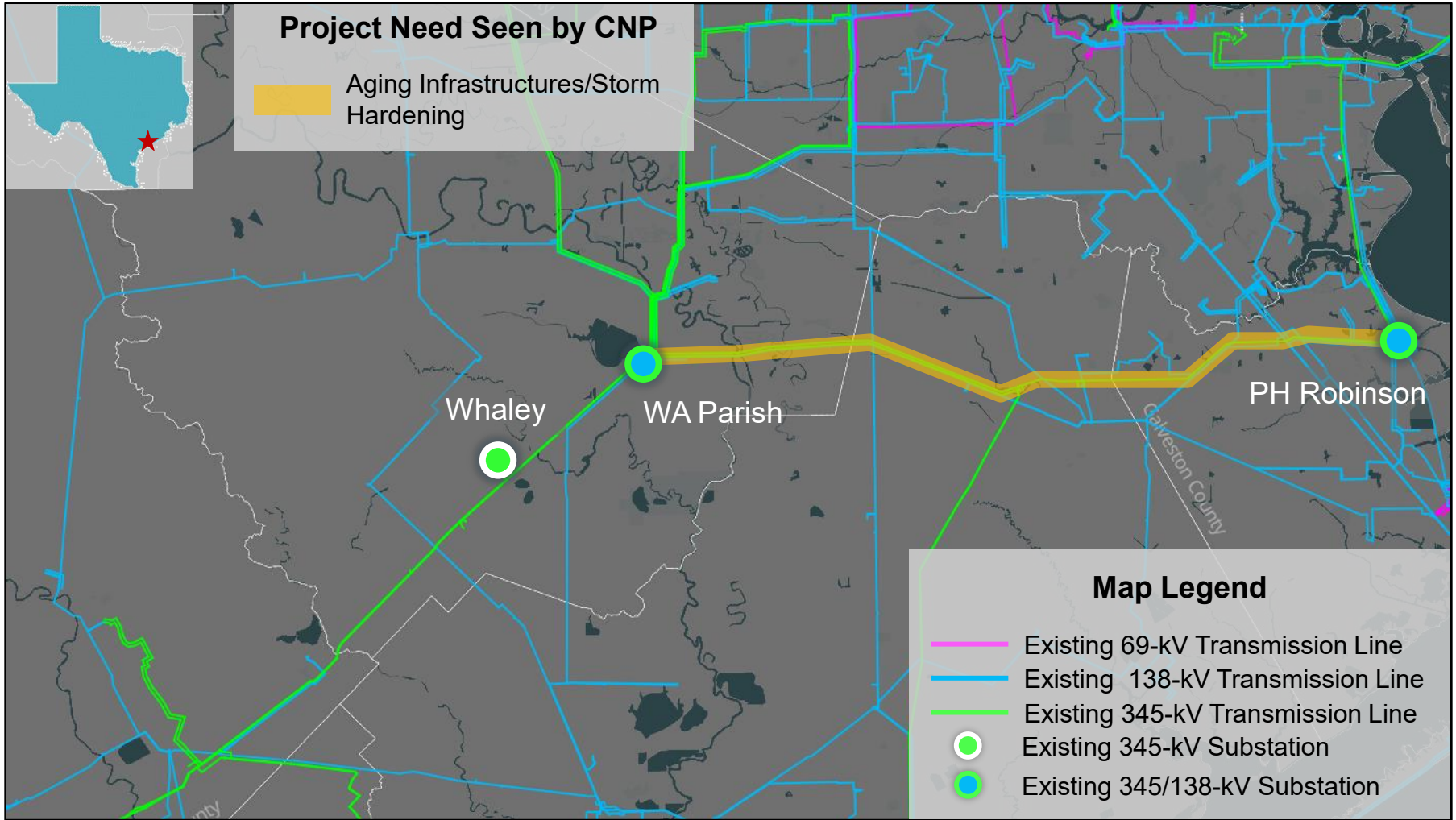
Tanzila Ahmed

RPG Meeting
January 16, 2026

Introduction

- CenterPoint Energy (CNP) submitted the P.H. Robinson to W.A. Parish 345-kV Hardening Project (25RPG028) for Regional Planning Group (RPG) review in August 2025
 - This Tier 1 project is estimated to cost approximately \$511.31 million and will not require a Certificate of Convenience and Necessity (CCN)
 - Estimated in-service date (ISD) is December 2028
 - This project is needed to address aging infrastructure and to ensure resilience against hurricane-force winds and extreme cold conditions in the Brazoria, Ft. Bend, and Galveston Counties
- CNP 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 October and November RPG meetings
 - <https://www.ercot.com/calendar/10282025-RPG-Meeting>
 - https://www.ercot.com/calendar/11112025-RPG-Meeting-_-Webex
- This project is currently under ERCOT Independent Review (EIR)

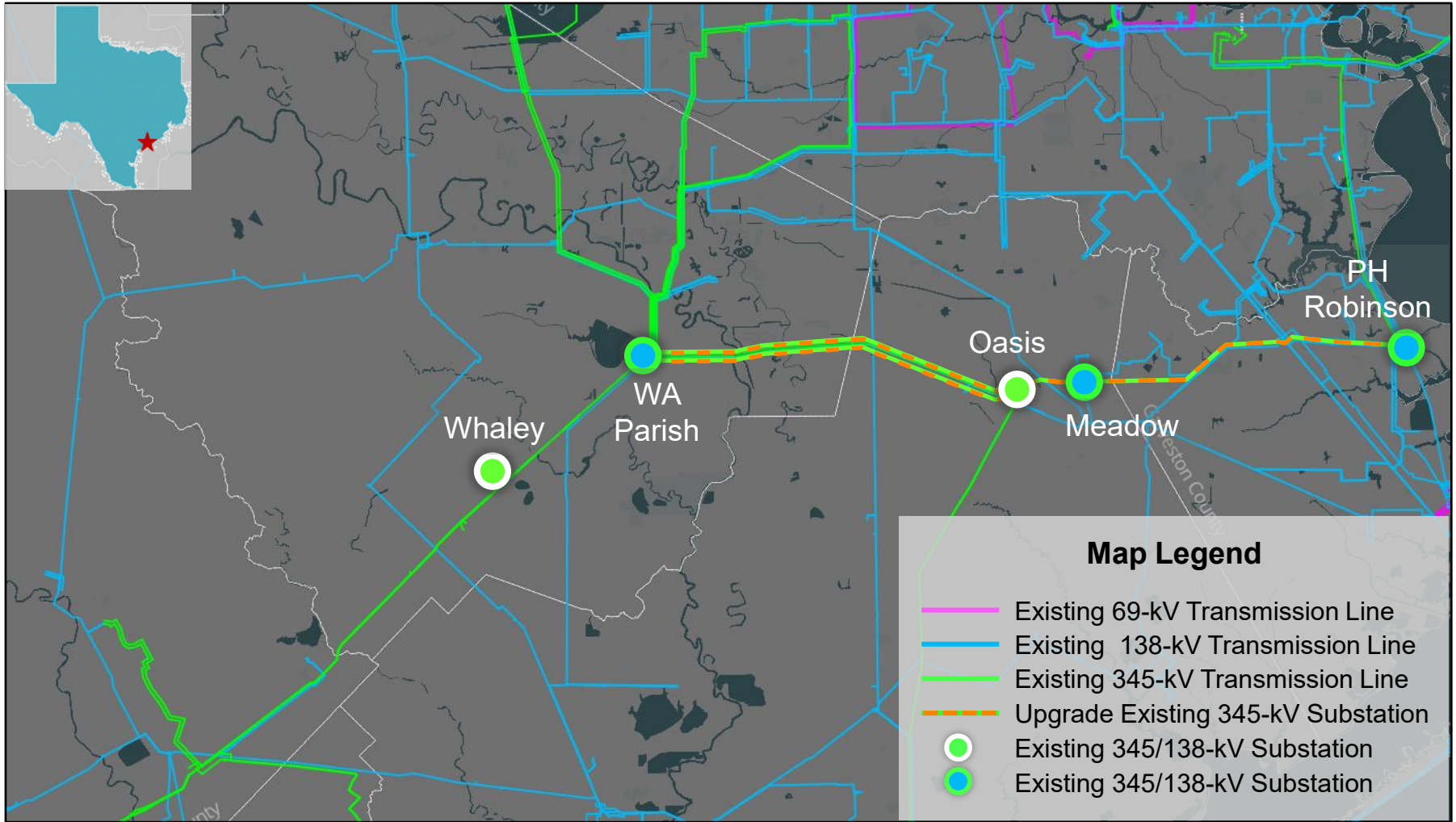
Map with Project Need Seen by CNP



CNP Proposed Project

- Rebuild/reconductor the existing P.H. Robinson to W.A. Parish 345-kV double-circuit transmission line, with a normal and emergency ratings of at least 2,987 MVA, approximately 40.2-mile:
 - Rebuild/reconductor the existing P.H. Robinson to Meadow Ckt.99 345-kV double-circuit transmission line, on double-circuit-capable steel structures with only one circuit in place, approximately 17.4-mile;
 - Ckt.93 will be rebuilt to the North of Ckt.99A within the existing transmission right of way (ROW). Ckt.99 will be rebuilt on double-circuit-capable lattice structures with conductor on both sides of the towers. One side will be Ckt.99, while the other side will be an energized tap;
 - Rebuild the existing Meadow to Oasis Ckt.99 345-kV double-circuit transmission line, on double-circuit-capable steel structures with only one circuit in place, approximately 3.18-mile;
 - Rebuild the existing Oasis to W.A. Parish Ckt.99 and Oasis to W.A. Parish Ckt.18 345-kV double-circuit transmission line on double-circuit-capable steel structures with both circuit in place, approximately 19.6-mile;
 - Upgrade the existing Oasis 345-kV substation to 63 kAIC fault duty breaker rating;
 - Upgrade substation equipment to 5,000A;

Map of Project Proposed by CNP



Study Assumptions

- Final 2024 Regional Transmission Planning (RTP) 2029 summer peak load case was used as start case
- Transmission updates
 - New transmission projects, listed in the [Appendix A](#), based on the June 2025 Transmission Project and Information Tracking (TPIT) report along with recently approved RPG projects were added to the study base case
- Generation updates
 - New 6.9(1) generation, listed in [Appendix B](#), were added to the study base case based on the August 2025 Generator Interconnection Status (GIS) report
 - All new generation were dispatched consistent with the 2024 RTP methodology
- Load level in the study area was maintained consistent with the Final RTP case
- The reserve was maintained consistent with the 2024 RTP

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 and to evaluate the proposed option

	N-1		G-1**+N-1		X-1**+N-1		Unsolved Powerflow
	Thermal Violations	Voltage Violations	Thermal Violations	Voltage Violations	Thermal Violations	Voltage Violations	
Base case	None	None	None	None	None	None	None
CNP Proposed Project	None	None	None	None	None	None	None

* G-1: Cedar Bayou, South Texas Project (STP), and W.A. Parish generations

** X-1: Cedar Bayou, Obrian, and P.H. Robinson 345/138-kV transformers

ERCOT Preferred Option

- ERCOT did not identify any reliability need in the study area for the submitted RPG project based on NERC and ERCOT Planning Criteria
- The project proposed by CNP is selected as the preferred option because it
 - Addresses the aging transmission infrastructure and storm hardening concerns
 - Does not create reliability issues

Generation Addition and Load Scaling Sensitivity Analyses

- Generation Addition Sensitivity Analysis
 - Per Planning Guide Section 3.1.3(4)(a), ERCOT performed a generation addition sensitivity by adding the new generation listed in [Appendix C](#) to the preferred option case. The additional resources were modeled following the 2024 RTP methodology. ERCOT determined relevant generators do not impact the preferred option
- Load Scaling Sensitivity Analysis
 - Planning Guide Section 3.1.3(4)(b) requires an evaluation of the potential impact of load scaling on the criteria violations seen in this EIR. Starting 2024, ERCOT RTP adopted a new methodology of having one summer peak case for each study year with non-coincident peaks for each of the Weather Zones, which would eliminate the load scaling impact. The study case did not include load scaling as such load scaling sensitivity analysis is no longer needed

Subsynchronous Oscillations (SSO) Assessment

- SSO Assessment was conducted for the preferred option per Nodal Protocol Section 3.22.1.3
- ERCOT found no adverse SSO impacts to the existing and planned generation resources at the time of this study

Congestion Analysis

- Congestion Analysis was performed for the CNP proposed project using the 2024 RTP 2029 economic case
- The proposed project relieved one existing congestion and resulted in one new congestion in the study area

Monitored Line	% Time of Congestion	New / Existing
P.H. Robinson to Meadow 345-kV Transmission Line	21.19	Existing
Oasis to Savana POI 345-kV Transmission Line	11.39	New

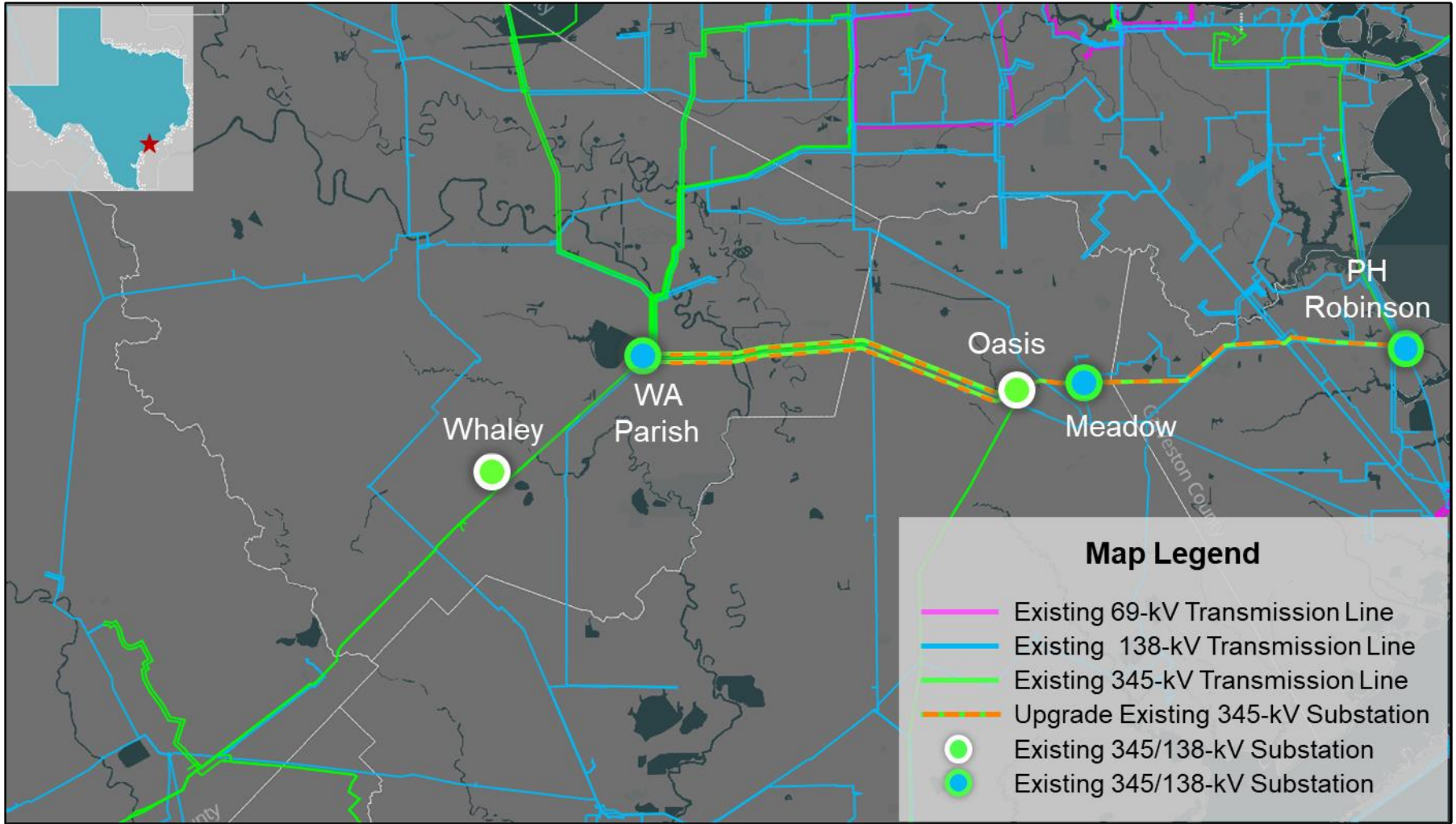
- Upgrading the increased congested line did not yield economic benefit and therefore will not be recommended for upgrade as part of this project

Upgrade Tested	Mileage (~mi)	Passed Production Cost Savings Test	Passed Consumer Cost Benefit Test
Oasis to Savana POI 345-kV Transmission Line	15.0	No	No

ERCOT Recommendation

- ERCOT recommends the project proposed by CNP
 - Estimated Cost: approximately \$511.31 million
 - Expected ISD: December 2028
 - No CCN filling will be required
- Based on ERCOT Independent Review, ERCOT will reclassify this RPG project to a Tier 4 project
 - Based on the need driver (aging transmission infrastructure and storm hardening)

Map of ERCOT Recommendation



ERCOT Recommendation Details

- Rebuild/reconductor the existing P.H. Robinson to W.A. Parish 345-kV double-circuit transmission line, with a normal and emergency ratings of at least 2,987 MVA, approximately 40.2-mile:
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 - Upgrade the existing Oasis 345-kV substation to 63 kAIC fault duty breaker rating;
 - Upgrade substation equipment to 5,000A;

Thank you!



Stakeholder comments also welcomed through:

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Appendix A – Transmission Projects Added

- List of recently approved RPG transmission projects added to study base case

RPG/TPIT No	Project Name	Tier	Project ISD	From County
63922	Tiki Island Distribution Upgrades	4	5/31/2026	Galveston
66208	Rebuild League City-Hidden Lakes with bundled 795 ACSS	4	5/31/2026	Galveston
73352A	PH Robinson Area 138kV Upgrades	4	10/31/2026	Galveston
72032	Stewart to West Bay Ckts 48A & 59A Upgrades	4	12/31/2027	Galveston

Appendix B – New Generation Projects Added

- List of new generation, that met the Planning Guide 6.9(1) condition, added to the study base case

GINR	Project Name	Fuel	Projected COD	Max Capacity (~MW)	County
23INR0029	Cedar Bayou 5 (TEF - Due Diligence)	GAS	12/15/2027	697.0	Chambers
23INR0137	BRP Diran BESS	OTH	1/31/2028	100.6	Wharton
24INR0493	Crowned Heron BESS 2	OTH	3/31/2026	154.2	Fort Bend
24INR0584	Houston IV BESS	OTH	6/3/2026	164.6	Harris
25INR0068	High Chap Solar	SOL	6/26/2028	152.3	Brazoria
25INR0102	Austin Bayou Solar	SOL	6/1/2027	753.4	Brazoria
25INR0103	Elio BESS	OTH	8/5/2027	317.2	Brazoria
25INR0319	Northington Solar	SOL	7/15/2027	129.8	Wharton
25INR0425	Aldrin 345 BESS	OTH	12/1/2027	362.0	Brazoria
26INR0189	Skipjack Energy Storage	OTH	2/28/2028	154.0	Brazoria
26INR0226	First Capitol BESS	OTH	5/1/2027	256.2	Brazoria
26INR0250	Duffy BESS	OTH	9/15/2026	235.9	Matagorda
26INR0333	VERTUS ENERGY STORAGE	OTH	2/1/2026	200.0	Galveston
26INR0405	Buffalo Creek BESS	OTH	6/1/2026	250.0	Fort Bend
27INR0224	Leopard BESS	OTH	7/9/2028	264.2	Victoria

Appendix C – New Generation Projects Added for Generation Addition Sensitivity Analysis

- List of new generation, that met the Planning Guide 6.9(1) condition, added to the study case for the Generation Addition Sensitivity Analysis

GINR	Project Name	Fuel	Projected COD	Max Capacity (~MW)	County
25INR0170	Pinewood Solar	SOL	1/9/2027	150.7	Brazoria
25INR0235	Austin Bayou Storage I	OTH	6/1/2027	150.7	Brazoria
25INR0236	Austin Bayou Storage II	OTH	6/1/2027	156.6	Brazoria
25INR0237	Austin Bayou Storage III	OTH	6/1/2027	156.6	Brazoria
25INR0330	Clutch City Solar Phase II	SOL	7/1/2028	251.3	Brazoria
25INR0480	Bell Creek BESS	OTH	10/30/2027	200.9	Brazoria
25INR0494	Willow Beach Wind	WIN	10/1/2027	202.3	Brazoria
25INR0554	Dan Kearney BESS	OTH	10/1/2027	200.8	Brazoria
26INR0201	Rock Rose BESS	OTH	12/15/2026	211.5	Fort Bend
26INR0314	Brazos River BESS	OTH	10/30/2027	180.4	Brazoria
26INR0340	SOUTHERN SELECT ENERGY STORAGE	OTH	3/31/2027	206.4	Galveston
26INR0375	Avalon BESS	OTH	12/1/2026	522.1	Fort Bend
26INR0417	GAMAY ENERGY STORAGE	OTH	3/1/2027	418.6	Brazoria
26INR0551	Hastings Park BESS	OTH	9/15/2027	256.3	Brazoria