May 2025

CPS ENERGY AND AEP TEXAS INC.

Pawnee to Tango 345 kV Transmission Line Rebuild Project
Environmental Assessment and Route Analysis

Karnes and Bee Counties, Texas

PROJECT NUMBER:
256342

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Pawnee to Tango 345 kV Transmission Line Rebuild Project

PREPARED FOR: CPS ENERGY AND AEP TEXAS INC.

PREPARED BY: POWER ENGINEERS, INC.
HOUSTON, TEXAS

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ACRONYMS AND ABBREVIATIONS

AEP Texas	AEP Texas, Inc.
AM radio	Amplitude modulation radio
amsl	above mean sea level
BEG	Bureau of Economic Geology
BGEPA	Bald and Golden Eagle Protection Act
BMP(s)	Best Management Practice(s)
BP	Before Present
CCN	Certificate of Convenience and Necessity
C.F.R.	Code of Federal Regulations
CLF	civilian labor force
CMP	Costal Management Program
CMZ	Coastal Management Zone
CPS Energy	City Public Service Energy
CWA	Clean Water Act
DoD	Department of Defense
EA	Environmental Assessment and Alternative Route Analysis
EAA	Edwards Aquifer Authority
EOR	Element of occurrence record
ERCOT	Electric Reliability Council of Texas
ESA	Endangered Species Act
ESSS	Ecologically Significant Stream Segments
FAA	Federal Aviation Administration
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FM	Farm-to-Market Road
FM radio	Frequency modulation radio
GIS	Geographic Information Systems
GLO	Texas General Land Office
HPA	high probability area
HTC	Historic Texas Cemeteries
IEEE	Institute of Electrical and Electronics Engineers
IH	Interstate Highway
IPaC	Information for Planning and Consultation
ISD	Independent School District

kcmil	thousand circular mils
kV	kilovolt
MBTA	Migratory Bird Treaty Act
MVA	Megavolt-amperes
NAIP	National Agricultural Imagery Program
NCED	National Conservation Easement Database
NEPA	National Environmental Policy Act
NESC	National Electrical Safety Code
NHD	National Hydrography Dataset
NOI	Notice of Intent
NOT	Notice of Termination
NPS	National Park Service
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetland Inventory
NWP	Nationwide Permit
OHP	City of San Antonio Office of Historic Preservation
OPGW	optical ground wire
OSHA	Occupational Safety and Health Administration
OTHM	Official Texas Historical Marker
PEM	palustrine emergent
POWER	POWER Engineers, Inc.
ppt	parts per trillion
Project	Pawnee to Tango 345 kV Transmission Line
PUC	Public Utility Commission of Texas
PURA	Public Utility Regulatory Act
ROW	right-of-way
RRC	Railroad Commission of Texas
RTEST	Rare, Threatened, and Endangered Species of Texas
SAL	State Antiquities Landmark
SAWS	San Antonio Water Systems
SH	State Highway
SHPO	State Historic Preservation Office
SWPPP	Stormwater Pollution Prevention Plan
TAC	Texas Administrative Code
TARL	Texas Archeological Research Laboratory

TASA	Texas Archeological Sites Atlas
TCEQ	Texas Commission on Environmental Quality
THC	Texas Historical Commission
THSA	Texas Historical Sites Atlas
TLC	Texas Land Conservancy
TMDL	total maximum daily load
TNRC	Texas Natural Resource Code
TPWC	Texas Parks and Wildlife Code
TPWD	Texas Parks and Wildlife Department
TSDC	Texas State Data Center
TSS	Texas Speleological Survey
TWDB	Texas Water Development Board
TWSC	Texas Water Science Center
TxDOT	Texas Department of Transportation
TXNDD	Texas Natural Diversity Database
TXR150000	Texas Pollution Discharge Elimination System General Construction Permit
US	United States
USACE	United States Army Corps of Engineers
U.S.C.	United States Code
USCB	United States Census Bureau
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
US Hwy	United States Highway
WOTUS	Waters of the United States

1.0 DESCRIPTION OF THE PROPOSED PROJECT

1.1 Scope of the Project

The City of San Antonio, acting by and through City Public Service Board (CPS Energy) and AEP Texas Inc. (AEP Texas), is evaluating an existing single-circuit 345 kilovolt (kV) transmission line constructed on single-circuit capable lattice and a few double pole steel structures within Karnes and Bee Counties (Figure 1-1) that it intends to rebuild as a double-circuit transmission line per an Electric Reliability Council of Texas (ERCOT) directive. The proposed rebuild of the Pawnee to Tango 345 kV Transmission Line (Project or Project Route) will extend approximately 12 miles from the South Texas Electric Cooperative Pawnee Station, located approximately one mile northwest of Farm-to Market (FM) 882 to the existing AEP Texas Tango Station, located approximately 0.2 mile northeast of FM 673. The right-of-way (ROW) for the existing single-circuit 345 kV transmission line is approximately 125 feet in width on private property and the rebuild double-circuit transmission line is anticipated to remain within the existing ROW for the majority of its length. The Project is anticipated to be in service by the end of 2026.

Because the Project is located outside the municipal boundaries of the City of San Antonio (San Antonio), CPS Energy and AEP Texas are seeking an amendment to their Certificates of Convenience and Necessity (CCNs) from the Public Utility Commission of Texas (PUC) to construct, own, and operate the Project. CPS Energy and AEP Texas contracted with POWER Engineers, Inc. (POWER) to prepare this Environmental Assessment and Route Analysis (EA) for the Project. The EA will support CPS Energy and AEP Texas' joint CCN application to be submitted to PUC (Application). The EA may also be used to support any additional federal, state, or local permitting activities that might be required in association with construction of the Project.

The EA discusses and documents the environmental and land use constraints identified within the Project study area, routing methodologies, and public involvement. The EA additionally provides an evaluation of the route for the Project from an environmental and land-use perspective. CPS Energy and AEP Texas will use the data presented in the EA to address how the route proposed in the Application (the Project Route) best addresses the requirements of the Public Utility Regulatory Act (PURA) and 16 Texas Administrative Code (TAC) § 25.101.

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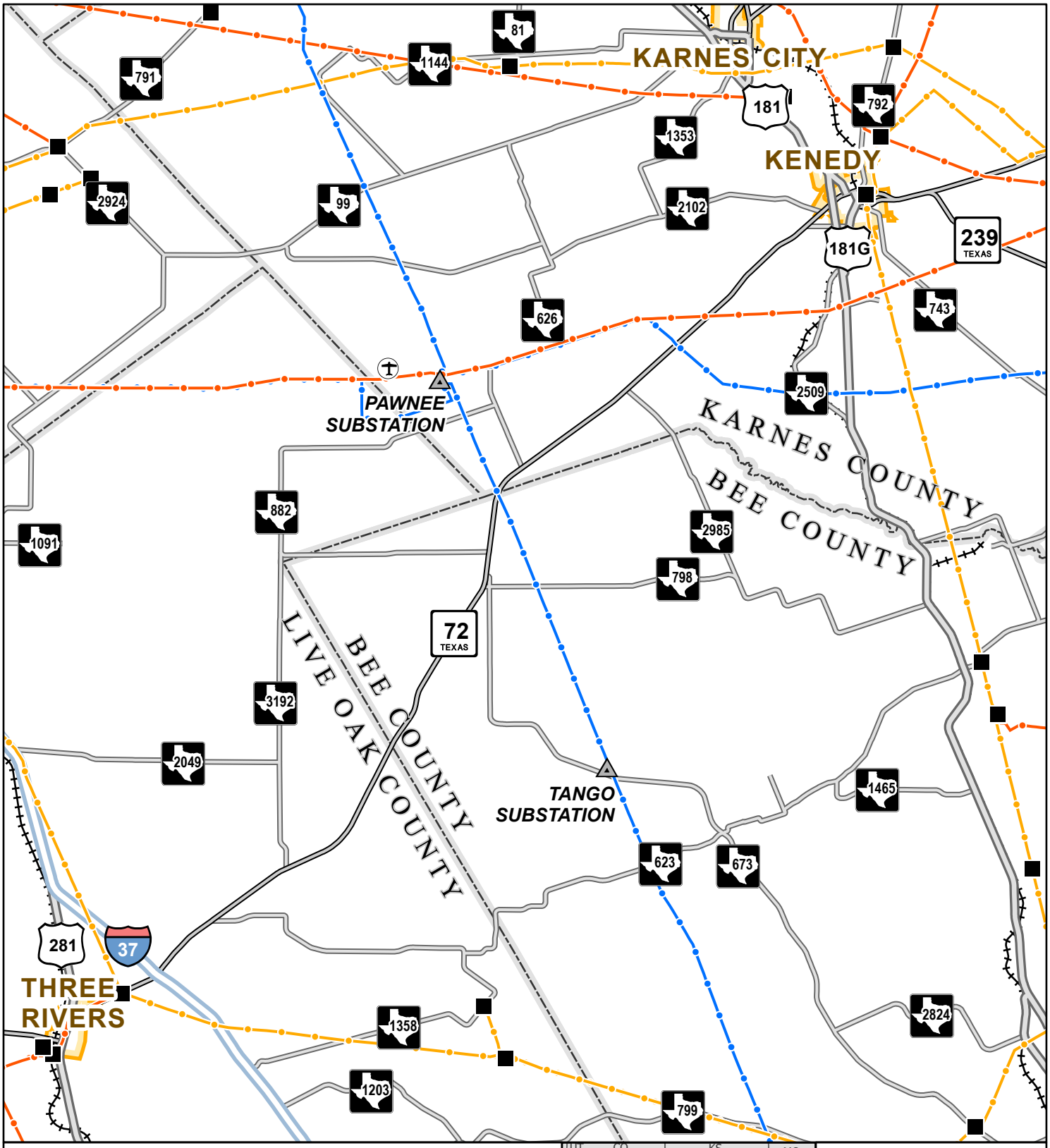
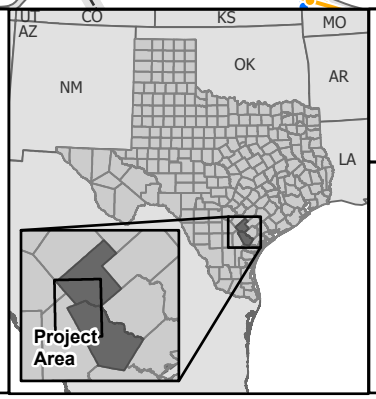


Existing Project Station
Existing Substations
Existing 69kV Transmission Line
Existing 138kV Transmission Line
Existing 345kV Transmission Line
Private Airport
Interstate Highway
US Highway
State Highway
FM Road
Railroad
City Limit
County Boundary



PAWNEE TO TANGO
345 KV TRANSMISSION LINE
REBUILD PROJECT
FIGURE 1-1
VICINITY

0 5
Miles

Date: 3/21/2025

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To assist POWER in its evaluation of the Project, CPS Energy and AEP Texas provided POWER with information regarding the Project endpoints, the Project Route, the need for the Project, proposed construction practices, transmission line design, clearing methods, ROW requirements, and maintenance procedures.

1.2 Purpose and Need

CPS Energy and AEP Texas are proposing to rebuild and add a second circuit to its existing Pawnee to Tango 345 kV single-circuit capable transmission line. The Project is needed due to historical high loading concerns for the existing Pawnee to Tango 345 kV transmission line, new generation resources in South Texas, and planned retirement of generation in San Antonio that will increase these high loading issues and frequency The ERCOT Board of Directors endorsed the Project as critical to the reliability of the ERCOT System on April 23, 2024, and requested acceleration of construction of the Project on March 13, 2025.

1.3 Description of Proposed Design

A general description of the transmission line design is provided below. Some details of the proposed installation will be determined following approval of the route.

1.3.1 Transmission Line Design

The Project will be operated as a 345 kV transmission line with 1,272 thousand circular mils (kcmil) aluminum conductor, steel-supported Pheasant with two conductors per phase and optical ground wire (OPGW) circuit. The transmission line will be installed on new monopole structures within the existing ROW. The ROW width will remain the same, typically 125 -150 feet wide, to accommodate constraints and to meet engineering clearance specifications.

The Project will be rated for operation at 3,928 Amperes, yielding a nominal 2,347-megavolt ampere (MVA) capacity. The configurations of the conductor and shield wire will provide adequate clearance for operation at 345 kV, considering icing and wind conditions. The Project will be designed and constructed to meet or exceed the specifications set forth in the current edition of the National Electrical Safety Code (NESC) and will comply with all applicable state and federal statutes and regulations.

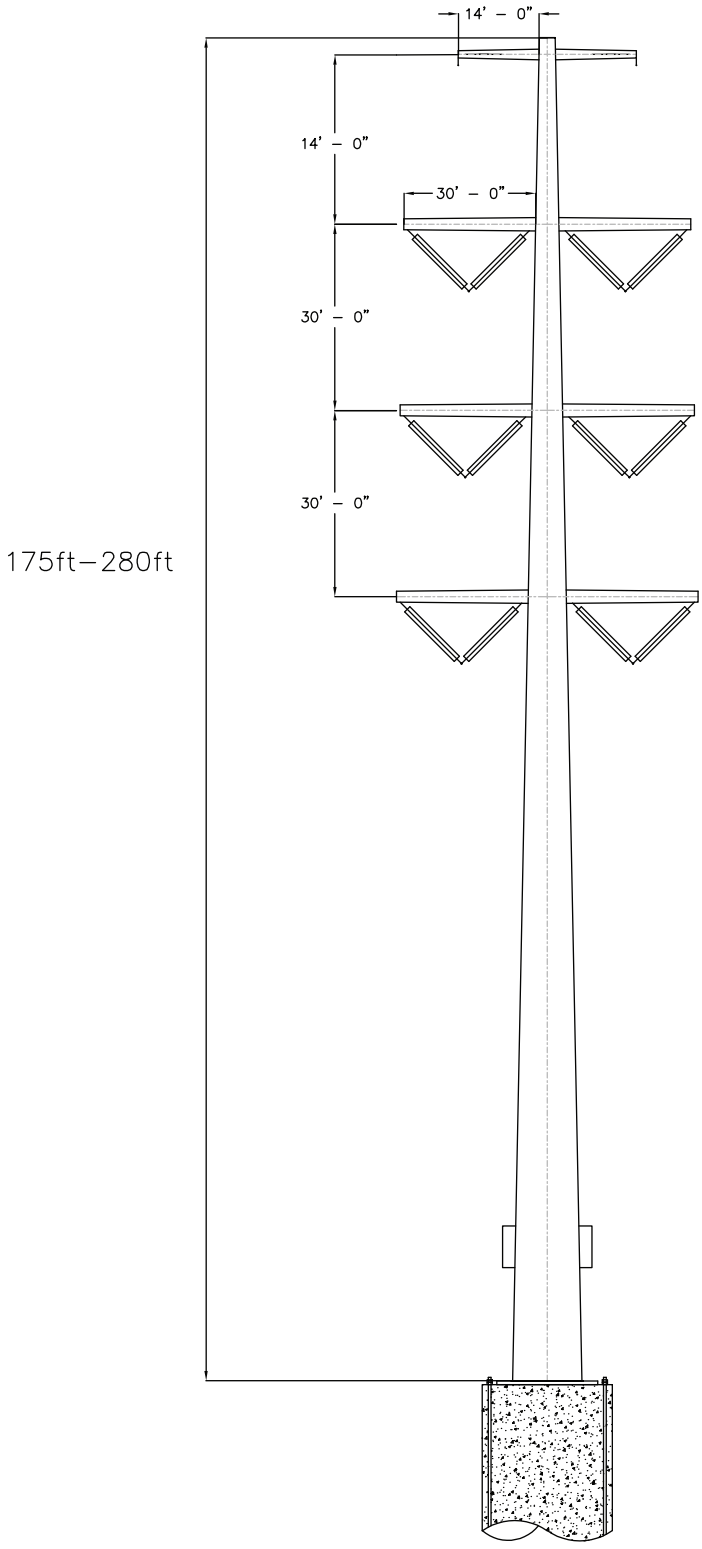
1.3.2 Typical Transmission Line Structures and Easements

CPS Energy and AEP Texas propose to use 345 kV double-circuit monopole structures for typical tangent and two single circuit dead-end structures. The geometries of the proposed typical tangent and dead-end structures are shown on Figures 1-2 through 1-4. All structure geometries are illustrative. In some areas, shorter than typical, taller than typical, or alternative structure types may need to be utilized. Actual structure types may differ slightly based on new or different designs available at the time of construction.

The Project is planned to be constructed within existing ROW, these easements are typically 125 – 150 feet in width, using spans that typically range from approximately 800 to 1,200 feet. In some areas, easement width and span length could be more or less than the typical depending on terrain and other engineering considerations. Access easements and/or temporary construction easements may be needed in some areas to rebuild the existing single circuit 345 kV transmission line.

1.3.3 Construction Schedule

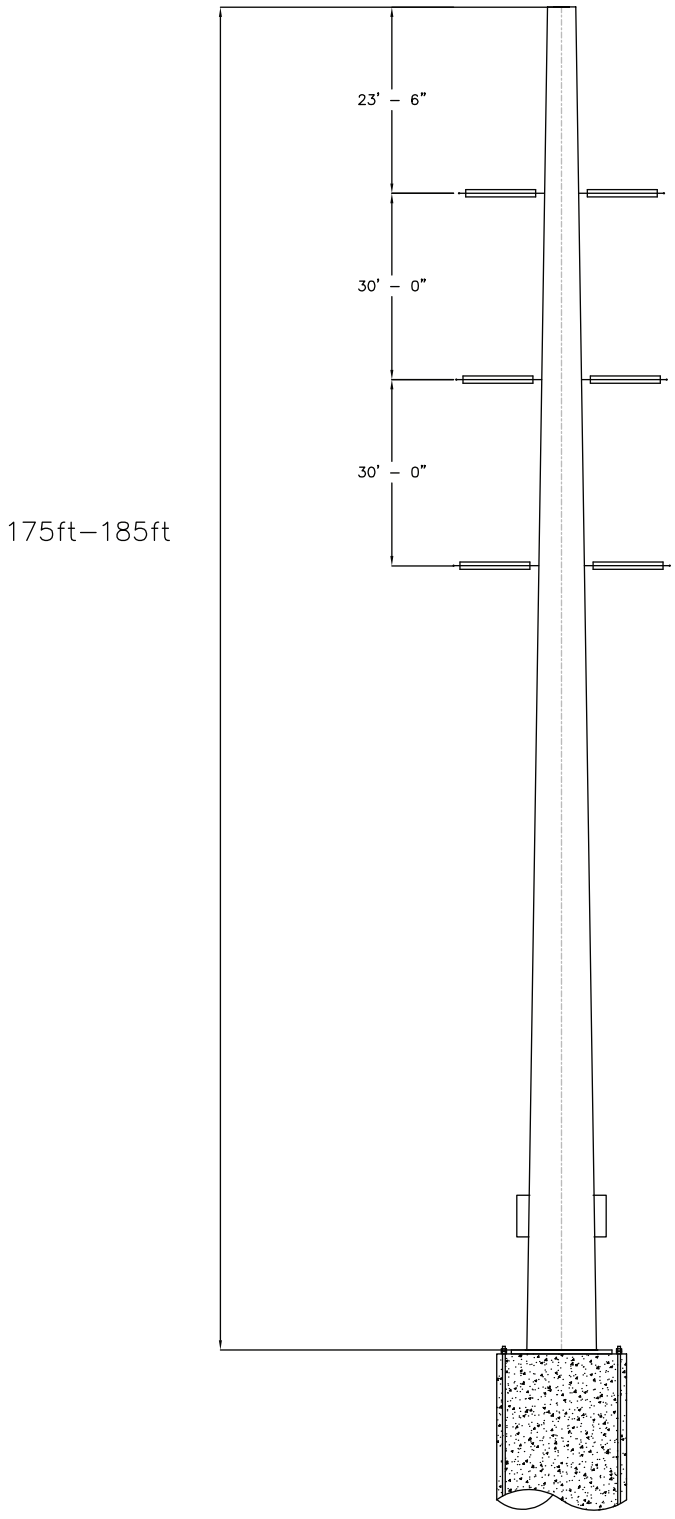
Subject to appropriate regulatory approvals for the Project, CPS Energy and AEP Texas plan to construct the Project between November 2025 and December 2026. The specific construction schedule will be refined following PUC approval of the Project, as any necessary surveys are completed, engineering designs are finalized, and any necessary species accommodations are considered. The transmission line is proposed to be constructed by a combination of contractor, CPS Energy, and AEP Texas crews.



PAWNEE TO TANGO 345 KV TRANSMISSION LINE PROJECT

Figure 1-2

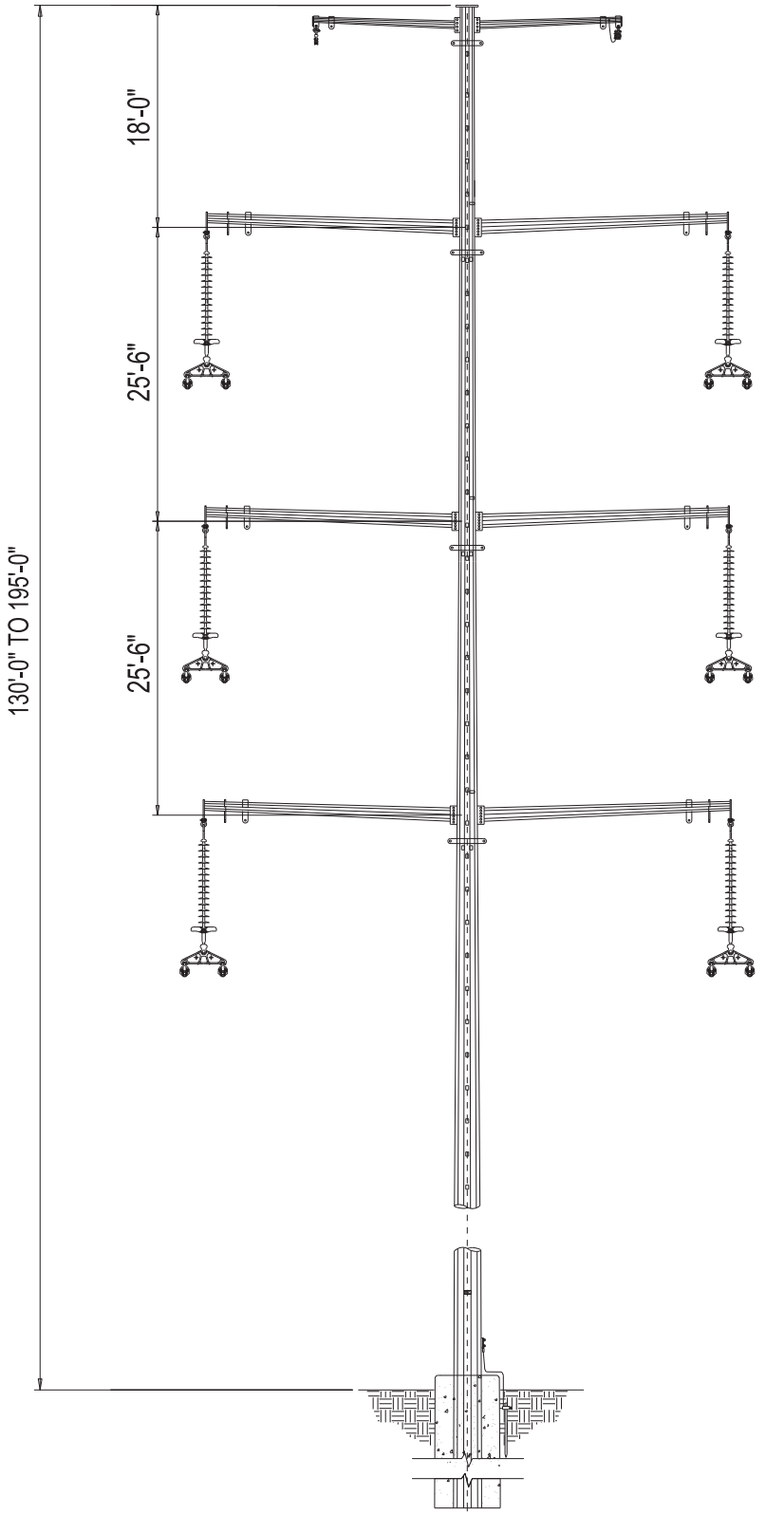
Typical 345 kV Double Circuit Tangent Structure



PAWNEE TO TANGO 345 KV TRANSMISSION LINE PROJECT

Figure 1-3

Typical 345 kV Single Circuit Dead-end Structure



PAWNEE TO TANGO 345 KV TRANSMISSION LINE PROJECT

Figure 1-4

Typical 345 kV Double Circuit Tangent Structure

AEP TEXAS
An AEP Company

POWER ENGINEERS

1.4 Construction Considerations

Construction of the Project with minimal outages of the existing Pawnee to Tango transmission line will require live line bare hand work (described further in Section 1.4.1), some potential clearing and additional temporary easements, structure assembly and erection, conductor and OPGW installation, and clean up when the Project is completed. The following criteria will be taken into consideration (these criteria are subject to adjustment befitting the rules and judgments of any public agencies whose lands may be crossed by the proposed line):

1. Clearing and grading of construction areas such as storage areas, setup sites, etc., will be minimized to the extent practicable. These areas will be graded in a manner that will minimize erosion and conform to the natural topography.
2. Soil that has been excavated during construction and not used will be evenly backfilled onto a cleared area or removed from the site. The backfilled soil will be sloped gradually to conform to the terrain and the adjacent land. All disturbed areas as a result of construction activity will be restored and re-vegetated with native grass.
3. Soil disturbance during construction will be minimized and erosion control devices will be utilized where necessary. The Project will comply with Texas Commission on Environmental Quality (TCEQ), Karnes County, and Bee County requirements for stormwater discharges.
4. Clearing and construction activities in the vicinity of streambeds will be performed in a manner to minimize damage to the natural condition of the area. Where feasible, service and access roads will be constructed jointly. Roads will not be constructed on unstable slopes and as required, side drainage ditches and culverts will be utilized to prevent soil or road erosion. Construction of access roads and drainage structures required for the Project will comply with any applicable local, state, or federal permit requirements.
5. When possible, in areas of high wildlife use or in areas of known endangered or threatened species habitat, construction will be performed during seasons of low wildlife occurrence, such as between periods of peak waterfowl migrations (generally spring and fall) and during nonbreeding season (species dependent).
6. If any archeological materials are uncovered during construction, construction will cease in the immediate area of the discovery and the discovery will be evaluated.

1.4.1 Live Line Bare Hand

In order to construct the Project within the existing 125-foot-wide ROW with minimal outages to the existing Pawnee to Tango transmission line, CPS Energy intends to contract with qualified personnel with specialized equipment to perform 345 kV live line bare hand work in accordance with Occupational Safety and Health Administration (OSHA) 1910.269 and as Institute of Electrical and Electronics Engineers (IEEE) 516-2021. Construction crews may install temporary poles to temporarily relocate energized existing conductor of the Spruce to Pawnee transmission line. Such crews will utilize special insulated equipment to reposition the existing energized conductor. On dead-end structures, temporary bypasses (jumpers). and temporary poles with guy wire and anchors will be installed to allow for a transition between new conductor and existing/bypass conductor. Crews will use specialized breakers to transfer the load to the new conductor while the existing line remains energized.

1.4.2 Clearing and ROW Preparation

Clearing plans, methods, and practices are extremely important to minimize the potential adverse effects of transmission lines on the environment. The ROW will not be clear cut, unless necessary in very limited circumstances. Only trees and vegetation that may interfere with the construction, operation, and maintenance of the transmission line will be removed in accordance with the San Antonio tree ordinance requirements as applicable. Trees and brush that are removed will be mulched and spread in the ROW to help stabilize the ground and prevent erosion. CPS Energy and AEP Texas do not intend to use herbicides in ROW clearing and preparation.

1.4.3 Structure Assembly and Erection

Survey crews will stake or otherwise mark structure locations. Construction crews will install structures by excavating holes and placing a reinforced concrete drilled pier foundation. After the foundations have cured sufficiently, crews will set the structures and install the conductor and shield wire suspension assemblies. Since a large amount of vehicular traffic will occur during this operation, construction crews will take care to minimize impacts to the ROW by minimizing the number of pathways traveled.

1.4.4 Conductor and Shield Wire Installation

The conductors and shield wires are typically installed via a tensioning system. Conductors and shield wires are pulled by ropes and held tight by tensioner to keep the wires from coming in

contact with the ground and other objects that could be damaging to the wire. Guard structures (temporary wood-pole structures) will be installed where the transmission line crosses overhead electric power lines, overhead telephone lines, roadways, or other areas requiring sag. After the wire is pulled, it is placed in suspension and dead-end clamped for permanent attachment. In some areas, use of helicopters may be utilized for conductor and shield wire installation.

1.4.5 Cleanup

The cleanup operation typically involves returning disturbed areas to as close to the original contour as possible, the removal of debris, and the restoration of any items damaged by construction of the Project. Upon the completion of the construction work, all scrap, trash, excavated materials, waste materials, and debris resulting from construction of the transmission line will be promptly removed. All construction equipment and materials will be removed from the site, and waste disposal will be conducted in a legal manner. All disturbed areas will be re-vegetated with native grass seed mixture.

1.5 Maintenance Considerations

Following construction, CPS Energy and AEP Texas will periodically inspect the substation, transmission line ROW, structures, and line to ensure the safe and reliable operation of the facilities. The primary maintenance for the completed project will be the removal or trimming of trees that pose a potential danger to the conductors or structures. Preservation of natural resources requires a thoughtful, comprehensive maintenance program. The following factors are key components of CPS Energy and AEP Texas' maintenance program that will be utilized for the Project.

1. Native vegetation, particularly that of value to fish and wildlife that does not have the potential to grow close enough to the transmission line so as to pose a hazard to the safe operation and maintenance of the transmission line, will be allowed to grow in the ROW. Likewise, if ecologically appropriate, native grass cover and low-growing shrubs will be left in the areas immediately adjacent to transmission structures. Where grading is necessary, access roads will be graded to the proper slope to prevent soil erosion.

2. A cover of vegetation will be maintained within the ROW in a manner that minimizes erosion and does not interfere with the safe and reliable operation of the transmission facilities.

3. If used, United States Environmental Protection Agency (USEPA)-approved herbicides will be carefully selected to have a minimal effect on desirable indigenous plant life, and selective application will be used whenever appropriate.

4. CPS Energy and AEP Texas performs routine maintenance inspections at appropriate intervals. Routine maintenance will be performed, when possible, when access roads are firm or dry.

5. Aerial and ground maintenance inspection activities of the transmission line facility will include observation of soil erosion problems, fallen timber, and conditions of the vegetation that require attention. Where necessary, on the basis of erosion control, native shrubs or grasses may be planted.

6. CPS Energy and AEP Texas intend for the ROW to be utilized for compatible uses as long as the activity does not impact public safety or inhibit the safe operation and maintenance of the electrical system. The results of natural resources and cultural resources assessments will be followed as necessary and appropriate during maintenance of the ROW.

1.6 Agency Actions

If the proposed transmission line is located within, or across, the ROW of any county or state-maintained roads or highways, CPS Energy and AEP Texas will obtain the appropriate permit(s) from the controlling governing entity. Since more than one acre will be cleared or disturbed during construction, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared, and a Notice of Intent (NOI) will be submitted to the TCEQ. The controls specified in each SWPPP will be monitored in the field. Permits or regulatory approvals may also be required from the TCEQ, Texas Historical Commission (THC), United States Army Corps of Engineers (USACE), and the United States Fish and Wildlife Service (USFWS). Following the identification of environmental and ROW concerns, appropriate measures will be taken during engineering design to incorporate special provisions in construction documents, specifications, or other instructions. Following completion of the design, a preconstruction conference will be held, which will include a review of these provisions. Physical inspections of the Project will be performed to assure all appropriate measures have been taken during construction.

Numerous federal, state, and local regulatory agencies and organizations have developed rules and regulations regarding the routing and potential impacts associated with the construction of the Project. This section describes the major regulatory agencies and additional issues that are involved in project planning and permitting of transmission lines in Texas. POWER solicited comments from various regulatory entities during the development of this document, and records of correspondence and additional discussions with these agencies and organizations are provided in Appendix A.

1.6.1 Public Utility Commission of Texas

The PUC regulates CPS Energy's and AEP Texas' routing of transmission lines in Texas under Sections 37.051(g) and 37.056(c)(4)(A)-(D) of PURA. In addition to the specific legislative requirements in PURA, the PUC regulatory guidelines for routing transmission lines in Texas include:

- 16 TAC 25.101(b)(3)(B) (including the PUC's policy of prudent avoidance)
- 16 TAC 22.52(a)(4)
- The PUC's CCN application requirements
- PUC precedent related to transmission line applications

This EA has been prepared by POWER in support of CPS Energy's and AEP Texas' joint CCN application for this Project to be filed at the PUC for its consideration.

1.6.2 United States Army Corps of Engineers

The USACE is directed by Congress under Section 10 of the Rivers and Harbors Act of 1899 (33 United States Code [U.S.C.] § 403) and Section 404 of the Clean Water Act (CWA) (33 U.S.C. § 1344) to implement these statutes. Under Section 10, the USACE regulates all work or structures in or affecting the course, condition, or capacity of navigable waters of the United States (WOTUS). The intent of this law is to protect the navigable capacity of waters important to interstate commerce. Under Section 404, the USACE regulates the discharge of dredged and fill material into all WOTUS, including associated wetlands. The intent of this law is to protect the WOTUS and aquatic ecosystems from the indiscriminate discharge of material capable of causing pollution and to restore and maintain their chemical, physical, and biological integrity. The Project is located within the jurisdiction of the USACE – Galveston District.
Review of the National Hydrography Dataset (NHD) and National Wetland Inventory (NWI) maps indicate that surface WOTUS and associated areas of potential wetlands may occur

within the study area. Upon PUC approval of a route, additional coordination, jurisdictional wetland verifications, and permitting with the USACE – Galveston District for a Section 404 Permit might be required. Based on the Project footprint and construction techniques proposed, the construction of the Project will likely meet the criteria for the Nationwide Permit (NWP) No. 57 – Electricity Utility Line and Telecommunications Activities. A Section 10 permit is not anticipated for this Project.

1.6.3 United States Fish and Wildlife Service

The USFWS is charged with the responsibility for enforcement of federal wildlife laws and providing comments on proposed construction projects with a federal nexus under the National Environmental Policy Act (NEPA) and within the framework of several federal laws including the Endangered Species Act (ESA), Migratory Bird Treaty Act (MBTA), and Bald and Golden Eagle Protection Act (BGEPA). POWER reviewed the USFWS' Information for Planning and Conservation (IPaC) (Project Code: 2025-0047920) website for federally protected species and designated critical habitats within the study area.

Upon PUC approval of a route and prior to construction, surveys will be completed as determined necessary and appropriate to identify any potentially suitable habitat for federally listed species. If suitable habitat is identified, then informal consultation with the USFWS – Texas Coastal and Central Plans Ecological Services Field Office might need to occur to determine the need for any required species-specific surveys and/or permitting under Section 10 of the ESA.

1.6.4 Federal Aviation Administration

According to Federal Aviation Administration (FAA) regulations, Title 14 Code of Federal Regulations (C.F.R.) 77.9 the construction of a transmission line requires FAA notification if a transmission tower structure height will exceed 200 feet or the height of an imaginary surface extending outward and upward at one of the following slopes:

- A 100:1 slope for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of each airport described in paragraph (d) of 14 C.F.R. 77.9 having at least one runway longer than 3,200 feet, excluding heliports;

- A 50:1 slope for a horizontal distance of 10,000 feet from the nearest runway of a public or military airport described in paragraph (d) of 14 C.F.R. 77.9 where its longest runway is no longer than 3,200 feet in length, excluding heliports; or
- A 25:1 slope for a horizontal distance of 5,000 feet for a heliport described in paragraph (d) of 14 C.F.R. 77.9.

Paragraph (d) of 14 C.F.R. 77.9 includes public-use airports listed in the Airport/Facility Directory (currently the Chart Supplement), public-use or military airports under construction, airports operated by a federal agency or the Department of Defense (DoD), or an airport or heliport with at least one FAA-approved instrument approach procedure.

Notification is not required for structures that will be shielded by existing structures of a permanent and substantial nature or by natural terrain or topographic features of equal or greater height and will be located in a congested area of a city, town, or settlement where the shielded structure will not adversely affect safety in air navigation.

The PUC CCN application also requires listing private airports within 10,000 feet of any route centerline. Following PUC approval of a route for the proposed transmission line, CPS Energy will make a final determination of the need for FAA notification, based on specific structure locations and design. If any of the FAA notification criteria are met for the approved route, a Notice of Proposed Construction or Alteration, FAA Form 7460-1, will be completed and submitted to the FAA Southwest Regional Office in Fort Worth, Texas, at least 45 days prior to construction. The result of this notification, and any subsequent coordination with the FAA, could include changes in line design and/or potential requirements to mark and/or light the structures.

The PUC CCN application also requires listing private airports within 10,000 feet of any alternative route centerline.

1.6.5 Military Aviation and Installation Assurance Siting Clearinghouse

The DoD Military Aviation and Installation Assurance Siting Clearinghouse works with industry to overcome risks to national security while promoting compatible domestic energy development. Energy production facilities and transmission projects involving tall structures, such as electrical transmission towers, may degrade military testing and training operations.

The electromagnetic interference from electricity transmission lines can impact critical DoD testing activities. Title 16 TAC §22.52 states that upon filing of the application, the DoD shall be notified and an affidavit attesting to the notification shall also be provided with the applicant's proof of notice. The DoD shall also be provided written notice of the public meeting and if a public meeting is not held, the DoD shall be noticed of the planned filing of the application prior to the completion of the routing study. On December 20, 2024, the DoD was contacted about the proposed Project to provide notification and to solicit any input from the DoD about the proposed Project. In addition, on February 12, 2025, and in accordance with 16 TAC § 22.52 (a)(4), public meeting notice was provided via mail and email to the DoD Military Aviation and Installation Assurance Siting Clearing house for the public meeting that was held for the proposed Project on February 26, 2025. A notice of the filing of the CCN application will be sent to the DoD Military Aviation and Installation Assurance Siting Clearinghouse when the CCN application is filed with the PUC.

1.6.6 Texas Parks and Wildlife Department

The Texas Parks and Wildlife Department (TPWD) is the state agency with the primary responsibility for protecting the state's fish and wildlife resources in accordance with the Texas Parks and Wildlife Code (TPWC) Sections 12.0011(b). POWER solicited comment from TPWD during the scoping phase of the Project, and a copy of this EA will be submitted to TPWD when the CCN amendment application is filed with the PUC. Once the PUC approves a route, additional coordination with TPWD may be necessary to determine the need for any additional surveys, and to avoid or minimize any potential adverse impacts to sensitive habitats, threatened or endangered species, and other state regulated fish and wildlife resources.

1.6.7 Floodplain Management

Floodplain maps published by the Federal Emergency Management Agency (FEMA) were reviewed to identify the mapped 100-year floodplains within the study area. The mapped 100-year floodplains are typically associated with the larger creeks and streams or within the boundaries of a river. The 100-year floodplain represents a flood event that has a one percent chance of being equaled or exceeded for any given year. The construction of the proposed transmission line is not anticipated to create any significant permanent changes in the existing topographical grades and will not significantly increase the stormwater runoff within the study area due to increased areas of impermeable surfaces. Additional coordination with the study

area county floodplain administrator may be required after PUC route approval to determine if any permits or mitigation is necessary.

1.6.8 Texas Commission on Environmental Quality

The TCEQ is the state agency with the primary responsibility for protecting the state's water quality. Construction of the Project will require a Texas Pollution Discharge Elimination System General Construction Permit (TXR150000) as implemented by the TCEQ under the provisions of Section 402 of the CWA and Chapter 26 of the Texas Water Code. More than five acres of land disturbance is anticipated during construction of the Project for all alternative routes; therefore, the construction will be considered a "Large Construction Project" under TXR150000. Before beginning construction, CPS Energy and AEP Texas will develop and implement SWPPPs for use during construction activities. The submittal of an NOI and a Notice of Termination (NOT) to the TCEQ is also required for large construction projects.

1.6.9 Texas Historical Commission

Cultural resources are protected by federal and state laws if they have some level of significance under the criteria of the National Register of Historic Places (NRHP) (36 C.F.R. Part 60) or under state guidance (TAC, Title 13, Part 2, Chapter 26.7-8). The THC was contacted by POWER to identify known cultural resource sites within the study area boundary. POWER also reviewed Texas Archeological Research Laboratory (TARL) records for known locations of cultural resource sites. Once a route is approved by the PUC, additional coordination with the THC might determine the need for any archeological surveys or additional permitting requirements under the Antiquities Code of Texas (Texas Natural Resource Code [TNRC], Title 9, Chapter 191). CPS Energy and AEP Texas propose to implement an unanticipated discovery procedure during construction activities. If artifacts are discovered during construction, activities will cease near the discovery, and CPS Energy and AEP Texas will notify the State Historic Preservation Office (SHPO) for additional consultation.

1.6.10 Texas Department of Transportation

POWER notified the Texas Department of Transportation (TxDOT) of the Project during the development of the EA. If the route approved by the PUC crosses or occupies TxDOT ROW, it will be constructed in accordance with the rules, regulations, and policies of TxDOT. Best Management Practices (BMPs) will be used as required to minimize erosion and sedimentation resulting from construction. Revegetation will occur as required under the "Revegetation Special

Provisions" and contained in TxDOT Form 1023 (Rev. 9-93). Traffic control measures will comply with applicable portions of the Texas Manual of Uniform Traffic Control Devices.

1.6.11 Texas General Land Office

The Texas General Land Office (GLO) requires a miscellaneous easement for ROWs within any state-owned riverbeds or navigable streams or tidally influenced waters. Coordination with the GLO will be completed after PUC approval of the Project route.

1.6.12 Karnes County

Karnes County will require a Floodplain Development Permit for the construction of the Project, as applicable. These permits will be completed after PUC approval of the Project route.

1.6.13 Bee County

Bee County will require a Floodplain Development Permit for the construction of the Project, as applicable. These permits will be completed after PUC approval of the Project route.

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2.0 ROUTE SELECTION METHODOLOGY

2.1 Objective of Study

The objective of this EA is to evaluate the Project Route for compliance with Section 37.056(c)(4)(A)-(D) of PURA, the PUC's Substantive Rules located at 16 TAC § 25.101(b)(3)(B), including the PUC's policy of prudent avoidance, the PUC's CCN application requirements, and the precedent established by the PUC for transmission line certification projects, CPS Energy's transmission line routing manual, and AEP Texas general routing procedures. The study methodology utilized by POWER for this EA included study area delineation based on the Project endpoints; identification and characterization of existing land use and environmental constraints; and evaluation of the route and potential impacts in relation to the environmental constraints. POWER identified potentially affected resources and considered each during the route evaluation process. Input from regulatory agencies and local officials was also considered during the route evaluation process.

The route was analyzed using evaluation criteria to determine potential impacts to existing land use and environmental resources. CPS Energy and AEP Texas also will consider all of the certification criteria in PURA and the PUC Substantive Rules, engineering and construction constraints, grid reliability and security issues, and estimated costs to evaluate the route as it relates to the requirements of PURA and PUC Substantive Rules. This route will be submitted to the PUC in the joint CCN application.

2.2 Study Area Delineation

The study area is located southeast of the city of San Antonio in south central Texas within Karnes and Bee Counties. The study area boundaries for the data collection process encompass the existing 345 kV transmission line and the Project termination points. The proposed Project, a rebuild of the existing single-circuit transmission line to a double-circuit transmission line, is proposed to utilize as much as possible the existing transmission line ROW. Based on the ability to utilize existing ROW, the study area is approximately 1,600 feet wide, approximately 800 feet on each side of the existing line.

The extent of the Project endpoints and the study area are described below and are illustrated in Figure 2-1. The study area is oriented in a northwest to southeast direction with the existing Pawnee Substation located in the northern portion of the study area and the existing Tango Substation located in the southern portion of the study area.

More specifically, the Pawnee Substation is located approximately one mile northwest of FM 882. The Tango Substation is located approximately 0.2 mile northeast of FM 673.

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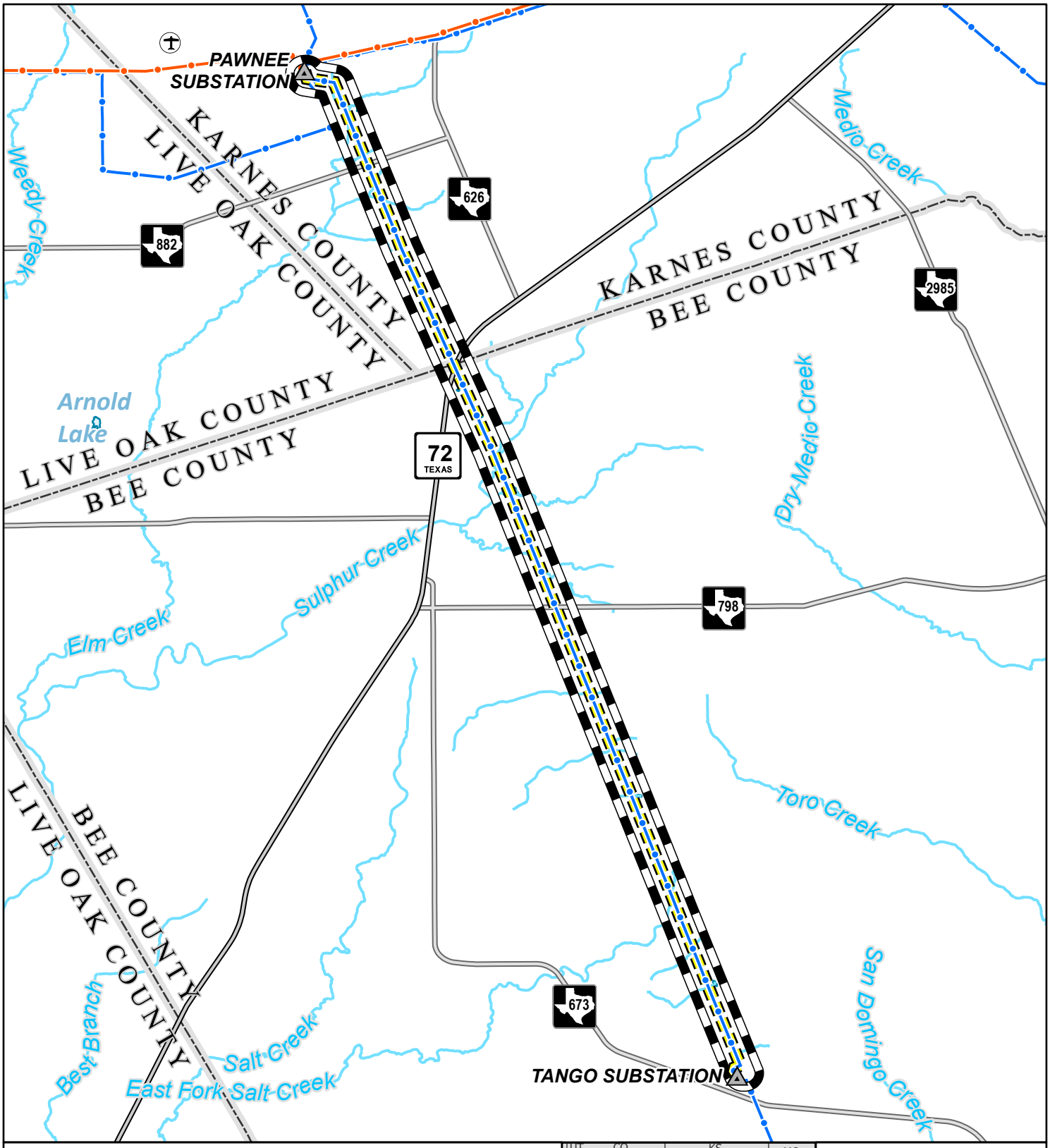
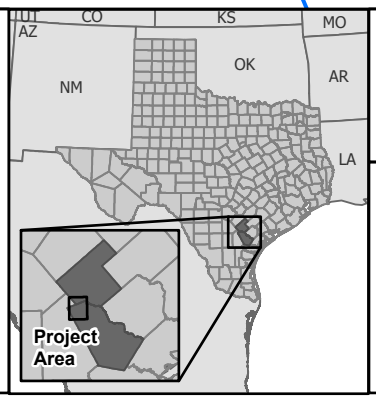


- Existing Project Station
- Project Route
- Study Area
- Existing 138kV Transmission Line
- Existing 345kV Transmission Line
- Private Airport
- State Highway
- FM Road
- River or Stream
- Waterbody
- County Boundary



PAWNEE TO TANGO
345 KV TRANSMISSION LINE
REBUILD PROJECT

FIGURE 2-1
STUDY AREA

0 1 2
Miles

Date: 3/27/2025

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2.3 Data Collection and Constraints Mapping

After delineation of the study area, a constraints map was prepared and used to initially display resource data and constraints for the Project area. The constraints map provides a broad overview of various resource locations indicating both routing constraints and areas of potential routing opportunities.

Several methodologies were utilized to collect and review environmental and land use data, including incorporation of readily available Geographic Information System (GIS) coverage with associated metadata; review of maps and published literature; and review of files and records from numerous federal, state, and local agencies. Data collected for each resource area was mapped within the study area utilizing GIS layers. The conditions of the existing environment are discussed throughout Section 3.0 of this document. Section 5.0 and Appendix A provide information regarding correspondence with agencies and officials.

Maps and/or data layers reviewed include (but are not limited to) United States Geological Survey (USGS) 7.5 minute topographic maps, NWI maps, TxDOT county highway maps, and recent aerial photography. USGS topographic maps and recent aerial photography (National Agricultural Imagery Program [NAIP] 2022) were used as the background for the environmental and land use constraint maps (see Appendices C and D [map pockets]).

Data typically displayed on the constraints map includes, but is not limited to:

- Major land jurisdictions and uses.
- Major roads including local roads, county roads, Farm-to-Market (FM) Roads, United States Highways (US Hwy), State Highways (SH), and Interstate Highways (IH).
- Existing transmission line and pipeline corridors.
- Airports, private airstrips, and heliports.
- Communication towers.
- Recreational areas.
- Major political subdivision boundaries.
- Lakes, reservoirs, rivers, streams, canals, and ponds.
- FEMA 100-year floodplains.
- NWI mapped wetlands.
- Mobile irrigation systems.
- Wells (including identifiable water, oil, and gas).

2.4 Agency Consultation

In consultation with CPS Energy and AEP Texas, POWER developed a list of federal, state, and local regulatory agencies, elected officials, and organizations to receive a consultation letter regarding the Project. The purpose of the letter was to inform the various agencies and officials of the Project and provide them with an opportunity to provide information regarding resources and potential issues within the study area. A list of agencies contacted, and a summary of responses are included in Section 5.0. Copies of all correspondence with the various state/federal regulatory agencies and local/county officials and departments are included in Appendix A.

2.5 Public Involvement

CPS Energy, AEP Texas and POWER evaluated the Project Route that was then presented to the public at an open house meeting held on February 26, 2025. The Project Route presented at the open house meeting is shown on Figure 4-2. Following the open house, CPS Energy and AEP Texas continued to receive feedback in the form of emails and phone calls.

Based on input, comments, and information received by CPS Energy, AEP Texas, and POWER during and subsequent to the public open house meeting, POWER conducted an analysis of the public input received. The purpose of the public input analysis was to identify and evaluate the comments and additional information received at and following the public open house meeting. Information obtained during the analysis was used to determine any issues that would warrant modifications to the Project Route. A summary of the formal questionnaire responses obtained at and following the public open house meeting is presented in Section 6.0. Copies of the public open house notice letter with map, brochure, frequently asked questions, and questionnaire provided in association with the open house are located in Appendix B.

2.6 Route Development and Evaluation Criteria

The Project Route was reviewed by CPS Energy and AEP Texas to determine engineering requirements, constructability, and long-term maintenance considerations. The POWER planning team reviewed the route using the environmental and land use constraints map while considering resource sensitivity. The Project Route was also reviewed in accordance with Section 37.056(c)(4)(A)-(D) of PURA, the PUC CCN application, and 16 TAC § 25.101, including the PUC's policy of prudent avoidance, and consistency with CPS Energy's transmission line routing manual, and AEP Texas general routing procedures. The Project Route was reviewed considering such factors as community values, parks and recreational areas, historical and aesthetic values, environmental integrity, route

length utilizing and parallel to existing compatible corridors or parallel to apparent property boundaries, and prudent avoidance.

CPS Energy, AEP Texas, and POWER reviewed and refined the Project Route as more information became available. In evaluating the Project Route, land use and environmental evaluation criteria were developed to reflect accepted practices for routing electric transmission lines in the state of Texas (see Table 2-1). Evaluation criteria were further refined based on data collection and reconnaissance surveys.

The Project Route is shown in relation to environmental and other land use constraints on topographic base in Figure 4-1 and on aerial photographic base in Figure 4-2. For the purposes of this analysis, only one route is addressed in this report. The analysis of the route involved inventorying and tabulating the number or quantity of each environmental criterion located along the route (e.g., number of habitable structures within 500 feet). The number or amount of each factor was determined by POWER using GIS layers, maps, recent aerial photography, and field verification from publicly accessible areas where practical. Potential environmental impacts are addressed in Section 4.0 of this document.

TABLE 2-1 LAND USE AND ENVIRONMENTAL EVALUATION CRITERIA

EVALUATION CRITERIA	
Land Use	
1	Length of route (miles)
2	Number of habitable structures[1] within 500 feet of the route centerline
3	Length of ROW using existing transmission line ROW
4	Length of ROW parallel and adjacent to existing transmission line ROW
5	Length of ROW parallel and adjacent to other existing ROW (roadways, railways, utilities, etc.)
6	Length of ROW parallel and adjacent to apparent property lines[2] or other natural or cultural features
7	Sum of evaluation criteria 3, 4, 5, and 6
8	Percent of evaluation criteria 3, 4, 5, and 6
9	Length of ROW across parks/recreational areas[3]
10	Number of additional parks/recreational areas[3] within 1,000 feet of ROW centerline
11	Length of ROW across cropland
12	Length of ROW across pasture/rangeland
13	Length of ROW across land irrigated by traveling systems (rolling or pivot type)
14	Length of route across conservation easements and/or mitigation banks (Special Management Area)
15	Length of route across gravel pits, mines, or quarries
16	Length of ROW parallel and adjacent to pipelines[4]
17	Number of pipeline[4] crossings
18	Number of transmission line crossings
19	Number of IH, US and state highway crossings
20	Number of FM road crossings
21	Number of FAA registered public/military airports[5] with at least one runway more than 3,200 feet in length located within 20,000 feet of ROW centerline
22	Number of FAA registered public/military airports[5] having no runway more than 3,200 feet in length located within 10,000 feet of ROW centerline
23	Number of private airstrips within 10,000 feet of the ROW centerline

TABLE 2-1 LAND USE AND ENVIRONMENTAL EVALUATION CRITERIA

EVALUATION CRITERIA	
24	Number of heliports within 5,000 feet of the ROW centerline
25	Number of commercial AM radio transmitters within 10,000 feet of the ROW centerline
26	Number of FM radio transmitters, microwave towers, and other electronic installations within 2,000 feet of ROW centerline
27	Number of identifiable existing water wells within 200 feet of the ROW centerline
28	Number of oil and gas wells within 200 feet of the ROW centerline (including dry or plugged wells)
Aesthetics	
29	Estimated length of ROW within foreground visual zone[6] of IH, US and state highways
30	Estimated length of ROW within foreground visual zone[6] of FM/Ranch-to-Market roads
31	Estimated length of ROW within foreground visual zone[6][7] of parks/recreational areas[3]
Ecology	
32	Length of ROW through upland woodlands/brushlands
33	Length of ROW through bottomland/riparian woodlands
34	Length of ROW across NWI mapped wetlands
35	Length of route across USFWS designated critical habitat for federally-listed threatened or endangered species
36	Length of ROW across open water (lakes, ponds)
37	Number of stream crossings
38	Length of ROW parallel (within 100 feet) to streams
39	Length of ROW across Edwards Aquifer Contributing Zones
40	Length of ROW across FEMA mapped 100-year floodplain
Cultural Resources	
41	Number of cemeteries within 1,000 feet of the ROW centerline
42	Number of recorded cultural resource sites crossed by ROW
43	Number of additional recorded cultural resource sites within 1,000 feet of ROW centerline
44	Number of resources determined eligible for or NRHP properties crossed by ROW
45	Number of additional resources determined eligible for or NRHP properties within 1,000 feet of ROW centerline
46	Length of ROW across areas of high archeological site potential

Notes: All length measurements are shown in miles unless noted otherwise.

[1]Single-family and multi-family dwellings, and related structures, mobile homes, apartment buildings, commercial structures, industrial structures, business structures, churches, hospitals, nursing homes, schools, or other structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis within 500 feet of the centerline of a transmission project of 230 kV or more.

[2]Apparent property boundaries created by existing roads, highways, or railroad ROWs are not "double-counted" in the length of ROW parallel to apparent property boundaries criteria.

[3]Defined as parks and recreational areas owned by a governmental body or an organized group, club, or church within 1,000 feet of the centerline of the Project.

[4]Only steel pipelines six inches and greater in diameter carrying petrochemicals were quantified in the pipeline crossing and paralleling calculations.

[5]As listed in the Chart Supplement South Central US (FAA 2024b formerly known as the Airport/Facility Directory South Central US) and FAA 2024a.

[6]One-half mile, unobstructed. Lengths of ROW within the visual foreground zone of interstates, US and state highway criteria are not "double-counted" in the length of ROW within the visual foreground zone of FM roads criteria.

[7]One-half mile, unobstructed. Lengths of ROW within the visual foreground zone of parks/recreational areas may overlap with the total length of ROW within the visual foreground zone of interstates, US, and state highway criteria and/or with the total length of ROW within the visual foreground zone of FM roads criteria.

2.7 Field Reconnaissance

A reconnaissance survey of the study area (from public viewpoints) was conducted by POWER personnel to confirm the findings of the research and data collection activities, identify changes in land use occurring after the date of the aerial photography, and to identify potential unknown constraints that may not have been previously noted in the data. A reconnaissance survey of the study area was conducted by POWER personnel on January 16, 2025.

3.0 NATURAL RESOURCES/ENVIRONMENTAL INTEGRITY

3.1 Natural Resources/Environmental Integrity

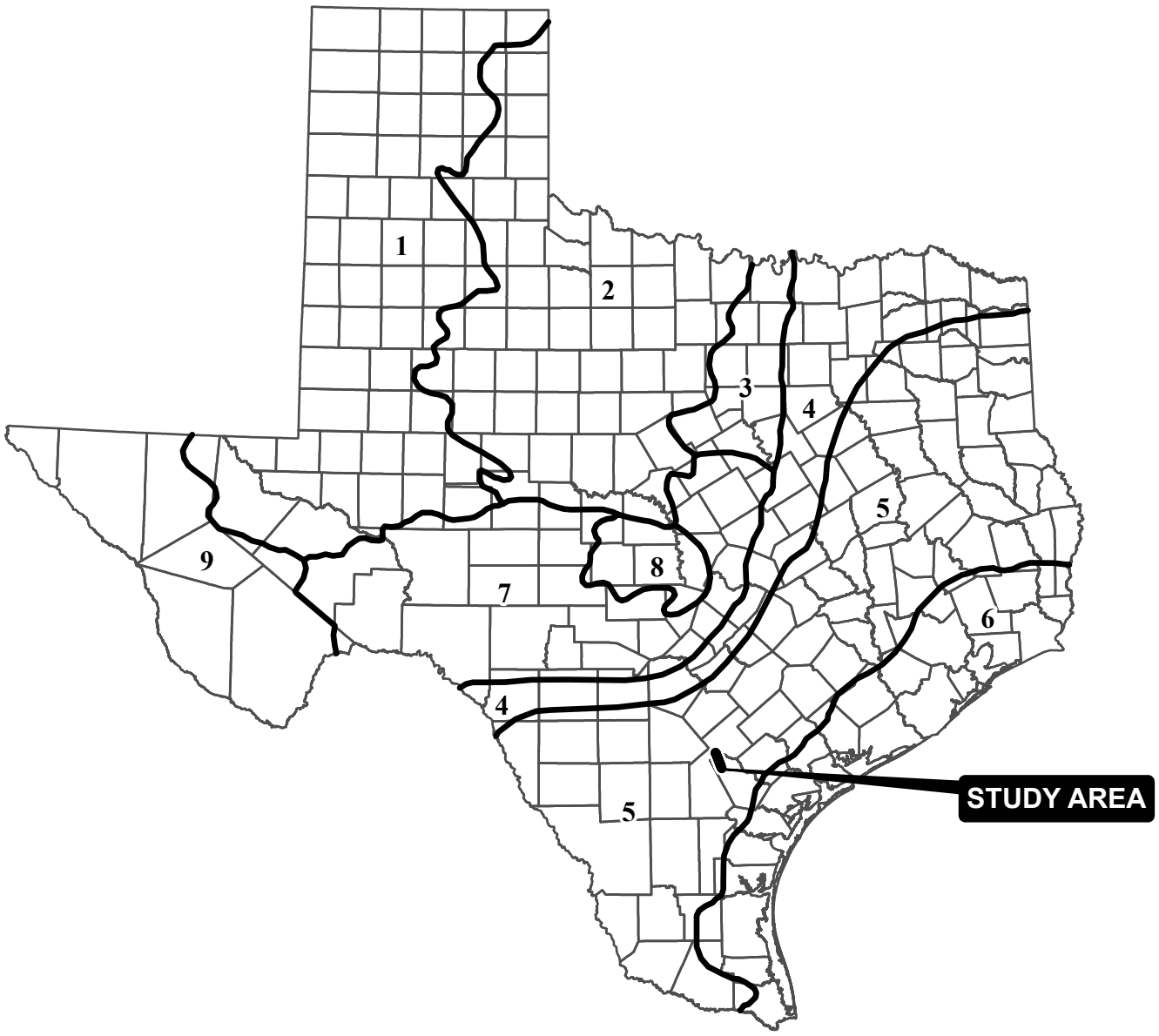
Resource inventory data were collected for physiography, geology, soils, surface waters, wetlands, and ecological resource areas. These data were obtained from readily available sources and mapped within the study area utilizing GIS layers. Additional data collection activities consisted of file and record reviews conducted utilizing the various state and federal regulatory agencies, a review of published literature, and review of various maps and aerial photographs. Maps and data layers reviewed include USGS 7.5-minute topographic maps, aerial imagery, Bureau of Economic Geology (BEG) Geologic Atlas, NWI maps, TxDOT county highway maps, and county appraisal district land parcel boundary maps.

3.1.1 Physiography and Geology

As shown in Figure 3-1, the study area is located within the Interior Coastal Plains physiographic subprovince (BEG 1996). The Interior Coastal Plains are punctuated by parallel ridges and valleys. West and south, tree density continuously declines, pines disappear in Central Texas, and chaparral brush and sparse grasses dominate between San Antonio and Laredo. Bedrock types of sand and mud are titled towards the Gulf of Mexico and erode into long, sandy ridges and clay. Interior Coastal Plain elevations range between 300 and 800 amsl (BEG 1996).

According to the USGS Texas Water Science Center's (TWSC) Geologic Database of Texas (USGS 2014), there are four geologic formations underlying the study area: alluvium, Catahoula Formation, Fleming Formation and Oakville Sandstone, and the Goliad Formation. Using the TWSC Geologic Database of Texas (USGS 2014), descriptions of each geologic formation is detailed below.

- Alluvium are local deposits from aquatic features such as point bars, natural levees, and stream channels comprised of clay, silt sand, and gravel. Organic matter is abundant in alluvium.
- The Catahoula Formation is a volcaniclastic unit comprised of sandstone, ash, conglomerate, and lesser amounts of coal and shale.
- Fleming Formation and Oakville Sandstone is a combined rock unit. The Fleming Formation is primarily comprised of clay and sandstone where small amounts of quartz, chert pebbles, fossil wood, and vertebrate fossils are locally common. The thickness range between 1,300 to 1,450 feet. Oakville Sandstone is primarily comprised of sandstone and clay and locally contains quartz, chert gravel, fossil wood, and vertebrate fossils. The thickness ranges between 300 to 500 feet.
- The Goliad Formation is primarily comprised of clay sand sandstone, marl, caliche, limestone, and conglomerate. Tertiary vertebrate and reworked Cretaceous invertebrate fossils are common within this formation. The thickness ranges between 75 to 200 feet.



0 30 60 120 180 240

Miles

Source: Texas Bureau of Economic Geology, 1996

Legend

Physiographic Region Boundary

1 High Plains
2 North-Central Plains
3 Grand Prairie
4 Blackland Prairies
5 Interior Coastal Plains
6 Gulf Coastal Prairies
7 Edwards Plateau
8 Central Texas Uplift
9 Trans-Pecos Basin and Range

County Boundary

PAWNEE TO TANGO 345 KV TRANSMISSION LINE REBUILD PROJECT

FIGURE 3-1

LOCATION OF THE STUDY AREA IN RELATION TO THE PHYSIOGRAPHIC REGIONS OF TEXAS

CPS ENERGY · AEP TEXAS · POWER ENGINEERS

Date: 3/20/2025

Significant Geological Features

Several potential geologic features affecting the construction and operation of a transmission line were evaluated within the study area. Geologic areas reviewed included potential karst, known cave locations, fault lines, active or abandoned mining locations, aggregate operation locations, and potential subsurface contamination. Subsurface contamination (soils or groundwater) from previous commercial activities or dumps/landfills may require additional considerations during routing and/or may create a potential hazard during construction activities.

The study area is outside of known karst formation locations (Texas Speleological Survey [TSS] 2007). Additionally, review of TSS did not identify any named caves occurring within the study area (TSS 1966).

There are no normal faults identified within the study area (USGS 2014). According to the Railroad Commission of Texas (RRC), there are no active or reclaimed lignite coal mine sites or uranium mine sites (RRC 2025a, 2025b, 2025c, and 2025d) within the study area. Additionally, no historical abandoned coal mining locations (RRC 2015) were identified within the study area. There were no aggregate/gravel production operations (TCEQ 2025a) identified within the study area.

Subsurface contamination (soils or groundwater) from previous commercial activities or dumps/landfills may require additional considerations during transmission routing and/or may create a potential hazard during construction activities. Review of the state superfund site database indicated that there are no state superfund sites within the study area (TCEQ 2024a). Additionally, no federal superfund sites were identified within the study area (USEPA 2025a). No state-listed solid waste facilities (TCEQ 2025b) were identified within the study area.

3.1.2 Soils

Soil Associations

Natural Resources Conservation Service (NRCS) Web Soil Survey data (NRCS 2025) was reviewed to identify and characterize mapped soils within the study area. Soil map units represent a collection of delineated areas defined and named the same in terms of their soil components (e.g., series). Mapped soils within the study area are listed in Table 3-1, including a brief description of the soil unit, landform of occurrence, and hydric and prime farmland classification status.

TABLE 3-1 MAPPED SOIL UNITS OCCURRING WITHIN THE STUDY AREA

SOIL MAP UNIT	LANDFORM	HYDRIC	PRIME FARMLAND
Bee County			
Aransas clay, occasionally flooded	Floodplains	No	Prime farmland if drained
Blanconia loamy fine sand, 0 to 2 percent slopes	Terraces	No	Prime farmland if irrigated
Clareville sandy clay loam, 0 to 1 percent slopes	Drainageways, flats	No	All areas are prime farmland
Coy clay loam, 1 to 3 percent slopes	Terraces	No	All areas are prime farmland
Goliad sandy clay loam, 1 to 3 percent slopes	Interfluves	No	Not prime farmland
Kincheloe clay loam, 1 to 5 percent slopes	Knobs	No	Not prime farmland
Monteola clay, 0 to 1 percent slopes	Hills	No	All areas are prime farmland
Monteola clay, 1 to 3 percent slopes	Hills	No	All areas are prime farmland
Papalote fine sandy loam, 1 to 3 percent slopes	Terraces	No	Prime farmland if irrigated
Parrita sandy clay loam, 0 to 3 percent slopes	Hills	No	Not prime farmland
Pernitas sandy clay loam, 2 to 5 percent slopes	Interfluves	No	Prime farmland if irrigated
Pettus sandy clay loam, 2 to 5 percent slopes	Interfluves, ridges	No	Not prime farmland
Racombes sandy clay loam, cool, 0 to 1 percent slopes, rarely flooded	Terraces	No	All areas are prime farmland
Weesatche fine sandy loam, 1 to 3 percent slopes	Ridges	No	All areas are prime farmland
Weesatche sandy clay loam, 1 to 3 percent slopes	Ridges	No	All areas are prime farmland
Karnes County			
Buchel clay, 0 to 1 percent slopes, occasionally flooded	Floodplains	No	All areas are prime farmland
Buchel clay, 0 to 1 percent slopes, frequently flooded	Floodplains	No	Not prime farmland
Coy clay loam, 0 to 1 percent slopes	Terraces	No	All areas are prime farmland
Coy clay loam, 1 to 3 percent slopes	Terraces	No	All areas are prime farmland
Coy clay loam, 3 to 5 percent slopes	Terraces	No	All areas are prime farmland
Monteola clay, 1 to 3 percent slopes	Hills	No	All areas are prime farmland
Pernitas sandy clay loam, 2 to 5 percent slopes	Interfluves	No	Prime farmland if irrigated
Weesatche fine sandy loam, 2 to 5 percent slopes	Ridges	No	All areas are prime farmland
Weesatche sandy clay loam, 1 to 3 percent slopes	Ridges	No	All areas are prime farmland

Source: NRCS 2025

Hydric Soils

The National Technical Committee for Hydric Soils defines hydric soils as soils formed under conditions of saturation, flooding, or ponding long enough during growing seasons to develop anaerobic conditions in the upper soil horizons. These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support growth and reproduction of hydrophytic vegetation (NRCS 2025).

Map units dominantly comprised of hydric soils might have small inclusions of non-hydric soils in higher areas of the landform. Conversely, map units dominated by non-hydric soils might have small

inclusions of hydric soils in lower areas of the landform. According to NRCS Web Soil Survey data (NRCS 2025) for the study area, none of the soils mapped within the study area are considered hydric.

Prime Farmland

The United States Secretary of Agriculture, within U.S.C. §7-4201(c)(1)(A), defines prime farmland soils as those soils that have the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. They have the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops when treated and managed, including water management, according to acceptable farming methods. Soils designated as farmland of statewide importance are potential prime farmlands with soils that meet most of the requirements of prime farmland but fail due to the absence of sufficient natural moisture or water management facilities. The United States Department of Agriculture (USDA) would consider these soils prime farmland if such practices were installed. According to NRCS Web Soil Survey data (NRCS 2025) for the study area, there are multiple soil map units designated as prime farmland within the study area.

Transmission line projects are typically not subject to the requirements of the Farmland Protection Policy Act unless they are associated with federal funding, which the proposed project is not. Additionally, transmission line construction is not typically considered a conversion of prime farmlands as the site can still be used for farming after construction is complete.

3.1.3 Water Resources

Surface Water

The study area is located within the Nueces River and San Antonio-Nueces Coastal River Basins as well as the Atascosa, Lower Nueces, and Mission River Sub Basins (TPWD 2025a). The study area is also located within the Lower Atascosa River, Sulphur Creek-Nueces River, and Medio Creek watersheds (TPWD 2025a). Named surface waters within the study area include East Fork Salt Creek, Elm Creek, Salt Creek, Sulphur Creek (USEPA 2025b). There are also several other unnamed tributaries of the named surface waters as well as several unnamed waterbodies within the study area.

Special Status Waters

Under 31 TAC § 357.43 and 31 TAC § 358.2, TPWD has designated Ecologically Significant Stream Segments (ESSS) based on habitat value, threatened and endangered species, species diversity, and aesthetic value criteria (TPWD 2025b and 2025c). No designated ESSS were identified within the study area (TPWD 2025b and 2025c).

In accordance with Section 303(d) and 304(a) of the CWA, the TCEQ identifies surface waters for which effluent limitations are not stringent enough to meet water quality standards and for which the associated pollutants are suitable for measurement by total maximum daily load (TMDL). TMDL is a scientifically derived target for water quality that determines the greatest amount of a particular substance that can be added to a 303(d) and 304(a) waterbody without compromising its health. Review of TCEQ's Texas Integrated Report of Water Quality Impairments (TCEQ 2024b) indicated that there are no Section 303(d) or 304(a) impaired surface waters within the study area.

Future Surface Water Developments

Review of the 2022 Texas Water Development Board (TWDB) State Water Plan and the 2021 Regional Water Plans for Region L – South Central Texas and Region N – Coastal Bend did not indicate any proposed surface water developments within the study area (TWDB 2022; TWDB 2021a, 2021b, and 2021c).

3.1.4 Groundwater

The major ground water aquifers mapped within the study area include the Carrizo-Wilcox (subcrop) and Gulf Coast Aquifers. The Carrizo-Wilcox Aquifer is primarily composed of sand locally interbedded with gravel silt, clay, and lignite. Although the aquifer can reach 3,000 feet in thickness, the average freshwater saturated thickness is 670 feet and commonly has isolated areas of saline groundwater (TWDB 2011). The Gulf Coast Aquifer is composed of discontinuous sand, silt, clay, and gravel beds. The maximum total sand thickness ranges from 700 feet to the south to 1,300 feet to the north. Freshwater saturated thickness averages about 1,000 feet (TWDB 2011). Other ground water resources include numerous domestic and public supply water wells (TWDB 2025 and 1975).

3.1.5 Floodplains

FEMA's Flood Insurance Rate Maps and National Flood Hazard Layer were reviewed for the study area (FEMA 2025). The 100-year flood (1% flood or base flood) represents a flood event that has a one percent chance of being equaled or exceeded for any given year. FEMA 100-year floodplain data are primarily mapped in association with the named surface water Sulphur Creek within the study area (FEMA 2025).

3.1.6 Wetlands

Mapped wetlands information was incorporated for the study area from USFWS NWI database (USFWS 2025a). NWI maps are based on topography and interpretation of infrared satellite data and color aerial photographs and are classified under the Cowardin System (Cowardin et al. 1979). Since

the date of NWI data mapping, mapped wetland features within the study area may have changed, and actual site conditions may differ in wetland classification, size, or presence. The primary wetland type identified within the study area is palustrine emergent (PEM) (USWFS 2025a). Unmapped wetlands may also potentially occur in association with riparian areas near any surface drainage or pond within the study area.

Palustrine Emergent Wetland

PEM wetlands are defined as all non-tidal wetlands dominated by persistent emergent erect, rooted, herbaceous hydrophytes, excluding mosses and lichens, that occur in less than 2.5 meters of water and has a salinity of less than 0.5 parts per trillion (ppt) (Cowardin et al. 1979). Mapped PEM wetlands occur in the central and northern sections of the study area and are associated with depressional topography and floodplains (Google, Inc. 2024; USFWS 2025a). Within the study area dominant species that can potentially occur within PEM wetlands include cattails (*Typha* spp.), sedges (*Carex* spp.), spikerushes *(Eleocharis* spp.), rushes (*Juncus* spp.), bulrushes (*Scirpus* spp.), pondweed (*Potamogeton* spp.), arrowhead (*Sagittaria* spp.), and hornwort (*Ceratophyllum* spp.) (Elliot 2014).

3.1.7 Coastal Management Program

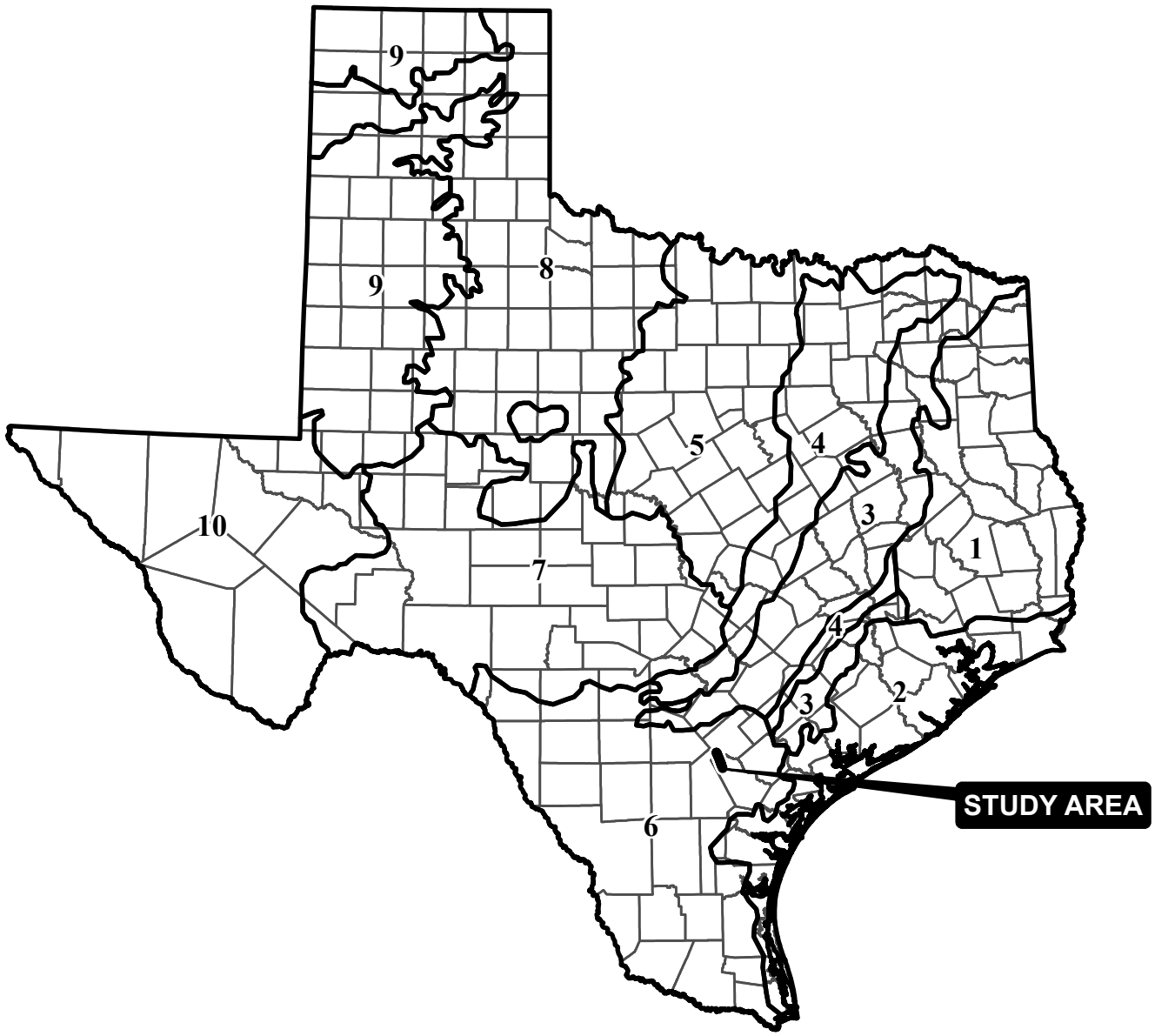
The PUC must comply with Coastal Management Program (CMP) policies when approving CCNs for electric transmission lines that are located within the Coastal Management Zone (CMZ) under the Coastal Zone Management Act of 1972. The study area is not located within the CMZ boundary as defined in 31 TAC § 27.1 and this excludes the project from CMP conditions (Texas GLO 2025).

3.1.8 Vegetation

Data and information on ecological resources within the study area were obtained from a variety of sources, including aerial photograph interpretation, field reconnaissance surveys, correspondence with the USFWS, TPWD, published literature, and technical reports.

Ecological Region

As shown in Figure 3-2, the study area is located within the South Texas Plains vegetational area (Gould et al. 1960). The study area is located within the East Central Texas Plains Level III Ecoregion and within Southern Post Oak Savanna Level IV Ecoregion (Griffith et al. 2007). A general description of the of the ecoregions within the study area are included below. The plant species in the vegetation communities of the ecoregions are dependent on location, hydrology, soils, and disturbance history or land management activities.



0 30 60 120 180 240

Miles

Source: Gould, et. al., 1960.

Legend

Vegetational Areas Boundary

1 Pineywoods
2 Gulf Prairies and Marshes
3 Post Oak Savannah
4 Blackland Prairies
5 Cross Timbers and Prairies
6 South Texas Plains
7 Edwards Plateau
8 Rolling Plains
9 High Plains
10 Trans-Pecos

County Boundary

PAWNEE TO TANGO 345 KV TRANSMISSION LINE REBUILD PROJECT

FIGURE 3-2

LOCATION OF THE STUDY AREA IN RELATION TO THE VEGETATIONAL AREAS OF TEXAS

Date: 3/20/2025

East Central Texas Plains Level III Ecoregion

The boundary of this ecological region is a subtle transition of soils and vegetation from its adjacent regions. Soils are variable among parallel ridges and valleys and tend to be acidic with sands and sandy loams in upland areas and clay to clay loams in low-lying areas. Many areas have a dense underlying clay pan affecting water movement and available moisture for plant growth. The bulk of this region's land use includes pasture and rangelands (Griffith et al. 2007).

Southern Post Oak Savanna Level IV Ecoregion

This ecoregion has more woods and forest than adjacent prairie ecoregions and consists of mostly hardwoods. Soils are generally acidic and have sand and sandy loam soil textures. Some clay to clay-loam occurs on lower areas, and a dense clay pan is usually underlying all soil types. Current land cover includes mixed post oak (*Quercus stellata*) woods, improved pasture, and rangeland with some invasive mesquite (*Prosopis* spp.) to the south of the region (Griffith et al. 2007). Common tree species include post oak, blackjack oak (*Quercus marilandica*), black hickory (*Carya texana*), and grasses of little bluestem (*Schizachyrium scoparium*), purpletop tridens (*Tridens flavus*), curly threeawn (*Aristida desmantha*), and yellow Indiangrass (*Sorghastrum nutans*). The understory is typically composed of yaupon (*Ilex vomitoria*), eastern redcedar (*Juniperus virginiana*), winged elm (*Ulmus alata*), American beautyberry (*Callicarpa americana*), and farkleberry (*Vaccinium arboreum*).

Ecological Systems

Review of the TPWD (2025d) Texas Ecosystem Analytical Mapper indicates the dominant (total of more than 5% of the study area) ecological systems within the study area include: Row Crops, South Texas: Disturbance Grassland, South Texas: Sandy Mesquite Savanna Grassland, and South Texas: Clayey Mesquite Mixed Shrubland. Descriptions of each ecological system and common species found within each system are detailed below (TPWD 2025d).

Row Crops

This ecological system includes all cropland where fields are fallow for some portion of the year. Some fields may rotate into and out of cultivation frequently, and year-round cover crops and tame hay fields are generally mapped as grassland.

South Texas: Disturbance Grassland

Includes a variety of mainly heavily grazed grasslands, including managed exotic pastures. Common dominant species include buffelgrass (*Pennisetum ciliare*), bermudagrass (*Cynodon dactylon*), King Ranch bluestem (*Bothriochloa ischaemum*), Kleberg's bluestem (*Dichanthium annulatum*), guineagrass

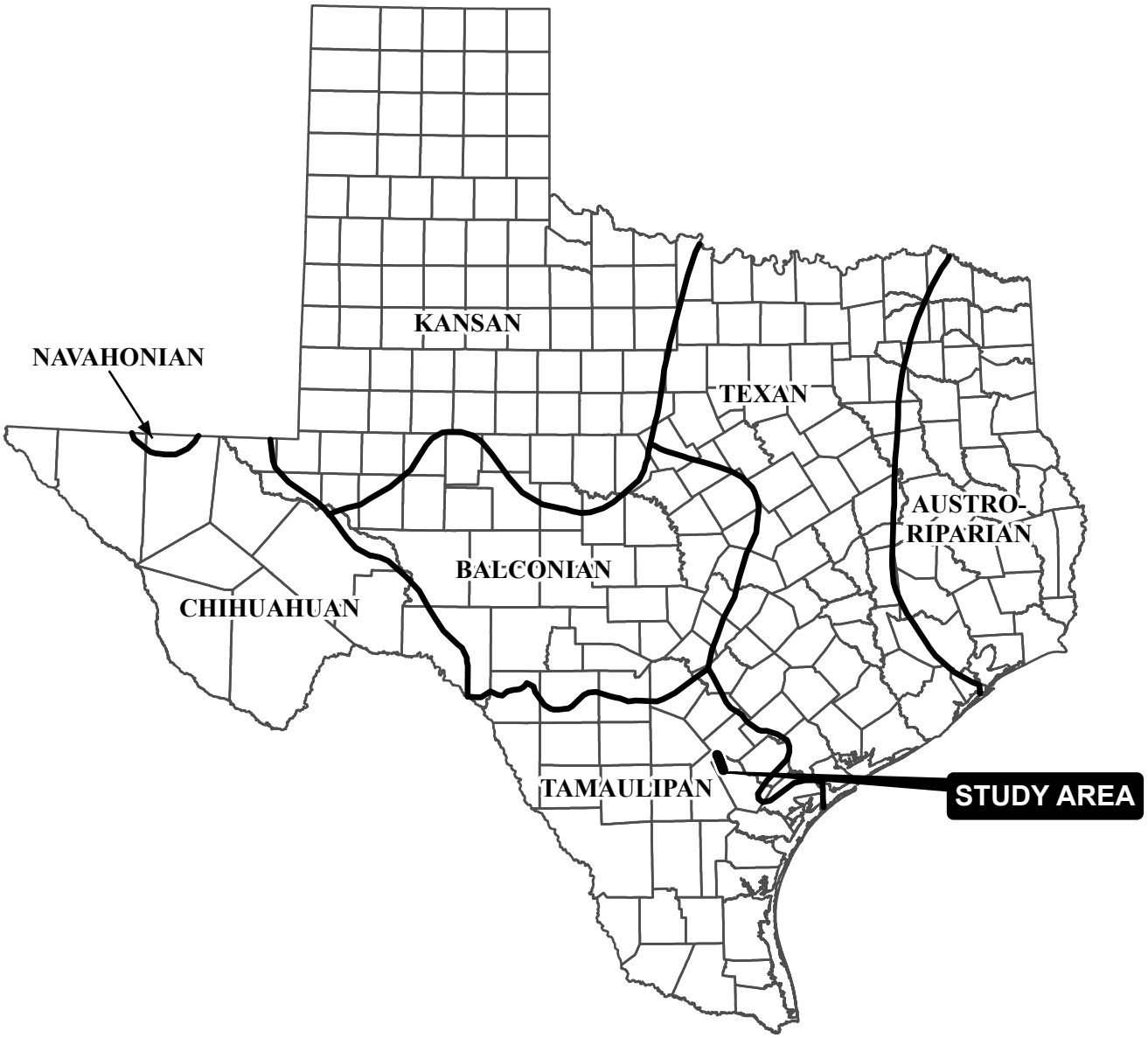
(*Urochloa maxima*), pink pappusgrass (*Pappophorum bicolor*), threeawns (*Aristida* spp.), and red grama (*Bouteloua trifida*). Shrubs and small tress may include mesquite, huisache (*Acacia smallii*), blackbrush (*Acacia rigidula*), lotebush (Ziziphus obtusifolia), bravo acacia (*Vachellia bravoensis*), and granjeno (*Celtis ehrenbergiana*).

South Texas: Sandy Mesquite Savanna Grassland
Characterized as grasslands with scattered mesquite. Herbaceous species such as buffelgrass, bermudagrass, King Ranch bluestem, Kleberg's bluestem, little bluestem, silver bluestem (*Bothriochloa laguroides*), purple threeawn (*Aristida purpurea*), tanglehead (*Heteropogon contortus*), and hogwort (*Croton capitatus*) are common. Common shrubs include mesquite, huisache, granjeno, blackbrush, Texas persimmon (*Diospyros texana*), colima (*Zanthoxylum fagara*), Texas hogplum (*Colubrina texensis*), whitebrush (*Aloysia gratissima*), and brasil (*Condalia hookeri*).

South Texas: Clayey Mesquite Mixed Shrubland
Characterized by a continuous canopy of shrubs and small trees. Species such as mesquite, huisache, granjeno, blackbrush, sugar hackberry (*Celtis laevigata*), brasil, guajillo (*Senegalia berlandieri*), lotebush, whitebrush, and pricklypear (*Opuntia* spp.) are common. Buffelgrass is a common herbaceous dominant.

3.1.9 Wildlife

The study area occurs within the Tamaulipan Biotic Province (see Figure 3-3) as described by Blair (Blair 1950). The Tamaulipan province includes the Gulf coastal plain south of the Balcones Escarpment and west of the boundary between pedalfer and pedocal soils. This province is characterized by an intermixture of Neotropical species, Austroroparian species, and southwest desert species (Blair 1950). The following sections list species that may occur in and represent the faunal diversity of the study area today.



0 30 60 120 180 240

Miles

Source: Blair, 1950, modified

Legend

Biotic Province Boundary

County Boundary

PAWNEE TO TANGO 345 KV TRANSMISSION LINE REBUILD PROJECT

FIGURE 3-3

LOCATION OF THE STUDY AREA IN RELATION TO THE BIOTIC PROVINCES OF TEXAS

Date: 3/20/2025

Amphibians

A representative list of amphibian species (frogs, toads, and salamanders) that may occur within the study area are listed in Table 3-2. The likelihood for occurrence of each species within the study areas will depend upon suitable habitat. Frogs and toads may occur in all vegetation types, while salamanders are typically restricted to hydric habitats (Dixon 2013).

TABLE 3-2 AMPHIBIAN SPECIES POTENTIALLY OCCURRING WITHIN THE STUDY AREA[1]

COMMON NAME[2]	SCIENTIFIC NAME[2]
Frogs/Toads	
American bullfrog	*Lithobates catesbeianus*
Barking frog	*Eleutherodactylus augusti*
Blanchard's cricket frog	*Acris blanchardi*
Chihuahuan green toad	*Anaxyrus debilis*
Cliff chirping frog	*Eleutherodactylus marnokii*
Cope's gray treefrog	*Hyla chrysoscelis*
Couch's spadefoot	*Scaphiopus couchi*
Gray treefrog	*Hyla versicolor*
Green treefrog	*Hyla cinerea*
Gulf Coast toad	*Incilius nebulifer*
Hurter's spadefoot	*Scaphiopus hurterii*
Red-spotted toad	*Anaxyrus punctatus*
Rio Grande chirping frog	*Eleutherodactylus cystignathoides*
Rio Grande leopard frog	*Lithobates berlandieri*
Rocky Mountain toad	*Anaxyrus woodhousii*
Sheep frog	*Hypopachus variolosus*
Southern leopard frog	*Lithobates sphenocephala*
Spotted chorus frog	*Pseudacris clarkii*
Strecker's chorus frog	*Pseudacris streckeri*
Texas toad	*Anaxyrus speciosus*
Western narrow-mouthed toad	*Gastrophryne olivacea*
Salamanders	
Black-spotted newt	*Notophthalmus meridionalis*
Eastern tiger salamander	*Ambystoma tigrinum*
Small-mouthed salamander	*Ambystoma texanum*
Western slimy salamander	*Plethodon albagula*

[1] According to Dixon 2013.
[2] Nomenclature follows: Society for the Study of Amphibians and Reptiles (Crother 2017).

Reptiles

A representative list of reptiles (turtles, lizards, and snakes) that may occur in the study area are listed in Table 3-3. The likelihood for occurrence of each species within the study areas will depend upon

suitable habitat. These include those species that are more commonly observed near water (e.g., aquatic turtles) and those that are more common in terrestrial habitats (Dixon 2013).

TABLE 3-3 REPTILIAN SPECIES POTENTIALLY OCCURRING WITHIN THE STUDY AREA[1]

COMMON NAME[2]	SCIENTIFIC NAME[2]
Turtles	
Cagle's map turtle	*Graptemys caglei*
Eastern box turtle	*Terrapene carolina*
Eastern mud turtle	*Kinosternon subrubrum*
Eastern musk turtle	*Sternotherus odoratus*
Guadalupe spiny softshell	*Apalone spinifera guadalupensis*
Ornate box turtle	*Terrapene ornata*
Pond slider	*Trachemys scripta*
Snapping turtle	*Chelydra serpentina*
Texas cooter	*Pseudemys texana*
Texas tortoise	*Gopherus berlandieri*
Yellow mud turtle	*Kinosternon flavescens*
Lizards	
Brown anole	*Anolis sagrei*
Common spotted whiptail	*Cnemidophorus gularis*
Crevice spiny lizard	*Sceloporus poinsettii*
Eastern collared lizard	*Crotaphytus collaris*
Eastern six-lined racerunner	*Aspidoscelis sexlineata sexlineata*
Great Plains skink	*Plestiodon obsoletus*
Green anole	*Anolis carolinensis*
Keeled earless lizard	*Holbrookia propinqua*
Little brown skink	*Scincella lateralis*
Mediterranean gecko	*Hemidactylus turcicus*
Prairie lizard	*Sceloporus consobrinus*
Prairie skink	*Plestiodon septentrionalis*
Rose-bellied lizard	*Sceloporus variabilis*
Short-lined skink	*Plestiodon tetragrammus brevilineatus*
Slender glass lizard	*Ophisaurus attenuatus*
Southern spot-tailed earless lizard	*Holbrookia lacerata subcaudalis*
Texas alligator lizard	*Gerrhonotus infernalis*
Texas banded gecko	*Coleonyx brevis*
Texas greater earless lizard	*Cophosarus texanus texanus*
Texas horned lizard	*Phrynosoma cornutum*
Texas spiny lizard	*Sceloporus olivaceus*
Texas tree lizard	*Urosaurus ornatus ornatus*
Snakes	
Black-tailed rattlesnake	*Crotalus molossus*
Broad-banded copperhead	*Agkistrodon contortrix laticinctus*

TABLE 3-3 REPTILIAN SPECIES POTENTIALLY OCCURRING WITHIN THE STUDY AREA[1]

COMMON NAME[2]	SCIENTIFIC NAME[2]
Bullsnake	*Pituophis catenifer sayi*
Central American indigo snake	*Drymarchon melanurus*
Checkered gartersnake	*Thamnophis marcianus*
Chihuahuan night snake	*Hypsiglena jani*
Dekay's brownsnake	*Storeria dekayi*
Desert kingsnake	*Lampropeltis getula splendida*
Diamond-backed watersnake	*Nerodia rhombifer*
Eastern black-necked gartersnake	*Thamnophis cyrtopsis ocellatus*
Eastern hog-nosed snake	*Heterodon platirhinos*
Eastern rat snake	*Pantherophis obsoletus*
Eastern yellow-bellied racer	*Coluber constrictor flaviventris*
Flat-headed snake	*Tantilla gracilis*
Graham's crayfish snake	*Regina grahamii*
Long-nosed snake	*Rhinocheilus lecontei*
Mexican milksnake	*Lampropeltis triangulum annulate*
Northern cottonmouth	*Agkistrodon piscivorus*
Plain-bellied watersnake	*Nerodia erythrogaster*
Plains black-headed snake	*Tantilla nigriceps*
Plains hog-nosed snake	*Heterodon nasicus*
Prairie kingsnake	*Lampropeltis calligaster*
Prairie ring-necked snake	*Diadophis punctatus arnyi*
Rough earthsnake	*Haldea striatula*
Rough greensnake	*Opheodrys aestivus*
Schott's whipsnake	*Masticophis schotti*
Smooth earthsnake	*Virginia valeriae*
Southwestern rat snake	*Pantherophis emoryi meahllmorum*
Striped whipsnake	*Masticophis taeniatus*
Texas coralsnake	*Micrurus tener*
Texas gartersnake	*Thamnophis sirtalis annectens*
Texas glossy snake	*Arizona elegans arenicola*
Texas lined snake	*Tropidoclonion lineatum texanum*
Texas patch-nosed snake	*Salvadora grahamiae lineata*
Texas threadsnake	*Rena dulcis*
Timber rattlesnake	*Crotalus horridus*
Western coachwhip	*Masticophis flagellum*
Western diamond-backed rattlesnake	*Crotalus atrox*
Western groundsnake	*Sonora semiannulata*
Western ribbonsnake	*Thamnophis proximus*

[1] According to Dixon 2013.
[2] Nomenclature follows: Society for the Study of Amphibians and Reptiles (Crother 2017).

Birds

A representative list of numerous avian species may occur within the study area as year-round residents, summer residents, and/or winter residents/migrants as presented in Table 3-4. Texas Ornithological Society (Lockwood and Freeman 2014) data and TPWD ecoregion specific avian check lists (Lockwood 2008) were reviewed for species distribution and life history information. Avian species potentially occurring within the study area include year-round residents and summer, and/or winter migrants as shown in Table 3-4. Additional transient bird species may migrate within or through the study area in the spring and fall and/or use the area to nest (spring/summer) or overwinter. The likelihood for the occurrence of each species depends upon availability of suitable habitat and season. Migratory bird species that are native to the United States or its territories are protected under the MBTA.

TABLE 3-4 AVIAN SPECIES POTENTIALLY OCCURRING WITHIN THE STUDY AREA[1]

COMMON NAME[2]	SCIENTIFIC NAME[2]	RESIDENT[1]	SUMMER[1]	WINTER[1]
Accipitriformes: Accipitridae				
Cooper's hawk	*Accipiter cooperii*		X	X
Northern harrier	*Circus hudsonius*			X
Red-shouldered hawk	*Buteo lineatus*	X		
Red-tailed hawk	*Buteo jamaicensis*	X		
Sharp-shinned hawk	*Accipiter striatus*			X
Swainson's hawk	*Buteo swainsoni*		X	X
Swallow-tailed kite	*Elanoides forficatus*		X	
White-tailed hawk	*Buteo albicaudatus*	X		
Accipitriformes: Cathartidae				
Black vulture	*Coragyps atratus*	X		
Turkey vulture	*Cathartes aura*	X		
Apodiformes: Apodidae				
Chimney Swift	*Chaetura pelagica*		X	
Apodiformes: Trochilidae				
Black-chinned hummingbird	*Archilochus alexandri*		X	
Buff-bellied hummingbird	*Amazilia yucatanensis*		X	
Ruby-throated hummingbird	*Archilochus colubris*		X	
Rufous hummingbird	*Selasphorus rufus*			X
Caprimulgiformes: Caprimulgidae				
Common nighthawk	*Chordeiles minor*		X	
Common poorwill	*Phalaenoptilus nuttallii*		X	
Charadriiformes: Charadriidae				
Killdeer	*Charadrius vociferus*	X		
Columbiformes: Columbidae				
Eurasian collared-dove	*Streptopelia decaocto*	X		
Inca dove	*Columbina inca*	X		
Mourning dove	*Zenaida macroura*	X		
Rock pigeon	*Columba livia*	X		
White-winged dove	*Zenaida asiatica*	X		

TABLE 3-4 AVIAN SPECIES POTENTIALLY OCCURRING WITHIN THE STUDY AREA[1]

COMMON NAME[2]	SCIENTIFIC NAME[2]	RESIDENT[1]	SUMMER[1]	WINTER[1]
Coraciiformes: Alcedinidae				
Belted kingfisher	*Megaceryle alcyon*			X
Green kingfisher	*Chloroceryle americana*	X		
Cuculiformes: Cuculidae				
Greater roadrunner	*Geococcyx californianus*	X		
Yellow-billed cuckoo	*Coccyzus americanus*		X	
Falconiformes: Falconidae				
American kestrel	*Falco sparverius*			X
Crested caracara	*Caracara plancus*	X		
Merlin	*Falco columbarius*			X
Prairie falcon	*Falco mexicanus*			X
Gruiformes: Gruidae				
Sandhill cranes	*Antigone canadensis*			X
Whooping crane	*Grus americana*			X
Passeriformes: Bombycillidae				
Cedar waxwing	*Bombycilla cedrorum*			X
Passeriformes: Cardinalidae				
Blue grosbeak	*Passerina caerulea*		X	
Dickcissel	*Spiza americana*		X	
Indigo bunting	*Passerina cyanea*		X	
Northern cardinal	*Cardinalis cardinalis*	X		
Painted bunting	*Passerina ciris*		X	
Summer tanager	*Piranga rubra*		X	
Passeriformes: Corvidae				
American crow	*Corvus brachyrhynchos*			X
Blue jay	*Cyanocitta cristata*	X		
Common raven	*Corvus corax*	X		
Passeriformes: Emberizidae				
Cassin's sparrow	*Peucaea cassinii*	X		
Chipping sparrow	*Spizella passerina*	X		
Clay-colored sparrow	*Spizella pallida*			X
Dark-eyed junco	*Junco hyemalis*			X
Eastern towhee	*Pipilo erythrophthalmus*			X
Field sparrow	*Spizella pusilla*	X		
Grasshopper sparrow	*Ammodramus savannarum*		X	
Harris's sparrow	*Zonotrichia querula*			X
Lark bunting	*Calamospiza melanocorys*			X
Lark sparrow	*Chondestes grammacus*		X	
Lincoln's sparrow	*Melospiza lincolnii*			X
Savannah sparrow	*Passerculus sandwichensis*			X
Song sparrow	*Melospiza melodia*	X		X
Spotted towhee	*Pipilo maculatus*			X
Vesper sparrow	*Pooecetes gramineus*			X
White-crowned sparrow	*Zonotrichia leucophrys*			X
White-throated sparrow	*Zonotrichia albicollis*			X
Passeriformes: Fringillidae				
American goldfinch	*Spinus tristis*			X
House finch	*Haemorhous mexicanus*	X		

TABLE 3-4 AVIAN SPECIES POTENTIALLY OCCURRING WITHIN THE STUDY AREA[1]

COMMON NAME[2]	SCIENTIFIC NAME[2]	RESIDENT[1]	SUMMER[1]	WINTER[1]
Lesser goldfinch	*Spinus psaltria*		X	
Pine siskin	*Spinus pinus*			X
Passeriformes: Hirundinidae				
Bank swallow	*Riparia riparia*			X
Barn swallow	*Hirundo rustica*		X	
Cave swallow	*Petrochelidon fulva*		X	
Cliff swallow	*Petrochelidon pyrrhonota*		X	
Purple martin	*Progne subis*		X	
Tree swallow	*Tachycineta bicolor*		X	
Passeriformes: Icteridae				
Baltimore oriole	*Icterus galbula*		X	X
Brown-headed cowbird	*Molothrus ater*	X		
Bullock's oriole	*Icterus bullockii*		X	
Common grackle	*Quiscalus quiscula*	X		
Eastern meadowlark	*Sturnella magna*	X		
Great-tailed grackle	*Quiscalus mexicanus*	X		
Orchard oriole	*Icterus spurius*		X	
Red-winged blackbird	*Agelaius phoeniceus*	X		
Passeriformes: Laniidae				
Loggerhead shrike	*Lanius ludovicianus*	X		X
Passeriformes: Mimidae				
Gray catbird	*Dumetella carolinensis*			X
Long-billed thrasher	*Toxostoma longirostre*	X		
Northern mockingbird	*Mimus polyglottos*	X		
Passeriformes: Motacillidae				
American pipit	*Anthus rubescens*			X
Passeriformes: Paridae				
Black-crested titmouse	*Baeolophus atricristatus*	X		
Carolina chickadee	*Poecile carolinensis*	X		
Passeriformes: Parulidae				
Black-and-white warbler	*Mniotilta varia*		X	
Black-throated green warbler	*Septophaga virens*		X	
Canada warbler	*Cardellina canadensis*			X
Common yellowthroat	*Geothlypis trichas*			X
Hooded warbler	*Setophaga citrina*		X	
Magnolia warbler	*Setophaga magnolia*			X
Mourning warbler	*Geothlypis philadelphia*			X
Northern parula	*Setophaga americana*		X	
Orange-crowned warbler	*Oreothlypis celata*			X
Pine warbler	*Setophaga pinus*			X
Tennessee warbler	*Oreothlypis peregrina*			X
Wilson's warbler	*Cardellina pusilla*			X
Yellow warbler	*Setophaga petechia*			X
Yellow-rumped warbler	*Setophaga coronata*			X
Passeriformes: Passeridae				
House sparrow	*Passer domesticus*	X		
Passeriformes: Polioptilidae				
Blue-gray gnatcatcher	*Polioptila caerulea*		X	

TABLE 3-4 AVIAN SPECIES POTENTIALLY OCCURRING WITHIN THE STUDY AREA[1]

COMMON NAME[2]	SCIENTIFIC NAME[2]	RESIDENT[1]	SUMMER[1]	WINTER[1]
Passeriformes: Regulidae				
Golden-crowned kinglet	*Regulus satropa*			X
Ruby-crowned kinglet	*Regulus calendula*			X
Passeriformes: Remizidae				
Verdin	*Auriparus flaviceps*	X		
Passeriformes: Sturnidae				
European starling	*Sturnus vulgaris*	X		
Passeriformes: Troglodytidae				
Bewick's wren	*Thryomanes bewickii*	X		
Cactus wren	*Campylorhynchus brunneicapillus*	X		
Carolina wren	*Thryothorus ludovicianus*	X		
House wren	*Troglodytes aedon*			X
Winter wren	*Troglodytes hiemalis*			X
Passeriformes: Turdidae				
American robin	*Turdus migratorius*		X	
Eastern bluebird	*Sialia sialis*	X		
Swainson's thrush	*Catharus ustulatus*		X	
Passeriformes: Tyrannidae				
Brown-crested flycatcher	*Myiarchus tyrannulus*		X	
Eastern phoebe	*Sayornis phoebe*		X	
Eastern wood-pewee	*Contopus virens*		X	
Great crested flycatcher	*Myiarchus crinitus*		X	
Least flycatcher	*Empidonax minimus*		X	
Say's phoebe	*Sayornis saya*			X
Scissor-tailed flycatcher	*Tyrannus forficatus*		X	
Vermilion flycatcher	*Pyrocephalus rubinus*		X	
Western kingbird	*Tyrannus verticalis*		X	
Passeriformes: Vireonidae				
Bell's vireo	*Vireo bellii*		X	
Blue-headed vireo	*Vireo solitarius*			X
Hutton's vireo	*Vireo huttoni*		X	X
Warbling vireo	*Vireo gilvus*		X	
White-eyed vireo	*Vireo griseus*		X	
Yellow-throated vireo	*Vireo flavifrons*		X	
Pelecaniformes: Ardeidae				
Great blue heron	*Ardea herodias*	X		
Great egret	*Ardea alba*		X	
Piciformes: Picidae				
Downy woodpecker	*Dryobates pubescens*			X
Golden-fronted woodpecker	*Melanerpes aurifrons*	X		
Ladder-backed woodpecker	*Dryobates scalaris*	X		
Northern flicker	*Colaptes auratus*			X
Yellow-bellied sapsucker	*Sphyrapicus varius*			X
Strigiformes: Strigidae				
Barred owl	*Strix varia*	X		
Eastern screech owl	*Megascops asio*	X		
Great horned owl	*Bubo virginianus*	X		

TABLE 3-4 AVIAN SPECIES POTENTIALLY OCCURRING WITHIN THE STUDY AREA[1]

COMMON NAME[2]	SCIENTIFIC NAME[2]	RESIDENT[1]	SUMMER[1]	WINTER[1]
Strigiformes: Tytonidae				
Barn owl	*Tyto furcata*	X		

[1] According to Lockwood and Freeman (2014).
[2] Nomenclature follows: American Birding Association (ABA) 2024.

Mammals

A representative list of mammals that may occur in the study area are listed in Table 3-5 (Schmidly and Bradley 2016). The likelihood for occurrence of each species within the study area will depend upon suitable habitat.

TABLE 3-5 MAMMALIAN SPECIES POTENTIALLY OCCURRING WITHIN THE STUDY AREA[1]

COMMON NAME[2]	SCIENTIFIC NAME[2]
Mammals	
American badger	*Taxidea taxus*
American beaver	*Castor canadensis*
American perimyotis	*Perimyotis subflavus*
Attwater's pocket gopher	*Geomys attwateri*
Big brown bat	*Eptesicus fuscus*
Big free-tailed bat	*Nyctinomops macrotis*
Black rat	*Rattus rattus*
Black-tailed jackrabbit	*Lepus californicus*
Black-tailed prairie dog	*Cynomys ludovicianus*
Bobcat	*Lynx rufus*
Brazilian free-tailed bat	*Tadarida brasiliensis*
Cave myotis	*Myotis velifer*
Collared peccary	*Pecari tajacu*
Common gray fox	*Urocyon cinereoargenteus*
Common raccoon	*Procyon lotor*
Coyote	*Canis latrans*
Crawford's desert shrew	*Notiosorex crawfordi*
Eastern cottontail	*Sylvilagus floridanus*
Eastern fox squirrel	*Sciurus niger*
Eastern gray squirrel	*Sciurus carolinensis*
Eastern mole	*Scalopus aquaticus*
Eastern red bat	*Lasiurus borealis*
Eastern spotted skunk	*Spilogale putorius*
Eastern woodrat	*Neotoma floridana*
Feral pig	*Sus scrofa*
Fulvous harvest mouse	*Reithrodontomys fulvescens*
Ghost-faced bat	*Mormoops megalophylla*
Gulf Coast kangaroo rat	*Dipodomys compactus*
Hispid cotton rat	*Sigmodon hispidus*
Hispid pocket mouse	*Chaetodipus hispidus*
Hoary bat	*Aeorestes cinereus*
Hog-nosed skunk	*Conepatus leuconotus*

TABLE 3-5 MAMMALIAN SPECIES POTENTIALLY OCCURRING WITHIN THE STUDY AREA[1]

COMMON NAME[2]	SCIENTIFIC NAME[2]
House mouse	*Mus musculus*
Lacey's white-ankled deermouse	*Peromyscus laceianus*
Least shrew	*Cryptotis parva*
Long-tailed weasel	*Mustela frenata*
Merriam's pocket mouse	*Perognathus merriami*
Mountain lion	*Puma concolor*
Nine-banded armadillo	*Dasypus novemcinctus*
North American deermouse	*Peromyscus maniculatus*
Northern pygmy mouse	*Baiomys taylori*
Northern yellow bat	*Dasypterus intermedius*
Norway rat	*Rattus norvegicus*
Nutria	*Myocastor coypus*
Plains harvest mouse	*Reithrodontomys montanus*
Red fox	*Vulpes vulpes*
Red wolf	*Canis rufus*
Ringtail	*Bassariscus astutus*
Rio Grande ground squirrel	*Ictidomys parvidens*
Rock squirrel	*Otospermophilus variegatus*
Southern plains woodrat	*Neotoma micropus*
Striped skunk	*Mephitis mephitis*
Swamp rabbit	*Sylvilagus aquaticus*
Texas deermouse	*Peromyscus attwateri*
Tricolored bat	*Perimyotis subflavus*
Virginia opossum	*Didelphis virginiana*
Western spotted skunk	*Spilogale gracilis*
White-footed deermouse	*Peromyscus leucopus*
White-tailed deer	*Odocoileus virginianus*

[1] According to Schmidly and Bradley (2016).
[2] Nomenclature follows: Bradley et al. (2014).

Fishes and Aquatic Invertebrates

In Texas, the divisions of the biotic provinces were separated on the basis of terrestrial vertebrate distributions; however, the distribution of freshwater fishes generally corresponds with the terrestrial biotic province boundaries. Areas showing the greatest deviation from this general rule include northeast Texas and the coastal zone (Hubbs 1957). Review of the USGS (2025a) topographic maps indicates that mapped surface waters within the study area include perennial, intermittent, and ephemeral streams. Additionally, unmapped surface waters may occur within the study area.

Perennial and large ponds provide consistent aquatic habitats for all trophic levels with fish being the most prominent. The relatively stable water levels of perennial ponds facilitate stable population growth. Species adapted for deeper waters will utilize pond environments (Hubbs 1957). Potential ponds located in the study area will exhibit variability in terms of their age, drainage, use by livestock, past fish

stocking, and fertilization history. Typically for pond habitat, fluctuations in water levels are experienced during summer months because of high evaporation rates and repeated heavy rainfall required to fill ponds. Periods of extended drought in the region may reduce these seasonal water level fluctuations or dry ponds completely. Intermittent and ephemeral flowing streams support aquatic species primarily adapted to ephemeral pool habitats. Because intermittent streams consist of small headwater drainages, persistent flow is unlikely to be sufficient to support any substantial lotic species assemblage. Species in ephemeral aquatic habitats are typically adapted to rapid dispersal and completion of life cycles. In streams dominated by scoured, sandy-clay bottoms, accumulations of woody debris or leaf pack provide the most important feeding and refuge areas for invertebrates and forage fish. Softer, muddy bottoms generally harbor substantial populations of burrowing invertebrates (e.g., larval diptera and oligochaetes), which can be an important food source to higher trophic levels (Thomas et al. 2007).

3.1.10 Threatened and Endangered Species

Information on sensitive wildlife and vegetation resources within the study area were obtained from a variety of sources, including correspondence with the USFWS and TPWD. Additional information was obtained from published literature and technical reports.

For the purpose of this EA, emphasis was placed on obtaining documented occurrences of special status species and/or their designated critical habitat within the study area. Documented occurrences of unique vegetation communities within the study area were also reviewed. Special status species include those listed by the USFWS (2025b) as threatened, endangered, or proposed for listing; and those species listed by TPWD identified by Rare, Threatened, and Endangered Species of Texas (RTEST) Annotated County Lists (TPWD 2025e). Spatial data of known occurrences for listed species and/or sensitive vegetation communities was obtained from the TPWD's Texas Natural Diversity Database (TXNDD) on January 2, 2025 (TPWD 2025f). The TXNDD data provides a data record, known as an element of occurrence record (EOR), of state-listed rare or threatened/endangered species and rare vegetation communities that have been documented within a given area. The TXNDD data does not preclude the potential for a species to exist within the study area. Only a species-specific survey within the study area can determine the presence or absence of a special status species.

The USFWS regulates activities affecting plants and animals designated as endangered or threatened under the ESA (16 U.S.C. § 1531 *et seq.*). A USFWS IPaC Official Species List (USFWS 2025b; Project Code: 2025-0047920) and Resource List was received on January 27, 2025. The IPaC report identifies federally listed threatened, endangered, and proposed species and designated critical habitat

potentially occurring within the study area (USFWS 2025b). By federal definition, an endangered species is in danger of extinction throughout all or a significant portion of its range. A threatened species is defined as likely to become endangered within the near foreseeable future throughout all or a significant portion of its range. Proposed species are those that have been proposed in the Federal Register to be listed under the ESA. Candidate species are those that have sufficient information on their biological vulnerability and threats to support listing as threatened or endangered and are likely to be proposed for listing in the near future. The ESA also provides for the conservation of "designated critical habitat," which is defined by the USFWS as the areas of land, water, and air space that an endangered species needs for survival. These areas include sites with food and water, breeding areas, cover or shelter sites, and sufficient habitat to provide for normal population growth and behavior for the species. The IPaC report received for the study area states that there are no designated critical habitats within the study area (USFWS 2025b).

The TPWD also regulates plants and animals designated at the state level as endangered or threatened (Chapters 67 and 68 of the TPWC and § 65.171 - 65.176 of Title 31 of the TAC; and Chapter 88 of the TPWC and § 69.01 - 69.9 of the TAC). Under Texas law, endangered animal species are those deemed to be "threatened with statewide extinction" and endangered plant species are those "in danger of extinction throughout all or a significant portion of its range." Threatened animal and plant species are those deemed likely to become endangered within the foreseeable future.

Special Status Plant Species

USFWS (2025b) IPaC species list for the study area and TPWD (2025e) county listings were reviewed for special status plant species potentially occurring within the study area. One federally listed endangered plant species, the black lace cactus (*Echinocereus reichenbachii var. albertii*), was identified as having the potential to occur within the study area (USFWS 2025b). A brief description of this species' life history, habitat requirements, and potential to occur within the study area are summarized below. TPWD's TXNDD data did not identify any EORs for special status plant species occurring within or near the study area (TPWD 2025f).

Black Lace Cactus

Black lace cactus is a succulent perennial growing approximately eight inches tall and produces a bright purple-pink flower with a crimson center (TPWD 2025g). Habitat includes dense mesquite shrublands and woodlands on poorly drained sandy soils within coastal grasslands of the Gulf Coastal Plain (TPWD 2025g). According to the most current distribution maps from USFWS (2025c), the study

area intersects known ranges of where this species is found. This species may have the potential to occur within the study area where suitable habitat is available.

Special Status Animal Species

The USFWS (2025b) IPaC official species list identified federally listed animal species potentially occurring within the study area. Additionally, the TPWD (2025e) Rare, Threatened, and Endangered Species of Texas by County interactive web map identified state-listed animal species potentially occurring within the county of the study area. Federally and/or federally proposed, state-listed, and candidate status animal species potentially occurring within the county of the study area are listed in Table 3-6. Some special status species listed in the TPWD RTEST Annotated County Lists but were not identified in the USFWS IPaC have been included in Table 3-6 for consistency. Only USFWS listed threatened or endangered species are afforded federal protection under the ESA. Although only federally listed threatened or endangered species are protected under the ESA, state-listed species may receive protection under other federal and/or state laws, such as the MBTA, BGEPA, Chapters 67, 68, and 88 of the Texas Parks and Wildlife Code, and Section 65.171–65.184 and 69.01–69.14 of Title 31 of the TAC. A brief description of each species' life history, habitat requirements, and any documented occurrences within the study area are summarized below.

TPWD's TXNDD data did not identify any EORs for animal species occurring within or near the study area (TPWD 2025f).

TABLE 3-6 LISTED THREATENED AND ENDANGERED SPECIES FOR THE STUDY AREA COUNTIES[1]

SPECIES		LEGAL STATUS[3]		COUNTY[4]	
COMMON NAME[2]	SCIENTIFIC NAME[2]	USFWS	TPWD	BEE	KARNES
Amphibians					
Black-spotted newt	*Notophthalmus meridionalis*	-	T	X	-
Sheep frog	*Hypopachus variolosus*	-	T	X	X
South Texas siren (large form)	*Siren sp.*	-	T	X	-
Birds					
Black rail	*Laterallus jamaicensis*	-	T	X	X
Interior least tern	*Sternula antillarum athalassos*	-	E	X	X
Piping plover	*Charadrius melodus*	T	T	X	X
Rufa red knot	*Calidris canutus rufa*	T	T	X	X
Swallow-tailed kite	*Elanoides forficatus*	-	T	X	X
White-faced ibis	*Plegadis chihi*	-	T	X	X
White-tailed hawk	*Buteo albicaudatus*	-	T	X	X
Whooping crane	*Grus americana*	E	E	X	X

TABLE 3-6 LISTED THREATENED AND ENDANGERED SPECIES FOR THE STUDY AREA COUNTIES[1]

SPECIES		LEGAL STATUS[3]		COUNTY[4]	
COMMON NAME[2]	SCIENTIFIC NAME[2]	USFWS	TPWD	BEE	KARNES
Wood stork	*Mycteria americana*	-	T	X	X
Flowering Plants					
Black lace cactus	*Echinocereus reichenbachii* var. *albertii*	E	-	-	-
Insects					
Monarch butterfly	*Danaus plexippus*	PT	-	X	X
Mammals					
Ocelot	*Leopardus pardalis*	E	E	X	X
Tricolored bat	*Perimyotis subflavus*	PE	-	X	X
White-nosed coati	*Nasua narica*	-	T	X	X
Reptiles					
Texas horned lizard	*Phrynosoma cornutum*	-	T	X	X
Texas tortoise	*Gopherus berlandieri*	-	T	X	X

[1] According to USFWS (2025b) and TPWD (2025e).
[2] Nomenclature follows: USFWS (2025b) and TPWD (2025e)
[3] Legal status abbreviations: E – Endangered, PE – Proposed Endangered, PT – Proposed Threatened, T – Threatened
[4] Indicates the county(ies) the species could potentially occur in based on the TPWD RTEST Annotated County Lists, habitat descriptions described below, and known documented ranges.

Federal Listed Threatened and Endangered Species

BIRDS

Piping Plover

The piping plover is a small migratory shorebird that nests within the Great Lakes, Northern Great Plains or Atlantic Coast (USFWS 2025d). Primary fall migration to Texas is from July to early September, while spring migration occurs from March to early May. Piping plovers are also state listed species and are common to locally uncommon winter residents along the Gulf of Mexico coastline (Lockwood and Freeman 2014). Multiple large lakes, ponds, streams, and other aquatic features occur within the study area that could potentially be utilized for migratory habitat by the piping plover during winter migration. This species has the potential to occur within the study area as a transient migrant wherever suitable habitat is available. However, within the study area this species only needs to be considered for wind-related projects that occur within the species' migratory route.

Rufa Red Knot

Rufa red knots are migratory and breed in the drier arctic tundra areas while overwintering takes place along shorelines of the Gulf of Mexico and Central and South America (USFWS 2025e). Spring migration occurs in large flocks and takes place from April to June. This species, which is also state listed, preferers habitat that includes the shoreline of coasts and bays and sometimes inland mudflats.

Their primary prey items are small mussels, clams, snails, and other invertebrates (USFWS 2013). Due to the study area being located outside the migratory corridor and the rare transient nature of the species, it is anticipated that this species will not occur within the study area. However, within the study area this species only needs to be considered for wind-related projects that occur within the species' migratory route.

Whooping Crane

The study area is located within the central migratory corridor for the whooping crane (USGS 2025b). The migration path includes a 220-mile-wide corridor that begins at their nesting site at Wood Buffalo National Park in Canada and continues south to their wintering grounds at the Aransas National Wildlife Refuge along the Texas coast (USFWS 2025f). The migratory corridor contains 95% of all confirmed whooping crane stopover sightings, during migration. Whooping cranes, which are also state listed species, overwinter in the Aransas National Wildlife Refuge from November through March. During migration, they typically fly at altitudes greater than 1,000 feet but will roost and feed in areas away from human disturbance during nightly stopovers. Stopover areas include large rivers, lakes and associated wetlands, playa lakes, pastureland, and cropland (USFWS 2009). Aquatic features, pastureland, and cropland located within the study area might be utilized during migration. This species has the potential to occur within the study area as a transient migrant wherever suitable habitat is available.

MAMMALS

Ocelot

In Texas, ocelots are also state-listed species and occur in dense thorny shrublands of the Lower Rio Grande Valley and Rio Grande Plains. Deep fertile clay or loamy soils are generally needed to produce suitable habitat. Typical habitat consists of mixed brush species such as granjeno, brasil, desert yaupon (*Schaefferia cuneifolia*), lotebush, wolfberry (*Lycium bernlandieri*), amargosa (*Nitrophila mohavensis*), whitebrush, blackbrush, guayacan (*Guaiacum angustifolium*), catclaw (*Acacia greggii*), cenizo (*Leucophyllum frutescens*), desert olive (*Forestiera pubescens*), and Texas persimmon (TPWD 2011). Dense shrubs and canopy cover are important considerations for suitable habitat. Although the study area shares similar plant species for suitable habitat for the ocelot, this species is not anticipated to occur within the study area due to the study area being north of the known range of this species.

Federal Proposed Endangered Species

MAMMALS

Tricolored Bat

The tricolored bat has a large extensive range throughout eastern and central North America. Throughout its range, the species has many types of roost sites and locations due to their expansive foraging habitat. Tricolored bats are closely associated with forested landscapes and bottomland riparian forest with most foraging occurring within forested riparian corridors. In spring and summer, non-reproductive individuals roost in trees near perennial streams. Maternal and other summertime roosts are found in dead or live tree foliage, caves, mines, and rock crevices, with maternal colonies also occasionally occurring within man-made structures. Winter hibernation sites typically found within caves, mines, cave like tunnels, or large box culverts adjacent to forest habitat (USFWS 2025g). This species is a habitat generalist and has the potential to occur within the study area wherever suitable habitat is available. However, due to the Project being a rebuild of an existing transmission line, it is unlikely that suitable habitat occurs within the expected Project ROW.

INSECTS

Monarch Butterfly

The monarch butterfly ranges from North and South America to the Caribbean, Australia, New Zealand, the Pacific Islands, and Western Europe. The species has been proposed as candidate species for protection under the ESA due to decreasing populations and habitat loss. Eastern and western monarch populations migrate both north and south on an annual basis. Populations usually overwinter in Mexico, Texas, Florida, and California and then spend the spring and summer months migrating back north. The entire migration cycle last for four generations of monarchs and no individual makes the round trip. Monarchs are heavily dependent on milkweed plants (*Asclepias* spp.) as larval hosts and to help produce poison. Preferred overwintering habitat includes appropriate roosting vegetation, dense tree cover, access to streams, and warm enough temperatures to allow for flight (USFWS 2025h). This species has the potential to occur as a temporary migrant at specific times of year within the study area wherever suitable habitat is available. However, due to the Project being a rebuild of an existing transmission line, it is unlikely that suitable habitat occurs within the expected Project ROW.

Other Federally Protected Species

BIRDS

Bald Eagle

The bald eagle (*Haliaeetus leucocephalus*) was delisted in 2007 by the USFWS, because the population has recovered beyond the ESA criteria for listing. The status of the bald eagle population is

currently monitored by USFWS, and the species is still protected under the MBTA and the BGEPA. Bald eagles may nest and/or winter in Texas. Nests are built in treetops or on cliffs near rivers or large lakes. The bald eagle primarily preys on fish but will also eat birds, small mammals, and turtles and will often scavenge or steal carrion (Campbell 2003; USFWS 2025i). This species is not anticipated to occur within the study area due to lack of potential suitable habitat. Additionally, due to the Project being a rebuild of an existing transmission line, it is unlikely that suitable habitat occurs within the expected Project ROW.

Golden Eagle

The golden eagle (*Aquila chrysaetos*) is one of the largest raptors in North America. Breeding range spans from western and northern Alaska, eastward to the Northwest Territories of Canada, south to northern Mexico and Texas, western Oklahoma, and western Kansas. The species' North American winter range extends from south-central Alaska, southern Canada, and casually further southward. As habitat generalists, this species has been found inhabiting open to semi-open country that includes prairies, sage brush, artic alpine and tundra, savanna, sparse woodlands, and mountainous or hilly barren areas (USFWS 2025j). In Texas, golden eagles occur more commonly in the western portion of the state where they breed at high elevation (8,600 above mean sea level) in mountains and canyons. This species is not anticipated to occur within the study area due to the study area being outside of known breeding populations.

State Listed Threatened and Endangered Species

AMPHIBIANS

Black-spotted Newt

The black-spotted newt is known to occupy nine counties in Texas along the Gulf of Mexico, mostly concentrated within 100 miles of the coast in the Gulf Coastal Plains. Adults, juveniles, and larvae usually inhabit permanent and temporary ponds, roadside ditches, and quiet stream pools amongst submerged vegetation in poorly drained clay soils. Eggs can be attached to submerged vegetation in shallow water, and adults and juveniles can be found under rocks and other forms of shelter when ponds dry up (Garrett and Barker 1987). They are known to use a wide variety of vegetation associations, such as thorn scrub and pasture. Aquatic habitats used for reproduction include a variety of ephemeral and permanent waterbodies (NatureServe 2025). This species has the potential to occur within the study area wherever suitable habitat is available.

Sheep Frog

The sheep frog's range extends from south Texas through the Pacific and Atlantic slopes of Mexico to Costa Rica. In Texas, this species is known to occupy various habitats such as grasslands, savannas,

and in moist sites in arid areas (AmphibiaWeb 2025). Eggs are usually laid after heavy rainfall or when their habitat is flooded by irrigation water. Species are known to migrate unknown distances through unsuitable habitats from their home range to breeding ponds (AmphibiaWeb 2025). This species has the potential to occur within the study area wherever suitable habitat is available.

South Texas Siren (Large Form)

The South Texas siren (large form), as defined by the TPWD, has been considered threatened by the TPWD since 2003. However, their present distribution and population status are not well understood. This species may have occurred as far north as San Patricio and Jim Wells counties, but there is no consensus on the current overall population status (Kline and Carreon 2013). The South Texas siren is believed to be found in bodies of quiet water, permanent or temporary, with or without submerged vegetation. They can also be found in wet areas such as arroyos, canals, ditches, or shallow depressions. This species may also aestivate in the ground during dry periods but does require some moisture (Kline and Carreon 2013). This species is not anticipated to occur within the study area due to the study area being outside of the known range of this species.

BIRDS

Black Rail

The black rail has a large range throughout North, Central, and South America. Breeding habitat includes marshes with salt, brackish, and freshwater salinity; grass swamps; wet prairies; and pond borders. Preferred habitat is salty prairie and high salt marsh where grass stem counts of 10 to 20 centimeters or higher (TPWD 2015). Wintering habitat along the Gulf Coast has been identified as either tidally or non-tidally influenced persistent, herbaceous emergent wetlands occurring over the wetland-upland interface. This species is not anticipated to occur within the study area due to lack of potential suitable habitat.

Interior Least Tern

The interior least tern is a subspecies of least tern. The USFWS recognizes any nesting least tern that is 50 miles or greater from a coastline as being an interior least tern (Campbell 2003). Interior least terns nest inland along sand and gravel bars within large, braided streams and rivers as well as salt flats associated with rivers and reservoirs. They are also known to nest on man-made structures (inland beaches, wastewater treatment plants, gravel quarries, etc.) (Thompson et al. 2020). This species is not anticipated to occur within the study area due to lack of potential suitable habitat.

Swallow-tailed Kite

The swallow-tailed kite historically occurred along the coastal plains, interior lowlands, and riparian areas throughout the southeastern United States and into central Texas. Today in Texas, the species is a rare

to uncommon migrant throughout the eastern third of the state and a rare to locally uncommon summer resident in southeast Texas. The most recent breeding records exist from Chambers, Liberty, Orange, and Tyler Counties (Lockwood and Freeman 2014). Habitats include lowland forested swampy areas ranging into open woodland, marshes, rivers, lakes, and ponds. Nesting occurs in tall trees within clearings or on forest woodland edge, usually in pine, bald cypress, or other deciduous trees (Meyer 1995). This species has the potential to occur within the study area as a rare temporary migrant wherever suitable habitat is available. However, due to the Project being a rebuild of an existing transmission line, it is unlikely that suitable habitat occurs within the expected Project ROW.

White-faced Ibis

The white-faced ibis prefers freshwater marshes, swamps, ponds, rivers, sloughs, and irrigated rice fields, but will also use brackish and saltwater habitats (Lockwood and Freeman 2014). This species is a colonial nester and forages on insects, newts, leeches, earthworms, snails, crayfish, frogs, and fish (TPWD 2025h). The white-faced ibis commonly breeds and winters along the Texas Gulf Coast (Arvin 2007). This species is not anticipated to occur within the study area due to lack of potential suitable habitat.

White-tailed Hawk

White-tailed hawks are resident species in their range which extends local from coastal south Texas plains to Mexico and as far south as South America. This species nests from near sea level to about 160 feet in elevation in savannas with short trees with average heights of 12 feet and shrubs (Arnold 2001a). This species has the potential to occur within the study area wherever suitable habitat is available. However, due to the Project being a rebuild of an existing transmission line, it is unlikely that suitable habitat occurs within the expected Project ROW.

Wood Stork

The wood stork inhabits prairie ponds, flooded pastures or fields, ditches, and other shallow standing water, including saltwater areas. This species usually roosts communally in tall snags, sometimes in association with other wading birds and historically nested in Texas (Arnold 2001b). This species is not anticipated to occur within the study area due to lack of potential suitable habitat.

MAMMALS

White-nosed Coati

The white-nosed coati is a member of the raccoon family (*Procyonidae*) that inhabits cropland/ hedgerows, mesquite grasslands, oak scrub, riparian corridors, and canyons of far south and west Texas but could once historically be found throughout central Texas as well (Schmidly and Bradley 2016). Denning occurs in snags or hollow trees. Adult males are solitary while females and young

males travel in groups of 12 or more. White-nosed coatis are most active during mornings and evenings at which times they forage canopies and the ground for fruits, insects, birds, and small mammals (Schmidly and Bradley 2016). This species is not anticipated to occur within the study area due to the study area being outside of the known range of this species.

REPTILES

Texas Horned Lizard

The Texas horned lizard inhabits open, arid to semiarid regions with sparse vegetation including open desert, grasslands, and shrubland containing bunch grasses, cacti, and yucca (TPWD 2025i). Preferred soils vary from pure sands and sandy loams to coarse gravels, conglomerates, and desert pavements (Henke and Fair 1998). Texas horned lizards are active between early spring to late summer and thermo-regulate by basking or burrowing into the soil. During winter inactivity periods, this species aestivates beneath the surface six to 12 inches deep under rocks, leaf litter, or abandoned animal burrows. Populations are thought to have decreased because of land use conversions, increased pesticide/herbicide use, collection, and increased fire ant populations. The Texas horned lizard forages primarily on the red harvester ant (*Pogonomyrmex barbatus*), but also consumes grasshoppers, beetles, and grubs (Dixon 2013; Henke and Fair 1998). This species has the potential to occur within the study area wherever suitable habitat is available.

Texas Tortoise

The Texas tortoise is a long-lived species with a shell that has characteristically yellowish-orange, bluntly-horned scutes (shell plates). Habitat preferences include arid brush, scrub woods, and grass-cactus associations with grassy understories (TPWD 2025j). The Texas tortoise is active during March to November and when inactive, it occupies shallow depressions at the base of bushes or cactus, underground burrows, or under other suitable objects such as man-made debris. The tortoise feeds on fruits of prickly pear and other mostly succulent plants. This species has the potential to occur within the study area wherever suitable habitat is available.

3.2 Human Resources/Community Values

3.2.1 Land Use

Jurisdiction does not necessarily represent land ownership. Potential conflicts that could arise from crossing jurisdictional boundaries were evaluated in this study. The study area is located within the jurisdictional boundary of Karnes and Bee Counties.

The study area covers approximately 3.84 square miles in Karnes and Bee Counties. Land uses within the study area were identified and placed into the following categories: planned land use, agriculture,

rangeland, oil and gas facilities, communication towers, and solar energy infrastructure. The primary sources of land use information were obtained from interpretation of aerial imagery and vehicular reconnaissance surveys from accessible public viewpoints. Planned land use features were limited to known features obtained from governmental entities and mobility authorities.

Residential Areas

The urban/developed classification represents concentrations of surface disturbing land uses, which include habitable structures and other developed areas, characterized with low, medium and high intensities. The various levels of development include a mix of institutional, commercial, and/or industrial land uses. Developed low, medium, and high intensity areas were identified using aerial photograph interpretation and reconnaissance surveys. These classifications are described below:

- **Developed Low Intensity** areas typically include rural settings with single-family housing units.
- **Developed Medium Intensity** areas typically include single-family housing units that are grouped in residential subdivisions and might include peripheral commercial structures.
- **Developed High Intensity** includes highly developed areas where people reside or work in high numbers. Examples include apartment complexes, row houses, and commercial/industrial parks. Areas with the highest concentration of development are typically located within or near the towns and communities in the study area.

The study area is located within Karnes and Bee Counties. The primary land use in the study area along the existing 345 kV transmission line ROW includes mix of agricultural development, low-density residential and industrial development, and transportation infrastructure. Habitable structures were identified using aerial imagery Google Earth (Google, Inc. 2024) and reconnaissance surveys. The PUC definition of a habitable structure was used for this routing study. The PUC's Substantive Rules (16 TAC § 25.101(a)(3)) define habitable structures as "structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis. Habitable structures include, but are not limited to, single-family and multi-family dwellings and related structures, mobile homes, apartment buildings, commercial structures, industrial structures, business structures, churches, hospitals, nursing homes, and schools."

Schools

The study area is located within the Kenedy and Pawnee Independent School Districts. However, no schools were identified within the study area (Texas Education Agency 2024).

Planned Land Use

The planned land use component identifies objectives and/or policies regarding land use goals and plans, including conservation easements, managed lands, and proposed developments. Cities and counties typically prepare comprehensive land use plans to provide strategic direction by goals and objectives for the individual city or county. City and county websites were reviewed, and correspondence was submitted to local and county officials to identify potential planned land use conflicts. The study area is not under the jurisdiction of any city; therefore, is not governed by any land use plans.

There are no zoning regulations in the unincorporated areas of Karnes and Bee Counties. Karnes and Bee Counties do not have comprehensive land use plans. However, Bee County has a Multi-Hazard Mitigation Plan which is a comprehensive strategy developed to minimize the risks and vulnerabilities associated with various natural and manmade hazards in this region (Bee County 2024).

Conservation Easements

A conservation easement is a restriction that property owners voluntarily place on specified uses of their property to protect natural, productive or cultural features. The property owner retains legal title to the property and determines the types of uses to allow or restrict. The property can still be bought, sold, and inherited, but the conservation easement is tied to the land and binds all present and future owners to its terms and restrictions. Conservation easement language will vary as to the individual property owner's allowances for additional developments on the land. The land trusts facilitate the easement and ensure compliance with the specified terms and conditions.

Based on review of numerous non-governmental groups (e.g., the Nature Conservancy, Texas Land Conservancy [TLC] and the National Conservation Easement Database [NCED]) that are land trusts and databases for conservation easements within Texas, no conservation easements were identified within the study area (Nature Conservancy 2024; TLC 2024; NCED 2024).

3.2.2 Agriculture

Agriculture is a significant segment of the economy throughout Texas, and study area counties have an active agricultural sector. According to the USDA's National Agricultural Statistics Service's 2017 Census of Agriculture, the total market value for agricultural products sold for both of the study area counties was $67,140,000, a 25% increase from the 2012 market value of $53,643,000. Livestock sales accounted for 63% of agricultural sales in Karnes County, while crop sales accounted for 37% of agricultural sales. The number of farms in Karnes County decreased from 1,288 in 2012 to 1,213 in

2017 (a decrease of 6%). Livestock sales accounted for 35% of agricultural sales in Bee County, while crop sales accounted for 65% of agricultural sales. The number of farms in Bee County decreased from 974 in 2012 to 943 in 2017 (a decrease of 3%) (USDA 2012 and 2017). Detailed agricultural information for the study area counties is provided in Table 3-7.

TABLE 3-7 AGRICULTURE INFORMATION IN THE STUDY AREA COUNTIES

County	Total Market Value of Agricultural Products			Distribution of Products (2017)		Number of Farms		
	2012	2017	Change	Crop Sales	Livestock Sales	2012	2017	Change
Karnes County	$27,599,000	$29,436,000	+7%	37%	63%	1,288	1,213	-6%
Bee County	$26,044,000	$37,704,000	+45%	65%	35%	974	943	-3%

Source: USDA 2012 and 2017.

3.2.3 Transportation/Aviation

Transportation

Federal, state, and local roadways were identified using TxDOT county transportation maps, Texas Natural Resources Information System data, and field reconnaissance surveys. The roadway transportation system within the study area includes SH 72, FM 882, FM 798 and several county roads (TxDOT 2024a).

TxDOT's "Project Tracker," which contains detailed information by county for every project that is or could be scheduled for construction, was reviewed to identify any state roadway projects planned within the study area. The TxDOT Project Tracker indicated there are three projects planned within the study area (TxDOT 2024b).

Karnes County

- There is one project to perform a seal coat within the study area on SH 72 that is underway or begins soon.

Bee County

- There is one project to perform a seal coat within the study area on FM 798 that is underway or begins soon.
- There is one project to perform a seal coat within the study area on SH 72 that begins construction within four years.

There are no railroads identified within the study area (United States Department of Transportation 2024).

Aviation

POWER reviewed the San Antonio Sectional Aeronautical Chart (FAA 2024a) and the Chart Supplement for the South Central United States (US) (formerly the Airport/Facility Directory) (FAA 2024b) to identify FAA registered facilities within the study area subject to notification requirements listed in 14 C.F.R. 77.9. Facilities subject to notification requirements listed in 14 C.F.R. 77.9 include public-use airports listed in the Airport/Facility Directory (currently the Chart Supplement), public-use or military airports under construction, airports operated by a federal agency or DoD, or an airport or heliport with at least one FAA-approved instrument approach procedure.

The Chart Supplement for the South Central US used in conjunction with the San Antonio Sectional Aeronautical Chart, contains all public-use airports, seaplane bases and public-use heliports, military facilities, and selected private-use facilities specifically requested by the DoD for which a DoD Instrument Approach Procedure has been published in the US Terminal Procedures Publication.

No public-use or military FAA registered airports were identified within the study area (FAA 2024b).

No public-use heliports or heliports with an instrument approach procedure are listed for the study area in the Chart Supplement for the South Central US (FAA 2024b).

In addition, POWER also reviewed the FAA database (FAA 2024c), USGS topographic maps, recent aerial imagery, and conducted field reconnaissance from publicly accessible areas to identify private-use airstrips and private-use heliports not subject to notification requirements listed in 14 C.F.R. 77.9. There were no private-use airstrips, and no private-use heliports identified within the study area.

3.2.4 Communication Towers

Review of the Federal Communication Commission (FCC) database indicated that there are no amplitude modulation radio (AM radio) transmitters within the study area. There is one frequency modulation radio (FM radio) transmitters/microwave towers/other electronic installations identified within the study area. There is one additional FM radio transmitters/microwave towers/other electronic installations within 2,000 feet of the study area boundary (FCC 2024).

3.2.5 Utility Features

Utility features reviewed include existing electrical transmission lines, pipelines, solar energy fields, water and gas/oil wells, and water and gas/oil storage tanks. Data sources used to identify existing electrical transmission and distribution lines include utility company and regional system maps, aerial imagery, USGS topographic maps, additional available planning documents, and field reconnaissance surveys. Existing transmission lines identified within the study area include four 345 kV transmission lines and two 138 kV transmission lines. Distribution lines are prevalent throughout the developed portions of the study area; however, these features were not mapped or inventoried.

Data was obtained from the RRC (RRC 2025a) which provided a GIS layer for existing oil and gas wells, pipelines, and supporting facilities. The 2025 RRC dataset along with aerial imagery interpretation and field reconnaissance were used to identify and map existing oil and gas related facilities. Several pipelines and oil and gas wells were identified within the study area (RRC 2025a).

There were no known water wells identified within the study area (TWDB 2025).

Additionally, solar energy panels were identified within the southern portion of the study area, which is associated with the Sparta Solar Fields.

3.2.6 Socioeconomics

This section presents a summary of economic and demographic characteristics for the county and describes the socioeconomic environment of the study area. Literature sources reviewed include publications of the United States Census Bureau (USCB), and the Texas State Data Center (TSDC).

Population Trends

Karnes and Bee Counties experienced a population decrease between 2010 and 2020 of 1% and 3% respectively. By comparison, population at the state level increased by nearly 16% between 2010 and 2020 (USCB 2010 and 2024).

According to TSDC projections, Karnes County is projected to experience a population growth between 2020 and 2050. While Bee County is projected to experience a population decrease between 2020 and 2050. The population of Karnes County is expected to experience population increases of 4%, 5% and 4%, respectively. The population of Bee County is expected to experience population decrease of 2%, 2% and 4%, respectively. By comparison, the population of Texas is expected to experience population increases of 13%, 12%, and 10% over the next three decades, respectively (TSDC 2022). Table 3-8

presents the past population trends and projections for the study area counties and for the state of Texas.

TABLE 3-8 POPULATION TRENDS

	PAST		PROJECTED		
STATE/COUNTY	2010	2020	2030	2040	2050
Texas	25,145,561	29,145,505	32,912,882	36,807,213	40,645,784
Karnes County	14,824	14,710	15,357	16,052	16,739
Bee County	31,861	31,047	30,459	29,805	28,693

Sources: USCB 2010 and 2024; TSDC 2022.

Employment

From 2010 to 2022, the civilian labor force (CLF) in Karnes and Bee Counties increased by 10% (473 people) and 20%, (1,922 people) respectively. By comparison, the CLF at the state level grew by 25% (2,943,813 people) over the same time period (USCB 2024). Table 3-9 presents the CLF for the study area counties and the state of Texas for the years 2010 and 2023.

Between 2010 and 2023, Karnes County experienced an increase in its unemployment rate from 3.20% in 2010, to 4.60% in 2023. Bee County experienced a decrease in its unemployment rate from 9.00% in 2010 to 5.90% in 2023. By comparison, the state of Texas experienced a decrease in the unemployment rate over the same period. The state's unemployment rate decreased from 7.00% in 2010, to 5.10% in 2023 (USCB 2024). Table 3-9 presents the employment and unemployment data for the study area counties and the state of Texas for the years 2010 and 2023.

TABLE 3-9 CIVILIAN LABOR FORCE AND EMPLOYMENT

STATE/COUNTY	2010	2023
Texas		
Civilian Labor Force	11,962,847	14,906,660
Employment	11,125,616	14,140,748
Unemployment	837,231	765,912
Unemployment Rate	7.00%	5.10%
Karnes County		
Civilian Labor Force	4,829	5,302
Employment	4,675	5,059
Unemployment	154	243
Unemployment Rate	3.20%	4.60%
Bee County		
Civilian Labor Force	9,723	11,645
Employment	8,849	10,966
Unemployment	874	688

TABLE 3-9 CIVILIAN LABOR FORCE AND EMPLOYMENT

STATE/COUNTY	2010	2023
Unemployment Rate	9.00%	5.90%

Source: USCB 2010 and 2024.

Leading Economic Sectors

The major occupations in Karnes and Bee Counties in 2023 are listed under the category of management, business, science and arts occupations, followed by service occupations (USCB 2024). Table 3-10 presents the number of persons employed in each occupation category during 2023 in the study area counties.

TABLE 3-10 OCCUPATIONS IN THE STUDY AREA COUNTIES

OCCUPATION	KARNES COUNTY	BEE COUNTY
Management, business, science, and arts occupations	1,434	3,188
Service occupations	1,301	2,479
Sales and office occupations	1,020	2,206
Natural resources, construction, and maintenance occupations	759	1,429
Production, transportation, and material moving occupations	545	1,664

Source: USCB 2024.

In 2010 and 2023, the industry group employing the most people in Karnes and Bee Counties was educational services, and healthcare and social assistance (USCB 2024). Table 3-11 presents the number of persons employed in each of the industries in the study area counties for the years 2010 and 2023.

TABLE 3-11 INDUSTRY IN THE STUDY AREA COUNTIES

INDUSTRY GROUP	KARNES COUNTY		BEE COUNTY	
	2010	2023	2010	2023
Agriculture, forestry, fishing and hunting, and mining	559	594	808	888
Construction	254	585	464	952
Manufacturing	242	288	202	431
Wholesale trade	54	57	76	274
Retail trade	414	472	685	1,337
Transportation and warehousing, and utilities	279	154	540	837
Information	90	155	79	124
Finance and insurance, and real estate and rental and leasing	260	237	518	385
Professional, scientific and management, and administrative and waste management services	218	358	297	448

TABLE 3-11 INDUSTRY IN THE STUDY AREA COUNTIES

INDUSTRY GROUP	KARNES COUNTY		BEE COUNTY	
	2010	2023	2010	2023
Educational services, and health care and social assistance	1,261	970	2,025	2,939
Arts, entertainment, and recreation, and accommodation and food services	319	371	798	679
Other services, except public administration	272	311	521	532
Public administration	453	507	1,836	1,140

Source: USCB 2024.

3.2.7 Community Values

The term “community values” is included as a factor for the consideration of transmission line route approval under PURA 37.056(c)(4)(A-D); however, the term has not been defined by the PUC. The PUC CCN application requires information concerning the following items related to community values:

- Public open-house meeting if applicable.
- Approval or permits required from other governmental agencies.
- Brief description of the area traversed.
- Habitable structures within 500 feet of the centerline for transmission lines of 230 kV or more.
- AM and FM radio, microwave, and other electronic installations in the area.
- FAA-registered public use airstrips, private airstrips, and heliports located in the area.
- Irrigated pasture or croplands utilizing center-pivot or other traveling irrigation systems.
- Parks and recreation areas.
- Historical and archeological sites.

In addition, POWER also evaluated the Project for community values and resources that might not be specifically listed by the PUC, but that might be of importance to a particular community as a whole. Although the term “community values” is not formally defined in PUC rules, in several dockets the PUC and Staff have used the following as a working definition: the term “community values” is defined as *a shared appreciation of an area or other natural resource by a national, regional, or local community*. Examples of a community resource would be a park or recreational area, historical or archeological site, or a scenic vista (aesthetics). POWER mailed consultation letters to various local elected and appointed officials to identify and collect information regarding community values and community resources.

3.3 Recreational and Park Areas

The PUC's CCN application specifically requires reporting of recreational and park areas owned by a governmental body or an organized group, club, or church. Federal and state database searches and county/local maps were reviewed to identify any parks and/or recreational areas within the study area. A reconnaissance survey was also conducted to identify any additional park or recreational areas.

3.3.1 National/State/County/Local Parks

No national or state parks were identified within the study area (National Parks Service [NPS] 2024a; TPWD 2024a). No county or local parks were identified within the study area.

There are also no public hunting areas or wildlife management areas identified within the study area (TPWD 2024b). Additional recreational activities such as hunting and fishing might occur on private properties throughout the study area but are not considered to be open to the general public.

3.3.2 Wildlife Viewing Trails

Review of the TPWD *Central Texas Coast – Great Texas Coastal Birding Trail* did not indicate any wildlife viewing loops or sites of interest within the study area (TPWD 2024c).

3.4 Aesthetic Values

PURA § 37.056(c)(4)(C) incorporates aesthetics as a consideration when evaluating proposed electric transmission facilities. There are currently no formal guidelines provided for managing visual resources on private, state, or county owned lands. For the purposes of this study, the term aesthetics is defined by POWER to accommodate the subjective perception of natural beauty in a landscape and measure an area's scenic qualities. The visual analysis was conducted by describing the regional setting and determining a viewer's sensitivity. Related literature, aerial photograph interpretation, and field reconnaissance surveys were used to describe the regional setting and to determine the landscape character types for the area.

Consideration of the visual environment includes a determination of aesthetic values (where the major potential effect of a project on the resource is considered visual) and recreational values (where the location of a transmission line could potentially affect the scenic enjoyment of the area) that would help define a viewer's sensitivity. POWER considered the following aesthetic criteria that combine to give an area its aesthetic identity:

- Topographical variation (hills, valleys, etc.).

- Prominence of water in the landscape (rivers, lakes, etc.).
- Vegetation variety (woodland, meadows).
- Diversity of scenic elements.
- Degree of human development or alteration.
- Overall uniqueness of the scenic environment compared with the larger region.

The study area is primarily rural, with agricultural, some residential and industrial development scattered throughout. The predominant land use within the study area is pastureland/rangeland. The majority of the study area has been impacted by land improvements associated with residential structures, industrial activity, local roadways, and various utility corridors including the existing 345 kV transmission line. Overall, the study area viewscape consists of low intensity urban development. However, no known high-quality aesthetic resources, designated views, or designated scenic roads or highways were identified within the study area (Federal Highway Administration 2024).

The study area is located within the Texas Independence Trail Region. There are no identified sites of interest within the study area (THC 2024a). A review of the NPS website did not indicate any Wild and Scenic Rivers, National Monuments, National Memorials, National Historic Sites, National Battlefields, or National Historic Trails within the study area (National Wild and Scenic Rivers System 2024; NPS 2024b, 2024c, 2024d, and 2024e).

Based on these criteria, the study area exhibits a moderate degree of aesthetic quality for the region. The majority of the study area maintains the feel of a rural community with an agricultural and industrial setting. Although some portions of the study area might be visually appealing, the aesthetic quality of the study area overall is not distinguishable from that of other adjacent areas within the region.

3.5 Historical (Cultural Resource) Values

Section 37.056(c)(4)(A-D) of the Texas Utilities Code highlights the importance of considering historical and aesthetic values in the evaluation of proposed electric transmission facilities. Additionally, the PUC's Standard Application for a CCN requires the identification and documentation of known historical sites within 1,000 feet of any alternative route. This documentation includes mapping and noting the distance from the centerline of the proposed route. While archaeological sites within the same distance must be recorded and their proximity to the centerline noted, they do not need to be included on the maps to ensure their protection. It's also essential to list the sources consulted for identifying these sites, including national, state, or local commissions.

The THC serves as the state's agency for historic preservation. Collaborating with TARL, the THC keeps thorough records of cultural resources that have been previously documented, along with data on past field investigations. We accessed restricted information from the THC's online Texas Archeological Sites Atlas (TASA) and acquired GIS shapefiles from TARL to pinpoint and map the locations of recorded cultural (both archaeological and historical) resources within the study area. On a national scale, we reviewed resources from the NPS to identify locations and boundaries of nationally designated historic landmarks, trails, and battlefield monuments.

Cultural resources encompass both archaeological and historical sites. According to the NPS' standard definitions, these resources include districts, sites, buildings, structures, or objects that hold significance for a culture, subculture, or community for various reasons—be it scientific, traditional, religious, or otherwise. In this study, we categorize cultural resources into three primary groups: archaeological resources, historical resources, and cemeteries. These categories align with how cultural resource records are organized by the THC and TARL.

Archaeological resources refer to locations where human activity has significantly changed the landscape, leaving behind physical evidence such as burned rock middens, stone tools, petroglyphs, house foundations, trails, and discarded materials. In Texas, many archaeological sites originate from Native American (pre-historic), Euro/African American, or Hispanic cultures. High probability areas (HPAs) for both prehistoric and historic archaeological resources have been identified, considering factors like proximity to reliable water sources, specific topographic features, and the existence of structures noted on historical maps in currently undeveloped regions.

Historical resources encompass various standing buildings or structures, such as houses, barns, and outbuildings. They can also include features like dams, canals, bridges, transportation routes, and silos, as well as districts that are not archaeological but are typically more than 50 years old.

Cemeteries serve as purposeful resting places for the deceased, encompassing a range of settings from expansive public burial grounds hosting many individuals to intimate family plots with just a few graves, or even solitary burial sites. Certain cemeteries can earn the title of Historic Texas Cemeteries (HTCs) from the THC or be acknowledged through an Official Texas Historical Marker (OTHM) designation. Additionally, they may be part of the THC Record-Investigate-Protect Program, which documents and safeguards their significance.

3.5.1 Cultural Background

The study area is mapped by Perttula (2004) in the northern portion of the South Texas Plains archeological region of Texas, in the Central and Southern Planning Region as delineated by the THC (Mercado-Allinger et al.1996) (Figure 3-4). The study area is near, and thus shares culture histories with, the Central Texas Region to the north, the Savannah and Prairie Region to the east, and the Coastal Texas region to the south. The following culture history is drawn primarily from Hester's (1995) discussion of South Texas prehistory, unless otherwise noted. Like most of Texas, the prehistory of South Texas is divided into three broad periods of cultural development based on technological changes evident in the archeological record, and on broad changes in the physical and cultural environment. These periods, the Paleoindian, Archaic and Late Prehistoric Periods, are discussed below, followed by a discussion of the study area following the arrival of Europeans. All dates pertaining to the prehistory of the area are given as approximate years before present (BP).

Paleoindian Period (11,500 to 8,800 BP)

The Paleoindian period is the earliest generally accepted period of human occupation in North America. During this period, prehistoric populations exploited now-extinct giant mammals, such as ancient bison (*Bison antiquus*) and mammoth (*Mammuthus columbi*), although recent emphasis has been placed on the wide diversity of plants and animals exploited by these early groups (Collins 1995 and 2002). The Paleoindian Period coincided with the end of the last major North American glaciation, known geologically as the Late Pleistocene, and with the beginning of the Holocene.

In South Texas, the Paleoindian tradition is represented by fluted projectile points and specialized blade production (Hester 1995). Sites containing diagnostic dart point types such as Clovis, Folsom, Plainview, and Angostura are often attributed to this early period of human occupation in South Texas and elsewhere. The late Paleoindian period corresponds to a greater variety of point styles, including smaller side-notched points that are believed to reflect a more diverse hunting strategy. Climate changes including a warming trend at the end of the Pleistocene contributed to the extinction of Pleistocene mega-fauna and regional changes in flora and fauna.

N

0 30 60 120 180 240

Miles

Source: Mercado- Allinger et. al., 1996

Legend

Cultural Resource Planning Region Boundary

County Boundary

PAWNEE TO TANGO 345 KV TRANSMISSION LINE REBUILD PROJECT

FIGURE 3-4

LOCATION OF THE STUDY AREA IN RELATION TO THE CULTURAL RESOURCE PLANNING REGIONS OF TEXAS

CPS ENERGY · AEP TEXAS · POWER ENGINEERS

Date: 3/20/2025

During this time, while the focus shifted to hunting large game, small animals, fish, reptiles, and plant life remained vital components of the diet. Small groups continued their traditional practices of hunting, gathering, and sourcing materials for stone tools across a wide region. The distinctive Clovis spear points of the early Paleoindian era transitioned to the shorter, fluted Folsom points. There was also an increased diversity of smaller dart points. Late Pleistocene fauna and possibly associated lithic materials have been reported at the Buckner Ranch Site (41BE2) on the Berclair Terrace in Bee County near its border with Goliad County.

Archaic Period (8,000 to 1,150 BP)

The long-lasting Archaic Period in South Texas followed the Paleoindian period and is distinguished by changes in material culture representing cultural adaptation to the changing North American environment. It is thought that human population density gradually increased during this period, and the Archaic Period is characterized by a shift to the hunting of smaller game, plant gathering, and an emphasis on the exploitation of marine resources in coastal zones. The hunting and gathering lifeway is epitomized by the Archaic tradition. The Archaic period is generally subdivided into three subperiods: Early, Middle and Late.

Early Archaic archeological sites are rare in South Texas, and the settlement patterns and subsistence strategies of this period are poorly understood. Early Archaic groups were likely organized into small hunting and gathering bands and were similar to their Paleoindian predecessors in their lifestyle and population density. Typical food resources probably consisted of deer, mussels, small game, fish and acorn nuts (Hester 1995). In Central Texas, the transition from the late Paleoindian period to the Early Archaic is characterized by a gradual shift from broad hunting and gathering practices to more localized methods. This transition also resulted in a wider array of artifacts compared to the late Paleoindian period (Collins 2004). Key aspects of the Early Archaic included a greater usage of groundstone tools and the prevalent use of heat-treated rocks, which may have served as hearths or ovens. Bison are notably absent during the early Archaic in Central Texas (Collins 2004).

The Middle Archaic Period (4500 BP to 2400 BP) has a distinct lithic technology separating it from earlier periods. Dart points from this period are distinguished by their triangular shape. Middle Archaic dart points, such as the Tortugas and Abasolo point types, differ sharply from the stemmed points of the Early Archaic Period. Pedernales, Langtry, Kinney, and Bulverde dart points are also Middle Archaic dart point types (Turner and Hester 1999). This period also exhibits a large amount of distally-beveled “gouges.” Use-wear analysis suggests the gouges were used for woodworking (Hester 1995). During the early Middle Archaic in Central Texas, evidence of bison hunting can be found in the

archaeological record (Collins 2004). However, around 5,000 BP, bison disappear from the central Texas sites, coinciding with some of the driest conditions experienced by humans in the region (Collins 2004). The Middle Archaic is marked by growing populations and increased population density from earlier periods, although the population density remained low (Hester 1995). Site densities in South Texas increased markedly during the Middle Archaic, possibly reflecting a decrease in group mobility and/or an increase in territoriality among groups (Black 1989). Early cemeteries, dating to the end of the Middle Archaic, suggest territoriality increased during the Middle Archaic.

The Late Archaic Period (2400 BP to 1300 BP) is the best understood and best represented of the Archaic subperiods. During the Late Archaic, the exploitation of diverse ecological niches continued to intensify, becoming increasingly oriented toward the exploitation of seasonal food sources. Lithic materials, chemically traced to Central Texas, as well as the presence of a small amount of large, small-stemmed bifaces (common in Central Texas during the Archaic Period), suggests that trade with neighboring areas increased during the Late Archaic. Shumla, Ensor, Frio, Marco, and Montell point types are typical of the Late Archaic period. Ground stones are more frequently encountered in Late Archaic sites than in previous periods, consisting primarily of manos and metates. The increased use of ground stones likely represents an increased exploitation of mesquite, acacia beans, and other plant resources. Hester (1995) suggests this shift reflects a continued increase in population density. Cultural deposits on Late Archaic sites also tend to be deeper than during preceding periods, suggesting that occupations were either more extended in duration or that sites were reoccupied more frequently (Black 1989).

Late Prehistoric Period (1,150 to 350 BP)

The primary hallmarks of the Late Prehistoric Period are the introduction of the bow and arrow and the introduction of pottery in the region. The arrow points found from this period are much smaller and lighter than the dart points from earlier periods, and include Fresno, Scallorn, Starr, Zavala, and Perdiz points (Hester 1995). Evidence points to the presence of two ceramic traditions in South Texas, bone-tempered and sandy paste. The bone-tempered pottery, often referred to as Leon Plain ware, is primarily recovered from inland South Texas sites and associated with the Toyah culture (Hester 1989). These wares include mostly undecorated jars and bowls. The sandy paste ceramic tradition, commonly referred to as Rockport ware, originates along the Texas Gulf Coast. These wares tend to be thin walled, sandy textured, and often decorated and waterproofed with asphaltum (Hester 1989).

The Late Prehistoric period is often considered to have begun around 1,250 BP, although it might have actually started as late as 800 BP. During this time, subsistence practices remained relatively stable,

with hunting and gathering still prominent and the processing of plants in burned rock middens continuing. A significant change marking the transition from the Late Archaic to the Late Prehistoric was the rise of arrow points, which became more common in archaeological findings compared to dart and spear points. Additionally, there seems to be an uptick in intergroup violence, likely linked to rising population pressures, as seen in many skeletal remains showing fatal arrow wounds. Toward the end of the Late Prehistoric period, pottery and signs of small-scale agriculture begin to emerge in the archaeological records (Collins 2004).

As Europeans began to explore Mexico and South Texas in the sixteenth century, European goods were introduced to the native groups, some of which appear in contact-era artifact assemblages. Records made by early European explorers, such as Alvar Nunez Cabeza da Vaca, provide the earliest ethnohistoric accounts of the Coahuiltecan-affiliated groups located in South Texas at the time. Based on these records, it appears that native groups in the region were highly nomadic hunter gatherers who moved in a seasonal pattern within distinctive territories (Hester 1989). The combined effects of diseases introduced by Europeans as well as violent cultural conflicts decimated local Native American populations.

Post-contact Period (ca. 500 to 50 BP)

As Europeans began to explore Mexico and South Texas in the sixteenth century, European goods were introduced to the native groups, some of which appear in contact-era artifact assemblages. The dominant regional tribes in the area at the time of Spanish arrival included the Karankawa, Lipan Apache, and the Coahuiltecans. Records made by early European explorers, such as Alvar Nunez Cabeza da Vaca, provide the earliest ethnohistoric accounts of the Coahuiltecan-affiliated groups located in South Texas at the time. Based on these records, it appears that native groups in the region were highly nomadic hunter gatherers who moved in a seasonal pattern within distinctive territories (Hester 1989). The combined effects of diseases introduced by Europeans, as well as violent cultural conflicts, decimated local Native American populations prior to the establishment of a permanent European presence in the area.

Spain was the first European nation to explore and claim New World territory that included Texas and the Lower Rio Grande. In 1528, Cabeza de Vaca crossed South Texas after being shipwrecked along the Texas Coast near Galveston Bay. For a period of more than two centuries, Spanish excursions into South Texas were primarily military expeditions designed to bolster Spain’s claim to the region and prevent other European nations from establishing claims within Spanish territory. Roads and trails used

by the Spanish in this period often followed older routes used by Native American people and relied on natural springs and other water sources as waypoints.

Longhorn cattle were introduced by the Spanish and strays from the first expeditionary herds were the predecessors that formed the early North American herds. In 1722, Mission Señora del Espiritu Santo de Zúñiga was established near modern-day Victoria in an effort to Christianize the local Karankawa groups. *Santa Dorotea* or La Bahía, as it is often called, was established in the vicinity of the modern town of Goliad in 1749 when Nuestra Señora de Loreto presidio and Nuestra Señora del Espíritu Santo de Zúñiga mission were moved to the San Antonio River. The mission was moved a number of times, and finally, in the 1740s, rebuilt near the San Antonio River as Spain sought to block French and English incursions and protect the main road from Mexico to Bexar and East Texas (Roell 2024). The settlement of Presidio La Bahía/Mission Espiritu established additional herds in the area. This earlier reliance on cattle eventually lead Goliad to call itself “the Birthplace of Texas Ranching” (NRHP 2007).

In 1758, a land grant was given to Andrés Hernández and Luis Antonio Menchaca in present-day Karnes County, and they proceeded to establish ranches soon thereafter. In 1789, a land grant was given to Carlos Martínez in present-day Bee County, however settlement of the area did not begin until the arrival of Irish immigrants in 1826 (Bauer 2024). The Spanish established a fort, Fuerte de Santa Cruz del Cibolo, on Cibolo Creek in present-day Karnes County in 1770. The fort lasted 13 years before it was abandoned after multiple Comanche attacks (Long 2024). In 1805, Mexican aristocrat Martín De León established a ranch between Chiltipin Creek and the Aransas River but was unable to establish a colony after repeated attempts in 1807 and 1809 due to rising political tensions in Mexico with Spain (Roell 2024).

After Mexican independence colonization, the area became more accessible for colonization. 1824 De León’s Colony was established with the immigration of 41 Mexican families to the area, making it the only predominantly Mexican colony in Texas (Roell 2024). The first permanent European settlers in Bee County arrived in 1826 from Ireland, and, after women and children arrived in 1829, they founded Corrigan (Bauer 2024). Settlement of the region continued into the 1830s with Mexican, Anglo-American, and Irish settlers, such as those who established the McMullen-McGloin Colony, which included the area around present-day Beeville (Bauer 2024).

When the war for Texas independence started in 1836, the residents of these areas sided with the rebellion against Mexican President Antonio López de Santa Ana, who saw Mexican families in particular, such as De León, as traitors (Roell 2024). When the hostilities came to an end, the regional

population and economy grew to the point that Karnes County was formed in 1854, with Helena named the county seat. The county was a haven for outlaws and thieves (Long 2024). That same year, a group of Polish immigrants settled in Karnes County, founding the first Polish colony in the US (Long 2024).

Following the Texas Revolution and Texas' subsequent annexation by the US, the ranching industry continued to dominate the area, led primarily by Anglo-Americans (Weber 2024). Mexican residents focused on the transportation of goods from the coast to the interior along the Indianola-Goliad-San Antonio Road. The transportation trade became so lucrative that, in 1857, Anglo-Americans Texans began harassing the predominantly Mexican traders, known as carters, by destroying their oxcarts, stealing their goods, and killing or wounding the carters (Weber 2024).

Karnes County was the site of several attacks on the Mexican carters by Texans (Long 2024). Pressured by the United States, Texas authorities eventually intervened to the chagrin of many locals (Weber 2024). The instigators were hung from Goliad's "Hanging Tree" (Roell 2024). Shortly after the Cart War, Bee County was formally established in 1858 from portions of San Patricio, Goliad, Refugio, Live Oak, and Karnes Counties, with Beeville serving as the county seat (Bauer 2024).

Both Bee and Karnes Counties relied heavily on cattle ranching thus the necessity for enslaved labor was not as prevalent as in areas that relied on the plantation economy (Bauer 2024 and Long 2024). About 15% of Karnes County residents were enslaved and Bee County had just under 80 of 910 residents who were enslaved (Long 2024). Though the economy was not significantly tied to enslaved labor, Karnes County voted overwhelming for secession from the US, with only one person voting against the measure. The overwhelming support is likely due to the presence of the pro-southern group the Knights of the Golden Circle in the area. Most of the Polish residents in the county, most of whom were against slavery, had not been residents in the state long enough to vote (Long 2024). During the war Bee County residents served in the Confederate army as well as local defensive groups (Bauer 2024).

After the Civil War, cattle drives played a vital role in the economy of the Bee and Karnes Counties (Bauer 2024 and Long 2024). These cattle drives followed the Chisholm Trail bound for the railroads in Matamoros and broader American markets. During the 1870s and 1880s, the trails were diverted to the Rockport-Fulton area after cattle processing plants had been established there (Bauer 2024). Sheep ranching and wool production was also a prominent industry between 1870 and 1880 (Bauer 2024; Long 2024). During the 1880s, ranching gave way to large scale agriculture, with corn and oats as the principal crops. Eventually, farming methods and practices promoted by the state Agricultural

Experimental Station near Beeville, introduced flax, peanuts, fruits, vegetables, and onions into the repertoire of Bee County producers by 1895 (Bauer 2024).

The agriculture industry intensified with the expansion of the San Antonio and Aransas Pass Railway to Beeville in 1886. Other railroads expanding into Bee County opened new markets to the county's produce and introduced further immigration, which only contributed to the rise of the farming industry in the following decades (Bauer 2024). Settlers from Mexico and Germany made up the most significant portion of these immigrants and the number of farms grew from 628 in 1900 to 1,497 in 1920 (Bauer 2024). Cotton replaced corn and oats as the dominant product and by 1930, Bee County was producing up to 15,000 bales annually (Bauer 2024). When the railroads reached Karnes County, they brought an economic and population boom and an increased reliance on farming (Long 2024).

Sheep ranching was insignificant in the region by 1910 (Bauer 2024). However, cattle ranching was not completely replaced during the agricultural boom of the early twentieth century. The number of cattle and ranches continued to steadily increase, along with the adoption of horse ranching and poultry production. By 1930, chickens, turkeys, and geese were being raised at a commercial scale in Bee County (Bauer 2024).

The increase of population and land acquisition that fueled these growing industries eventually led to high land prices and residents gradually turned to tenant farming to adjust to these conditions. More than half the Bee County's farms were operated by tenant farmers by 1930, many of whom were white immigrants who could not buy land (Bauer 2024). Tenant farming also became common in Karnes County (Long 2024). During the Great Depression, which began in 1929, farmers in both counties were hit by the combination of falling prices and boll weevil infestation (Bauer 2024; Long 2024).

The discovery of oil in Pettus in 1929, and in neighboring Karnes County in 1930, aided in the post-Depression recovery in the area (Bauer 2024; Long 2024). The regional economy did not fully recover from the Great Depression until World War II, when several military installations were established, such as the Chase Field Naval Air Station in Beeville (Bauer 2024). In the 1940s and 1950s the Karnes County's economy began shifting towards large farms and ranches worked by agricultural laborers (Long 2024). The oil and gas industry has continued to be the biggest contributor to the Bee and Karnes Counties economies since the 1950s (Bauer 2024; Long 2024).

3.5.2 Literature and Records Review

On December 19, 2024, shapefiles were acquired from TARL to identify and map the locations of recorded archeological resources within the study area. Descriptive data pertaining to archeological sites and surveys were obtained from the TASA in December 2024. The locations of, and information pertaining to, State Antiquities Landmarks (SALs), NRHP properties, Historic Texas Cemeteries, and OTHMs within the study area were obtained from the TASA (THC 2024a) and the THSA (THC 2024b). The TASA, THSA, and USGS topographic maps were reviewed to identify cemeteries within the study area. Texas Department of Transportation's Historic Resources Aggregator (TxDOT 2024c) was reviewed to identify historic resources within the study area that are listed on or determined eligible for listing on the NRHP. At the national level, the NRHP database (NPS 2024c) and NPS websites for National Historic Landmarks (NPS 2024d) and National Historic Trails (NPS 2024e) were reviewed.

The records search indicated that two archeological sites have been recorded in the study area. No NRHP-listed or determined-eligible resources, SALs, cemeteries, or OTHMs are documented within the study area. The cultural resources within the study area are summarized below in Table 3-12.

TABLE 3-12 RECORDED CULTURAL RESOURCES WITHIN THE STUDY AREA

ARCHEOLOGICAL SITES	NRHP-LISTED RESOURCES	NRHP DETERMINED - ELIGIBLE RESOURCE	STATE ANTIQUITIES LANDMARKS	CEMETERIES	OTHM
2	0	0	0	0	0

Source: THC 2024a and 2024b.

One pre-contact and one post-contact archeological site are recorded in the study area (Table 3-13) (THC 2024b). Site 41KA122 is an isolated find consisting of a single chert flake. The site that has not been formally evaluated for inclusion on the NRHP. Site 41KA119 is a homestead with a standing shed, multiple collapsed structures, a water tank, wooden posts used to support one of the structures, and farm machinery. Artifacts observed at the site include corrugated tin, fence timbers, barbed wire, soft drink bottles, baby food jars, and two large cement piers (THC 2024b). Site 41KA119 has been determined to be ineligible for listing on the NRHP.

TABLE 3-13 RECORDED ARCHEOLOGICAL SITES WITHIN THE STUDY AREA

TRINOMIAL	PERIOD	ELIGIBILITY STATUS	SITE DESCRIPTION
41KA119	post-contact	Ineligible	homestead with standing shed, collapsed structures, water tank, wooden posts, farm machinery, and scatter of corrugated tin, fence timbers, barbed wire, soft drink bottles, baby food jars, and cement piers
41KA122	pre-contact	Undetermined	isolated flake

Source: THC 2024b.

3.5.3 Previous Investigations

No previous cultural resource investigations are mapped within the study area (THC 2024b).

3.5.4 High Probability Areas

Review of the previously recorded cultural resource site data indicates that the study area has not been entirely examined during previous archeological and historical investigations. Consequently, the records review results do not include all possible cultural resource sites within the study area. To further assess and avoid potential impacts to cultural resources, HPAs for archeological sites were defined during the route analysis process. HPAs were designated based on a review of the site and survey data within the study area, as well as soils and geologic data, topographic variables, and previously surveyed areas. Within the study area, the pre-contact HPAs typically occur near and along streams, at the heads of major draws, near springs, and outcroppings of chert gravels suited to stone tool manufacture. Terraces and topographic high points that would provide flats for camping and expansive landscape views as well as access to fresh water sources are also considered to have a high probability of containing prehistoric archeological sites. Post-contact age resources are also likely to be found near water sources. However, they will also be in proximity to primary and secondary transportation routes (e.g., trails, roads, and railroads) which provided access to the sites. Buildings and cemeteries are also more likely to be located within or near post-contact communities.

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4.0 ENVIRONMENTAL IMPACTS OF THE PROJECT ROUTE

Potential impacts of the Project that could occur from, and are unique to, the construction (new and rebuild) and operation of a transmission line are discussed separately in this section of the EA. Evaluation of the potential impacts of the Project Route identified in Section 3.0 was conducted by tabulating the data for each of the 46 evaluation criteria in Table 2-1. The data tabulation for land use and environmental criteria for the Project Route is presented in Table 4-1.

TABLE 4-1 LAND USE AND ENVIRONMENTAL DATA FOR PROJECT ROUTE EVALUATION

Evaluation Criteria		
Land Use		Route
1	Length of project route (miles)	12.23
2	Number of habitable structures[1] within 500 feet of ROW centerline	4
3	Length of ROW using existing transmission line ROW	12.23
4	Length of ROW parallel and adjacent to existing transmission line ROW	0
5	Length of ROW parallel and adjacent to other existing ROW (e.g., roadways, highways, utilities, etc.)	0
6	Length of ROW parallel and adjacent to apparent property lines[2] or other natural or cultural features	0
7	Sum of evaluation criteria 3, 4, 5, and 6	12.23
8	Percent of evaluation criteria 3, 4, 5, and 6	100%
9	Length of ROW across parks/recreational areas[3]	0
10	Number of additional parks/recreational areas[3] within 1,000 feet of ROW centerline	0
11	Length of ROW across cropland	0.89
12	Length of ROW across pasture/rangeland	9.99
13	Length of ROW across land irrigated by traveling systems (rolling or pivot type)	0
14	Length of route across conservation easements and/or mitigation banks (Special Management Area)	0
15	Length of route across gravel pits, mines, or quarries	0
16	Length of ROW parallel and adjacent to pipelines[4]	1.13
17	Number of pipeline[4] crossings	28
18	Number of transmission line crossings	0
19	Number of IH, US and state highway crossings	1
20	Number of FM or RM road crossings	2
21	Number of FAA registered airports[5] with at least one runway more than 3,200 feet in length located within 20,000 feet of ROW centerline	0
22	Number of FAA registered airports[5] having no runway more than 3,200 feet in length located within 10,000 feet of ROW centerline	0
23	Number of private airstrips within 10,000 feet of the ROW centerline	1
24	Number of heliports within 5,000 feet of the ROW centerline	0
25	Number of commercial AM radio transmitters within 10,000 feet of the ROW centerline	0
26	Number of FM radio transmitters, microwave towers, and other electronic installations within 2,000 feet of ROW centerline	2
27	Number of identifiable existing water wells within 200 feet of the ROW centerline	0
28	Number of oil and gas wells within 200 feet of the ROW centerline (including dry or plugged wells)	6
Aesthetics		
29	Estimated length of ROW within foreground visual zone[6] of interstate, US and state highways	1.64
30	Estimated length of ROW within foreground visual zone[6] of FM/RM roads	2.06

TABLE 4-1 LAND USE AND ENVIRONMENTAL DATA FOR PROJECT ROUTE EVALUATION

Evaluation Criteria		
31	Estimated length of ROW within foreground visual zone[6][7] of parks/recreational areas[3]	0
Ecology		
32	Length of ROW across upland woodlands/brushlands	0.70
33	Length of ROW across bottomland/riparian woodlands	0.41
34	Length of ROW across NWI mapped wetlands	0
35	Length of route across USFWS designated critical habitat for federally-listed threatened or endangered species	0
36	Length of ROW across open water (lakes, ponds)	0.01
37	Number of stream crossings	17
38	Length of ROW parallel (within 100 feet) to streams	0.27
39	Length of ROW across Edwards Aquifer Zones	0
40	Length of ROW across FEMA mapped 100-year floodplain	0.45
Cultural Resources		
41	Number of cemeteries within 1,000 feet of the ROW centerline	1
42	Number of recorded cultural resource sites crossed by ROW	0
43	Number of additional recorded cultural resource sites within 1,000 feet of ROW centerline	3
44	Number of resources determined eligible for or NRHP properties crossed by ROW	0
45	Number of additional resources determined eligible for or NRHP properties within 1,000 feet of ROW centerline	0
46	Length of ROW across areas of high archeological site potential	8.64

Notes: All length measurements are shown in miles unless noted otherwise.
[1]Single-family and multi-family dwellings, and related structures, mobile homes, apartment buildings, commercial structures, industrial structures, business structures, churches, hospitals, nursing homes, schools, or other structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis within 500 feet of the centerline of a transmission project of 230 kV or more.
[2]Apparent property boundaries created by existing roads, highways, or railroad ROWs are not "double-counted" in the length of ROW parallel to apparent property boundaries criteria.
[3]Defined as parks and recreational areas owned by a governmental body or an organized group, club, or church within 1,000 feet of the centerline of the Project.
[4]Only steel pipelines six inches and greater in diameter carrying petrochemicals were quantified in the pipeline crossing and paralleling calculations.
[5]As listed in the Chart Supplement South Central US (FAA 2024b formerly known as the Airport/Facility Directory South Central US) and FAA 2024a.
[6]One-half mile, unobstructed. Lengths of ROW within the visual foreground zone of interstates, US and state highway criteria are not "double-counted" in the length of ROW within the visual foreground zone of FM roads criteria.
[7]One-half mile, unobstructed. Lengths of ROW within the visual foreground zone of parks/recreational areas may overlap with the total length of ROW within the visual foreground zone of interstates, US, and state highway criteria and/or with the total length of ROW within the visual foreground zone of FM roads criteria.

4.1 Impacts on Natural Resources/Environmental Integrity

4.1.1 Impacts on Physiography and Geology

Construction related to rebuilding the existing transmission line is not anticipated to have any significant adverse effects on the physiographic or geologic features and resources of the area. Replacement and erection of the new pole structures proposed for the Project will require the excavation and/or minor disturbance of small quantities of near-surface materials but should have no measurable impacts on the geologic resources or features along the Project Route. No geological hazards were identified within the study area and no geologic hazards are anticipated along the Project Route.

4.1.2 Impacts on Soils

Potential impacts to soils from the construction, operation, and maintenance of electric transmission lines include erosion and compaction. Such impacts can be avoided by CPS Energy and AEP Texas'

implementation of appropriate mitigative measures during construction. No conversion of prime farmland soils is anticipated because of the Project.

The highest risk for soil erosion and compaction is associated with the clearing and construction phases of the Project. In accordance with CPS Energy and AEP Texas standard construction specifications, woody vegetation will be cleared within the ROW as necessary to achieve the conductor to ground clearances of the transmission line. Areas with vegetation removed will have the highest potential for soil erosion and the movement of heavy equipment down the cleared ROW creates the greatest potential for soil compaction. Prior to construction, CPS Energy and AEP Texas will develop a SWPPP to minimize potential impacts associated with soil erosion, compaction, and off-ROW sedimentation. Implementation of this plan will incorporate temporary and permanent BMPs to minimize soil erosion on the ROW during rainfall events. The SWPPP will also establish the criteria for mitigating soil compaction and re-vegetation to maintain soil stabilization during the construction and post construction phases. The native herbaceous layer of vegetation will be maintained, to the extent practical, during construction. Denuded areas will be seeded and/or further stabilized with the implementation of permanent soil berms or interceptor slopes to stabilize disturbed areas and minimize soil erosion potential. The ROW will be inspected during and post construction to identify potential high erosion areas and that BMPs are implemented and maintained.

The potential for erosion and compaction will be minimized by CPS Energy and AEP Texas' development and implementation of a SWPPP for the Project.

4.1.3 Impacts on Surface Water

The Project Route crosses surface waters within the study area. CPS Energy and AEP Texas proposes to span all surface waters and construct any structures outside of the ordinary high-water marks for any surface waters. CPS Energy and AEP Texas will limit the removal of woody vegetation as necessary to meet the necessary conductor to ground clearances. The shorter understory and herbaceous layers of vegetation will remain, where allowable, and BMPs will be implemented in accordance with the SWPPP for the Project to reduce the potential for sedimentation into surface waters. Since CPS Energy and AEP Texas intend to span all surface waters and a SWPPP will be implemented during construction, no significant impacts to surface waters are anticipated for the Project Route. The length of open water crossings (lakes, ponds), number of streams crossed, and length of the Project Route paralleling (within 100 feet) streams are provided in Table 4-1.

The Project Route crosses approximately 0.01 mile of open water (lakes, ponds), has 17 stream crossings, and parallels (within 100 feet) streams for approximately 0.27 mile. These determinations are based on the NHD and, since the dataset's inception, the hydrology of some stream features may have been altered by construction of drainage ditches, impoundments, and residential areas. A Section 10 permit is not anticipated for this Project.

4.1.4 Impacts on Ground Water

The Project Route occurs within the Carrizo-Wilcox and Gulf Coast Aquifers. The construction, operation, and maintenance of the Project are not anticipated to adversely affect groundwater resources within the study area.

During construction activities, a potential impact to groundwater resources is related to fuel and/or other chemical spills. Avoidance and minimization measures of potential contamination of water resources will be identified in the SWPPP. CPS Energy and AEP Texas will take all necessary precautions to avoid the occurrence of these spills. If an unauthorized discharge occurs during construction, CPS Energy and AEP Texas will comply in accordance with state and/or federal regulations.

4.1.5 Impacts on Floodplains

The construction of the Project Route is not anticipated to impact the overall function of floodplains within the study area, or adversely affect adjacent or downstream properties. Engineering design should alleviate the potential of construction activities to adversely impact flood channels and proper structure placement will minimize any flow impedance during a major flood event. Typically, the small footprint of pole structures as proposed for the Project does not significantly alter the flow of water within a floodplain.

The Project Route crosses approximately 0.45 mile of FEMA-mapped floodplains primarily associated with Sulphur Creek and its tributaries (see Table 4-1). Prior to construction CPS Energy and AEP Texas will coordinate with the respective county floodplain administrator(s) to acquire any permits.

4.1.6 Impacts on Wetlands

As indicated in Table 4-1, the Project Route does not cross NWI mapped wetlands. Unmapped wetlands still have the potential to occur within the study area. Removal of vegetation in wetlands increases the potential for erosion and sedimentation, which can be detrimental to downstream plant communities and aquatic life. Wetland areas also provide habitat to a number of species and are often used as migration corridors for wildlife. Mitigation measures with BMPs will be implemented, as

appropriate, in identified areas of wetland potential during construction activities to further avoid and minimize impacts to those areas. CPS Energy and AEP Texas propose to implement BMPs as a component of their SWPPP to prevent off-ROW sedimentation and degradation of potential wetland areas. With the use of these avoidance and minimization measures, the Project Route is not anticipated to have a significant impact on potential wetlands.

The temporary and/or permanent placement of fill material within jurisdictional waterways and wetlands may require a permit from the USACE under Section 404 of the CWA. If necessary, CPS Energy will coordinate with the USACE – Galveston District prior to clearing and construction to ensure compliance with Section 404 of the CWA. The construction of the Project will likely meet the criteria for the NWP 57 – Electricity Utility Line and Telecommunications Activities.

4.1.7 Impacts on Coastal Natural Resources Areas

The study area is not located within the CMZ boundary as defined by 31 TAC § 27.1, which excludes the Project from CMP conditions. Therefore, no impacts from the Project Route on coastal natural resource areas are anticipated.

4.1.8 Impacts on Vegetation

Potential impacts to vegetation will result from clearing the ROW of woody vegetation and/or mowing/clearing of herbaceous vegetation. These activities facilitate ROW access for structure construction, line stringing, and future maintenance activities of the proposed transmission line.

Impacts to vegetation will generally be limited to the transmission line ROW. Additional clearing might be necessary in temporary easements outside of the ROW to facilitate the construction of the transmission line. The clearing activities will be completed while minimizing the impacts to existing groundcover vegetation when practical. Future ROW maintenance activities might include periodic mowing and/or herbicide applications to maintain an herbaceous vegetation layer within the ROW.

Clearing trees and shrubs from woodland areas typically generates a degree of habitat fragmentation. The magnitude of anticipated habitat fragmentation was minimized to the extent possible during the routing process by utilizing the existing transmission line ROW. Vegetation clearing will occur only where necessary to provide access, workspace, and future maintenance access to the ROW.

As indicated in Table 4-1, the Project Route crosses 0.41 mile of bottomland/riparian woodlands and 0.70 mile across upland woodlands/brushlands.

4.1.9 Impacts on Wildlife

The primary impacts of construction activities on wildlife species are typically associated with temporary disturbances from construction activities, and with the removal of vegetation (habitat modification). Increased noise and equipment movement during construction might temporarily displace mobile wildlife species from the immediate workspace area. These impacts are considered short-term and normal wildlife movements would be expected to resume after construction is completed. Potential long-term impacts include those resulting from habitat modifications and/or fragmentation. The Project Route crosses areas of upland woodlands/brushlands, which can represent the highest degree of habitat fragmentation by converting the area within the ROW to an herbaceous habitat. During the routing process, POWER attempted to minimize potential woodland habitat fragmentation by utilizing the existing transmission line ROW.

Construction activities might impact small, immobile, or fossorial (living underground) animal species through incidental impacts or from the alteration of local habitats. Incidental impacts to these species might occur due to equipment or vehicular movement on the ROW by direct impact or due to the compaction of the soil if the species is fossorial. Potential impacts of this type are not typically considered significant and are not likely to have an adverse effect on any species population dynamics.

If ROW clearing occurs during bird nesting seasons, potential impacts could occur within the ROW area related to bird eggs and/or nestlings. Increases in noise and equipment activity levels during construction could also potentially disturb breeding or other activities of species nesting in areas immediately adjacent to the ROW. If ROW clearing activities are necessary during the migratory bird nesting season (March 15 to September 15), CPS Energy and AEP Texas will comply with state (TPWC Chapter 64) and federal (MBTA) regulations regarding avian species by having a qualified biologist conduct surveys for active nests prior to ground disturbance and/or vegetation clearing.

Transmission lines can also present additional hazards to birds due to electrocutions and/or collisions. Measures would be implemented to minimize this risk with transmission line through engineering designs. The electrocution risk to birds would not be significant since the engineering design distance between conductors, conductor to structure, or conductor to ground wire for the proposed transmission line is greater than the wingspan of most birds typically expected to occur within the area (i.e., greater than eight feet). The risk for avian collisions with the shield wire can be minimized by installing bird flight diverters or other marking devices on the line within determined high bird use areas.

4.1.10 Impacts on Aquatic Resources

Potential impacts to aquatic resources would include potential effects of erosion, siltation, and sedimentation. Vegetation clearing of the ROW might result in increased suspended solids entering surface waters traversed by the Project. Increases in suspended solids might adversely affect aquatic organisms that require relatively clear water for foraging and/or reproduction. Physical aquatic habitat loss or alteration could result wherever riparian vegetation is removed and at temporary crossings required for access. Increased levels of siltation or sedimentation might also potentially impact downstream areas primarily affecting filter feeding benthic and other aquatic invertebrates. Implementation of a SWPPP utilizing BMPs will minimize these potential impacts. No significant adverse impacts are anticipated to any aquatic habitats crossed or located adjacent to the ROW for the Project Route.

Construction of the Project is not anticipated to have significant impacts to wildlife and aquatic resources within the study area. Direct impacts would be associated with the loss of woodland/brushland habitat, which is reflected in the vegetation analysis discussed above. Habitat fragmentation was minimized for the Project Route within woodland areas by utilizing the existing transmission line. While highly mobile animals might temporarily be displaced from habitats near the ROW during the construction phase, normal movement patterns should return after Project construction is complete. Implementation of a SWPPP utilizing BMP will minimize potential impacts to aquatic habitats.

4.1.11 Impacts to Threatened and Endangered Species

In order to assess potential impacts to threatened or endangered species, POWER utilized available information for the species under review. Known occurrence data from TXNDD for the study area and Project scoping comments from TPWD were reviewed as discussed in Section 3.1.10. A USFWS IPaC consultation, TPWD county listings, and USFWS designated critical habitat locations were included in the review.

The TXNDD data provides a GIS data record of state-listed, rare, and federally threatened and endangered species and special status vegetation communities that have been documented within a given area. The absence of species within the TXNDD database is not a substitute for a species-specific field survey that may be needed to assess potential habitat for state or federal listed special status species. Prior to construction, a field survey would be completed of the Project Route to determine if suitable habitat for threatened and endangered species is present. Additional consultation with the USFWS and TPWD may be required if suitable habitat is observed during field surveys.

Review of TPWD'S TXNDD data (TPWD 2025f) did not identify any EORs for any species within or near the study area or Project Route.

Threatened and Endangered Plant Species

Review of the TPWD (2025e) and USFWS (2025b) data identified one federally listed plant species, the black lace cactus, to potentially occur within the study area (see Table 3-6 in Section 3.1.10).

The black lace cactus is a federally endangered species that may have the potential to occur within the study area where suitable habitat is available. Federally listed plant species are only afforded federal protection from take if they are located on federal lands and/or federal funding or actions are associated with the Project. If necessary, CPS Energy and AEP Texas would coordinate with the USFWS regarding the black lace cactus. Construction of the Project Route is not anticipated to have adverse effects on federally listed threatened or endangered plant species.

Threatened and Endangered Animal Species

Review of the TPWD (2025e) and USFWS (2025b) data identified 18 animal species that are federally and/or federally proposed listed or state-listed for Bee and Karnes Counties (see Table 3-6 in Section 3.1.10). As indicated in Table 4-1, the Project Route does not cross known critical habitat of federally listed threatened or endangered species.

Federally Listed and Proposed Species

The study area is located outside of the recognized/known distribution of the ocelot. Therefore, impacts to this species are not anticipated to occur from the Project.

Additionally, impacts to the rufa red knot are not anticipated due to lack of suitable habitat. Therefore, impacts to this species are not anticipated to occur from the Project.

The piping plover and whooping crane may potentially occur temporarily within the study area as transient migrants wherever suitable habitat is available. The Project is not anticipated to have adverse impacts to piping plover or whooping crane nesting habitat due to the Project being limited to existing, maintained utility ROW. The USFWS only requires consideration of impacts to the piping plover and rufa red knot for wind energy projects within their migratory route; however, for due diligence, they have been included in this impact evaluation.

The tricolored bat is a federally proposed species that may occur within the study area wherever suitable habitat is available. TPWD recommends that tree clearing activities should be avoided during the pupping season from May 1 to July 15, during winter torpor from December 15 to February 15, and

minimizing the Project's overall tree clearing footprint in anticipation of a listing decision by USFWS. This species may be susceptible to minor temporary disturbance during construction efforts; however, due to the Project being limited to existing, maintained utility ROW, impacts from the Project Route are not anticipated to occur to this species' roosting or foraging habitat. If the tricolored bat becomes federally listed prior to construction, additional consultation with USFWS and/or a voluntary environmental review process as detailed by the USFWS Consultation Guidance (USFWS 2024a) for the tricolored bat may be required to determine appropriate mitigation practices, if any.

The monarch butterfly is a federally proposed threatened species that may occur within the study area as a temporary migrant at specific times of year within the study area wherever suitable habitat is available. The recent proposal by USFWS to list the monarch butterfly as a threatened species under the ESA includes section 4(d) protective regulations (USFWS 2024b). This species may be susceptible to minor temporary disturbance during construction efforts; however, due to the Project being limited to existing, maintained utility ROW, impacts from the Project Route are not anticipated to occur to this species. If the monarch butterfly becomes federally listed prior to construction, additional consultation with USFWS may be required.

Other Federally Protected Species

Bald eagles are not anticipated to occur within the study are due to lack of suitable habitat. However, the nests of bald eagles are protected under the MBTA and BGEPA. Nests are protected if they have been used within the previous five nesting seasons. If nests are identified or individuals are observed during field surveys of the Project Route, CPS Energy and AEP Texas will further coordinate with the TPWD and USFWS to determine avoidance or mitigation measures. However, due to the Project being limited to existing, maintained utility ROW, impacts from the Project Route are not anticipated to occur to this species. Golden eagles are not anticipated to occur within the study area due to the study area being outside of known breeding populations. Therefore, impacts to golden eagles are not anticipated.

State-Listed Species

The study area is located outside of the recognized/known distributions of the South Texas siren and white-nosed coati; therefore, impacts to these species are not anticipated to occur from the Project.

The black rail, interior least tern, white-faced ibis, and wood stork are not anticipated to occur within the study area due to the lack of potential suitable habitat and/or the Project being limited to existing, maintained utility ROW. Therefore, impacts to these species are not anticipated.

The black-spotted newt, sheep frog, swallow-tailed kite, white-tailed hawk, Texas horned lizard, and Texas tortoise may occur within the study area wherever suitable habitat is available. If suitable habitat

is identified for these species during field surveys, CPS Energy and AEP Texas shall follow the recommendations outlined in Appendix A to avoid and minimize impacts to these species.

CPS Energy and AEP Texas proposes to conduct ROW clearing activities in compliance with state (TPWC Chapter 64) and federal (MBTA) regulations regarding avian species and appoint a qualified biologist to conduct surveys for active nests prior to vegetation clearing.

4.2 Impacts on Human Resources/Community Values

4.2.1 Impacts on Land Use

The magnitude of potential impacts to land use resulting from the construction of a transmission line is determined by the amount of land (land use type) temporarily or permanently displaced by the actual ROW and by the compatibility of the facility with adjacent land uses. During construction, temporary impacts to land uses within the ROW might occur due to the movement of workers, equipment, and materials through the area. Construction noise and dust, as well as temporary disruptions of traffic flow, might also temporarily affect local residents and businesses in the area immediately adjacent the ROW. Coordination between CPS Energy, AEP Texas, their respective contractors, and landowners regarding ROW access and construction scheduling should minimize these disruptions.

The evaluation criteria used to compare potential land use impacts include overall route length, route length using existing ROW, parallel to existing linear features (including apparent property boundaries), route proximity to habitable structures, route proximity to park and recreational areas, and route length across various land use types. An analysis of the existing land use within and adjacent to the proposed ROW is required to evaluate the potential impacts.

Route Length

The length of a proposed route can be an indicator of the relative magnitude of land use impacts. Generally, all other things being equal, the shorter the route, the less land is crossed, which usually results in the least amount of potential impacts. The total length of the Project Route that will be rebuilt as a double circuit line is approximately 12.23 miles (see Table 4-1).

Compatible ROW

PUC Substantive Rule 25.101(b)(3)(B) requires that an applicant for a CCN, and ultimately the PUC, consider whether new transmission line routes are within existing compatible ROWs and/or are parallel to existing compatible ROWs, apparent property lines, or other natural or cultural features. Criteria were used to evaluate the use of existing transmission line ROW, length parallel and adjacent to existing

transmission line ROW, length of route parallel to other existing linear ROWs, and length of ROW parallel and adjacent to apparent property lines. The entire length of the Project Route, approximately 12.23 miles, will be rebuilt in and utilize existing transmission line ROW. As a result, the Project Route is not parallel or adjacent to additional existing transmission line ROW, other existing ROW (roadways, railways, utilities, etc.), or apparent property lines or other natural or cultural features (see Table 4-1).

Typically, a more representative account for the consideration of whether new transmission line routes are within and/or parallel to existing compatible ROWs, apparent property lines, or other natural or cultural features is demonstrated with the percentage of total route length parallel to any of these existing linear features. The percentage can be calculated for the Project Route by adding up the total length within and/or parallel to existing transmission lines, other existing ROW, and apparent property lines and then dividing the result by the total length of the route. The percentage of the Project Route within and/or paralleling existing linear features is 100% (see Table 4-1).

Developed and Residential Areas

Typically, one of the most important measures of potential land use impacts is the number of habitable structures located in the vicinity of the route. Based on direction provided by the PUC, habitable structure identification is included with the CCN application. POWER determined the number of habitable structures located within 500 feet of the Project Route and the distance from the centerline through the use of GIS software, interpretation of aerial photography, and verification during reconnaissance surveys. The existing transmission line that will be rebuilt, or the Project Route, has four habitable structures located within 500 feet of its centerline (see Table 4-1).

Table 4-5 presents detailed information on the habitable structures. All known habitable structure locations are shown on Figure 4-2 located in Appendix D (map pocket).

Lands with Conservation Easements

As discussed in Section 3.2.1, no conservation easements were identified within the study area. Therefore, the Project Route would not have any additional direct impact on lands with the conservation easements.

4.2.2 Impacts on Agriculture

Impacts to agricultural land uses can generally be ranked by degree of potential impact, with the least potential impact occurring in areas where cultivation is not the primary use (pastureland/rangeland), followed by cultivated croplands, which have a higher degree of potential impact. Most existing

agricultural land uses may be resumed within the ROW following construction. The Project Route crosses approximately 0.89 mile of cropland (see Table 4-1).

The Project Route crosses approximately 9.99 miles of land categorized as pastureland/rangeland; however, because the ROW for this project will not be fenced or otherwise separated from adjacent lands, there will be no significant long-term displacement of ongoing activities. The Project Route does not cross any lands with known mobile irrigation systems (rolling or pivot type) (see Table 4-1).

4.2.3 Impacts on Transportation/Aviation Features

Transportation Features

Potential impacts to transportation could include temporary disruption of traffic or conflicts with future proposed roadways and/or utility improvements. Traffic disruptions would include those associated with the movement of equipment and materials to the ROW, and slightly increased traffic flow and/or periodic congestion during the construction phase of the Project. In the rural areas, these impacts are typically considered minor, temporary, and short-term. In the urban areas, the temporary impacts to traffic flow can be significant during construction; however, the Project Route is not located in areas that are considered as urban. CPS Energy and AEP Texas will coordinate with the agencies in control of the affected roadways to address these traffic flow impacts. As mentioned in Section 3.2.3, there are three state roadway projects within the study area. The Project Route crosses one highway, SH 72, and two FM roads (see Table 4-1).

Aviation Facilities

According to FAA regulations, Title 14 C.F.R. 77, the construction of a transmission line requires FAA notification if tower structure heights exceed the height of an imaginary surface extending outward and upward at a slope of 100:1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of a public or military airport having at least one runway longer than 3,200 feet. The FAA also requires notification if tower structure heights exceed a 50:1 slope for a horizontal distance of 10,000 feet from the nearest runway of a public or military airport where no runway is longer than 3,200 feet in length, and if tower structure heights exceed a 25:1 slope for a horizontal distance of 5,000 feet for heliports.

No public FAA registered airports with at least one runway longer than 3,200 feet were identified within 20,000 feet of the Project Route. There were no FAA registered airports with a runway shorter than 3,200 feet identified within 10,000 feet of the Project Route. There were no heliports identified within 5,000 feet of the Project Route (see Table 4-1).

Following PUC approval of a complete route for the Project, CPS Energy and AEP Texas will make a final determination of the need for FAA notification, based on specific route location and structure design of the approved route. The result of this notification, and any subsequent coordination with the FAA, could include changes in the line design and/or potential requirements to mark the conductors and/or light the structures.

There is one private airstrip, the San Christoval Ranch, identified within 10,000 feet of the Project Route (see Table 4-1).

The Project Route is not anticipated to have a substantial impact on aviation activities within the study area. The number of airports, airstrips, and heliports for the Project is presented in Table 4-1. Table 4-5 presents detailed information on airports, airstrips, and heliports. The distance for each airport/airstrip from the Project Route was measured using GIS software and aerial photography interpretation (see Table 4-2). All known airport/airstrip locations are shown on Figures 4-1 and 4-2 located in Appendix C and D (map pockets).

TABLE 4-2 AIRPORT FACILITIES AND RUNWAY LOCATIONS

FIGURE 4-2 MAP ID	AIRPORTS	DISTANCE FROM PROJECT ROUTE (FEET)*	ESTIMATED RUNWAY LENGTH (FEET)[1/*]	EXCEEDS THE SLOPE[1,2]
1001	San Christoval Ranch Airstrip (Private)	7,035	3,955	N/A

[1]FAA 2024b; *POWER aerial photo and USGS interpretation.
[2]POWER used aerial photo and USGS interpretation considering elevation information obtained from USGS topographic maps and a typical maximum transmission structure height of 150 feet.

4.2.4 Impacts on Communication Towers

The Project Route would not have a significant impact on electronic communication facilities or operations in the study area. No commercial AM radio transmitters were identified within 10,000 feet of the Project Route. However, two FM radio towers or other electronic communication facilities were identified within 2,000 feet of the Project Route centerline (see Table 4-1).

The number of other communication facilities located within 2,000 feet of the Project Route is presented in Table 4-1. Table 4-5 presents detailed information on the electronic communication facilities. The distance to the electronic communication facilities from the Project Route was measured using GIS software and aerial photograph interpretation (see Table 4-3). All known radio and communication facility locations are shown on Figures 4-1 and 4-2 located in Appendix C and D (map pockets).

TABLE 4-3 ELECTRONIC COMMUNICATION FACILITIES

FIGURE 4-1 MAP ID	TOWER TYPE	DISTANCE FROM PROJECT ROUTE (FEET)*
2001	Other Electronic Installation	970
2002	Other Electronic Installation	94

*POWER aerial photo and USGS interpretation; FCC 2024.

4.2.5 Impacts on Utility Features

Utility features include existing electrical transmission lines, distribution lines, water wells, pipelines, and oil and gas wells. There are no identifiable water wells within 200 feet of the Project Route (see Table 4-1).

The Project Route does not cross any existing transmission lines (see Table 4-1).

There were six oil and gas wells identified within 200 feet of the Project Route (see Table 4-1).

The Project Route crosses 28 identifiable pipelines and is parallel and adjacent to a pipeline for approximately 1.13 miles. Additionally, the Project Route does not cross any gravel pits, mines, or quarries (see Table 4-1).

If additional unidentified utility features are crossed by or are in close vicinity to the Project Route centerline approved by the PUC, CPS Energy and AEP Texas will coordinate with appropriate entities to obtain necessary permits or permission as required.

4.2.6 Impacts on Socioeconomics

Construction and operation of the Project is not anticipated to result in a significant change in the population or employment rate within the study area. For this project, some short-term employment would be generated. CPS Energy and AEP Texas normally use contract labor supervised by CPS Energy and AEP Texas employees during the clearing and construction phases of transmission line projects. Construction workers for the Project would likely commute to the work site on a daily or weekly basis instead of permanently relocating to the area. The temporary workforce increase would likely result in an increase in local retail sales due to purchases of lodging, food, fuel, and other merchandise for the duration of construction activities. No additional CPS Energy and AEP Texas staff will be required for line operations and maintenance.

4.2.7 Impacts on Community Values

Adverse effects upon community values are defined as aspects of the Project that would significantly and negatively alter the use, enjoyment, or intrinsic value attached to an important area or resource by a community. This definition assumes that community concerns are applicable to this specific project's location and characteristics, and do not include objections to electric transmission lines in general.

Potential impacts to community resources can be classified into direct and indirect effects. Direct effects are those that would occur if the location and construction of a transmission line and station result in the removal or loss of public access to a valued resource. Indirect effects are those that would result from a loss in the enjoyment or use of a resource due to the characteristics (primarily aesthetic) of the proposed transmission line, structures, or ROW.

4.3 Impacts on Parks and Recreation Areas

Potential impacts to parks or recreation areas include the disruption or preemption of recreation activities. As previously mentioned in Section 3.3.1, no parks or recreational areas meeting the definition set forth in the PUC application were identified within the study area. Also, no adverse impacts are anticipated for any other potential fishing or hunting areas from the Project Route. The Project Route is not located within 1,000 feet of any additional parks or recreation facilities (see Table 4-1).

4.4 Impacts on Aesthetic Values

Aesthetic impacts, or impacts to visual resources, exist when the ROW, lines and/or structures of a transmission line system create an intrusion into, or substantially alter the character of the existing view. The significance of the impact is directly related to the quality of the view, in the case of natural scenic areas, or to the importance of the existing setting in the use and/or enjoyment of an area, in the case of valued community resources and recreational areas.

Construction of the Project could have both temporary and permanent aesthetic impacts. Temporary impacts would include views of the actual assembly and erection of the tower structures. If wooded areas are cleared, the brush and wood debris could have an additional negative temporary impact on the local visual environment. Permanent impacts from the Project would involve the views of the cleared ROW, tower structures, and lines from public viewpoints including roadways, recreational areas, and scenic overlooks.

Since no designated landscapes protected from most forms of development or by legislation exist within the study area, potential aesthetic impacts were evaluated by estimating the length of the Project Route that would fall within the foreground visual zones (one-half mile with unobstructed views) of major highways, FM roads, and parks or recreational areas. The Project Route lengths within the foreground visual zone of IHs, US Hwys, SHs, FM roads, and parks or recreational areas were tabulated and are discussed below.

The Project Route has portion of its ROW length located within the foreground visual zone of IHs, US Hwys, and SHs for approximately 1.64 miles, and within the foreground visual zone of FM roads for approximately 2.06 miles. However, the Project Route does not have any portion of its ROW length located within the foreground visual zone of parks or recreational areas (see Table 4-1).

Overall, the character of the landscape within the study area along the existing 345 kV transmission line maintains the characteristics of a primarily rural and agricultural setting. The residential and industrial developments within the study area have already impacted the aesthetic quality within the area. The rebuild construction of the Project Route is not anticipated to significantly impact the aesthetic quality of the landscape.

4.5 Impacts on Historical (Cultural Resources) Values

Methods for identifying, evaluating, and mitigating impacts to cultural resources have been established for federal projects or permitting actions, primarily for purposes of compliance with the National Historic Preservation Act. Similar methods are often used when considering cultural resources affected by state-regulated undertakings. In either case, this process generally involves identification of significant (i.e., national- or state-designated) cultural resources within a project area, determining the potential impacts of a project on those resources, and implementing measures to avoid, minimize, or mitigate those impacts.

Impacts associated with the construction, operation, and maintenance of transmission lines can affect cultural resources either directly or indirectly. Construction activities associated with any proposed project can adversely impact cultural resources if those activities alter the integrity of key characteristics that contribute to a property's significance as defined by the standards of the NRHP or the Antiquities Code of Texas. These characteristics might include location, design, setting, materials, workmanship, feeling, or association for architectural and engineering resources or archeological information potential for archeological resources.

4.5.1 Direct Impacts

Typically, direct impacts could be caused by the actual construction of the line or through increased vehicular and pedestrian traffic and excavation for towers during the construction phase. If construction is required near historic structures, landscapes, or districts, proper mitigation and avoidance measures will avoid adversely impacting such features during construction of a transmission line. Additionally, an increase in vehicular and/or pedestrian traffic might damage surficial or shallowly buried sites. Excavation for transmission structures could impact shallow or deeply buried archeological sites. Direct impacts might also include isolation of a historic resource from or alteration of its surrounding environment.

4.5.2 Indirect Impacts

Indirect impacts include those effects caused by a project that are farther removed in distance or that occur later in time but are reasonably foreseeable. These indirect impacts might include introduction of visual or audible elements that are out of character with the resource or its setting. Indirect impacts might also occur as a result of alterations in the pattern of land use, changes in population density, accelerated growth rates, or increased pedestrian or vehicular traffic. Absent BMPs, proper mitigation, and avoidance measures, historic buildings, structures, landscapes, and districts are among the types of resources that could be adversely impacted by the indirect impact of a transmission line.

The preferred form of mitigation for direct and indirect impacts to cultural resources is avoidance through project modifications. Additional mitigation measures for direct impacts might include implementing a program for data recovery excavations if an archeological site cannot be avoided. Indirect impacts on historical properties and landscapes can be lessened through careful design and landscaping considerations, such as using vegetation screens or berms if practicable. Additionally, relocation might be possible for some historic structures.

4.5.3 Summary of Cultural Resource Impacts

The distance of each recorded site located within 1,000 feet of the Project Route was measured using GIS software and aerial photography interpretation (see Table 4-4). A review of the THC, NPS, and TxDOT data, indicated that three archeological sites and one cemetery are recorded within 1,000 feet of the Project Route (see Table 4-5). None of these archeological sites have been determined to be eligible for listing on the NRHP. The cultural resources recorded within 1,000 feet of the Project Route are discussed below.

TABLE 4-4 ARCHEOLOGICAL SITES RECORDED WITHIN 1,000 FEET OF THE PROJECT ROUTE

SITE TRINOMIAL	DISTANCE IN FEET FROM CENTERLINE	NRHP ELIGIBILITY
41KA119	764	Ineligible
41KA121	879*	Undetermined
41KA122	178	Undetermined

Note: *Indicates the site is within 1,000 feet of the Project Route but is outside of the study area.

Of the three archeological sites recorded within 1,000 feet of the Project Route, two sites (41KA121 and 41KA122) have not been formally assessed for listing on the NRHP. Both sites are isolated finds consisting of a single flake each. Site 41KA121 is outside of the study area but within 1,000 feet of the Project Route. Site 41KA119 has been determined ineligible for listing on the NRHP. Site 41KA119 is the remains of a homestead including a shed, collapsed structures, a water tank, wooden posts, farm equipment and a scatter of corrugated tin, fence timbers, barbed wire, soft drink bottles, baby food jars, and cement piers. No sites are crossed by the Project Route and no direct impacts are anticipated for the recorded archeological sites.

Our Lady of the Guadalupe Cemetery (BE-C051) is the sole cemetery mapped within 1,000 feet of the Project Route. The cemetery is outside of the study area, and due to its distance of 824 feet from the Project Route, it is anticipated the Project Route will have no effect on the cemetery.

Because the Project Route has not been surveyed for cultural resources, the potential for undiscovered cultural resources does exist along the route. To assess this potential, a review of geological, soils, and topographical maps was undertaken by a professional archeologist to identify areas along the route where unrecorded prehistoric archeological resources have a higher probability to occur. These HPAs for prehistoric archeological sites were identified near unnamed streams, particularly where previous surveys have not been conducted, and near previously recorded sites. Historic HPA were mapped near structures depicted on historic topographic maps. To facilitate the data evaluation, each HPA was mapped using GIS and the length of HPA tabulated. Based on the analysis, the Project Route crosses 8.64 miles of HPA (see Table 4-1).

The Project Route is illustrated on Figures 4-1 (Appendix C topographic based) and 4-2 (Appendix D aerial based).

TABLE 4-5 HABITABLE STRUCTURES AND OTHER LAND USE FEATURES IN THE VICINITY OF THE PROJECT ROUTE

MAP NUMBER	STRUCTURE OR FEATURE	APPROXIMATE DISTANCE FROM ROUTE CENTERLINE[1] (FEET)
1	Single Family Residence	411
2	Single Family Residence	294
3	Single Family Residence	240
4	Single Family Residence	435
1001	San Christoval Ranch Airstrip	7,035
2001	Other Electronic Communication	970
2002	Other Electronic Communication	94
3001	Our Lady of Guadalupe Cemetery	824*
-	41KA119	764
-	41KA121	879*
-	41KA122	178

[1] Due to the potential horizontal accuracies of the aerial photography and data utilized, all habitable structures within 510 feet have been identified.
* Indicates the site is within 1,000 feet of the Project Route but is outside of the study area.

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5.0 AGENCY CORRESPONDENCE

A list of federal, state, and local regulatory agencies, elected officials and organizations was developed to receive a consultation letter regarding the Project. The purpose of the letter was to inform the various agencies and officials of the Project and provide them with an opportunity to provide information regarding resources and potential issues within the study area. Various federal, state and local agencies and officials that may have potential concerns and/or regulatory permitting requirements for the proposed Project were contacted. POWER utilized websites and telephone confirmations to identify local officials. Copies of all correspondence with the various state/federal regulatory agencies and local/county officials and departments are included in Appendix A.

Federal, state and local agencies/officials contacted include:

- Federal Aviation Administration (FAA)
- Federal Emergency Management Agency (FEMA) – Region 6
- National Park Service (NPS)
- Natural Resource Conservation Service (NRCS) – Texas Office
- United States Army Corps of Engineers (USACE) – Galveston District
- Military Aviation and Installation Assurance Siting Clearinghouse
- United States Environmental Protection Agency (USEPA) – Region 6
- United States Fish and Wildlife Service (USFWS)
- Applicable United States Congressman
- Applicable Texas Senators
- Applicable Texas House Members
- Railroad Commission of Texas (RRC)
- Texas Commission on Environmental Quality (TCEQ)
- Texas Department of Transportation (TxDOT) – Aviation Division, Environmental Affairs Division, Planning & Programming, and Corpus Christi District Engineer
- Texas General Land Office (GLO)
- Texas Historical Commission (THC)
- Texas Parks and Wildlife Department (TPWD)
- Texas Water Development Board (TWDB)
- Office of Public Utility Counsel
- Bee County Judge and Commissioners Court
- Bee County Community Affairs Environmental Enforcement Office
- Karnes County Judge and Commissioners Court

- Karnes County Special Projects and Permits
- City of San Antonio Officials
- Alamo Area Council of Governments
- Alamo Soil and Water Conservation District
- Edwards Aquifer Authority Chairman
- San Antonio River Authority
- San Antonio Water System
- Kenedy Independent School District (ISD)
- Pawnee ISD
- Coastal Bend Council of Governments
- The Nature Conservancy – Texas
- Texas Land Trust Council
- Texas Land Conservancy (TLC)
- Texas Agricultural Land Trust
- Texas Cave Management Association

In addition to letters sent to the agencies listed, POWER also requested and reviewed TXNDD Element Occurrence Records from TPWD (TPWD 2025f). POWER also requested and reviewed previously recorded archeological site information from TARL and reviewed the THC's TASA for additional cultural resource information. As of the date of this document, written responses to letters sent in relation to the study area that were received are listed and summarized below.

FEMA responded with a letter dated January 2, 2025, requesting that the community floodplain administrator be contacted for the review of, and possible permit requirements for, the Project. CPS Energy and AEP Texas will coordinate with the floodplain administrator as needed.

The NRCS responded with a letter dated February 20, 2025, stating that the project has been evaluated and does not involve any USDA-NRCS easements. The Project is also not subject to Farmland Protection Policy Act provisions.

The USACE Section 408 Coordinator responded with an email dated December 26, 2024, stating that the proposed Project was within the Galveston District Civil Works boundaries. They also stated that the Project may require authorization under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899.

The USACE Project Operations Branch responded with an email dated December 26, 2024, again stating that the Project may require authorization under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899. They also stated that the Project will not need a 33 USC Section 408 permission letter. CPS Energy and AEP Texas will coordinate with USACE as needed.

The USACE Regulatory Division responded with a letter dated January 16, 2025, stating that they had assigned Project Number SWG-2025-00040 and if any activity is preformed that triggers any federal regulations and permit will be required prior to the activity occurring. CPS Energy and AEP Texas will coordinate with USACE as needed.

The USFWS Texas Coastal and Central Plains Ecological Services Field Office responded with a letter dated January 27, 2025, providing a list of the federally listed threatened and endangered species for the study area county. The USFWS also provided the definitions of the affected determinations and referenced the MBTA and BGEPA. CPS Energy and AEP Texas will coordinate with the USFWS as needed.

The THC responded with an email dated January 22, 2025, stating that an archeological survey will be required, and a Texas Antiquities Permit may be required. CPS Energy and AEP Texas will coordinate with the THC as needed.

The TPWD responded with a letter dated April 8, 2025, providing several recommendations. In summary, TPWD recommended avoiding or minimizing potential impacts to nesting migratory birds and listed or rare species. The TPWD also recommended a list of beneficial management practices to follow. CPS Energy and AEP Texas will coordinate with the TPWD as needed.

TWDB responded with a letter dated February 24, 2025, stating that the proposed transmission line would not conflict with any recommended water management strategies in the regional or state water plans.

TxDOT responded with an email dated January 30, 2025, providing various maps illustrating publicly available environmental constrains and other data from the TxDOT databases. CPS Energy and AEP Texas will coordinate with the TxDOT as needed.

Bee County responded with a letter dated January 6, 2025, stating that their concerns would be for any identified designated floodplains and floodways(s). Additional concerns would be associated with construction entrances on the county road system. CPS Energy and AEP Texas will coordinate with Bee County as needed.

Karnes County responded with an email dated January 7, 2025, stating that they were the new Commissioner for Precinct 1. They requested property owner information and an update on the Project. CPS Energy and AEP Texas will coordinate with Karnes County as needed.

Coastal Bend Council of Governments responded with an email dated January 14, 2025, stating that they did not have any environmental or land use constraints or other issues within the study area.

6.0 PUBLIC INVOLVEMENT

CPS Energy and AEP Texas hosted a public open house meeting near the study area to solicit comments, concerns, and input from residents, landowners, public officials, and other interested parties. The purpose of the meeting was to:

- Promote a better understanding of the Project, including the purpose, need, potential benefits and impacts, and the PUC CCN application approval process.
- Inform the public with regard to the routing procedure, schedule, and decision-making process.
- Ensure that the decision-making process adequately identifies and considers the values and concerns of the public and community leaders.

The public meeting was held on February 26, 2025, at the Bee County Expo Center in Beeville, Texas from 5:00 p.m. to 7:00 p.m. Invitation letters were sent to landowners who owned property within 500 feet of the Project Route. CPS Energy and AEP Texas mailed approximately 76 invitation letters to landowners. Each landowner that received an invitation letter also received a map of the study area depicting the Project Route. Advertisements for the open house was also published in *The Karnes Countywide* on February 20, 2025, and in the *Beeville Bee-Picayune* on February 13 and 20, 2025.

At the meeting, engineers, GIS analysts, biologists, project managers, and regulatory professionals from CPS Energy, AEP Texas and POWER were available to answer questions regarding the Project. Manned information stations were set up that provided: typical 345 kV pole types; a list of agencies contacted; land-use and environmental criteria for transmission lines; and an environmental and land use constraints map on aerial base. CPS Energy and AEP Texas also provided two GIS interactive stations operated by POWER GIS analysts. These computer stations allowed attendees to view more-detailed digital maps of the Project Route and submit comments digitally and spatially. The information station format is advantageous because it facilitates one-on-one discussions and encourages personalized landowner interactions.

CPS Energy and AEP Texas each established a Project website, https://www.cpsenergy.com/en/about-us/new-infrastructure/pawnee-to-tango-transmission-line.html and https://www.aeptransmission.com/texas/Pawnee-Tango/, to provide information to the public. The websites content explains the scope and need for the Project. The CPS Energy's website also provides several Project documents including the public meeting invitation letter, Project brochure, open house displays, the questionnaire, Frequently Asked Questions document, and aerial map. The AEP Texas website provides project updates, a timeline and structure information, along with a virtual open house.

Each individual in attendance was offered the opportunity to sign their name on the sign-in sheet and was given three handouts. The first handout was an information brochure that provided general information about the Project. The second was a questionnaire that solicited comments on the Project and an evaluation of the information presented at the public meeting. Individuals were asked to fill out the questionnaire after visiting the information stations and speaking with POWER, CPS Energy and AEP Texas personnel. The third handout was a Frequently Asked Questions document providing an overview of the Project as well as a description of the regulatory process. Copies of the public notice letter with map, brochure, questionnaire, and Frequently Asked Questions are located in Appendix B.

A total of six individuals signed in as attendees at the public meeting and two submitted questionnaire responses at or after the public meeting. Results from the questionnaires were reviewed and analyzed. Table 6-1 summarizes general response information from the questionnaires.

TABLE 6-1 GENERAL RESPONSE SUMMARY FROM QUESTIONNAIRES

GENERAL INFORMATION RESPONSES	PERCENTAGE (%) OF RESPONDENTS
Was the need for the project clearly explained?	
Strongly Agree	50%
Agree	0%
Neutral	50%
Disagree	0%
Strongly Disagree	0%
The project team responded to and answered questions about the Project.	
Strongly Agree	50%
Agree	0%
Neutral	50%
Disagree	0%
Strongly Disagree	0%
The exhibits at the open house were helpful.	
Strongly Agree	50%
Agree	0%
Neutral	50%
Disagree	0%
Strongly Disagree	0%

Respondents were then presented with a list of 13 factors that are taken into consideration for a routing study (see a complete list of the criteria on the questionnaire in Appendix B). They were asked to rank each of these criteria, with **1** being the most important factor and **5** being the least important factor. Of those attendees that ranked the criteria, the five criteria that were ranked by the respondents as being the most important are listed in descending order:

- Parallel to existing transmission lines: 1 questionnaire (50%)
- Parallel to existing roadways/highways: 1 questionnaire (50%)
- Visibility of structures: 1 questionnaire (50%)
- Parallel to property lines: 1 questionnaire (50%)
- Impact to residences: 1 questionnaire (50%)

Respondents were asked if there are other factors that should be considered when identifying and evaluating the Project Route. The response was regarding upcoming new generation.

Respondents were then asked if there are other features that should be added to the Land Use and Environmental Constraints map; however, no responses were provided.

Respondents were asked which of three situations applied to them, written responses were as follows:

- 2 indicated that the Project Route is near their home/business
- 0 indicated that the Project Route crosses their property
- 0 answered “Other”

Respondents were also asked if there was any other information, they would like the Project team to know or take into consideration when evaluating the Project; however, no responses were provided.

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7.0 LIST OF PREPARERS

This EA and Route Analysis was prepared for CPS Energy and AEP Texas by POWER. A list of the POWER employees with primary responsibilities for the preparation of this document is presented below.

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Appendix A

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Austin, TX 78716

Mr. Chad Ellis
Chief Executive Director
Texas Agricultural Land Trust
P.O. Box 6152
San Antonio, TX 78209

Mr. Joe Ranzau
President
Texas Cave Management Association
2186 Jackson Keller Street, #533
San Antonio, TX 78214

POWER ENGINEERS, INC.
7600B N CAPITAL OF TEXAS HWY
SUITE 320
AUSTIN, TX 78731 USA

PHONE 281-765-5511

December 20, 2024
(Via email)

U.S. Fish & Wildlife Service
Texas Coastal & Central Plains Ecological Services Field Office
Corpus Christi
Ipac@ecosphere.fws.gov

Re: Proposed Pawnee to Tango 345 kV Transmission Line Rebuild Project in Karnes and Bee Counties, Texas
POWER Engineers, Inc. Project No. 256342

To Whom it May Concern:

CPS Energy and AEP Texas Inc. (AEP Texas) will be filing an application with the Public Utility Commission of Texas (PUC) to amend their Certificates of Convenience and Necessity (CCN) to rebuild an existing single-circuit 345 kilovolt (kV) transmission line in Karnes and Bee Counties, Texas that is intended to be rebuilt as a double-circuit transmission line based on the endorsement of and designation by the Electric Reliability Council of Texas (ERCOT) as critical to the reliability of the ERCOT system. The proposed rebuild of the 345 kV transmission line will extend approximately 12 miles from the existing South Texas Electric Cooperative Pawnee Substation, located approximately one mile northwest of Farm-to-Market (FM) 882 in Karnes County, to the existing AEP Texas Tango Substation, located approximately 0.2 mile northeast of FM 673 in Bee County. The purpose of this project is to support existing and anticipated growth and enhance and ensure reliability. The study area is shown on the enclosed map.

POWER Engineers, Inc. (POWER) is preparing an Environmental Assessment (EA) to support CPS Energy and AEP Texas' CCN application with the PUC. POWER is gathering data on the existing environment and identifying environmental, cultural, and land use constraints within the study area. POWER, CPS Energy, and AEP Texas will review the existing line between the end points for rebuilding and consider these environmental, cultural and land use constraints and the need to serve the electrical load in the area.

We are requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your input will be an important consideration in the evaluation of rebuilding the existing transmission line and in the assessment of potential impacts. In addition, we would appreciate receiving information about any permits, easements, or other approvals by your agency/office that you believe could affect this project, or if you are aware of any major proposed development or construction in the study area. Upon certification for the proposed project, CPS Energy and AEP Texas will identify and obtain necessary permits, if required, from your agency/office.

December 20, 2024

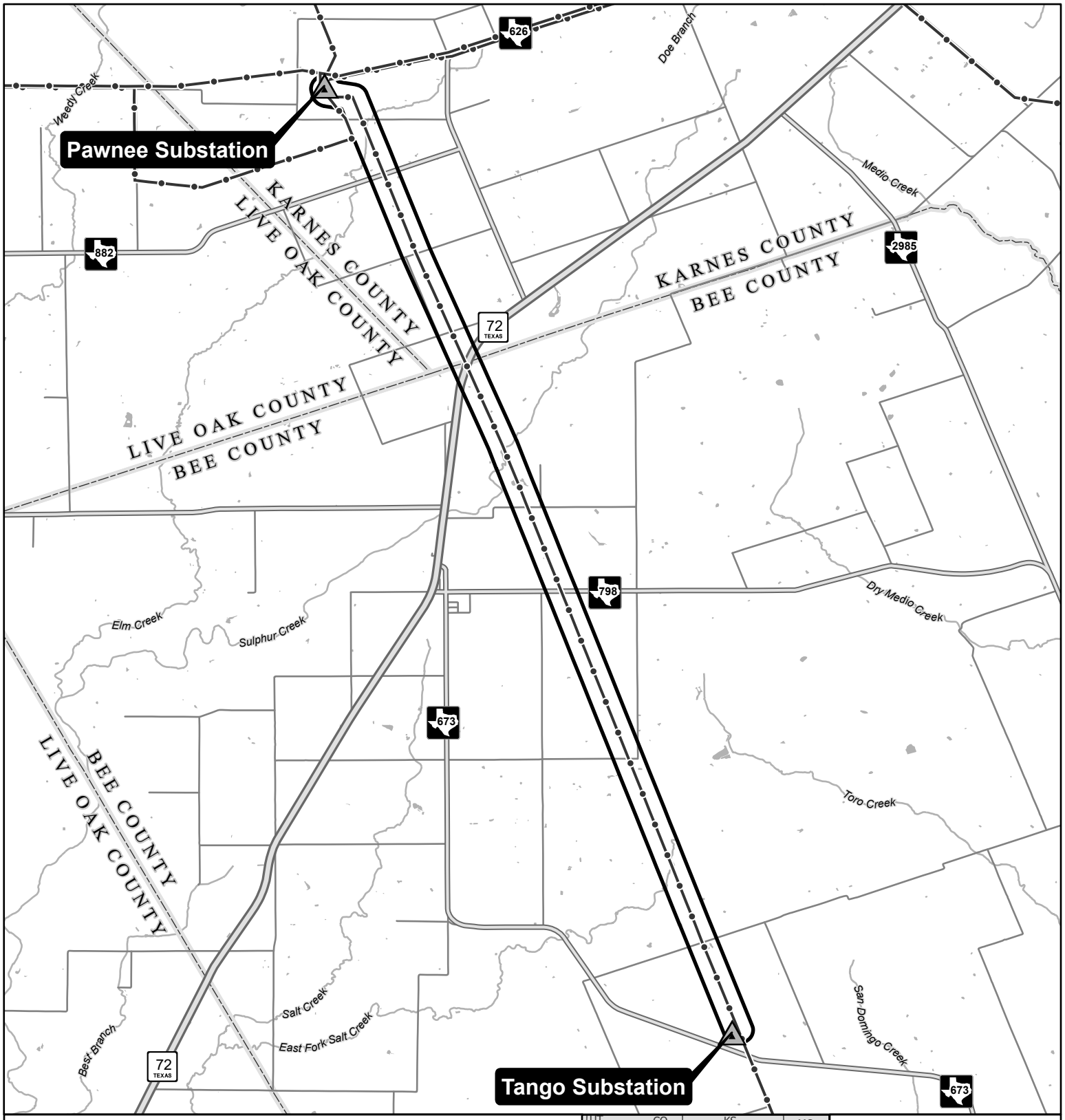
Thank you for your assistance with this proposed electric transmission line project. Please contact me by phone at 281-765-5511, or by e-mail at denise.williams@powereng.com, if you have any questions or require additional information. We would appreciate receiving your earliest reply.

Sincerely,

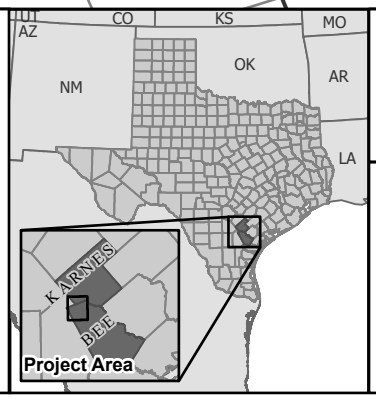
Denise M. Williams
Project Manager

Enclosure(s):
Study Area Map

Sent Via Mail
ProjectWise 256342



- Project Substation
- Study Area Boundary
- Existing Transmission Line
- State Highway
- Farm-to-Market Road
- County / Local Road
- River / Stream
- Waterbody
- County Boundary



PAWNEE TO TANGO
345 KV TRANSMISSION LINE
REBUILD PROJECT

STUDY AREA

0 1 2
Miles

Date: 12/18/2024

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U. S. Department of Homeland Security
FEMA Region 6
800 North Loop 288
Denton, TX 76209-3698

FEMA

FEDERAL EMERGENCY MANAGEMENT AGENCY
REGION VI
MITIGATION DIVISION

RE: Proposed Pawnee to Tango 345 kV Transmission Line Rebuild Project in Karnes and Bee Counties, Texas, POWER Engineers, Inc. Project No. 256342

NOTICE REVIEW/ENVIRONMENTAL CONSULTATION

☐ We have no comments to offer. ☒ We offer the following comments:

WE WOULD REQUEST THAT THE COMMUNITY FLOODPLAIN ADMINISTRATOR BE CONTACTED FOR THE REVIEW AND POSSIBLE PERMIT REQUIREMENTS FOR THIS PROJECT. IF FEDERALLY FUNDED, WE WOULD REQUEST PROJECT TO BE IN COMPLIANCE WITH EO11988 & EO 11990.

County Contact:
Robert Guerrero, Floodplain Administrator
361) 621-1553
robert.guerrero@beecounty.texas.gov

REVIEWER:

Charles Cook
Floodplain Management and Insurance Branch
Mitigation Division
Charles.Cook4@fema.dhs.gov
(940) 898-5400 DATE: January 2, 2025

POWER ENGINEERS

POWER ENGINEERS, INC.
7600B N CAPITAL OF TEXAS HWY
SUITE 320
AUSTIN, TX 78731 USA

PHONE 281-765-5511

December 20, 2024
(Via Mail)

Mr. Tony Robinson
Region 6 Regional Administrator
Federal Emergency Management Agency
FRC 800 N. Loop 288
Denton, TX 76209-3698

Re: Proposed Pawnee to Tango 345 kV Transmission Line Rebuild Project in Karnes and Bee Counties, Texas
POWER Engineers, Inc. Project No. 256342

Dear Mr. Robinson:

CPS Energy and AEP Texas Inc. (AEP Texas) will be filing an application with the Public Utility Commission of Texas (PUC) to amend their Certificates of Convenience and Necessity (CCN) to rebuild an existing single-circuit 345 kilovolt (kV) transmission line in Karnes and Bee Counties, Texas that is intended to be rebuilt as a double-circuit transmission line based on the endorsement of and designation by the Electric Reliability Council of Texas (ERCOT) as critical to the reliability of the ERCOT system. The proposed rebuild of the 345 kV transmission line will extend approximately 12 miles from the existing South Texas Electric Cooperative Pawnee Substation, located approximately one mile northwest of Farm-to-Market (FM) 882 in Karnes County, to the existing AEP Texas Tango Substation, located approximately 0.2 mile northeast of FM 673 in Bee County. The purpose of this project is to support existing and anticipated growth and enhance and ensure reliability. The study area is shown on the enclosed map.

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We are requesting that your agency/office provide information concerning environmental and land use constraints or other issues of interest to your agency/office within the study area. Your input will be an important consideration in the evaluation of rebuilding the existing transmission line and in the assessment of potential impacts. In addition, we would appreciate receiving information about any permits, easements, or other approvals by your agency/office that you believe could affect this project, or if you are aware of any major proposed development or construction in the study area. Upon certification for the proposed project, CPS Energy and AEP Texas will identify and obtain necessary permits, if required, from your agency/office.

December 20, 2024

Thank you for your assistance with this proposed electric transmission line project. Please contact me by phone at 281-765-5511, or by e-mail at denise.williams@powereng.com, if you have any questions or require additional information. We would appreciate receiving your earliest reply.

Sincerely,

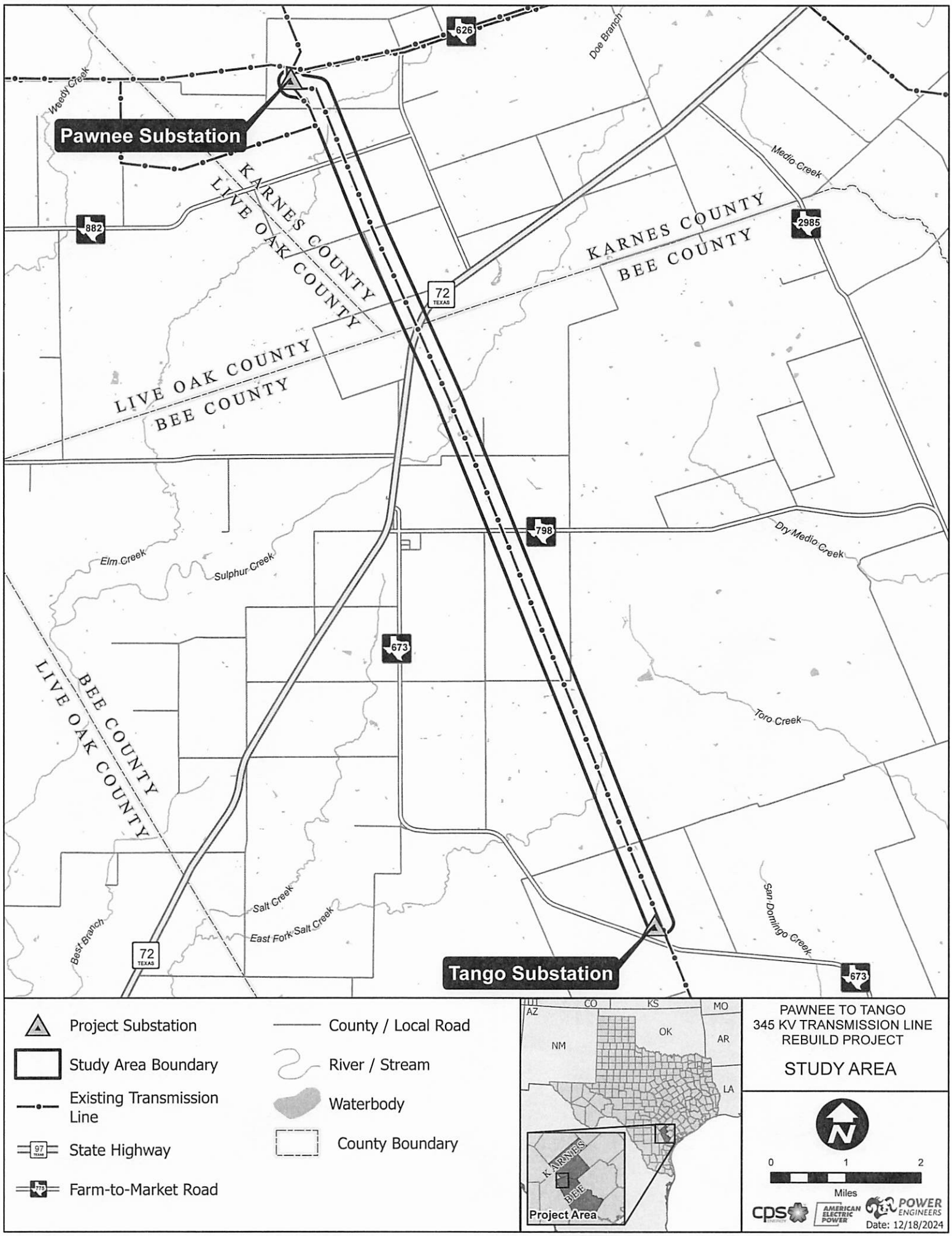
Denise M. Williams
Project Manager

Enclosure(s):
Study Area Map

Sent Via Mail
ProjectWise 256342

RA# 24-12-129784

Date Rec'd: 12/30/24		
Rec'd by: Maria		
	Action	Info
RA		
Deputy RA		
XA		
Analyst		
RES		
REC		
MIT	✓	
MSD		
NP		
Grants		
File		
Suspense Date: 1/13/25		


Pawnee Substation
Tango Substation
626
882
72
TEXAS
2985
798
673
72
TEXAS
673
KARNES COUNTY
LIVE OAK COUNTY
BEE COUNTY
LIVE OAK COUNTY
BEE COUNTY
KARNES COUNTY
BEE COUNTY
LIVE OAK COUNTY
Weedy Creek
Doe Branch
Medio Creek
Dry Medio Creek
Elm Creek
Sulphur Creek
Toro Creek
Salt Creek
East Fork Salt Creek
Best Branch
San Domingo Creek
Project Substation
Study Area Boundary
Existing Transmission Line
State Highway
Farm-to-Market Road
County / Local Road
River / Stream
Waterbody
County Boundary
AZ
CO
KS
MO
NM
OK
AR
LA
KARNES
BEE
Project Area
PAWNEE TO TANGO
345 KV TRANSMISSION LINE
REBUILD PROJECT
STUDY AREA
N
0
1
2
Miles
cps
AMERICAN ELECTRIC POWER
POWER ENGINEERS
Date: 12/18/2024

From:	Holle, Chris - FPAC-NRCS, TX
To:	Williams, Denise
Cc:	Stahnke, Alan - FPAC-NRCS, TX; Anderson, Ashley - FPAC-NRCS, TX
Subject:	[EXTERNAL] EA - Proposed Pawnee to Tango 345 kV Transmission Line Rebuild Project in Karnes and Bee Counties
Date:	Thursday, February 20, 2025 1:15:17 PM
Attachments:	image001.png Pawnee-Tango Transmission Line Rebuild_Response_Letter.pdf Pawnee-Tango Transmission Line Rebuild_Soil_Report.pdf

Denise,

Attached you will find the soil report and letter for the requested environmental assessment. This assessment is for the Proposed Pawnee to Tango 345 kV Transmission Line Rebuild Project in Karnes and Bee Counties Project. Should you have any questions or need additional information, please let me know.

Thanks,

Chris Holle
Cartographic Technician
Texas

USDA U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service
101 South Main Temple, Texas. 76501
p: (254) 742-9951

Natural Resources Conservation Service
U.S. DEPARTMENT OF AGRICULTURE

Texas State Office
101 S. Main Street
Temple, TX, 76501

2/20/2025

Power Engineers, Inc.
7600B N. Capital of Texas HWY
Suite 320
Austin, TX. 78731

Attention: Denise M. Williams, Project Manager

Subject: Proposed Pawnee to Tango 345 kV transmission Line Rebuild Project in Karnes and Bee Counties

Thank you for the opportunity to provide input on the potential environmental effects of the Proposed Pawnee to Tango 345 kV transmission Line Rebuild Project in Karnes and Bee Counties. The proposed site has been evaluated and does not involve any USDA-NRCS easements.

The soils in the proposed project area have been reviewed. There are a few soil limitations in the project area that should be taken into consideration while planning for the project. As with any project, soil erosion is a main concern and erosion prevention practices are recommended. There is a low to moderate potential for concrete corrosion and a moderate to high potential for steel corrosion for the area. There are few hydric soils. Although the project area contains prime farmland, replacing existing structures within the same footprint is considered "Minimal Activity" therefore, this project is not subject to Farmland Protection Policy Act provisions. The water erosion potential is mainly low to very low with few areas of moderate, while the wind erosion potential ranges from high to very high.

Enclosed is a Web Soil Survey map and reports illustrating the location of the soils as well as the ratings for related interpretations that are described above. We encourage you to consider this information during the Proposed Pawnee to Tango 345 kV transmission Line Rebuild Project in Karnes and Bee Counties and take measures to protect the soils and water quality.

If you have further questions, please contact me at (254) 742-9951 or by email at chris.holle@usda.gov.

Sincerely,

Chris Holle

Chris Holle
USDA/NRCS

Attachment: Pawnee-Tango Transmission Line Rebuild_Soil_Report

Jordan, Katie

From: Story, Jason E CIV USARMY CESWF (USA) <Jason.E.Story@usace.army.mil>
Sent: Thursday, December 26, 2024 8:12 AM
To: Jordan, Katie
Cc: Williams, Denise; Brewer, Ashley; Cepero, Carlos E CIV USARMY CESWD (USA); Little, David M CIV USARMY CESWF (USA); Danella, Michael A CIV USARMY CESWF (USA); Harry, Charlene Y CIV USARMY (USA); BROWN, Karl B CIV USARMY CESWG (USA); Story, Jason E CIV USARMY CESWF (USA)
Subject: [EXTERNAL] RE: Pawnee to Tango 345 kV Rebuild Project
Attachments: Pawnee to Tango Agency Letter_USACE.pdf

Dear Ms. Jordan:

Based on the project location map you sent, the proposed project appears to be within the Galveston District Civil Works boundaries. Please contact the Galveston District. The Galveston District Section 408 Coordinator is Charlene Harry, copied to this email.

Keep in mind, authorization for your project also may be required under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899, which are administered by the Regulatory Division. Information about the Regulatory Division can be found at https://www.swg.usace.army.mil/Missions/Regulatory/Permits/ [swg.usace.army.mil]

Thanks in advance,

Jason Story
Section 408 Coordinator
Fort Worth District
Biologist
RPEC
U.S. Army Corps of Engineers
817-239-8475
jason.e.story@usace.army.mil

For more information on Section 408, visit the Fort Worth District Section 408 webpage at https://www.swf.usace.army.mil/Missions/Section-408/ [swf.usace.army.mil]

From: katie.jordan@powereng.com <katie.jordan@powereng.com>
Sent: Friday, December 20, 2024 10:06 AM
To: Story, Jason E CIV USARMY CESWF (USA) <Jason.E.Story@usace.army.mil>
Cc: denise.williams@powereng.com; ashley.brewer@powereng.com
Subject: [Non-DoD Source] Pawnee to Tango 345 kV Rebuild Project

Dear Mr. Story,

On behalf of our client, CPS Energy, attached please find a proposed project information letter.

Thank you for your assistance with this proposed electric transmission line project. Please contact the Project Manager, Denise Williams, by phone at 281-765-5511, or by e-mail at denise.williams@powereng.com, if you have any questions or require additional information.

Thank you,

Katie Jordan
Environmental Planner I
ENV South Central PM/Planning III Department

1-512-500-0947 (main office)
832-477-6152 (cell)

POWER Engineers, Inc.
www.powereng.com

Jordan, Katie

From: BROWN, Karl B CIV USARMY CESWG (USA) <karl.b.brown@usace.army.mil>
Sent: Thursday, December 26, 2024 10:03 AM
To: Jordan, Katie
Cc: Harry, Charlene Y CIV USARMY (USA); Orange, Joshua R CIV USARMY CESWG (USA); Edwards, Aron S CIV USARMY CESWG (USA)
Subject: [EXTERNAL] RE: Pawnee to Tango 345 kV Rebuild Project

Hello Ms. Jordan,

I'm able to respond to your email requesting information regarding your proposed project. As Mr. Story relays about your project may be required to be authorized under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899, which are administered by the Regulatory Division, you project will not need a 33 USC Section 408 permission letter.

Thank you for your time,
Karl Brown

Karl B. Brown
Chief, Project Operations Branch
2000 Fort Point Road
Galveston, Texas 77550
409-766-3069 (o)
409-370-8457 (c)
karl.b.brown@usace.army.mil

From: Story, Jason E CIV USARMY CESWF (USA) <Jason.E.Story@usace.army.mil>
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Cc: denise.williams@powereng.com; ashley.brewer@powereng.com; Cepero, Carlos E CIV USARMY CESWD (USA) <Carlos.E.Cepero@usace.army.mil>; Little, David M CIV USARMY CESWF (USA) <David.M.Little@usace.army.mil>; Danella, Michael A CIV USARMY CESWF (USA) <Michael.A.Danella@usace.army.mil>; Harry, Charlene Y CIV USARMY (USA) <Charlene.Y.Harry@usace.army.mil>; BROWN, Karl B CIV USARMY CESWG (USA) <karl.b.brown@usace.army.mil>; Story, Jason E CIV USARMY CESWF (USA) <Jason.E.Story@usace.army.mil>
Subject: RE: Pawnee to Tango 345 kV Rebuild Project

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Thanks in advance,

Jason Story
Section 408 Coordinator
Fort Worth District
Biologist
RPEC
U.S. Army Corps of Engineers
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Cc: denise.williams@powereng.com; ashley.brewer@powereng.com
Subject: [Non-DoD Source] Pawnee to Tango 345 kV Rebuild Project

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Thank you,
Katie Jordan
Environmental Planner I
ENV South Central PM/Planning III Department

1-512-500-0947 (main office)
832-477-6152 (cell)

POWER Engineers, Inc.
www.powereng.com

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, GALVESTON DISTRICT
2000 FORT POINT RD
GALVESTON, TEXAS 77550

January 16, 2025

Evaluation Branch

SUBJECT: General Information Letter; File No. SWG-2025-00040; POWER Engineers, Inc. - Proposed Pawnee to Tango 345 kV Transmission Line – Bee and Karnes Counties, Texas

Denise M. Williams
POWER Engineers, Inc.
7600B N Capital of Texas Hwy, Suite 320
Austin, Texas 78731

Dear Ms. Williams:

PLEASE NOTE: THIS IS NOT A PERMIT

This letter is in reference to your letter dated December 20, 2024, requesting we provide information concerning environmental and land use constraints or other issues of interest. The project site is located in Bee and Karnes Counties, Texas.

The Corps of Engineers (Corps), Regulatory Division, regulates the work and/or structures in/or affecting navigable waters of the United States (U.S.) under the authority of Section 10 of the Rivers and Harbors Act of 1899 (Section 10). Navigable waters of the U.S. include all waters that are navigable today, in the past or reasonably foreseeable future and those affected by the daily tide. The Corps, Regulatory Division, also regulates the discharge of dredged and/or fill material into waters of the U.S. under the authority of Section 404 of the Clean Water Act (Section 404). Waters of the U.S. include aquatic features such as the navigable waters of the U.S., rivers, lakes, streams, tidal and mud flats, and adjacent wetlands.

Additionally, activities that affect Federal Interests (federal projects and/or work areas) would also be subject to federal regulation under the authority of Section 14 of the Rivers and Harbors Act (Section 408). Section 408 makes it unlawful for anyone to alter in any manner, in whole or in part, any work (ship channel, flood control channels, seawalls, bulkhead, jetty, piers, etc.) built by the United States unless it is authorized by the Corps of Engineers (i.e. Navigation and Operations Division). Lastly, the Corps has real estate interests over lands for various purposes, including operations and maintenance of its navigation and flood risk management projects. These interests include fee ownership, perpetual easements, navigational servitude, rights-of-way, etc. Coordination with the Galveston District is required in order to use these lands. Depending on the scope and location of the non-federal project, coordination with one, or all, of the following Galveston District offices may be required: Regulatory Division (Department of Army Permits), Real Estate Division (Outgrants) and/or Operations Division (Section 408 reviews). For further information, please see https://www.swg.usace.army.mil/Missions/Navigation/Land-Use/.

If any activity is performed that triggers any of the aforementioned federal regulations, a Department of Army permit will be required prior to the activity occurring. Due to the nature of this request we cannot address any specific requirement but do note that jurisdictional aquatic resources have been located in the vicinity. To address any specific permit requirement we will require specific project details.

This response is not an authorization. Please reference the subject file number SWG-2025-00040 in future correspondence pertaining to this subject. If you have any questions, please contact the Regulatory Hotline at 409-766-3869. To assist us in improving our service to you, please complete the survey found at https://regulatory.ops.usace.army.mil/customer-service-survey/.

Sincerely,

Andria Davis
Leader, North Evaluation Unit

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Texas Coastal & Central Plains Esfo
17629 El Camino Real, Suite 211
Houston, TX 77058-3051
Phone: (281) 286-8282 Fax: (281) 488-5882

In Reply Refer To: 01/27/2025 22:20:06 UTC
Project Code: 2025-0047920
Project Name: Pawnee to Tango 345kV Transmission Line Rebuild Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The U.S. Fish and Wildlife Service (Service) field offices in Clear Lake, Corpus Christi, Fort Worth, and Alamo, Texas, have combined administratively to form the Texas Coastal Ecological Services Field Office. All project related correspondence should be sent to the field office address listed below responsible for the county in which your project occurs:

Project Leader; U.S. Fish and Wildlife Service; 17629 El Camino Real Ste. 211; Houston, Texas 77058
Angelina, *Austin*, *Brazoria*, *Brazos*, *Chambers, Colorado, Fayette, Fort Bend, Freestone, Galveston, Grimes, Hardin, Harris, Houston, Jasper, Jefferson, Leon, Liberty, Limestone, Madison, Matagorda, Montgomery, Newton, Orange, Polk, Robertson, Sabine, San Augustine, San Jacinto, Trinity, Tyler, Walker, Waller, and Wharton.*

Assistant Field Supervisor, U.S. Fish and Wildlife Service; 4444 Corona Drive, Ste 215; Corpus Christi, Texas 78411
Aransas, Atascosa, Bee, Brooks, Calhoun, De Witt, Dimmit, Duval, Frio, Goliad, Gonzales, Hidalgo, Jackson, Jim Hogg, Jim Wells, Karnes, Kenedy, Kleberg, La Salle, Lavaca, Live Oak, Maverick, McMullen, Nueces, Refugio, San Patricio, Victoria, and Wilson.

U.S. Fish and Wildlife Service; Santa Ana National Wildlife Refuge; Attn: Texas Ecological Services Sub-Office; 3325 Green Jay Road, Alamo, Texas 78516
Cameron, Hidalgo, Starr, Webb, Willacy, and Zapata.

For questions or coordination for projects occurring in counties not listed above, please contact arles@fws.gov.

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your

proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: http://www.fws.gov/media/endangered-species-consultation-handbook.

Non-Federal entities may consult under Sections 9 and 10 of the Act. Section 9 and Federal regulations prohibit the take of endangered and threatened species, respectively, without special exemption. “Take” is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. “Harm” is further defined (50 CFR § 17.3) to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. “Harass” is defined (50 CFR § 17.3) as intentional or negligent actions that create the likelihood of

injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering. Should the proposed project have the potential to take listed species, the Service recommends that the applicant develop a Habitat Conservation Plan and obtain a section 10(a)(1)(B) permit. The Habitat Conservation Planning Handbook is available at: https://www.fws.gov/library/collections/habitat-conservation-planning-handbook.

Migratory Birds:
In addition to responsibilities to protect threatened and endangered species under the Act, there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts visit: https://www.fws.gov/program/migratory-birds.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable National Environmental Policy Act (NEPA) documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Texas Coastal & Central Plains Esfo
17629 El Camino Real, Suite 211
Houston, TX 77058-3051
(281) 286-8282

PROJECT SUMMARY

Project Code: 2025-0047920
Project Name: Pawnee to Tango 345kV Transmission Line Rebuild Project
Project Type: Transmission Line - Maintenance/Modification - Above Ground
Project Description: Rebuild of transmission line.
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@28.658134699999998,-97.98493545707363,14z

Counties: Bee and Karnes counties, Texas

ENDANGERED SPECIES ACT SPECIES

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 2 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

BIRDS

NAME	STATUS
Piping Plover *Charadrius melodus* Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is **final** critical habitat for this species. Your location does not overlap the critical habitat. This species only needs to be considered under the following conditions: ▪ Wind related projects within migratory route. Species profile: https://ecos.fws.gov/ecp/species/6039	Threatened
Rufa Red Knot *Calidris canutus rufa* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. This species only needs to be considered under the following conditions: ▪ Wind Related Projects Within Migratory Route Species profile: https://ecos.fws.gov/ecp/species/1864	Threatened
Whooping Crane *Grus americana* Population: Wherever found, except where listed as an experimental population There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/758	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

FLOWERING PLANTS

NAME	STATUS
Black Lace Cactus *Echinocereus reichenbachii var. albertii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5560	Endangered

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

---

1. The Bald and Golden Eagle Protection Act of 1940.
2. The Migratory Birds Treaty Act of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts
For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/ activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete
If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

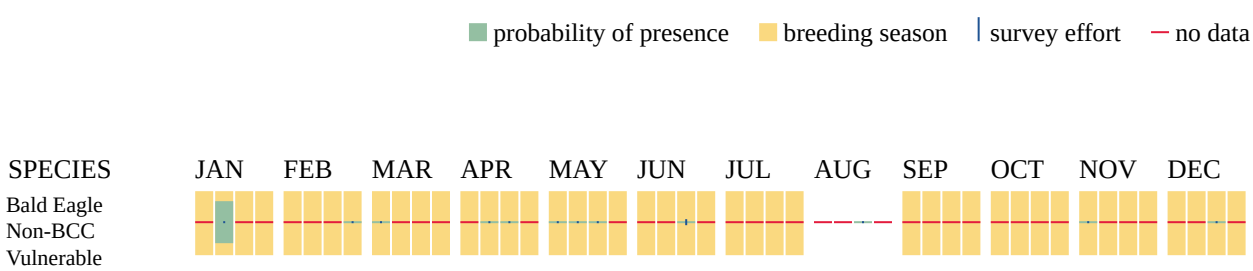
Probability of Presence (▪)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (▪)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds

- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

---

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31
Chimney Swift *Chaetura pelagica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Lesser Yellowlegs *Tringa flavipes* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Little Blue Heron *Egretta caerulea* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9477	Breeds Mar 10 to Oct 15

NAME	BREEDING SEASON
Prairie Loggerhead Shrike *Lanius ludovicianus excubitorides* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8833	Breeds Feb 1 to Jul 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

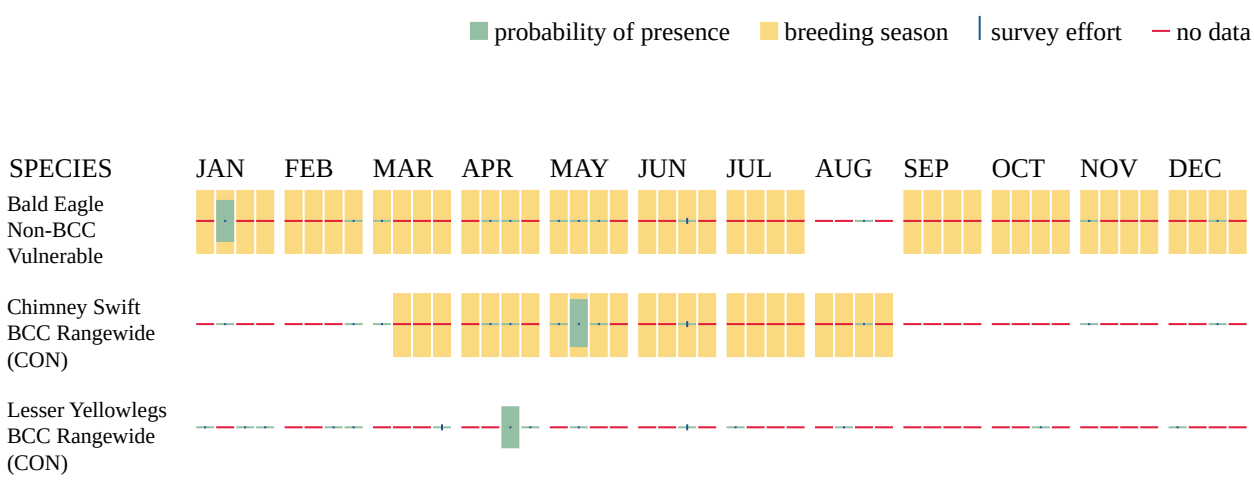
Probability of Presence (▪)

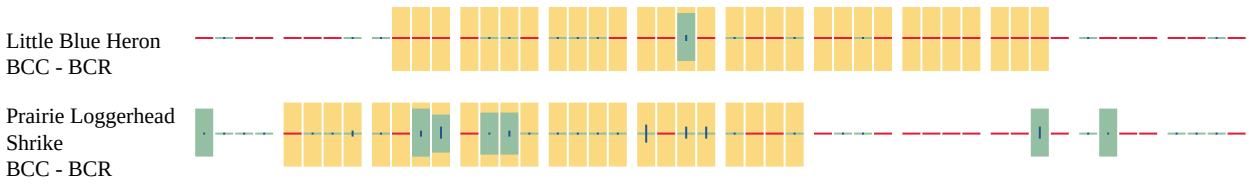
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (▪)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.





Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

RIVERINE

- R4SBA
- R4SBC
- R5UBH

FRESHWATER POND

- PUBFh
- PUBFx
- PUSCh
- PUBF

FRESHWATER EMERGENT WETLAND

- PEM1Fh
- PEM1Fx
- PEM1Ch

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Mikaela Egbert
Address: 25025 I-45 N
City: Spring
State: TX
Zip: 77380
Email mikaela.egbert@powereng.com
Phone: 3466043790

From: Kimberly Amy
To: Williams, Denise
Cc: Stephanie Lewis; Leticia Estavillo
Subject: [EXTERNAL] Spruce to Pawnee 345 kV Rebuild
Date: Thursday, January 30, 2025 10:49:37 AM
Attachments: Spruce to Pawnee 345_Transmission Line Upgrade 10.15.24.pdf
TCEQ Wilson Karnes.pdf
TCEQ Bexar Wilson.pdf
Env Constraints Wilson Karnes.pdf
EPA Waters Bexar Wilson.pdf
EPA Waters Wilson Karnes.pdf
Env Constraints Bexar Wilson.pdf
EPA Pawnee to Tango.pdf
Env Constraints - Pawnee to Tango.pdf

Good morning Denise,

I was nice speaking with you earlier this week. TxDOT appreciates the opportunity to provide information on these projects. Please see the attached maps illustrating environmental constraints and other data from TxDOT's databases (all publicly available data) on two of your current projects. Data sources are listed below.

TxDOT Statewide Planning map: https://www.txdot.gov/apps/statewide_mapping/statewideplanningmap.html [txdot.gov]
USFWS National Wetland Inventory: https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/ [fwsprimary.wim.usgs.gov]
EPA Waters Geoviewer: https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=074cfede236341b6a1e03779c2bd0692 [epa.maps.arcgis.com]
FEMA Flood Hazard Layer: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd [hazards-fema.maps.arcgis.com]
TX Railroad Commission GIS Viewer: https://gis.rrc.texas.gov/GISViewer/ [gis.rrc.texas.gov]

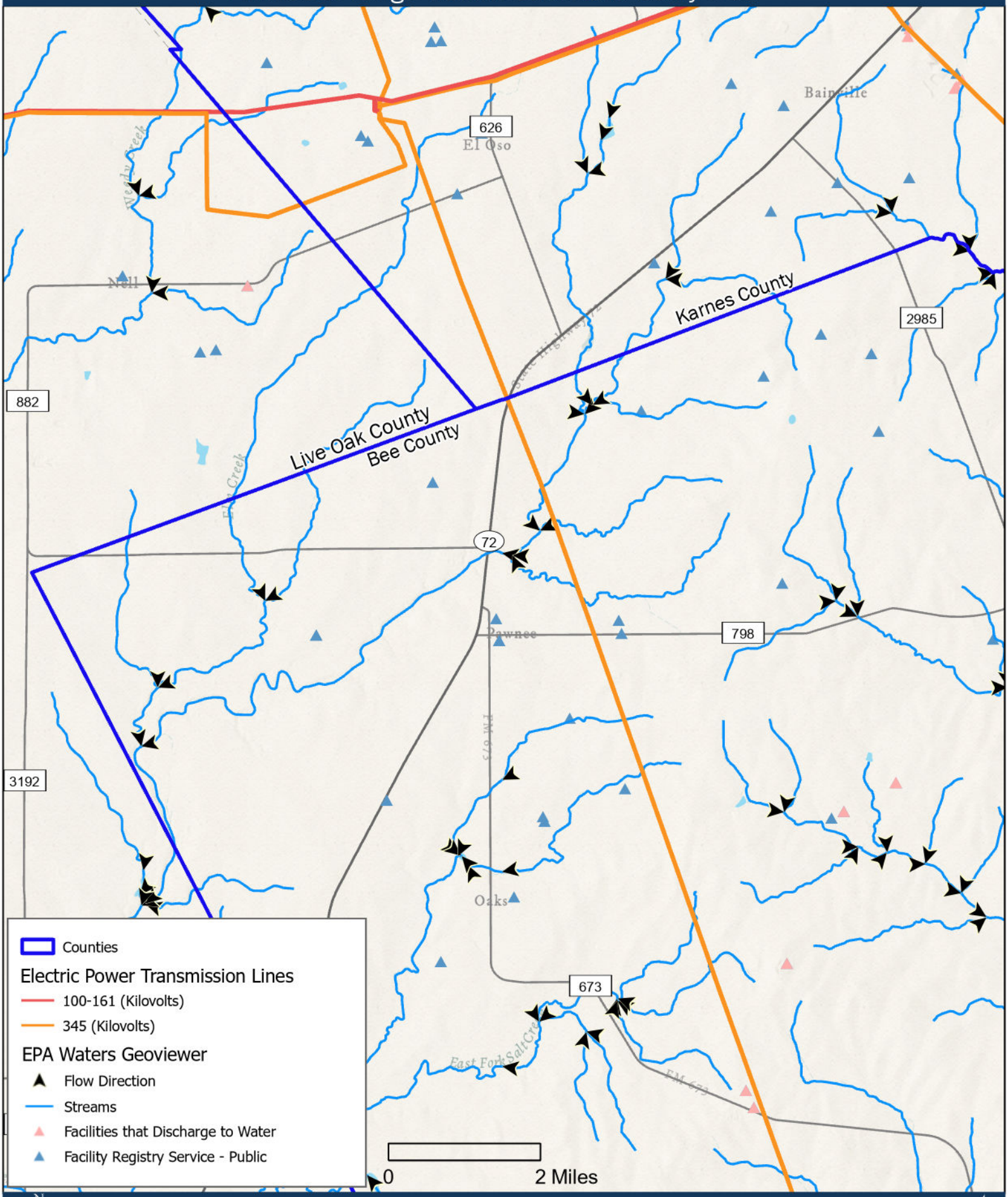
If you have any questions please feel free to reach out to me.

Thank you,

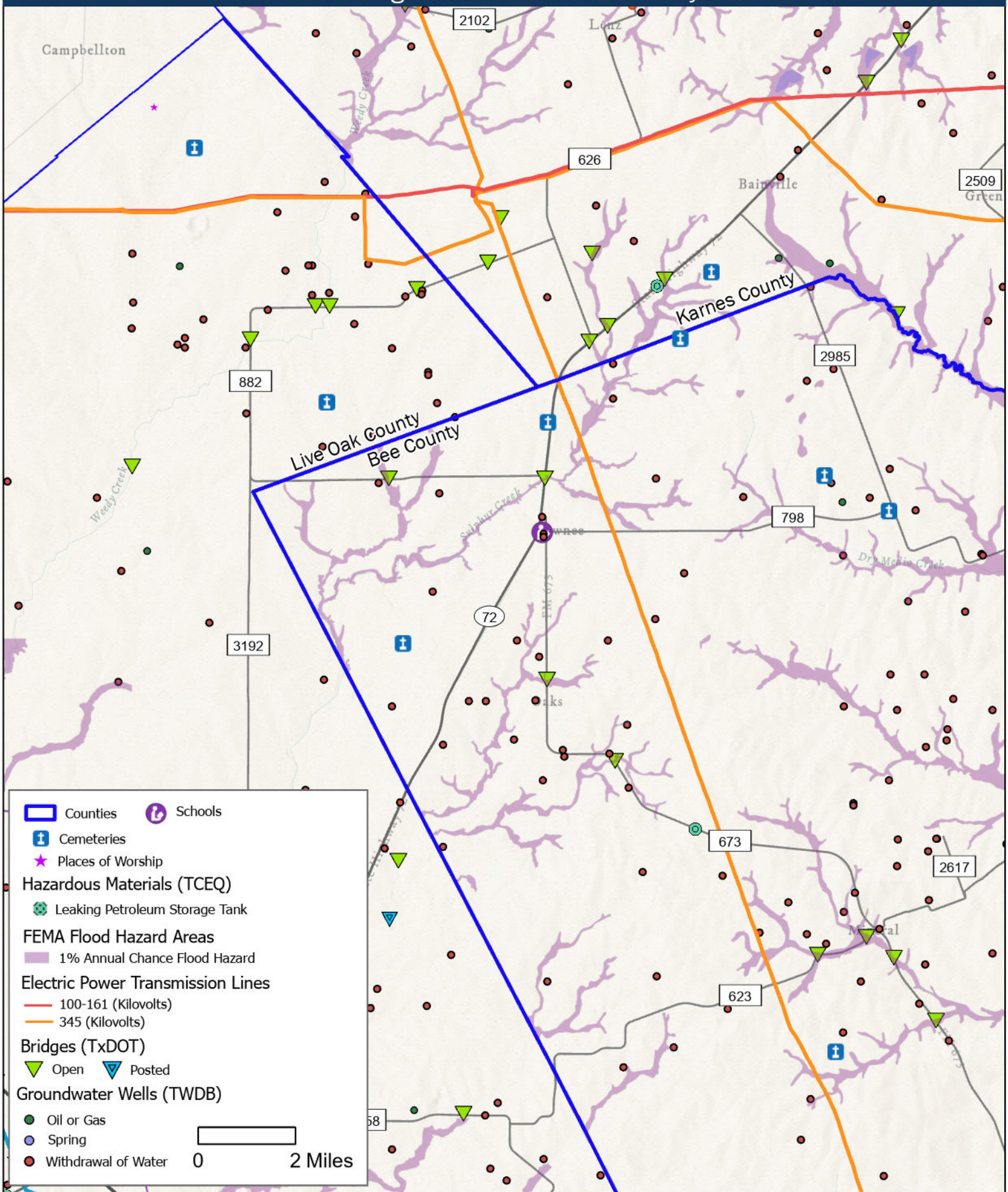
Kimberly Amy
Environmental Coordinator
Corpus Christi District Office
Texas Department of Transportation
Email: kimberly.amy@txdot.gov
Office: (361) 808-2509
Cell: (361) 414-3856

[txdot.gov]

Pawnee to Tango Transmission Line Study Area



Pawnee to Tango Transmission Line Study Area



From: noreply@thc.state.tx.us
To: Williams, Denise; reviews@thc.state.tx.us
Subject: [EXTERNAL] Pawnee to Tango 345 Transmission Line Rebuild Project
Date: Wednesday, January 22, 2025 8:57:54 AM

Re: Project Review under the Antiquities Code of Texas
THC Tracking #202504770
Date: 01/22/2025
Pawnee to Tango 345 Transmission Line Rebuild Project
1 mile NW of FM882- 0.2 miles NE of FM673

Description: Proposed rebuild of the 345 kV transmission line will extend approx. 12 miles from existing South Texas Electric Coop Pawnee Substation.

Dear Denise Williams:
Thank you for your submittal regarding the above-referenced project. This response represents the comments of the Executive Director of the Texas Historical Commission (THC), pursuant to review under the Antiquities Code of Texas.

The review staff, led by Caitlin Brashear and Mary Galindo, has completed its review and has made the following determinations based on the information submitted for review:

Archeology Comments

- An archeological survey is required. You may obtain lists of archeologists in Texas through the Council of Texas Archeologists and the Register of Professional Archaeologists. Please note that other qualified archeologists not included on these lists may be used. If this work will occur on land owned or controlled by a state agency or political subdivision of the state, a Texas Antiquities Permit must be obtained from this office prior to initiation of fieldwork. All fieldwork should meet the Archeological Survey Standards for Texas. A report of investigations is required and should be produced in conformance with the Secretary of the Interior's Guidelines for Archaeology and Historic Preservation and submitted to this office for review. Reports for a Texas Antiquities Permit should also meet the Council of Texas Archeologists Guidelines for Cultural Resources Management Reports and the Texas Administrative Code. In addition, any buildings 45 years old or older that are located on or adjacent to the tract should be documented with photographs and included in the report. To facilitate review and make project information available through the Texas Archeological Sites Atlas, we appreciate the submittal of survey area shapefiles via the Shapefile tab on eTRAC concurrently with submission of the draft report. Please note that while appreciated for Federal projects this is required for projects conducted under

a Texas Antiquities Permit. For questions on how to submit these, please visit our video training series at: https://www.youtube.com/playlist?list=PLONbbv2pt4cog5t6mCqZVaEAx3d0MkgQC [youtube.com]

We have the following comments: There are many known cultural resources within the proposed study area, including archeological sites and cemeteries. Additionally, there have been very few archeological investigations within the study area and there are mapped geologic and soil units that would indicate an increased likelihood of buried archeological sites. Terraces either side of waterways are high probability areas. We recommend consulting with a professional archeologist early in the project process to perform a comprehensive records search for previously recorded historic properties to be avoided, and to identify high-probability areas for archeological survey. Federal regulations require consultation with the USACE and other appropriate agencies to determine if there are any jurisdictional lands along the route. If the project will ultimately involve a federal undertaking, compliance with Section 106 of the National Historic Preservation Act will be required. If this project will involve property or easements that are owned or controlled by political subdivisions of the state and/or will have the potential to affect a State Antiquities Landmark, those areas will be subject to the Antiquities Code of Texas, and a Texas Antiquities Permit will be required before conducting survey across these lands. Once the route has been finalized and all regulatory jurisdictions have been established, please submit a scope of work meeting all applicable state and federal requirements for our review. We welcome submissions through our online eTRAC system. Links to the eTRAC portal and a user guide can be found on our website at https://www.thc.texas.gov/etrac-system [thc.texas.gov].

We look forward to further consultation with your office and hope to maintain a partnership that will foster effective historic preservation. Thank you for your cooperation in this review process, and for your efforts to preserve the irreplaceable heritage of Texas. If the project changes, or if new historic properties are found, please contact the review staff. If you have any questions concerning our review or if we can be of further assistance, please email the following reviewers: caitlin.brashear@thc.texas.gov, Mary.Galindo@thc.texas.gov.

This response has been sent through the electronic THC review and compliance system (eTRAC). Submitting your project via eTRAC eliminates mailing delays and allows you to check the status of the review, receive an electronic response, and generate reports on your submissions. For more information, visit http://thc.texas.gov/etrac-system [thc.texas.gov].

Sincerely,

for Joseph Bell, State Historic Preservation Officer
Executive Director, Texas Historical Commission

Please do not respond to this email.

TEXAS WATER DEVELOPMENT BOARD

P.O. Box 13231, 1700 N. Congress Ave.
Austin, TX 78711-3231, www.twdb.texas.gov
Phone (512) 463-7847, Fax (512) 475-2053

February 24, 2025

Ms. Denise Williams
Project Manager, Power Engineers
7600B N. Capital of Texas Hwy, Ste 320
Austin, TX 78731

Dear Ms. Williams:

We received your letter dated December 20, 2024, requesting information concerning environmental assessment and route analysis for the proposed Pawnee to Tango 345kV Transmission Line Rebuild Project in Karnes and Bee Counties, Texas (POWER Engineers Project No. 256342)

To plan for the state's water resources and provide affordable water and wastewater services, the Texas Water Development Board (TWDB) provides planning, geographic data collection and dissemination, and financial and technical assistance services. TWDB is not a regulatory agency and does not issue any permits. Based on the map and information provided, it appears that the proposed transmission line would not conflict with any recommended water management strategies in the regional or state water plans; therefore, we have no specific comments regarding the proposed project.

If you have any further questions, please contact Michele Foss of my staff at (512) 463-9225.

Sincerely,
Matt Nelson
Deputy Executive Administrator
Office of Planning

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Chairman-Emeritus
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T. Dan Friedkin
Chairman-Emeritus
Houston

David Yoskowitz, Ph.D.
Executive Director

April 8, 2025

Ms. Denise Williams
Project Manager
POWER Engineers, Inc.
7600B N Capital of Texas HWY, Suite 320
Austin, TX 78731

RE: CPS Energy and AEP Texas Inc Proposed Pawnee to Tango 345-kV Transmission Line Rebuild, Karnes and Bee County

Dear Ms. Denise Williams:

The Texas Parks and Wildlife Department (TPWD) received an initial project review request dated December 20, 2024, regarding the proposed transmission project referenced above.

Under Texas Parks and Wildlife Code (PWC) section 12.0011(b)(2) and (b)(3), TPWD has authority to provide recommendations and informational comments that will protect fish and wildlife resources to local, state, and federal agencies that approve, license, or construct developmental projects or make decisions affecting those resources. TPWD is providing input on this proposed project to facilitate the incorporation of beneficial management practices (BMP) during construction, operation, and maintenance that may assist the project proponent in minimizing impacts to the state's natural resources. Pursuant to the PWC section 12.0011(b)(2) and (b)(3), TPWD offers the following comments and recommendations concerning this project.

Project Description

CPS Energy and AEP Texas Inc (AEP Texas) propose to rebuild approximately 12 miles of existing single-circuit 345-kilovolt (kV) transmission line in Karnes and Bee Counties, Texas, to a double-circuit transmission line. The rebuild will occur from the existing South Texas Electric Cooperative Pawnee Substation, located approximately one mile northwest of Farm-to-Market (FM) 822 in Karnes County, to the existing AEP Texas Tango Substation, located approximately 0.2 mil northeast of FM 673 in Bee County.

POWER Engineers, Inc. (POWER) is preparing an Environmental Assessment (EA) to support CPS Energy and AEP Texas' application for a Certificate of Convenience and Necessity from the Public Utility Commission of Texas for the proposed project. POWER is requesting environmental and land use constraints information or other issues of interest to TPWD within the study area for the project. POWER provided a map exhibiting the study area boundary, the existing Pawnee Substation, the existing Tango Substation, the existing 345-kV single-circuit transmission line, streams, and primary roadways. Communication with POWER indicates that construction will involve replacing the existing lattice structures with monopole structures within the existing right-of-way (ROW).

Comment: A benefit of utilizing existing ROW for the proposed rebuild project is that the proposed project avoids the need for new-location ROW and avoids new habitat loss and fragmentation.

Migratory Birds

Federal Law: Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) prohibits taking, attempting to take, capturing, killing, selling, purchasing, possessing, transporting, and importing of migratory birds, their eggs, parts, or nests, except when specifically authorized by the Department of the Interior. This protection applies to most native bird species, including ground nesting species. The U.S. Fish and Wildlife Service (USFWS) Migratory Bird Office can be contacted at (505) 248-7882 for more information.

Within the project area, potential impacts to migratory birds may occur during disturbance of existing vegetation and bare ground that may be occupied by active bird nests, including nests that may occur in grass, shrubs, trees and on bare ground.

Recommendation: TPWD recommends any vegetation clearing or disturbance be scheduled outside of the general bird nesting season of March 15th to September 15th. If disturbing vegetation during the bird nesting season is unavoidable, TPWD recommends surveying the area proposed for disturbance to ensure that no nests with eggs or young will be disturbed by construction. Nest surveys should be conducted not more than five days prior to clearing activities to maximize detection of active nests. TPWD generally recommends a 100-foot radius buffer of vegetation remains around active nests until the eggs have hatched and the young have fledged; however, the size of the buffer zone depends on various factors and can be coordinated with the local or regional USFWS office. Raptor nesting occurs in late winter through early spring; TPWD recommends construction activities be excluded from a minimum zone of 100 meters (approximately 328 feet) surrounding any raptor nest during February 1st through July 15th. The USFWS can be contacted at the number listed above for further information.

State Law: Chapter 64, Birds

The PWC section 64.002, regarding protection of nongame birds, provides that no person may catch, kill, injure, pursue, or possess a bird that is not a game bird. The PWC section 64.003, regarding destroying nests or eggs, provides that, no person may destroy or take the nests, eggs, or young and any wild game bird, wild bird, or wild fowl.

Recommendation: Please review the *Federal Law: Migratory Bird Treaty Act* section above for recommendations as they are also applicable for compliance with Chapter 64 of the PWC.

Rare and Protected Species

Federal Law: Endangered Species Act

Federally listed animal species and their habitat are protected from take on any property by the Endangered Species Act (ESA). Take of a federally listed species can be allowed if it is incidental to an otherwise lawful activity and must be permitted in accordance with Section 7 or 10 of the ESA. Take of a federally listed species or its habitat without allowance from USFWS is a violation of the ESA. The USFWS rare species lists can be obtained at the USFWS Information Planning and Consultation (IPaC) website.

> **Recommendation:** TPWD recommends that the EA identify the federally listed, candidate, and proposed species with potential to occur within the study area. TPWD recommends CPS Energy and AEP Texas conduct site surveys of the route to identify suitable habitat for federally listed species, to assess potential impacts to federally listed species, and to identify conservation practices that will be employed to avoid or minimize adverse impacts to federally listed, candidate, and proposed species. If impact to a federally listed species is anticipated, TPWD recommends that CPS Energy and AEP Texas consult with USFWS Texas Coastal and Central Plains Ecological Services Clear Lake Sub-office at office at HoustonESFO@fws.gov or (281) 286-8282 pursuant to the ESA.

TPWD review of aerial imagery and TPWD Ecological Mapping Systems Data indicates the study area contains primarily disturbance grassland and mesquite savanna grasslands with less prominent coverage of row crops, shrublands, and high and low intensity urban development. Floodplain grasslands and shrublands occur along Sulphur Creek and unnamed tributaries.

Based on publicly available data for the project area, TPWD anticipates that the study area contains suitable migration habitat for the proposed threatened monarch butterfly (*Danaus Plexippus*). The monarch butterfly has an expected range of the entire continental United States, with migration through Texas between the principal breeding grounds in the north and the overwintering areas in Mexico. The primary drivers affecting health include the loss and degradation of habitat, continued exposure to insecticides, and effects of climate change. Habitat during migration includes open fields and meadows containing nectar plants and milkweed needed for survival. Significant declines in the population of migrating monarchs have led to widespread concern about this species and other native insect pollinator species due to reductions in native floral resources.

Potential impacts to the monarch butterfly may occur during vegetation disturbance, herbicide treatment, or grading of the Project's grasslands during the active monarch season in Texas (approximately March 1 – October 31).

> **Recommendation:** Regarding the monarch butterfly, TPWD recommends development strategies that avoid or minimize loss to migration habitat for the monarch butterfly within the project area, such as minimizing disturbance during construction. To support pollinators and migrating monarchs, TPWD encourages the establishment of native wildflower habitats on private and public lands, including infrastructure ROW. Infrastructure ROW can provide habitat for a diverse community of pollinators, providing food, breeding, or nesting opportunities. Infrastructure ROW extend across a variety of landscapes and can aid in dispersal of pollinators by linking fragmented habitats. By acting as refugia for pollinators in

otherwise inhospitable landscapes, this habitat can contribute to the maintenance of healthy ecosystems and provide ecological services such as crop pollination. TPWD recommends restoring or revegetating impacted areas with vegetation that provides pollinator habitat, where feasible. For ROW areas that contain floral resources, TPWD recommends incorporating pollinator conservation into maintenance plans for the ROW to promote and sustain the availability of flowering species throughout the growing season. TPWD recommends avoiding herbicides that affect floral resources and scheduling vegetation maintenance to occur once the seed from pollinator plants has been released, typically late summer to early fall. Resources to aid in pollinator establishment and plant lists include the Lady Bird Johnson Wildflower Center plant lists, Pollinator.org planting guides by zip code, Monarch Watch.org, the Xerces Society pollinator resource center, and TPWD Native Pollinators and Monarch Butterfly webpages.

State Law: State Listed Species

The PWC section 68.015 regulates state listed threatened and endangered animal species. The capture, trap, take, or killing of state listed threatened and endangered animal species is unlawful unless expressly authorized under a permit issued by USFWS or TPWD. The TPWD *Rare, Threatened, and Endangered Species of Texas by County* (RTEST) is an on-line resource that identifies threatened and endangered species and other species of greatest conservation need (SGCN) that have potential to occur within each county in Texas based on occurrence and range data. The on-line webpage can be found by searching TPWD RTEST in your search engine.

Recommendation: TPWD recommends the EA identify the state listed threatened and endangered species with potential to occur within the study area using the RTEST lists for Bee and Karnes Counties. TPWD recommends CPS Energy and AEP Texas conduct site surveys of the route to identify suitable habitat for state listed species and to assess potential impacts to state listed species. TPWD recommends the EA identify impact avoidance and minimization measures that CPS Energy and AEP Texas will implement to protect state listed species, natural vegetation communities, and other SGCN that may occur within the study area.

The following state listed species have the potential to occur within the project area and would be susceptible to impact from construction:

Texas horned lizard (*Phrynosoma cornutum*)
Texas tortoise (*Gopherus berlandieri*)

Texas horned lizard: The Texas horned lizard can be found in open, arid, and semi-arid regions with sparse vegetation, including grass, cactus, scattered brush or scrubby trees. If present in the project area, the Texas horned lizard could be impacted by ground disturbing activities. Texas horned lizards may hibernate on-site in loose soils a few inches below ground during the cooler months from September/October to March/April. Construction in these areas could harm hibernating lizards. Horned lizards are active above ground when temperatures exceed 75 degrees Fahrenheit. If horned lizards (nesting, gravid females, newborn young, lethargic from cool temperatures or

hibernation) cannot move away from noise and approaching construction equipment, they could be negatively affected by construction activities.

Recommendation: TPWD recommends avoiding disturbance to the Texas horned lizard, its burrows, and colonies of its primary food source, the harvester ant (*Pogonomyrmex* sp.), during clearing and construction. TPWD recommends a permitted biological monitor be present during construction to attempt to capture and relocate Texas horned lizards, if found. If the presence of a biological monitor is not feasible, Texas horned lizards observed during construction should be allowed to safely leave the site on their own. For purposes of relocation, surveys, monitoring, and research, terrestrial state-listed species may only be handled by individuals authorized through the TPWD Wildlife Permits Office.

Texas tortoise: The Texas tortoise occurs primarily in open woodlands and brush. It feeds primarily on fruits of prickly pear and succulent plants. Texas tortoises have low fecundity; individuals take over 10 years to reach maturity and females do not reproduce every year. Nesting occurs in spring and summer. The Texas tortoise has a home range of approximately five to ten acres. Tortoises are often found near or at the base of prickly pear cactus and may seek shade by crawling under parked vehicles. When inactive, tortoises may occupy the shallow depressions or pallets that are scratched out at the base of vegetative cover; tortoises may also be found sheltering in burrows.

Recommendation: TPWD recommends reviewing the Texas tortoise BMP document available online at TPWD's Environmental Review Team Planning Tools webpage. Contractors and other staff should be made aware that in southcentral Texas the Texas tortoise is generally inactive from December through January and is therefore likely to be undetectable in a project area during this time. TPWD recommends a biological monitor be on site during any vegetation clearing to inspect sites subject to disturbance that may provide cover for tortoises (e.g., bases of prickly pear cactus) or provide sites for tortoise pallets (shallow excavations typically at the base of vegetation that are opportunistically occupied by tortoises). As indicated above, tortoises may seek cover (shade) underneath parked vehicles; therefore, TPWD recommends that before driving vehicles that have been parked within the project area, contractors should check underneath the vehicles to ensure no tortoises are present.

If a tortoise is located at the project site, it should be relocated only if it is found in an area in which imminent danger is present. Individuals that must be relocated should be transported to the closest suitable habitat outside of the proposed disturbance area but preferably within its five-to-ten-acre range by individuals authorized through the TPWD Wildlife Permits Office. After tortoises are removed from the immediate project area, TPWD recommends constructing an exclusion fence as described below under the *General Beneficial Management Practices* section. Reduced speed limits should also be established and enforced in areas in which state listed reptiles could occur.

Recommendation: If possible, TPWD recommends completing major ground disturbing activities before late fall or winter when reptiles become inactive and could be utilizing burrows in areas subject to disturbance. If ground disturbing

construction activities must occur after October (e.g., to avoid migratory birdnesting season) in areas of suitable tortoise habitat, TPWD recommends surveying those areas for tortoises or indications of tortoise presence, e.g., the presence of burrows or pallets under prickly pear. If tortoises or indications of tortoise presence is observed, TPWD Environmental Review Team staff should be contacted.

Recommendation: Please review the *General Beneficial Management Practices* section below for additional recommendations to avoid or minimize potential impacts to state listed species, including Texas horned lizard and Texas tortoise. Please review the *Migratory Birds* section above for recommendations to avoid or minimize potential impacts to birds that are also state listed species.

Species of Greatest Conservation Need

The 2023 State Wildlife Action Plan: Texas (SWAP) replaces the 2013 Texas Conservation Action Plan. The SWAP identifies SGCN, important habitats, and threats affecting SGCN within the state. In addition to state and federally listed species, TPWD tracks other SGCN and natural plant communities and actively promotes their conservation. TPWD considers it important to evaluate and, if feasible, minimize impacts on SGCN and their habitat to reduce the likelihood of endangerment and preclude the need to list as threatened or endangered in the future. SGCN and their general habitat descriptions are included in the above-referenced RTEST application.

General Beneficial Management Practices

TPWD recommends implementing the following BMP to avoid or minimize impacts to wildlife and SGCN, including state listed SGCN, potentially occurring in Karnes and Bee Counties:

Recommendation: TPWD recommends designing the project to minimize removal of vegetation and retain native habitats and natural ground cover. Areas exhibiting native grasses and forbs should be protected from disturbance and from the introduction of non-native vegetation. TPWD recommends that precautions be taken to avoid impact to SGCN flora and fauna, natural plant communities, and priority habitats such as riparian areas, native grasslands, and wetlands.

Recommendation: Artificial light at night can have negative impacts on wildlife and ecosystems by disrupting natural diurnal and nocturnal behaviors such as migration, reproduction, nourishment, rest, and cover from predators. Careful selection of lighting technologies can reduce the project's contribution to skyglow and light pollution. TPWD recommends avoiding the use of permanent outdoor nighttime lighting. If outdoor lighting is required for on-ground facilities, such as personnel parking areas and switch/substation sites, TPWD recommends minimizing the project's contribution to skyglow by focusing light downward with shields or cutoff luminaires and using dark-sky friendly lighting that is illuminated only when needed, as bright as needed, and minimizes blue light emissions. Appropriate lighting technologies, beneficial management practices (BMP), and other dark sky resources can be found at the International Dark-Sky Association and McDonald Observatory websites.

Recommendation: TPWD recommends protecting streams, floodplains, riparian corridors, lakes, and wetlands, regardless of their jurisdictional status, because they provide valuable habitat for aquatic species and other wildlife and help protect water quality. TPWD recommends establishing disturbance-free buffers contiguous to wetlands or aquatic systems to preserve wildlife cover, food sources, and travel corridors and constructing the transmission line to avoid creeks or span all creeks that must be crossed. During construction, trucks and equipment should use existing bridges to cross creeks while avoiding unnecessary temporary or permanent access roads across creeks. If stream crossings are required, TPWD recommends avoiding disturbance to inert microhabitats in waterways such as snags, brush piles, fallen logs, creek banks, pools, and gravel stream bottoms, as these provide habitat for a variety of fish and wildlife species and their food sources. Placement of culverts in areas containing native mussels should be avoided. Erosion control measures should be installed prior to construction and maintained until disturbed areas are permanently revegetated.

Recommendation: TPWD recommends the judicious use and placement of sediment control fence to exclude wildlife from discrete areas to be disturbed. In many cases, sediment control fence placement for the purposes of controlling erosion and protecting water quality can be modified minimally to also provide the benefit of excluding wildlife access to construction areas. The exclusion fence should be buried at least six inches and be at least 24 inches high. The exclusion fence should be maintained for the life of the project and only be removed after the project activities are completed and the disturbed sites have been revegetated or otherwise stabilized. Construction personnel should be encouraged to examine the inside of the exclusion area daily to determine if any wildlife species have been trapped inside the area of impact and provide safe egress opportunities prior to initiation of construction activities.

Recommendation: Disturbed areas are susceptible to infestation of invasive terrestrial plant species such as old-world privets (*Ligustrum* spp.), Johnson grass (*Sorghum halepense*), bermudgrass (*Cynodon dactylon*), King Ranch bluestem (*Bothriochloa ischaemum var. songarica*), and bastard cabbage (*Rapistrum rugosum*). Other species with potential to invade portions of the project ROW can be found on the *Eco Alerts By Region* of the Texas Invasives website. TPWD recommends protecting areas that exhibit a native grass and forbs component from disturbance and from introduction of non-native vegetation. For areas containing native vegetation prior to construction, TPWD recommends CPS energy and AEP Texas only revegetate with native species and prepare and follow a maintenance plan to monitor, treat, and control invasive species within the construction and operation ROWs.

Recommendation: TPWD recommends informing employees and contractors of the potential for SGCN to occur in the project area and to avoid impacts to all wildlife that are encountered. Wildlife in danger from project activities that will not readily leave the site, can be translocated to a nearby area with similar habitat that will not be disturbed by project activities. TPWD recommends that any translocations of reptiles be the minimum distance possible no greater than one mile,

preferably within 100-200 yards of the initial encounter location. For purposes of relocation, surveys, monitoring, and research, terrestrial state listed species may only be handled by persons with the appropriate authorization obtained through the TPWD Wildlife Permits Program. For more information on obtaining this authorization, please contact the Wildlife Permits office at (512) 389-4647.

Recommendation: Small vertebrates including snakes, lizards, toads, and mice can fall into trenches or holes, become trapped, and would be susceptible to loss from backfilling activities, trench inundation, starvation, dehydration, predation, and exposure to elements. Where trenching or other excavation is involved in construction, TPWD recommends minimizing the number of trenches or excavation areas left open at any given time during construction. Excavation areas should be inspected for the presence of trapped wildlife prior to backfilling. If trenches and excavation areas cannot be backfilled the day of initial excavation or covered overnight, then escape ramps should be installed, if feasible, at least every 90 meters (approximately 295 feet). Escape ramps consist of short lateral trenches made of soil or wooden planks sloping to the surface at an angle less than 45 degrees (1:1).

Recommendation: For soil stabilization and revegetation of disturbed areas within the proposed project area, TPWD recommends erosion control and seed and mulch stabilization materials that avoid entanglement hazards to snakes and other wildlife species. Because the mesh found in many erosion control blankets or mats pose an entanglement hazard to wildlife, TPWD recommends the use of no-till drilling, hydromulching, or hydroseeding rather than erosion control blankets or mats due to a reduced risk to wildlife. If erosion control blankets or mats will be used, the product should contain no netting or contain loosely woven, natural fiber netting in which the mesh design allows the threads to move, therefore allowing expansion of the mesh openings. Plastic mesh matting and hydromulch containing microplastics should be avoided.

Data Reporting and the Texas Natural Diversity Database

TPWD maintains records of occurrence for protected and rare species, or SGCN, within the TXNDD and these data are publicly available by request. The TXNDD is intended to assist customers in avoiding harm to rare species or significant ecological features. Given the small proportion of public versus private land in Texas, the TXNDD does not include a comprehensive inventory of rare resources in the state. These data are not inclusive and cannot be used as presence/absence data. The data represents species that could potentially be in the project area and cannot be substituted for field surveys.

TPWD notes that there were no TXNDD records located within the proposed study area for the proposed project.

Recommendation: The TXNDD is updated continuously based on new, updated, and undigitized records; therefore, TPWD recommends requesting the most recent TXNDD data on a regular basis. For questions regarding a record or to request the most recent data, please contact TexasNatural.DiversityDatabase@tpwd.texas.gov.

Recommendation: To aid in the scientific knowledge of a species' status and current range, TPWD encourages reporting encounters of protected and rare species to the TXNDD according to the data submittal instructions found at the TPWD Texas Natural Diversity Database: Submit Data website. An additional method for reporting observations of species is through the iNaturalist community application where plant and animal observations are uploaded from a smartphone. The observer may select to add the observation to specific TPWD Texas Nature Tracker Projects appropriate for the taxa observed, including Herps of Texas, Birds of Texas, Texas Eagle Nests, Texas Whooper Watch, Mammals of Texas, Rare Plants of Texas, Bees & Wasps of Texas, Terrestrial Mollusks of Texas, Texas Freshwater Mussels, Fishes of Texas, and Texas Milkweeds for Monarchs.

TPWD appreciates the opportunity to provide comments and recommendations for this project. Please contact me at Karen.Hardin@tpwd.texas.gov or (903) 644-6155 if you have any questions.

Sincerely,

Karen B. Hardin
Environment Review Team
Ecological and Environmental Planning Program
Wildlife Division

KBH:53827

From: Bobby Jemison
To: Williams, Denise
Cc: Community Affairs
Subject: [EXTERNAL] Power Engineers, Inc. Project 256342
Date: Monday, January 6, 2025 9:55:18 AM

Denise,

We are in receipt of your letter dated December 20, 2024 regarding the 'Proposed Pawnee to Tango 345 kV Transmission Line Rebuild Project and have the following responses to your inquiry.

Responses are as follows:

Environmental and land use constraints of concerns would be those associated with any identified designated floodplains and floodway(s) which cannot be altered or obstructed by any means or at any time during the course of the project activities.

Regarding any permits or approvals, this Office will not require any unless circumstances occur as previously stated.

Other concerns would be associated with construction entrances on the County road system. Please coordinate with the County Road and Bridge Department for specifics.

Should you have further question, please do not hesitate to reach out to me.

Thanks,

Bobby Jemison
Director
Bee County
Community Affairs Department
C 361-318-0760
O 361-621-1553

F 361-492-5992

From: David Wiatrek
To: Williams, Denise
Subject: [EXTERNAL] Spruce to Pawnee and Pawnee to Tango
Date: Tuesday, January 7, 2025 11:24:46 AM
Attachments: Outlook-rqa43bzx.png

Good morning, Ms. Williams.

I would like to introduce myself as the new Commissioner for Karnes County Pct. 1. I just received two study area maps that were sent out on October 15th and December 20th to the previous Commissioner. To best help provide information on environmental and land use constraints, please send me a list of the property owners who will be affected by the Spruse to Pawnee and the Pawnee to Tango projects. I would like to meet with the property owners to identify any constraints as soon as possible.

I understand that these projects started months back so I would appreciate any updates you can provide.

Thank you.

David J. Wiatrek
Karnes County Commissioner Pct. 1
101 N. Panna Maria Ave.
Karnes City, TX 78118
Office: 830-780-3919
Mobile: 830-837-3200
david.wiatrek@co.karnes.tx.us
http://www.co.karnes.tx.us

From: Sal Ochoa
To: Williams, Denise
Subject: [EXTERNAL] Proposed Pawnee to Tango 345 kV Transmission Line Rebuild Project in Karnes and Bee Counties, Texas
Date: Tuesday, January 14, 2025 5:00:01 PM

Good afternoon Denise,

My apologies for just responding to your letter requesting any information concerning environmental and land use constraints or other issues of interest within the study area. As I mentioned Monday in our phone conversation, I have been in my current position for about 3 weeks and I would be looking into this requested information as soon as possible. Karnes County is not in the Coastal Bend Council of Governments Region, so I do not have any information for that study area. The information I currently have available, was not able to locate any environmental or land use constraints or other issues within the Bee County study area. If you need any other information or have any questions, please feel free to contact me anytime.

Thanks,

Salvador "Sal" Ochoa, Jr.
Environmental Planning Program Manager
Coastal Bend Council of Governments
2910 Leopard St., Corpus Christi, TX 78408
Office: 361-232-5096
Email: sochoa@coastalbendcog.org

COASTAL BEND
COUNCIL OF GOVERNMENTS

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Appendix B

Public Involvement

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Public school students should not be worth less

Hector O. Dominguez Jr.
Runge ISD Superintendant

The debate over school vouchers has become one of the most polarizing issues in education today. Proponents argue that vouchers give parents the ability to choose the best educational setting for their children, while opponents contend that diverting public funds to private institutions undermines the very foundation of public education. At the heart of this debate is a simple yet profound question: Should public school students be worth less than their private or charter school counterparts?

Public, private, and charter schools all have a place in the educational landscape, and parents deserve the right to choose what is best for their children. However, if taxpayer dollars are funding student education in private and charter schools, these institutions should be held to the same academic and financial accountability standards as public schools.

Ensuring equal accountability

Public schools operate under strict state and federal accountability systems. From standardized testing to financial audits, public schools are required to demonstrate student progress, justify their spending, and comply with rigorous transparency standards. However, private schools receiving public funds through vouchers are not always subject to the same level of scrutiny.

If public money follows a student to a private or charter school, those institutions should be required to administer the same state assessments and adhere to the same academic standards as public schools. This ensures that all students—regardless of where they attend school—are held to equitable educational expectations.

The impact on public schools

Public schools serve the vast majority of students in our communities, including those with special needs, English learners, and economically disadvantaged students. Diverting taxpayer funds from public schools through vouchers inevitably reduces resources for these students. In rural areas, where private school options are scarce, voucher programs offer little to no benefit to families while still pulling funds from already underfunded public schools.

Voucher proponents often argue that competition will improve education. But for competition to be fair, all schools should operate under the same rules. Public schools cannot deny admission based on a student's academic performance, behavior history, or special needs. Many private schools, however, can and do. This creates an uneven playing field where public schools are left serving the highest-need students with fewer resources.

A path forward

Rather than dismantling public education through inequitable voucher programs, we should focus on strengthening all schools to ensure every child—regardless of their ZIP code—receives a high-quality education. If private and charter schools receive taxpayer funds, they must operate under the same accountability measures as public schools.

Public school students should not be worth less than their private and charter school peers. If education funding is to follow the student, then all students should be subject to the same rigorous educational and financial oversight. The future of our children and our public education system depends on ensuring that every school—public, private, or charter—meets the same high standards of excellence.

Happy Heart Health Month

OKMH TIDES DIABETES PROGRAM

Theresa Fenner, MPH, DrPH(c), CHES – Diabetes Educator

Theresa.Fenner@okmh.org

It's hard not to notice all of the pink and red heart shapes this time of the year, and they all serve as a reminder to take care of one of your body's most important organs this month! This is especially true for people with Diabetes because unmanaged high blood sugar can increase the risk of heart disease. Take a moment this month to practice some good heart health habits - take a stroll, enjoy some food packed with healthy fiber or omega-3's, engage in a stress-relief activity, or make an appointment with your doctor to know your blood pressure and cholesterol numbers. Whatever you do, show a little love to your heart in February!

The Diabetes and Heart Disease Link

Did you know that having Type 2 Diabetes can make someone twice as likely to develop and die of cardiovascular/heart disease (such as heart attack, heart failure, or stroke) than people without Diabetes? It's important to remember, though, it's not the Diabetes itself but rather unmanaged high blood sugar that creates most problems. High blood sugar over time can damage important blood vessels and nerves of the heart. However, even when blood sugar is managed, there are other risk factors to be aware of when you have Type 2 Diabetes. Having Type 2 Diabetes can make people more at risk for "comorbidities," or other health conditions that often occur with the Diabetes, such as high blood pressure, high LDL (aka "bad") and low HDL (aka "good") cholesterol, and high triglycerides (a fat in the blood).

Additionally, research shows that some people with Type 2 Diabetes may be more susceptible to unhealthy behaviors such as smoking, not getting enough physical activity, eating a diet high in saturated fat and sodium, or drinking alcohol. To take care of Diabetes and lower the risk of heart disease, providers suggest managing your ABCs:

- A1C - get a regular A1C test and aim to stay in target
- Blood pressure - keep blood pressure below 130/80 (or your doctor's target range for you)
- Cholesterol - manage HDL and LDL cholesterol levels
- Smoking - stop smoking or don't start

Lady Eagles split games against Three Rivers, Kenedy

Dylan Dozier
dylan@southtexasnews.com

The Pettus Lady Eagles secured a dominant 50-21 victory over the Three Rivers Lady Bulldogs before falling to the Kenedy Leopards 68-45 in their latest matchups.

In their win over Three Rivers, Hayleigh Cruz led the Lady Eagles with 26 points, four rebounds, and four steals. Miranda Monson contributed 10 points, 15 rebounds, and five steals, while Carmen Cantu had a strong presence on the boards with nine points, 20 rebounds, and three steals. Celine Cantu added five steals to go along with her two points, and Bianca Ames and Payton Gomez also contributed to the scoring effort. Cambry Cisneros grabbed six rebounds to aid the defensive effort.

Against Kenedy, Cruz once again led the team with 27 points, three rebounds, and two steals. Miranda Monson and Cambry Cisneros added six points each, with Monson securing 10 rebounds and Cisneros collecting eight. Celine Cantu contributed three points and six steals, while Nala Darling pulled down nine rebounds.

The Lady Eagles will look to bounce back in their next matchup as they continue district play.

Trojans tennis takes first place in Yoakum

Dylan Dozier
dylan@southtexasnews.com

The A.C. Jones Trojans tennis team claimed first place at the Yoakum tournament on Wednesday, Feb. 5, with strong performances across multiple divisions. Yoakum finished in second place.

In girls' doubles, the team of Julia McFall and Trisha Panton secured first place, while Kathryn Nicholson and Lexy Garza finished third.

The boys' doubles division saw Daniel Hinojosa and Aiden Sanchez take first place, with teammates Devin Williamson and Parker Ramon finishing second. Joe Gonzales and Ayden Salazar rounded out the podium with a third-place finish.

In mixed doubles, Landin Cruz and Layla Ramon captured first place, while Javier Sanchez and Ximena Esquivel finished in second.

Beeville JV tennis finishes fourth at CC Vets Tourney

Dylan Dozier
dylan@southtexasnews.com

The Beeville Junior Varsity tennis team earned a fourth-place finish at the Corpus Christi Vets Tournament on Jan. 27, 2025. Corpus Christi Veterans Memorial claimed first place, followed by San Antonio Memorial in second and Navarro in third.

Beeville's standout performances included Lieam Perez, who secured third place in boys' singles. In girls' singles, Mallory Villa finished fourth.

In doubles play, the duo of Cameron Rosenbaum and Alexis Martinez placed fourth in girls' doubles, while Alfredo Perez and Jarred Herrera earned fourth place in boys' doubles.

The Beeville JV team will look to build on their performance as they continue their season.

Trojan JV tennis finishes third at Industrial Tournament

Dylan Dozier
dylan@southtexasnews.com

The A.C. Jones Junior Varsity Trojans tennis team secured a third-place finish at the Industrial tournament on Thursday, Feb. 6. Industrial claimed first place, while Yoakum finished second.

In individual results, Destiny Banda placed third in girls' singles.

Ryan Coronado and Leiam Perez captured first place in boys' doubles, while George Varra and Sarah Lucio earned second place in mixed doubles.

The Trojans will return to action at the JV tournament in Goliad on Thursday, Feb. 13, with matches beginning at 8 a.m.

LOCAL SPORTS CALENDAR

BEEVILLE

Boys Basketball
Bi-District Playoffs: Away: Feb. 17-18, TBA
Boys/Girls Varsity Soccer
Girls/Boys: Rockport: Away: Feb. 7, 7:30 p.m.
Boys/Girls: SGA: Home: Feb. 18, 6 p.m./8 p.m.
Wrestling
UIL 5A State Tourney: Austin: Feb. 14-15, TBA
Varsity Tennis
Port Lavaca Invitational: Away: Feb. 20, 8 a.m.
Golf
Girls: Regional Preview: Feb. 19, 8 a.m.

PETTUS

Baseball
Karnes City: Away: Feb. 18, 6 p.m.
Charlotte Tournament: Away: Feb. 20-22, TBD
Softball
Kenedy Tourney: Away: Feb. 13 & 15, TBD
Bloomington: Home: Feb. 14, 6 p.m.
Poteet: Away: Feb. 18, 6 p.m.
Golf
GIRLS: Sinton: Feb. 25
Powerlifting
GIRLS FINALS: Mathis: Feb. 15

SKIDMORE-TYNAN

Boys Baseball
Aransas Pass: Away: Feb. 17, 5:30 p.m.
Aransas Pass: Away: Feb. 22, 3 p.m.
Softball
Kenedy Tournament: Away: Feb. 13 & 15, TBA
West Oso: Away: Feb. 18, 7 p.m.
Three Rivers Tournament: Away: Feb. 20-22, TBA
Tennis
Aransas Pass: Away: Feb. 24
Powerlifting
Last Girls Qualifier: Edinburg: Feb. 24

COASTAL BEND COLLEGE

Men's Basketball
Panola College; Feb. 15, 4 p.m.
Trinity Valley Community; Feb. 19, 7:30 p.m.
Women's Basketball
Panola College: Feb. 15, 2 p.m.
Trinity Valley Community; Feb. 19, 5:30 p.m.
Baseball
Western Oklahoma State; Feb. 14, 5:30 p.m.; Feb. 15, 3 & 6 p.m.; Feb. 16, noon
Men's Soccer
Cougar Classic; Feb. 16, TBD
Texas A&M San Antonio; Feb. 16, 11 a.m.

10 years of service

Beeville Physical Therapy celebrated 10 years of serving the community. Pictured from left are Tiffany Truxaw, Rachel Tremaine, Erin Dial and Miranda Smith. (Photo by Dennis Wade)

COMMUNITY SHORTS

Blood drives

The Coastal Bend Bloodmobile will be at the following location(s):

Feb. 25 – Wal-Mart Supercenter, 9:30 a.m. to noon

Feb. 27 – Beeville Police Department, 9 a.m. to noon

Bee County Day at the Capitol

Bee County Day at the Capitol will be held Feb. 26 during the 89th Texas Legislative Session. All in he county are invited to come and help advocate and promote Bee County.

There will be a group photo at the capitol recognition on the House and Senate floors, and gifts taken in teams to the legislators. Lunch will be dutch treat. A finalized agenda will be emailed to all registrants.

For more information contact Leticia Munoz, Bee County Chamber of Commerce, at 361-318-8560.

Chamber banquet

The Bee County Chamber of Commerce will hold their annual banquet and Night of Honor on Feb. 27 at 6 p.m. at the Beeville Country Club. Guest speaker will be Rudy Trevino.

For ticket information, visit experiencebeecounty.org.

Beeville Beatdown wrestling

Apex Championship Entertainment will present Beeville Beatdown, live pro-wrestlingat The Grand Dance Hall on March 1. Doors open at 6 p.m. with bell time at 7 p.m. for TLC Hardcore Title Match, Dog Collar Match, Apex Championship Entertainment Title Match and more.

Tickets can be purchased at CBS Grocery, Longevity Spa and Pizzarriffic. General admission is $15 with kids 10 and under free. Ringside tickets are $25, and second row tickets are $20. VIP tables can be purchased for $65 by calling 361-254-2711.

BCJLHS meeting

The Bee County Livestock & Homemakers Show monthly meeting will be held on Monday, March 3, in the Blue Ribbon Country Store Conference Room at 6 p.m. Visitors are welcome.

BCRSP meeting

The Bee County Retired School Personnel will meet on Tuesday, March 4 at 9:30 a.m. in the Simmons Bank meeting room. All retired school personnel are invited to enjoy a brunch, social time and an informative program. The speaker for this meeting will be Dr. Mark Besancon, Doctor of Veterinary Medicine.

Purple Door button design

The Purple Door has announced a button design contest to help raise awareness of February as Sexual Assault Awareness Month.

Designs can be hand drawn or digitally created and are due by March 14. The winner will receive a $50 VISA gift card.

Voting will be anonymous and held through social media. The winner will be revealed on March 31.

For more information contact Maribel Arredondo at marredondo@purpledoottx.org.

LIBRARY BRIEFS

Library closed

The library will be closed Monday, Jan. 20, in honor of Martin Luther King Jr. Day.

STEM

Magnificent Mondays (Ages 6-17) at 4:30 p.m.

- Origami – Feb. 24

Wacky Wednesday (Ages 6-17) at 4:30 p.m.)

- Switch Covers – Feb. 19
- Stamp Making – Feb. 26

Fantastic Fridays (at 3 p.m.)

- Minecraft (Ages 6-17) – Feb. 21
- VR Games (Ages 10-17) – Feb. 28

Toddler Time

Ages 0-5 can join staff Wednesdays at 11 a.m. for toddler interaction and exploring.

- Puzzle Play – Feb. 19

Family movie night

A movie for the whole family to enjoy on Thursday, Feb. 20, at 5 p.m. This month's selection is "Sonic 2". Rated PG.

Book sale

The library will hold a book sale Feb. 22 – March 1 during regular library hours. Hardbacks are $1, paperbacks $.50. Saturday, March 1, is Bargain Day – $1 a bag. (Bring your own bag.)

Weekly story time

Come join staff every Wednesday and Friday at 10 a.m. Story times will feature great books, songs and a fun craft.

Astronomy Club

Join library staff on Thursday, Feb. 27, at 6:30 p.m. for Astronomy Club and explore the mysteries of the cosmos. All ages.

Computer classes

- Internet Basics: Feb. 19 at 10 a.m.
- Microsoft PowerPoint: Feb. 20 at 6 p.m.
- Graphic Design: Canva: Feb. 21 at 3 p.m.
- eBooks/Libby and SimplyE: Feb. 24 at 3 p.m.
- Tech: Zoom: Feb. 25 at 3 p.m.
- Social Media Safety: Feb. 26 at 10 a.m.
- Microsoft Publisher: Feb. 27 at 6 p.m.

All classes are free of charge and open to the public. No registration is required. Ask at any desk for more information.

Happy Birthday

JULIAN SALDIVAR

You turned 92 on January 28. I send you my blessings and good wishes and all my love. Remember we have been friends 64 years. You and I met when I was 17 and you were 28 years-old. I thank God for sending me a good friend in my life as special as you. These five years, I'd call you to check on you five to six times, wrote you everyday, one to two letters a day. That's what friends that are friends do when friends are friends until we die. Thanks for my teddy bear that you gave me in 1961 that no one can destroy. Now my feelings and hurts I got in 1961. After all that was my blue teddy bear that will always be that memory of your friendship of 64 years. Thanks for being there and don't forget friends are until God takes us with Him. Many Happy Birthdays.

May God send you a friend forever like me who doesn't forget what a friend means.

Always your friend, Mary Moreno of Chula Vista, California, once of Beeville. Bless you always!

February 12, 2025

Dear Landowner:

We invite you to attend an open house to learn about a proposed transmission line rebuild project in your area. The project will be completed in collaboration between CPS Energy and AEP Texas. The Pawnee to Tango Transmission Line Rebuild Project involves the proposed reconstruction of approximately 12 miles of transmission infrastructure traversing parts of Karnes and Bee counties.

The proposed transmission line project will connect the Pawnee Station to the Tango Station.

At the Open House, you may learn more about the project need, what this project consists of, as well as the transmission line route that we are currently evaluating. We welcome your questions, comments, and input regarding this project. CPS Energy and AEP Texas team members directly involved with the project will be present to answer your questions and receive feedback you provide. The Open House will have an informal “come and go” format with information stations addressing specific areas of the proposed project.

CPS Energy and AEP Texas Open House
Pawnee to Tango Transmission Line Rebuild Project

February 26, 2025
5 - 7 P.M.
Bee County Expo Center Auditorium
214 S FM 351
Beeville, TX 78102

A brochure describing the proposed project, and a map of the study area, is included in this packet. Additional information will also be available at www.cpsenergy.com/infrastructure. Scroll down to the “Pawnee to Tango Transmission Line Rebuild Project,” or at AEPTexas.com/Pawnee-Tango.

We look forward to meeting you, receiving feedback you provide, and answering your questions. Thank you in advance for taking the time to join us.

Sincerely,

Kevin Phillips
Project Manager II, CPS Energy
S&T Regulatory Support

Michael Harris
Lead Outreach Specialist

12 de febrero de 2025

Estimado propietario:

Lo invitamos a asistir a una reunión pública para informarse sobre un proyecto propuesto de reconstrucción de una línea de transmisión en su área. El proyecto se llevará a cabo en colaboración entre CPS Energy y AEP Texas. El Proyecto de Reconstrucción de la Línea de Transmisión de Pawnee a Tango implica la reconstrucción propuesta de aproximadamente 12 millas de infraestructura de transmisión que atraviesa partes de los condados de Karnes y Bee.

El proyecto de línea de transmisión propuesto conectará la estación de Pawnee con la estación de Tango.

En la Reunión Pública podrá obtener más información sobre la necesidad del proyecto, en qué consiste y cuál es el trazado de la línea de transmisión que estamos evaluando actualmente. Agradecemos sus preguntas, comentarios y opiniones sobre este proyecto. Los miembros del equipo de CPS Energy y AEP Texas que participan directamente en el proyecto estarán presentes para responder a sus preguntas y recibir sus comentarios. La Reunión Pública tendrá un formato informal de “entrada por salida” con estaciones de información que abordarán áreas específicas del proyecto propuesto.

Reunión Pública de CPS Energy y AEP Texas
Proyecto de Reconstrucción de la Línea de Transmisión de Pawnee a Tango

26 de febrero de 2025
5 - 7 P.M.
Auditorio del Centro de Exposiciones del Condado de Bee
214 S FM 351
Beeville, TX 78102

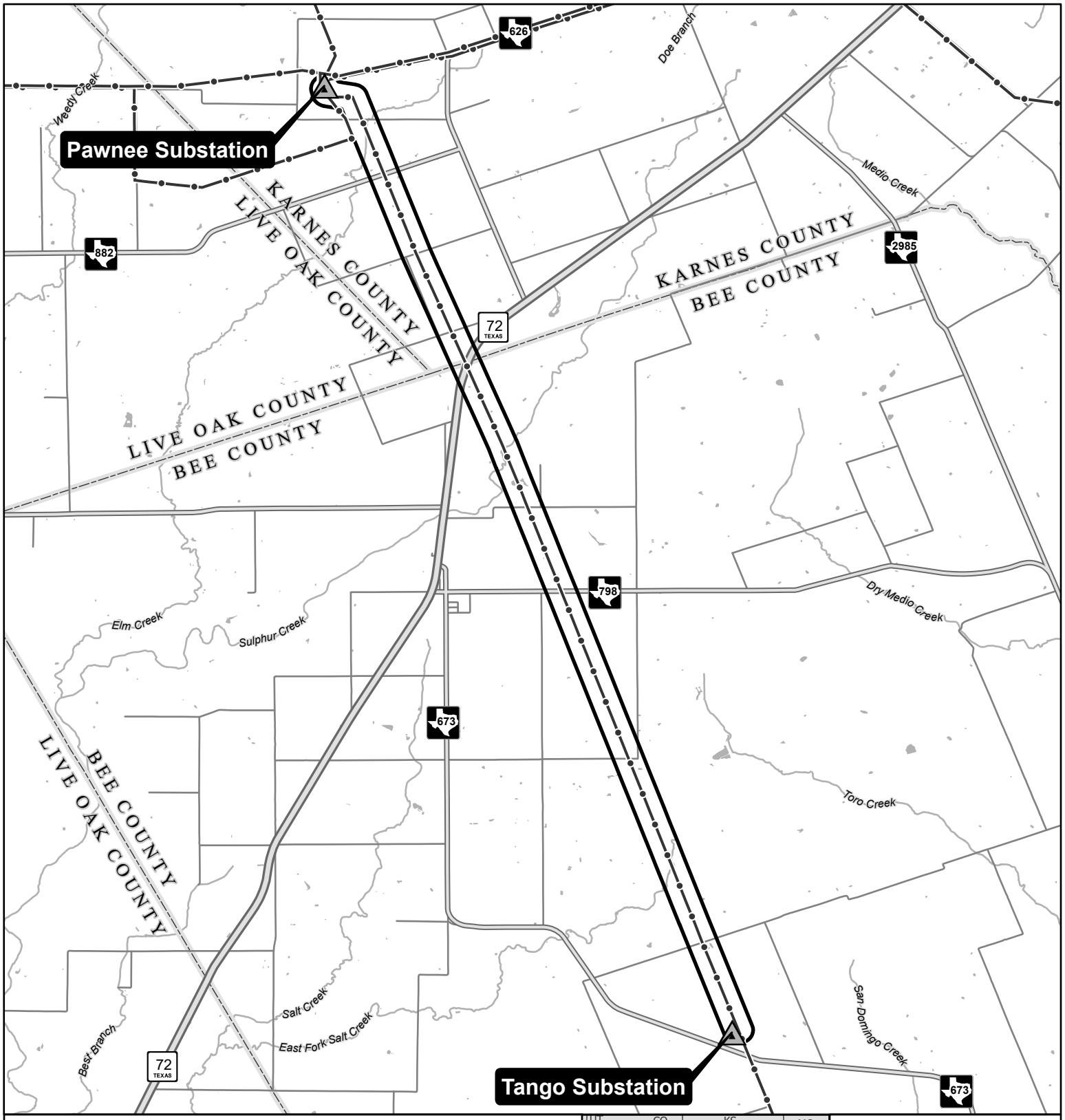
En este paquete se incluye un folleto que describe el proyecto propuesto y un mapa del área de estudio. También habrá información adicional disponible en www.cpsenergy.com/infrastructure. Baje hasta ver “Pawnee to Tango Transmission Line Rebuild Project”, o en AEPTexas.com/Pawnee-Tango.

Esperamos conocerlo, recibir sus comentarios y responder a sus preguntas. Gracias de antemano por dedicarnos su tiempo.

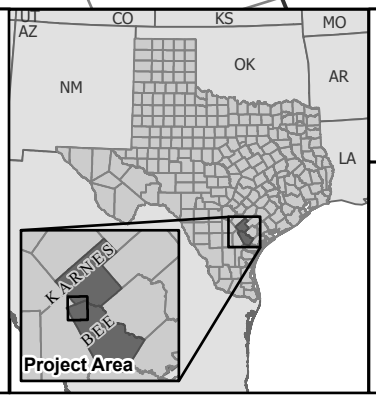
Atentamente,

Kevin Phillips
Director de Proyectos II, CPS Energy
S&T Regulatory Support

Michael Harris
Especialista Principal de Alcance



- Project Substation
- Study Area Boundary
- Existing Transmission Line
- State Highway
- Farm-to-Market Road
- County / Local Road
- River / Stream
- Waterbody
- County Boundary



PAWNEE TO TANGO
345 KV TRANSMISSION LINE
REBUILD PROJECT

STUDY AREA

0 1 2
Miles

Date: 12/18/2024

Pawnee to Tango Transmission Line Rebuild Project
Questionnaire

Your feedback is important to us.

Please take a moment to respond to the following questions so we may evaluate public comments.

1. Did you attend the Pawnee to Tango Transmission Line Rebuild Open House?
   Yes No

2. Do you understand the need for the Pawnee to Tango Transmission Line Rebuild Project?
   Strongly Agree Agree Neutral Disagree Strongly Disagree

3. If you attended the Open House or have reviewed the project information from the website, have your questions about the Pawnee to Tango Transmission Line Rebuild Project been answered?
   Strongly Agree Agree Neutral Disagree Strongly Disagree

4. If you answered "Disagree" or "Strongly Disagree" to Question 3, and you still have questions about the project that have not been answered to your satisfaction, would you like for someone from the project team to contact you to discuss the project with you further?
   Yes No

5. Were the exhibits at the Open House helpful to you? If not, do you have suggestions for improvements?
   Strongly Agree Agree Neutral Disagree Strongly Disagree

Suggestions for Improvement:

_____

_____

6. Below is a list of factors that CPS Energy, AEP Texas and their consultants consider when identifying and evaluating alternative transmission line route segments. Please rank your top five factors below from most important (1) to least important (5).

_____ Impact to residences

_____ Proximity to schools, churches, cemeteries

_____ Proximity to parks/recreational areas

_____ Proximity to archaeological/historical sites

_____ Impact to woodlands/grasslands/wetlands

_____Parallel existing roadways/highways

_____ Parallel existing transmission lines

_____ Impact to businesses

_____ Impact to streams/floodplains

_____ Impact to trees and other vegetation

_____ Visibility of structures

_____ Parallel property lines

_____ Total project cost

Continued ⟶

7. Are there any other factors that you feel should be considered when identifying and evaluating alternative transmission line segments? _____

_____

8. Following your review of the Land Use and Environmental Constraints map at the Open House or from the project website, please indicate any features that should be added which were not identified in the appropriate location or that were not included on the map.

_____

_____

9. Please check all that apply:

☐ A potential transmission segment or segments are near my home/business.

List segment(s): _____

☐ A potential transmission segment or segments cross my property.

List segment(s): _____

☐ Other. Please specify _____

10. Is there any other information you would like the Project Team to know, or take into consideration, when evaluating the project?

_____

_____

You may submit this form to the welcome table at the Open House, via mail or email to the following:

CPS Energy
Kevin Phillips
Mail Drop RT0801
500 McCullough
San Antonio, TX 78215
Email:
Pawnee-TangoProject@cpsenergy.com

Please provide your name and contact information below. (Optional)

Name:_____

Address:_____

City_____State_____Zip_____

Telephone:_____

Email:_____

Proyecto de Reconstrucción de la Línea de Transmisión de Pawnee a Tango

Cuestionario

Sus comentarios son importantes para nosotros.

Por favor, tome un momento para responder las siguientes preguntas para que podamos evaluar los comentarios del público.

1. ¿Asistió a la Reunión Pública sobre la Reconstrucción de la Línea de Transmisión de Pawnee a Tango?
   Sí No

2. ¿Comprende la necesidad del Proyecto de Reconstrucción de la Línea de Transmisión de Pawnee a Tango?
   Totalmente de Acuerdo De Acuerdo Neutral En Desacuerdo Totalmente en Desacuerdo

3. Si asistió a la Reunión Pública o ha consultado la información sobre el proyecto en la página web, ¿han sido respondidas sus preguntas sobre el Proyecto de Reconstrucción de la Línea de Transmisión de Pawnee a Tango?
   Totalmente de Acuerdo De Acuerdo Neutral En Desacuerdo Totalmente en Desacuerdo

4. Si ha respondido "en desacuerdo" o "totalmente en desacuerdo" a la pregunta 3, y aún tiene preguntas sobre el proyecto que no han sido respondidas a su satisfacción, ¿le gustaría que alguien del equipo del proyecto se pusiera en contacto con usted para discutir el proyecto con usted?
   Sí No

5. ¿Le resultaron útiles las exposiciones de la Reunión Pública? Si no, ¿tiene alguna sugerencia de mejora?
   Totalmente de Acuerdo De Acuerdo Neutral En Desacuerdo Totalmente en Desacuerdo

Sugerencias de Mejora:

_____

_____

6. Abajo hay una lista de factores que CPS Energy, AEP Texas y sus consultores consideran cuando identifican y evalúan segmentos alternativos de rutas de líneas de transmisión. Por favor, clasifique sus cinco factores principales desde el más importante (1) al menos importante (5).

_____ Impacto sobre las residencias

_____ Proximidad a escuelas, iglesias y cementerios

_____ Proximidad a parques/áreas recreativas

_____ Proximidad al sitio arqueológico/histórico

_____ Impacto en los bosques/pastizales/humedales

_____ Carreteras/autopistas paralelas

_____ Líneas de transmisión paralelas existentes

_____ Impacto a los negocios

_____ Impacto en los ríos/llanuras inundables

_____ Impacto a los árboles y otra vegetación

_____ Visibilidad de las estructuras

_____ Líneas de propiedad paralelas

_____ Costo total del proyecto

Continuación ⟶

7. ¿Existen otros factores que, en su opinión, deban tenerse en cuenta a la hora de identificar y evaluar segmentos alternativos de líneas de transmisión? _____

_____

8. Una vez revisado el Mapa de Uso del Terreno y Limitaciones Medioambientales en la Reunión Pública o en el sitio web del proyecto, indique cualquier característica que deba añadirse que no se haya identificado en el lugar adecuado o que no se haya incluido en el mapa.

_____

_____

9. Por favor, indique todo lo que corresponda:

☐ Hay un segmento o segmentos de transmisión potenciales cerca de mi casa/negocio.

Enumere el segmento(s): _____

☐ Un segmento o segmentos potenciales de transmisión atraviesan mi propiedad.

Enumere el segmento(s): _____

☐ Otro. Por favor, especifique: _____

10. ¿Hay alguna otra información que le gustaría que el Equipo del Proyecto conociera o tuviera en cuenta a la hora de evaluar el proyecto?

_____

_____

_____

Puede presentar este formulario en la mesa de bienvenida en la Reunión Pública, por correo postal o electrónico a la siguiente dirección:

CPS Energy
Kevin Phillips
Buzón de Correo RT0801
500 McCullough
San Antonio, TX 78215

Correo Electrónico:
Pawnee-TangoProject@cpsenergy.com

Indique a continuación su nombre e información de contacto. (Opcional)

Nombre:_____

Dirección:_____

Ciudad_____Estado_____

Código Postal_____

Teléfono:_____

Correo Electrónico:_____

Pawnee to Tango Transmission Line Rebuild Project
Frequently Asked Questions

Project Overview

What is the Pawnee to Tango Transmission Line Rebuild Project?
CPS Energy and AEP Texas are proposing to rebuild approximately 12 miles of existing horizontal single circuit 345-kilovolt (kV) transmission infrastructure into new vertical double circuit 345kV transmission infrastructure traversing through Karnes and Bee counties. Transmission lines consist of specially designed structures composed of various material (wood, concrete, steel, etc.) and wires that move electricity long distances at high voltages from station to station.

Why is this new transmission line needed in this area?
The reconstruction of the transmission line is needed to increase the resiliency and reliability of Texas' electric grid by adding another transmission pathway to increase support of new renewable generation in South Texas and the planned retirement of generation in San Antonio.

What is a transmission line?
The proposed transmission line consists of specially designed steel structures and wires that move electricity long distances at high voltages between station endpoints.

How does electricity get delivered to homes and businesses?
Typically, electricity is generated from remotely located electric power plants (including wind and solar farms) and then travels from those remote generating sources to substations closer to population centers through a system of high-voltage transmission lines. Once at a substation, the electricity is reduced to a voltage level that is appropriate for distribution to customers. Electricity then travels from the substation through the network of distribution lines, supplying electricity to homes and businesses.

When does construction begin?
Construction on the Pawnee to Tango Transmission Line Rebuild Project is anticipated to begin in November 2025..

When will crews be working on this transmission project?
Under normal circumstances, work will be performed Monday through Friday, 7 A.M. - 8 P.M. Weekend work will be performed as needed. Please note that the work will be done within transmission easements.

Transmission Line Routes

Who selects the final transmission line route?
After determining the project is needed, the Public Utility Commission of Texas (PUC) utilizes an established regulatory process to evaluate and approve the route to be constructed following its review of the data presented by the applicants in their application; recommendations from the PUC staff of experts; and the views and concerns of affected landowners and other interested parties.

Will landowners receive notice of the PUC proceeding?
Yes. All landowners who are crossed by a potential transmission line route, or who own a habitable structure within 500 feet of the centerline of a potential transmission line route, will be mailed a notice informing them that an application has been filed at the PUC requesting approval to construct and operate the project. CPS Energy and AEP Texas will also publish notice of the Certificate of Convenience and Necessity (CCN) application filing in the newspaper and update the project website (see the end of this FAQ sheet for the website address for this project) announcing the filing of the application. The mailed notice packet will include the Docket Number used for tracking documents filed at the PUC along with forms for interested persons to provide public comment on the project or to participate in the PUC proceeding and other important information regarding the PUC regulatory process. If the PUC issues a final order approving the project and the route to be constructed, each landowner will receive a notice of the outcome.

Can landowners or other interested persons participate in the PUC proceeding?
Yes. Landowners or other persons impacted by the potential transmission line route may file a public comment regarding the project or request to participate in the PUC proceeding. A person participating in the PUC proceeding is generally referred to as an "intervenor" during the proceeding and must follow the specified responsibilities to maintain intervenor status throughout the regulatory process.

Environmental

Will it be necessary to remove trees and other vegetation to construct the project?
Yes, some removal of trees and other vegetation is often required to construct and operate transmission lines safely and reliably. CPS Energy and AEP Texas will work with landowners and communities to responsibly comply with tree preservation requirements and minimize the impact where necessary to operate the transmission line infrastructure safely and reliably.

Continued ⟶

Will the project impact endangered species in the area?
CPS Energy and AEP Texas will conduct studies set forth by the PUC's ordering decision to mitigate impact to endangered wildlife and plant species to the extent any such impacts are implicated by the construction of the project.

Infrastructure

What will the transmission line poles look like?
CPS Energy and AEP Texas anticipate using galvanized steel tubular monopole structures, although other types of structures may be used when the circumstances warrant.

Will the transmission lines create electric and magnetic fields (EMF) for people living nearby?
Transmission lines are designed to operate safely for people living, working, and recreating nearby and are not anticipated to result in any adverse EMF effects for people near them. For more information on EMF, please visit:
https://www.niehs.nih.gov/health/topics/agents/emf

Real Property

What rights do landowners have when a utility acquires the necessary transmission line right of way?
Landowners whose property will be crossed by the approved transmission line route, or from whom the land for the substation site will be acquired, have rights that are generally set out in The Texas Landowner Bill of Rights, published by the Attorney General of Texas. A copy may be found at https://www.texasattorneygeneral.gov/sites/default/files/files/divisions/general-oag/landowners-bill-of-rights-24.pdf Interested landowners are encouraged to review that document to become more familiar with their rights under the law. Affected landowners will receive a copy of The Texas Landowner Bill of Rights from the Applicants by US Mail before an easement is negotiated.

How will landowners along the chosen transmission route be affected?
For all or the majority of the project, CPS Energy and AEP Texas will replace the existing transmission infrastructure within the existing right of way so no additional new permanent right of way will be needed in this portion of the project. Temporary construction easements may be necessary, and some short-term impacts may be experienced by landowners during construction. CPS Energy and AEP Texas currently anticipate that most or all construction activities will take place within the existing transmission line right of way.
If any new permanent right of way is needed, CPS Energy and AEP Texas will purchase a property right known as an "easement" from existing property owners. In accordance with the terms of the easement, vegetation growing under the transmission line will be trimmed, and in some cases cleared to allow for the line construction. The easement document will also address issues such as roadways, fencing, access and notice rights, and other matters regarding CPS Energy's construction, operation, and maintenance of the transmission line facilities.

How does CPS Energy arrive at values for property rights acquired from landowners?
CPS Energy and AEP Texas will evaluate property value using industry standard practices and offers landowners fair market value for property rights to be acquired.

Does CPS Energy have the power of "eminent domain" to acquire property rights?
Eminent domain authority is available to CPS Energy and AEP Texas to acquire private property rights for public use. However, it is used as a last resort, as CPS Energy and AEP Texas first try to negotiate with an affected landowner to reach mutually agreeable terms.

Next Steps

What happens after the Open House?
CPS Energy and AEP Texas's project team will evaluate all project information, including public input received. The project team will then meet to identify any appropriate adjustments to the proposed project to ensure that the project satisfies applicable regulatory criteria. The project team will consider community values, recreational and park areas, historical and aesthetic values, environmental integrity, engineering, design, construction, operations and maintenance, and estimated cost.

When will CPS Energy file the CCN Application?
The anticipated date to file the CCN application is February 2025. Updates will be posted on the project webpage at cpsenergy.com/infrastructure (search Spruce to Pawnee). Affected landowners will be notified when the application is filed.

When will CPS Energy and AEP Texas file the CCN Application?
The anticipated date to file the CCN application is May 2025. Updates will be posted on the project webpage at www.cpsenergy.com/infrastructure (search Pawnee to Tango). Information may also be found at www.aeptexas.com/pawnee-tango. Affected landowners will be notified when the application is filed.

Proyecto de Reconstrucción de la Línea de Transmisión de Pawnee a Tango
Preguntas Más Frecuentes

Resumen del Proyecto

¿Qué es el Proyecto de Reconstrucción de la Línea de Transmisión de Pawnee a Tango?
CPS Energy y AEP Texas proponen reconstruir aproximadamente 12 millas de infraestructura de transmisión horizontal existente de un solo circuito de 345 kilovoltios (kV) en una nueva infraestructura de transmisión vertical de doble circuito de 345 kV que atraviesa los condados de Karnes y Bee. Las líneas de transmisión consisten en estructuras especialmente diseñadas compuestas de diversos materiales (madera, concreto, acero, etc.) y cables que mueven la electricidad largas distancias a altos voltajes de estación a estación.

¿Por qué es necesaria esta nueva línea de transmisión en esta área?
La reconstrucción de la línea de transmisión es necesaria para aumentar la resiliencia y fiabilidad de la red eléctrica de Texas mediante la adición de otra vía de transmisión para aumentar el apoyo a la nueva generación renovable en el sur de Texas y la retirada prevista de la generación en San Antonio.

¿Qué es una línea de transmisión?
La línea de transmisión propuesta está formada por estructuras de acero y cables especialmente diseñados para transportar electricidad a largas distancias a altas tensiones entre estaciones.

¿Cómo llega la electricidad a los hogares y negocios?
Normalmente, la electricidad se genera en plantas eléctricas situadas en lugares remotos (incluidos parques eólicos y solares) y luego viaja desde esas fuentes de generación remotas hasta estaciones de conmutación y subestaciones más cercanas a los centros de población a través de un sistema de líneas de transmisión de alto voltaje. Una vez en la subestación, la electricidad se reduce a un nivel de voltaje adecuado para su distribución a los clientes. La electricidad viaja entonces desde la subestación a través de la red de líneas de distribución, proporcionando electricidad a hogares y negocios.

¿Cuándo comienza la construcción?
Se prevé que la construcción del proyecto de reconstrucción de la línea de transmisión de Pawnee a Tango comience en noviembre de 2025.

¿Cuándo trabajarán los equipos en este proyecto de transmisión?
En circunstancias normales, el trabajo se realizará de lunes a viernes, de 7 a.m. a 8 p.m. El trabajo de fin de semana se realizará según sea necesario. Tenga en cuenta que el trabajo se realizará dentro de las servidumbres de transmisión.

Rutas de las Líneas de Transmisión

¿Quién selecciona la ruta definitiva de la línea de transmisión?
Tras determinar que el proyecto es necesario, la Comisión de Servicios Públicos de Texas (PUC) utiliza un proceso regulador establecido para evaluar y aprobar la ruta que se construirá tras su revisión de los datos presentados por los solicitantes en su solicitud; las recomendaciones del personal de expertos de la PUC; y las opiniones y preocupaciones de los propietarios afectados y otras partes interesadas.

¿Recibirán los propietarios notificación del procedimiento de la PUC?
Sí. Todos los propietarios de tierras atravesadas por una posible ruta de línea de transmisión, o que posean una estructura habitable dentro de los 500 pies de la línea central de una posible ruta de línea de transmisión, recibirán por correo un aviso informándoles que se ha presentado una solicitud ante la PUC solicitando la aprobación para construir y operar el proyecto. CPS Energy y AEP Texas también publicarán un aviso de la presentación de la solicitud de Certificado de Conveniencia y Necesidad (CCN) en el periódico y actualizarán el sitio web del proyecto (consulte la dirección del sitio web de este proyecto al final de esta hoja de preguntas frecuentes) anunciando la presentación de la solicitud. El paquete de notificación enviado por correo incluirá el número de expediente utilizado para el seguimiento de los documentos presentados ante la PUC, junto con formularios para que las personas interesadas puedan hacer comentarios públicos sobre el proyecto o participar en el procedimiento de la PUC y otra información importante sobre el proceso regulador de la PUC. Si la PUC emite una orden final aprobando el proyecto y la ruta a construir, cada propietario recibirá una notificación del resultado.

¿Pueden los propietarios u otras personas interesadas participar en el procedimiento de la PUC?
Sí. Los propietarios de tierras u otras personas afectadas por la posible ruta de la línea de transmisión pueden presentar un comentario público sobre el proyecto o solicitar participar en el procedimiento de la PUC. Una persona que participa en el procedimiento de la PUC generalmente se denomina "interviniente" durante el procedimiento y debe seguir las responsabilidades especificadas para mantener la condición de interviniente durante todo el proceso regulador.

Medioambiente

¿Será necesario eliminar árboles y otra vegetación para construir el proyecto?
Sí, a menudo es necesario eliminar algunos árboles y otra vegetación para construir y operar las líneas de transmisión de manera segura y confiable. CPS Energy y AEP Texas trabajarán con los propietarios de tierras y las comunidades para cumplir responsablemente con los requisitos de preservación de árboles y minimizar el impacto cuando sea necesario para operar la infraestructura de la línea de transmisión de manera segura y confiable.

Continuación ⟶

¿El proyecto afectará a las especies en peligro de extinción en el área?
CPS Energy y AEP Texas llevarán a cabo los estudios establecidos por la decisión de la PUC para mitigar el impacto sobre las especies silvestres y vegetales en peligro de extinción en la medida en que la construcción del proyecto afecte a dichas especies.

Infraestructura

¿Cómo serán los postes de la línea de transmisión?
CPS Energy y AEP Texas prevén utilizar estructuras monoposte tubulares de acero galvanizado, aunque podrán utilizarse otros tipos de estructuras cuando las circunstancias lo justifiquen.

¿Las líneas de transmisión crearán campos eléctricos y magnéticos (EMF) para las personas que vivan cerca?
Las líneas de transmisión están diseñadas para funcionar de forma segura para las personas que viven, trabajan y se divierten en las inmediaciones y no se prevé que produzcan ningún efecto EMF adverso para las personas cercanas. Para más información sobre los EMF, visite: https://www.niehs.nih.gov/health/topics/agents/emf

Bienes Inmuebles

¿Qué derechos tienen los propietarios de terrenos cuando una compañía de servicios públicos adquiere la servidumbre de paso necesaria para la línea de transmisión?
Los propietarios cuyas propiedades vayan a ser atravesadas por el trazado aprobado de la línea de transmisión, o a los que se vaya a adquirir el terreno para el emplazamiento de la estación de conmutación, tienen derechos muy específicos que, en general, se recogen en la Declaración de Derechos de los Propietarios de Texas (The Texas Landowner Bill of Rights), publicada por el fiscal general de Texas. Se puede encontrar una copia en https://www.texasattorneygeneral.gov/sites/default/files/files/divisions/general-oag/landowners-bill-of-rights-24.pdf Se recomienda a los propietarios interesados que consulten este documento para conocer mejor los derechos que les otorga la ley. Los propietarios afectados recibirán una copia de la Declaración de derechos del propietario de Texas de CPS Energy por correo postal antes de negociar una servidumbre.

¿Cómo se verán afectados los propietarios de tierras a lo largo de la ruta de transmisión elegida?
Para la totalidad o la mayor parte del proyecto, CPS Energy y AEP Texas reemplazarán la infraestructura de transmisión existente dentro del derecho de paso existente, por lo que no se necesitará un nuevo derecho de paso permanente adicional en esta parte del proyecto. Es posible que se necesiten servidumbres de construcción temporales y que los propietarios de tierras sufran algunos impactos a corto plazo durante la construcción. CPS Energy y AEP Texas anticipan actualmente que la mayoría o todas las actividades de construcción se llevarán a cabo dentro del derecho de paso de la línea de transmisión existente. Si se necesita un nuevo derecho de paso permanente, CPS Energy y AEP Texas comprarán un derecho de propiedad conocido como "servidumbre" a los propietarios existentes. De acuerdo con los términos de la servidumbre, se podará la vegetación que crezca bajo la línea de transmisión y, en algunos casos, se despejará para permitir la construcción de la línea. El documento de servidumbre también abordará cuestiones como las carreteras, el cercado, los derechos de acceso y notificación y otros asuntos relacionados con la construcción, operación y mantenimiento de las instalaciones de la línea de transmisión por parte de CPS Energy.

¿Cómo llega CPS Energy al valor de los derechos de propiedad adquiridos de los propietarios?
CPS Energy y AEP Texas evaluarán el valor de la propiedad utilizando las prácticas estándar de la industria y ofrecerán a los propietarios un valor justo de mercado por los derechos de propiedad que se adquieran.

¿Tiene CPS Energy el poder de "dominio eminente" para adquirir derechos de propiedad?
CPS Energy y AEP Texas tienen autoridad de dominio eminente para adquirir derechos de propiedad privada para uso público. Sin embargo, se utiliza como último recurso, ya que CPS Energy y AEP Texas primero intentan negociar con un propietario afectado para llegar a términos de mutuo acuerdo.

Siguientes Pasos

¿Qué sucede después de la Reunión Pública?
El equipo del proyecto de CPS Energy y AEP Texas evaluará toda la información del proyecto, incluyendo los aportes públicos recibidos. El equipo del proyecto se reunirá entonces para identificar cualquier ajuste apropiado al proyecto propuesto para asegurar que el proyecto satisface los criterios reguladores aplicables. El equipo del proyecto tendrá en cuenta los valores de la comunidad, las áreas recreativas y de parques, los valores históricos y estéticos, la integridad medioambiental, la ingeniería, el diseño, la construcción, las operaciones y el mantenimiento, y el costo estimado.

¿Cuándo presentará CPS Energy la solicitud de CCN?
La fecha prevista para presentar la solicitud de CCN es febrero de 2025. Las actualizaciones se publicarán en la página web del proyecto en cpsenergy.com/infrastructure (busque Spruce to Pawnee). Se notificará a los propietarios afectados cuando se presente la solicitud.

¿Cuándo presentarán CPS Energy y AEP Texas la solicitud de CCN?
La fecha prevista para presentar la solicitud CCN es mayo de 2025. Las actualizaciones se publicarán en la página web del proyecto en www.cpsenergy.com/infrastructure (busque Pawnee to Tango). También se puede encontrar información en www.aeptexas.com/pawnee-tango. Se notificará a los propietarios afectados cuando se presente la solicitud.

Who is CPS Energy?

Established in 1860, CPS Energy is the nation's largest community-owned, natural gas and electric company, providing safe, reliable, and competitively-priced service to **950,129** electric and **389,116** natural gas customers in San Antonio and portions of seven adjoining counties. Our customers' combined energy bills rank among the lowest of the nation's 20 largest cities – while generating $9 billion in revenue for the City of San Antonio for more than seven decades. As a trusted and strong Community partner, we continuously focus on job creation, economic development and educational investment. True to our People First philosophy, we are powered by our skilled workforce, whose commitment to the community is demonstrated through our employees' volunteerism in giving back to our city and programs aimed at bringing value to our customers.

We are among the top public power wind energy buyers in the nation and number one in Texas for solar generation.

For more information, visit **cpsenergy.com**.

American Electric Power (AEP)

For more than a century, AEP Texas, a unit of American Electric Power, has served homes, businesses and industries across a 97,000 square mile service territory in south and west Texas.

For more information, visit **AEPTexas.com**.

How can you follow the progress of this project?

The CPS Energy project team will post project information on the CPS Energy website at www.cpsenergy.com/infrastructure or the AEP website at www.aeptransmission.com.

Who can answer your questions?

The website will include regular updates on the project as steps are completed.

Also, you may write, call or email to:

CPS Energy

Kevin Phillips, Project Manager II
Pawnee to Tango Transmission Line Rebuild Project
Mail Code RT0801
500 McCullough Ave.
San Antonio, Texas 78215
(210) 353-6673
Pawnee-TangoProject@cpsenergy.com

AEP Texas

Michael Harris
Lead Outreach Specialist
539 N. Carancahua
Corpus Christi, TX 78401
(833) 329-4865
Pawnee-TangoProject@cpsenergy.com

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PAWNEE TO TANGO

TRANSMISSION LINE REBUILD PROJECT

Typical Transmission Structure

INFORMATION ABOUT THE PAWNEE TO TANGO TRANSMISSION LINE REBUILD PROJECT

What is the Pawnee to Tango Transmission Line Rebuild Project?

CPS Energy and AEP Texas are proposing to rebuild approximately 12 miles of existing horizontal single-circuit 345 kilovolt (kV) transmission infrastructure traversing through Karnes and Bee counties. Transmission lines consist of various material (wood, concrete, steel, etc.) and wires that move electricity long distances at high voltages from station to station.

How might this project affect you?

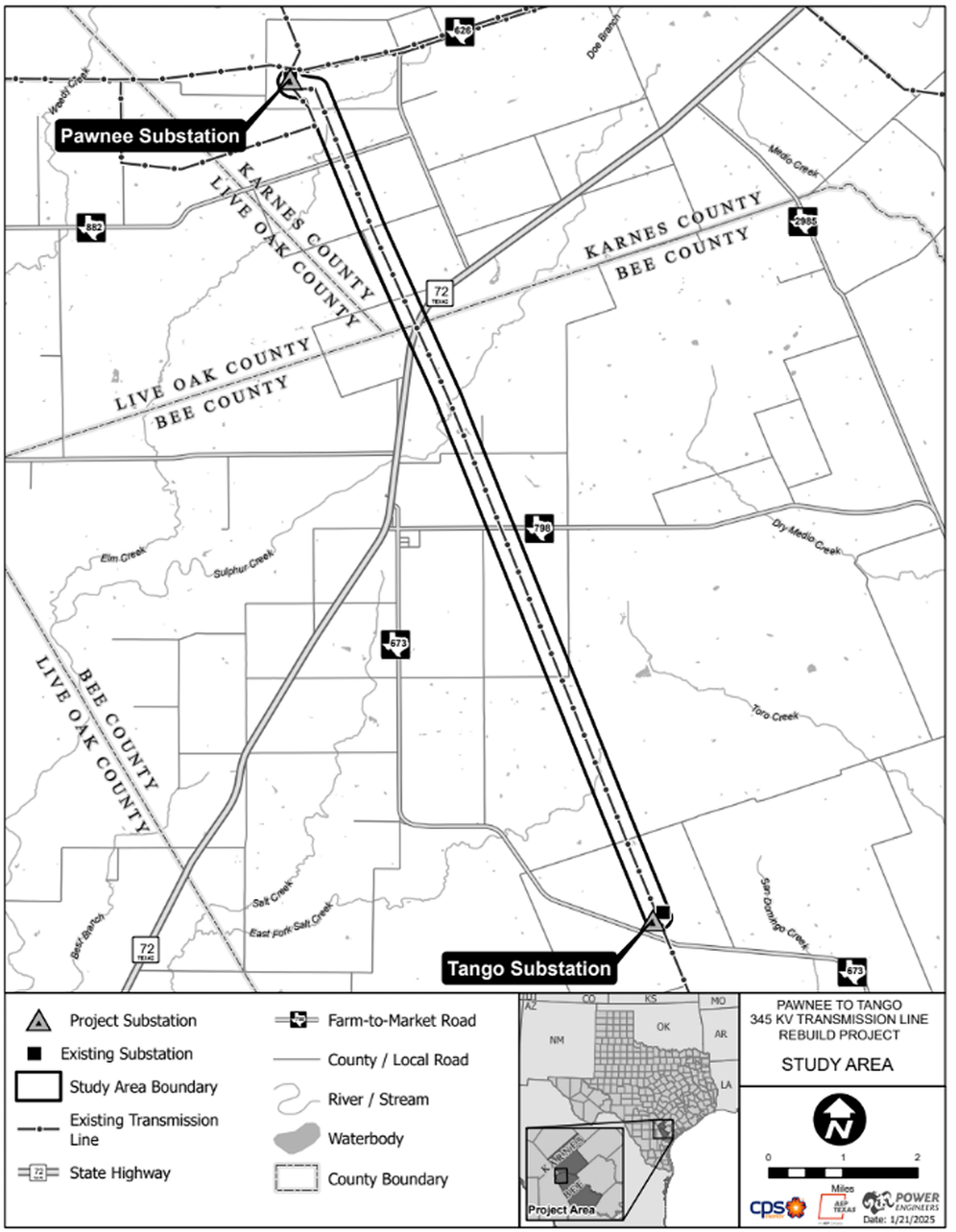
CPS Energy and AEP Texas are evaluating multiple means to most effectively rebuild the transmission line with minimized impact. Additional right-of-way may be needed to safely reconstruct this transmission lines. If it is determined to be needed, CPS Energy anticipates purchasing additional property rights from property owners to expand the current right-of-way for the new transmission infrastructure.

Your input and feedback are important to our evaluation of alternatives.

Why is this project needed?

The reconstruction of the transmission line is needed to increase the resiliency and reliability of Texas' electric grid by adding another transmission pathway to increase support of new renewable generation in South Texas and the planned retirement of generation in San Antonio.

Project Map



¿Quién es CPS Energy?

Fundada en 1860, CPS Energy es la compañía eléctrica y de gas natural de propiedad comunitaria más grande del país, que proporciona un servicio seguro, fiable y a precios competitivos a **950,129** clientes de electricidad y **389,116** de gas natural en San Antonio y partes de siete condados adyacentes. Las facturas de energía combinadas de nuestros clientes se encuentran entre las más bajas de las 20 ciudades más grandes del país, generando al mismo tiempo 9,000 millones de dólares en ingresos para la ciudad de San Antonio durante más de siete décadas. Como socio comunitario fuerte y de confianza, nos centramos continuamente en la creación de empleo, el desarrollo económico y la inversión educativa. Fieles a nuestra filosofía de Las Personas Primero, nos impulsa nuestro personal calificado, cuyo compromiso con la comunidad se demuestra a través del voluntariado de nuestros empleados para retribuir a nuestra ciudad y los programas destinados a aportar valor a nuestros clientes.

Estamos entre los principales compradores de energía eólica pública del país y somos el número uno de Texas en generación solar.

Para más información, visite **cpsenergy.com**.

American Electric Power (AEP)

Desde hace más de un siglo, AEP Texas, una unidad de American Electric Power, ha prestado servicio a hogares, negocios e industrias en un territorio de 97,000 millas cuadradas en el sur y oeste de Texas..

Para obtener más información, visite **AEPTexas.com**.

¿Cómo puede seguir el progreso de este proyecto?

El equipo del proyecto de CPS Energy publicará información sobre el proyecto en el sitio web de CPS Energy en www.cpsenergy.com/infrastructure o en el sitio web de AEP en www.aeptransmission.com.

¿Quién puede responder a sus preguntas?

El sitio web incluirá actualizaciones periódicas sobre el proyecto a medida que se vayan completando los pasos. También puede escribir, llamar o enviar un correo electrónico a

CPS Energy

Kevin Phillips, Director de Proyectos II
Proyecto de reconstrucción de la línea de transmisión de Pawnee a Tango
Código postal RT0801
500 McCullough Ave.
San Antonio, Texas 78215
(210) 353-6673
Pawnee-TangoProject@cpsenergy.com

AEP Texas

Especialista Principal de Alcance
539 N. Carancahua
Corpus Christi, TX 78401
(833) 329-4865
Pawnee-TangoProject@cpsenergy.com

PROYECTO DE RECONSTRUCCIÓN DE LA LÍNEA DE TRANSMISIÓN DE

PAWNEE A TANGO

Estructura de Transmisión Típica

INFORMACION SOBRE EL PROYECTO DE RECONSTRUCCION DE LA LINEA DE TRANSMISION DE PAWNEE A TANGO

¿Qué es el Proyecto de Reconstrucción de la Línea de Transmisión de Pawnee a Tango?

CPS Energy y AEP Texas proponen reconstruir aproximadamente 12 millas de infraestructura de transmisión horizontal de 345 kilovoltios (kV) de un solo circuito que atraviesa los condados de Karnes y Bee. Las líneas de transmisión están formadas por diversos materiales (madera, concreto, acero, etc.) y cables que transportan electricidad a largas distancias a altos voltajes de una estación a otra.

¿Cómo puede afectarle este proyecto?

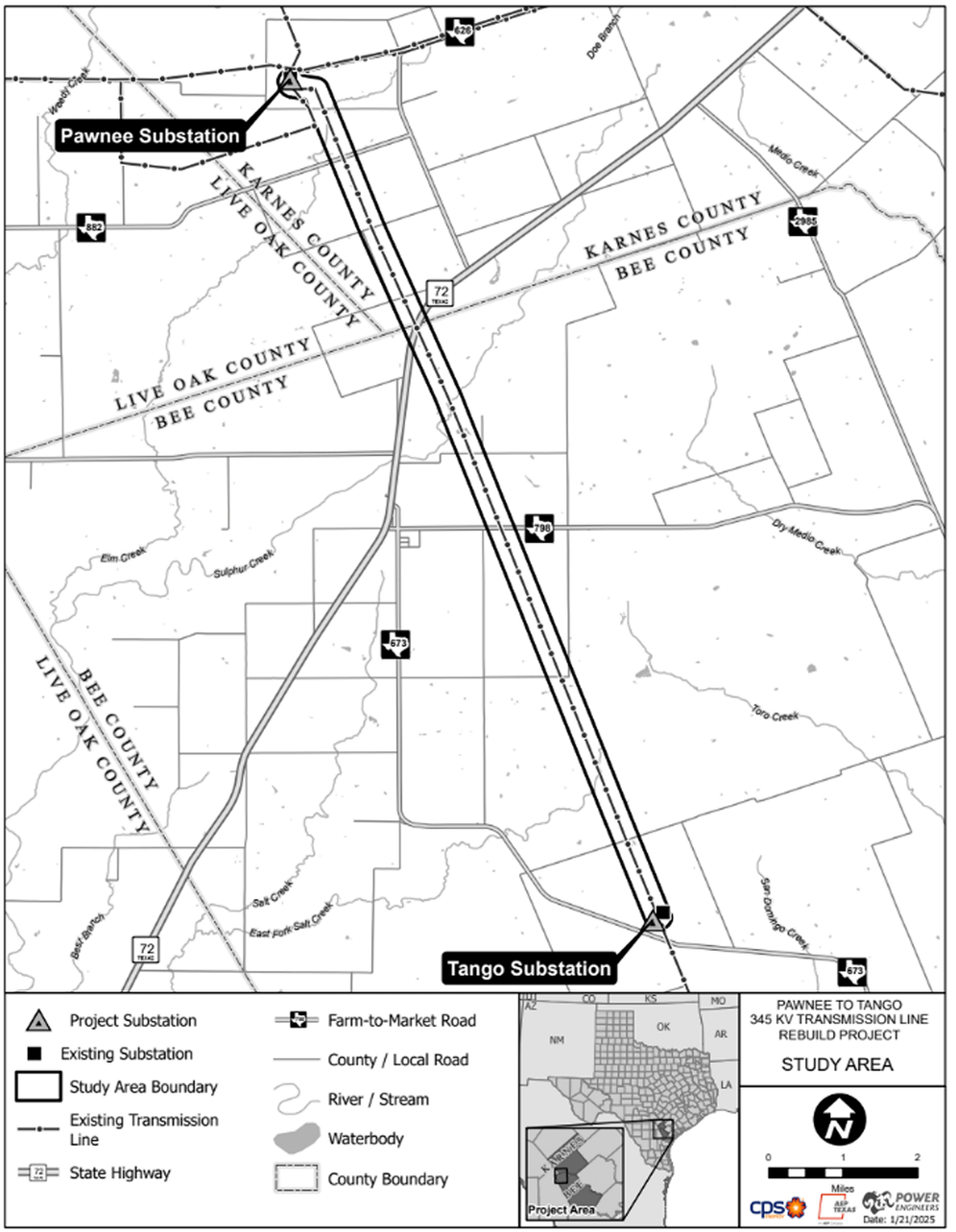
CPS Energy y AEP Texas están evaluando múltiples medios para reconstruir la línea de transmisión de la manera más eficaz con un impacto mínimo. Es posible que se necesiten derechos de paso adicionales para reconstruir con seguridad esta línea de transmisión. Si se determina que es necesario, CPS Energy anticipa la compra de derechos de propiedad adicionales de propietarios para ampliar el derecho de paso actual para la nueva infraestructura de transmisión.

Su opinión y comentarios son importantes para nuestra evaluación de alternativas.

¿Por qué es necesario este proyecto?

La reconstrucción de la línea de transmisión es necesaria para aumentar la resiliencia y fiabilidad de la red eléctrica de Texas mediante la adición de otra vía de transmisión para aumentar el apoyo a la nueva generación renovable en el sur de Texas y la retirada prevista de la generación en San Antonio.

Mapa del Proyecto



INTRODUCTION

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CPS ENERGY

Established in 1860, CPS Energy is the nation's largest community-owned, natural gas and electric company, providing safe, reliable, and competitively priced service to 950,000 electric and 380,000 natural gas customers in San Antonio and portions of seven adjoining counties. We are among the top public power wind energy buyers in the nation and number one in Texas for solar generation.

For more information, visit cpsenergy.com.

AEP Texas

For more than a century, AEP Texas, a unit of American Electric Power, has served homes, businesses, and industries across a 97,000 square mile service territory in south and west Texas.

For more information, visit AEPTexas.com.

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PURPOSE, NEED & SCOPE

The Electric Reliability Council of Texas (ERCOT) endorsed this project as a needed transmission system improvement on the CPS Energy system on July 26, 2024.

SCOPE:

CPS Energy and AEP Texas propose to add a second circuit to the existing Pawnee to Tango 345kV transmission line in Karnes and Bee Counties. In order to add the second circuit, CPS Energy and AEP Texas propose to rebuild approximately 12 miles of existing transmission line infrastructure between the Pawnee Station in Karnes County and the AEP Texas Tango Station in Bee County.

PURPOSE & NEED:

The project purpose and need are based on the following factors:

- Historically high loading concerns on the existing line;
- New renewable generation in South Texas, and
- Planned retirement of generation in San Antonio.

The Electric Reliability Council of Texas (ERCOT) Board of Directors endorsed the project as critical to the reliability of the ERCOT System on April 23, 2024.

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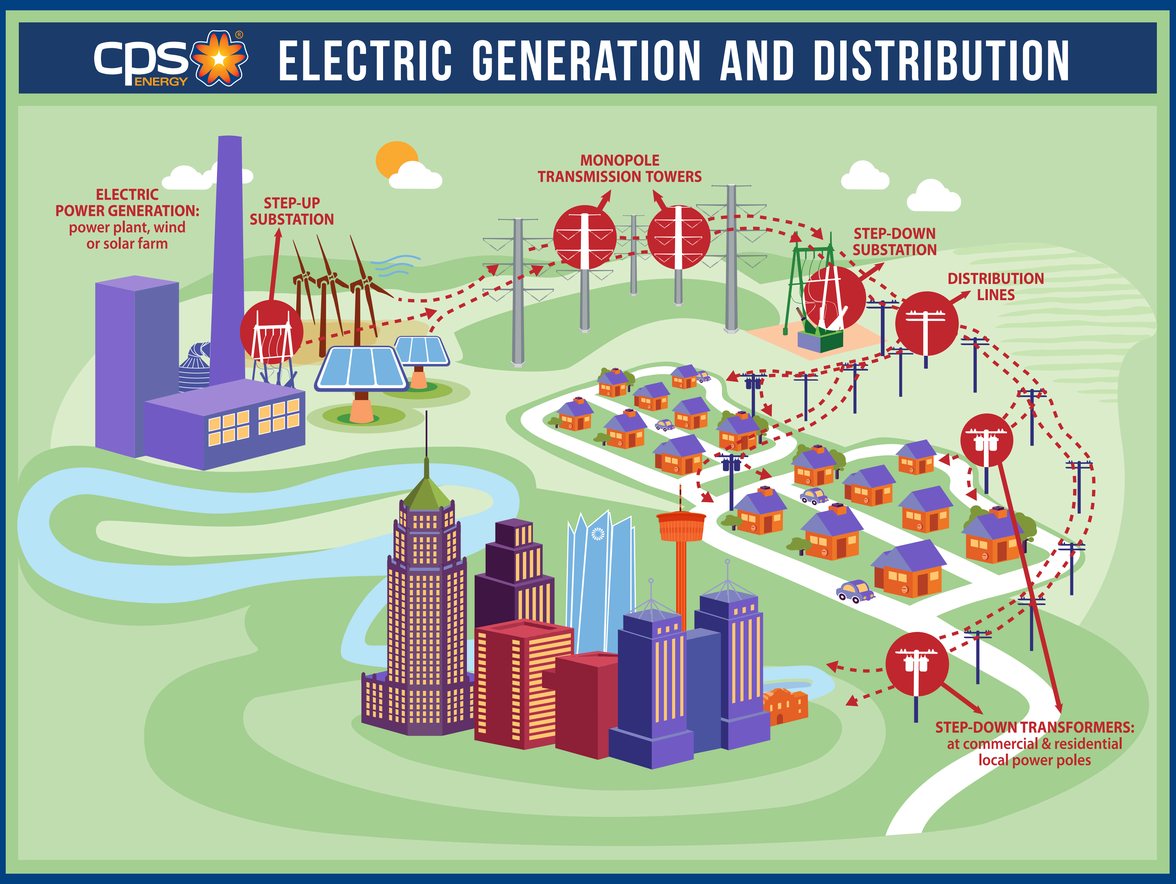
GENERATION TO CUSTOMER DIAGRAM



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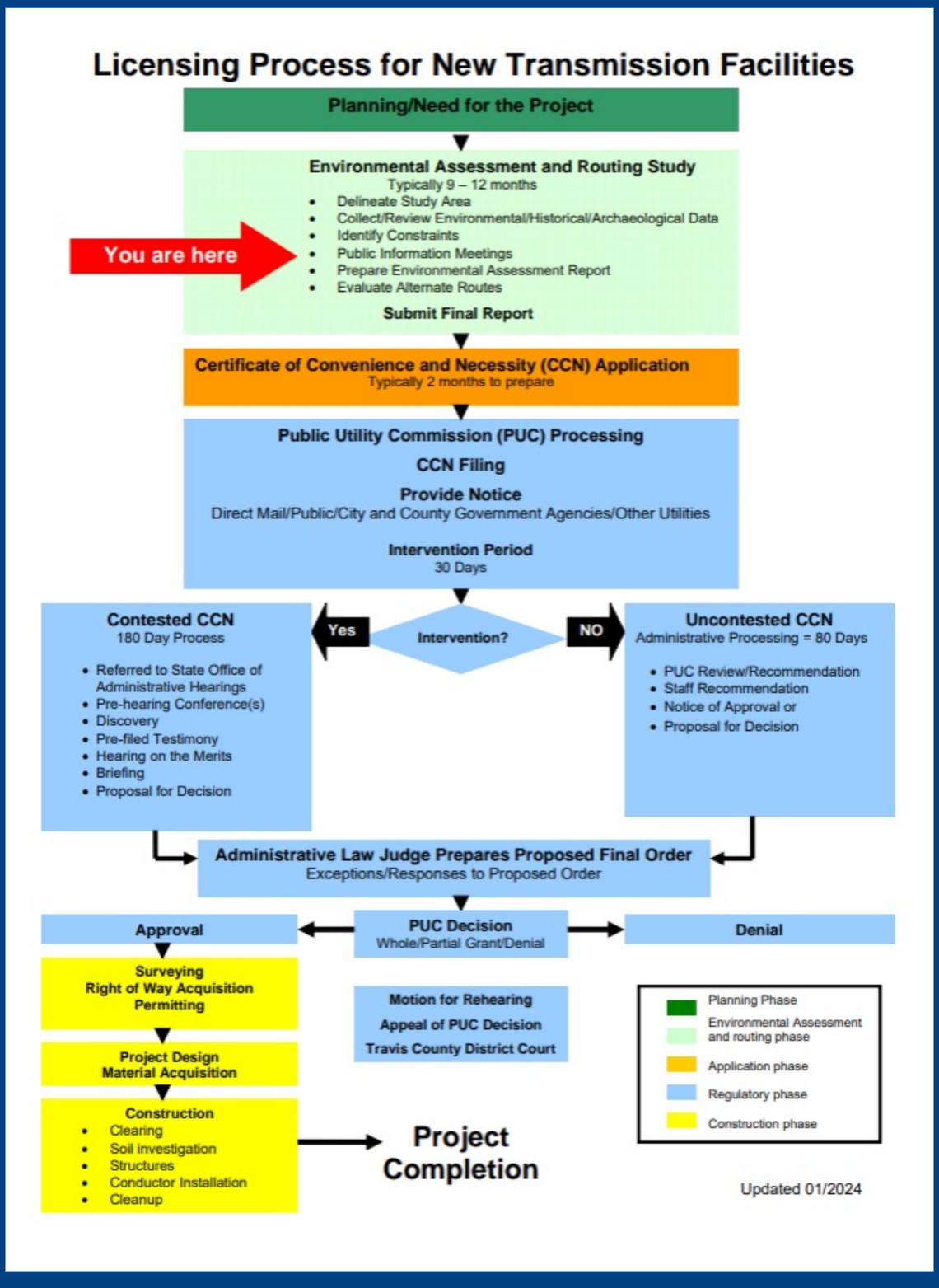
CCN PROCESS



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CCN PROCESS HIGHLIGHTS

Application & Notification

- CPS Energy and AEP Texas submit joint Application to the Public Utility Commission of Texas (PUC) to Amend CPS Energy's and AEP Texas' Certificate of Convenience and Necessity (CCN)
- CPS Energy and AEP Texas provides notice to:
  - Landowners (as listed on the county tax rolls) whose property is crossed
  - Landowners who own habitable structures within 500 feet of segment (as listed on the county tax rolls)
  - Texas Parks & Wildlife
  - Department of Defense
  - Municipalities within five miles
  - Other Electric Utilities within five miles
  - Karnes and Bee Counties
  - Office of Public Utility Counsel
- CPS Energy and AEP Texas publish notice of the filed application in a newspaper of general circulation in Karnes and Bee Counties within a week of filing the application.

PUC Public Participation

- Landowners and other potentially impacted persons have 30 days to file a request to participate (intervene) in the PUC proceeding
- If no parties intervene, the PUC staff conduct a review and issue a recommendation.
- If parties intervene, testimony may be filed, and an administrative hearing is held. After the hearing process, an Administrative Law Judge (ALJ) will prepare a recommendation to the PUC (a Proposal for Decision). The ALJ will consider the following when making a ruling:
  - Community values, recreational and park areas, historical and aesthetic values, environmental integrity, and other factors associated with the need for the project
  - Engineering constraints, costs, and moderation of impact on affected community and landowners

PUC Decision

- Within approximately 6 months of the application filing (if contested) the governor-appointed PUC Commissioners will approve the application, deny the application, or approve the application with modifications. The PUC's approval will extend to the overall project need.

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ANTICIPATED TIMELINE

Gather information and land use data
In progress

Send letters to landowners
February 2025

Hold Open House
February 2025

Complete Environmental Analysis and Routing Assessment
Estimated April 2025

Present project update to CPS Energy Board of Trustees
Estimated April 2025

Submit CCN application to The Public Utility Commission of Texas (PUC) and notify directly affected landowners and required entities
Estimated May 2025

Receive Ruling from the PUC regarding project need
Estimated November 2025

Start construction
Estimated November 2026

Complete construction
Estimated December 2026

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TRANSMISSION FACTS

- Typical 345kV Monopole Heights are 175’-195’ depending on terrain and span length
- Typical 345kV Span Lengths are 800’-1200’ depending on route variables
- Typical 345kV Pole Foundation Diameter is 10’-12’

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TYPICAL 345kV TRANSMISSION POLES

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STAGES OF CONSTRUCTION

Easement is cleared enough to access pole locations

Foundation-reinforcing cage is assembled

Foundation is drilled and poured

Transmission structure is installed

Conductors are pulled into place

Right-of-way is cleaned up

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ACQUISITION ELEMENTS

- Mail "Bill of Rights" letter to affected landowners
- Contact property owner
- Obtain permission to conduct survey(s)
- Survey establishes boundaries of easement
  (Simultaneously perform environmental/cultural surveys)
- Easement area is defined/described by Registered Professional Land Surveyor
- Value of Easement established by independent appraiser
- Negotiate with property owner for Easement or right-of-way for utility use

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RIGHT-OF-WAY TERMS TO KNOW

Easement:
A right created by grant, reservation, agreement, or implication, which one party has in another party's land.

Survey:
The measure of the boundaries of a parcel of land, its area, and sometimes its topography.

Appraisal:
The act or process if developing an opinion of value; an opinion of value.

Negotiation:
The process by which two or more parties resolve differences to reach a mutually acceptable agreement.

Eminent Domain:
A governmental right to acquire private property for public use by condemnation, and the payment of just compensation.

Fair Market Value:
The price that would probably be negotiated between a willing seller and a willing buyer in a reasonable time, usually arrived at by comparable sales in the same area.

State of Texas Landowner Bill of Rights:
Property owner rights that apply to any attempt by the government or a private entity to take your property, as prescribed in Texas Government Code Sec. 402.03 1 and Chapter 21 of the Texas Property Code.

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TYPICAL TRANSMISSION EASEMENTS

Clearing around transmission poles

Clearing along route

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LAND USE & ENVIRONMENTAL EVALUATION CRITERIA

EVALUATION CRITERIA

Land Use

1 Length of alternative route (miles)
2 Number of habitable structures[1] within 500 feet of the route centerline
3 Length of ROW using existing transmission line ROW
4 Length of ROW parallel and adjacent to existing transmission line ROW
5 Length of ROW parallel and adjacent to other existing ROW (roadways)
6 Length of ROW parallel and adjacent to apparent property lines[2] (or other natural or cultural features, etc.)
7 Sum of evaluation criteria 4, 5, and 6
8 Percent of evaluation criteria 4, 5, and 6
9 Length of ROW across parks/recreational areas[3]
10 Number of additional parks/recreational areas[3] within 1,000 feet of ROW centerline
11 Length of ROW across cropland
12 Length of ROW across pasture/rangeland
13 Length of ROW across land irrigated by traveling systems (rolling or pivot type)
14 Length of route across conservation easements and/or mitigation banks (Special Management Area)
15 Length of route across gravel pits, mines, or quarries
16 Length of ROW parallel and adjacent to pipelines[4]
17 Number of pipeline crossings[4]
18 Number of transmission line crossings
19 Number of interstate, U.S. and state highway crossings
20 Number of FM or RM road crossings
21 Number of FAA registered public/military airports[5] with at least one runway more than 3,200 feet in length located within 20,000 feet of ROW centerline
22 Number of FAA registered public/military airports[5] having no runway more than 3,200 feet in length located within 10,000 feet of ROW centerline
23 Number of private airstrips within 10,000 feet of the ROW centerline
24 Number of heliports within 5,000 feet of the ROW centerline
25 Number of commercial AM radio transmitters within 10,000 feet of the ROW centerline
26 Number of FM radio transmitters, microwave towers, and other electronic installations within 2,000 feet of ROW centerline
27 Number of identifiable existing water wells within 200 feet of the ROW centerline
28 Number of oil and gas wells within 200 feet of the ROW centerline (including dry or plugged wells)

Aesthetics

29 Estimated length of ROW within foreground visual zone[6] of IH, US and state highways
30 Estimated length of ROW within foreground visual zone[6] of FM/RM roads
31 Estimated length of ROW within foreground visual zone[6, 7] of parks/recreational areas[3]

Ecology

32 Length of ROW through upland woodlands/brushlands
33 Length of ROW through bottomland/riparian woodlands
34 Length of ROW across National Wetlands Institute (NWI) mapped wetlands
35 Length of ROW across critical habitat of federally listed endangered or threatened species
36 Length of ROW across open water (lakes, ponds)
37 Number of stream and river crossings
38 Length of ROW parallel (within 100 feet) to streams or rivers
39 Length of ROW across Edwards Aquifer Contributing Zone
40 Length of ROW across FEMA mapped 100-year floodplain

Cultural Resources

41 Number of cemeteries within 1,000 feet of the ROW centerline
42 Number of recorded cultural resource sites crossed by ROW
43 Number of additional recorded cultural resource sites within 1,000 feet of ROW centerline
44 Number of NRHP listed properties crossed by ROW
45 Number of additional NRHP listed properties within 1,000 feet of ROW centerline
46 Length of ROW across areas of high archaeological site potential

Notes: All length measurements are shown in miles unless noted otherwise.

[1] Single-family and multi-family dwellings, and related structures, mobile homes, apartment buildings, commercial structures, industrial structures, business structures, churches, hospitals, nursing homes, schools, or other structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis within 500 feet of the centerline of a transmission project of 230 kV or more.

[2] Apparent property boundaries created by existing roads, highways, or railroad ROWs are not "double-counted" in the length of ROW parallel to apparent property boundaries criteria.

[3] Defined as parks and recreational areas owned by a governmental body or an organized group, club, or church within 1,000 feet of the centerline of the project.

[4] Only steel pipelines six inches and greater in diameter carrying petrochemicals were quantified in the pipeline crossing and paralleling calculations.

[5] As listed in the Chart Supplement South Central US (FAA 2024b formerly known as the Airport/Facility Directory South Central US) and FAA 2024a.

[6] One-half mile, unobstructed. Lengths of ROW within the visual foreground zone of interstates, US and state highway criteria are not "double-counted" in the length of ROW within the visual foreground zone of FM roads criteria.

[7] One-half mile, unobstructed. Lengths of ROW within the visual foreground zone of parks/recreational areas may overlap with the total length of ROW within the visual foreground zone of interstates, US and state highway criteria and/or with the total length of ROW within the visual foreground zone of FM roads criteria.

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LOCAL, STATE & FEDERAL AGENCIES CONTACTED/NOTIFIED

FEDERAL

Federal Aviation Administration
Federal Emergency Management Agency
National Parks Service
NRCS Texas State Office
U.S. Army Corps of Engineers - Fort Worth District
U.S. Department of Defense Military Aviation and Installation Assurance Siting Clearinghouse
U.S. Environmental Protection Agency
U.S. Fish Wildlife Service
U.S. Congressman

STATE

Texas State Senators
Texas House Representatives
Railroad Commission of Texas
Texas Commission on Environmental Quality
Texas Department of Transportation
Texas General Land Office
Texas Historical Commission
Texas Parks and Wildlife Department
Texas Water Development Board

LOCAL

City of San Antonio - Community Affairs Environmental Enforcement Office
City of San Antonio - Economic Development Department
City of San Antonio - Department of Planning
City of San Antonio - Transportation
City of San Antonio Office of Historic Preservation Development and Business Services Center
City of San Antonio - Mayor and City Manager
Alamo Area Council of Governments
Costal Bend Council of Governments
Alamo Soil and Water Conservation District
San Antonio World Heritage Office
San Antonio Water System
San Antonio River Authority

Edwards Aquifer Authority Chairman
Bee County Judge
Bee County Commissioners
Karnes County Judge
Karnes County Commissioners
Karnes County Special Projects and Permits
Bowers ISD
Kenedy ISD

NON-GOVERNMENTAL ORGANIZATION

The Nature Conservancy
Texas Land Trust Council
Texas Land Conservancy
Texas Agricultural Land Trust
Texas Cave Management Association

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ENVIRONMENTAL ASSESSMENT

- An Environment Assessment is prepared to address land use, visual resources, socioeconomic elements, biological/ ecological resources, geology and soils, hydrology, and cultural resources within the regional study area and along the alternative routes.
- Power Engineers with expertise in different environmental disciplines (wildlife biology, plant ecology, land use/ planning, and archaeology) evaluate the primary alternative routes based upon environmental and land use conditions present along each primary alternative route, augmented by aerial photograph interpretation and field surveys, where possible, and the general routing methodology used by Power Engineers and environmental criteria.

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Appendix C

Figure 4-1
Project Route with Environmental and Land Use Constraints (Topographic Base Map)

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Appendix D

Figure 4-2
Habitable Structures and Other Land Use Features
In the Vicinity of the Project Route
(Aerial Base Map)

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