Executive Summary

Oncor submitted the West Texas 345-kV Infrastructure Rebuild Project to the Regional Planning Group (RPG) on November 3, 2023. Oncor proposed this project to address load growth, load integration requests, the need to rebuild aging facilities and NERC TPL-001-5 reliability criteria violations. The expected in-service date (ISD) of this project is Summer 2028. This project is located in the West and Far West Weather Zones in Scurry, Mitchell, Howard, Glasscock, Martin, Midland, and Ector Counties.

ERCOT completed the Permian Basin Load Interconnection Study (PBLI)[1] in December 2021 to identify transmission upgrades, especially long lead time transmission upgrades, necessary to reliably serve the existing and projected oil and gas loads in the Permian Basin area. The Permian Basin area includes the Delaware Basin, Midland Basin, and Central Basin Platforms which covers most of the counties in the Far West Weather Zone plus five adjacent counties in the West Weather Zone. The geographic and reliability assessment scope of the West Texas 345-kV Infrastructure Rebuild Project are a subset of the Permian Basin Load Interconnection Study. The Permian Basin Load Interconnection Study stated that if the preferred upgrades identified in that study are submitted to Regional Planning Group (RPG) for review, ERCOT may use that study report as part of ERCOT Independent Review. The West Texas 345-kV Infrastructure Rebuild Project includes components of 'Preferred' Project IDs 1, 2, 3 and 25 identified by the Permian Basin Load Interconnection Study. More details of the Permian Basin Load Interconnection Study can be found in Appendix A.

Additionally, ERCOT completed an updated study which confirmed the need for this project and that the Oncor West Texas 345-kV Infrastructure Rebuild Project addresses the need.

Accordingly, based on this independent review, ERCOT recommends the following project as submitted by Oncor:

- Construct a new Ranger Camp 345/138/69-kV substation, approximately 1.0 miles north of the existing Morgan Creek 345/138-kV Switch, with two new 600 MVA (nameplate) 345/138-kV transformers, a 14-breaker 345-kV breaker-and-a-half bus arrangement, and a 16-breaker, 138-kV breaker-and-a-half arrangement with one new 177 MVA (nameplate) 138/69-kV transformer, and a 2-breaker 69-kV single bus arrangement. All 345-kV equipment will be rated at least 2988 MVA, 138-kV at least 765 MVA and 69-kV at least 239 MVA.
  - Disconnect the following 345-kV lines at Morgan Creek and terminate at new Ranger Camp 345-kV:
    - Morgan Creek to Falcon Seaboard adding approximately 1.4 miles of new Right of Way (ROW)
    - Morgan Creek to Tonkawa adding approximately 0.94 miles of new ROW
  - Disconnect the following 138-kV transmission lines at Morgan Creek and terminate at new Ranger Camp 138-kV:
    - Morgan Creek to Eskota
    - Morgan Creek to Barber Lake West
    - Morgan Creek to Barber Lake East
    - Morgan Creek to Sun
    - Morgan Creek to Cosden

[1] https://www.ercot.com/gridinfo/planning

  - Disconnect the following 69-kV transmission lines at Morgan Creek and terminate at new Ranger Camp 69-kV:
    - Morgan Creek to Colorado City
    - Morgan Creek to Big Spring
  - Relocate the existing 177 MVA (nameplate) 138/69-kV transformer from Morgan Creek Switch to new Ranger Camp Switch
- Construct a new breaker-and-a-half rung with two new 345-kV breakers at Tonkawa 345-kV Switch. New breakers will be rated at least 2988 MVA
- Rebuild Morgan Creek (Ranger Camp) to Tonkawa 345-kV transmission line, replace with two new Morgan Creek (Ranger Camp) to Tonkawa 345-kV lines, with conductors rated to at least 2988 MVA, in existing (estimated 21.3 miles) ROW, installed on new, common double-circuit towers
- Construct a new Cattleman 345/138-kV Switch, approximately 2.0 miles southwest of existing Morgan Creek 345/138-kV Switch, with two new 600 MVA (nameplate) 345/138-kV transformers, a 15-breaker 345-kV breaker-and-a-half bus arrangement and a 9-breaker 138-kV breaker-and-a-half bus arrangement. All 345-kV equipment will be rated at least 2988 MVA and 138-kV at least 765 MVA
- Disconnect the following 345-kV transmission lines at Morgan Creek and terminate at new Cattleman 345-kV:
  - Morgan Creek to Champion Creek/LCRA Bitter Creek double circuit transmission lines adding approximately 1.25 miles of new ROW
  - Morgan Creek to LCRA Gasconades adding approximately 2.13 miles of new ROW
  - Morgan Creek to Consavvy
  - Morgan Creek to Longshore
- Disconnect the following 138-kV transmission lines at Morgan Creek and terminate at new Cattleman 138-kV:
  - Morgan Creek to McDonald Road using new ROW
- Construct two new Cattleman to Ranger Camp 345-kV transmission lines, with conductors rated to at least 2988 MVA, in a new (estimated 4.2 miles) ROW, installed on new, common double-circuit towers
- Rebuild Morgan Creek 138-kV Switch, in existing Morgan Creek 345/138-kV Switchyard from existing 12-breaker double-bus arrangement to a new 10-breaker 138-kV breaker-and-a-half bus arrangement. All 138-kV equipment will be rated at least 765 MVA
- Construct two new Morgan Creek to Morgan Creek CT Yard 138-kV transmission lines, with conductors rated to at least 614 MVA in existing (estimated 0.1 miles) ROW
- Construct two new Morgan Creek to Ranger Camp 138-kV transmission lines, with conductors rated to at least 614 MVA, in existing (estimated 1.2 miles) ROW, installed on new, common double-circuit towers
- Construct two new Morgan Creek to Cattleman 138-kV transmission lines, with conductors rated to at least 614 MVA, adding new (estimated 2.48 miles) ROW, installed on new, common double-circuit towers

- Construct a new Prong Moss 345-kV Switch, approximately 29.4 miles southwest of existing Morgan Creek 345/138-kV Switch, and along the existing Morgan Creek to Midland East 345-kV corridor, and approximately 7.0 miles south of the existing Falcon Seaboard generating station in a 12-breaker 345-kV breaker-and-a-half bus arrangement. All equipment will be rated at least 2988 MVA
  - Tap Prong Moss 345-kV Switch into existing Morgan Creek (Ranger Camp) to Falcon Seaboard 345-kV transmission line with, approximately 0.1 miles, new transmission line segment in new ROW
  - Tap Prong Moss 345-kV Switch into Falcon Seaboard to Midland East 345-kV transmission line with, approximately 0.1 miles, new transmission line segment in new ROW
  - Rebuild Morgan Creek (Ranger Camp) to Prong Moss, replace with two new Morgan Creek (Ranger Camp) to Prong Moss 345-kV transmission lines with conductors rated at least 2988 MVA, in existing (estimated 29.4 miles) ROW installed on new, common double-circuit towers
  - Rebuild Prong Moss to Midland East 345-kV line, replace with two new Prong Moss to Midland East 345-kV transmission lines with conductors rated at least 2988 MVA, in existing estimated 41.2 miles) ROW, installed on new, common double-circuit towers
- Rebuild Midland County Northwest 345-kV Switch bus work and terminal equipment to be rated at least 2988 MVA, add one new 2-breaker 345-kV breaker-and-a-half rung rated to at least 2988 MVA
- Rebuild Midland East to Midland County Northwest 345-kV transmission line, replace with two new Midland East to Midland County Northwest 345-kV transmission lines, with conductors rated at least 2988 MVA, in 16.3 miles of existing ROW and 1.0 miles of new ROW, installed on new (estimated 17.3 miles) common double-circuit towers
- Rebuild Longshore 345-kV Switch, and upgrade from existing 6-breaker ring-bus configuration to a 11-breaker 345-kV breaker-and-a-half bus arrangement. All equipment will be rated at least 2988 MVA
  - Tap the rebuilt Longshore 345-kV Switch into Morgan Creek (Cattleman) to Consavvy 345-kV transmission line with approximately 0.1 miles of line in existing ROW
- Upgrade all terminal equipment at 2-breaker Midessa South 345-kV Switch to at least 2988 MVA
- Upgrade all terminal equipment at 3-breaker, ring bus, Quail East 345-kV Switch to at least 2988 MVA
- Upgrade terminal equipment on two breaker-and-a-half rungs of Odessa EHV 345-kV Switch to at least 2988 MVA
- Upgrade all terminal equipment on both single breaker terminals and main bus at existing Odessa EHV 345-kV Switch to at least 2988 MVA
- Construct a new Reiter 345/138-kV Switch, approximately 3.0 miles south of the existing Odessa EHV 345/138-kV Switch along the existing Odessa EHV to Moss/Wolf 345-kV double-circuit transmission line, with two new 600 MVA (nameplate) 345/138-kV transformers, in a 12-breaker 345-kV breaker-and-a-half bus arrangement and a 10-breaker 138-kV breaker-and-a-half bus arrangement. All 345-kV equipment will be rated at least 2988 MVA, and 138-kV at least 765 MVA
- Tap new Reiter 345-kV Switch into existing Odessa EHV to Moss & Odessa EHV to Wolf 345-kV double-circuit transmission line with, approximately 0.1 miles, new transmission line segment rated to at least 2987 MVA in new ROW

- Tap new Reiter 138-kV Switch into existing Odessa EHV to Moss 138-kV transmission line with, approximately 0.2 miles, new transmission line segment rated to at least 614 MVA in a new ROW
- Tap new Reiter 138-kV Switch into existing Odessa EHV to Wolf 138-kV transmission line with, approximately 0.1 miles, new transmission line segment rated to at least 614 MVA in new ROW
- Upgrade Tesoro 345-kV Switch by adding two new breaker-and-a-half rungs with two new breakers rated to at least 2988 MVA on each of the two new rungs
- Construct two new Reiter to Tesoro 345-kV transmission lines, with conductors rated to at least 2988 MVA, in new (estimated 4.0 miles) ROW, installed on new, common double-circuit towers
- Rebuild Morgan Creek (Cattleman) to Odessa EHV 345-kV double-circuit transmission lines, with conductors rated to at least 2988 MVA, in existing (estimated 88.7 miles) ROW installed on common double-circuit towers

The recommended project is a Tier 1 project estimated to cost $1.12 Billion. The estimated cost reflects the fact that the vast majority of the work necessary to complete the various project components will need to be performed on energized transmission elements and/or will require construction of temporary by-pass transmission facilities. The project is recommended for construction to meet a summer 2028 ISD. However, Oncor has advised that the projected in-service date may change based on requirements for various approvals, ROW acquisition and construction progress.

Multiple Certificate of Convenience and Necessity (CCN) filings will be required for this transmission project. Oncor will work with ERCOT as early as practical to develop outage plans needed for construction and implement Constraint Management Plans (CMP) based on summer 2028 operational conditions.

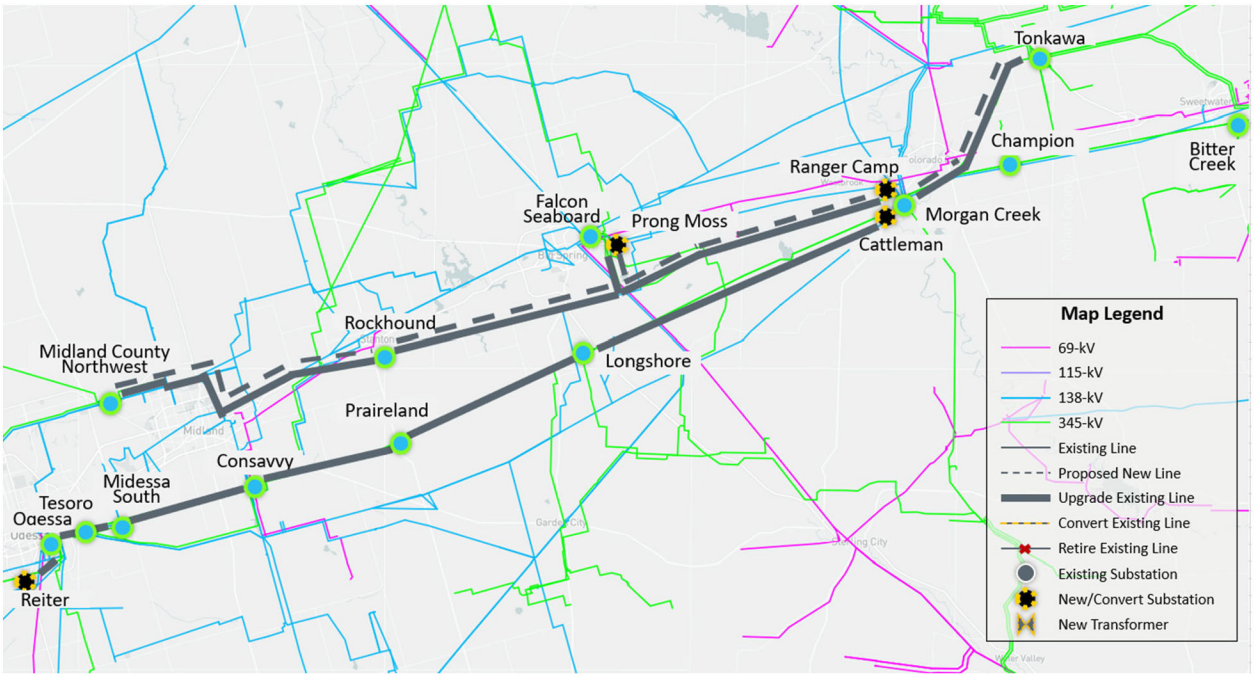

Figure E.1: Map of Recommended Upgrades

Table of Contents

1 Introduction

As part of the continuing efforts to address challenges in the Permian Basin, ERCOT completed the Permian Basin Load Interconnection Study (PBLI)[2] in December 2021 through extensive review and input by TSPs and stakeholders.

The PBLI identified the reliability challenges and a set of transmission upgrades, especially long lead time transmission upgrades, to connect and reliably serve the existing and projected oil and gas loads in the Permian Basin area utilizing the demand forecast from the IHS Markit study[3]. The IHS Markit study is a customer demand study performed by IHS Markit, which provides an in-depth analysis of the oil and gas industry and provides an electricity demand forecast in the Permian area through 2030. According to the IHS Markit study report, the demand forecast was based on geology and resource assessment, industry intelligence, oil and gas expertise, commercial considerations, translations of historical and forecasted oil and gas activities into electric load demands in every single square mile in the Permian Basin area.

As shown in Appendix A, the Permian Basin Load Interconnection Study identified both preferred and placeholder transmission upgrades and stated that "If the preferred upgrades identified in [PBLI] are submitted to Regional Planning Group (RPG) for review, ERCOT may use [PBLI] as part of the ERCOT Independent Review". Some components of PBLI "Preferred upgrades" have already been submitted and approved by ERCOT and the RPG. The Oncor West Texas 345-kV Infrastructure Rebuild Project presents and re-confirms justification for PBLI 'Preferred' Projects IDs 1, 2, 3 and 25.

Oncor submitted the West Texas 345-kV Infrastructure Rebuild Project for RPG review to address load growth, load integration requests and the need to rebuild aging facilities. This submittal is provided in Appendix B.

This RPG project has an estimated cost of $1.12 Billion and is classified as a Tier 1 project pursuant to Protocol Section 3.11.4.3. The estimated cost reflects the fact that the vast majority of the work necessary to complete the various project components associated with this project will need to be performed on energized transmission elements and/or will require construction of temporary by-pass transmission facilities. The project is recommended for construction to meet a summer 2028 in-service date (ISD). However, Oncor has advised that the projected ISD may change based on requirements for various approvals, right-of-way (ROW) acquisition and construction progress.

Multiple Certificate of Convenience and Necessity (CCN) filings will be required for this transmission project. Oncor has committed to work with ERCOT as necessary to develop and implement Constraint Management Plans based on summer 2028 operational conditions.

Since the primary components of the West Texas 345-kV Infrastructure project have already been analyzed and identified as preferred upgrades in the Permian Basin Load Interconnection Study, ERCOT conducted the independent review of this RPG project by updating study results and assumptions to check if any recent system changes would potentially alter or modify the projects recommended in these studies. The following sections describe the details of the updated study assumptions, methodology, and the results of the ERCOT Independent Review.

[2] https://www.ercot.com/gridinfo/planning

[3] ERCOT Letter to Commissioners - Follow-up Status Update on Permian

2 Study Assumptions and Methodology

ERCOT reviewed the RPG project submitted by Oncor and confirmed the submitted project aligns with the Permian Basin Load Interconnection 'Preferred' Projects IDs 1, 2, 3 and 25. As such, for this independent review, ERCOT utilized the study results from the 2021 Permian Basin Load Interconnection Study. Furthermore, ERCOT reviewed the 2023 RTP final reliability case to confirm the project need.

2.1 Study Assumptions for Reliability Analysis

ERCOT conducted the Permian Basin Load Interconnection Study in 2021 based on criteria contained in NERC reliability standard TPL-001-4, ERCOT Nodal Protocol and Planning Guide. The Permian Basin Load Interconnection also examined a number of transmission upgrade options to address the aggregate reliability needs within the Permian Basin. For this reason, no additional options were identified and examined for this independent review.

The following sections describe the study assumptions of this review using a 2023 RTP final case.

2.1.1 Steady-State Study Base Case

A Final 2023 RTP case, published on the Market Information System (MIS) on December 22, 2023, was used as reference case. The 2028 Summer season was selected for the study. The steady-state study base case for the West and Far West Weather Zones was constructed by updating transmission, generation, and loads and using the following 2028 Summer Peak Load Flow case as reference:

- 2023RTP_2028_SUM_WFW_12222023[4]

2.1.2 Transmission Topology

Transmission projects listed in Table 2.1, identified in the 2023 RTP as placeholders for West Texas 345-kV Infrastructure Rebuild Project, were removed to develop the study base case.

[4] 2023RTP_Final_Reliability

Table 2.1 Transmission Projects Removed from Study Base Case

RTP Project ID	Project Name	TSP	County
2021-FW19	Morgan Creek SES - Longshore Switch 345-kV Line Upgrade	ONCOR	Mitchell, Howard
2022-WFW2	Midessa South SW - Consavvy - Longshore Switch - Morgan Creek SES 345-kV Line Upgrades	ONCOR	Midland, Howard, Mitchell
2023-WFW2	Morgan Creek SES - Falcon Seaboard - Midland East 345-kV Line Upgrade	ONCOR	Scurry
2023-W12	Morgan Creek SES - Tonkawa 345-kV Line Rebuild	ONCOR	Mitchell

Transmission projects within the study area with ISD by June 2028 were added to the study base case. The ERCOT Transmission Project Information and Tracking (TPIT)[5] report from October 2023 was used as reference. The added TPIT projects are listed in Table 2.2 below.

Table 2.2 Transmission Projects Added to Study Base Case

TPIT Number	Project Name	County	Projected In-service Date	Planning Charter Tier
77146	Reconductor WNK-AAT-MDT-FSH	Winkler	Nov-23	Tier 4
70964	WETT 345 kV Volta witch	Howard	Jan-24	Tier 3
71968	Midkiff - Pemkiff 138 kV Line	Upton	May-24	Tier 4
73434	Shaw 138 kV POD	Reagan	May-24	Tier 4
76212	Model Coachwhip Sub	Ward	May-24	Tier 4
73408	Odysseus: Build new 345 kV Station	Coke	Oct-24	Tier 4
71960	Upgrade Grady - Expanse 138 kV Line	Martin	Dec-24	Tier 4
71989	Big Spring West - Stanton East 138 kV Line	Martin	Dec-24	Tier 4
73043	Peck – Driver 138-kV Line	Glasscock	Dec-24	Tier 2
76686	Add Hog Mountain 138 kV POD	Glasscock	Dec-24	Tier 4
76232	Reconductor Mivida-Coachwhip-Fishhook 2045 ACCC	Ward	May-26	Tier 4
76291	Upgraded Cedarville–BoneSpringsTap–Fishhook	Ward	May-26	Tier 4
76293	Upgraded Cedvale-MiDiva138KV	Ward	May-26	Tier 4
77320	Add CapBANK in COYANOSA	Ward	Jun-26	Tier 4
77803 77807	TNMP Silverleaf and Cowpen 345/138-kV Stations	Reeves, Ward	Jun-27	Tier 1
73368	Grey Well Draw - Buffalo 138 kV Second Circuit	Martin, Midland	Dec-24	Tier 3
78374	Rockhound 345/138-kV Switching Station	Martin, Midland	Dec-24	Tier 3

2.1.3 Generation

Based on the December 2023 Generator Interconnection Status (GIS) report posted on the ERCOT website in January 2024[6], generator additions planned to connect to the study area, before June 2028,

[5] https://www.ercot.com/gridinfo/planning
[6] https://www.ercot.com/mp/data-products/data-product-details?id=PG7-200-ER

and meeting Planning Guide Section 6.9(1) for inclusion in the planning models, that were not in the base case, were added to the study base case. These generator additions are listed in Table 2.3. All the new generation units added to the case were dispatched consistent with the 2023 RTP methodology.

Table 2.3 Generation Units Added to Study Case

GINR Number	Project Name	County	Capacity (MW)	Fuel	Projected Commercial Operation Date
23INR0387	Pioneer DJ Wind	Midland	140.3	WIN	05/03/2024
23INR0470	BoCo BESS	Borden	155.5	OTH	06/22/2024
24INR0273	Al Pastor BESS	Dawson	100.8	OTH	09/02/2024

The status of each unit that was projected to be either indefinitely mothballed or retired at the time of the study were reviewed. The units listed in Table 2.4 were opened (turned off) in the study base case to reflect their mothballed/retired status.

Table 2.4: List of Generation Opened to Reflect Mothballed/Retired/Forced Outage Status

Bus No	Unit Name	Capacity (MW)	Weather Zone
110941	SL_SL_G1	65.0	Coast
110942	SL_SL_G2	65.0	Coast
110943	SL_SL_G3	30.0	Coast
110944	SL_SL_G4	30.0	Coast
130121	SGMTN_SIGNALM2	6.6	Far West

2.1.4 Loads

The load level of the Far West Weather Zone remains the same as in the 2023 RTP case. The loads outside of the study Weather Zone, excluding the West and Far West Weather Zones, were adjusted as necessary for power balance consistent with the 2023 RTP assumptions.

2.2 Study Assumptions for Congestion Analysis

2.2.1 Base Case

The 2028 economic final case from the 2023 RTP was used to develop a study base case for congestion analysis.

2.2.2 Transmission Topology

All RPG-approved Tier 1, 2, and 3 transmission projects in the study area as well as the Tier 4 projects in the study area expected to be in-service by 2028 were added to the study base case. The ERCOT TPIT report posted on October 2023, was used as reference. The added TPIT projects are listed in Appendix C.

2.2.3 Generation

Planned generators in the ERCOT system that met Planning Guide Section 6.9(1) conditions for inclusion in the base cases (based on the January 2024 GIS report) were added to the study base case. The added generators are listed in Appendix C.

2.2.4 Loads

Loads were maintained consistent with the 2023 RTP economic model for the year 2028.

2.3 Methodology

This section lists the Contingencies and Criteria used for project review along with the tools used to perform each of the various analyses.

2.3.1 Contingencies and Criteria

The reliability assessments were performed based on NERC Reliability Standard TPL-001-5.1, ERCOT Protocols, and ERCOT Planning Criteria.

Contingencies were updated based on the changes made to the topology as described in Section 2.1 of this document. The following steady-state contingencies were simulated for the study region:

- P0 (System Intact)
- P1, P2-1, P7 (N-1 conditions);
- P2-2, P2-3, P4, and P5 (Extra High Voltage (EHV) only);
- P3-1: G-1 + N-1 (G-1: Odessa Ector CC Train, Falcon Seaboard CC Train); and
- P6-2: X-1 + N-1 (X-1: 345/138-kV Consavvy 345/138-kV transformer, Einstein 345/138-kV transformers).

All 69-kV and above buses, transmission lines, and transformers in the study region were monitored (excluding generator step-up transformers) and the following thermal and voltage limits were enforced:

- Thermal
  - Rate A (normal rating) for pre-contingency conditions; and
  - Rate B (emergency rating) for post-contingency conditions.
- Voltages
  - Voltages exceeding pre-contingency and post-contingency limits; and
  - Voltage deviations exceeding 8% on non-radial load buses.

2.3.2 Study Tool

ERCOT utilized the following software tools to perform this independent review:

- PowerWorld Simulator version 23 was used for security constrained optimal power flow (SCOPF) and steady state contingency analysis
- UPLAN version 12.3.0.29978 was used to perform the congestion analysis

3 Project Need

ERCOT conducted the review of the Permian Basin Load Interconnection Study, and the 2023 RTP summer peak final reliability case based on the study assumptions and methodologies described in Section 2.

3.1 Review of the 2023 Regional Transmission Plan (RTP) Case

ERCOT evaluated the 2023 RTP 2028 Summer Peak case based on the study assumptions and methodologies described in Section 2. The study results showed thermal overloads under NERC Category P1, P2-1, P3, P6-2 and P7 contingency conditions that confirmed the reliability need and matched results from the PBLI as well as the Oncor submittal.

West Texas 345-kV Infrastructure Rebuild Project upgrade will address these thermal overloads under the N-1, G-1+N-1, X-1+N-1 contingency conditions that resulted in thermal overloads as shown in Table 3.1.

Table 3.1 Thermal Overloads in the 2023 RTP Case

Contingency Category	Thermal Overloads Base Case	Thermal Overloads West Texas 345-kV Infrastructure Rebuild Project Added
N-0 (P0)	None	None
N-1 (P1, P2-1, P7)	58 miles of 345-kV lines	None
G-1+N-1 (P3)	197 miles of 345-kV lines	None
X-1+N-1 (P6-2)	57 miles of 345-kV lines	None

3.2 Review of Permian Basin Load Interconnection Study Results

The Permian Basin Load Interconnection Study identified a set of transmission upgrades, especially long lead time local transmission upgrades, to connect and reliably serve the existing and projected oil and gas loads in the Permian Basin area utilizing the demand forecast from the IHS Markit study, which provides an in-depth analysis of the oil and gas industry and provides an electricity demand forecast in the Permian Basin area through 2030.

The results of the Permian Basin Load Interconnection Study reconfirmed the need for the West Texas 345-kV Infrastructure Rebuild Project upgrade to maintain grid reliability under N-1, G-1+N-1, X-1+N-1 contingency conditions that match those identified by the ERCOT independent review referenced in Section 3.1 of this report as well as those identified in the Oncor submittal.

More details of the Permian Basin Load Interconnection Study can be found in Appendix A while the Oncor submittal can be found in Appendix B.

4 Recommended Project

Based on this independent review and the Permian Basin Load Interconnection Study, ERCOT recommends the following project (West Texas 345-kV Infrastructure Rebuild Project):

- Construct a new Ranger Camp 345/138/69-kV substation, approximately 1.0 miles north of the existing Morgan Creek 345/138-kV Switch, with two new 600 MVA (nameplate) 345/138-kV transformers, a 14-breaker 345-kV breaker-and-a-half bus arrangement, and a 16-breaker, 138-kV breaker-and-a-half arrangement with one new 177 MVA (nameplate) 138/69-kV transformer, and a 2-breaker 69-kV single bus arrangement. All 345-kV equipment will be rated at least 2988 MVA, 138-kV at least 765 MVA and 69-kV at least 239 MVA.
  - Disconnect the following 345-kV lines at Morgan Creek and terminate at new Ranger Camp 345-kV:
    - Morgan Creek to Falcon Seaboard adding approximately 1.4 miles of new Right of Way (ROW)
    - Morgan Creek to Tonkawa adding approximately 0.94 miles of new ROW
  - Disconnect the following 138-kV transmission lines at Morgan Creek and terminate at new Ranger Camp 138-kV:
    - Morgan Creek to Eskota
    - Morgan Creek to Barber Lake West
    - Morgan Creek to Barber Lake East
    - Morgan Creek to Sun
    - Morgan Creek to Cosden
  - Disconnect the following 69-kV transmission lines at Morgan Creek and terminate at new Ranger Camp 69-kV:
    - Morgan Creek to Colorado City
    - Morgan Creek to Big Spring
  - Relocate the existing 177 MVA (nameplate) 138/69-kV transformer from Morgan Creek Switch to new Ranger Camp Switch
- Construct a new breaker-and-a-half rung with two new 345-kV breakers at Tonkawa 345-kV Switch. New breakers will be rated at least 2988 MVA
- Rebuild Morgan Creek (Ranger Camp) to Tonkawa 345-kV transmission line, replace with two new Morgan Creek (Ranger Camp) to Tonkawa 345-kV lines, with conductors rated to at least 2988 MVA, in existing (estimated 21.3 miles) ROW, installed on new, common double-circuit towers
- Construct a new Cattleman 345/138-kV Switch, approximately 2.0 miles southwest of existing Morgan Creek 345/138-kV Switch, with two new 600 MVA (nameplate) 345/138-kV transformers, a 15-breaker 345-kV breaker-and-a-half bus arrangement and a 9-breaker 138-kV breaker-and-a-half bus arrangement. All 345-kV equipment will be rated at least 2988 MVA and 138-kV at least 765 MVA
- Disconnect the following 345-kV transmission lines at Morgan Creek and terminate at new Cattleman 345-kV:

  - Morgan Creek to Champion Creek/LCRA Bitter Creek double circuit transmission lines adding approximately 1.25 miles of new ROW
  - Morgan Creek to LCRA Gasconades adding approximately 2.13 miles of new ROW
  - Morgan Creek to Consavvy
  - Morgan Creek to Longshore
- Disconnect the following 138-kV transmission lines at Morgan Creek and terminate at new Cattleman 138-kV:
  - Morgan Creek to McDonald Road using new ROW
- Construct two new Cattleman to Ranger Camp 345-kV transmission lines, with conductors rated to at least 2988 MVA, in a new (estimated 4.2 miles) ROW, installed on new, common double-circuit towers
- Rebuild Morgan Creek 138-kV Switch, in existing Morgan Creek 345/138-kV Switchyard from existing 12-breaker double-bus arrangement to a new 10-breaker 138-kV breaker-and-a-half bus arrangement. All 138-kV equipment will be rated at least 765 MVA
- Construct two new Morgan Creek to Morgan Creek CT Yard 138-kV transmission lines, with conductors rated to at least 614 MVA in existing (estimated 0.1 miles) ROW
- Construct two new Morgan Creek to Ranger Camp 138-kV transmission lines, with conductors rated to at least 614 MVA, in existing (estimated 1.2 miles) ROW, installed on new, common double-circuit towers
- Construct two new Morgan Creek to Cattleman 138-kV transmission lines, with conductors rated to at least 614 MVA, adding new (estimated 2.48 miles) ROW, installed on new, common double-circuit towers
- Construct a new Prong Moss 345-kV Switch, approximately 29.4 miles southwest of existing Morgan Creek 345/138-kV Switch, and along the existing Morgan Creek to Midland East 345-kV corridor, and approximately 7.0 miles south of the existing Falcon Seaboard generating station in a 12-breaker 345-kV breaker-and-a-half bus arrangement. All equipment will be rated at least 2988 MVA
  - Tap Prong Moss 345-kV Switch into existing Morgan Creek (Ranger Camp) to Falcon Seaboard 345-kV transmission line with, approximately 0.1 miles, new transmission line segment in new ROW
  - Tap Prong Moss 345-kV Switch into Falcon Seaboard to Midland East 345-kV transmission line with, approximately 0.1 miles, new transmission line segment in new ROW
  - Rebuild Morgan Creek (Ranger Camp) to Prong Moss, replace with two new Morgan Creek (Ranger Camp) to Prong Moss 345-kV transmission lines with conductors rated at least 2988 MVA, in existing (estimated 29.4 miles) ROW installed on new, common double-circuit towers
  - Rebuild Prong Moss to Midland East 345-kV line, replace with two new Prong Moss to Midland East 345-kV transmission lines with conductors rated at least 2988 MVA, in existing estimated 41.2 miles) ROW, installed on new, common double-circuit towers
- Rebuild Midland County Northwest 345-kV Switch bus work and terminal equipment to be rated at least 2988 MVA, add one new 2-breaker 345-kV breaker-and-a-half rung rated to at least 2988 MVA
- Rebuild Midland East to Midland County Northwest 345-kV transmission line, replace with two new Midland East to Midland County Northwest 345-kV transmission lines, with conductors rated at

least 2988 MVA, in 16.3 miles of existing ROW and 1.0 miles of new ROW, installed on new (estimated 17.3 miles) common double-circuit towers

- Rebuild Longshore 345-kV Switch, and upgrade from existing 6-breaker ring-bus configuration to a 11-breaker 345-kV breaker-and-a-half bus arrangement. All equipment will be rated at least 2988 MVA
  - Tap the rebuilt Longshore 345-kV Switch into Morgan Creek (Cattleman) to Consavvy 345-kV transmission line with approximately 0.1 miles of line in existing ROW
- Upgrade all terminal equipment at 2-breaker Midessa South 345-kV Switch to at least 2988 MVA
- Upgrade all terminal equipment at 3-breaker, ring bus, Quail East 345-kV Switch to at least 2988 MVA
- Upgrade terminal equipment on two breaker-and-a-half rungs of Odessa EHV 345-kV Switch to at least 2988 MVA
- Upgrade all terminal equipment on both single breaker terminals and main bus at existing Odessa EHV 345-kV Switch to at least 2988 MVA
- Construct a new Reiter 345/138-kV Switch, approximately 3.0 miles south of the existing Odessa EHV 345/138-kV Switch along the existing Odessa EHV to Moss/Wolf 345-kV double-circuit transmission line, with two new 600 MVA (nameplate) 345/138-kV transformers, in a 12-breaker 345-kV breaker-and-a-half bus arrangement and a 10-breaker 138-kV breaker-and-a-half bus arrangement. All 345-kV equipment will be rated at least 2988 MVA, and 138-kV at least 765 MVA
- Tap new Reiter 345-kV Switch into existing Odessa EHV to Moss & Odessa EHV to Wolf 345-kV double-circuit transmission line with, approximately 0.1 miles, new transmission line segment rated to at least 2987 MVA in new ROW
- Tap new Reiter 138-kV Switch into existing Odessa EHV to Moss 138-kV transmission line with, approximately 0.2 miles, new transmission line segment rated to at least 614 MVA in a new ROW
- Tap new Reiter 138-kV Switch into existing Odessa EHV to Wolf 138-kV transmission line with, approximately 0.1 miles, new transmission line segment rated to at least 614 MVA in new ROW
- Upgrade Tesoro 345-kV Switch by adding two new breaker-and-a-half rungs with two new breakers rated to at least 2988 MVA on each of the two new rungs
- Construct two new Reiter to Tesoro 345-kV transmission lines, with conductors rated to at least 2988 MVA, in new (estimated 4.0 miles) ROW, installed on new, common double-circuit towers
- Rebuild Morgan Creek (Cattleman) to Odessa EHV 345-kV double-circuit transmission lines, with conductors rated to at least 2988 MVA, in existing (estimated 88.7 miles) ROW installed on common double-circuit towers

5 Additional Analysis and Assessment

The recommended West Texas 345-kV Infrastructure Rebuild Project is categorized as a Tier 1 project, pursuant to ERCOT Protocol Section 3.11.4.3(1)(a). As required by Planning Guide Section 3.1.3(4), ERCOT performed generation and load sensitivity studies to identify the preferred option performance. Additionally, a Sub-Synchronous Resonance (SSR) Assessment was performed.

5.1 Generation Addition Sensitivity Analysis

ERCOT performed a generation addition sensitivity analysis based on Planning Guide Section 3.1.3(4)(a).

Based on a review of the October 2023 GIS report, the following generators in the study area shown in Table 5.1 have a signed interconnection agreement (IA) but have not met all the conditions for inclusion in the case pursuant to Section 6.9(1) of the Planning Guide.

Table 5.1 Generation Units with Signed IA

GINR	Project Name	County	Fuel	Capacity (MW)
21INR0031	Indigo Solar	Fisher	Solar	125
23INR0300	Greater Bryant G Solar	Midland	Solar	42
21INR0268	Greyhound Solar	Ector	Solar	609
22INR0262	Deville Solar	Callahan	Solar	425
16INR0104	Big Sampson Wind	Crockett	Wind	400
23INR0086	Hanson Solar	Coleman	Solar	401
24INR0057	Hanson Storage	Coleman	Other	101
21INR0263	Monarch Creek Wind	Throckmorton	Wind	344
22INR0274	Crowded Star Solar II	Jones	Solar	189
21INR0207	Quantum Solar	Haskell	Solar	374
21INR0021	Green Holly Solar	Dawson	Solar	414
21INR0022	Red Holly Solar	Dawson	Solar	260
21INR0029	Green Holly Storage	Dawson	Other	50
21INR0033	Red Holly Storage	Dawson	Other	50
25INR0400	Maldives Solar (Alternate POI)	Scurry	Solar	184

These future resources did not have a material impact on the need for the West Texas 345-kV Infrastructure Rebuild Project.

5.2 Load Scaling Sensitivity Analysis

Per Planning Guide Section 3.1.3(4)(b), ERCOT evaluated the load scaling sensitivity and concluded that the load scaling assumed in the study case would not have any material impact on the project need because of the following reasons:

- The majority of the need is located in the northern section of the Far West Weather Zone, this region is remote enough from the rest of the ERCOT load as to not be affected by load scaling outside of the West and Far-West Weather Zones.
- The load scaling outside the stud area is not expected to have a material impact on the need for the West Texas 345-kV Infrastructure Rebuild Project.

5.3 Sub-synchronous resonance (SSR) Assessment

Pursuant to Protocol Section 3.22.1.3(2), ERCOT conducted an SSR screening assessment for the recommended West Texas 345-kV Infrastructure Rebuild Project and found no adverse SSR impacts to the existing and planned Generation Resources in the study area.

6 Congestion Analysis

ERCOT conducted a congestion analysis to identify any potential impact on system congestion related to the addition of the West Texas 345-kV Infrastructure Rebuild Project.

The results of the congestion analysis indicated no additional congestion in the area with the addition of the West Texas 345-kV Infrastructure Rebuild Project.

7 Conclusion

This report describes the ERCOT evaluation of the West Texas 345-kV Infrastructure Rebuild Project submitted Oncor. Based on the results of this independent review and the Permian Basin Load Interconnection Study, ERCOT recommends this RPG project to address the reliability need to accommodate the significant and rapid load growth in the area. The West Texas 345-kV Infrastructure Rebuild Project is estimated to cost $1.12 Billion and consists of the following upgrades:

- Construct a new Ranger Camp 345/138/69-kV substation, approximately 1.0 miles north of the existing Morgan Creek 345/138-kV Switch, with two new 600 MVA (nameplate) 345/138-kV transformers, a 14-breaker 345-kV breaker-and-a-half bus arrangement, and a 16-breaker, 138-kV breaker-and-a-half arrangement with one new 177 MVA (nameplate) 138/69-kV transformer, and a 2-breaker 69-kV single bus arrangement. All 345-kV equipment will be rated at least 2988 MVA, 138-kV at least 765 MVA and 69-kV at least 239 MVA.
  - Disconnect the following 345-kV lines at Morgan Creek and terminate at new Ranger Camp 345-kV:
    - Morgan Creek to Falcon Seaboard adding approximately 1.4 miles of new Right of Way (ROW)
    - Morgan Creek to Tonkawa adding approximately 0.94 miles of new ROW
  - Disconnect the following 138-kV transmission lines at Morgan Creek and terminate at new Ranger Camp 138-kV:
    - Morgan Creek to Eskota
    - Morgan Creek to Barber Lake West
    - Morgan Creek to Barber Lake East
    - Morgan Creek to Sun
    - Morgan Creek to Cosden
  - Disconnect the following 69-kV transmission lines at Morgan Creek and terminate at new Ranger Camp 69-kV:
    - Morgan Creek to Colorado City
    - Morgan Creek to Big Spring
  - Relocate the existing 177 MVA (nameplate) 138/69-kV transformer from Morgan Creek Switch to new Ranger Camp Switch
- Construct a new breaker-and-a-half rung with two new 345-kV breakers at Tonkawa 345-kV Switch. New breakers will be rated at least 2988 MVA
- Rebuild Morgan Creek (Ranger Camp) to Tonkawa 345-kV transmission line, replace with two new Morgan Creek (Ranger Camp) to Tonkawa 345-kV lines, with conductors rated to at least 2988 MVA, in existing (estimated 21.3 miles) ROW, installed on new, common double-circuit towers
- Construct a new Cattleman 345/138-kV Switch, approximately 2.0 miles southwest of existing Morgan Creek 345/138-kV Switch, with two new 600 MVA (nameplate) 345/138-kV transformers, a 15-breaker 345-kV breaker-and-a-half bus arrangement and a 9-breaker 138-kV breaker-and-a-half bus arrangement. All 345-kV equipment will be rated at least 2988 MVA and 138-kV at least 765 MVA

- Disconnect the following 345-kV transmission lines at Morgan Creek and terminate at new Cattleman 345-kV:
  - Morgan Creek to Champion Creek/LCRA Bitter Creek double circuit transmission lines adding approximately 1.25 miles of new ROW
  - Morgan Creek to LCRA Gasconades adding approximately 2.13 miles of new ROW
  - Morgan Creek to Consavvy
  - Morgan Creek to Longshore
- Disconnect the following 138-kV transmission lines at Morgan Creek and terminate at new Cattleman 138-kV:
  - Morgan Creek to McDonald Road using new ROW
- Construct two new Cattleman to Ranger Camp 345-kV transmission lines, with conductors rated to at least 2988 MVA, in a new (estimated 4.2 miles) ROW, installed on new, common double-circuit towers
- Rebuild Morgan Creek 138-kV Switch, in existing Morgan Creek 345/138-kV Switchyard from existing 12-breaker double-bus arrangement to a new 10-breaker 138-kV breaker-and-a-half bus arrangement. All 138-kV equipment will be rated at least 765 MVA
- Construct two new Morgan Creek to Morgan Creek CT Yard 138-kV transmission lines, with conductors rated to at least 614 MVA in existing (estimated 0.1 miles) ROW
- Construct two new Morgan Creek to Ranger Camp 138-kV transmission lines, with conductors rated to at least 614 MVA, in existing (estimated 1.2 miles) ROW, installed on new, common double-circuit towers
- Construct two new Morgan Creek to Cattleman 138-kV transmission lines, with conductors rated to at least 614 MVA, adding new (estimated 2.48 miles) ROW, installed on new, common double-circuit towers
- Construct a new Prong Moss 345-kV Switch, approximately 29.4 miles southwest of existing Morgan Creek 345/138-kV Switch, and along the existing Morgan Creek to Midland East 345-kV corridor, and approximately 7.0 miles south of the existing Falcon Seaboard generating station in a 12-breaker 345-kV breaker-and-a-half bus arrangement. All equipment will be rated at least 2988 MVA
  - Tap Prong Moss 345-kV Switch into existing Morgan Creek (Ranger Camp) to Falcon Seaboard 345-kV transmission line with, approximately 0.1 miles, new transmission line segment in new ROW
  - Tap Prong Moss 345-kV Switch into Falcon Seaboard to Midland East 345-kV transmission line with, approximately 0.1 miles, new transmission line segment in new ROW
  - Rebuild Morgan Creek (Ranger Camp) to Prong Moss, replace with two new Morgan Creek (Ranger Camp) to Prong Moss 345-kV transmission lines with conductors rated at least 2988 MVA, in existing (estimated 29.4 miles) ROW installed on new, common double-circuit towers
  - Rebuild Prong Moss to Midland East 345-kV line, replace with two new Prong Moss to Midland East 345-kV transmission lines with conductors rated at least 2988 MVA, in existing estimated 41.2 miles) ROW, installed on new, common double-circuit towers
- Rebuild Midland County Northwest 345-kV Switch bus work and terminal equipment to be rated at least 2988 MVA, add one new 2-breaker 345-kV breaker-and-a-half rung rated to at least 2988 MVA

- Rebuild Midland East to Midland County Northwest 345-kV transmission line, replace with two new Midland East to Midland County Northwest 345-kV transmission lines, with conductors rated at least 2988 MVA, in 16.3 miles of existing ROW and 1.0 miles of new ROW, installed on new (estimated 17.3 miles) common double-circuit towers
- Rebuild Longshore 345-kV Switch, and upgrade from existing 6-breaker ring-bus configuration to a 11-breaker 345-kV breaker-and-a-half bus arrangement. All equipment will be rated at least 2988 MVA
  - Tap the rebuilt Longshore 345-kV Switch into Morgan Creek (Cattleman) to Consavvy 345-kV transmission line with approximately 0.1 miles of line in existing ROW
- Upgrade all terminal equipment at 2-breaker Midessa South 345-kV Switch to at least 2988 MVA
- Upgrade all terminal equipment at 3-breaker, ring bus, Quail East 345-kV Switch to at least 2988 MVA
- Upgrade terminal equipment on two breaker-and-a-half rungs of Odessa EHV 345-kV Switch to at least 2988 MVA
- Upgrade all terminal equipment on both single breaker terminals and main bus at existing Odessa EHV 345-kV Switch to at least 2988 MVA
- Construct a new Reiter 345/138-kV Switch, approximately 3.0 miles south of the existing Odessa EHV 345/138-kV Switch along the existing Odessa EHV to Moss/Wolf 345-kV double-circuit transmission line, with two new 600 MVA (nameplate) 345/138-kV transformers, in a 12-breaker 345-kV breaker-and-a-half bus arrangement and a 10-breaker 138-kV breaker-and-a-half bus arrangement. All 345-kV equipment will be rated at least 2988 MVA, and 138-kV at least 765 MVA
- Tap new Reiter 345-kV Switch into existing Odessa EHV to Moss & Odessa EHV to Wolf 345-kV double-circuit transmission line with, approximately 0.1 miles, new transmission line segment rated to at least 2987 MVA in new ROW
- Tap new Reiter 138-kV Switch into existing Odessa EHV to Moss 138-kV transmission line with, approximately 0.2 miles, new transmission line segment rated to at least 614 MVA in a new ROW
- Tap new Reiter 138-kV Switch into existing Odessa EHV to Wolf 138-kV transmission line with, approximately 0.1 miles, new transmission line segment rated to at least 614 MVA in new ROW
- Upgrade Tesoro 345-kV Switch by adding two new breaker-and-a-half rungs with two new breakers rated to at least 2988 MVA on each of the two new rungs
- Construct two new Reiter to Tesoro 345-kV transmission lines, with conductors rated to at least 2988 MVA, in new (estimated 4.0 miles) ROW, installed on new, common double-circuit towers
- Rebuild Morgan Creek (Cattleman) to Odessa EHV 345-kV double-circuit transmission lines, with conductors rated to at least 2988 MVA, in existing (estimated 88.7 miles) ROW installed on common double-circuit towers

This project will require multiple CCN filings and the expected ISD for this project is summer 2028.

Appendix

Appendix A: Permian Basin Load Interconnection Study Report	ERCOT_Permian_Basin_Load_Interconn
Appendix B: Oncor West Texas 345-kV Infrastructure Rebuild Project RPG Submittal	Oncor West Texas 345 kV Infrastructur
Appendix C: Projects Added to Economics Case	Appenidx_C.pdf

ercot

Date: June 11, 2024
To: Board of Directors
From: Bob Flexon, Reliability and Markets (R&M) Committee Chair
Subject: Oncor West Texas 345-kV Infrastructure Rebuild Regional Planning Group (RPG) Project

Issue for the ERCOT Board of Directors

ERCOT Board of Directors Meeting Date: June 18, 2024
Item No.: 12.2

Issue:
Whether the Board of Directors (Board) of Electric Reliability Council of Texas, Inc. (ERCOT) should accept the recommendation of ERCOT staff to endorse the need for the Tier 1 Oncor West Texas 345-kV Infrastructure Rebuild Regional Planning Group (RPG) Project in order to meet the reliability requirements for the ERCOT System and address thermal overloads and load growth in the in Scurry, Mitchell, Howard, Glasscock, Martin, Midland, and Ector Counties in the West and Far West Weather Zones, which ERCOT staff has independently reviewed and which the Technical Advisory Committee (TAC) has voted unanimously to endorse.

Background/History:
Oncor proposed the West Texas 345-kV Infrastructure Rebuild Project in November 2023, a $1.12 billion, Tier 1 project with the expected in-service date of summer 2028, to meet reliability planning criteria. Protocol Section 3.11.4.7, Processing of Tier 1 Projects, requires ERCOT to independently review submitted projects. ERCOT verified the West Texas 345-kV Infrastructure Rebuild Project are components of the Preferred Project IDs 1, 2, 3 and 25 identified in the December 2021 Permian Basin Load Interconnection Study and addresses the need for a project under North American Electric Reliability Corporation (NERC) and ERCOT Planning Criteria to address thermal overloads on 218-miles of 345-kV transmission lines in Scurry, Mitchell, Howard, Glasscock, Martin, Midland, and Ector Counties in the West and Far West Weather Zones with the following ERCOT System improvements:

- Construct a new Ranger Camp 345/138/69-kV substation, approximately 1.0 miles north of the existing Morgan Creek 345/138-kV Switch, with two new 600 MVA (nameplate) 345/138-kV transformers, a 14-breaker 345-kV breaker-and-a-half bus arrangement, and a 16-breaker, 138-kV breaker-and-a-half arrangement with one new 177 MVA (nameplate) 138/69-kV transformer, and a 2-breaker 69-kV single bus arrangement. All 345-kV equipment will be rated at least 2988 MVA, 138-kV at least 765 MVA and 69-kV at least 239 MVA;
  - Disconnect the following 345-kV lines at Morgan Creek and terminate at new Ranger Camp 345-kV:

ATTACHMENT NO. 6

    - Morgan Creek to Falcon Seaboard adding approximately 1.4 miles of new Right of Way (ROW)
    - Morgan Creek to Tonkawa adding approximately 0.94 miles of new ROW
  - Disconnect the following 138-kV transmission lines at Morgan Creek and terminate at new Ranger Camp 138-kV:
    - Morgan Creek to Eskota
    - Morgan Creek to Barber Lake West
    - Morgan Creek to Barber Lake East
    - Morgan Creek to Sun
    - Morgan Creek to Cosden
  - Disconnect the following 69-kV transmission lines at Morgan Creek and terminate at new Ranger Camp 69-kV:
    - Morgan Creek to Colorado City
    - Morgan Creek to Big Spring
  - Relocate the existing 177 MVA (nameplate) 138/69-kV transformer from Morgan Creek Switch to new Ranger Camp Switch;
- Construct a new breaker-and-a-half rung with two new 345-kV breakers at Tonkawa 345-kV Switch. New breakers will be rated at least 2988 MVA;
- Rebuild Morgan Creek (Ranger Camp) to Tonkawa 345-kV transmission line, replace with two new Morgan Creek (Ranger Camp) to Tonkawa 345-kV lines, with conductors rated to at least 2988 MVA, in existing (estimated 21.3 miles) ROW, installed on new, common double-circuit towers;
- Construct a new Cattleman 345/138-kV Switch, approximately 2.0 miles southwest of existing Morgan Creek 345/138-kV Switch, with two new 600 MVA (nameplate) 345/138-kV transformers, a 15-breaker 345-kV breaker-and-a-half bus arrangement and a 9-breaker 138-kV breaker-and-a-half bus arrangement. All 345-kV equipment will be rated at least 2988 MVA and 138-kV at least 765 MVA;
- Disconnect the following 345-kV transmission lines at Morgan Creek and terminate at new Cattleman 345-kV:
  - Morgan Creek to Champion Creek/LCRA Bitter Creek double circuit transmission lines adding approximately 1.25 miles of new ROW
  - Morgan Creek to LCRA Gasconades adding approximately 2.13 miles of new ROW
  - Morgan Creek to Consavvy
  - Morgan Creek to Longshore
- Disconnect the following 138-kV transmission lines at Morgan Creek and terminate at new Cattleman 138-kV:
  - Morgan Creek to McDonald Road using new ROW
- Construct two new Cattleman to Ranger Camp 345-kV transmission lines, with conductors rated to at least 2988 MVA, in a new (estimated 4.2 miles) ROW, installed on new, common double-circuit towers;
- Rebuild Morgan Creek 138-kV Switch, in existing Morgan Creek 345/138-kV Switchyard from existing 12-breaker double-bus arrangement to a new 10-

breaker 138-kV breaker-and-a-half bus arrangement. All 138-kV equipment will be rated at least 765 MVA;

- Construct two new Morgan Creek to Morgan Creek CT Yard 138-kV transmission lines, with conductors rated to at least 614 MVA in existing (estimated 0.1 miles) ROW;
- Construct two new Morgan Creek to Ranger Camp 138-kV transmission lines, with conductors rated to at least 614 MVA, in existing (estimated 1.2 miles) ROW, installed on new, common double-circuit towers;
- Construct two new Morgan Creek to Cattleman 138-kV transmission lines, with conductors rated to at least 614 MVA, adding new (estimated 2.48 miles) ROW, installed on new, common double-circuit towers;
- Construct a new Prong Moss 345-kV Switch, approximately 29.4 miles southwest of existing Morgan Creek 345/138-kV Switch, and along the existing Morgan Creek to Midland East 345-kV corridor, and approximately 7.0 miles south of the existing Falcon Seaboard generating station in a 12-breaker 345-kV breaker-and-a-half bus arrangement. All equipment will be rated at least 2988 MVA;
  - Tap Prong Moss 345-kV Switch into existing Morgan Creek (Ranger Camp) to Falcon Seaboard 345-kV transmission line with, approximately 0.1 miles, new transmission line segment in new ROW
  - Tap Prong Moss 345-kV Switch into Falcon Seaboard to Midland East 345-kV transmission line with, approximately 0.1 miles, new transmission line segment in new ROW
  - Rebuild Morgan Creek (Ranger Camp) to Prong Moss, replace with two new Morgan Creek (Ranger Camp) to Prong Moss 345-kV transmission lines with conductors rated at least 2988 MVA, in existing (estimated 29.4 miles) ROW installed on new, common double-circuit towers
  - Rebuild Prong Moss to Midland East 345-kV line, replace with two new Prong Moss to Midland East 345-kV transmission lines with conductors rated at least 2988 MVA, in existing estimated 41.2 miles) ROW, installed on new, common double-circuit towers
- Rebuild Midland County Northwest 345-kV Switch bus work and terminal equipment to be rated at least 2988 MVA, add one new 2-breaker 345-kV breaker-and-a-half rung rated to at least 2988 MVA;
- Rebuild Midland East to Midland County Northwest 345-kV transmission line, replace with two new Midland East to Midland County Northwest 345-kV transmission lines, with conductors rated at least 2988 MVA, in 16.3 miles of existing ROW and 1.0 miles of new ROW, installed on new (estimated 17.3 miles) common double-circuit towers;
- Rebuild Longshore 345-kV Switch, and upgrade from existing 6-breaker ring-bus configuration to a 11-breaker 345-kV breaker-and-a-half bus arrangement. All equipment will be rated at least 2988 MVA;

- Tap the rebuilt Longshore 345-kV Switch into Morgan Creek (Cattleman) to Consavvy 345-kV transmission line with approximately 0.1 miles of line in existing ROW
- Upgrade all terminal equipment at 2-breaker Midessa South 345-kV Switch to at least 2988 MVA;
- Upgrade all terminal equipment at 3-breaker, ring bus, Quail East 345-kV Switch to at least 2988 MVA;
- Upgrade terminal equipment on two breaker-and-a-half rungs of Odessa EHV 345-kV Switch to at least 2988 MVA;
- Upgrade all terminal equipment on both single breaker terminals and main bus at existing Odessa EHV 345-kV Switch to at least 2988 MVA;
- Construct a new Reiter 345/138-kV Switch, approximately 3.0 miles south of the existing Odessa EHV 345/138-kV Switch along the existing Odessa EHV to Moss/Wolf 345-kV double-circuit transmission line, with two new 600 MVA (nameplate) 345/138-kV transformers, in a 12-breaker 345-kV breaker-and-a-half bus arrangement and a 10-breaker 138-kV breaker-and-a-half bus arrangement. All 345-kV equipment will be rated at least 2988 MVA, and 138-kV at least 765 MVA;
- Tap new Reiter 345-kV Switch into existing Odessa EHV to Moss & Odessa EHV to Wolf 345-kV double-circuit transmission line with, approximately 0.1 miles, new transmission line segment rated to at least 2987 MVA in new ROW;
- Tap new Reiter 138-kV Switch into existing Odessa EHV to Moss 138-kV transmission line with, approximately 0.2 miles, new transmission line segment rated to at least 614 MVA in a new ROW;
- Tap new Reiter 138-kV Switch into existing Odessa EHV to Wolf 138-kV transmission line with, approximately 0.1 miles, new transmission line segment rated to at least 614 MVA in new ROW;
- Upgrade Tesoro 345-kV Switch by adding two new breaker-and-a-half rungs with two new breakers rated to at least 2988 MVA on each of the two new rungs
- Construct two new Reiter to Tesoro 345-kV transmission lines, with conductors rated to at least 2988 MVA, in new (estimated 4.0 miles) ROW, installed on new, common double-circuit towers; and
- Rebuild Morgan Creek (Cattleman) to Odessa EHV 345-kV double-circuit transmission lines, with conductors rated to at least 2988 MVA, in existing (estimated 88.7 miles) ROW installed on common double-circuit towers.

For construction to meet the summer 2028 in-service date, the West Texas 345-kV Infrastructure Rebuild Project requires Public Utility Commission of Texas (PUCT, Commission) approval of a Certificate of Convenience and Necessity. Oncor will work with ERCOT as early as practical to develop outage plans needed for construction and implement Constraint Management Plans (CMP) based on summer 2028 operational conditions.

ERCOT verified the West Texas 345-kV Infrastructure Rebuild Project are components of the Preferred Project IDs 1, 2, 3 and 25 identified in the December 2021 Permian Basin Load Interconnection Study and addresses the need in Scurry, Mitchell, Howard, Glasscock, Martin, Midland, and Ector Counties in the West and Far West Weather Zones. ERCOT's independent review verified the reliability need for the West Texas 345-kV Infrastructure Rebuild Project to satisfy ERCOT Planning Guide Section 4.1.1.2(1)(a), 4.1.1.2(1)(c) and 4.1.1.2(1)(d), Reliability Performance Criteria. Contingencies are the loss of a common tower, loss of a single generating unit followed by a single transmission element or common tower outage and loss of a single 345/138-kV transformer followed by a single transmission element or common tower outage, respectively.

RPG considered project overviews during meetings in January 2024 and May 2024. Between January 2024 and May 2024, ERCOT staff presented scope and status updates at RPG meetings in January, February, March, April, and May. Pursuant to paragraph (2) of Protocol Section 3.11.4.9, Regional Planning Group Acceptance and ERCOT Endorsement, ERCOT presented the Tier 1 project to TAC for review and comment, and on May 22, 2024, TAC unanimously endorsed the project as recommended by ERCOT. Pursuant to paragraph (1)(a) of Protocol Section 3.11.4.3, Categorization of Proposed Transmission Projects, projects with an estimated capital cost of $100 million or greater are Tier 1 projects, for which Protocol Section 3.11.4.7(2) requires endorsement by the Board. Pursuant to Section 3.11.4.9, ERCOT's endorsement of a Tier 1 project is obtained upon affirmative vote of the Board. Section IV(B)(2)(a) of the R&M Committee Charter requires the R&M Committee to review and make a recommendation to the Board regarding any Tier 1 project.

ERCOT's assessment of the Sub-Synchronous Resonance (SSR) of existing facilities in the Scurry, Mitchell, Howard, Glasscock, Martin, Midland, and Ector Counties in the West and Far West Weather Zones, conducted pursuant to Protocol Section 3.22.1.3, Transmission Project Assessment, yielded no adverse SSR impacts to the existing and planned generation resources at the time of the study. Results of the congestion analysis ERCOT conducted pursuant to Planning Guide Section 3.1.3, Project Evaluation, indicate no additional congestion in the area with the addition of the West Texas 345-kV Infrastructure Rebuild Project.

The project completion date may change depending on material acquisition, outage coordination, and construction. The estimated cost reflects the fact that the vast majority of the work necessary to complete the various project components will need to be performed on energized transmission elements and/or will require construction of temporary by-pass transmission facilities. Transmission Service Provider (TSP) cooperation with ERCOT could be necessary to develop and implement CMPs based on summer 2028 operational conditions.

The report describing the ERCOT Independent Review of the Oncor West Texas 345-kV Infrastructure Rebuild Project, including ERCOT staff's recommendation, is attached as ***Attachment A***.

Key Factors Influencing Issue:

1. ERCOT System improvements are needed to meet reliability planning criteria for the Scurry, Mitchell, Howard, Glasscock, Martin, Midland, and Ector Counties in the West and Far West Weather Zones.
2. ERCOT verified the Oncor West Texas 345-kV Infrastructure Rebuild Project are components of the Preferred Project IDs 1, 2, 3 and 25 identified in the December 2021 Permian Basin Load Interconnection Study and addresses the thermal overloads.
3. Protocol Section 3.11.4.7 requires Board endorsement of a Tier 1 project, which is a project with an estimated capital cost of $100 million or greater pursuant to Protocol Section 3.11.4.3(1)(a).
4. TAC voted unanimously to endorse the Tier 1 Oncor West Texas 345-kV Infrastructure Rebuild Regional Planning Group (RPG) Project, as recommended by ERCOT, on May 22, 2024.

Conclusion/Recommendation:

ERCOT staff recommends, and the R&M Committee is expected to recommend, that the Board endorse the need for the Tier 1 Oncor West Texas 345-kV Infrastructure Rebuild RPG Project, which ERCOT staff has independently reviewed and which TAC has voted unanimously to endorse based on NERC and ERCOT reliability planning criteria.

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ELECTRIC RELIABILITY COUNCIL OF TEXAS, INC.
BOARD OF DIRECTORS RESOLUTION

WHEREAS, pursuant to Section 3.11.4.3(1)(a) of the Electric Reliability Council of Texas, Inc. (ERCOT) Protocols, projects with an estimated capital cost of $100 million or greater are Tier 1 projects, for which Section 3.11.4.7 requires endorsement by the ERCOT Board of Directors (Board); and

WHEREAS, after due consideration of the alternatives, the Board deems it desirable and in the best interest of ERCOT to accept ERCOT staff's and the and Reliability and Markets (R&M) Committee's recommendations to endorse the need for the Tier 1 Oncor West Texas 345-kV Infrastructure Rebuild Regional Planning Group Project, which ERCOT staff has independently reviewed and which the Technical Advisory Committee (TAC) has voted to endorse, based on North American Electric Reliability Corporation (NERC) and ERCOT reliability planning criteria;

THEREFORE, BE IT RESOLVED, that the Board hereby endorses the need for the Tier 1 Oncor West Texas 345-kV Infrastructure Rebuild Regional Planning Group Project, which ERCOT staff has independently reviewed and which TAC has voted to endorse, based on NERC and ERCOT reliability planning criteria, as recommended by ERCOT staff and the R&M Committee.

CORPORATE SECRETARY'S CERTIFICATE

I, Jonathan M. Levine, Assistant Corporate Secretary of ERCOT, do hereby certify that, at its June 18, 2024 meeting, the Board passed a motion approving the above Resolution by unanimous voice vote with no abstentions.

IN WITNESS WHEREOF, I have hereunto set my hand this 2nd day of July, 2024.

Jonathan M. Levine
Assistant Corporate Secretary

ERCOT Independent Review of the Oncor West Texas 345-kV Infrastructure Rebuild Project

Document Revisions

Date	Version	Description	Author(s)
May 16, 2024	1.0	Final	Ben Richardson
		Reviewed by	Robert Golen, Prabhu Gnanam

Executive Summary

Oncor submitted the West Texas 345-kV Infrastructure Rebuild Project to the Regional Planning Group (RPG) on November 3, 2023. Oncor proposed this project to address load growth, load integration requests, the need to rebuild aging facilities and NERC TPL-001-5 reliability criteria violations. The expected in-service date (ISD) of this project is Summer 2028. This project is located in the West and Far West Weather Zones in Scurry, Mitchell, Howard, Glasscock, Martin, Midland, and Ector Counties.

ERCOT completed the Permian Basin Load Interconnection Study (PBLI)[1] in December 2021 to identify transmission upgrades, especially long lead time transmission upgrades, necessary to reliably serve the existing and projected oil and gas loads in the Permian Basin area. The Permian Basin area includes the Delaware Basin, Midland Basin, and Central Basin Platforms which covers most of the counties in the Far West Weather Zone plus five adjacent counties in the West Weather Zone. The geographic and reliability assessment scope of the West Texas 345-kV Infrastructure Rebuild Project are a subset of the Permian Basin Load Interconnection Study. The Permian Basin Load Interconnection Study stated that if the preferred upgrades identified in that study are submitted to Regional Planning Group (RPG) for review, ERCOT may use that study report as part of ERCOT Independent Review. The West Texas 345-kV Infrastructure Rebuild Project includes components of 'Preferred' Project IDs 1, 2, 3 and 25 identified by the Permian Basin Load Interconnection Study. More details of the Permian Basin Load Interconnection Study can be found in Appendix A.

Additionally, ERCOT completed an updated study which confirmed the need for this project and that the Oncor West Texas 345-kV Infrastructure Rebuild Project addresses the need.

Accordingly, based on this independent review, ERCOT recommends the following project as submitted by Oncor:

- Construct a new Ranger Camp 345/138/69-kV substation, approximately 1.0 miles north of the existing Morgan Creek 345/138-kV Switch, with two new 600 MVA (nameplate) 345/138-kV transformers, a 14-breaker 345-kV breaker-and-a-half bus arrangement, and a 16-breaker, 138-kV breaker-and-a-half arrangement with one new 177 MVA (nameplate) 138/69-kV transformer, and a 2-breaker 69-kV single bus arrangement. All 345-kV equipment will be rated at least 2988 MVA, 138-kV at least 765 MVA and 69-kV at least 239 MVA.
  - Disconnect the following 345-kV lines at Morgan Creek and terminate at new Ranger Camp 345-kV.
    - Morgan Creek to Falcon Seaboard adding approximately 1.4 miles of new Right of Way (ROW)
    - Morgan Creek to Tonkawa adding approximately 0.94 miles of new ROW
  - Disconnect the following 138-kV transmission lines at Morgan Creek and terminate at new Ranger Camp 138-kV:
    - Morgan Creek to Eskota
    - Morgan Creek to Barber Lake West
    - Morgan Creek to Barber Lake East
    - Morgan Creek to Sun
    - Morgan Creek to Cosden

[1] https://www.ercot.com/gridinfo/planning

- Disconnect the following 69-kV transmission lines at Morgan Creek and terminate at new Ranger Camp 69-kV:
  - Morgan Creek to Colorado City
  - Morgan Creek to Big Spring
- Relocate the existing 177 MVA (nameplate) 138/69-kV transformer from Morgan Creek Switch to new Ranger Camp Switch

- Construct a new breaker-and-a-half rung with two new 345-kV breakers at Tonkawa 345-kV Switch. New breakers will be rated at least 2988 MVA
- Rebuild Morgan Creek (Ranger Camp) to Tonkawa 345-kV transmission line, replace with two new Morgan Creek (Ranger Camp) to Tonkawa 345-kV lines, with conductors rated to at least 2988 MVA, in existing (estimated 21.3 miles) ROW, installed on new, common double-circuit towers
- Construct a new Cattleman 345/138-kV Switch, approximately 2 0 miles southwest of existing Morgan Creek 345/138-kV Switch, with two new 600 MVA (nameplate) 345/138-kV transformers, a 15-breaker 345-kV breaker-and-a-half bus arrangement and a 9-breaker 138-kV breaker-and-a-half bus arrangement. All 345-kV equipment will be rated at least 2988 MVA and 138-kV at least 765 MVA
- Disconnect the following 345-kV transmission lines at Morgan Creek and terminate at new Cattleman 345-kV:
  - Morgan Creek to Champion Creek/LCRA Bitter Creek double circuit transmission lines adding approximately 1.25 miles of new ROW
  - Morgan Creek to LCRA Gasconades adding approximately 2.13 miles of new ROW
  - Morgan Creek to Consavvy
  - Morgan Creek to Longshore
- Disconnect the following 138-kV transmission lines at Morgan Creek and terminate at new Cattleman 138-kV:
  - Morgan Creek to McDonald Road using new ROW
- Construct two new Cattleman to Ranger Camp 345-kV transmission lines, with conductors rated to at least 2988 MVA, in a new (estimated 4.2 miles) ROW, installed on new, common double-circuit towers
- Rebuild Morgan Creek 138-kV Switch, in existing Morgan Creek 345/138-kV Switchyard from existing 12-breaker double-bus arrangement to a new 10-breaker 138-kV breaker-and-a-half bus arrangement. All 138-kV equipment will be rated at least 765 MVA
- Construct two new Morgan Creek to Morgan Creek CT Yard 138-kV transmission lines, with conductors rated to at least 614 MVA in existing (estimated 0.1 miles) ROW
- Construct two new Morgan Creek to Ranger Camp 138-kV transmission lines, with conductors rated to at least 614 MVA, in existing (estimated 1.2 miles) ROW, installed on new, common double-circuit towers
- Construct two new Morgan Creek to Cattleman 138-kV transmission lines, with conductors rated to at least 614 MVA, adding new (estimated 2.48 miles) ROW, installed on new, common double-circuit towers

- Construct a new Prong Moss 345-kV Switch, approximately 29.4 miles southwest of existing Morgan Creek 345/138-kV Switch, and along the existing Morgan Creek to Midland East 345-kV corridor, and approximately 7.0 miles south of the existing Falcon Seaboard generating station in a 12-breaker 345-kV breaker-and-a-half bus arrangement. All equipment will be rated at least 2988 MVA
  - Tap Prong Moss 345-kV Switch into existing Morgan Creek (Ranger Camp) to Falcon Seaboard 345-kV transmission line with, approximately 0.1 miles, new transmission line segment in new ROW
  - Tap Prong Moss 345-kV Switch into Falcon Seaboard to Midland East 345-kV transmission line with, approximately 0.1 miles, new transmission line segment in new ROW
  - Rebuild Morgan Creek (Ranger Camp) to Prong Moss, replace with two new Morgan Creek (Ranger Camp) to Prong Moss 345-kV transmission lines with conductors rated at least 2988 MVA, in existing (estimated 29.4 miles) ROW installed on new, common double-circuit towers
  - Rebuild Prong Moss to Midland East 345-kV line, replace with two new Prong Moss to Midland East 345-kV transmission lines with conductors rated at least 2988 MVA, in existing estimated 41.2 miles) ROW, installed on new, common double-circuit towers
- Rebuild Midland County Northwest 345-kV Switch bus work and terminal equipment to be rated at least 2988 MVA, add one new 2-breaker 345-kV breaker-and-a-half rung rated to at least 2988 MVA
- Rebuild Midland East to Midland County Northwest 345-kV transmission line, replace with two new Midland East to Midland County Northwest 345-kV transmission lines, with conductors rated at least 2988 MVA, in 16.3 miles of existing ROW and 1.0 miles of new ROW, installed on new (estimated 17.3 miles) common double-circuit towers
- Rebuild Longshore 345-kV Switch, and upgrade from existing 6-breaker ring-bus configuration to a 11-breaker 345-kV breaker-and-a-half bus arrangement. All equipment will be rated at least 2988 MVA
  - Tap the rebuilt Longshore 345-kV Switch into Morgan Creek (Cattleman) to Consavvy 345-kV transmission line with approximately 0.1 miles of line in existing ROW
- Upgrade all terminal equipment at 2-breaker Midessa South 345-kV Switch to at least 2988 MVA
- Upgrade all terminal equipment at 3-breaker, ring bus, Quail East 345-kV Switch to at least 2988 MVA
- Upgrade terminal equipment on two breaker-and-a-half rungs of Odessa EHV 345-kV Switch to at least 2988 MVA
- Upgrade all terminal equipment on both single breaker terminals and main bus at existing Odessa EHV 345-kV Switch to at least 2988 MVA
- Construct a new Reiter 345/138-kV Switch, approximately 3.0 miles south of the existing Odessa EHV 345/138-kV Switch along the existing Odessa EHV to Moss/Wolf 345-kV double-circuit transmission line, with two new 600 MVA (nameplate) 345/138-kV transformers, in a 12-breaker 345-kV breaker-and-a-half bus arrangement and a 10-breaker 138-kV breaker-and-a-half bus arrangement. All 345-kV equipment will be rated at least 2988 MVA, and 138-kV at least 765 MVA
- Tap new Reiter 345-kV Switch into existing Odessa EHV to Moss & Odessa EHV to Wolf 345-kV double-circuit transmission line with, approximately 0.1 miles, new transmission line segment rated to at least 2987 MVA in new ROW

- Tap new Reiter 138-kV Switch into existing Odessa EHV to Moss 138-kV transmission line with, approximately 0.2 miles, new transmission line segment rated to at least 614 MVA in a new ROW
- Tap new Reiter 138-kV Switch into existing Odessa EHV to Wolf 138-kV transmission line with, approximately 0.1 miles, new transmission line segment rated to at least 614 MVA in new ROW
- Upgrade Tesoro 345-kV Switch by adding two new breaker-and-a-half rungs with two new breakers rated to at least 2988 MVA on each of the two new rungs
- Construct two new Reiter to Tesoro 345-kV transmission lines, with conductors rated to at least 2988 MVA, in new (estimated 4.0 miles) ROW, installed on new, common double-circuit towers
- Rebuild Morgan Creek (Cattleman) to Odessa EHV 345-kV double-circuit transmission lines, with conductors rated to at least 2988 MVA, in existing (estimated 88.7 miles) ROW installed on common double-circuit towers

The recommended project is a Tier 1 project estimated to cost $1.12 Billion. The estimated cost reflects the fact that the vast majority of the work necessary to complete the various project components will need to be performed on energized transmission elements and/or will require construction of temporary by-pass transmission facilities. The project is recommended for construction to meet a summer 2028 ISD. However, Oncor has advised that the projected in-service date may change based on requirements for various approvals, ROW acquisition and construction progress.

Multiple Certificate of Convenience and Necessity (CCN) filings will be required for this transmission project. Oncor will work with ERCOT as early as practical to develop outage plans needed for construction and implement Constraint Management Plans (CMP) based on summer 2028 operational conditions.

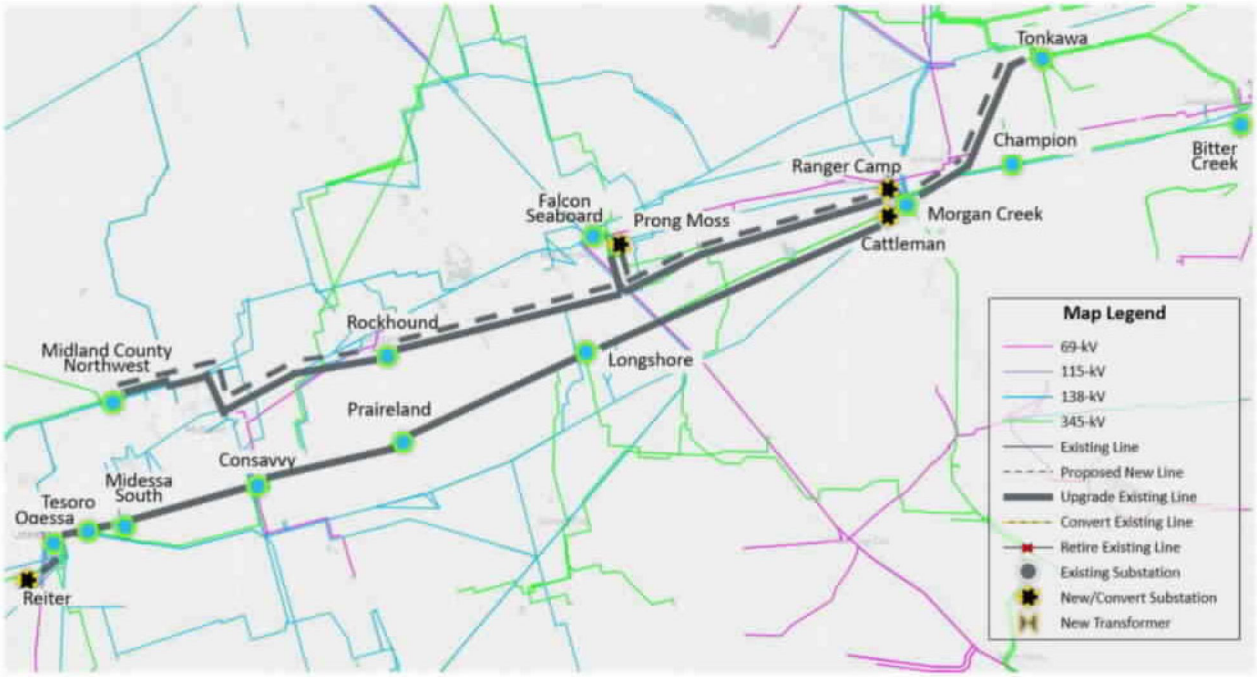

Figure E.1: Map of Recommended Upgrades

Table of Contents

1 Introduction

As part of the continuing efforts to address challenges in the Permian Basin, ERCOT completed the Permian Basin Load Interconnection Study (PBLI)[2] in December 2021 through extensive review and input by TSPs and stakeholders.

The PBLI identified the reliability challenges and a set of transmission upgrades, especially long lead time transmission upgrades, to connect and reliably serve the existing and projected oil and gas loads in the Permian Basin area utilizing the demand forecast from the IHS Markit study[3]. The IHS Markit study is a customer demand study performed by IHS Markit, which provides an in-depth analysis of the oil and gas industry and provides an electricity demand forecast in the Permian area through 2030. According to the IHS Markit study report, the demand forecast was based on geology and resource assessment, industry intelligence, oil and gas expertise, commercial considerations, translations of historical and forecasted oil and gas activities into electric load demands in every single square mile in the Permian Basin area.

As shown in Appendix A, the Permian Basin Load Interconnection Study identified both preferred and placeholder transmission upgrades and stated that "If the preferred upgrades identified in [PBLI] are submitted to Regional Planning Group (RPG) for review, ERCOT may use [PBLI] as part of the ERCOT Independent Review" Some components of PBLI "Preferred upgrades" have already been submitted and approved by ERCOT and the RPG. The Oncor West Texas 345-kV Infrastructure Rebuild Project presents and re-confirms justification for PBLI 'Preferred' Projects IDs 1, 2, 3 and 25.

Oncor submitted the West Texas 345-kV Infrastructure Rebuild Project for RPG review to address load growth, load integration requests and the need to rebuild aging facilities. This submittal is provided in Appendix B.

This RPG project has an estimated cost of $1.12 Billion and is classified as a Tier 1 project pursuant to Protocol Section 3.11.4.3. The estimated cost reflects the fact that the vast majority of the work necessary to complete the various project components associated with this project will need to be performed on energized transmission elements and/or will require construction of temporary by-pass transmission facilities. The project is recommended for construction to meet a summer 2028 in-service date (ISD). However, Oncor has advised that the projected ISD may change based on requirements for various approvals, right-of-way (ROW) acquisition and construction progress.

Multiple Certificate of Convenience and Necessity (CCN) filings will be required for this transmission project. Oncor has committed to work with ERCOT as necessary to develop and implement Constraint Management Plans based on summer 2028 operational conditions.

Since the primary components of the West Texas 345-kV Infrastructure project have already been analyzed and identified as preferred upgrades in the Permian Basin Load Interconnection Study, ERCOT conducted the independent review of this RPG project by updating study results and assumptions to check if any recent system changes would potentially alter or modify the projects recommended in these studies. The following sections describe the details of the updated study assumptions, methodology, and the results of the ERCOT Independent Review.

[2] https://www.ercot.com/gridinfo/planning

[3] ERCOT Letter to Commissioners - Follow-up Status Update on Permian

2 Study Assumptions and Methodology

ERCOT reviewed the RPG project submitted by Oncor and confirmed the submitted project aligns with the Permian Basin Load Interconnection 'Preferred' Projects IDs 1, 2, 3 and 25. As such, for this independent review, ERCOT utilized the study results from the 2021 Permian Basin Load Interconnection Study. Furthermore, ERCOT reviewed the 2023 RTP final reliability case to confirm the project need.

2.1 Study Assumptions for Reliability Analysis

ERCOT conducted the Permian Basin Load Interconnection Study in 2021 based on criteria contained in NERC reliability standard TPL-001-4, ERCOT Nodal Protocol and Planning Guide. The Permian Basin Load Interconnection also examined a number of transmission upgrade options to address the aggregate reliability needs within the Permian Basin. For this reason, no additional options were identified and examined for this independent review.

The following sections describe the study assumptions of this review using a 2023 RTP final case.

2.1.1 Steady-State Study Base Case

A Final 2023 RTP case, published on the Market Information System (MIS) on December 22, 2023, was used as reference case. The 2028 Summer season was selected for the study. The steady-state study base case for the West and Far West Weather Zones was constructed by updating transmission, generation, and loads and using the following 2028 Summer Peak Load Flow case as reference:

- 2023RTP_2028_SUM_WFW_12222023[1]

2.1.2 Transmission Topology

Transmission projects listed in Table 2.1, identified in the 2023 RTP as placeholders for West Texas 345-kV Infrastructure Rebuild Project, were removed to develop the study base case.

[1] 2023RTP_Final_Reliability

Table 2.1 Transmission Projects Removed from Study Base Case

RTP Project ID	Project Name	TSP	County
2021-FW19	Morgan Creek SES - Longshore Switch 345-kV Line Upgrade	ONCOR	Mitchell, Howard
2022-WFW2	Midessa South SW - Consavvy - Longshore Switch - Morgan Creek SES 345-kV Line Upgrades	ONCOR	Midland, Howard, Mitchell
2023-WFW2	Morgan Creek SES - Falcon Seaboard - Midland East 345-kV Line Upgrade	ONCOR	Scurry
2023-W12	Morgan Creek SES - Tonkawa 345-kV Line Rebuild	ONCOR	Mitchell

Transmission projects within the study area with ISD by June 2028 were added to the study base case. The ERCOT Transmission Project Information and Tracking (TPIT)[5] report from October 2023 was used as reference. The added TPIT projects are listed in Table 2.2 below.

Table 2.2 Transmission Projects Added to Study Base Case

TPIT Number	Project Name	County	Projected In-service Date	Planning Charter Tier
77146	Reconductor WNK-AAT-MDT-FSH	Winkler	Nov-23	Tier 4
70964	WETT 345 kV Volta witch	Howard	Jan-24	Tier 3
71968	Midkiff - Pemkiff 138 kV Line	Upton	May-24	Tier 4
73434	Shaw 138 kV POD	Reagan	May-24	Tier 4
76212	Model Coachwhip Sub	Ward	May-24	Tier 4
73408	Odysseus: Build new 345 kV Station	Coke	Oct-24	Tier 4
71960	Upgrade Grady - Expanse 138 kV Line	Martin	Dec-24	Tier 4
71989	Big Spring West - Stanton East 138 kV Line	Martin	Dec-24	Tier 4
73043	Peck – Driver 138-kV Line	Glasscock	Dec-24	Tier 2
76686	Add Hog Mountain 138 kV POD	Glasscock	Dec-24	Tier 4
76232	Reconductor Mivida-Coachwhip-Fishhook 2045 ACCC	Ward	May-26	Tier 4
76291	Upgraded Cedarville–BoneSpringsTap–Fishhook	Ward	May-26	Tier 4
76293	Upgraded Cedvale-MiDiva138KV	Ward	May-26	Tier 4
77320	Add CapBANK in COYANOSA	Ward	Jun-26	Tier 4
77803 77807	TNMP Silverleaf and Cowpen 345/138-kV Stations	Reeves, Ward	Jun-27	Tier 1
73368	Grey Well Draw - Buffalo 138 kV Second Circuit	Martin, Midland	Dec-24	Tier 3
78374	Rockhound 345/138-kV Switching Station	Martin, Midland	Dec-24	Tier 3

2.1.3 Generation

Based on the December 2023 Generator Interconnection Status (GIS) report posted on the ERCOT website in January 2024[6], generator additions planned to connect to the study area, before June 2028,

[5] https://www.ercot.com/gridinfo/planning
[6] https://www.ercot.com/mp/data-products/data-product-details?id=PG7-200-ER

and meeting Planning Guide Section 6.9(1) for inclusion in the planning models, that were not in the base case, were added to the study base case. These generator additions are listed in Table 2.3. All the new generation units added to the case were dispatched consistent with the 2023 RTP methodology.

Table 2.3 Generation Units Added to Study Case

GINR Number	Project Name	County	Capacity (MW)	Fuel	Projected Commercial Operation Date
23INR0387	Pioneer DJ Wind	Midland	140.3	WIN	05/03/2024
23INR0470	BoCo BESS	Borden	155.5	OTH	06/22/2024
24INR0273	Al Pastor BESS	Dawson	100.8	OTH	09/02/2024

The status of each unit that was projected to be either indefinitely mothballed or retired at the time of the study were reviewed. The units listed in Table 2.4 were opened (turned off) in the study base case to reflect their mothballed/retired status.

Table 2.4: List of Generation Opened to Reflect Mothballed/Retired/Forced Outage Status

Bus No	Unit Name	Capacity (MW)	Weather Zone
110941	SL_SL_G1	65.0	Coast
110942	SL_SL_G2	65.0	Coast
110943	SL_SL_G3	30.0	Coast
110944	SL_SL_G4	30.0	Coast
130121	SGMTN_SIGNALM2	6.6	Far West

2.1.4 Loads

The load level of the Far West Weather Zone remains the same as in the 2023 RTP case. The loads outside of the study Weather Zone, excluding the West and Far West Weather Zones, were adjusted as necessary for power balance consistent with the 2023 RTP assumptions.

2.2 Study Assumptions for Congestion Analysis

2.2.1 Base Case

The 2028 economic final case from the 2023 RTP was used to develop a study base case for congestion analysis.

2.2.2 Transmission Topology

All RPG-approved Tier 1, 2, and 3 transmission projects in the study area as well as the Tier 4 projects in the study area expected to be in-service by 2028 were added to the study base case. The ERCOT TPIT report posted on October 2023, was used as reference. The added TPIT projects are listed in Appendix C.

2.2.3 Generation

Planned generators in the ERCOT system that met Planning Guide Section 6.9(1) conditions for inclusion in the base cases (based on the January 2024 GIS report) were added to the study base case. The added generators are listed in Appendix C.

2.2.4 Loads

Loads were maintained consistent with the 2023 RTP economic model for the year 2028.

2.3 Methodology

This section lists the Contingencies and Criteria used for project review along with the tools used to perform each of the various analyses.

2.3.1 Contingencies and Criteria

The reliability assessments were performed based on NERC Reliability Standard TPL-001-5.1, ERCOT Protocols, and ERCOT Planning Criteria.

Contingencies were updated based on the changes made to the topology as described in Section 2.1 of this document. The following steady-state contingencies were simulated for the study region:

- P0 (System Intact)
- P1, P2-1, P7 (N-1 conditions);
- P2-2, P2-3, P4, and P5 (Extra High Voltage (EHV) only);
- P3-1: G-1 + N-1 (G-1: Odessa Ector CC Train, Falcon Seaboard CC Train); and
- P6-2: X-1 + N-1 (X-1: 345/138-kV Consavvy 345/138-kV transformer, Einstein 345/138-kV transformers).

All 69-kV and above buses, transmission lines, and transformers in the study region were monitored (excluding generator step-up transformers) and the following thermal and voltage limits were enforced:

- Thermal
  - Rate A (normal rating) for pre-contingency conditions; and
  - Rate B (emergency rating) for post-contingency conditions.
- Voltages
  - Voltages exceeding pre-contingency and post-contingency limits; and
  - Voltage deviations exceeding 8% on non-radial load buses.

2.3.2 Study Tool

ERCOT utilized the following software tools to perform this independent review:

- PowerWorld Simulator version 23 was used for security constrained optimal power flow (SCOPF) and steady state contingency analysis
- UPLAN version 12.3.0.29978 was used to perform the congestion analysis

3 Project Need

ERCOT conducted the review of the Permian Basin Load Interconnection Study, and the 2023 RTP summer peak final reliability case based on the study assumptions and methodologies described in Section 2.

3.1 Review of the 2023 Regional Transmission Plan (RTP) Case

ERCOT evaluated the 2023 RTP 2028 Summer Peak case based on the study assumptions and methodologies described in Section 2. The study results showed thermal overloads under NERC Category P1, P2-1, P3, P6-2 and P7 contingency conditions that confirmed the reliability need and matched results from the PBLI as well as the Oncor submittal.

West Texas 345-kV Infrastructure Rebuild Project upgrade will address these thermal overloads under the N-1, G-1+N-1, X-1+N-1 contingency conditions that resulted in thermal overloads as shown in Table 3.1.

Table 3.1 Thermal Overloads in the 2023 RTP Case

Contingency Category	Thermal Overloads Base Case	Thermal Overloads West Texas 345-kV Infrastructure Rebuild Project Added
N-0 (P0)	None	None
N-1 (P1, P2-1, P7)	58 miles of 345-kV lines	None
G-1+N-1 (P3)	197 miles of 345-kV lines	None
X-1+N-1 (P6-2)	57 miles of 345-kV lines	None

3.2 Review of Permian Basin Load Interconnection Study Results

The Permian Basin Load Interconnection Study identified a set of transmission upgrades, especially long lead time local transmission upgrades, to connect and reliably serve the existing and projected oil and gas loads in the Permian Basin area utilizing the demand forecast from the IHS Markit study, which provides an in-depth analysis of the oil and gas industry and provides an electricity demand forecast in the Permian Basin area through 2030.

The results of the Permian Basin Load Interconnection Study reconfirmed the need for the West Texas 345-kV Infrastructure Rebuild Project upgrade to maintain grid reliability under N-1, G-1+N-1, X-1+N-1 contingency conditions that match those identified by the ERCOT independent review referenced in Section 3.1 of this report as well as those identified in the Oncor submittal.

More details of the Permian Basin Load Interconnection Study can be found in Appendix A while the Oncor submittal can be found in Appendix B.

4 Recommended Project

Based on this independent review and the Permian Basin Load Interconnection Study, ERCOT recommends the following project (West Texas 345-kV Infrastructure Rebuild Project):

- Construct a new Ranger Camp 345/138/69-kV substation, approximately 1.0 miles north of the existing Morgan Creek 345/138-kV Switch, with two new 600 MVA (nameplate) 345/138-kV transformers, a 14-breaker 345-kV breaker-and-a-half bus arrangement, and a 16-breaker, 138-kV breaker-and-a-half arrangement with one new 177 MVA (nameplate) 138/69-kV transformer, and a 2-breaker 69-kV single bus arrangement. All 345-kV equipment will be rated at least 2988 MVA, 138-kV at least 765 MVA and 69-kV at least 239 MVA.
  - Disconnect the following 345-kV lines at Morgan Creek and terminate at new Ranger Camp 345-kV:
    - Morgan Creek to Falcon Seaboard adding approximately 1.4 miles of new Right of Way (ROW)
    - Morgan Creek to Tonkawa adding approximately 0.94 miles of new ROW
  - Disconnect the following 138-kV transmission lines at Morgan Creek and terminate at new Ranger Camp 138-kV:
    - Morgan Creek to Eskota
    - Morgan Creek to Barber Lake West
    - Morgan Creek to Barber Lake East
    - Morgan Creek to Sun
    - Morgan Creek to Cosden
  - Disconnect the following 69-kV transmission lines at Morgan Creek and terminate at new Ranger Camp 69-kV:
    - Morgan Creek to Colorado City
    - Morgan Creek to Big Spring
  - Relocate the existing 177 MVA (nameplate) 138/69-kV transformer from Morgan Creek Switch to new Ranger Camp Switch
- Construct a new breaker-and-a-half rung with two new 345-kV breakers at Tonkawa 345-kV Switch. New breakers will be rated at least 2988 MVA
- Rebuild Morgan Creek (Ranger Camp) to Tonkawa 345-kV transmission line, replace with two new Morgan Creek (Ranger Camp) to Tonkawa 345-kV lines, with conductors rated to at least 2988 MVA, in existing (estimated 21.3 miles) ROW, installed on new, common double-circuit towers
- Construct a new Cattleman 345/138-kV Switch, approximately 2.0 miles southwest of existing Morgan Creek 345/138-kV Switch, with two new 600 MVA (nameplate) 345/138-kV transformers, a 15-breaker 345-kV breaker-and-a-half bus arrangement and a 9-breaker 138-kV breaker-and-a-half bus arrangement. All 345-kV equipment will be rated at least 2988 MVA and 138-kV at least 765 MVA
- Disconnect the following 345-kV transmission lines at Morgan Creek and terminate at new Cattleman 345-kV:

- Morgan Creek to Champion Creek/LCRA Bitter Creek double circuit transmission lines adding approximately 1.25 miles of new ROW
- Morgan Creek to LCRA Gasconades adding approximately 2.13 miles of new ROW
- Morgan Creek to Consavvy
- Morgan Creek to Longshore

- Disconnect the following 138-kV transmission lines at Morgan Creek and terminate at new Cattleman 138-kV:
  - Morgan Creek to McDonald Road using new ROW
- Construct two new Cattleman to Ranger Camp 345-kV transmission lines, with conductors rated to at least 2988 MVA, in a new (estimated 4.2 miles) ROW, installed on new, common double-circuit towers
- Rebuild Morgan Creek 138-kV Switch, in existing Morgan Creek 345/138-kV Switchyard from existing 12-breaker double-bus arrangement to a new 10-breaker 138-kV breaker-and-a-half bus arrangement. All 138-kV equipment will be rated at least 765 MVA
- Construct two new Morgan Creek to Morgan Creek CT Yard 138-kV transmission lines, with conductors rated to at least 614 MVA in existing (estimated 0.1 miles) ROW
- Construct two new Morgan Creek to Ranger Camp 138-kV transmission lines, with conductors rated to at least 614 MVA, in existing (estimated 1.2 miles) ROW, installed on new, common double-circuit towers
- Construct two new Morgan Creek to Cattleman 138-kV transmission lines, with conductors rated to at least 614 MVA, adding new (estimated 2.48 miles) ROW, installed on new, common double-circuit towers
- Construct a new Prong Moss 345-kV Switch, approximately 29.4 miles southwest of existing Morgan Creek 345/138-kV Switch, and along the existing Morgan Creek to Midland East 345-kV corridor, and approximately 7.0 miles south of the existing Falcon Seaboard generating station in a 12-breaker 345-kV breaker-and-a-half bus arrangement. All equipment will be rated at least 2988 MVA
  - Tap Prong Moss 345-kV Switch into existing Morgan Creek (Ranger Camp) to Falcon Seaboard 345-kV transmission line with, approximately 0.1 miles, new transmission line segment in new ROW
  - Tap Prong Moss 345-kV Switch into Falcon Seaboard to Midland East 345-kV transmission line with, approximately 0.1 miles, new transmission line segment in new ROW
  - Rebuild Morgan Creek (Ranger Camp) to Prong Moss, replace with two new Morgan Creek (Ranger Camp) to Prong Moss 345-kV transmission lines with conductors rated at least 2988 MVA, in existing (estimated 29.4 miles) ROW installed on new, common double-circuit towers
  - Rebuild Prong Moss to Midland East 345-kV line, replace with two new Prong Moss to Midland East 345-kV transmission lines with conductors rated at least 2988 MVA, in existing estimated 41.2 miles) ROW, installed on new, common double-circuit towers
- Rebuild Midland County Northwest 345-kV Switch bus work and terminal equipment to be rated at least 2988 MVA, add one new 2-breaker 345-kV breaker-and-a-half rung rated to at least 2988 MVA
- Rebuild Midland East to Midland County Northwest 345-kV transmission line, replace with two new Midland East to Midland County Northwest 345-kV transmission lines, with conductors rated at

least 2988 MVA, in 16.3 miles of existing ROW and 1.0 miles of new ROW, installed on new (estimated 17.3 miles) common double-circuit towers

- Rebuild Longshore 345-kV Switch, and upgrade from existing 6-breaker ring-bus configuration to a 11-breaker 345-kV breaker-and-a-half bus arrangement. All equipment will be rated at least 2988 MVA
  - Tap the rebuilt Longshore 345-kV Switch into Morgan Creek (Cattleman) to Consavvy 345-kV transmission line with approximately 0.1 miles of line in existing ROW
- Upgrade all terminal equipment at 2-breaker Midessa South 345-kV Switch to at least 2988 MVA
- Upgrade all terminal equipment at 3-breaker, ring bus, Quail East 345-kV Switch to at least 2988 MVA
- Upgrade terminal equipment on two breaker-and-a-half rungs of Odessa EHV 345-kV Switch to at least 2988 MVA
- Upgrade all terminal equipment on both single breaker terminals and main bus at existing Odessa EHV 345-kV Switch to at least 2988 MVA
- Construct a new Reiter 345/138-kV Switch, approximately 3.0 miles south of the existing Odessa EHV 345/138-kV Switch along the existing Odessa EHV to Moss/Wolf 345-kV double-circuit transmission line, with two new 600 MVA (nameplate) 345/138-kV transformers, in a 12-breaker 345-kV breaker-and-a-half bus arrangement and a 10-breaker 138-kV breaker-and-a-half bus arrangement. All 345-kV equipment will be rated at least 2988 MVA, and 138-kV at least 765 MVA
- Tap new Reiter 345-kV Switch into existing Odessa EHV to Moss & Odessa EHV to Wolf 345-kV double-circuit transmission line with, approximately 0.1 miles, new transmission line segment rated to at least 2987 MVA in new ROW
- Tap new Reiter 138-kV Switch into existing Odessa EHV to Moss 138-kV transmission line with, approximately 0.2 miles, new transmission line segment rated to at least 614 MVA in a new ROW
- Tap new Reiter 138-kV Switch into existing Odessa EHV to Wolf 138-kV transmission line with, approximately 0.1 miles, new transmission line segment rated to at least 614 MVA in new ROW
- Upgrade Tesoro 345-kV Switch by adding two new breaker-and-a-half rungs with two new breakers rated to at least 2988 MVA on each of the two new rungs
- Construct two new Reiter to Tesoro 345-kV transmission lines, with conductors rated to at least 2988 MVA, in new (estimated 4.0 miles) ROW, installed on new, common double-circuit towers
- Rebuild Morgan Creek (Cattleman) to Odessa EHV 345-kV double-circuit transmission lines, with conductors rated to at least 2988 MVA, in existing (estimated 88.7 miles) ROW installed on common double-circuit towers

5 Additional Analysis and Assessment

The recommended West Texas 345-kV Infrastructure Rebuild Project is categorized as a Tier 1 project, pursuant to ERCOT Protocol Section 3.11.4.3(1)(a). As required by Planning Guide Section 3.1.3(4), ERCOT performed generation and load sensitivity studies to identify the preferred option performance. Additionally, a Sub-Synchronous Resonance (SSR) Assessment was performed.

5.1 Generation Addition Sensitivity Analysis

ERCOT performed a generation addition sensitivity analysis based on Planning Guide Section 3.1.3(4)(a).

Based on a review of the October 2023 GIS report, the following generators in the study area shown in Table 5.1 have a signed interconnection agreement (IA) but have not met all the conditions for inclusion in the case pursuant to Section 6.9(1) of the Planning Guide.

Table 5.1 Generation Units with Signed IA

GINR	Project Name	County	Fuel	Capacity (MW)
21INR0031	Indigo Solar	Fisher	Solar	125
23INR0300	Greater Bryant G Solar	Midland	Solar	42
21INR0268	Greyhound Solar	Ector	Solar	609
22INR0262	Deville Solar	Callahan	Solar	425
16INR0104	Big Sampson Wind	Crockett	Wind	400
23INR0086	Hanson Solar	Coleman	Solar	401
24INR0057	Hanson Storage	Coleman	Other	101
21INR0263	Monarch Creek Wind	Throckmorton	Wind	344
22INR0274	Crowded Star Solar II	Jones	Solar	189
21INR0207	Quantum Solar	Haskell	Solar	374
21INR0021	Green Holly Solar	Dawson	Solar	414
21INR0022	Red Holly Solar	Dawson	Solar	260
21INR0029	Green Holly Storage	Dawson	Other	50
21INR0033	Red Holly Storage	Dawson	Other	50
25INR0400	Maldives Solar (Alternate POI)	Scurry	Solar	184

These future resources did not have a material impact on the need for the West Texas 345-kV Infrastructure Rebuild Project.

5.2 Load Scaling Sensitivity Analysis

Per Planning Guide Section 3.1.3(4)(b), ERCOT evaluated the load scaling sensitivity and concluded that the load scaling assumed in the study case would not have any material impact on the project need because of the following reasons:

- The majority of the need is located in the northern section of the Far West Weather Zone, this region is remote enough from the rest of the ERCOT load as to not be affected by load scaling outside of the West and Far-West Weather Zones.
- The load scaling outside the stud area is not expected to have a material impact on the need for the West Texas 345-kV Infrastructure Rebuild Project.

5.3 Sub-synchronous resonance (SSR) Assessment

Pursuant to Protocol Section 3.22.1.3(2), ERCOT conducted an SSR screening assessment for the recommended West Texas 345-kV Infrastructure Rebuild Project and found no adverse SSR impacts to the existing and planned Generation Resources in the study area.

6 Congestion Analysis

ERCOT conducted a congestion analysis to identify any potential impact on system congestion related to the addition of the West Texas 345-kV Infrastructure Rebuild Project.

The results of the congestion analysis indicated no additional congestion in the area with the addition of the West Texas 345-kV Infrastructure Rebuild Project.

7 Conclusion

This report describes the ERCOT evaluation of the West Texas 345-kV Infrastructure Rebuild Project submitted Oncor. Based on the results of this independent review and the Permian Basin Load Interconnection Study, ERCOT recommends this RPG project to address the reliability need to accommodate the significant and rapid load growth in the area. The West Texas 345-kV Infrastructure Rebuild Project is estimated to cost $1.12 Billion and consists of the following upgrades:

- Construct a new Ranger Camp 345/138/69-kV substation, approximately 1.0 miles north of the existing Morgan Creek 345/138-kV Switch, with two new 600 MVA (nameplate) 345/138-kV transformers, a 14-breaker 345-kV breaker-and-a-half bus arrangement, and a 16-breaker, 138-kV breaker-and-a-half arrangement with one new 177 MVA (nameplate) 138/69-kV transformer, and a 2-breaker 69-kV single bus arrangement. All 345-kV equipment will be rated at least 2988 MVA, 138-kV at least 765 MVA and 69-kV at least 239 MVA.
  - Disconnect the following 345-kV lines at Morgan Creek and terminate at new Ranger Camp 345-kV:
    - Morgan Creek to Falcon Seaboard adding approximately 1.4 miles of new Right of Way (ROW)
    - Morgan Creek to Tonkawa adding approximately 0.94 miles of new ROW
  - Disconnect the following 138-kV transmission lines at Morgan Creek and terminate at new Ranger Camp 138-kV:
    - Morgan Creek to Eskota
    - Morgan Creek to Barber Lake West
    - Morgan Creek to Barber Lake East
    - Morgan Creek to Sun
    - Morgan Creek to Cosden
  - Disconnect the following 69-kV transmission lines at Morgan Creek and terminate at new Ranger Camp 69-kV:
    - Morgan Creek to Colorado City
    - Morgan Creek to Big Spring
  - Relocate the existing 177 MVA (nameplate) 138/69-kV transformer from Morgan Creek Switch to new Ranger Camp Switch
- Construct a new breaker-and-a-half rung with two new 345-kV breakers at Tonkawa 345-kV Switch. New breakers will be rated at least 2988 MVA
- Rebuild Morgan Creek (Ranger Camp) to Tonkawa 345-kV transmission line, replace with two new Morgan Creek (Ranger Camp) to Tonkawa 345-kV lines, with conductors rated to at least 2988 MVA, in existing (estimated 21.3 miles) ROW, installed on new, common double-circuit towers
- Construct a new Cattleman 345/138-kV Switch, approximately 2.0 miles southwest of existing Morgan Creek 345/138-kV Switch, with two new 600 MVA (nameplate) 345/138-kV transformers, a 15-breaker 345-kV breaker-and-a-half bus arrangement and a 9-breaker 138-kV breaker-and-a-half bus arrangement. All 345-kV equipment will be rated at least 2988 MVA and 138-kV at least 765 MVA

- Disconnect the following 345-kV transmission lines at Morgan Creek and terminate at new Cattleman 345-kV:
  - Morgan Creek to Champion Creek/LCRA Bitter Creek double circuit transmission lines adding approximately 1.25 miles of new ROW
  - Morgan Creek to LCRA Gasconades adding approximately 2 13 miles of new ROW
  - Morgan Creek to Consavvy
  - Morgan Creek to Longshore
- Disconnect the following 138-kV transmission lines at Morgan Creek and terminate at new Cattleman 138-kV:
  - Morgan Creek to McDonald Road using new ROW
- Construct two new Cattleman to Ranger Camp 345-kV transmission lines, with conductors rated to at least 2988 MVA, in a new (estimated 4.2 miles) ROW, installed on new, common double-circuit towers
- Rebuild Morgan Creek 138-kV Switch, in existing Morgan Creek 345/138-kV Switchyard from existing 12-breaker double-bus arrangement to a new 10-breaker 138-kV breaker-and-a-half bus arrangement. All 138-kV equipment will be rated at least 765 MVA
- Construct two new Morgan Creek to Morgan Creek CT Yard 138-kV transmission lines, with conductors rated to at least 614 MVA in existing (estimated 0.1 miles) ROW
- Construct two new Morgan Creek to Ranger Camp 138-kV transmission lines, with conductors rated to at least 614 MVA, in existing (estimated 1.2 miles) ROW, installed on new, common double-circuit towers
- Construct two new Morgan Creek to Cattleman 138-kV transmission lines, with conductors rated to at least 614 MVA, adding new (estimated 2.48 miles) ROW, installed on new, common double-circuit towers
- Construct a new Prong Moss 345-kV Switch, approximately 29.4 miles southwest of existing Morgan Creek 345/138-kV Switch, and along the existing Morgan Creek to Midland East 345-kV corridor, and approximately 7.0 miles south of the existing Falcon Seaboard generating station in a 12-breaker 345-kV breaker-and-a-half bus arrangement. All equipment will be rated at least 2988 MVA
  - Tap Prong Moss 345-kV Switch into existing Morgan Creek (Ranger Camp) to Falcon Seaboard 345-kV transmission line with, approximately 0.1 miles, new transmission line segment in new ROW
  - Tap Prong Moss 345-kV Switch into Falcon Seaboard to Midland East 345-kV transmission line with, approximately 0.1 miles, new transmission line segment in new ROW
  - Rebuild Morgan Creek (Ranger Camp) to Prong Moss, replace with two new Morgan Creek (Ranger Camp) to Prong Moss 345-kV transmission lines with conductors rated at least 2988 MVA, in existing (estimated 29.4 miles) ROW installed on new, common double-circuit towers
  - Rebuild Prong Moss to Midland East 345-kV line, replace with two new Prong Moss to Midland East 345-kV transmission lines with conductors rated at least 2988 MVA, in existing estimated 41.2 miles) ROW, installed on new, common double-circuit towers
- Rebuild Midland County Northwest 345-kV Switch bus work and terminal equipment to be rated at least 2988 MVA, add one new 2-breaker 345-kV breaker-and-a-half rung rated to at least 2988 MVA

- Rebuild Midland East to Midland County Northwest 345-kV transmission line, replace with two new Midland East to Midland County Northwest 345-kV transmission lines, with conductors rated at least 2988 MVA, in 16.3 miles of existing ROW and 1.0 miles of new ROW, installed on new (estimated 17.3 miles) common double-circuit towers
- Rebuild Longshore 345-kV Switch, and upgrade from existing 6-breaker ring-bus configuration to a 11-breaker 345-kV breaker-and-a-half bus arrangement. All equipment will be rated at least 2988 MVA
  - Tap the rebuilt Longshore 345-kV Switch into Morgan Creek (Cattleman) to Consavvy 345-kV transmission line with approximately 0.1 miles of line in existing ROW
- Upgrade all terminal equipment at 2-breaker Midessa South 345-kV Switch to at least 2988 MVA
- Upgrade all terminal equipment at 3-breaker, ring bus, Quail East 345-kV Switch to at least 2988 MVA
- Upgrade terminal equipment on two breaker-and-a-half rungs of Odessa EHV 345-kV Switch to at least 2988 MVA
- Upgrade all terminal equipment on both single breaker terminals and main bus at existing Odessa EHV 345-kV Switch to at least 2988 MVA
- Construct a new Reiter 345/138-kV Switch, approximately 3.0 miles south of the existing Odessa EHV 345/138-kV Switch along the existing Odessa EHV to Moss/Wolf 345-kV double-circuit transmission line, with two new 600 MVA (nameplate) 345/138-kV transformers, in a 12-breaker 345-kV breaker-and-a-half bus arrangement and a 10-breaker 138-kV breaker-and-a-half bus arrangement. All 345-kV equipment will be rated at least 2988 MVA, and 138-kV at least 765 MVA
- Tap new Reiter 345-kV Switch into existing Odessa EHV to Moss & Odessa EHV to Wolf 345-kV double-circuit transmission line with, approximately 0.1 miles, new transmission line segment rated to at least 2987 MVA in new ROW
- Tap new Reiter 138-kV Switch into existing Odessa EHV to Moss 138-kV transmission line with, approximately 0.2 miles, new transmission line segment rated to at least 614 MVA in a new ROW
- Tap new Reiter 138-kV Switch into existing Odessa EHV to Wolf 138-kV transmission line with, approximately 0.1 miles, new transmission line segment rated to at least 614 MVA in new ROW
- Upgrade Tesoro 345-kV Switch by adding two new breaker-and-a-half rungs with two new breakers rated to at least 2988 MVA on each of the two new rungs
- Construct two new Reiter to Tesoro 345-kV transmission lines, with conductors rated to at least 2988 MVA, in new (estimated 4.0 miles) ROW, installed on new, common double-circuit towers
- Rebuild Morgan Creek (Cattleman) to Odessa EHV 345-kV double-circuit transmission lines, with conductors rated to at least 2988 MVA, in existing (estimated 88.7 miles) ROW installed on common double-circuit towers

This project will require multiple CCN filings and the expected ISD for this project is summer 2028.

Appendix

Appendix A: Permian Basin Load Interconnection Study Report	ERCOT_Permian_Basin_Load_Interconn
Appendix B: Oncor West Texas 345-kV Infrastructure Rebuild Project RPG Submittal	Oncor West Texas 345 kV Infrastructur
Appendix C: Projects Added to Economics Case	Appenidx_C.pdf

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GENERAL SESSION MINUTES OF THE BOARD OF DIRECTORS MEETING OF ELECTRIC RELIABILITY COUNCIL OF TEXAS, INC.

8000 Metropolis Drive (Building E), Suite 100, Boardroom B
Austin, Texas 78744
June 18, 2024

Pursuant to notice duly given, the meeting of the Board of Directors (Board) of Electric Reliability Council of Texas, Inc. (ERCOT) convened on the above-referenced date.

Meeting Attendance:

Board Members:

Director	Affiliation/Role (if any)	Voting Category
Aguilar, Carlos	N/A	Voting
Capuano, Linda	N/A	Voting
Cobos, Lori	Public Utility Commission of Texas (PUCT, Commission), Commissioner	Non-Voting
England, Julie	N/A	Voting
Flexon, Bob	N/A	Voting
Flores, Bill (Vice Chair)	N/A	Voting
Foster, Paul (Chair)	N/A	Voting
Gleeson, Thomas	PUCT Chair	Non-Voting
Heeg, Peggy	N/A	Voting
Hjaltman, Courtney	Office of Public Utility Counsel (OPUC), Public Counsel	Voting
Swainson, John	N/A	Voting
Vegas, Pablo	ERCOT President and Chief Executive Officer (CEO)	Non-Voting

Officers and Guests:

Officer/Guest	Role
Berlin, Anna	ERCOT Associate Corporate Counsel
Billo, Jeff	ERCOT Director of Operations Planning
Black, Robert	ERCOT Vice President of Public Affairs
Collins, Keith	ERCOT Vice President of Commercial Operations

Day, Betty	ERCOT Vice President of Security and Compliance and Chief Compliance Officer
Hobbs, Kristi	ERCOT Vice President of System Planning and Weatherization
Jackson, Kathleen	PUCT Commissioner
Levine, Jonathan	ERCOT Assistant General Counsel and Assistant Corporate Secretary
Martinez, Adam	ERCOT Vice President of Enterprise Risk and Strategy
McDonald, Jeff	Potomac Economics, ERCOT Independent Market Monitor (IMM) Director
Parakkuth, Jayapal	ERCOT Senior Vice President and Chief Information Officer
Rainwater, Kim	ERCOT Corporate Counsel
Rickerson, Woody	ERCOT Senior Vice President and Chief Operating Officer
Schue, Jamie	ERCOT Senior Corporate Counsel
Seely, Chad V.	ERCOT Senior Vice President, General Counsel and Corporate Secretary
Smith, Caitlin	Jupiter Power LLC, Technical Advisory Committee (TAC) Chair
Spak, Mara	ERCOT Vice President of Human Resources
Taylor, Sean	ERCOT Senior Vice President, Chief Financial Officer and Chief Risk Officer
Woodfin, Dan	ERCOT Vice President of System Operations
Zerwas, Rebecca	ERCOT Director of State Policy and PUC Relations, Board Liaison

Call General Session to Order (Agenda Item 1)
Paul Foster, Board Chair, determined that a quorum was present and called the Board meeting to order at approximately 10:01 a.m.

Chair Foster recognized Thomas Gleeson, Chairman of the PUCT. Chair Gleeson called an Open Meeting of the Commission to order to consider matters that had been duly posted with the Texas Secretary of State for June 18, 2024.

Chair Foster highlighted the Antitrust Admonition and addressed the following Agenda Items in the order below.

Notice of Public Comment, if Any (Agenda Item 2)
Chair Foster announced that on the agenda for the meeting, which was posted publicly on June 11, 2024, ERCOT had provided instructions for members of the public who were interested in commenting in person and that to date no individuals had expressed interest in commenting, which Chad Seely confirmed, noting commenters were available for Board questions, if any, regarding Agenda Item 9.1.1, NPRR1224, ECRS Manual Deployment Triggers – URGENT.

Consent Agenda; Unopposed Revision Requests Recommended by TAC for Approval (Agenda Items 3 – 3.1.12)
Chair Foster presented the Consent Agenda, including unopposed Revision Requests recommended by TAC for approval. Mr. Seely reviewed the cost impacts of the Revision Requests. Chair Foster entertained a motion to recommend approval of the Consent Agenda as follows:

- NPRR1198, Congestion Mitigation Using Topology Reconfigurations;
- NPRR1212, Clarification of Distribution Service Provider's Obligation to Provide an ESI ID;
- NPRR1218, REC Program Changes Per P.U.C. Subst. R. 25.173, Renewable Energy Credit Program;
- NPRR1220, Market Restart Approval Process Modifications;
- NPRR1222, Public Utility Commission of Texas Approval of the Methodology for Determining Ancillary Service Requirements;
- NPRR1223, Addition of TA Contact Information Into TDSP Application Form;
- NPRR1228, Continued One-Winter Procurements for Firm Fuel Supply Service (FFSS) – URGENT;
- NOGRR255, High Resolution Data Requirements;
- NOGRR258, Related to NPRR1198, Congestion Mitigation Using Topology Reconfigurations;
- PGRR112, Dynamic Data Model and Full Interconnection Study (FIS) Deadline for Quarterly Stability Assessment;
- PGRR113, Related to NPRR1198, Congestion Mitigation Using Topology Reconfigurations; and
- PGRR114, Related to NPRR1212, Clarification of Distribution Service Provider's Obligation to Provide an ESI ID

Bill Flores moved to recommend approval of the Consent Agenda as presented. Julie England seconded the motion. The motion passed by unanimous voice vote with no abstentions.

April 23, 2024 General Session Meeting Minutes (Agenda Item 4)

Chair Foster entertained a motion to approve the April 23, 2024 General Session Meeting Minutes (Minutes).

Peggy Heeg moved to approve the Minutes as presented. Mr. Flores seconded the motion. The motion passed by unanimous voice vote with no abstentions.

CEO Update (Agenda Item 5)

Pablo Vegas presented the CEO Update. Mr. Vegas highlighted ERCOT's work with Market Participants in advance of summer with hurricane preparedness and summer weatherization inspections and discussed the Reliability Roadmap for the remainder of 2024 and beyond. Board members and Mr. Vegas discussed the impact on ERCOT's dispatchable generation fleet of four rules the Environmental Protection Agency (EPA) finalized in April, raising a reliability risk, and ERCOT's continued support (which includes reliability analysis) of the State of Texas's litigation efforts as requested. Board members and Mr. Vegas discussed ERCOT's 2024 Innovation Summit. Board members and Commissioner Jackson discussed the timeline for the Commission's work on Demand Response following the Texas A&M University study that is nearing completion and a goal for recommendations to the Texas Legislature during the next Legislative session.

2024 Summer Outlook; 2024 Summer Weather and Operations (Agenda Items 6 and 6.1)
Dan Woodfin presented the 2024 Summer Weather and Operations. Board members and Mr. Woodfin discussed ERCOT's role in hurricane preparedness. Board members and Mr. Woodfin also discussed probabilistic assessments for summer 2024 demand and supply, as well as visibility needs into demand response from Large Flexible Loads and cryptominers.

2024 Summer Markets and Credit (Agenda Items 6.2)
Woody Rickerson presented the 2024 Summer Markets and Credit, including potential for impact during summer of 2024 on the relative frequency of self-commitment over Reliability Unit Commitment (RUC) action of November 2023 modifications to the Operating Reserve Demand Curve (ORDC) to include multi-step price floors; comparison of natural gas prices during the first quarter of 2024 to 2022 and 2023; and comparison of forward electricity prices in 2024 to 2022 and 2023.

Board Education – Load Forecasting (Agenda Item 7)
Jeff Billo presented Board Education – Load Forecasting. Board members and Mr. Billo discussed the extent to which Market Participants are compensated for price responsive demand, including economic decisions within the market such as lowering charges via ERCOT's Four Coincident Peak (4CP) Program; when exposed to wholesale market prices; or through thermostat programs offered by Retail Electric Providers. Discussion also included addressing challenges with machine-learning algorithms for behavioral modeling and significant changes to the Long-Term Load Forecast since Mr. Billo most recently presented Load Forecasting education to the Board two years ago, particularly regarding impacts of artificial intelligence and data centers.

Independent Market Monitor (IMM) 2023 State of the Market Report for the ERCOT Electricity Markets (Agenda Item 8)
Jeff McDonald, Director of Potomac Economics, presented the Independent Market Monitor (IMM) 2023 State of the Market Report for the ERCOT Electricity Markets. Board members and Mr. McDonald discussed effects on 2023 combustion turbine net revenues of ERCOT Contingency Reserve Service (ECRS). Discussion also included market incentives compared to Legislative provisions for new thermal dispatchable generation, and impact on investment decisions of fluctuating data for net revenues over the past six years. Mr. Rickerson and Mr. McDonald discussed IMM's work on bidding prices for batteries, and Board members and Mr. McDonald discussed the future role of grid reliability in IMM reporting and product transactions following Commission approval of a Reliability Standard for the ERCOT Region.

TAC Report; Non-Unanimous and Other Selected Revision Requests Recommended by TAC for Approval; NPRR1224, ECRS Manual Deployment Triggers – URGENT; NOGRR245, Inverter-Based Resource (IBR) Ride-Through Requirements – URGENT; Reliability and Markets (R&M) Committee Recommendations on Non-Unanimous and Other Selected Revision Requests (Agenda Items 9 – 9.2)
Caitlin Smith, TAC Chair, presented the TAC Report, which included TAC's non-unanimous recommendation for approval of NPRR1224, as well as TAC's non-unanimous recommendation for approval of NOGRR245 in June, following the Board, at its April 23, 2024 meeting, remanding the NOGRR to TAC to address the key reliability concerns identified by ERCOT.

Reliability and Markets (R&M) Committee Chair Bob Flexon reported the Committee considered NPRR1224 at its meeting the prior day and recommended, with one opposing vote by R&M Committee Member Courtney Hjaltman, approval of NPRR1224 as recommended by TAC, following the TAC Report and in-person comments by ERCOT staff, the IMM, Texas Industrial Energy Consumers, and Vistra. Mr. Flexon reported the Committee encourages stakeholder processing as expeditiously as possible of NPRR1232, Standing Deployment of ECRS in the Operating Hour for a Portion of ECRS that is Provided from SCED-Dispatchable Resources, since it provides for the automated release of ECRS to Security-Constrained Economic Dispatch (SCED) without the need for a manual ERCOT deployment instruction.

Mr. Flexon moved to recommend approval of NPRR1224 as recommended by TAC. Carlos Aguilar seconded the motion. The motion passed my unanimous voice vote with one abstention (Ms. Hjaltman).

Mr. Flexon reported on the R&M Committee's deliberations yesterday on NOGRR245, including TAC's Report and in-person comments by ERCOT staff and NextEra, and the R&M Committee's recommendation to table NOGRR245 to allow ERCOT staff, Joint Commenters, and any other stakeholders to develop language to bifurcate parts of the exemption process framework into a future Board Priority Revision Request. Mr. Flexon reported the Committee recognized possible need for special meetings of the R&M Committee and Board in July to consider NOGRR245.

Mr. Flexon moved to table NOGRR245. Ms. Heeg seconded the motion. The motion passed by voice vote with no abstentions.

Finance and Audit (F&A) Committee Report (Agenda Item 10)
Vice Chair Flores, F&A Committee Chair, reported that the F&A Committee met the prior day and highlighted items discussed at the F&A Committee meeting.

Human Resources and Governance (HR&G) Committee Report; Proposed Amendments to the Board Policies and Procedures; Ratification of Officer (Agenda Items 11 – 11.2)
Ms. Heeg, HR&G Committee Chair, reported the HR&G Committee met the prior day and recommended approval of proposed amendments to the Board Policies and Procedures to make clarifications and, following TAC feedback, regarding the Board process for Revision Requests. Ms. Heeg reported the HR&G Committee also recommended ratification of Keith Collins as ERCOT Vice President of Commercial Operations. Following a vote, Ms. Heeg highlighted other discussions from yesterday's meeting of the HR&G Committee.

Ms. Heeg moved to (1) approve the amendments to the Board Policies and Procedures, and (2) approve the ratification of Keith Collins, ERCOT Vice President of Commercial Operations, as an ERCOT Officer effective June 17, 2024, each as recommended by the HR&G Committee. John Swainson seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Reliability and Markets (R&M) Committee Report; R&M Committee Charter; Oncor West Texas 345-kV Infrastructure Rebuild Regional Planning Group (RPG) Project (Agenda Items 12 – 12.2)

Mr. Flexon highlighted additional items discussed at the R&M Committee meeting yesterday, including the Committee's recommendation to approve revisions to the R&M Committee Charter corresponding to amendments to the Board Policies and Procedures document and clarifying other R&M Committee practices.

Mr. Flexon moved to approve the R&M Committee Charter. Ms. Hjaltman seconded the motion. The motion passed by unanimous voice vote with no abstentions. Mr. Aguilar was not seated for this vote.

Mr. Flexon reported the R&M Committee's recommendation yesterday to endorse the Oncor West Texas 345-kV Infrastructure Rebuild Regional Planning Group (RPG) Project. Following a vote, Mr. Flexon highlighted other topics discussed during yesterday's meeting of the R&M Committee.

Mr. Flexon moved to endorse the need for the Tier 1 Oncor West Texas 345-kV Infrastructure Rebuild RPG Project, which ERCOT staff has independently reviewed and which TAC has voted unanimously to endorse, based on North American Electric Reliability Corporation (NERC) and ERCOT reliability planning criteria. Ms. Heeg seconded the motion. The motion passed by unanimous voice vote with no abstentions.

Technology and Security (T&S) Committee Report (Agenda Item 13)
Mr. Swainson, T&S Committee Chair, reported the T&S Committee met the prior day and highlighted items discussed at the T&S Committee meeting.

Other Business (Agenda Item 14)
Chair Foster announced today would be his last meeting as Chair of the ERCOT Board and as a Board member, following a decision to step down effective the end of the day tomorrow, June 19, 2024. Chair Foster indicated Vice Chair Bill Flores will serve until a new Board Chair is selected by the ERCOT Board Selection Committee. Chair Foster shared what he has come to learn in his tenure as ERCOT Board Chair, complimented staff, and thanked the following for the opportunity to serve: Gov. Greg Abbott and Legislative leadership; PUC Chair Gleeson and the Commission; fellow Board members; Mr. Vegas and staff; and Market Participants.

Executive Session; Vote on Matters from Executive Session; Adjournment (Agenda Items 15 and 16)
Chair Foster reported that no voting items form Executive Session were expected; accordingly, he would adjourn the meeting immediately upon conclusion of Executive Session. Chair Foster recessed General Session at approximately 11:51 a.m. and convened Executive Session at approximately 12:17 p.m.

There were no voting items from Executive Session.

Chair Foster adjourned the meeting upon conclusion of Executive Session at approximately 2:55 p.m.

Board materials and presentations from the meeting are available on ERCOT's website at https://www.ercot.com/committees/board.

Chad V. Seely
Corporate Secretary

Transmission System in Project Area

Ranger Camp

Morgan Creek

Cattleman

Ranger Camp - Cattleman 345 kV Transmission Line Project

Stations

Oncor Transmission Lines
- 69 kV (overhead)
- 138 kV (overhead)
- 345 kV (overhead)

Proposed Transmission Line Project

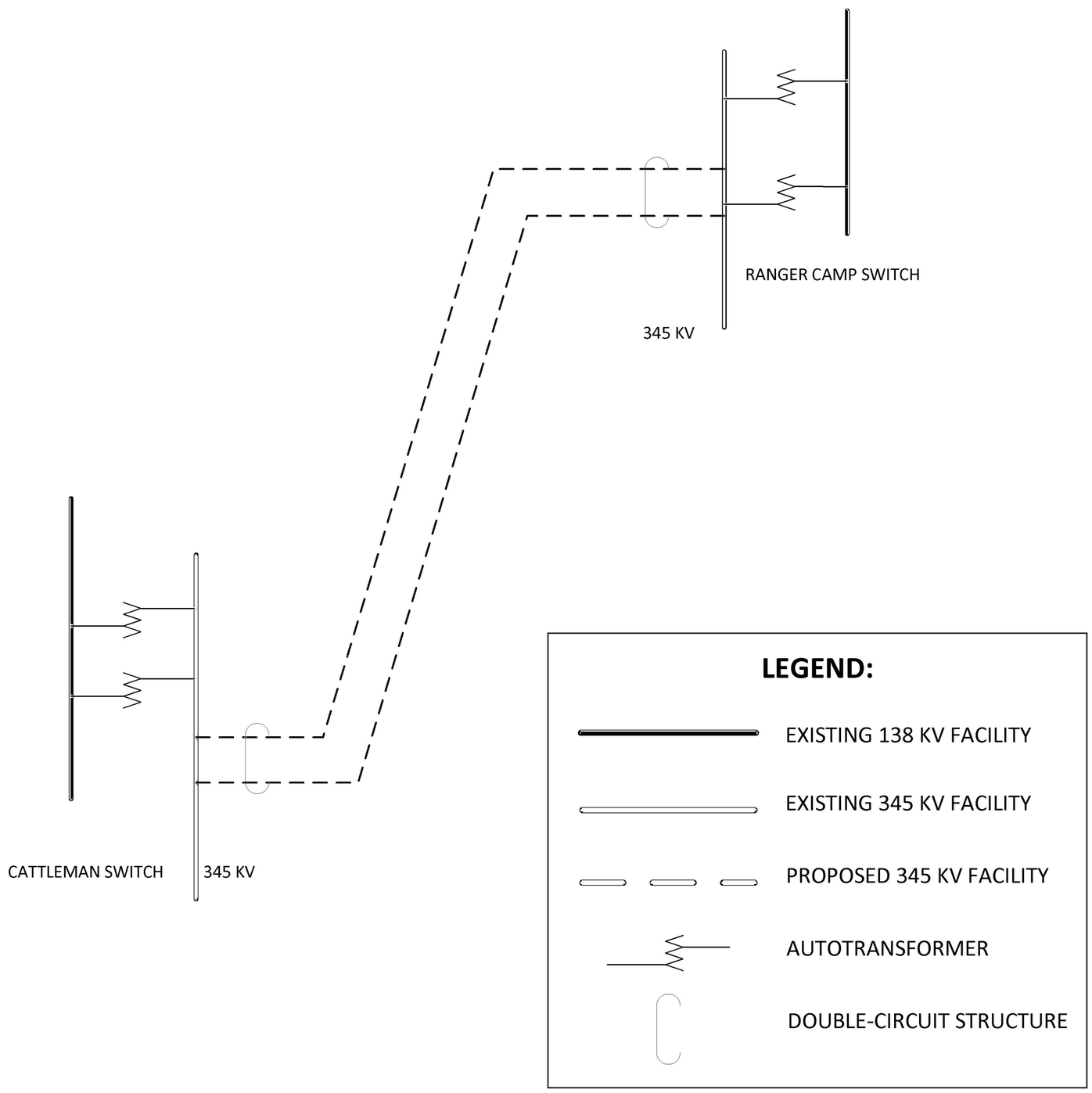
Study Area Boundary

N

0 0.130.25 0.5 0.75 1 Miles

ATTACHMENT NO. 7

Schematic of Transmission System in Proximate Area of Project



ATTACHMENT NO. 8

List of Directly Affected Landowners for Notice and Pipeline Owners, Operators, and Associations for Courtesy Notice
Ranger Camp Switch - Cattleman Switch 345 kV Transmission Line
Mitchell County, Texas

Last Update: November 26, 2024

TRACT	HABITABLE STRUCTURE	LAST NAME	FIRST NAME	BUSINESS NAME	ATTN TO/CARE OF:	ADDRESS	CITY	STATE	ZIP
101, 103, 105, 107	1, 2, 3			LUMINANT GENERATION CO LLC	ATTN PROPERTY TAX DEPT	6555 SIERRA DRIVE	IRVING	TX	75039
102, 113, 114, 115, 117				ONCOR ELECTRIC DELIVERY CO		PO BOX 139100	DALLAS	TX	75313
108, 116				AUTONOMOUS OIL LLC		PO BOX 12208	DALLAS	TX	75225
112	4			FEDERAL HOME LOAN MORTGAGE CORP	% SHELLPOINT MORTGAGE SERVICING	75 BEATTIE PLACE STE 300	GREENVILLE	SC	29601
113		COX	TANNER J			1789 CR 143	COLORADO CITY	TX	79512
113		COX	SARAH ANN			1789 CR 143	COLORADO CITY	TX	79512
COURTESY NOTICES									
				PERMIAN BASIN PETROLEUM ASSOCIATION		601 N MARIENFELD ST STE 200	MIDLAND	TX	79701
				PERMIAN BASIN PETROLEUM ASSOCIATION		1122 COLORADO STREET STE. 2320	AUSTIN	TX	78701
				TEXAS OIL AND GAS ASSOCIATION		304 W 13TH ST	AUSTIN	TX	78701
				TEXAS PIPELINE ASSOCATION		604 W 14TH ST	AUSTIN	TX	78701
				ENERGY TRANSFER COMPANY		8111 WESTCHESTER DR STE 600	DALLAS	TX	75225
				MAGELLAN PIPELINE COMPANY, L.P.		PO BOX 871	TULSA	OK	74102
				ONEOK WESTEX TRANSMISSION, L.L.C.		100 WEST FIFTH ST	TULSA	OK	74103
				SUNOCO PIPELINE L.P.		8111 WESTCHESTER DR STE 600	DALLAS	TX	75225
				WTG JAMESON, LP		211 NORTH COLORADO ST	MIDLAND	TX	79701

ATTACHMENT NO. 9

Application of Oncor Electric Delivery Company LLC to Amend Its Certificate of Convenience and Necessity for the Ranger Camp Switch - Cattleman Switch 345 kV Transmission Line Project in Mitchell County, Texas

PUBLIC UTILITY COMMISSION OF TEXAS DOCKET NO. 57519

Landowner

This notice is provided to notify you that Oncor Electric Delivery Company LLC (Oncor) has applied to amend its certificate of convenience and necessity to construct, own, and operate a new double-circuit 345 kilovolt (kV) transmission line to connect the Ranger Camp Switch to the Cattleman Switch in Mitchell County, Texas. The Ranger Camp Switch is located approximately 0.7 miles southwest of the intersection of South Farm-to-Market Road (FM) 1229 and State Highway (SH) 163, near Colorado City. The Cattleman Switch is located approximately 0.8 miles west of the intersection of SH 163 and FM 2836. The length of this project will be approximately 4.2 miles and constructed entirely within right-of-way that has already been acquired for this project. The estimated cost of this project is $32,409,000.

Your land may be directly affected by this docket. If Oncor's route is approved by the Public Utility Commission of Texas (Commission or PUC), Oncor will have the right to build a facility that may directly affect your land. This docket will not determine the value of your land or the value of an easement if one is needed by Oncor to build the facility. If you have questions about this project, you may contact Jeremy McConnell of Oncor at 214-486-5216.

A detailed routing map may be reviewed at the following location:

Display Location	Address
Mitchell County Court House	349 Oak St., Colorado City, TX 79512

All routes and route segments included in this notice are available for selection and approval by the Public Utility Commission of Texas.

The enclosure entitled "Guide for Landowners Affected by a New Electric Transmission Line Route" provides basic information about how you may participate in this docket and how you may contact the PUC. Please read this guide carefully. The guide includes sample forms for making comments and for making a request to intervene as a party in this docket. ***The only way to fully participate in the PUC's decision on where to locate the transmission line is to intervene in this docket. It is important for an affected person to intervene because the utility is not obligated to keep affected persons informed of the PUC's proceedings and cannot predict which route may or may not be approved by the PUC.***

In addition to the contacts listed in the guide, you may call the PUC's Customer Assistance Hotline at (512) 936-7120 or (888) 782-8477. Hearing- and speech-impaired individuals may contact the Commission through Relay Texas at 1-800-735-2989. If you wish to participate in this proceeding by becoming an intervenor, the deadline for intervention in the proceeding is **March 10, 2025**, which is 32 days after the filing of the application. The PUC must receive your request to intervene

by that date if you choose to intervene. The request to intervene form is included with your brochure.

The preferred method for you to file your request for intervention is electronically. If you decide to file an electronic request for intervention, you will be required to serve the request on all other parties by email. Therefore, please include your own email address on the intervention form. Instructions for electronic filing via the "PUC Filer" on the PUC's website can be found at: https://interchange.puc.texas.gov/filer. Instructions for using the PUC Filer are available at: https://ftp.puc.texas.gov/public/puct-info/industry/filings/E-Filing_Instructions.pdf. For assistance with your electronic filing, please contact the PUC's Help Desk at (512) 936-7100 or helpdesk@puc.texas.gov. You can review materials filed in this docket on the PUC Interchange at: http://interchange.puc.texas.gov.

While the preferred method for submitting a request for intervention is electronically, you may file your request for intervention by mailing a hard copy of your request to the PUC. Any request must be received by the intervention deadline of **March 10, 2025**. If you are not filing your request for intervention electronically, mail the request for intervention and 10 copies of the request to:

Public Utility Commission of Texas
Central Records
Attn: Filing Clerk
1701 N. Congress Avenue
P.O. Box 13326
Austin, Texas 78711-3326

Persons who wish to intervene in the docket must also email or mail a copy of their request for intervention to all parties in the docket and all persons that have pending motions to intervene, at or before the time the request for intervention is electronically filed with, or mailed to, the PUC. In addition to the intervention deadline, other important deadlines may exist that affect your participation in this docket. You should review the orders and other filings made in the docket. The enclosed brochure explains how you can access these filings.

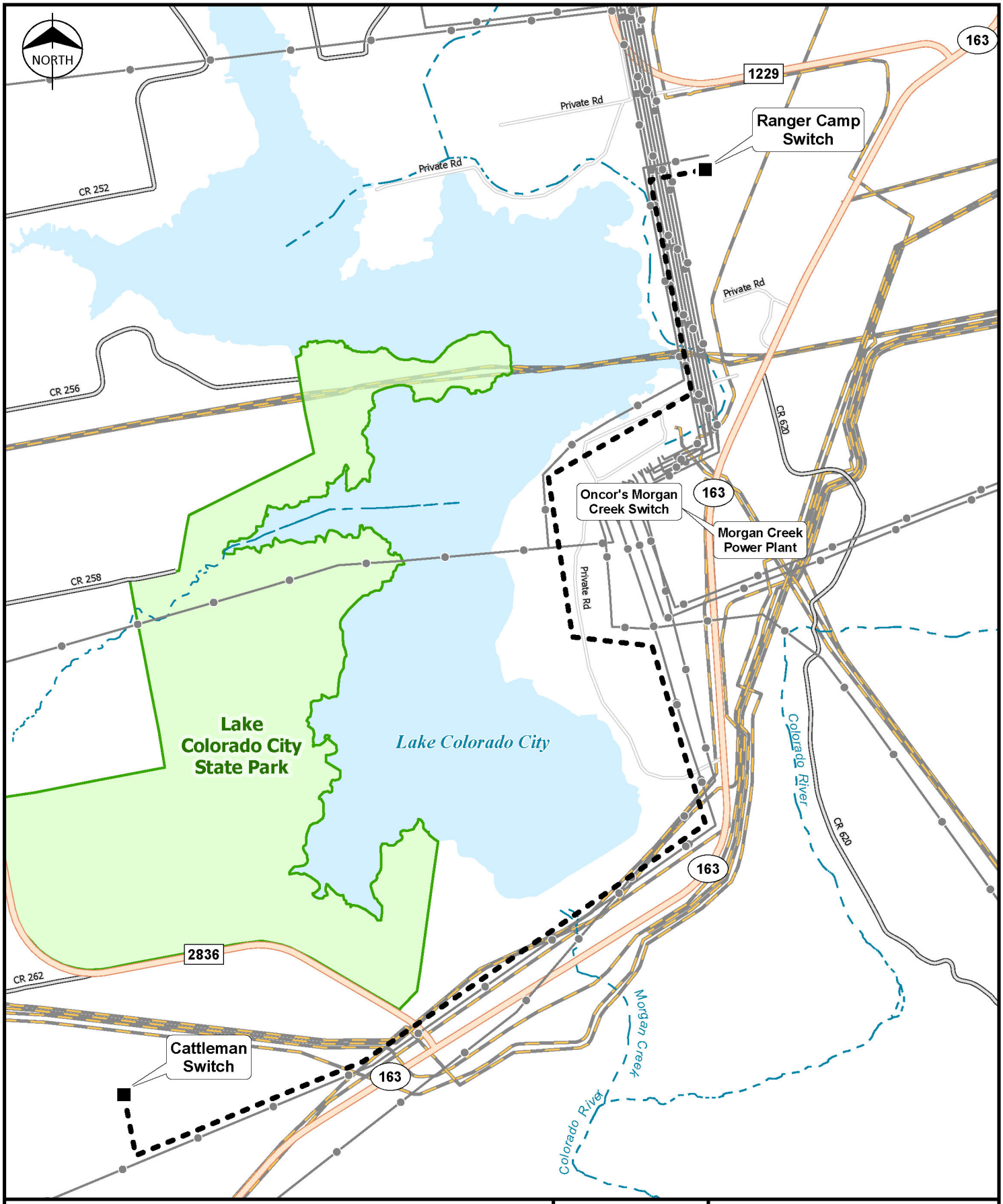
Enclosures:

- Route Description and Map
- Brochure: Guide for Landowners Affected by a New Electric Transmission Line Route
- Request to Intervene Form
- Comment Form
- The State of Texas Landowner's Bill of Rights

Ranger Camp Switch to Cattleman Switch 345 kV Transmission Line Project
Route Description

Route length (22,193 feet)

The proposed route begins at the Ranger Camp Switch (under construction) located approximately 0.7 miles southwest of the intersection of South Farm-to-Market Road (FM) 1229 and State Highway (SH) 163 in Mitchell County, Texas. From this location, the route proceeds in a west-southwesterly direction approximately 782 feet, crossing seven existing Oncor transmission lines, to an angle point. From this angle point, the route proceeds in a south-southeasterly direction approximately 3,033 feet paralleling an existing Oncor transmission line corridor. This segment crosses two refined product pipelines, one liquid pipeline, and an unnamed stream. From this angle point, the route proceeds in a southwesterly direction, paralleling the south side an existing Oncor transmission line approximately 2,313 feet, to an angle point. From this angle point, the route proceeds in a south-southeasterly direction paralleling the east side of an existing Oncor transmission line approximately 1,033 feet, crossing an existing Oncor transmission line. Here the route continues approximately 1,225 feet, paralleling the west side of a private road to an angle point. From this angle point, the route proceeds in an east-southeasterly direction approximately 1,115 feet, to an angle point. From this angle point, the route proceeds in a south-southeasterly direction, paralleling the west side of an existing Oncor transmission line, approximately 2,580 feet, to an angle point. This segment crosses one natural gas pipeline, one liquid pipeline, and an existing Oncor transmission line. From this angle point, the route proceeds in a southwesterly direction, paralleling the north side of an existing Oncor transmission line, approximately 5,812 feet, to a slight angle point. This segment crosses an existing Oncor transmission line, Morgan Creek, FM 2836, and contains nine pipeline crossings (six liquid and three natural gas). From this slight angle point, the route proceeds in a southwesterly direction, paralleling the north side of an existing Oncor transmission line, approximately 3,432 feet, to an angle point. This segment crosses two liquid pipelines. From this angle point, the route proceeds in a north-northwesterly direction approximately 868 feet, to the terminus at Oncor's Cattleman Switch (under construction), located approximately 0.8 miles west of the intersection of SH 163 and FM 2836.



Ranger Camp Switch to Cattleman Switch 345 kV Transmission Line
Project Endpoint
3DHP Flowline Creek or Stream
Existing Transmission Line
Pipeline - 8" or greater diameter
State Park

0 900 1,800
US Feet

ONCOR
BURNS McDONNELL

Detailed Route Description Map
Ranger Camp Switch
to Cattleman Switch
345 kV Transmission Line
Oncor Electric Delivery
Company LLC
Mitchell County, Texas

Source: ESRI; USGS 3DHP (formerly NHD); TPWD; RRC; Burns & McDonnell Engineering Company, Inc

Issued: 12/12/2024

Guide for Landowners Affected by a New Electric Transmission Line Route

Why am I receiving this notice?

You are receiving this notice because your property is near one of the possible routes for a proposed electric transmission line. You can find maps of the proposed routes on the website of the company that applied to build the line.

What does the Public Utility Commission of Texas (PUCT) do?

The PUCT is the Texas state agency that decides if a transmission line is needed and what route the line will follow. The PUCT does not build or operate electric transmission lines.

What are transmission lines and why do we need them?

Electric transmission lines carry electricity long distances across the state. They bring electricity from power plants to cities and neighborhoods where they link to smaller wires called distribution-level wires, that carry electricity to individual customers' homes and businesses. New electric transmission lines are needed where there is growth in electricity demand or where existing transmission lines are at full capacity.

Public Participation in the Transmission Line Siting Process

How can I participate?

Depending on the level of participation you choose, you can either be a protestor or an intervenor.

- **Protestors** – If you have concerns about the transmission line, you can send us written comments about the proposed routes. These comments are filed in the public record and are available to e anyone who is interested in the application. Comments help inform the PUCT Commissioners and staff of the public concerns.
- **Intervenors** – Intervening makes you an official participant in the legal case where the transmission line and the route are debated in front of a judge and the PUC Commissioners. You will be allowed to present evidence in the case and can cross-examine witnesses. You can testify in the case and may also be cross-examined by the other parties in the case. Intervenors must follow along with the process of the case, respond to requests from the Administrative Law Judge (ALJ) and other parties, and actively participate in the case. Otherwise, they may lose their status as an intervenor. Intervenors are not required to have an attorney.

Why should I participate?

If you have any concerns about the proposed routes, the PUCT encourages you to participate in the siting process. As a landowner, you have detailed knowledge of the impacted area that might not be reflected in the application. Sharing your knowledge with the PUCT allows us to make better-informed decisions about the route of the line.

How can I follow the process?

All the documents related to a case are filed in the PUCT public document interchange. You can search for the case by name or by the five-digit docket number. You can also sign up to receive a notification every time a new document is added related to the case. The interchange is at https://interchange.puc.texas.gov/

What is the process?

After the company applies to build a new transmission line to the PUCT, technical staff reviews the application. The PUCT sends the application to the State Office of Administrative Hearings (SOAH) when an intervenor or technical staff requests a hearing. A SOAH judge will schedule a prehearing conference to address procedural matters, including setting a procedural schedule for the case. The procedural schedule will set a hearing date, deadlines to request information from other participants and deadlines to file written testimony prior to the hearing. SOAH conferences and hearings can be held by video conference with a call-in option. All participants in the case must attend the hearing to have their written testimony entered into evidence. After the hearing, the SOAH judge will give the PUCT a recommendation about the route.

The PUCT Commissioners are not bound by this recommendation in selecting a route for the transmission line. The PUCT Commissioners will issue a final decision at a public meeting, which the people participating in the case can attend and request to make a statement. The PUCT Commissioners can and sometimes do make alterations to the route in response to statements from landowners. The company building the transmission line will then negotiate with landowners for the easements on their property. PUCT Commissioners meet in public meetings broadcast online.

During the time the case is going through the hearing process, participants in the case also negotiate to find a route that satisfies everyone. The PUCT Commissioners are not required to approve a negotiated route.

The entire process can take up to six months.

Where do I go for more information?

The company that has applied to build the line will have maps on their website. For more information about how to participate in the process please contact the PUCT Office of Public Engagement https://www.puc.texas.gov/agency/about/ope/ or 512-936-7374.

Guía Para Propietarios Afectados por Una Nueva Ruta de Línea de Transmisión Eléctrica

¿Por qué recibo este aviso?

Está recibiendo este aviso porque su propiedad está cerca de una de las posibles rutas para una línea de transmisión eléctrica propuesta o cerca de un sitio de subestación propuesto. Puede encontrar mapas de las rutas propuestas en la solicitud de la compañía en el intercambio de la Comisión de Servicios Públicos de Texas (PUCT) utilizando el número de expediente de cinco dígitos.

¿Qué hace la PUCT?

La PUCT es la agencia estatal de Texas que decide si se necesita una línea de transmisión y qué ruta seguirá la línea. La PUCT no construye ni opera líneas de transmisión eléctrica.

¿Qué son las líneas de transmisión y por qué las necesitamos?

Las líneas de transmisión eléctrica transportan electricidad a largas distancias por todo el estado. Llevan la electricidad desde las plantas de energía a las ciudades y vecindarios donde se conectan a cables más pequeños llamados cables de nivel de distribución, que llevan la electricidad a los hogares y negocios de los clientes individuales. Se necesitan nuevas líneas de transmisión eléctrica donde hay un aumento en la demanda de electricidad o donde las líneas de transmisión existentes están a capacidad completa y es necesario ampliarlas.

Participación Pública en el Proceso de Emplazamiento de Líneas de Transmisión

¿Cómo puedo participar?

Según el nivel de participación que elija, puede ser un manifestante o un interventor.

- **Manifestantes** – Si tienen inquietudes sobre la línea de transmisión, pueden enviarnos comentarios por escrito sobre las rutas propuestas. Estos comentarios se archivan en el registro público y están disponibles para cualquier persona interesada en la solicitud. Los comentarios ayudan a informar a los comisionados y al personal de la PUCT sobre las preocupaciones del público.

- **Interventores** – -La intervención lo convierte en un participante oficial en el caso legal donde la transmisión y la ruta se debaten frente a un juez y los Comisionados de la PUC. Se le permitirá presentar pruebas en el caso y podrá contrainterrogar a los testigos. Puede testificar en el caso y también puede ser interrogado por las otras partes en el caso. Los interventores deben seguir con el proceso del caso, responder a las solicitudes del Juez de Derecho Administrativo (ALJ) y otras partes, y participar activamente en el caso. De lo contrario, puede perder su condición de interventor. Los interventores no están obligados a tener un abogado. El aviso que recibió indica la fecha límite para intervenir. Los formularios para interventores se pueden encontrar en el sitio web de la PUC.

¿Por qué debo participar?

Si tiene inquietudes sobre las rutas propuestas, la PUCT lo alienta a participar en el proceso de ubicación. Como propietario, tiene un conocimiento detallado del área afectada que podría no estar reflejado en la solicitud. Compartir su conocimiento con la PUCT nos permite tomar una decisión mejor informada sobre la ruta de la línea.

¿Cómo puedo seguir el proceso?

Todos los documentos relacionados con un caso se archivan en el intercambio de documentos públicos de la PUCT. Puede buscar el caso por nombre o por el número de expediente de cinco dígitos. También puede registrarse para recibir una notificación cada vez que se agregue un nuevo documento relacionado con el caso. El intercambio está en https://interchange.puc.texas.gov/

¿Cuál es el proceso?

Después de que la empresa presenta una solicitud ante la PUCT para construir una nueva línea de transmisión, el personal técnico de la PUCT revisa la solicitud en un procedimiento legal. Cuando un interventor o personal técnico de la PUCT solicite una audiencia, la PUCT enviará la solicitud a la Oficina Estatal de Audiencias Administrativas (SOAH). El juez de SOAH fijará una fecha de audiencia, plazos para solicitar información de otros participantes y plazos para presentar testimonio escrito o una declaración de posición antes de la audiencia. El juez de SOAH puede determinar el formato de las conferencias y audiencias, por ejemplo, mediante videoconferencia con opción de llamada telefonica. Los participantes en el caso deben asistir a la audiencia para que su testimonio escrito se convierta en prueba. Después de la audiencia, el juez de SOAH brindará a los Comisionados de la PUCT una recomendación sobre la ruta propuesta para la línea de transmisión.

Los Comisionados de la PUCT no están obligados por la recomendación del juez de la SOAH al seleccionar una ruta para la línea de transmisión. Los Comisionados de la PUCT emitirán una decisión final en una reunión pública a la que podrán asistir los participantes del caso y solicitar declarar. Las reuniones públicas de la PUCT se transmiten en línea. Los Comisionados de la PUCT pueden y en ocasiones hacen modificaciones a la ruta en respuesta a declaraciones de los propietarios de terrenos. Luego, la empresa que construye la línea de transmisión negociará con los propietarios de terrenos para comprar derechos de servidumbre sobre sus propiedades. La PUCT no determina la cantidad de dinero que se debe pagar a los propietarios por servidumbres u otros derechos de paso.

Hasta que los comisionados de la PUCT tomen una decisión final, los participantes en el caso también negocian para encontrar una ruta que satisfaga a todos. Los Comisionados de la PUCT no están obligados a aprobar una ruta negociada.

Todo el proceso de revisión de ruta de la línea de transmisión de la PUCT puede tardar hasta seis meses.

¿Dónde me dirijo para obtener más información?

La empresa que haya solicitado construir la línea tendrá mapas en su sitio web. Para obtener más información sobre cómo participar en el proceso, comuníquese con la Oficina de Participación Pública de PUCT https://www.puc.texas.gov/agency/about/ope/ o 512-936-7374.

Request to Intervene in PUC Docket No. 57519

The following information must be submitted by the person requesting to intervene in this proceeding. This completed form will be provided to all parties in this docket. **If you DO NOT want to be an intervenor, but still want to file comments, please complete the "Comments" page.**

For USPS, send one copy to:

Public Utility Commission of Texas
Central Records
P.O. Box 13326
Austin, TX 78711-3326

For all other delivery or courier services, send one copy to:

Public Utility Commission of Texas
Central Records
1701 N. Congress Ave.
Austin, TX 78701

First Name:_____ Last Name: _____

Phone Number:_____ Fax Number:_____

Address, City, State:_____

Email Address:_____

I am requesting to intervene in this proceeding. As an INTERVENOR, I understand the following:

- I am a party to the case;
- I am required to respond to all discovery requests from other parties in the case;
- If I file testimony, I may be cross-examined in the hearing;
- If I file any documents in the case, I will have to provide a copy of that document to every other party in the case; and
- I acknowledge that I am bound by the Procedural Rules of the Public Utility Commission of Texas (PUC) and the State Office of Administrative Hearings (SOAH).

Please check one of the following:

☐ I own property with a habitable structure located near one or more of the utility's proposed routes for a transmission line.

☐ One or more of the utility's proposed routes would cross my property.

☐ Other. Please describe and provide comments. You may attach a separate page, if necessary.

_____

_____

_____

Signature of person requesting intervention:

_____ Date: _____

Comments in Docket No. 57519

If you want to be a PROTESTOR only, please complete this form. Although public comments are not treated as evidence, they help inform the PUC and its staff of the public concerns and identify issues to be explored. The PUC welcomes such participation in its proceedings.

For USPS, send one copy to:

Public Utility Commission of Texas
Central Records
P.O. Box 13326
Austin, TX 78711-3326

For all other delivery or courier services, send one copy to:

Public Utility Commission of Texas
Central Records
1701 N. Congress Ave.
Austin, TX 78701

First Name: _____ Last Name: _____

Phone Number: _____ Fax Number: _____

Address, City, State: _____

I am NOT requesting to intervene in this proceeding. As a PROTESTOR, I understand the following:

- I am NOT a party to this case;
- My comments are not considered evidence in this case; and
- I have no further obligation to participate in the proceeding.

Please check one of the following:

☐ I own property with a habitable structure located near one or more of the utility's proposed routes for a transmission line.

☐ One or more of the utility's proposed routes would cross my property.

☐ Other. Please describe and provide comments. You may attach a separate page, if necessary. _____

_____

_____

_____

_____

Signature of person submitting comments:

_____ Date: _____

THE STATE OF TEXAS

LANDOWNER'S BILL OF RIGHTS

This Landowner's Bill of Rights applies to any attempt to condemn your property. The contents of this Bill of Rights are set out by the Texas Legislature in Texas Government Code section 402.031 and chapter 21 of the Texas Property Code. Any entity exercising eminent domain authority must provide a copy of this Bill of Rights to you.

1. You are entitled to receive adequate compensation if your property is condemned.
2. Your property can only be condemned for a public use.
3. Your property can only be condemned by a governmental entity or private entity authorized by law to do so.
4. The entity that wants to acquire your property must notify you that it intends to condemn your property.
5. The entity proposing to acquire your property must provide you with a written appraisal from a certified appraiser detailing the adequate compensation you are owed for your property.
6. If you believe that a registered easement or right-of-way agent acting on behalf of the entity that wants to acquire your property has engaged in misconduct, you may file a written complaint with the Texas Real Estate Commission (TREC) under section 1101.205 of the Texas Occupations Code. The complaint should be signed and may include any supporting evidence.
7. The condemning entity must make a bona fide offer to buy the property before it files a lawsuit to condemn the property—meaning the condemning entity must make a good faith offer that conforms with chapter 21 of the Texas Property Code.
8. You may hire an appraiser or other professional to determine the value of your property or to assist you in any condemnation proceeding.
9. You may hire an attorney to negotiate with the condemning entity and to represent you in any legal proceedings involving the condemnation.
10. Before your property is condemned, you are entitled to a hearing before a court-appointed panel of three special commissioners. The special commissioners must determine the amount of compensation the condemning entity owes for condemning your property. The commissioners must also determine what compensation, if any, you are entitled to receive for any reduction in value of your remaining property.
11. If you are unsatisfied with the compensation awarded by the special commissioners, or if you question whether the condemnation of your property was proper, you have the right to a trial by a judge or jury. You may also appeal the trial court's judgment if you are unsatisfied with the result.

PREPARED BY THE OFFICE OF THE ATTORNEY GENERAL OF TEXAS • JANUARY 2022

CONDEMNATION PROCEDURE

Eminent domain is the legal authority certain governmental and private entities have to condemn private property for public use in exchange for adequate compensation. Only entities authorized by law to do so may condemn private property. Private property can include land and certain improvements that are on that property.

WHO CAN I HIRE TO HELP ME?

You can hire an appraiser or real estate professional to help you determine the value of your property as well as an attorney to negotiate with a condemning entity or to represent you during condemnation proceedings.

WHAT QUALIFIES AS A PUBLIC PURPOSE OR USE?

Your property may be condemned only for a purpose or use that serves the general public. This could include building or expanding roadways, public utilities, parks, universities, and other infrastructure serving the public. Texas law does not allow condemning authorities to exercise eminent domain for tax revenue or economic development.

WHAT IS ADEQUATE COMPENSATION?

Adequate compensation typically means the market value of the property being condemned. It could also include certain damages if your remaining property's market value is diminished by the condemnation or the public purpose for which it is being condemned.

OTHER THAN ADEQUATE COMPENSATION, WHAT OTHER COMPENSATION COULD I BE OWED?

If you are displaced from your residence or place of business, you may be entitled to reimbursement for reasonable expenses incurred while moving to a new site. However, reimbursement costs may not be available if those expenses are recoverable under another law. Also, reimbursement costs are capped at the market value of the property.

WHAT DOES A CONDEMNOR HAVE TO DO BEFORE CONDEMNING MY PROPERTY?

- Provide you a copy of this Landowner's Bill of Rights before, or at the same time as, the entity first represents that it possesses eminent domain authority. It is also required to send this Landowner's Bill of Rights to the last known address of the person listed as the property owner on the most recent tax roll at least seven days before making its final offer to acquire the property.
  - If the condemnor seeks to condemn a right-of-way easement for a pipeline or electric transmission line and is a private entity, the condemnor must also provide you a copy of the Landowner's Bill of Right's addendum.
  - The addendum describes the standard terms required in an instrument conveying property rights (such as a deed transferring title or an easement spelling out the easement rights) and what terms you can negotiate.
- Make a bona fide offer to purchase the property. This process is described more fully in chapter 21 of the Texas Property Code. A "bona fide offer" involves both an initial written offer as well as a final written offer.
  - The initial written offer must include:
    - a copy of the Landowner's Bill of Rights and addendum (if applicable);
    - either a large-font, bold-print statement saying whether the offered compensation includes damages to the remainder of your remaining property or a formal appraisal of the property that identifies any damages to the remaining property (if any);
    - the conveyance instrument (such as an easement or deed); and
    - the name and telephone number of an employee, affiliate, or legal representative of the condemning entity.
  - The final written offer must be made at least 30 days after the initial written offer and must include, if not previously provided:
    - compensation equal to or more than the amount listed in a written, certified appraisal that is provided to you;
    - copies of the conveyance instrument; and
    - the Landowner's Bill of Rights.
- Disclose any appraisal reports. When making its initial offer, the condemning entity must share its appraisal reports that relate to the property from the past 10 years. You have the right to discuss the offer with others and to either accept or reject the offer made by the condemning entity.

WHAT IF I DO NOT ACCEPT AN OFFER BY THE CONDEMNING AUTHORITY?

The condemnor must give you at least 14 days to consider the final offer before filing a lawsuit to condemn your property, which begins the legal condemnation process.

HOW DOES THE LEGAL CONDEMNATION PROCESS START?

The condemnor can start the legal condemnation process by filing a lawsuit to acquire your property in the appropriate court of the county where the property is located. When filing the petition, the condemnor must send you a copy of the petition by certified mail, return receipt requested, and first class mail. It must also send a copy to your attorney if you are represented by counsel.

WHAT DOES THE CONDEMNOR HAVE TO INCLUDE IN THE LAWSUIT FILED WITH THE COURT?

The lawsuit must describe the property being condemned and state the following: the public use; your name; that you and the condemning entity were unable to agree on the value of the property; that the condemning entity gave you the Landowner's Bill of Rights; and that the condemning entity made a bona fide offer to voluntarily purchase the property from you.

SPECIAL COMMISSIONERS' HEARING AND AWARD

No later than 30 days after the condemning entity files a condemnation lawsuit in court, the judge will appoint three local landowners to serve as special commissioners and two alternates. The judge will promptly give the condemnor a signed order appointing the special commissioners and the condemnor must give you, your lawyer, and other parties a copy of the order by certified mail, return receipt requested. The special commissioners will then schedule a condemnation hearing at the earliest practical time and place and to give you written notice of the hearing.

WHAT DO THE SPECIAL COMMISSIONERS DO?

The special commissioners' job is to decide what amount of money is adequate to compensate you for your property. The special commissioners will hold a hearing where you and other interested parties may introduce evidence. Then the special commissioners will determine the amount of money that is adequate compensation and file their written decision, known as an "Award," in the court with notice to all parties. Once the Award is filed, the condemning entity may take possession and start using the property being condemned, even if one or more parties object to the Award of the special commissioners.

ARE THERE LIMITATIONS ON WHAT THE SPECIAL COMMISSIONERS CAN DO?

Yes. The special commissioners are tasked only with determining monetary compensation for the value of the property condemned and the value of any damages to the remaining property. They do not decide whether the condemnation is necessary or if the public use is proper. Further, the special commissioners do not have the power to alter the terms of an easement, reduce the size of the land acquired, or say what access will be allowed to the property during or after the condemnation. The special commissioners also cannot determine who should receive what portion of the compensation they award. Essentially, the special commissioners are empowered only to say how much money the condemnor should pay for the land or rights being acquired.

WHO CAN BE A SPECIAL COMMISSIONER?

Special commissioners must be landowners and residents in the county where the condemnation proceeding is filed, and they must take an oath to assess the amount of adequate compensation fairly, impartially, and according to the law.

WHAT IF I WANT TO OBJECT TO A SPECIAL COMMISSIONER?

The judge must provide to the parties the names and contact information of the special commissioners and alternates. Each party will have up to 10 days after the date of the order appointing the special commissioners or 20 days after the date the petition was filed, whichever is later, to strike one of the three special commissioners. If a commissioner is struck, an alternate will serve as a replacement. Another party may strike a special commissioner from the resulting panel within three days after the date the initial strike was filed or the date of the initial strike deadline, whichever is later.

WHAT WILL HAPPEN AT THE SPECIAL COMMISSIONERS' HEARING?

The special commissioners will consider any evidence (such as appraisal reports and witness testimony) on the value of your condemned property, the damages or value added to remaining property that is not being condemned, and the condemning entity's proposed use of the property.

WHAT ARE MY RIGHTS AT THE SPECIAL COMMISSIONERS' HEARING?

You have the right to appear or not appear at the hearing. If you do appear, you can question witnesses or offer your own evidence on the value of the property. The condemning entity must give you all existing appraisal reports regarding your property used to determine an opinion of value at least three days before the hearing. If you intend to use appraisal reports to support your claim about adequate compensation, you must provide them to the condemning entity 10 days after you receive them or three business days before the hearing, whichever is earlier.

DO I HAVE TO PAY FOR THE SPECIAL COMMISSIONERS' HEARING?

If the special commissioners' award is less than or equal to the amount the condemning entity offered to pay before the proceedings began, then you may be financially responsible for the cost of the condemnation proceedings. But, if the award is more than the condemning entity offered to pay before the proceedings began, then the condemning entity will be responsible for the costs.

WHAT DOES THE CONDEMNOR NEED TO DO TO TAKE POSSESSION OF THE PROPERTY?

Once the condemning entity either pays the amount of the award to you or deposits it into the court's registry, the entity may take possession of the property and put the property to public use. Non-governmental condemning authorities may also be required to post bonds in addition to the award amount. You have the right to withdraw funds that are deposited into the registry of the court, but when you withdraw the money, you can no longer challenge whether the eminent domain action is valid—only whether the amount of compensation is adequate.

OBJECTING TO THE SPECIAL COMMISSIONERS' AWARD

If you, the condemning entity, or any other party is unsatisfied with the amount of the award, that party can formally object. The objection must be filed in writing with the court and is due by the first Monday following the 20th day after the clerk gives notice that the commissioners have filed their award with the court. If no party timely objects to the special commissioners' award, the court will adopt the award amount as the final compensation due and issue a final judgment in absence of objection.

WHAT HAPPENS AFTER I OBJECT TO THE SPECIAL COMMISSIONERS' AWARD?

If a party timely objects, the court will hear the case just like other civil lawsuits. Any party who objects to the award has the right to a trial and can elect whether to have the case decided by a judge or jury.

WHO PAYS FOR TRIAL?

If the verdict amount at trial is greater than the amount of the special commissioners' award, the condemnor may be ordered to pay costs. If the verdict at trial is equal to or less than the amount the condemnor originally offered, you may be ordered to pay costs.

IS THE TRIAL VERDICT THE FINAL DECISION?

Not necessarily. After trial any party may appeal the judgment entered by the court.

DISMISSAL OF THE CONDEMNATION ACTION

A condemnation action may be dismissed by either the condemning authority itself or on a motion by the landowner.

WHAT HAPPENS IF THE CONDEMNING AUTHORITY NO LONGER WANTS TO CONDEMN MY PROPERTY?

If a condemning entity decides it no longer needs your condemned property, it can file a motion to dismiss the condemnation proceeding. If the court grants the motion to dismiss, the case is over, and you can recover reasonable and necessary fees for attorneys, appraisers, photographers, and for other expenses up to that date.

WHAT IF I DO NOT THINK THE CONDEMNING ENTITY HAS THE RIGHT TO CONDEMN MY PROPERTY?

You can challenge the right to condemn your property by filing a motion to dismiss the condemnation proceeding. For example, a landowner could challenge the condemning entity's claim that it seeks to condemn the property for a public use. If the court grants the landowner's motion, the court may award the landowner reasonable and necessary fees and expenses incurred to that date.

CAN I GET MY PROPERTY BACK IF IT IS CONDEMNED BUT NEVER PUT TO A PUBLIC USE?

You may have the right to repurchase your property if your property is acquired through eminent domain and:

- the public use for which the property was acquired is canceled before that property is put to that use,
- no actual progress is made toward the public use within 10 years, or
- the property becomes unnecessary for public use within 10 years.

The repurchase price is the price you were paid at the time of the condemnation.

ADDITIONAL RESOURCES AND ADDENDA

For more information about the procedures, timelines, and requirements outlined in this document, see chapter 21 of the Texas Property Code. An addenda discussing the terms required for an instrument of conveyance under Property Code section 21.0114(c), and the conveyance terms that a property owner may negotiate under Property Code section 21.0114(d), is attached to this statement.

The information in this statement is intended to be a summary of the applicable portions of Texas state law as required by HB 1495, enacted by the 80th Texas Legislature, Regular Session, and HB 2730, enacted by the 87th Texas Legislature, Regular Session. This statement is not legal advice and is not a substitute for legal counsel.

ADDENDUM A:

Required Terms for an Instrument Conveying a Pipeline Right-of-Way Easement or an Easement Related to Pipeline Appurtenances[1]

(1) The maximum number of pipelines that may be installed in the right-of-way acquired through this instrument is _____.

(2) The types of pipeline appurtenances that are authorized to be installed under this instrument for pipeline-related appurtenances, such as pipes, valves, compressors, pumps, meters, pigging stations, dehydration facilities, electric facilities, communication facilities, and any other appurtenances that may be necessary or desirable in connection with a pipeline, are described as follows: _____.

(3) The maximum diameter, excluding any protective coating or wrapping, of each pipeline to be initially installed under this instrument for a pipeline right-of-way is _____.

(4) For each pipeline to be installed under this instrument, the type or category of substances permitted to be transported through each pipeline is _____.

(5) Any aboveground equipment or facility that Grantee[2] intends to install, maintain, or operate under this instrument on the surface of the pipeline easement is described as follows: _____.

(6) A description or illustration of the location of the easement, including a metes and bounds or centerline description, plat, or aerial or other map-based depiction of the location of the easement on the property, is attached as Exhibit _____.

(7) The maximum width of the easement under this instrument is _____.

(8) For each pipeline to be installed under this instrument, the minimum depth at which the pipeline will initially be installed is _____.

(9) The entity installing pipeline(s) under this instrument: (check one)

- ☐ intends to double-ditch areas of the pipeline easement that are not installed by boring or horizontal directional drilling.
- ☐ does not intend to double-ditch areas of the pipeline easement that are not installed by boring or horizontal directional drilling.

(10) Grantee shall provide written notice to Grantor[3], at the last known address of the person in whose name the property is listed on the most recent tax roll of any taxing unit authorized to levy property taxes against the property, if and when Grantee assigns any interest conveyed under this instrument to another entity, provided that this provision does not require notice by Grantee for assignment to an affiliate or to a successor through merger, consolidation, or other sale or transfer of all or substantially all of its assets and businesses.

(11) The easement rights conveyed by this instrument are: (check one)

- ☐ exclusive.
- ☐ nonexclusive.

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1 The easement terms listed in this addendum may be amended, altered, or omitted by the agreement of the condemning authority and the landowner, pursuant to Sections 21.0114(d), (e), and (f) of the Texas Property Code.

2 "Grantee" is the private entity, as defined by Section 21.0114(a) of the Texas Property Code, that is acquiring the pipeline easement.

3 "Grantor" is the property owner from whom the Grantee is acquiring the pipeline easement.

(12) Grantee may not grant to a third party access to the easement area for a purpose that is not related to one of the following: the construction, safety, repair, maintenance, inspection, replacement, operation, or removal of each pipeline to be installed under this instrument or of pipeline appurtenances to be installed under this instrument.

(13) Grantor: (check one)

- ☐ may recover from Grantee actual monetary damages, if any, arising from the construction and installation of each pipeline to be installed under this instrument.
- ☐ acknowledges that the consideration paid for the easement acquired under this instrument includes monetary damages, if any, arising from the construction and installation of each pipeline to be installed under this instrument.

(14) After initial construction and installation of each pipeline installed under this instrument, Grantor: (check one)

- ☐ may recover from Grantee actual monetary damages, if any, arising from the repair, maintenance, inspection, replacement, operation, or removal of each pipeline to be installed under this instrument.
- ☐ acknowledges that the consideration paid for the easement acquired under this instrument includes monetary damages, if any, arising from the repair, maintenance, inspection, replacement, operation, or removal of each pipeline to be installed under this instrument.

(15) Grantor: (check one)

- ☐ and Grantee agree, with regard to Grantee's removal, cutting, use, repair, and replacement of gates and fences that cross the easement or that will be used by Grantee under this instrument, that Grantee will access and secure the easement acquired under this instrument as follows: _____.
- ☐ may recover from Grantee payment for monetary damages, if any, caused by Grantee to gates and fences, if any, to the extent that the gates or fences are not restored or paid for as part of the consideration paid for the instrument.
- ☐ acknowledges that the consideration paid for the easement acquired under this instrument includes monetary damages, if any, caused by Grantee to gates and fences.

(16) With regard to restoring the pipeline easement area acquired under this instrument and Grantor's remaining property used by Grantee to as near to original condition as is reasonably practicable and maintaining the easement in a manner consistent with the purposes for which the easement is to be used under this instrument: (check one)

- ☐ Grantee will be responsible for the restoration.
- ☐ Grantee will reimburse Grantor for monetary damages that arise from damage to the pipeline easement area or the Grantor's remaining property, if any, caused by the Grantee and not restored or paid for as part of the consideration for the instrument.
- ☐ acknowledges that the consideration paid for the easement acquired under this instrument includes monetary damages, if any, caused by Grantee to the pipeline easement area or the Grantor's remaining property.

(17) Grantee's rights of ingress, egress, entry, and access on, to, over, and across Grantor's property under this instrument are described as follows: _____.

(18) Grantee may not make use of the property rights acquired by this instrument, other than as provided by this instrument, without the express written consent of Grantor.

(19) The terms of this instrument bind the heirs, successors, and assigns of Grantor and Grantee.

ADDENDUM B:

Required Terms for an Instrument Conveying an Electric Transmission Line Right-of-Way Easement[4]

(1) The uses of the surface of the property to be encumbered by the electric transmission line right-of-way easement acquired by Grantee[5] under this instrument are generally described as follows: _____.

(2) A description or illustration of the location of the electric transmission line right-of-way easement, including a metes and bounds or centerline description, plat, or aerial or other map-based depiction of the location of the easement on the property, is attached as Exhibit _____.

(3) The maximum width of the electric transmission line right-of-way easement acquired by this instrument is _____.

(4) Grantee will access the electric transmission line right-of-way easement acquired under this instrument in the following manner: _____.

(5) Grantee may not grant to a third party access to the electric transmission line right-of-way easement area for a purpose that is not related to the construction, safety, repair, maintenance, inspection, replacement, operation, or removal of the electric and appurtenant facilities installed under this instrument.

(6) Grantor[6]: (check one)

- ☐ may recover from Grantee actual monetary damages, if any, arising from the construction, operation, repair, maintenance, inspection, replacement, and future removal of lines and support facilities after initial construction in the easement, if any.
- ☐ acknowledges that the consideration paid for the easement acquired under this instrument includes monetary damages, if any, arising from the construction, operation, repair, maintenance, inspection, replacement, and future removal of lines and support facilities after initial construction in the easement.

(7) Grantor: (check one)

- ☐ and Grantee agree, with regard to Grantee's removal, cutting, use, repair, and replacement of gates and fences that cross the easement or that will be used by Grantee under this instrument, that Grantee will access and secure the easement acquired under this instrument as follows: _____
- ☐ may recover from Grantee payment for monetary damages, if any, caused by Grantee to gates and fences, if any, to the extent that the gates or fences are not restored or paid for as part of the consideration paid for the instrument.
- ☐ acknowledges that the consideration paid for the easement acquired under this instrument includes monetary damages, if any, caused by Grantee to gates and fences.

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4 The easement terms listed in this addendum may be amended, altered, or omitted by the agreement of the condemning authority and the landowner, pursuant to Sections 21.0114(d), (e), and (f) of the Texas Property Code.

5 "Grantee" is the private entity, as defined by Section 21.0114(a) of the Texas Property Code, that is acquiring the electric transmission line right-of-way easement.

6 "Grantor" is the property owner from whom the Grantee is acquiring the electric transmission line right-of-way easement.

(8) Grantee shall restore the easement area and Grantor's remaining property to their original contours and grades, to the extent reasonably practicable, unless Grantee's safety or operational needs and the electric facilities located on the easement would be impaired. With regard to restoring the electric transmission line right-of-way easement area acquired under this instrument and Grantor's remaining property used by Grantee to as near to original condition as is reasonably practicable following future damages, if any, directly attributed to Grantee's use of the easement: (check one)

- ☐ Grantee will be responsible for the restoration, unless the safety or operational needs of Grantee and the electric facilities would be impaired.
- ☐ Grantor acknowledges that the consideration paid for the easement acquired under this instrument includes future damages, if any, caused by Grantee to the easement area or the Grantor's remaining property.

(9) The easement rights acquired under this instrument are: (check one)

- ☐ exclusive.
- ☐ nonexclusive.
- ☐ otherwise limited under the terms of the instrument as follows: _____.

(10) Grantee may not assign Grantee's interest in the property rights acquired under this instrument to an assignee that will not operate as a utility subject to the jurisdiction of the Public Utility Commission of Texas or the Federal Energy Regulatory Commission without written notice to Grantor at the last known address of the person in whose name the property is listed on the most recent tax roll of any taxing unit authorized to levy property taxes against the property.

(11) Grantee may not make use of the property rights acquired by this instrument, other than as provided by this instrument, without the express written consent of Grantor.

(12) The terms of this instrument bind the heirs, successors, and assigns of Grantor and Grantee.

ADDENDUM C:

Optional Terms for an Instrument Conveying a Pipeline Right-of-Way Easement, an Easement Related to Pipeline Appurtenances, or an Electric Transmission Line Right-of-Way Easement[7]

(1) With regard to the specific vegetation described as follows: _____, Grantor[8]: (check one):

- ☐ may recover from Grantee[9] payment for monetary damages, if any, caused by Grantee to the vegetation.
- ☐ Grantor acknowledges that the consideration paid for the easement acquired under this instrument includes monetary damages, if any, caused by Grantee to the vegetation.

(2) With regard to income loss from disruption of existing agricultural production or existing leases based on verifiable loss or lease payments caused by Grantee's use of the easement acquired under this instrument, Grantor: (check one)

- ☐ may recover from Grantee payment for monetary damages, if any, caused by Grantee to Grantor's income.
- ☐ Grantor acknowledges that the consideration paid for the easement acquired under this instrument includes monetary damages, if any, caused by Grantee to Grantor's income.

(3) Grantee shall maintain commercial liability insurance or self-insurance at all times, including during Grantee's construction and operations on the easement, while Grantee uses the easement acquired under this instrument. The insurance must insure Grantor against liability for personal injuries and property damage sustained by any person to the extent caused by the negligence of Grantee or Grantee's agents or contractors and to the extent allowed by law. If Grantee maintains commercial liability insurance, it must be issued by an insurer authorized to issue liability insurance in the State of Texas.

(4) If Grantee is subject to the electric transmission cost-of-service rate jurisdiction of the Public Utility Commission of Texas or has a net worth of at least $25 million, Grantee shall maintain commercial liability insurance or self-insurance at levels approved by the Public Utility Commission of Texas in the entity's most recent transmission cost-of-service base rate proceeding.

7 Pursuant to Section 21.0114(d) of the Texas Property Code, in addition to the terms set forth in Addenda A and B, a property owner may negotiate for the inclusion of the terms in this Addendum in any instrument conveying an easement to a private entity, as defined by Section 21.0114(a) of the Texas Property Code. The easement terms listed in this addendum may be amended, altered, or omitted by the agreement of the condemning authority and the landowner, pursuant to Sections 21.0114(d), (e), and (f) of the Texas Property Code.

8 "Grantor" is the property owner from whom the Grantee is acquiring the pipeline or electric transmission line right-of-way easement.

9 "Grantee" is the private entity, as defined by Section 21.0114(a) of the Texas Property Code, that is acquiring the easement.

Application of Oncor Electric Delivery Company LLC to Amend Its Certificate of Convenience and Necessity for the Ranger Camp Switch - Cattleman Switch 345 kV Transmission Line Project in Mitchell County, Texas

PUBLIC UTILITY COMMISSION OF TEXAS DOCKET NO. 57519

DOD Military Aviation and Installation Assurance Siting Clearinghouse, OPUC, County, or Municipal Contact Name

This notice is provided to notify you that Oncor Electric Delivery Company LLC (Oncor) has applied to amend its certificate of convenience and necessity to construct, own, and operate a new double-circuit 345 kilovolt (kV) transmission line to connect the Ranger Camp Switch to the Cattleman Switch in Mitchell County, Texas. The Ranger Camp Switch is located approximately 0.7 miles southwest of the intersection of South Farm-to-Market Road (FM) 1229 and State Highway (SH) 163, near Colorado City. The Cattleman Switch is located approximately 0.8 miles west of the intersection of SH 163 and FM 2836. The length of this project will be approximately 4.2 miles and constructed entirely within right-of-way that has already been acquired for this project. The estimated cost of this project is $32,409,000.

If you have questions about this project, you may contact Jeremy McConnell of Oncor at 214-486-5216.

A detailed routing map may be reviewed at the following location:

Display Location	Address
Mitchell County Court House	349 Oak St., Colorado City, TX 79512

All routes and route segments included in this notice are available for selection and approval by the Public Utility Commission of Texas.

The preferred method for you to file your request for intervention is electronically. If you decide to file an electronic request for intervention, you will be required to serve the request on all other parties by email. Therefore, please include your own email address on the intervention form. Instructions for electronic filing via the "PUC Filer" on the PUC's website can be found at: https://interchange.puc.texas.gov/filer. Instructions for using the PUC Filer are available at: https://ftp.puc.texas.gov/public/puct-info/industry/filings/E-Filing_Instructions.pdf. For assistance with your electronic filing, please contact the PUC's Help Desk at (512) 936-7100 or helpdesk@puc.texas.gov. You can review materials filed in this docket on the PUC Interchange at: http://interchange.puc.texas.gov.

While the preferred method for submitting a request for intervention is electronically, you may file your request for intervention by mailing a hard copy of your request to the PUC. Any request must be received by the intervention deadline of **March 10, 2025**. If you are not filing your request for intervention electronically, mail the request for intervention and 10 copies of the request to:

Public Utility Commission of Texas
Central Records
Attn: Filing Clerk
1701 N. Congress Avenue
P.O. Box 13326
Austin, Texas 78711-3326

Persons who wish to intervene in the docket must also email or mail a copy of their request for intervention to all parties in the docket and all persons that have pending motions to intervene, at or before the time the request for intervention is electronically filed with, or mailed to, the PUC. ***The only way to fully participate in the PUC's decision on where to locate the transmission line is to intervene in this docket. It is important for an affected person to intervene because the utility is not obligated to keep affected persons informed of the PUC's proceedings and cannot predict which route may or may not be approved by the PUC.***

The deadline for intervention in the docket is **March 10, 2025**, and the PUC must receive your request to intervene by that date if you choose to do so.

The PUC has a guide titled "Guide for Landowners Affected by a New Electric Transmission Line Route." Copies of the guide may be requested by contacting Jeremy McConnell of Oncor at (214) 486-5216 or may be downloaded from the PUC's website at: www.puc.state.tx.us. To obtain additional information about this docket, you may contact the PUC's Customer Assistance Hotline at (512) 936-7120 or (888) 782-8477. Hearing- and speech-impaired individuals may contact the Commission through Relay Texas at 1-800-735-2989. In addition to the intervention deadline, other important deadlines may exist that affect your participation in this docket. You should review the orders and other filings made in the docket.

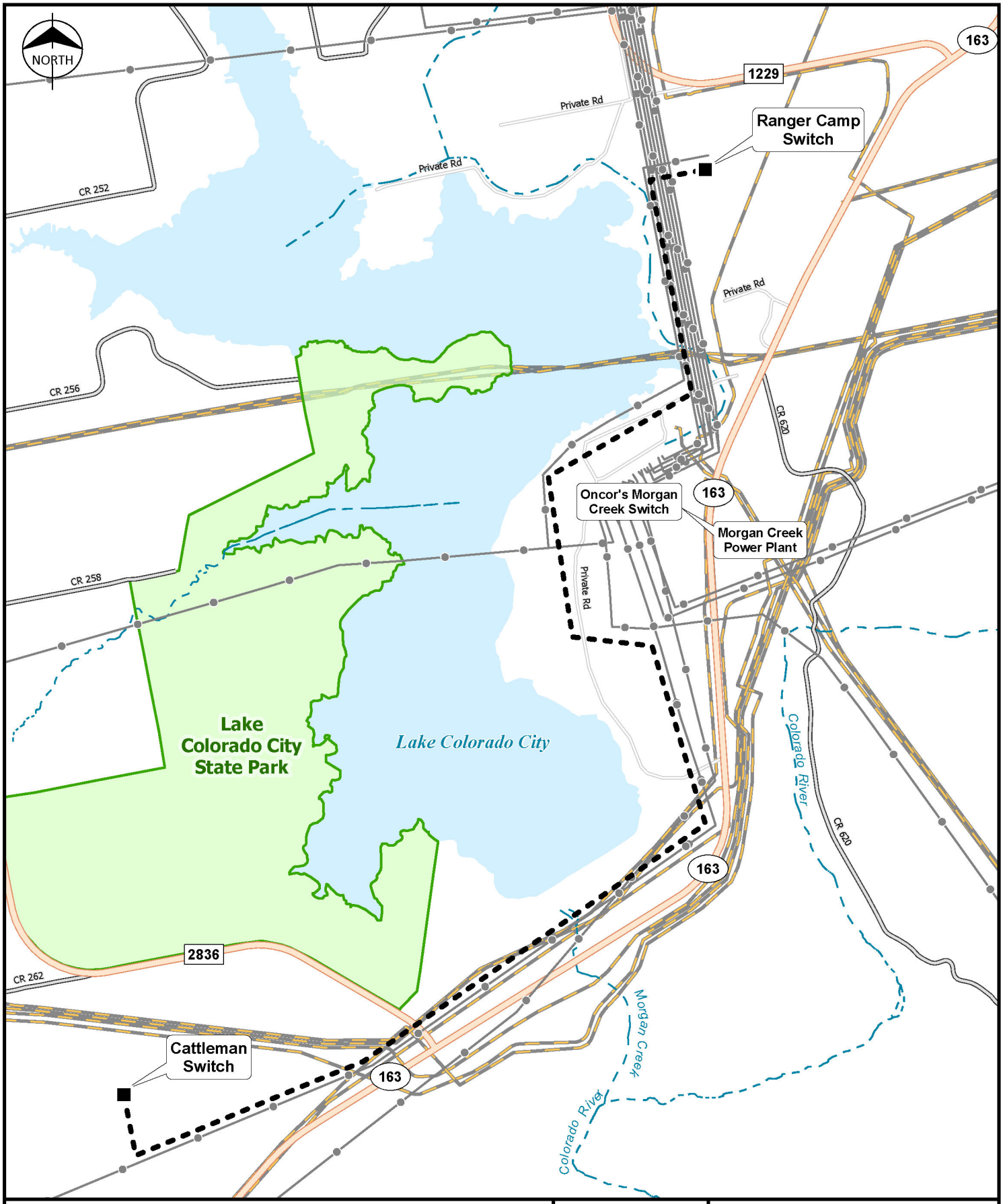
Enclosures:

- Route Description and Map

Ranger Camp Switch to Cattleman Switch 345 kV Transmission Line Project
Route Description

Route length (22,193 feet)

The proposed route begins at the Ranger Camp Switch (under construction) located approximately 0.7 miles southwest of the intersection of South Farm-to-Market Road (FM) 1229 and State Highway (SH) 163 in Mitchell County, Texas. From this location, the route proceeds in a west-southwesterly direction approximately 782 feet, crossing seven existing Oncor transmission lines, to an angle point. From this angle point, the route proceeds in a south-southeasterly direction approximately 3,033 feet paralleling an existing Oncor transmission line corridor. This segment crosses two refined product pipelines, one liquid pipeline, and an unnamed stream. From this angle point, the route proceeds in a southwesterly direction, paralleling the south side an existing Oncor transmission line approximately 2,313 feet, to an angle point. From this angle point, the route proceeds in a south-southeasterly direction paralleling the east side of an existing Oncor transmission line approximately 1,033 feet, crossing an existing Oncor transmission line. Here the route continues approximately 1,225 feet, paralleling the west side of a private road to an angle point. From this angle point, the route proceeds in an east-southeasterly direction approximately 1,115 feet, to an angle point. From this angle point, the route proceeds in a south-southeasterly direction, paralleling the west side of an existing Oncor transmission line, approximately 2,580 feet, to an angle point. This segment crosses one natural gas pipeline, one liquid pipeline, and an existing Oncor transmission line. From this angle point, the route proceeds in a southwesterly direction, paralleling the north side of an existing Oncor transmission line, approximately 5,812 feet, to a slight angle point. This segment crosses an existing Oncor transmission line, Morgan Creek, FM 2836, and contains nine pipeline crossings (six liquid and three natural gas). From this slight angle point, the route proceeds in a southwesterly direction, paralleling the north side of an existing Oncor transmission line, approximately 3,432 feet, to an angle point. This segment crosses two liquid pipelines. From this angle point, the route proceeds in a north-northwesterly direction approximately 868 feet, to the terminus at Oncor's Cattleman Switch (under construction), located approximately 0.8 miles west of the intersection of SH 163 and FM 2836.



Ranger Camp Switch to Cattleman Switch 345 kV Transmission Line
Project Endpoint
3DHP Flowline Creek or Stream
Existing Transmission Line
Pipeline - 8" or greater diameter
State Park

0 900 1,800
US Feet

ONCOR
BURNS McDONNELL

Detailed Route Description Map
Ranger Camp Switch
to Cattleman Switch
345 kV Transmission Line
Oncor Electric Delivery
Company LLC
Mitchell County, Texas

Source: ESRI; USGS 3DHP (formerly NHD); TPWD; RRC; Burns & McDonnell Engineering Company, Inc

Issued: 12/12/2024

Application of Oncor Electric Delivery Company LLC to Amend Its Certificate of Convenience and Necessity for the Ranger Camp Switch - Cattleman Switch 345 kV Transmission Line Project in Mitchell County, Texas

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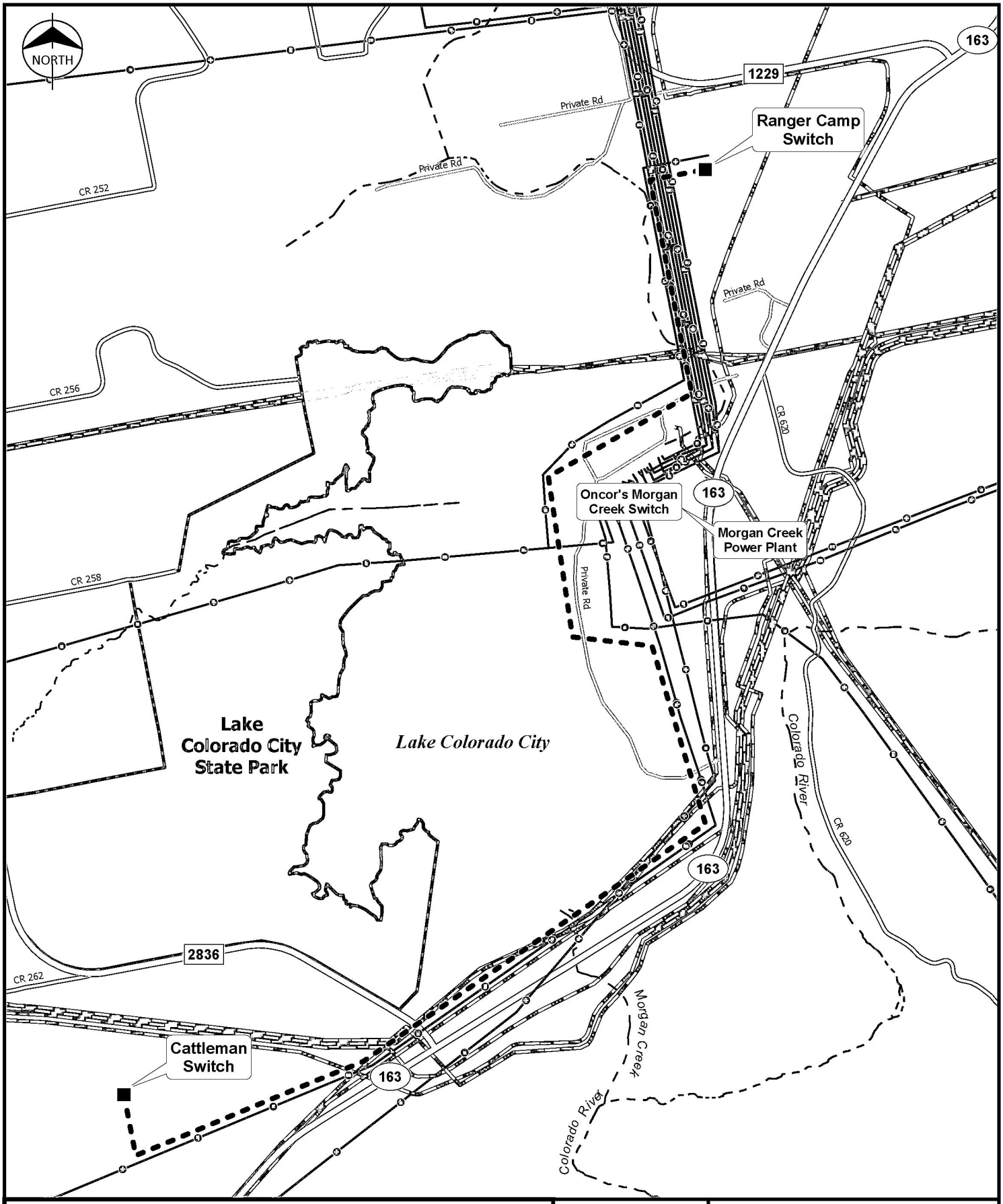
Ranger Camp Switch to Cattleman Switch 345 kV Transmission Line Project
Route Description

Route length (22,193 feet)

The proposed route begins at the Ranger Camp Switch (under construction) located approximately 0.7 miles southwest of the intersection of South Farm-to-Market Road (FM) 1229 and State Highway (SH) 163 in Mitchell County, Texas. From this location, the route proceeds in a west-southwesterly direction approximately 782 feet, crossing seven existing Oncor transmission lines, to an angle point. From this angle point, the route proceeds in a south-southeasterly direction approximately 3,033 feet paralleling an existing Oncor transmission line corridor. This segment crosses two refined product pipelines, one liquid pipeline, and an unnamed stream. From this angle point, the route proceeds in a southwesterly direction, paralleling the south side an existing Oncor transmission line approximately 2,313 feet, to an angle point. From this angle point, the route proceeds in a south-southeasterly direction paralleling the east side of an existing Oncor transmission line approximately 1,033 feet, crossing an existing Oncor transmission line. Here the route continues approximately 1,225 feet, paralleling the west side of a private road to an angle point. From this angle point, the route proceeds in an east-southeasterly direction approximately 1,115 feet, to an angle point. From this angle point, the route proceeds in a south-southeasterly direction, paralleling the west side of an existing Oncor transmission line, approximately 2,580 feet, to an angle point. This segment crosses one natural gas pipeline, one liquid pipeline, and an existing Oncor transmission line. From this angle point, the route proceeds in a southwesterly direction, paralleling the north side of an existing Oncor transmission line, approximately 5,812 feet, to a slight angle point. This segment crosses an existing Oncor transmission line, Morgan Creek, FM 2836, and contains nine pipeline crossings (six liquid and three natural gas). From this slight angle point, the route proceeds in a southwesterly direction, paralleling the north side of an existing Oncor transmission line, approximately 3,432 feet, to an angle point. This segment crosses two liquid pipelines. From this angle point, the route proceeds in a north-northwesterly direction approximately 868 feet, to the terminus at Oncor's Cattleman Switch (under construction), located approximately 0.8 miles west of the intersection of SH 163 and FM 2836.



Ranger Camp Switch to Cattleman Switch 345 kV Transmission Line
Project Endpoint
3DHP Flowline Creek or Stream
Existing Transmission Line
Pipeline - 8" or greater diameter
State Park

0 900 1,800
US Feet

ONCOR

BURNS McDONNELL

Detailed Route Description Map
Ranger Camp Switch
to Cattleman Switch
345 kV Transmission Line
Oncor Electric Delivery
Company LLC
Mitchell County, Texas

Source: ESRI; USGS 3DHP (formerly NHD); TPWD; RRC; Burns & McDonnell Engineering Company, Inc

Issued: 12/12/2024

Application of Oncor Electric Delivery Company LLC to Amend Its Certificate of Convenience and Necessity for the Ranger Camp Switch - Cattleman Switch 345 kV Transmission Line Project in Mitchell County, Texas

PUBLIC UTILITY COMMISSION OF TEXAS DOCKET NO. 57519

Pipeline Owner/Operator/Association

This courtesy notice is provided to notify you that Oncor Electric Delivery Company LLC (Oncor) has applied to amend its certificate of convenience and necessity to construct, own, and operate a new double-circuit 345 kilovolt (kV) transmission line to connect the Ranger Camp Switch to the Cattleman Switch in Mitchell County, Texas. The Ranger Camp Switch is located approximately 0.7 miles southwest of the intersection of South Farm-to-Market Road (FM) 1229 and State Highway (SH) 163, near Colorado City. The Cattleman Switch is located approximately 0.8 miles west of the intersection of SH 163 and FM 2836. The length of this project will be approximately 4.2 miles and constructed entirely within right-of-way that has already been acquired for this project. The estimated cost of this project is $32,409,000. Persons with questions about the project may contact Jeremy McConnell of Oncor at 214-486-5216.

A detailed routing map may be reviewed at the following location:

Display Location	Address
Mitchell County Court House	349 Oak St., Colorado City, TX 79512

All routes and route segments included in this notice are available for selection and approval by the Public Utility Commission of Texas.

The preferred method for you to file your request for intervention is electronically. If you decide to file an electronic request for intervention, you will be required to serve the request on all other parties by email. Therefore, please include your own email address on the intervention form. Instructions for electronic filing via the "PUC Filer" on the PUC's website can be found at: https://interchange.puc.texas.gov/filer. Instructions for using the PUC Filer are available at: https://ftp.puc.texas.gov/public/puct-info/industry/filings/E-Filing_Instructions.pdf. For assistance with your electronic filing, please contact the PUC's Help Desk at (512) 936-7100 or helpdesk@puc.texas.gov. You can review materials filed in this docket on the PUC Interchange at http://interchange.puc.texas.gov.

While the preferred method for submitting a request for intervention is electronically, you may file your request for intervention by mailing a hard copy of your request to the PUC. Any request must be received by the intervention deadline of **March 10, 2025**. If you are not filing your request for intervention electronically, mail the request for intervention and 10 copies of the request to:

Public Utility Commission of Texas
Central Records
Attn: Filing Clerk
1701 N. Congress Avenue
P.O. Box 13326
Austin, Texas 78711-3326

Persons who wish to intervene in the docket must also email or mail a copy of their request for intervention to all parties in the docket and all persons that have pending motions to intervene, at or before the time the request for intervention is electronically filed with, or mailed to, the PUC. ***The only way to fully participate in the PUC's decision on where to locate the transmission line is to intervene in this docket. It is important for an affected person to intervene because the utility is not obligated to keep affected persons informed of the PUC's proceedings and cannot predict which route may or may not be approved by the PUC.***

The deadline for intervention in the docket is **March 10, 2025**, and the PUC must receive your request to intervene by that date if you choose to do so.

The PUC has a guide titled "Guide for Landowners Affected by a New Electric Transmission Line Route." Copies of the guide may be requested by contacting Jeremy McConnell of Oncor at (214) 486-5216 or may be downloaded from the PUC's website at www.puc.state.tx.us. To obtain additional information about this docket, you may contact the PUC's Customer Assistance Hotline at (512) 936-7120 or (888) 782-8477. Hearing- and speech-impaired individuals may contact the Commission through Relay Texas at 1-800-735-2989. In addition to the intervention deadline, other important deadlines may exist that affect your participation in this docket. You should review the orders and other filings made in the docket.

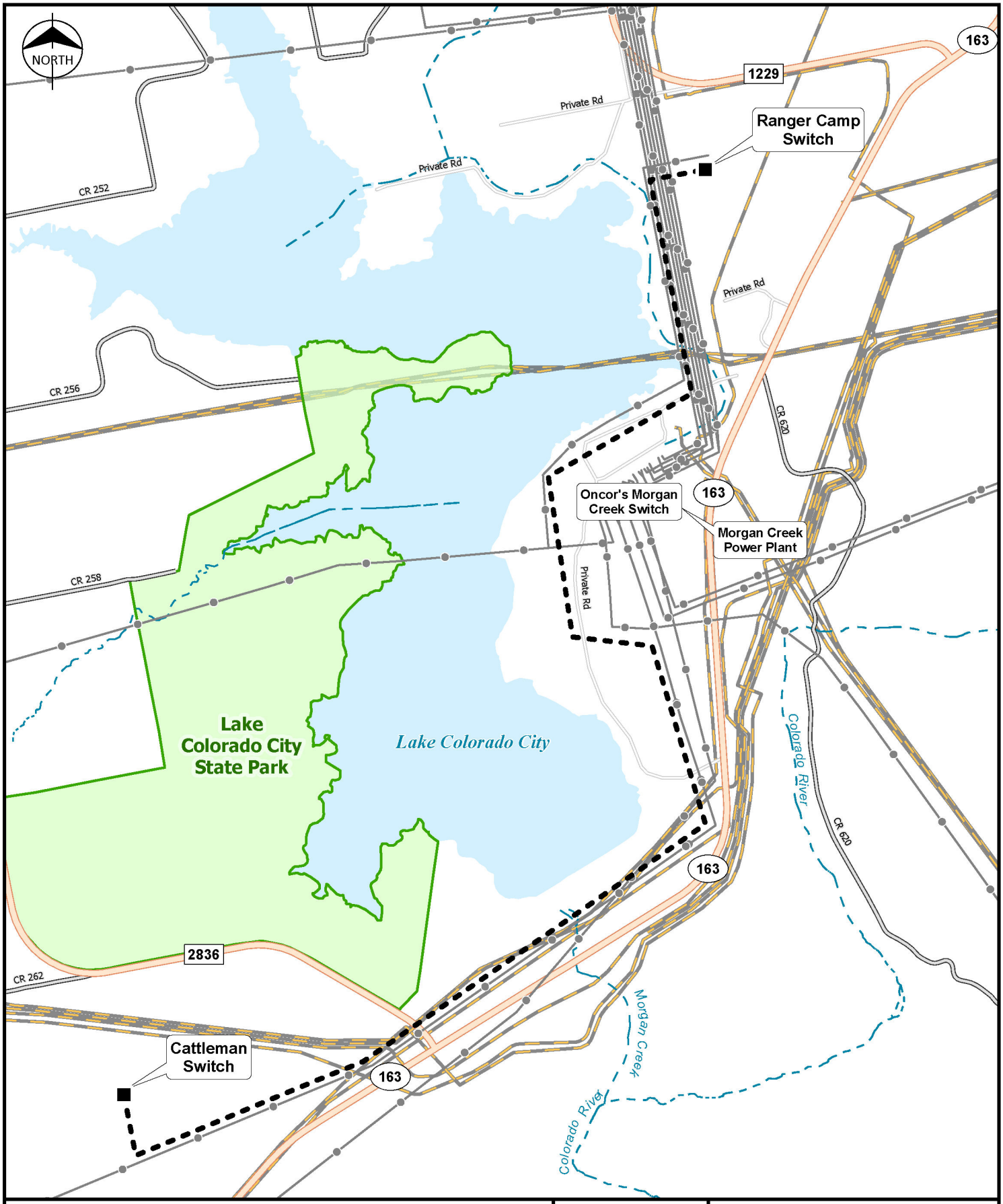
Enclosures:

- Route Description and Map

Ranger Camp Switch to Cattleman Switch 345 kV Transmission Line Project
Route Description

Route length (22,193 feet)

The proposed route begins at the Ranger Camp Switch (under construction) located approximately 0.7 miles southwest of the intersection of South Farm-to-Market Road (FM) 1229 and State Highway (SH) 163 in Mitchell County, Texas. From this location, the route proceeds in a west-southwesterly direction approximately 782 feet, crossing seven existing Oncor transmission lines, to an angle point. From this angle point, the route proceeds in a south-southeasterly direction approximately 3,033 feet paralleling an existing Oncor transmission line corridor. This segment crosses two refined product pipelines, one liquid pipeline, and an unnamed stream. From this angle point, the route proceeds in a southwesterly direction, paralleling the south side an existing Oncor transmission line approximately 2,313 feet, to an angle point. From this angle point, the route proceeds in a south-southeasterly direction paralleling the east side of an existing Oncor transmission line approximately 1,033 feet, crossing an existing Oncor transmission line. Here the route continues approximately 1,225 feet, paralleling the west side of a private road to an angle point. From this angle point, the route proceeds in an east-southeasterly direction approximately 1,115 feet, to an angle point. From this angle point, the route proceeds in a south-southeasterly direction, paralleling the west side of an existing Oncor transmission line, approximately 2,580 feet, to an angle point. This segment crosses one natural gas pipeline, one liquid pipeline, and an existing Oncor transmission line. From this angle point, the route proceeds in a southwesterly direction, paralleling the north side of an existing Oncor transmission line, approximately 5,812 feet, to a slight angle point. This segment crosses an existing Oncor transmission line, Morgan Creek, FM 2836, and contains nine pipeline crossings (six liquid and three natural gas). From this slight angle point, the route proceeds in a southwesterly direction, paralleling the north side of an existing Oncor transmission line, approximately 3,432 feet, to an angle point. This segment crosses two liquid pipelines. From this angle point, the route proceeds in a north-northwesterly direction approximately 868 feet, to the terminus at Oncor's Cattleman Switch (under construction), located approximately 0.8 miles west of the intersection of SH 163 and FM 2836.



Ranger Camp Switch to Cattleman Switch 345 kV Transmission Line
Project Endpoint
3DHP Flowline Creek or Stream
Existing Transmission Line
Pipeline - 8" or greater diameter
State Park

0 900 1,800
US Feet

ONCOR
BURNS McDONNELL

Detailed Route Description Map
Ranger Camp Switch
to Cattleman Switch
345 kV Transmission Line
Oncor Electric Delivery
Company LLC
Mitchell County, Texas

Source: ESRI; USGS 3DHP (formerly NHD); TPWD; RRC; Burns & McDonnell Engineering Company, Inc

Issued: 12/12/2024

Jeremy McConnell
Regulatory Manager
Regulatory Transmission and Planning

February 6, 2025

Mr. Alan Cain – Director of Wildlife
Texas Parks and Wildlife Department
4200 Smith School Road
Austin, Texas 78744

Re: PUC Docket No. 57519—*Application of Oncor Electric Delivery Company LLC to Amend Its Certificate of Convenience and Necessity for the Ranger Camp Switch – Cattleman Switch 345 kV Transmission Line Project in Mitchell County, Texas*

Dear Mr. Cain:

Pursuant to the rules of the Public Utility Commission of Texas ("Commission"), please find enclosed a copy of the aforementioned application and its attachments, including the *Environmental Assessment for the Ranger Camp Switch to Cattleman Switch 345 kV Transmission Line Project in Mitchell County, Texas* ("EA") attached to the application of Oncor Electric Delivery Company LLC ("Oncor") requesting certification for the above-referenced Ranger Camp Switch – Cattleman Switch 345 kV Transmission Line Project filed at the Commission on January 23, 2025, in Commission Docket No. 57519.

This notice is provided to notify you that Oncor has applied to amend its certificate of convenience and necessity to construct, own, and operate a new double-circuit 345 kilovolt transmission line to connect the Ranger Camp Switch to the Cattleman Switch in Mitchell County, Texas. The Ranger Camp Switch is located approximately 0.7 miles southwest of the intersection of South Farm-to-Market Road ("FM") 1229 and State Highway ("SH") 163, near Colorado City, Texas. The Cattleman Switch is located approximately 0.8 miles west of the intersection of SH 163 and FM 2836. The length of this project will be approximately 4.2 miles and constructed entirely within right-of-way that has already been acquired for this project.

The EA provides a detailed description of the data gathered and analyzed by Burns and McDonnell, the environmental and routing consultant retained by Oncor for this project.

Oncor respectfully requests to be copied on any correspondence that TPWD might send to the Commission regarding this project. Please contact me if you have any questions regarding this transmittal or the project.

Sincerely,

Jeremy McConnell
Regulatory Manager

CC w/o attachments:
Therese Harris, Public Utility Commission of Texas
Jaren Taylor, Vinson & Elkins

1616 Woodall Rodgers Freeway, 6A-015
Dallas, Texas 75202
214.486.5216. | Jeremy.McConnell@oncor.com

ATTACHMENT NO. 14

OATH

STATE OF TEXAS §
§
COUNTY OF DALLAS §

I, Jeremy McConnell, being duly sworn, file this application as a Regulatory Manager at Oncor Electric Delivery Company LLC ("Oncor"), and state that, in such capacity, I am qualified and authorized to file and verify such application on behalf of Oncor, am personally familiar with the maps and exhibits filed with this application, and have complied with all the requirements contained in the application; and that all statements made and matters set forth therein and all exhibits attached thereto are true and correct. I further state that this application is made in good faith, that notice of its filing is being provided in accordance with 16 TAC § 22.52(a), and that this application does not duplicate any filing presently before the Commission.

Jeremy McConnell
AFFIANT (Applicant's Authorized Representative)

SUBSCRIBED AND SWORN TO BEFORE ME, a Notary Public in and for the State of Texas, this 3rd day of February, 2025.

Terri Watts
Notary Public
My Commission expires:

TERRI WATTS
Notary Public, State of Texas
Comm. Expires 07-07-2028
Notary ID 1129360-0