TABLE 4-2 Environmental and Land Use Data for Route Evaluation Cypress to Legend 500 kV Transmission Line Project Primary Atternative Segments

| Evaluation Criteria | | | | | | | | | | | | | | | | | | | | |
|---|-----|------|-----|-----|-----|------|------|------|------|-----|------|------|------|-----|-----|-----|-----|-----|-----|-----|
| Land Use | 108 | 109 | 110 | 111 | 112 | 113 | 115 | 116 | 117 | 119 | 120 | 121 | 122 | 123 | 124 | 125 | 126 | 129 | 130 | 131 |
| 1 Length of alternative route | 0.3 | 0.5 | 2.1 | 0.2 | 0.2 | 1.9 | 3.1 | 0.1 | 0.4 | 0.6 | 1.8 | 1.8 | 1.7 | 0.5 | 0.5 | 0.3 | 1.4 | 0.4 | 0.8 | 1.1 |
| 2 Number of habitable structures' within 500 feet of the route centerline | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 |
| 3 Length of route utilizing existing electric facility right-of-way (ROW) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 Length of route parallel to existing electric facility ROW | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 0.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 Length of route parallel to other existing compatible ROW (roads, highways, railway, telephone utility ROW, etc.) | 0.0 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 Length of route parallel to apparent property lines2 (or other natural or cultural features) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 |
| 7 Sum of evaluation criteria 3, 4, 5, and 6 | 0.0 | 0.4 | 0.1 | 0.0 | 0.0 | 1.7 | 0.8 | 0.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 |
| 8 Percent of evaluation criteria 3, 4, 5, and 6 | 0% | 65% | 7% | 0% | 12% | 88% | 25% | 100% | 0% | 32% | 0% | 0% | 0% | 0% | 0% | 0% | 52% | 0% | 0% | 0% |
| 9 Length of route parallel to pipeline ROW | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 Length of route across TPWD WMA office property | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 Length of route across J.D. Murphree WMA property | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 0.0 | 0.0 | 0.2 | 0.8 | 1.6 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 Length of route across National Park Service property | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 Length of route across parks/recreational areas | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 Number of additional parks/recreational areas ³ within 1,000 feet of the route centerline | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15 Length of route across cropland | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 Length of route across pasture/rangeland (includes open fields) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | 0.6 | 0.1 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 Length of route across land irrigated by traveling systems (rolling or pivot type) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 Length of route across gravel pits, mines, or quarries | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 Number of pipeline crossings | 0 | 0 | 10 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 |
| 20 Number of electric transmission line crossings | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21 Number of Interstate (IH), US Highway (US Hwy), and State Highway (SH) crossings | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 22 Number of Farm-to-Market (FM) or Ranch-to-Market (RM) road crossings | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 23 Number of private use airstrips within 10,000 feet of the route centerline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 24 Number of heliports within 5,000 feet of the route centerline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25 Number of Federal Aviation Administration (FAA) registered airports4 (runways >3, 200 feet) within 20,000 feet of the route centerline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 26 Number of FAA registered airports4 (runways <3,200 feet) within 10,000 feet of the route centerline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 27 Number of commercial Amplitude Modulation radio (AM radio) transmitters within 10,000 feet of the route centerline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 28 Number of Frequency Modulation radio (FM radio) transmitters, microwave towers, etc., within 2,000 feet of the route centerline | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 29 Number of existing water wells within 200 feet of the route centerline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30 Number of oil and gas wells within 200 feet of the route centerline | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Aesthetics | | | | | | | | _ | | | | | _ | | | _ | | | | _ |
| 31 Estimated length of route within foreground visual zone⁵ of US and SHs | 0.3 | 0.5 | 2.1 | 0.2 | 0.2 | 1.9 | 0.0 | 0.1 | 0.4 | 0.6 | 1.8 | 1.5 | 0.2 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 32 Estimated length of route within foreground visual zone⁵ of FM/RM roads | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 33 Estimated length of route within foreground visual zone ⁶ of parks/recreational areas ³ | 0.2 | 0.3 | 1.9 | 0.2 | 0.2 | 0.6 | 3.1 | 0.1 | 0.4 | 0.6 | 1.8 | 1.8 | 1.7 | 0.5 | 0.5 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| Ecology | | | | | | | | | | | | | | | - | - | | | | |
| 34 Length of route across bottomland/riparian forest | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.1 |
| 35 Length of route across upland forest (including pine silviculture) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | 0.4 | 0.8 | 1.0 |
| 36 Acreage of route across National Wetland Inventory (NWI) mapped forested or scrub/shrub wetlands | 0.4 | 0.4 | 0.8 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 2.6 | 2.6 | 1.2 |
| 37 Acreage of route across NWI mapped emergent wetlands | 4.5 | 10.6 | 7.4 | 4.5 | 1.3 | 15.1 | 52.8 | 1.5 | 12.2 | 8.0 | 21.1 | 24.7 | 35.6 | 5.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 38 Length of route across known critical habitat of federally-listed threatened or endangered species | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 39 Length of route across known occupied red-cockaded woodpecker cluster habitat | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 40 Length of route across open water (lakes, ponds, etc.) | 0.0 | 0.1 | 0.6 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.1 | 0.7 | 0.5 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 41 Number of stream/canal crossings | 0 | 1 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 1 | 0 | 7 | 2 | 3 | 2 | 0 | 0 | 0 | 0 | 1 |
| 42 Number of navigable waterway crossings | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 43 Length of route parallel (within 100 feet) to natural streams or rivers | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| 44 Length of route across FEMA mapped 100-year floodplains | 0.3 | 0.5 | 0.5 | 0.2 | 0.2 | 1.9 | 2.3 | 0.1 | 0.4 | 0.6 | 1.8 | 1.8 | 1.7 | 0.4 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 45 Length of route across Coastal Management Zone | 0.3 | 0.5 | 2.1 | 0.2 | 0.2 | 1.9 | 3.1 | 0.1 | 0.4 | 0.6 | 1.8 | 1.8 | 1.7 | 0.5 | 0.5 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | | | , | | | | | | | | | | | | | | | |
| 46 Number of cemeteries within 1,000 feet of the route centerline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 |
| 47 Number of recorded historic or archeological resources crossed by route | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 48 Number of additional recorded historic or archeological resources within 1,000 feet of route centerline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 49 Number of resources determined eligible for or listed on the National Register of Historic Places crossed by route | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 50 Number of additional resources determined eligible for or listed on the National Register of Historic Places within 1,000 feet of route centerline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 |
| 51 Length of route across high archaeological/historical site potential | 0.3 | 0.5 | 0.3 | 0.2 | 0.2 | 0.6 | 2.4 | 0.1 | 0.4 | 0.6 | 1.3 | 1.0 | 1.4 | 0.5 | 0.4 | 0.3 | 0.0 | 0.0 | 0.1 | 0.6 |

Single-family and multi-family dwellings, and related structures, etc., mobile homes, apartment buildings, commercial structures, industrial structures, business structures, churches,

hospitals, nursing humes, 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 345 kV or more.

²Apparent property lines created by existing roads, highway, or railroad ROW are not "double-counted" in the length of route parallel to apparent property lines criteria.

¹Defined 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.

¹As listed in the Chart Supplement South Central U.S. (FAA 2023b formerly known as the Airport/Fadility Directory South Central U.S.) and FAA 2023a.

"One-half mile, unobstructed. Lengths of ROW within the foreground visual zone of Interstates, US and state highway criteria are not "double-counted" in the length of ROW within the

foreground visual zone of FM roads criteria.

⁵One-half mile, unobstructed. Lengths of ROW within the foreground visual zone of parks/recreational areas may overlap with the total length of ROW within the foreground visual zone of interstates, US and state highway criteria and/or with the total length of ROW within the foreground visual zone of the state of t

All length measurements are shown in miles unless noted otherwise.

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TABLE 4-2 Environmental and Land Use Data for Route Evaluation Cypress to Legend 500 kV Transmission Line Project Primary Alternative Segments

| Evaluation Criteria | | | | | lative begin | |
|---|-----|------|-----|-----|--------------|-----|
| Land Use | 132 | 133 | 134 | 135 | 136 | 137 |
| 1 Length of alternative route | 0.8 | 0.8 | 1.0 | 1.0 | 3.7 | 2.2 |
| 2 Number of habitable structures1 within 500 feet of the route centerline | 0 | 0 | 0 | 0 | 1 | 0 |
| 3 Length of route utilizing existing electric facility right-of-way (ROW) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 Length of route parallel to existing electric facility ROW | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 0.0 |
| 5 Length of route parallel to other existing compatible ROW (roads, highways, railway, telephone utility ROW, etc.) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 Length of route parallel to apparent property lines2 (or other natural or cultural features) | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 0.0 |
| 7 Sum of evaluation criteria 3, 4, 5, and 6 | 0.0 | 0.0 | 0.0 | 0.6 | 0.7 | 0.0 |
| 8 Percent of evaluation criteria 3, 4, 5, and 6 | 0% | 0% | 0% | 58% | 20% | 0% |
| 9 Length of route parallel to pipeline ROW | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 |
| 10 Length of route across TPWD WMA office property | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 Length of route across J.D. Murphree WMA property | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 Length of route across National Park Service property | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 Length of route across parks/recreational areas | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 Number of additional parks/recreational areas ³ within 1,000 feet of the route centerline | 0 | 0 | 0 | 0 | 0 | 0 |
| 15 Length of route across cropland | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 1.3 |
| 16 Length of route across pasture/rangeland (includes open fields) | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | 0.7 |
| 17 Length of route across land irrigated by traveling systems (rolling or pivot type) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 Length of route across gravel pits, mines, or quarries | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 Number of pipeline crossings | 10 | 1 | 0 | 6 | 33 | 2 |
| 20 Number of electric transmission line crossings | 0 | 0 | 0 | 0 | 2 | 0 |
| 21 Number of Interstate (IH), US Highway (US Hwy), and State Highway (SH) crossings | 0 | 0 | 0 | 0 | 0 | 0 |
| 22 Number of Farm-to-Market (FM) or Ranch-to-Market (RM) road crossings | 0 | 0 | 0 | 0 | 0 | 0 |
| 23 Number of private use airstrips within 10,000 feet of the route centerline | 1 | 1 | 1 | 1 | 1 | 0 |
| 24 Number of heliports within 5,000 feet of the route centerline | 0 | 0 | 0 | 0 | 0 | 0 |
| 25 Number of Federal Aviation Administration (FAA) registered airports4 (runways >3, 200 feet) within 20,000 feet of the route centerline | 0 | 0 | 0 | 0 | 0 | 1 |
| 26 Number of FAA registered airports4 (runways <3,200 feet) within 10,000 feet of the route centerline | 1 | 1 | 0 | 1 | 1 | 0 |
| 27 Number of commercial Amplitude Modulation radio (AM radio) transmitters within 10,000 feet of the route centerline | 0 | 0 | 0 | 0 | 0 | 0 |
| 28 Number of Frequency Modulation radio (FM radio) transmitters, microwave towers, etc., within 2,000 feet of the route centerline | 0 | 0 | 0 | 0 | 0 | 0 |
| 29 Number of existing water wells within 200 feet of the route centerline | 0 | 0 | 0 | 0 | 0 | 0 |
| 30 Number of oil and gas wells within 200 feet of the route centerline | 0 | 0 | 0 | 0 | 0 | 0 |
| Aesthetics | | | | | | |
| 31 Estimated length of route within foreground visual zone ⁵ of US and SHs. | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 |
| 32 Estimated length of route within foreground visual zone ⁵ of FWRM roads | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 33 Estimated length of route within foreground visual zone ⁶ of parks/recreational areas ³ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Ecology | | | | | | |
| 34 Length of route across bottomland/riparian forest | 0.0 | 0.4 | 0.0 | 0.2 | 0.0 | 0.0 |
| 35 Length of route across upland forest (including pine silviculture) | 0.7 | 0.3 | 1.0 | 0.8 | 0.0 | 0.0 |
| 36 Acreage of route across National Wetland Inventory (NWI) mapped forested or scrub/shrub wetlands | 0.0 | 11.0 | 2.1 | 1.5 | 0.0 | 0.0 |
| 37 Acreage of route across NWI mapped emergent wetlands | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 |
| 38 Length of route across known critical habitat of federally-listed threatened or endangered species | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 39 Length of route across known occupied red-cockaded woodpecker cluster habitat | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 40 Length of route across open water (lakes, ponds, etc.) | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 0.0 |
| 41 Number of stream/canal crossings | 0 | 4 | 2 | 0 | 8 | 10 |
| 42 Number of navigable waterway crossings | 0 | 0 | 0 | 0 | 0 | 0 |
| 43 Length of route parallel (within 100 feet) to natural streams or rivers | 0.0 | 0.3 | 0.0 | 0.0 | 0.1 | 0.2 |
| 44 Length of route across FEMA mapped 100-year floodplains | 0.1 | 0.1 | 0.4 | 0.0 | 0.0 | 0.1 |
| 45 Length of route across Coastal Management Zone | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Cultural Resources | | - | • | | | |
| 46 Number of cemeteries within 1,000 feet of the route centerline | 0 | 0 | 0 | 0 | 0 | 0 |
| 47 Number of recorded historic or archeological resources crossed by route | 0 | 0 | 0 | 0 | 0 | 0 |
| 48 Number of additional recorded historic or archeological resources within 1,000 feet of route centerline | 0 | 0 | 0 | 0 | 0 | 0 |
| 49 Number of resources determined eligible for or listed on the National Register of Historic Places crossed by route | 0 | 0 | 0 | 0 | 0 | 0 |
| 50 Number of additional resources determined eligible for or listed on the National Register of Historic Places within 1,000 feet of route centerline | 0 | 0 | 0 | 0 | 0 | 0 |
| 51 Length of route across high archaeological/historical site potential | 0.2 | 0.7 | 0.8 | 0.0 | 0.0 | 0.6 |
| | - | | - | - | - | |

¹Single-family and multi-family dwellings, and related structures, etc., mobile homes, apartment buildings, commercial structures, industrial structures, business structures, churches,

haspitals, nursing harnes, schools or ather structures narmally inhabited by hurnans or intended to be inhabited by hurnans an a daily ar regular basis within 500 feet of the centerline of a transmission project of 345 kV or more.

²Apparent property lines created by existing roads, highway, or railroad ROW are not "double-counted" in the length of route parallel to apparent property lines criteria.

¹Defined 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.

⁴As listed in the Chart Supplement South Central U.S. (FAA 2023b formerly known as the Airport/Facility Directory South Central U.S.) and FAA 2023a.

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

¹One-half mile, unobstructed. Lengths of ROW within the foreground visual zone of parks/recreational areas may overlap with the total length of ROW within the foreground visual zone of interstates, US and state highway criteria and/or with the total length of ROW within the foreground visual zone of states are of the state of the states of the states are of the states

All length measurements are shown in miles unless noted otherwise.

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4.1.4 Coastal Natural Resource Areas

As mentioned in Section 3.1.4, portions of the proposed Project are located within the CMP boundary. According to 16 TAC § 25.102(a), the PUC may grant a certificate for the construction of transmission or generation facilities located, either in whole or in part, within the coastal management program boundary as defined in 31 TAC § 27.1 only when it finds that the proposed facilities are consistent with the applicable goals and policies of the CMP specified in 31 TAC § 26.16(a), or that the proposed facilities will not have any direct and significant impacts on any of the applicable CNRAs specified in 31 TAC § 26.3(b). The proposed Project will be constructed consistent with the applicable goals and policies of the CMP. Therefore, further coordination with the TGLO and Texas Land Commissioner is required to ensure minimal impacts to CNRAs are made by any of the alternative routes.

Potential CNRAs crossed by the alternative routes include special hazard areas (FEMA mapped floodplains) and coastal wetlands (NWI mapped wetlands). The length of each alternative route crossing potential CNRAs (FEMA mapped wetlands and NWI mapped wetlands) is described in Table 4-1. Refer to Section 4.1.6 and Section 4.1.7 for additional information regarding FEMA mapped floodplains and NWI mapped wetlands. ETI proposes to construct the transmission line in accordance with the goals (31 TAC § 26.12) and policies (31 TAC § 26.16) of the CMP and to minimize any potential impacts to the listed CNRAs. Upon PUC approval of a route, on the ground CNRA and wetland verifications may be required.

4.1.5 Impacts on Groundwater

The construction, operation, and maintenance of the proposed Project are not anticipated to adversely affect groundwater resources within the study area. The potential area of disturbance due to construction activities is insignificantly relevant to the total potential recharge area available for the aquifer in the region. During construction activities, another potential impact for both surface water and groundwater resources is related to potential fuel and/or other chemical spills. As a component of the SWPPP, standard operating procedures and spill response specifications relating to petroleum product storage, refueling, and maintenance activities of equipment are provided to avoid and minimize potential contamination to water resources.

4.1.6 Impacts on Floodplains

FEMA floodplain maps were reviewed for the study area counties. FEMA Flood Insurance Rate Map panels show the 100-year floodplain within Hardin County is primarily mapped along Little Rock Creek, Rock Creek, Boggy Creek, Black Creek Little Pine Island Bayou, Pine Island Bayou and their larger tributaries. Floodplains in Jefferson County are typically associated with larger waterbodies in the northern half of the county and in the southern portion of Jefferson County. The Project's relative location to the coast and low elevations indicate that majority of the Project south of IH-10 is within FEMA designated 100-year floodplain, except areas in and around Port Acres, which has reduced flood risk due to levees. All 24 alternative routes cross areas of existing FEMA mapped 100-year floodplains. The length of route across FEMA mapped 100-year floodplains ranges from approximately 12.5 miles for Alternative Route 15, to approximately 21.2 miles for Alternative Route 16.

Construction activities would not be anticipated to significantly impede the flow of water within these watersheds, significantly impact the overall function of the floodplain, nor adversely affect

adjacent or downstream properties. ETI will coordinate with local floodplain administrators as needed to satisfy any permitting requirements prior to construction.

4.1.7 Impacts on Wetlands

For each alternative route, the estimated acreage of NWI mapped forested or scrub-shrub and emergent wetlands within the route ROW were calculated and presented in Tables 4-1 and 4-2.

As discussed in Section 3.1.7, NWI maps are based on topography and interpretation of infrared satellite data and color aerial imagery. Since the time of the publication of NWI data, hydrology of the study area may have been modified. Modification of hydrology can result in the potential for incongruities between NWI data and current ground conditions. In some instances, the bottomland/riparian forest criterion, which is interpreted from recent aerial imagery, along with floodplain data may provide a more accurate indication of the potential presence of forested or scrub-shrub wetlands. As such, NWI data is useful for planning and comparative analysis purposes with qualification but should not be relied upon for determining USACE or another regulatory jurisdiction.

NWI mapped wetland types identified along the alternative routes include PEM, PSS, and PFO. PEM wetlands are primarily associated with emergent freshwater vegetation located in depressional areas of fields, wet meadows, pastures, and cleared areas. PEM wetlands may also occur along the margins of ponds and lakes. PFO and PSS wetlands are forested and scrub-shrub woodland vegetation types typically occurring in low lying areas, floodplains, and bottomland and riparian areas adjacent to streams, creeks, and rivers. As indicated in Table 4-1, all 24 alternative routes cross some area of NWI mapped forested or scrub-shrub and/or emergent wetlands. The acreage of route across NWI mapped forested or scrub-shrub wetlands ranges from approximately 42.1 acres for Alternative Route 7, to approximately 73.1 acres for Alternative Route 24. The acreage of route across NWI mapped emergent wetlands ranges from approximately 76.7 acres for Alternative Route 22, to approximately 140.6 acres for Alternative Route 23.

Impacts to forested and or scrub-shrub wetlands resulting from ROW clearing would not result in a loss of wetlands but would result in the conversion of forested or scrub-shrub wetlands to emergent wetlands. No permanent loss of wetlands because of ROW clearing along any of the alternative routes is anticipated. To further minimize potential impacts, ETI may opt to hand clear woody vegetation within USACE jurisdictional forested and/or scrub-shrub wetlands and span wetland areas where practical. Impacts to emergent wetlands would be considered temporary and minor, and these areas would be allowed to reestablish after construction.

It is anticipated that construction activities that would occur in wetlands within any of the alternative routes would be authorized under NWP 57. As discussed in Section 1.5.4, NWP 57 authorizes electric utility line activities having a minimal impact that would not result in the loss of greater than 0.5 acres of wetlands. Upon PUC approval of a route, ETI will determine the need for on the ground wetland delineation surveys and whether pre-construction notification with USACE is required in accordance with current regulations.

4.1.8 Impacts on Vegetation

Potential impacts to vegetation would result from clearing new ROW of woody vegetation exceeding minimal heights required for safe operation of the transmission line. These activities facilitate ROW access for structure construction, line stringing and future maintenance activities. The proposed ROW width for the 500 kV transmission line may be up to approximately 225 feet wide depending on the route selected. In some instances where an alternative route parallels existing compatible ROW, removal of vegetation may not be necessary or is already required as part of routine maintenance of the existing ROW and would not be considered an impact from this project. Removal of woody vegetation within new ROW would be required within upland forested (including pine silviculture), bottomland/riparian forested, and forested wetland areas. Mowing and/or shredding of herbaceous vegetation may be required within pasture/rangelands. Future ROW maintenance activities may include periodic mowing and/or herbicide applications to maintain the herbaceous vegetation layer within the ROW.

Clearing trees and shrubs from forested areas typically generates a degree of habitat fragmentation. The magnitude of habitat fragmentation is typically minimized by paralleling an existing linear feature such as a roadway, transmission line, or railway. During the route development process, consideration was given to avoid forested areas and to maximize the length of the alternative routes parallel to or utilizing existing linear corridors where practical.

Impacts to vegetation would be limited to the ROW that is necessary for the construction, operation, and maintenance of the proposed transmission line. ROW clearing activities would be completed while minimizing the impacts to existing groundcover vegetation, when practical. The most common vegetation types crossed by the alternative routes include upland forest, bottomland/riparian forests, and pasture/rangeland.

As indicated in Table 4-1, all 24 alternative routes cross through upland and bottomland/riparian forest areas. These vegetation types were interpolated from aerial imagery and route lengths across these areas were digitally measured for tabulation. Habitat observed to be pine silviculture or tree farms were included in upland forest vegetation type. The length of route across bottomland/riparian forest ranges from approximately 3.2 miles for Alternative Route 19, to approximately 5.4 miles for Alternative Route 18. The length of route across upland forest (including pine silviculture) ranges from approximately 11.1 miles for Alternative Routes 4, 5, and 6, to approximately 15.9 miles for Alternative Route 17.

4.1.9 Impacts to Wildlife and Fisheries

The primary impacts of construction activities on terrestrial wildlife species are typically associated with temporary disturbances from construction activities and with the removal of vegetation (habitat modification/fragmentation). Increased noise and equipment movement during construction may 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. All the alternative routes cross areas of upland and bottomland/riparian forests 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 forested habitat fragmentation by utilizing or paralleling existing compatible ROW or other linear features to the extent feasible.

Construction activities may also incidentally impact small, immobile, or fossorial (living underground) animal species. Indirect impacts to these species may occur due to equipment or vehicular movement on the ROW, or by direct impact 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 the bird nesting season, potential impacts could occur within the ROW area related to potential takes of 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. ETI proposes to implement applicable avian protection plan guidelines recommended by USFWS and construction activities compliant with the MBTA to avoid or minimize these potential impacts.

Transmission lines can also present additional hazards to birds due to electrocutions and/or collisions. Measures can be implemented to minimize this risk with transmission line engineering designs. The electrocution risk to birds should not be significant since the engineering design distance between conductors, conductor to structure or conductor to ground wire for the proposed 500 kV transmission line is greater than the wingspan of any bird typically within the area (i.e., greater than eight feet). The structures and lines could be a collision hazard to birds in flight; however, potential for wire strikes can be reduced by marking the lines with bird flight diverters within areas of potential high avian use.

Tree clearing activities may impact bat species, potential occupied hibernacula, and their potential roosting habitat. Upon PUC approval of a route, ETI will consult with TPWD and/or USFWS prior to clearing activities to determine if there are known hibernacula or roosting habitats within the study area. Compliance with the USFWS ESA guidelines would help avoid accidental clearing of occupied hibernacula and roosting habitat. Impacts to listed bat species can also be minimized by conducting clearing activities during the species' wintering months.

Potential impacts to aquatic systems would include effects of erosion, siltation, and sedimentation. Vegetation clearing of the ROW may result in increased suspended solids entering surface waters traversed by the transmission line. Increases in suspended solids may adversely affect aquatic organisms that require relatively clear water for foraging and/or reproduction. Implementation of the SWPPP would minimize these potential impacts.

Physical aquatic habitat loss or alteration could result wherever riparian vegetation is removed and at temporary crossings required for access roads. Increased levels of siltation or sedimentation may also potentially impact downstream areas primarily affecting filter feeding benthic and other aquatic invertebrates.

Construction of any of the alternative routes is not anticipated to adversely impact general wildlife and fisheries resources within the study area. Indirect impacts would be associated with the loss of forested habitat which is reflected in the vegetation analysis discussed above. Habitat fragmentation was minimized for all the alternative routes within forested areas by utilizing existing compatible ROW or paralleling existing compatible ROW or other linear features to the extent feasible. While mobile animals may temporarily be displaced from habitats near the ROW during the construction phase, normal movement patterns should return after proposed Project construction is complete. Implementation of the SWPPP with BMPs would minimize potential impacts to aquatic resources.

Impacts to Threatened and Endangered Species

To determine potential impacts to threatened or endangered species, a review utilizing available information was completed. Known element occurrence data for the study area was obtained from the TXNDD (TXNDD 2023). Current federal threatened and endangered species listings within the study area, USFWS designated critical habitat locations, and current county listings for state threatened and endangered species were included in the review.

No USFWS (USFWS 2024) designated critical habitat occurs within the study area. One EOR for the federally and state listed endangered Texas trailing phlox occurs within the study area, however, none of the 24 alternative routes cross the Texas trailing phlox EOR. One EOR for the state listed threatened Texas pigtoe occurs within the study area, however, none of the 24 alternative routes cross the Texas pigtoe EOR. The absence of TXNDD mapped data for federally or state-listed species does not preclude the need for additional habitat evaluations for potential suitable habitat or the need for any species-specific surveys for any listed species for the PUC approved route.

Federally and State-Protected Plant Species

No federally or state-listed plant species (USFWS 2024 and TPWD 2023c) were identified as potentially occurring within the study area. No impacts to federal or state listed plant species are anticipated.

Federally Protected Wildlife Species

The federally listed avian species such as the eastern black rail, red-cockaded woodpecker, whooping crane, and yellow-billed cuckoo may occur within the study area if potential suitable habitat is available. Other federally listed avian species such as piping plover, rufa red knot, and whooping crane may occur as possible non-breeding migrants or post-breeding dispersals that pass through the study area and potentially occupy habitats temporarily or seasonally. Seasonal habitats used by these avian species may be spanned or avoided entirely. Primarily aquatic federally listed species such as the West Indian manatee, Kemp's Ridley sea turtle, hawksbill sea turtle, green sea turtle, leatherback sea turtle, and loggerhead sea turtle are not anticipated to occur within the study area due to lack of potential coastal and/or marine habitat. Therefore, impacts to these species are not anticipated.

If in the event federally listed threatened or endangered species, or potential suitable habitat for federally listed threatened or endangered species, is identified during a field survey of the PUC approved route, ETI will further coordinate with the USFWS as needed to determine avoidance or mitigation strategies.

Federally Proposed, Candidate, and Other Protected Wildlife Species

The federally proposed threatened Louisiana pigtoe and alligator snapping turtle and federally proposed endangered tricolored bat may all occur within the study area where suitable habitat is present. Potential federal candidate species in the study area include the monarch butterfly. Based on aerial imagery and field reconnaissance surveys, the study area could provide potential suitable migratory habitat for the monarch butterfly at specific times of the year. Although the monarch butterfly may occur as a temporary migrant within the study area, no significant impacts to this species is anticipated to occur. These species are not currently

offered protection by the ESA. However, they could be listed during the permitting process of a project and may require consultation with the USFWS.

Although not federally listed as threatened or endangered, bald eagles are protected under the MBTA and BGEPA. Bald eagles may forage within the study area and are typically associated with mature trees near large bodies of water. If in the course of biological surveys and/or construction activities, any bald eagle roost or nest trees are identified within the vicinity of the Project, ETI will refer to the *National Bald Eagle Management Guidelines* (USFWS 2007) to avoid and minimize harm and disturbance of bald eagles as recommended by the USFWS.

State-Protected Wildlife Species

State-listed avian species such as Bachman's sparrow, black rail, interior least tern, reddish egret, swallow-tailed kite, white-faced ibis, and wood stork may occur as possible non-breeding migrants or post-breeding dispersals that pass through the study area and potentially occupy habitats temporarily or seasonally. The state-listed interior least tern is not anticipated to occur within the study area due to lack of potential suitable sand and gravel bar habitat. Therefore, impacts to the interior least tern is not anticipated. The proposed transmission line is not anticipated to have any adverse impacts to these species' nesting habitat. Avian species may have additional protections and a pre-construction nest survey may be necessary to comply with state (Texas Parks and Wildlife Code Chapter 64) and federal (MBTA) regulations.

State-listed aquatic species such as the Louisiana pigtoe, southern hickorynut, Texas fawnsfoot, Texas heelsplitter, and western creek chubsucker may occur within the study area wherever suitable habitat is available. ETI proposes to implement a SWPPP to avoid and minimize impacts to aquatic species.

The state-listed sandbank pocketbook is not anticipated to occur within the study area due to the Project being outside of the species known limited distribution. Therefore, impacts to this species is not anticipated.

Other state-listed aquatic species such as the great hammerhead, oceanic whitetip shark, shortfin mako shark, Atlantic spotted dolphin, blue whale, Cuvier's beaked whale, dwarf sperm whale, false killer whale, finback whale, Gervais's beaked whale, Gulf of Mexico Bryde's whale, killer whale, North Atlantic right whale, pygmy killer whale, pygmy sperm whale, rough-toothed dolphin sei whale, short-finned pilot whale, and sperm whale are not anticipated to occur within the study area due to lack of potential marine habitat. Therefore, impacts to these species are not anticipated.

State-listed mammal, the Rafinesque's big-eared bat, may occur within the study area where suitable habitat is available. Although it is unlikely, it is possible the state listed Louisiana black bear may occur as a rare temporary transient or vagrant within the study area if potential suitable habitat is available.

State-listed reptile species such as the alligator snapping turtle and northern scarlet snake may occur within the study area where potential suitable habitat is available. Other reptile species such as the Louisiana pine snake and Texas horned lizard are not anticipated to occur within the study area due to the Project being outside of the species known current distribution. Therefore, no impacts are anticipated to the Louisiana pine snake or Texas horned lizard.

Construction activities along the ROW may temporarily displace wildlife species. Although not anticipated to occur, if state listed species are observed during construction, they would be allowed to leave the area. Overall, impacts of the proposed Project are expected to be minimal and temporary; displaced organisms would be expected to return after construction. Spanning surface waters and implementing a SWPPP to the extent practicable, will avoid and minimize significant adverse impacts to aquatic species.

4.2 Impacts on Community Values

Adverse effects upon community values are defined as aspects of the proposed 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 results 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, tower structures, or ROW.

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 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 to the ROW. Coordination between ETI, its contractors, and landowners regarding ROW access and construction scheduling should minimize these disruptions.

The evaluation criteria used to compare potential land use impacts include proximity to the overall length of the alternative route, route length parallel to or utilizing existing transmission line ROW, length parallel to other existing linear ROW, and the length paralleling property lines (or other natural or cultural features). An analysis of the existing land use within and adjacent to the proposed ROW is required to evaluate the potential impacts.

Overall Length

The overall length of a particular alternative route can be an indicator of the relative level of land use impacts. That is, generally (all other things being approximately equal), the shorter the route, the less land is crossed, and the fewer potential impacts would result. The total lengths of the alternative routes vary from approximately 40.4 miles for Alternative Routes 5 and 6, to approximately 47.9 miles for Alternative Route 24. The differences in route lengths reflect the direct or indirect pathway of each alternative route between the proposed Project endpoints. The length of the alternative routes may also reflect the effort to minimize land use impacts by utilizing or paralleling existing transmission or distribution line ROWs, other existing linear

features including other compatible ROW and apparent property boundaries (or other natural or cultural features) and provides geographic diversity of the alternative routes.

Habitable Structures

Generally, one of the most important measures of potential land use impacts is the number of habitable structures located in the vicinity of each route. Based on direction provided by the PUC, habitable structure identification is included in the CCN filing. Habitable structure information for each alternative route is shown in Appendix C (Habitable Structures and Other Land Use Features in the Vicinity of the Primary Alternative Routes) and Tables 7-2 through 7-25 (Appendix E). POWER determined the number of habitable structures located within 500 feet of each alternative route centerline and their distance from the centerline using aerial imagery interpretation and verification during reconnaissance surveys. Due to the potential horizontal inaccuracies of the aerial imagery and data utilized, habitable structures within 510 feet have been identified.

As shown in Table 4-1, all alternative routes have habitable structures located within 500 feet of their centerlines. The number of habitable structures ranges from 19 for Alternative Route 20, to 59 for Alternative Route 4.

Utilizing or Paralleling Existing Compatible ROW

16 TAC § 25.101(b)(3)(B) requires that the PUC consider whether new transmission line routes are within or utilizing existing electric facility ROWs, including the use of vacant positions on existing multiple-circuit transmission lines; whether the routes parallel or utilize other existing compatible ROWs (including roads, highways, railroads, or telephone utility ROW); whether the routes parallel apparent property lines or other natural or cultural features; and whether the routes conform with the policy of prudent avoidance. Criteria were used to evaluate length utilizing electric facility ROW (transmission), length parallel to existing transmission line ROW, length of route parallel to other existing linear ROWs, and length of route paralleling apparent property lines (or other natural or cultural features). It should also be noted that if a segment utilizes or parallels more than one existing linear corridor, only one linear corridor was tabulated (e.g., a segment parallels both an apparent property line and a roadway, but it was only tabulated as paralleling the roadway).

Tables 4-1 and 4-2 indicate the length of each alternative route and segment tabulated as utilizing or paralleling existing transmission ROW. Tabulations for utilizing existing transmission line ROW typically include proposed instances of rebuilding existing transmission line structures to allow for double circuiting within existing ROW or instances of paralleling an existing transmission line within available vacant space of the existing ROW.

All alternative routes utilize existing electric facility ROW for a portion of their length, at approximately 0.7 mile each. Additionally, all alternative routes parallel existing electric facility ROW for a portion of their length. The lengths range from approximately 0.2 mile for Alternative Routes 4, 5, 6, 14, and 16 to approximately 6.2 miles for Alternative Routes 7, 8, and 9.

When not utilizing or paralleling existing transmission line ROW, less impact to land use generally results from locating new lines parallel to other existing compatible linear ROW (highway, road, canal, railway, telephone utility ROW, etc.). All of the alternative routes parallel

other existing compatible ROW. The lengths range from approximately 1.2 miles for Alternative Routes 16 and 21, to approximately 5.6 miles for Alternative Route 22.

Paralleling Apparent Property Lines (or Other Natural or Cultural Features)

Paralleling apparent property lines (or other natural or cultural features) is generally considered a positive routing criterion to minimize impacts to existing and planned property uses when not utilizing or paralleling existing transmission line or another compatible ROW. Property lines created by existing roads, highway, and railway, etc., are not "double-counted" in the length of route parallel to property lines (or other natural or cultural features) criterion. All of the alternative routes parallel apparent property lines (or other natural or cultural features) for some portion of their length. The length of alternative routes that parallel apparent property boundaries (or other natural or cultural features) ranges from approximately 3.6 miles for Alternative Routes 17 and 21, to approximately 8.3 miles for Alternative Route 18.

To evaluate the length of each of the alternative routes that utilize or parallel existing compatible ROWs, and apparent property lines (or other natural or cultural features) relative to the overall length of the route, the percentage of each total route length utilizing or parallel to any of these features was estimated. These percentages can be calculated by adding up the total length utilizing or parallel to existing transmission or distribution lines, other existing compatible ROW, and apparent property lines (or other natural or cultural features) criteria and then dividing the result by the total length of the alternative route. All of the alternative routes utilize or parallel existing linear features for at least 14% of their lengths. The percentage of each route that utilizes or parallels existing linear features ranges from 14% for Alternative Route 16, to 35% for Alternative Routes 10, 11, and 12.

Paralleling Existing Pipeline ROW

Although not specifically included in 16 TAC § 25.101(3)(B)(ii) as compatible, pipeline ROWs are linear cultural features and paralleling them when it is compatible and practical to do so minimizes impacts to the landowner's existing and planned property uses and reduces wildlife habitat fragmentation. By paralleling existing utility corridors such as pipeline ROW, adverse impacts to ecological resources and land uses may be reduced by avoiding and/or minimizing the impacts to undisturbed habitats (refer to TPWD recommendations in Appendix A).

POWER tabulated instances of alternative routes parallel to existing pipeline ROW when an alternative route was not already utilizing or paralleling existing transmission line ROW, other compatible ROW, or parallel to apparent property boundaries (or other natural or cultural features). If an alternative route is utilizing or paralleling an existing transmission line ROW that is also currently paralleled by a pipeline ROW, then no tabulation of paralleling existing pipeline ROW was included in Table 4-1 for that portion of the alternative route. However, if an alternative route is paralleling an existing pipeline ROW and the pipeline ROW is located between the alternative route and another existing compatible ROW or property boundary, then that portion of the alternative route was tabulated in Table 4-1 as paralleling the existing pipeline ROW and no tabulation was provided in Table 4-1, all of the alternative routes have a portion of their route as paralleling existing pipeline ROW. Alternative route lengths paralleling existing pipeline ROW and 19, to 6.2 miles for Alternative Route 23.

Impacts on Agriculture

Impacts to agricultural land can generally be ranked by the degree of potential impact, with the highest degree of potential impact occurring to cultivated cropland areas, including hayfield production. However, due to the relatively small area affected (beneath the structures), and the short duration of construction activities at any one location, such impacts should be both temporary and minor. Alternative route lengths crossing cropland range from approximately 1.6 miles for Alternative Route 24, to approximately 8.4 miles for Alternative Route 17.

None of the alternative routes cross agricultural lands with traveling irrigation systems (rolling or pivot).

Since the ROW for this proposed Project would not be fenced or otherwise separated from adjacent lands, no long-term or significant displacement of grazing or managed wildlife activities would occur. Most existing grassland uses, including grazing on rangelands and pastures, may be resumed following construction. Alternative route lengths crossing pastureland or rangeland areas, including open fields, range from approximately 6.1 miles for Alternative Route 15, to approximately 17.0 miles for Alternative Route 24.

4.2.2 Impacts on Transportation/Aviation

Transportation

Potential impacts to transportation could include temporary disruption of traffic and conflicts with proposed roadway and/or utility improvements. Traffic disruptions would include those associated with the movement of construction equipment and materials to and from the ROW and increased traffic flow and/or periodic congestion during the construction phase of the Project. Such impacts are usually temporary and short-term.

All alternative routes cross IH, US Hwy, and SHs five times. All alternative routes cross FM and RM roads twice. ETI would be required to obtain road-crossing permits from TxDOT for any crossing of state-maintained roadways.

<u>Aviation</u>

The proposed Project is not anticipated to have significant effects on aviation operations within the study area.

All of the alternative routes have at least one FAA registered public-use airports with at least one runway longer than 3,200 feet located within 20,000 feet of the route centerline. Alternative Route 24 has one, while 16 of the alternative routes have three each.

All of the alternative routes have one FAA registered public-use airport with at least one runway less than 3,200 feet located within 10,000 feet of the route centerline.

All of the alternative routes have at least one private use airstrip located within 10,000 feet of the route centerline. Alternative Route 21 has two private use airstrips within 10,000 feet of the route centerline.

There are no known heliports located within 5,000 feet of any of the alternative routes.

Following PUC approval of a route for the proposed transmission line, ETI 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.

4.2.3 Impacts on Communication

The proposed transmission line would have a minimal effect on communication operations in the area. As indicated in Table 4-1, no AM radio transmitters were identified within 10,000 feet of any alternative routes. All alternative routes are within 2,000 feet of multiple FM radio transmitters, microwave towers, or other similar electronic installations. The number ranges from three for Alternative Route 16, to 10 for Alternative Routes 1, 7, and 22.

4.2.4 Impacts on Utility Features

Utility features, including existing electrical transmission lines and distribution lines, and pipelines are crossed by all of the alternative routes. Water wells are scattered throughout the study area and were avoided to the extent practicable. If these utility features are crossed by, or are in close vicinity to the route approved by the PUC, ETI will coordinate with the appropriate entities to obtain necessary permits or permission as required.

Several existing electric transmission lines were identified within the study area. All of the alternative routes cross existing ETI transmission lines. The number of electric transmission line crossings range from approximately nine for Alternative Routes 13, 19, and 24 to approximately 13 crossings for 12 of the alternative routes.

Oil and gas pipelines that are crossed by the PUC approved route will be indicated on engineering drawings and flagged prior to construction. ETI will coordinate with pipeline companies as necessary during transmission line surveys, construction, and operation. All alternative routes have multiple pipeline crossings. The number of pipeline crossings range from approximately 124 for Alternative Route 14, to approximately 164 for Alternative Route 15.

Several oil and gas wells were identified within the study area based on GIS shapefile data obtained from the RRC. As depicted in Table 4-1 all the alternative routes have oil and/or gas wells within 200 feet of the route centerline. The number of oil and/or gas wells range from approximately one for 10 of the alternative routes, to approximately four for Alternative Routes 14 and 17.

Several water wells were identified within the study area based on shapefile data obtained from TWDB. As depicted in Table 4-1 there is one water well within 200 feet of Alternative Routes 22 and 24.

4.2.5 Impacts on Socioeconomics

Construction and operation of the proposed 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. ETI normally uses contract labor supervised by ETI employees during the clearing and construction phase of transmission line projects. Construction workers for the proposed 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 an increase in local retail sales due to purchases of lodging, food, fuel, and other merchandise for the duration of construction activities. No additional staff would be required for line operations and maintenance.

ETI is also required to pay sales tax on purchases and is subject to paying local property tax on land or improvements as applicable.

This proposed Project is intended to have a positive impact to the economics of this region. As stated in further detail in Section 1.2, the purpose of this proposed Project is to provide electric service to support the load growth in Hardin and Jefferson Counties in Southeast Texas. The new line will provide greater reliability to the Southeast Texas region by adding a new transmission source into the growing area.

4.3 Impacts on Recreation and Park Areas

Potential impacts to parks and recreational land uses include the disruption or preemption of recreational activities. As previously mentioned in Section 3.3, several parks and recreational areas were identified within the study area.

All of the alternative routes have lengths crossing a park or recreational area. All alternative routes cross through BTNP for approximately 0.5 mile each. Seventeen of the alternative routes cross the J.D. Murphree WMA. These lengths range from approximately 0.2 mile each for nine of the alternative routes, to 1.8 miles for Alternative Route 18. In addition, Alternative Routes 1, 4-7, 10, 13, 15, and 19 cross TPWD WMA office property at approximately 0.1 mile.

None of the alternative routes cross through additional parks and recreational areas.

All of the alternative routes have additional parks or recreation areas within 1,000 feet. The number of additional parks or recreational areas within 1,000 feet range from one for 15 of the alternative routes, to three for Alternative Routes 1, 2, 3, 7, 8, 9, 15, 20, and 21.

No significant impacts to the use of the parks and recreation facilities located within the study area are anticipated from any of the alternative routes.

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 proposed Project could have both temporary and permanent aesthetic effects. 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 proposed Project would involve the views of the cleared ROW, tower structures, and lines from public viewpoints, including roadways and recreational areas.

Potential visibility impacts were evaluated by estimating the length of each alternative 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 alternative route lengths within the foreground visual zone of major highways, FM roads, and parks or recreational areas were tabulated and are discussed below.

All alternative routes have some portion of their length located within the foreground visual zone of an IH, US Hwy, and SH. Lengths ranges from approximately 4.1 mile for Alternative Route 24, to approximately 12.2 miles for Alternative Route 22.

All alternative routes have some portion of their length located within foreground visual zone of FM and RM roads. Lengths range from approximately 1.9 miles for Alternative Routes 24, to approximately 3.5 miles for Alternative Routes 18 and 20.

All alternative routes have some portion of their length within the foreground visual zone of parks or recreational areas. Lengths range from approximately 4.0 miles for Alternative Routes 13 and 19, to approximately 5.3 miles each for Alternative Routes 23 and 24.

The commercial and industrial developments within the study area, including existing transmission lines, have already impacted the aesthetic quality within the region from public viewpoints. The construction of any of the alternative routes is not anticipated to significantly impact the aesthetic quality of the landscape.

Please also refer to the discussion regarding habitable structures in Section 4.2.1

4.5 Impacts on Historical (Cultural Resource) 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 the proposed 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 State of Texas Antiquities Code. 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 are caused by the actual construction of the line or through increased vehicular and pedestrian traffic during the construction phase. The construction of a transmission line might directly alter, damage, or destroy historic buildings, archeological sites, engineering structures, landscapes, or historic districts. Additionally, an increase in vehicular traffic might damage surficial or shallowly buried sites, while the increase in pedestrian traffic might result in vandalism of some 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 to cultural resources include those effects caused by the proposed 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 because of alterations in the pattern of land use, changes in population density, accelerated growth rates, or increased pedestrian or vehicular traffic. Historic buildings, structures, landscapes, and districts are among the types of resources that might be adversely impacted by the indirect impact of the proposed transmission towers and lines.

4.5.3 Summary of Cultural Resources Impacts

The distance of each recorded cultural resource crossed or located within 1,000 feet from the proposed alternative routes was measured using GIS software and aerial imagery interpretation. As shown on Table 4-1, none of the alternative routes cross recorded archeological sites, cemeteries, OTHMs, SALs, or sites listed on or eligible for listing on the NRHP. A total of four archeological sites and one cemetery are recorded within 1,000 feet of the alternative routes.

As with many of the sites located in the study area, sites 41JF11, 41JF34, 41JF52, and 41JF53 are pre-contact campsites with shell middens ceramics, debitage, and animal bone fragments (see Table 4-3, below). Site 41JF11 and 41JF34 are approximately 773 feet and 623 feet, respectively, from Alternative Routes 1-12, 14-16, 20, and 21. Site 41JF52 is approximately 902 feet from Alternative Routes 18 and 23. Site 41JF53 is approximately 708 feet from Alternative Routes 13, 17, and 19. None of these sites have been formally evaluated for inclusion on the NRHP.

| SITE TRINOMIAL | DESCRIPTION | DISTANCE IN FEET FROM CENTERLINE | ALTERNATIVE ROUTE(S) | ELIGIBILITY DETERMINATION |
|-------------------|---|--|---|------------------------------|
| 41JF11 | pre-contact campsite with shell midden, animal bones, and debitage | 773 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 20, 21 | undetermined |
| 41JF34 | pre-contact campsite with shell midden and animal bone fragments | 623 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 20, 21 | undetermined |

TABLE 4-3 ARCHEOLOGICAL SITES RECORDED WITHIN 1,000 FEET OF THE ALTERNATIVE ROUTES

| SITE TRINOMIAL | DESCRIPTION | DISTANCE IN FEET FROM CENTERLINE | ALTERNATIVE ROUTE(S) | ELIGIBILITY DETERMINATION |
|-------------------|---|--|-------------------------|------------------------------|
| 41JF52 | Late Prehistoric campsite with shell midden, ceramic sherds, and bone fragments | 902 | 18, 23 | undetermined |
| 41JF53 | pre-contact campsite with shell midden | 708 | 13, 17, 19 | undetermined |

TABLE 4-3 ARCHEOLOGICAL SITES RECORDED WITHIN 1,000 FEET OF THE ALTERNATIVE ROUTES

One cemetery is recorded within 1,000 feet of the alternative routes. The Lincoln-Broussard Cemetery (JF-C023) is not a designated HTC. The cemetery is approximately 119 feet from Alternative Routes 1, 2, 3, 7, 8, 9, 15, 20, and 21.

None of the alternative routes have been surveyed in their entirety for cultural resources. Thus, the potential for undiscovered cultural resources exists along all alternative routes. To assess this potential, a review of geological, soils, and topographical maps was undertaken by a professional archeologist to identify areas along the alternative routes where unrecorded archeological resources have a higher probability to occur. These HPAs for pre-contact archeological sites were identified along Little Pine Island Bayou, Bayou Din, Lovell Lake, Taylor Bayou, Big Hill Bayou and their tributaries; on terraces overlooking river and stream channels; on the edges of and high areas within swamps and bottomlands. Post-contact age resources are also likely to be found near water sources including man-made canals; however, they will also be near primary and secondary roads which provided access to the sites. Buildings and cemeteries are more likely to be located within or near post-contact communities.

To facilitate the data evaluation and alternative route comparison, each HPA was mapped using GIS and the length of each alternative route crossing these areas was tabulated. The length of HPAs crossed by each alternative route ranges from approximately 13.9 miles for Alternative Route 1 to approximately 23.4 miles for Alternative Route 19 The lengths of each alternative route crossing areas of archeological HPAs are presented in Table 4-1.

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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 in regarding the proposed Project. The purpose of the letter was to inform the various agencies and officials of the proposed 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:

- » FAA
- » FEMA Region 6
- » DoD Military Aviation and Installation Assurance Siting Clearinghouse
- » NPS
- » NRCS Texas Office
- » USACE Galveston District
- » USEPA Region 6
- » NPS BTNP
- » Railroad Commission of Texas
- » TCEQ Region 10
- » TxDOT Aviation Division, Environmental Affairs Division, Planning and Programming, District Engineer
- » TGLO
- » THC
- » TPWD
- » TPWD J.D. Murphree WMA
- » TWDB
- » Hardin County Judge and Commissioners Court
- » Hardin County Historical Commission
- » Jefferson County Judge and Commissioners Court
- » Jefferson County Engineering Department
- » Jefferson County Drainage District No. 6 and No. 7
- » Jefferson County Historical Commission
- » South East Texas Regional Planning Commission
- » Lower Neches Valley Authority

- » City of Beaumont Officials
- » City of Port Arthur Officials
- » City of Bevil Oaks Officials
- » City of Nederland Officials
- » City of China Officials
- » City of Lumberton Officials
- » Lumberton ISD
- » Hardin-Jefferson ISD
- » Kountze ISD
- » Beaumont ISD
- » Hamshire-Fannett ISD
- » Port Arthur ISD
- » Sabine Pass ISD
- » Texas Agricultural Land Trust
- » Texas Land Conservancy
- » Texas Land Trust Council
- » The Nature Conservancy Texas

In addition to letters sent to the agencies listed, POWER also requested and reviewed TXNDD Element Occurrence Records from TPWD (TXNDD 2023). 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 November 2023 in relation to the study area that were received are listed and summarized below.

The FAA responded with an email dated January 3, 2024, and a letter dated December 29, 2023, stating if the Project construction may affect navigable airspace to electronically file FAA Form 7460-1.

An email was received from a realty specialist with from the USACE Galveston District on November 13, 2023, stating to send plans to him and the regulatory division once they are finalized. In addition, a realty specialist with from the USACE Galveston District responded with an email dated August 20, 2024, stating that there are no real estate interest associated with the current proposed plans.

An email was received from a USACE regulatory project manager from USACE Galveston District on August 12, 2024, that provided Section 10, 404, and 408 permit information and transmission line height requirements when crossing Section 10 waters.

The TGLO responded with a letter dated November 30, 2023, stating that the TGLO does not appear to have any environmental or land use constraints, but requested contact when a final route has been selected to determine if the proposed Project crosses any streambeds or Permanent School Fund land that would require an easement.

The THC responded with an email dated December 11, 2023, stating that archeological survey is required and may require an Antiquities Permit if any lands owned or controlled by the state of Texas or any subdivision thereof are crossed.

The TPWD responded with an email and letter dated December 21, 2023. The Wildlife Division of TPWD provided a tracking number (51641) and provided several recommendations. In summary, TPWD recommended: using existing facilities whenever possible; avoiding project alternatives that cross TPWD properties (i.e., J.D. Murphree WMA) and USFWS, NPS, and United States Forest Service properties, avoid conservation easements, contractors implement erosion and sediment control, avoiding or minimizing potential impacts to native vegetation, water resources, migratory birds, listed or rare species, and wetlands.

Jefferson County responded with an email dated December 6, 2023, stating that the Project may need to contact the floodplain administrator and environmental control department.

The City of Beaumont Planning Department responded with an email dated November 17, 2023, asking if the route would stay within an existing ROW or outside of the city limits because if not then they would need better details on the alignment options.

The Lower Neches Valley Authority responded with an email dated November 28, 2023, stating that they have many canals in the area.

In addition to the correspondence that has been described, POWER and ETI representatives met with representatives of NPS, TPWD, TxDOT, DD7, USACE, and BTNP stakeholders to discuss the preliminary alternative routing for this Project.

The Project meeting with NPS occurred on February 28, 2024. The purpose of the meeting was to obtain information regarding the permitting process for crossing the BTNP. The NPS representatives indicated that an SF-299 permit would be required to cross the preserve and discussed the NEPA process. In addition, several Project meetings with BTNP staff occurred on April 24, 2024, May 13, 2024, September 27, 2024, January 6, 2025, and January 23, 2025 to continue discussing the SF-299 application process. ETI submitted an SF 299 application to NPS on February 7, 2025, and NPS provided its response to the application on March 6, 2025, explaining that the requested work aligns with the allowances outlined in the easements and as such, ETI does not require any additional authorization from NPS to proceed with the proposed activities.

The Project meeting with BTNP primary stakeholders occurred on May 13, 2024. The purpose of the meeting was to provide information regarding the proposed Project and discuss preliminary alternative segments crossing BTNP. In addition, a follow-up meeting occurred on January 6, 2025, and an onsite visit to proposed alternative segment 42 crossing occurred on January 29, 2025. BTNP primary stakeholders expressed strong preference that ETI utilize its existing easement.

The Project meeting with DD7 occurred on March 5, 2024. The purpose of the meeting was to obtain information regarding the proposed preliminary alternative segments along DD7 properties, managed ponds along levee systems, and potential permitting requirements for crossing the DD7 property. The DD7 representatives indicated no concerns.

The Project meeting with TPWD occurred on October 10, 2024. The purpose of the meeting was to review the proposed preliminary alternative segments and discuss potential permitting

requirements for crossing TPWD and State of Texas property. The TPWD representatives indicated an easement application would be required to cross lands it owns and/or administers for the State of Texas. In addition, Project meetings occurred on October 30, 2024, March 4, 2025, and March 27, 2025. An easement application was submitted to TPWD on March 28, 2025.

The Project meeting with the USACE Sabine to Galveston Coastal Storm Risk Management team occurred on September 3, 2024. The purpose of the meeting was to review the proposed preliminary alternative segments along the levee system managed by the USACE. USACE representatives indicated upcoming projects that would include, but not limited to, raising the levee system to reduce the risk of damage created by storm surge from hurricanes and tropical storms. USACE also provided ground-to-wire clearance requirements for transmission lines when crossing over the levee system.

The Project meeting with TxDOT occurred on January 17, 2025. The purpose of the meeting was to review the proposed preliminary alternative segments along SH 73 and discuss the feasibility of constructing a transmission line within TxDOT ROW. During the meeting, it was brought to ETI's attention that Kinder Morgan has plans for a large diameter natural gas pipeline project indicating a proposal to build within TxDOT ROW along the south side of SH 73. In addition, a Project meeting occurred on February 28, 2025.

6.0 PUBLIC INVOLVEMENT

ETI hosted two public meetings and developed a website for the proposed Project for the surrounding communities to solicit comments, concerns, and input from residents, landowners, public officials, and other interested parties. The public meetings were held from 4:00 p.m. – 7:00 p.m. on May 21 and May 22, 2024 at Courville's Event Venue in Beaumont

The purpose of these public meetings was to:

- » Promote a better understanding of the proposed Project, including the purpose, need, potential benefits, impacts, and the PUC CCN application approval process.
- » Inform the public regarding 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.

Prior to the public meetings, a Project open house website was developed to provide landowners with information and encourage them to participate in the open house meetings. The Project open house website contained typical 500 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 and topographic base. The open house website also provided an interactive map that allowed landowners to view more-detailed digital maps of preliminary alternative segments. Landowners were also able to submit questions and comments about the Project.

ETI and POWER presented 125 preliminary alternative segments to the public on the public meeting website and during the open house meetings. Invitation letters were sent to landowners who owned property within 500 feet from a preliminary alternative segment. ETI mailed 629 invitation letters to landowners for the open house meetings. Due to the potential horizontal inaccuracies of the aerial imagery and county appraisal district data utilized, properties within 510 feet were identified. Each landowner that received an invitation letter also received a map of the study area depicting the preliminary alternative segments, a brochure, a list of frequently asked questions, and a questionnaire. A copy of the public notice letter and associated enclosures are provided in Appendix B.

At the public meetings, a total of 71 individuals attended, with 23 questionnaire responses submitted upon conclusion of the public meetings. An additional 26 questionnaires were received from landowners after the public meetings, for a total of 49 questionnaires received. Results from the questionnaires were reviewed and analyzed. Table 6-1 summarizes general response information from the 49 questionnaires.

| GENERAL INFORMATION RESPONSES | PERCENTAGE (%) OF RESPONDENTS |
|--|----------------------------------|
| I was given an opportunity to send or call in questions and receive answers. | |
| Strongly Agree | 20% |
| Agree | 35% |
| Neutral | 18% |

TABLE 6-1 GENERAL RESPONSE SUMMARY FROM PUBLIC MEETING QUESTIONNAIRES

| GENERAL INFORMATION RESPONSES | PERCENTAGE (%) OF RESPONDENTS |
|--|----------------------------------|
| Disagree | 0% |
| Strongly Disagree | 10% |
| N/A or No Response | 16% |
| ETI Texas staff were knowledgeable about the event topic. | |
| Strongly Agree | 22% |
| Agree | 37% |
| Neutral | 24% |
| Disagree | 0% |
| Strongly Disagree | 0% |
| N/A or No Response | 16% |
| ETI Texas staff responded to my issues and concerns. | |
| Strongly Agree | 25% |
| Agree | 29% |
| Neutral | 29% |
| Disagree | 5% |
| Strongly Disagree | 0% |
| N/A or No Response | 18% |
| Potential line route location.* | |
| I have property located in the project area. | 82% |
| A potential line route segment is on my land or near my home or business. | 88% |
| An existing transmission line is on my land or near my home | 14% |
| A potential substation site is on my land or near my home/business. | 0% |
| Other | 16% |
| Additional Contact | |
| Requested follow-up contact for project detail and/or progress | 20% |
| No response to offer for more information or not related to additional contact | 80% |

TABLE 6-1 GENERAL RESPONSE SUMMARY FROM PUBLIC MEETING QUESTIONNAIRES

*Respondents may have provided input in more than one category.

The questionnaire then discussed the many environmental and land use features taken into consideration during the routing process and asked about the known accuracy of these features shown on the maps. A summary of these questions is shown in Table 6-2. Questionnaire respondents were also asked to identify potential missing features from the maps.

TABLE 6-2 LAND USE AND ENVIRONMENTAL CONSTRAINTS MAP QUESTION SUMMARY FROM QUESTIONNAIRES

| GENERAL INFORMATION RESPONSES | PERCENTAGE (%) OF RESPONDENTS | | | | |
|--|----------------------------------|--|--|--|--|
| Were the exhibits and information provided during the Webinar, through the Online Open House link, or on the Project website helpful? (Y/N) | | | | | |
| Yes | 76% | | | | |
| No | 2% | | | | |
| N/A or No Response | 18% | | | | |
| POWER Engineers has shown these features on the Environmental and Land Use Constraints Map on the website. Are those features accurately located? (Y/N) | | | | | |
| Yes | 31% | | | | |
| No | 24% | | | | |
| l don't know | 35% | | | | |
| N/A or No Response | 10% | | | | |
| Are you aware of any other features that are not shown on the Environmental and Land Use Constraints Map? (Y/N) | | | | | |
| Yes | 33% | | | | |
| No | 43% | | | | |
| N/A or No Response | 24% | | | | |

Respondents were asked their preferred combination of route segments, and if so, why. Questionnaire respondents' preferred segments are summarized in Table 6-3. Preferred segments and responses are summarized below:

- » "Route away from school, residences"
- » "We anticipate a major solar farm project....and will give us greater interconnect flexibility."
- » Avoids existing homes/property and neighborhoods.
- » Avoids populated areas.
- » Parallels existing Entergy line.
- » Avoids impacts to wildlife and forestry.

TABLE 6-3 QUESTIONNAIRE RESPONDENT PREFERRED SEGMENT SUMMARY

| SEGMENTS PREFERRED* | # OF RESPONDENTS | % OF RESPONDENTS |
|---------------------|------------------|------------------|
| 1 | 6 | 12% |
| 3 | 6 | 12% |
| 4 | 6 | 12% |
| 10 | 1 | 2% |
| 13 | 1 | 2% |
| 16 | 1 | 2% |

| SEGMENTS PREFERRED* | # OF RESPONDENTS | % OF RESPONDENTS |
|---------------------|------------------|------------------|
| 17 | 1 | 2% |
| 23 | 1 | 2% |
| 24 | 1 | 2% |
| 25 | 6 | 12% |
| 26 | 1 | 2% |
| 29 | 1 | 2% |
| 35 | 1 | 2% |
| 36 | 1 | 2% |
| 40 | 2 | 4% |
| 41 | 1 | 2% |
| 44 | 4 | 8% |
| 45 | 4 | 8% |
| 49 | 1 | 2% |
| 51 | 4 | 8% |
| 53 | 1 | 2% |
| 54 | 1 | 2% |
| 56 | 6 | 12% |
| 60 | 11 | 22% |
| 61 | 1 | 2% |
| 62 | 2 | 4% |
| 63 | 1 | 2% |
| 64 | 4 | 8% |
| 66 | 3 | 6% |
| 69 | 3 | 6% |
| 73 | 15 | 31% |
| 74 | 1 | 2% |
| 75 | 2 | 4% |
| 76 | 2 | 4% |
| 78 | 2 | 4% |
| 79 | 1 | 2% |
| 80 | 2 | 4% |
| 81 | 3 | 6% |
| 82 | 1 | 2% |
| 83 | 12 | 24% |
| 85 | 13 | 27% |
| 86 | 5 | 10% |
| 90 | 9 | 18% |
| 92 | 2 | 4% |
| 94 | 1 | 2% |
| 96 | 1 | 2% |
| 98 | 10 | 20% |

TABLE 6-3 QUESTIONNAIRE RESPONDENT PREFERRED SEGMENT SUMMARY

| SEGMENTS PREFERRED* | # OF RESPONDENTS | % OF RESPONDENTS |
|----------------------|------------------|------------------|
| 99 | 3 | 6% |
| 100 | 12 | 24% |
| 103 | 7 | 14% |
| 105 | 1 | 2% |
| 106 | 7 | 14% |
| 110 | 1 | 2% |
| 113 | 1 | 2% |
| 115 | 7 | 14% |
| No response | 4 | 8% |
| Other or Unspecified | 12 | 24% |

TABLE 6-3 QUESTIONNAIRE RESPONDENT PREFERRED SEGMENT SUMMARY

*Respondents may have provided multiple segments.

Respondents were then asked if they had concerns with any particular segments and why. Questionnaire respondents' segments of concern are summarized in Table 6-4. Segments of concern responses and comments are summarized below:

- » "Already have existing high voltage line on property."
- » Concerns about impacts to active airstrips.
- » Concerns about impacts to forest land and wildlife.
- » Concerns about potential impacts on farming production and operations.
- » Concerns about impacts to property and residence.
- » Concerns about impacts on future development plans.
- » Concerns about impacts to health.

TABLE 6-4 QUESTIONNAIRE RESPONDENT SEGMENTS OF CONCERN SUMMARY

| SEGMENTS WITH CONCERNS* | # OF RESPONDENTS | % OF RESPONDENTS |
|-------------------------|------------------|------------------|
| 1 | 1 | 2% |
| 2 | 1 | 2% |
| 3 | 1 | 2% |
| 4 | 1 | 2% |
| 7 | 1 | 2% |
| 8 | 1 | 2% |
| 11 | 1 | 2% |
| 19 | 1 | 2% |
| 23 | 1 | 2% |
| 25 | 2 | 4% |
| 27 | 1 | 2% |

| SEGMENTS WITH CONCERNS* | # OF RESPONDENTS | % OF RESPONDENTS |
|-------------------------|------------------|------------------|
| 31 | 1 | 2% |
| 33 | 1 | 2% |
| 37 | 1 | 2% |
| 39 | 1 | 2% |
| 40 | 1 | 2% |
| 43 | 8 | 16% |
| 44 | 3 | 6% |
| 46 | 2 | 4% |
| 47 | 1 | 2% |
| 50 | 7 | 14% |
| 51 | 1 | 2% |
| 52 | 10 | 20% |
| 53 | 4 | 8% |
| 54 | 8 | 16% |
| 55 | 1 | 2% |
| 56 | 1 | 2% |
| 58 | 1 | 2% |
| 60 | 1 | 2% |
| 61 | 1 | 2% |
| 65 | 4 | 8% |
| 68 | 5 | 10% |
| 70 | 8 | 16% |
| 71 | 8 | 16% |
| 72 | 1 | 2% |
| 79 | 1 | 2% |
| 85 | 2 | 4% |
| 86 | 1 | 2% |
| 88 | 1 | 2% |
| 89 | 2 | 4% |
| 93 | 3 | 6% |
| 94 | 1 | 2% |
| 95 | 1 | 2% |
| 96 | 1 | 2% |
| No response | 2 | 4% |
| Other or Unspecified | 9 | 18% |

TABLE 6-4 QUESTIONNAIRE RESPONDENT SEGMENTS OF CONCERN SUMMARY

*Respondents may have provided multiple segments.

The questionnaire presented a list of 12 factors (including other) that are taken into consideration for a routing study. The questionnaire asked the respondents to rank these criteria, with one being the most important factor, and 12 being the least important factor. The average ranking given by the respondents is listed next to each criterion in Table 6-5.

| RANKING CRITERIA | AVERAGE RANK* |
|--|------------------|
| Maintain reliable electric service | 4.54 |
| Use or parallel existing electric transmission line right of way where possible | 2.66 |
| Parallel other existing compatible right of way (e.g., roads, highways) where possible | 3.52 |
| Parallel property lines where possible | 4.44 |
| Maximize distance from residences | 2.30 |
| Maximize distance from schools, churches, nursing homes, etc. | 4.07 |
| Maximize distance from commercial buildings | 6.32 |
| Maximize distance from historic sites or areas | 6.50 |
| Maximize distance from parks and recreational areas | 6.43 |
| Minimize visibility of the lines | 4.63 |
| Minimize environmental impacts | 4.14 |
| Other | 1.00 |

TABLE 6-5 QUESTIONNAIRE SUMMARY OF FACTORS RANKED IN ORDER OF IMPORTANCE

*Note: Many respondents ranked multiple categories equally or did not respond.

Respondents were also asked if there were any other concerns they have with the alternative routes or if there was any other information they would like the proposed Project team to know or take into consideration when evaluating the alternative routes for the new line. Responses included: utilizing existing transmission lines, concerns on impacts to residences, impacts on health, impacts to future development, and impacts to the environment.

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7.0 ROUTE SELECTION

The purpose of this study was to delineate and evaluate alternative routes for ETI's proposed Project. POWER completed the environmental analysis of 24 alternative routes (Section 4.0), the results of which are shown in Table 4-1 and Table 4-2. The environmental evaluation was a comparison of 24 alternative routes from a strictly environmental viewpoint based upon the measurement of land use, aesthetics, ecology, and cultural resource criteria. POWER used this information while considering landowner and agency concerns to select a route for recommendation that provided the best balance between land use, aesthetics, ecology, and cultural resource factors. ETI used this information along with engineering and construction constraints, reliability issues, and estimated costs to identify a route that it believes best addresses the requirements of PURA and PUC Substantive Rules. POWER's evaluation is discussed below.

7.1 POWER's Environmental Evaluation

POWER used a consensus process to evaluate the potential environmental impacts of the alternative routes. POWER professionals with expertise in different environmental disciplines (land use, ecology, and archeology) evaluated the 24 alternative routes based on the environmental conditions present along each route. This evaluation was based on data collected for separate environmental criteria, comments from local, state, and federal agencies, and field reconnaissance of the study area. Each POWER technical expert independently analyzed the routes and the environmental data presented in Table 4-1. The evaluators then met as a group and discussed their independent results. The group as a whole determined the relationship and relative sensitivity among the major environmental factors. The group then ranked the 24 alternative routes based strictly upon the environmental data considered.

Based on best professional judgment, the evaluators believed that all 24 alternative routes' overall potential impacts are minimal, and all were viable and acceptable from an overall environmental perspective. The evaluators each ranked the alternatives from 1st to 24th (with 1st having the least potential impact and 24th the greatest potential impact) from the perspective of their own area of expertise. In ranking each route, the evaluators considered the competing advantages and disadvantages of each route among the various criteria. For example, routes that pass through developed areas typically have higher land use impacts but lower ecological impacts. The results of this ranking are summarized in Table 7-1.

| ALTERNATIVE ROUTE | LAND USE SPECIALIST | ECOLOGY SPECIALIST | CULTURAL RESOURCES SPECIALIST | ASSISTANT PROJECT MANAGER | PROJECT MANAGER | CONSENSUS |
|----------------------|------------------------|-----------------------|-------------------------------------|---------------------------------|--------------------|------------------|
| Route 1 | 18 ʰ | 1 st | 1 st | 3rd | 3rd | 3rd |
| Route 2 | 3rd | 4 th | 9 th | 8 th | 10 th | 10 th |
| Route 3 | 10 " | 17th | 17 th | 12 th | 12 th | 12 th |
| Route 4 | 15 h | 2 nd | 16 th | 4 th | 4 th | 4 th |
| Route 5 | 5≞ | 9th | 23 rd | 9 th | 1 1 th | 11 th |
| Route 6 | 12 ʰ | 18 th | 14 th | 13 th | 13 th | 13 th |
| Route 7 | 16 th | 8 th | 2 nd | 1 st | 1 st | 1 st |

TABLE 7-1 POWER'S ENVIRONMENTAL RANKING OF ALTERNATIVE ROUTES

| ALTERNATIVE ROUTE | LAND USE SPECIALIST | ECOLOGY SPECIALIST | CULTURAL RESOURCES SPECIALIST | ASSISTANT PROJECT MANAGER | PROJECT MANAGER | CONSENSUS |
|----------------------|------------------------|-----------------------|-------------------------------------|---------------------------------|--------------------|------------------|
| Route 8 | 1st | 13 th | 19 th | 6 th | 8th | 8th |
| Route 9 | 9th | 19 th | 22 nd | 10 th | 6 th | 6 th |
| Route 10 | 21 st | 11 th | 20 th | 2 nd | 2 nd | 2 nd |
| Route 11 | 2 nd | 14 th | 2 4 th | 7 th | 9th | 9th |
| Route 12 | 1 1 th | 20th | 5 th | 11 th | 7th | 7th |
| Route 13 | 17 th | 3rd | 13 th | 14 th | 15 th | 15 th |
| Route 14 | 4 th | 12 th | 18 th | 22 nd | 19 th | 16 th |
| Route 15 | 19 th | 7th | 21 st | 24 th | 1 4 th | 14 th |
| Route 16 | 6 th | 10 th | 11 th | 16 th | 17 th | 17 th |
| Route 17 | 7th | 15 th | 15 th | 19 th | 18 th | 18 th |
| Route 18 | 22 nd | 24 th | 4 th | 17 th | 23 rd | 23 rd |
| Route 19 | 20th | 5 th | 3rd | 15 th | 16 th | 19 th |
| Route 20 | 13 th | 23 rd | 8 th | 5 th | 5 th | 5 th |
| Route 21 | 8th | 16 th | 7 th | 23 rd | 20 th | 20 th |
| Route 22 | 23 rd | 6 th | 6 th | 21 st | 21 st | 22 nd |
| Route 23 | 14th | 21 st | 12 th | 20 th | 22 nd | 21 st |
| Route 24 | 24 th | 22 nd | 10 th | 18 th | 24th | 24 th |

The land use evaluation placed the greatest importance on overall length of route, number of habitable structures within 500 feet of the route centerline, and the length at which the route crossed over the J.D. Murphree WMA. Comparing the 24 alternative routes from a land use perspective, Route 8 was selected as having the least-potential land use impact, followed in ranking by Route 11, Route 2, Route 14, and Route 5.

All the alternative routes are viable from an ecological impact perspective based on the evaluation of available ecological resource information. The potential ecological impacts were compared for each alternative route to rank each route for the purpose of POWER's consensus team recommendation. The acreage of route across NWI mapped forested or scrub/shrub wetlands, length of route across bottomland/riparian forest, and length of route across upland forest were the primary ecological criteria used to differentiate and rank each alternative route. The length of acreage across NWI mapped emergent wetlands, length of route across the J.D. Murphree WMA and NPS property were also considered. From an ecological impact perspective, Route 1 was ranked as having the least potential impact, followed by Route 4, Route 13, Route 2, and Route 19.

Based on the review of cultural resources information, all alternative routes are viable from a cultural resources' perspective. The cultural resources specialist ranked the routes based primarily on the percentage of the routes across HPAs. Route 1 was identified as having the least potential impact from a cultural resources' perspective, followed by Route 10, Route 11, Route 12, Route 13, Route 14, and Route 15.

The POWER Assistant Environmental Project Manager also ranked the routes, considering all the criteria. Overall length of the route, length utilizing existing electric facility ROW, and length paralleling existing electric facility ROW were the primary factors given the nature of the industrially developed study area. Again, given the nature of the study area, secondary factors

considered were length of route across bottomland/riparian woodland, acreage of route across NWI mapped wetlands, and length of route parallel (within 100 feet) to natural streams and rivers. Alternative Route 7 was selected by the POWER Assistant Environmental Project Manager as the best-balanced route considering all the criteria reviewed, followed by Route 10, Route 1, Route 4, Route 20, Route 9, and Route 12.

The POWER Environmental Project Manager also ranked the alternative routes, considering all the criteria. Overall length of the route, number of habitable structures, length paralleling or utilizing existing electric facility ROW (transmission) or other compatible ROW, length of route across J.D. Murphree WMA, length of route across bottomland/riparian forest, and acreage of route across NWI mapped forested or scrub/shrub and emergent wetlands were the primary factors given the nature of the study area. Route 7 was selected by the POWER Environmental Project Manager as the best-balanced route considering all the criteria reviewed, followed by Route 10, Route 1, Route 4, and Route 20.

Based on group discussion of the relative value and importance of each set of criteria (human, natural resources, and cultural) for this specific project, it was the consensus of the group that the overall length of the route, length utilizing existing electric facility ROW, and length paralleling existing electric facility ROW or other compatible ROW were the primary factors area in their decision for selecting the route and ranking the alternative routes. Following the evaluation by discipline, the group of POWER evaluators discussed the relative importance and sensitivity of the various criteria as they applied to all the alternative routes and the study area. Among these alternatives, and considering the environmental data in Table 4-1, it was the decision of the group that land use criteria should be primary route selection factors.

Following this decision, the group selected Route 7 as the route that best addresses PURA and PUC routing criteria from strictly an environmental, land use, and cultural resource perspective and then agreed on a ranking for the remaining alternatives, starting with the alternative route with the least potential impacts. The result of their discussion and decision is presented in Table 4-1. Following Route 7, the next top four routes were ranked as follows: Routes 10, 1, 4, and 20, in order of overall least potential impact. The differences between the 24 alternative routes are relatively narrow and share positive attributes however the decision to recommend Route 7 was based primarily on the following advantages among the objective criteria:

Route 7:

- » is tied with Routes 8 and 9 for most length of route parallel to existing electric facility ROW for 6.2 miles;
- » utilizes or parallels existing linear features (electric facility ROWs, other existing compatible ROWs, or apparent property lines or other natural of cultural features) for approximately 32% of its length;
- » tied with multiple routes for least amount of route across J.D. Murphree WMA property for 0.0 mile;
- » has the least amount of acreage or route across NWI mapped forested wetlands at approximately 42.1 acres;
- » has the second least amount of acreage of route across NWI mapped emergent wetlands at approximately 76.7 acres;
- » has below average length of route across bottomland/riparian forested areas at approximately 4.1 miles;

- » has below average length of route across high archeological/historical site potential at approximately 15.7 miles;
- » crosses no known occupied habitat of federally listed endangered or threatened species (according to TXNDD and USFWS published data); and
- » crosses no land irrigated by traveling systems (rolling or pivot type).

Route 7 also:

- » does not cross any additional park or recreational areas;
- » does not have any cemeteries within 1,000 feet of centerline; and
- » does not cross recorded historic or prehistoric sites.

POWER also considered Texas Parks and Wildlife Code Section 26.001, assuming it applies to the proposed routes and route segments, and concluded that the proposed routes meet the requirements of the section and that routes using Segment 110, such as Route 7, best align with the requirements of the section that: (1) there is no feasible and prudent alternative to the use or taking of land to which Section 26.001 applies; and (2) the program or project includes all reasonable planning to minimize harm to the land, as a park, recreation area, scientific area, wildlife refuge, or historic site, resulting from the use or taking.

POWER's Project Manager reviewed all the data and evaluations produced by the task managers and concurred with the rankings and recommendations for the alternative routes. Therefore, based upon its evaluation of this proposed Project and its experience and expertise in the field of transmission line routing, POWER recommends Route 7 from an overall environmental and land use perspective and the remaining routes as alternatives. Considering all pertinent factors related to environmental, land use, and cultural resources, it is POWER's opinion that these routes best satisfy the criteria specified in PURA § 37.056(c)(4) for consideration in the granting of CCNs.

The specification and inclusion of this route within the CCN application does not guarantee its approval by the PUC. It is included to facilitate the PUC administrative approval process, but all routes and route segments filed in the application are available for selection and approval by the PUC.

The map in Appendix C (Habitable Structures and Other Land Use Features in the Vicinity of the Primary Alternative Routes) shows the approximate locations of habitable structures (or groups of habitable structures) within 500 feet of the alternative routes and other land use features in the vicinity of all the alternative routes. Habitable structures and other land use features, such as communication towers and airports/airstrips, are listed including their distance and direction to the alternative routes in Tables 7-2 through 7-25 (Appendix E).

7.2 ETI's Route Selection

ETI used a consensus process to independently select Route 1 as the primary alternative route that ETI representatives believe best addresses the requirements of PURA and PUC Substantive Rules for this Project. ETI initially reviewed POWER's evaluation and recommendations, followed by a review of each alternative route. This review included the consideration of the factors and criteria listed in PURA and the PUC Substantive Rules including potential environmental, cultural, and land use impacts, engineering and construction constraints, reliability issues, and estimated costs. ETI concluded, after reviewing the results of POWER's routing study and a wide range of factors, including cost, that Route 1 is the route
which best overall addresses the requirements of PURA and the PUC Substantive Rules. Route 1 is POWER's third ranked route and therefore ranks well from an environmental, land use, and cultural resource perspective. As such, POWER supports ETI's route selection.

8.0 LIST OF PREPARERS

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

| RESPONSIBILITY | NAME | TITLE | | |
|--|----------------------------------|---|--|--|
| Environmental Project Manager | Scott Childress | Project Manager II | | |
| Assistant Environmental Project Manager/Project Coordinator | Ashley Brewer | Environmental Planner II | | |
| Natural Resources | Daniel Ray | Environmental Specialist IV | | |
| Land Use/Aesthetics | Ashley Brewer Alyssa Hamm | Environmental Planner II Environmental Planner I | | |
| Cultural Resources | Darren Schubert Emily Duke | Project Manager II Cultural Resource Specialist II | | |
| Maps/Figures/Graphics | Gray Rackley Jennifer Knowles | Senior GIS Analyst II GIS Analyst II | | |

9.0 REFERENCES

Abbot, James T. 2001. Houston Area Geoarcheology: A Framework for Archeological Investigation, Interpretation, and Cultural Resource Management in the Houston Highway Management District. *Archeological Studies Program Report* 27. Austin: Environmental Affairs Division, Texas Department of Transportation.

America's Scenic Byways. 2024. Texas. https://scenicbyways.info/. Accessed July 2024.

- Archambeault, Marie J. and Jeffrey D. Owens. 2005. *Cultural Resource Survey of the Proposed Lumberton 2.7-Mile Sewer Line and Lift Station along US Highway 69, Hardin County, Texas*. Horizon Environmental Services, Inc.; Austin.
- Aten, Lawrence E. 1979. Indians of the Upper Texas Coast: Ethnohistoric and Archaeological Frameworks. Ph.D. dissertation, Department of Anthropology, University of Texas at Austin.
 - _____. 1983. Indians of the Upper Texas Coast. New York: Academic Press.
- Aten, Lawrence E. and Charles Bollich 2005. Archeological Reconnaissance at Black Hill Mound, Jefferson County, Texas. City of Beaumont, Texas.
- Baker, A., P. Gonzalez, R.I.G. Morrison, and B.A. Harrington. 2020. Red Knot (*Calidris canutus*), version 1.0. In *Birds of the World* (S.M. Billerman, Editor). Cornell Lab of Ornithology, Ithaca, NY, USA. https://doi.org/10.2173/bow.redkno.01. Accessed August 2023.
- Blair, W.F. 1950. The Biotic Provinces of Texas. Texas Journal of Science 2:93-117.
- Block, W.T. 1976. A History of Jefferson County, Texas from Wilderness to Reconstruction. Master's Thesis, Lamar University. Nederland Publishing Company, Nederland, Texas.
- Bolton, H.E. 1970. Texas in the middle eighteenth century. The University of Texas Press, Austin.
- Boudreaux and Peyton 2019. A Phase I Cultural Resources Survey of the Garner Junction Project, Jefferson County, Texas. Perennial Environmental Services; Austin.
- Bradley, R.D., L.K. Ammerman, R.J. Baker, L.C. Bradley, J.A. Cook, R.C. Dowler, C. Jones, D. J. Schmidly, F.B. Stangl, Jr. R.A. Van Den Bussche, B.G. Würsig. 2014. Revised Checklist of North American Mammals North of Mexico. https://www.biodiversitylibrary.org/bibliography/157630. Accessed October 2024.
- Brownlow, Russell. 2003. An Intensive Cultural Resources Survey of Jefferson County Drainage District No. 6's Proposed Mayhew and Needmore Diversions and Green Pond Detention Basin, Jefferson County, Texas. Horizon Environmental Services, Inc., Austin.

- . 2005. An Intensive Cultural Resources Survey of the Proposed Widening of Jefferson County Drainage District No. 6's Griffing Ditch, Beaumont, Jefferson County, Texas. Horizon Environmental Services, Inc., Austin.
- Brownlow, Russell and Jeffrey D. Owens. 2016. Intensive Cultural Resources Survey of the Proposed ExxonMobil 54.2-Acre BPEX Equipment Laydown Site, Beaumont, Jefferson County, Texas. Horizon Environmental Services, Inc.; Austin.
- Buehler, D.A. 2020. Bald Eagle (*Haliaeetus leucocephalus*), version 1.0. In *Birds of the World* (A. F. Poole and F. B. Gill, Editors). Cornell Lab of Ornithology, Ithaca, NY, USA. https://doi.org/10.2173/bow.baleag.01. Accessed October 2023.
- Bureau of Economic Geology (BEG). 1992. Beaumont Sheet, Geologic Atlas of Texas, University of Texas at Austin, Bureau of Economic Geology. Scale 1:250,000.
- _____. 1992. Houston Sheet, Geologic Atlas of Texas, University of Texas at Austin, Bureau of Economic Geology. Scale 1:250,000.
 - ____. 1996. Physiographic Map of Texas. University of Texas. Austin, Texas.
- Campbell, L. 2003. Endangered and Threatened Animals of Texas: Their life history and management. Endangered Resource Branch, Texas Parks and Wildlife Department, Austin.
- Chesser, R.T., S.M. Billerman, K.J. Burns, C. Cicero, J.L. Dunn, B.E. Hernández-Baños, R.A. Jiménez, A.W. Kratter, N.A. Mason, P.C. Rasmussen, J.V. Remsen, Jr., and K. Winker. 2024. Check-list of North American Birds (online). American Ornithological Society. https://checklist.americanornithology.org/taxa/. Accessed October 2024.
- City of Beaumont. 2024. City of Beaumont. Planning. Comprehensive Plan. Development Strategies Plan: A Development/Re-Development/Conservation Guide for Beaumont and its Environs. https://www.beaumonttexas.gov/DocumentCenter/View/446/Comprehensive-Plan-PDF. Accessed August 2024.
- City of Port Arthur. 2018. City of Port Arthur. Comprehensive Plan. https://www.portarthurtx.gov/DocumentCenter/View/6609/Comprehensive-Plan. Accessed April 2025.
- Cochran, Jennifer L. 2020. A Phase I Cultural Resources Survey of the Sabine Neches HDD Pipeline Project, Jefferson County, Texas. Perennial Environmental Services; Austin.
- Collins, Michael B. 2002. The Gault Site. Texas and Clovis Research. Athena Review 3(2):24-36.
- Coulter, M.C., J.A. Rodgers Jr., J.C. Ogden, and F.C. Depkin. 1999. Wood Stork (*Mycteria americana*), version 2.0. In *The Birds of North America* (A.F. Poole and F.B. Gill, Editors). Cornell Lab of Ornithology, Ithaca, NY, USA. https://doi.org/10.2173/bna.409. Accessed August 2023.

- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service, Office of Biological Services, Washington, D.C.
- Crother, B.I. (ed.). 2017. Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding pp. 1–102. SSAR Herpetological Circular 43. https://ssarherps.org/wpcontent/uploads/2017/10/8th-Ed-2017-Scientific-and-Standard-English-Names.pdf. Accessed August 2023.
- Dafoe, Hilary, Patricia Hutchins, and Martin Handly. 2018. Phase I Cultural Resource Survey for the J. D. Murphree Wildlife Management Area - Texas Parks and Wildlife Department Portion of the Proposed Port Arthur Pipeline Project, for Port Arthur Pipeline, LLC located in Jefferson County, Texas. Texas Parks and Wildlife Department.
- Dixon, J.R. 2013. Amphibians and Reptiles of Texas: With keys, taxonomic synopses, bibliography, and distribution maps. W.L. Moody Jr. Natural History Series. Texas A&M University Press, College Station, Texas. 447 pp.
- Dixon J.R. and J.E. Werler. 2007. *Texas Snakes: Identification, Distribution, and Natural History*. University of Texas Press. Austin, Texas. 437 pp.
- Duncan 2023. "Hardin County," *Handbook of Texas Online.* https://www.tshaonline.org/handbook/entries/hardin-county. Accessed August 2023. Published by the Texas State Historical Association.
- Durst, Mara and Ashley Brown. 2009. City of Lumberton, Texas, Hardin County. DRS Round II/Critical Infrastructure Project, A Cultural Resource Inventory, Hardin County, Texas. Universal Ensco, Inc.; Houston.
- Elliott-Smith, E. and S.M. Haig. 2020. Piping Plover (*Charadrius melodus*), version 1.0. In *Birds of the World* (A.F. Poole, Editor). Cornell Lab of Ornithology, Ithaca, NY, USA. https://doi.org/10.2173/bow.pipplo.01. Accessed October 2023.
- Federal Aviation Administration (FAA). 2023a. National Aeronautical Charting Office. Houston Sectional Aeronautical Chart, Effective July 11, 2024.
- _____. 2023b. Chart Supplement South Central U.S. (Formerly known as the Airport/Facility Directory South Central U.S.). http://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/dafd/. Accessed May 2023.
- _____. 2023c. Airport Data and Contact Information. https://adip.faa.gov/agis/public/#/airportSearch/advanced. Accessed May 2023.
- Federal Communication Commission (FCC). 2023. Search FCC Database. https://www.fcc.gov/licensing-databases/search-fcc-databases. Accessed September 2023.
- Federal Emergency Management Agency (FEMA). 2024. National Flood Hazard Layer. https://msc.fema.gov/portal/search?AddressQuery=hardin%20county%2C%20texas. Accessed January 2024.

Federal Highway Administration. 2023. Federal Highway Administration. Byways. https://www.fhwa.dot.gov/byways. Accessed September 2023.

Foster, William C. 2008. Historic Native Peoples of Texas. University of Texas Press, Austin

- George, P.G., R.E. Mace, and R. Petrossian. 2011. Aquifers of Texas. Report No. 380. Texas. Water Development Board. Austin, Texas.
- Google Earth 2024. Aerial Maps. Google Earth, version 7.3.6.9345 Google, Inc.
- Gould, F.W., G.O. Hoffman, and C.A. Rechenthin. 1960. Vegetational areas of Texas. Texas Agricultural Extension Service. L-492.
- Griffith, G., S. Bryce, J. Omernik, and A. Rogers. 2007. Ecoregions of Texas. Project Report to Texas Commission on Environmental Quality. Austin, Texas. 125 pp.
- Haggard, John V. 2023. "NEUTRAL GROUND," *Handbook of Texas Online.* https://www.tshaonline.org/handbook/entries/neutral-ground. Accessed August 2023. Published by the Texas State Historical Association.
- Hall, Grant D. 1981. Allens Creek: a study in the cultural prehistory of the Lower Brazos River Valley, Texas. Technical Report 61, Texas Archeological Survey. The University of Texas at Austin, Texas.
- _____. 2000. Pecan Food Potential in Prehistoric North America. *Economic Botany* 54: 103-112.
- Harrel, J.B., C.M. Allen, and S.J. Hebert. 1996. "Movements and Habitat use of Subadult Alligator Snapping Turtles (*Macroclemys temminckii*) in Louisiana." *American Midland Naturalist* 135:61-67.
- Hatch, S.L., K.N. Gandhi, and L.E. Brown. 1990. Checklist of the Vascular Plants of Texas. Miscellaneous publication – Texas Agricultural Experiment Station, College Station, Texas.
- Henke S.E. and W.S. Fair. 1998. Management of Texas Horned Lizards. Wildlife Management Bulletin of the Caesar Kleberg Wildlife Research Institute. Texas A&M University-Kingsville. No.2.
- Hester, Thomas R. 1980. A Survey of Paleo-Indian Archaeological Remains along the Texas Coast. In Papers on the Archeology of the Texas Coast. Special Report No. 11. Lynn Highley and Thomas R. Hester, eds. Pp1-12. San Antonio: The University of Texas at San Antonio, Center for Archaeological Research.
- Howard, Margaret A., Gail L. Bailey, C. Britt Bousman, Karen M. Gardner, and Ross C. Fields. 1991. National Register Testing at the Spanish Moss Site (41GV10) and 41GV53, Galveston County, Texas. Reports of Investigations Number 77. Austin: Prewitt and Associates, Inc.
- Howells, R.G., R.W. Neck and H. Murray. 1996. Freshwater Mussels of Texas. University of Texas. Austin, Texas. 224pp.

- Hubbs, C. 1957. Distributional Patterns of Texas Fresh-water Fishes of Texas. *The Southwestern Naturalist*. Vol. 2(2/3):89-104.
- Hubbs, C., R.J. Edwards and G.P. Garrett. 2008. An Annotated Checklist of the Freshwater Fishes of Texas, with Keys to Identification of Species, 2nd edition. Texas Academy of Science. https://repositories.lib.utexas.edu/handle/2152/6290. Accessed October 2023.
- Jefferson County Drainage District No. Six (DD6). 2024. GIS Maps. https://apps.lja.com/jeffersondd6/assets. Accessed August 2024.
- Jefferson County Drainage District No. 7 (DD7). 2024. Files for Download. http://dd7.org/downloads.asp. Accessed August 2024.
- Kenmotsu, Nancy A, and Timothy K. Perttula. 1993. Archeology in the Eastern Planning Region, Texas: A Planning Document. Division of Antiquities Protection, Cultural Resource Management Report 3. Texas Historical Commission, Austin.
- Kleiner, Diana J. 2023. "Jefferson County". *Handbook of Texas Online.* https://www.tshaonline.org/handbook/entries/jefferson-county. Accessed August 2023. Published by the Texas State Historical Association.
- Koczur, L.M., M.C. Green, B.M. Ballard, P.E. Lowther, and R.T. Paul. 2020. Reddish Egret (*Egretta rufescens*), version 1.0. In *Birds of the World* (P.G. Rodewald, Editor). Cornell Lab of Ornithology, Ithaca, NY, USA. https://doi.org/10.2173/bow.redegr.01. Accessed October 2023.
- Lang, Aldon S. and Christopher Long. 2023. "LAND GRANTS." Handbook of Texas Online. https://www.tshaonline.org/handbook/entries/land-grants. Accessed August 2023. Published by the Texas State Historical Association.
- Lockwood, M.W. and B. Freeman. 2014. The TOS Handbook of Texas Birds, Second edition, Revised. Texas A&M University Press. College Station, Texas. 403 pp.
- Loeb, S.C., M.J. Lacki, and D.A. Miller, eds. 2011. Conservation and management of eastern big-eared bats: a symposium. Gen. Tech. Rep. SRS-145. Asheville, NC: US Department of Agriculture, Forest Service, Southern Research Station. 157 pp.
- McGuff, P.R. and W. Roberson. 1974. Lower Sabine and Neches Rivers, Texas and Louisiana: a study of the prehistoric and historic resources in areas under investigation for navigation improvement. Texas Archaeological Survey, Research Report No. 46. The University of Texas at Austin.
- Meyer, K.D. 1995. Swallow-tailed Kite (*Elanoides forficatus*), version 2.0. *The Birds of North America* (A.F. Poole and F.B. Gill, Editors). Cornell Lab of Ornithology, Ithaca, NY, USA. https://doi.org/10.2173/bna.138. Accessed October 2023.
- Miller, M.H., J. Carlson, L. Hogan, and D. Kobayashi. 2014. Status review report: great hammerhead shark (*Sphyrna mokarran*). Final Report to National Marine Fisheries Service, Office of Protected Resources. Accessed June 2024.

- Munscher, E.J. Gray, A. Tuggle, D. Ligon, V. Gladkaya, C. Drake, V. Ricardez, B.P. Butterfield, K. Norrid, and A. Walde. 2020. Discovery of an Alligator snapping Turtle (*Macrochelys temminckii*) Population in Metropolitan Houston, Harris County, Texas. Urban Naturalist 32:1-13.
- National Agricultural Imagery Program. 2024. Liberty and Montgomery Counties, Texas. http://gis.apfo.usda.gov/arcgis/services. Accessed December 2024.
- National Conservation Easement Database (NCED). 2024a. NCED Easements. https://site.tplgis.org/NCED/planningapp/. Accessed August 2024.
- _____. 2024b. NCED Easements. https://www.conservationeasement.us/about/. Accessed August 2024.
- National Marine Fisheries Service and United States Fish and Wildlife Service (NMFS and USFWS). 1993, Recovery Plan for Hawksbill Turtles in the U.S. Caribbean Sea, Atlantic Ocean, and Gulf of Mexico. https://ecos.fws.gov/docs/recovery_plan/931110.pdf. Accessed October 2023.
- National Marine Fisheries Service (NMFS). 2011. Final Recovery Plan for the Sei Whale (*Balaenoptera borealis*). National Marine Fisheries Service, Office of Protected Resources, Silver Spring, MD. 108 pp. https://repository.library.noaa.gov/view/noaa/15977. Accessed October 2023.
- National Oceanic and Atmospheric Administration (NOAA). 2024a. Species Directory: Kemp's Ridley Turtle. https://www.fisheries.noaa.gov/species/kemps-ridley-turtle. Accessed October 2024.
- . 2024b. Species Directory: Hawksbill Turtle. https://www.fisheries.noaa.gov/species/hawksbill-turtle. Accessed October 2024.
- . 2024c. Species Directory: Green Turtle. https://www.fisheries.noaa.gov/species/greenturtle. Accessed October 2024.
- . 2024d. Species Directory: Leatherback Turtle. https://www.fisheries.noaa.gov/species/leatherback-turtle. Accessed October 2024.
- . 2024e. Species Directory: Loggerhead Turtle. https://www.fisheries.noaa.gov/species/loggerhead-turtle. Accessed October 2024.
- _____. 2024f. Species Directory: Oceanic Whitetip Shark. https://www.fisheries.noaa.gov/species/oceanic-whitetip-shark. Accessed October 2024.
- _____. 2024g. Species Directory: Atlantic Shortfin Mako Shark. https://www.fisheries.noaa.gov/species/atlantic-shortfin-mako-shark. Accessed October 2024.
- . 2024h. Species Directory: Dwarf Sperm Whale. https://www.fisheries.noaa.gov/species/gervais-beaked-whale. Accessed October 2024.
- . 2024i. Species Directory: False Killer Whale. https://www.fisheries.noaa.gov/species/false-killer-whale. Accessed October 2024.

- _____. 2024j. Species Directory: Finback Whale. https://www.fisheries.noaa.gov/species/finwhale. Accessed October 2024.
- _____. 2024k. Species Directory: Gervais's Beaked Whale. https://www.fisheries.noaa.gov/species/gervais-beaked-whale. Accessed October 2024.
- . 2024l. Species Directory: Rice's Whale. https://www.fisheries.noaa.gov/species/riceswhale Accessed October 2024.
- _____. 2024m. Species Directory: Killer Whale. https://www.fisheries.noaa.gov/species/killerwhale. Accessed October 2024.
- . 2024n. Species Directory: North Atlantic Right Whale. https://www.fisheries.noaa.gov/species/north-atlantic-right-whale. Accessed October 2024.
- _____. 2024o. Species Directory: Pygmy Killer Whale. https://www.fisheries.noaa.gov/species/pygmy-killer-whale. Accessed October 2024.
- . 2024p. Species Directory: Pygmy Sperm Whale. https://www.fisheries.noaa.gov/species/pygmy-sperm-whale. Accessed October 2024.
- . 2024q. Species Directory: Rough-toothed Dolphin. https://www.fisheries.noaa.gov/species/rough-toothed-dolphin. Accessed October 2024.
- . 2024r. Species Directory: Short-finned Pilot Whale. https://www.fisheries.noaa.gov/species/short-finned-pilot-whale. Accessed October 2024.
- _____. 2024s. Species Directory: Sperm Whale. https://www.fisheries.noaa.gov/species/spermwhale. Accessed October 2024.
- National Park Service (NPS). 2023a. National Parks. Texas. http://www.nps.gov/state/tx/index.htm?program=all. Accessed September 2023.
- _____. 2023b. National Trail System. https://www.nps.gov/nts/. Accessed August 2023 (last updated August 30, 2023).
- . 2023c. National Historic Landmarks Program List of NHLs by State. https://www.nps.gov/subjects/nationalhistoriclandmarks/list-of-nhls-bystate.htm#onthisPage-43. Accessed August 2023.
- _____. 2023d. National Register of Historic Places Program. https://www.nps.gov/maps/full.html?mapId=7ad17cc9-b808-4ff8-a2f9-a99909164466. Accessed August 2023.
- National Wild and Scenic Rivers System. 2023. National Wild and Scenic Rivers System Wild and Scenic Rivers by State. http://rivers.gov/map.php. Accessed August 2023.
- Natural Resources Conservation Service (NRCS). 2023a. NRCS Soil Web Survey. http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm. Accessed October 2023.

- . 2023b. Soil Survey Area Soil Data Access (SDA) Hydric Soils Rating by Map Unit. https://www.nrcs.usda.gov/publications/Hydric%20Soils%20Rating%20by%20Map%20U nit%205%20class.html. Accessed October 2023.
- NatureServe. 2023. An Online Encyclopedia of Life. http://explorer.natureserve.org/servlet/. Accessed October 2024.
- Newcomb, W.W. 1961. The Indians of Texas: From Prehistoric to Modern Times. Austin: University of Texas Press.
- Owens, Jeffrey D. 2008. Intensive Cultural Resources Survey of the Green Acres Storm Water System Project, Fannett, Jefferson County, Texas. Horizon Environmental Services, Inc.; Austin.
- . 2009a. Intensive Cultural Resources Survey of 34 Acres of Dredge Disposal Areas along Bayou Din, Beaumont, Jefferson County, Texas. Horizon Environmental Services, Inc.; Austin.
- . 2009b. Intensive Cultural Resources Survey of 7 Miles of Proposed Dredge Disposal Areas Along Green Pond Gully, Beaumont, Jefferson County, Texas. Horizon Environmental Services, Inc.; Austin
- . 2015. Intensive Cultural Resources Survey for the Proposed Coon Marsh Gully Drainage Improvements Project, Hardin County, Texas. Horizon Environmental Services, Inc.; Austin.
- Owens, Jeffrey D., and Jesse O. Dalton. 2020. Intensive Cultural Resources Survey of the Proposed 63.8-acre Labelle Laydown Yard, Jefferson County, Texas. Horizon Environmental Services, Inc.; Austin.
- Parsons, Brinckerhoff, Quade & Douglas Inc. 2001. US 69 Archeological Resources Technical Memorandum. Parsons, Brinckerhoff, Quade & Douglas Inc.; Austin.
- Patterson, L.W. 1980. The Owen Site, 41HR315: A Long Occupation Sequence in Harris County, Texas. Report No. 3. Houston: Houston Archeological Society.

- Perttula, Timothy K. 2004. An Introduction to Texas Prehistoric Archeology. In The Prehistory of Texas, Perttula, T.K, ed. Texas University A&M Press, College Station.
- PLATTS. 2023. McGraw Hill Financial, Inc., 2 Penn Plaza, New York, New York. Accessed August 2023.
- Poole, J.M., W.R. Carr, D.M. Price, and J.R. Singhurst. 2007. Rare Plants of Texas. Texas A&M University Press, College Station, Texas. 640 pp.
- Railroad Commission of Texas (RRC). 2023a. Public GIS Viewer (Map). https://gis.rrc.texas.gov/GISViewer/. Accessed January 2024.

_____. 1995. Southeast Texas Archeology. Report Number 12. Houston Archeological Society.

- _____. 2023b. Surface Coal Mine County Information. https://www.rrc.texas.gov/surfacemining/historical-coal-mining/mining-regions-fields-and-sites/. Accessed January 2024.
- . 2023c. Permits. Permitted Coal Mining Locations. https://www.rrc.texas.gov/surfacemining/permits/surface-coal-mine-county-information/ /. Accessed January 2024.
- . 2023d. Texas Uranium Exploration Permits. https://www.rrc.texas.gov/surfacemining/programs/uranium-exploration/texas-uranium-exploration-permits/. Accessed January 2024.
- Renaud, M.L. and J.A. Williams. 1995. Movements of Kemp's Ridley (*Lepidochelys kempii*) and Green (*Chelonia mydas*) Sea Turtles Using Lavaca Bay and Matagorda Bay. May 1994– May 1995. Final Report: U.S. Army Corps of Engineers, Galveston and New Orleans Districts. https://chelonian.org/wp-content/uploads/file/CCB_Vol_4_Nos1-4(2001-2005)/Renaud_and_Williams_2005a.pdf. Accessed October 2023.
- Ricklis, Robert A. 2004. Prehistoric Occupation of the Central and Lower Texas Coast: A Regional Overview. In The Prehistory of Texas, edited by Timothy K. Perttula, pp.155-180. Texas A&M University Press, College Station.
- Ryan, Joanne, and Charles E. Pearson. 2007. Calcasieu River and Pass Dredged Material Management Plan, Calcasieu and Cameron Parishes, Louisiana: Cultural Resources Literature Search, Records Review and Research Design. Prepared for U.S. Army Corps of Engineers, New Orleans District. Coastal Environments, Inc.
- Ryder, R.A. and D.E. Manry. 2020. White-faced Ibis (*Plegadis chihi*), version 1.0. In *Birds of the World* (A.F. Poole and F.B. Gill, Editors). Cornell Lab of Ornithology, Ithaca, NY, USA. https://doi.org/10.2173/bow.whfibi.01. Accessed October 2023.
- Sabine-Neches Navigation District. 2024. About Us. https://navigationdistrict.org/about/. Accessed August 2024.
- Schaadt, Rober L. 2023. "HARDIN, WILLIAM (1801–1839)." Handbook of Texas Online. https://www.tshaonline.org/handbook/entries/jefferson-county. Accessed August 2023. Published by the Texas State Historical Association.
- Schmidly, D.J. and R.D. Bradley. 2016. *The Mammals of Texas*, Seventh Edition. University of Texas Press, Austin, Texas. 720pp.
- Stutzenbaker, C.D. 2010. Aquatic and Wetland Plants of the Western Gulf Coast. Texas A&M University Press, Texas A&M University Press, College Station, Texas. 465 pp.
- Scott, Tony, James Hughey and John Picklesimer. 2009. Cultural Resource Management Survey of the Golden Pass LNG Pipeline Project in Jefferson, Orange, and Newton Counties, Texas. HRA Gray and Pape, LLC; Houston.
- Sick, Rebecca, Russell Brownlow, and Jeffrey D. Owens. 2005a. An Intensive Cultural Resources Survey of a Proposed 48-Acre Wastewater Treatment Plant Expansion Tract in Lumberton, Hardin County, Texas. Horizon Environmental Services, Inc.; Austin.

- ____. 2005b. An Intensive Cultural Resources Survey of the Proposed Lumberton 2.9-Mile Sewer Line, Hardin County, Texas. Horizon Environmental Services, Inc.; Austin.
- South East Texas Regional Planning Commission (SETRPC). 2024. Planning. https://www.setrpc.org/planning/. Accessed August 2024.
- Story, Dee Ann. 1985. Adaptive Strategies of Archaic Cultures of the West Gulf Coastal Plain. In Prehistoric Food Production in North America. R.I. Ford, ed. Pp 19-56. Anthropological Papers No. 75. Ann Harbor: Museum of Anthropology, University of Michigan.
- Story, Dee Ann, Janice A. Guy, Barbara A. Burnett, Martha Doty Freeman, Jerome C. Rose, D. Gentry Steele, Ben W. Olive, and Karl J. Reinhard. 1990. *The Archeology and Bioarcheology of the Gulf Coastal Plain*: Volume 1. Research Series No. 38. Fayetteville: University of Arkansas, Arkansas Archeological Survey.
- Stutzenbaker, Charles D. 2010. Aquatic and Wetland Plants of the Western Gulf Coast. Texas A&M University Press, Texas A&M University Press, College Station, Texas. 465 pp.
- Texas Commission on Environmental Quality (TCEQ). 2024. Draft 2024 Texas Integrated Report of Surface Water Quality for the Clean Water Act Sections 305(b) and 303(d). https://www.tceq.texas.gov/downloads/water-quality/assessment/integrated-report-2024/2024-303d. Accessed October 2024.
- . 2023a. Aggregate Production Site Maps. https://data.texas.gov/stories/s/Search-for-Active-Aggregate-Production-Operations/9kvs-ig69/. Accessed October 2023.
- . 2023b. Superfund Sites by County. https://www.tceq.texas.gov/remediation/superfund/sites/county/index.html. Accessed October 2023.
- _____. 2023c. Central File Room Online. https://records.tceq.texas.gov/cs/idcplg?IdcService=TCEQ_SEARCH. Accessed October 2023.
- . 2024. 2024 Texas Integrated Report of Surface Water Quality for the Clean Water Act Sections 305(b) and 303(d). https://www.tceq.texas.gov/downloads/waterquality/assessment/integrated-report-2024/2024-303d. Accessed October 2024.
- Texas Department of Transportation (TxDOT). 2023a. County Grid Map Search. http://www.dot.state.tx.us/apps-cg/grid_search/county_grid_search.htm. Accessed September 2023.
- _____. 2023b. Project Tracker. https://www.txdot.gov/projects/project-tracker.html. Accessed March 2025.
- _____. 2023c. Historic Resources of Texas Aggregator. https://txdot.maps.arcgis.com/apps/webappviewer/index.html?id=e13ba0aa78bf4548a8e 98758177a8dd5. Accessed August 2023.

- Texas Education Agency (TEA). 2020. School District Locator. http://teatexas.maps.arcgis.com/apps/Solutions/s2.html?appid=8b1d6f13310a49f48aa7052fe13f5 05a. Accessed September 2023.
- Texas General Land Office (TGLO). 2023a. Coastal Management Plan. http://www.glo.texas.gov/coast/grant-projects/cmp/index.html. Accessed October 2023.

_____. 2023b. GIS Maps and Data. Coastal Zone Boundary download. https://www.glo.texas.gov/land/land-management/gis/index.html. Accessed October 2023.

Texas Historical Commission (THC). 2023a. Texas Historic Sites Atlas (THSA). https://atlas.thc.texas.gov/ Accessed August 2023.

- Texas Land Conservancy. 2024. Protected Lands. https://texaslandconservancy.org/our-work/. Accessed August 2024.
- Texas Natural Diversity Database (TXNDD). 2023. Data Request. Texas Parks and Wildlife Department. Texas Biological and Conservation Data System. Austin, Texas. (Report Received February 10, 2023).
- Texas Parks and Wildlife Department (TPWD). 2007. National Bald Eagle Guidelines. https://www.fws.gov/sites/default/files/documents/national-bald-eagle-managementguidelines_0.pdf. Accessed November 2024.
- . 2009. 15 Texas Freshwater Mussels Placed on State Threatened List: Nov. 5, 2009. https://tpwd.texas.gov/newsmedia/releases/?req=20091105c. Accessed November 2023.
- _____. 2023a. Water Planning Data for Region I. https://tpwd.texas.gov/landwater/water/conservation/water_resources/water_quantity/sig segs/regioni.phtml. Accessed August 2023.
- _____. 2023b. Texas Ecosystems Analytical Mapper. https://tpwd.texas.gov/gis/team/. Accessed December 2023.
- . 2023d. TPWD Tricolored Bat (*Perimyotis subflavus*). https://tpwd.texas.gov/huntwild/wild/species/easpip/. Accessed November 2023.
- _____. 2023e. Texas Parks and Wildlife Find a Park. https://tpwd.texas.gov/state-parks/parksmap. Accessed August 2023.
- . 2023f. Wildlife Management Areas: Discover Texas Through Maps. https://tpwd.texas.gov/huntwild/hunt/wma/find_a_wma/. Accessed August 2023.
- _____. 2023g. Texas Public Hunting Locations. https://tpwd.maps.arcgis.com/apps/webappviewer/index.html?id=c9788957300943559f7 b49206e8ef153. Accessed August 2023.

^{. 2023}b. Texas Archeological Sites Atlas (TASA). Restricted Access https://atlas.thc.texas.gov. Accessed August 2023.

. 2023h. Texas Parks and Wildlife. Great Texas Wildlife Trails. Central Texas Coast – Great Texas Coastal Birding Trail. Big Thicket Loop. https://tpwd.texas.gov/huntwild/wildlife/wildlife-trails/utc/big-thicket-loop. Accessed May 2023.

. 2023i. Texas Parks and Wildlife. Great Texas Wildlife Trails. Central Texas Coast – Great Texas Coastal Birding Trail. Sabine Loop. https://tpwd.texas.gov/huntwild/wildlife/wildlife-trails/utc/sabine-loop. Accessed May 2023.

- _____. 2024a. Rare, Threatened and Endangered Species of Texas Query by County. http://tpwd.texas.gov/gis/rtest/. Accessed October 2024.
- _____. 2024b. Yellow-billed cuckoo (Coccyzus americanus). https://tpwd.texas.gov/huntwild/wild/species/yellowbilledcuckoo/. Accessed October2024.
- Texas State Data Center (TSDC). 20223. Data. Texas Population Projections Program. 2022 Population Projections Data Downloads. https://demographics.texas.gov/projections/2022/ Accessed September 2023..
- Texas State Historical Association (TSHA). 2023. Morgan Lines. *Handbook of Texas Online*. https://www.tshaonline.org/handbook/entries/morgan-lines. Accessed August 2023. Published by the Texas State Historical Association.
- Texas Water Development Board (TWDB). 1975. Major and Historical Springs of Texas. Texas Water Development Board, Report 189. Austin, Texas.
- _____. 2021. 2021 Regional Water Plan. Region I Water Planning Group. https://www.etexwaterplan.org/dc/final-chapters/. Accessed November 2023.
- . 2022. 2022 State Water Plan-Water for Texas. https://2022.texasstatewaterplan.org/statewide. Accessed November 2023.

____.2023. Water Data Interactive. https://www3.twdb.texas.gov/apps/waterdatainteractive/groundwaterdataviewer. Accessed August 2023.

- The Nature Conservancy. 2024. Texas. Places We Protect. https://www.nature.org/en-us/getinvolved/how-to-help/places-we-protect/. Accessed August 2024.
- Thomas, C., T.H. Bonner, and B.G. Whiteside. 2007. Freshwater Fishes of Texas a field guide. Texas A&M University Press. College Station, Texas.
- Thompson, B.C., J.A. Jackson, J. Burger, L.A. Hill, E.M. Kirsch, and J.L. Atwood (2020). Least Tern (*Sternula antillarum*), version 1.0. In Birds of the World (A.F. Poole and F.B. Gill, Editors). Cornell Lab of Ornithology, Ithaca, NY, USA. https://doi.org/10.2173/bow.leater1.01. Accessed October 2024.
- Troia, M.J. and N.B. Ford. 2010. "Notes on Habitat and Burrowing Behavior of Obovaroa Jacksoniana (*Bivalvia: Unionidae*) in the Upper Neches River of East Texas." *Texas Journal of Science* 62(3):195–204.

United States Army Corps of Engineers (USACE). 2011. Navigable waters of the United States in the Fort Worth, Albuquerque, and Tulsa Districts Within the State of Texas – December 20, 2011. https://www.swf.usace.army.mil/Portals/47/docs/regulatory/NavList2011.pdf. Accessed

October 2023.

- 2024. Regulatory In-lieu Fee and Bank Information Tracking System. Banks an ILF Sites. Mitigation Banks. https://ribits.ops.usace.army.mil/ords/f?p=107:2. Accessed August 2024.
- United States Census Bureau (USCB). 2010. Quickfacts. https://www.census.gov/quickfacts/fact/table/jeffersoncountytexas,hardincountytexas,US /POP010210. Accessed September 2023.
- . 2023. Explore Census Data. Advanced Search. https://data.census.gov/cedsci/advanced. Accessed May 2023.
- United States Department of Agriculture (USDA). 2017. 2017 Census of Agriculture Texas State and County Profiles. https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/Texas/. Accessed September 2023.
- _____. 2012. 2012 Census of Agriculture Texas State and County Profiles. https://agcensus.library.cornell.edu/census_year/2012-census/. Accessed May 2023.
- United States Department of Transportation. 2023. Federal Railroad Administration Safety Map. https://fragis.fra.dot.gov/GISFRASafety/. Accessed September 2023.
- United States Environmental Protection Agency (USEPA). 2023a. Superfund Sites Where You Live. http://www.epa.gov/superfund/sites/. Accessed September 2023.
 - . 2023b. WATERS GeoViewer. https://www.epa.gov/waterdata/waters-geoviewer Accessed October 2023.
- United States Fish and Wildlife Service (USFWS). 2009. Whooping Cranes and Wind Development, An issue Paper. USFWS Region 2 and Region 6, April 2009.
- . 2023a. Nationwide Rivers Inventory. https://www.nps.gov/maps/full.html?mapId=8adbe798-0d7e-40fb-bd48-225513d64977. Accessed October 2023.
- _____. 2023b. National Wetland Inventory (NWI) Mapper. https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/ Accessed October 2023.
 - ____. 2023d. Eastern Black Rail (*Laterallus jamaicensis jamaicensis*). https://www.fws.gov/species/eastern-black-rail-laterallus-jamaicensis-jamaicensis. Accessed October 2023.
- . 2023e. Piping Plover Conditional Ranges. https://ipac.ecosphere.fws.gov/legacy/conditionalRangeInformation?populationId=131&f eatureRangeIds=161208. Accessed October 2023.

| | 2023f. Red Knot Conditional Ranges. https://ipac.ecosphere.fws.gov/legacy/conditionalRangeInformation?populationId=8621& tabularRangeIds=168490. Accessed October 2023. |
|--------|---|
| | 2023g. Alligator Snapping Turtle (<i>Macrochelys temminckii</i>). https://ecos.fws.gov/ecp/species/4658. Accessed October 2023. |
| | 2023h. Monarch (<i>Danaus plexippus</i>). https://www.fws.gov/species/monarch-danaus- plexippus. Accessed October 2023. |
| | 2023i. Texas Fawnsfoot. https://www.fws.gov/species/texas-fawnsfoot-truncilla- macrodon. Accessed October 2023. |
| | 2023j. Texas Heelsplitter (<i>Potamilus amphichaenus</i>). https://ecos.fws.gov/ecp/species/299#:~:text=Habitat%20Requirements,timber%20(How ells%202014%2C%20p. Accessed October 2023. |
| | 2024. Information for Planning and Conservation (IPaC). (Project Code: 2025-0033536 Report Requested and Received December 18, 2024. |
| United | States Forest Service. 2023. National Forests and Grasslands in Texas. Interactive Visitor Map. https://www.fs.usda.gov/ivm/. Accessed August 2023. |
| United | States Geological Survey (USGS). 1943. Voth, Texas 7.5-minute quadrangle map. |
| | 1945. Fannett East, Texas 7.5-minute quadrangle map. |
| | 1955. Silsbee, Texas 7.5-minute quadrangle map. |
| | 1957. Port Arthur South, Texas 7.5-minute quadrangle map. |
| | 1960a. Beaumont East, Texas 7.5-minute quadrangle map. |
| | 1960b. Beaumont West, Texas 7.5-minute quadrangle map. |
| | 1962a. Alligator Hole Marsh, Texas 7.5-minute quadrangle map. |
| | 1962b. Big Hill Bayou, Texas 7.5-minute quadrangle map. |
| | 1962c. Fannett West, Texas 7.5-minute quadrangle map. |
| | 1962d. Port Acres, Texas 7.5-minute quadrangle map. |
| | 1984a. Bevil Oaks, Texas 7.5-minute quadrangle map. |
| | 1984b. Kountze South, Texas7.5-minute quadrangle map. |
| | 1985. China, Texas 7.5-minute quadrangle map. |
| | 2004. Hydrogeology and Simulation of Ground-Water Flow and Land-Surface Subsidence in the Northern Part of the Gulf Coast Aquifer System, Texas. U.S. |

Geological Services. Scientific Investigations Report 2004–5102. http://pubs.usgs.gov/sir/2004/5102/pdf/sir2004-5102.pdf. Accessed August 2023.

- 2019. United States Geologic Survey 7.5-minute quadrangle maps for Alligator Hole Marsh, Beaumont East, Beaumont West, Bevil Oaks, Big Hill Bayou, China, Fannett East, Fannett West, Kountze South, Port Acres, Port Arthur North, Port Arthur South, Silsbee, and Voth, TX. The quadrangle maps were accessed through The National Map: https://viewer.nationalmap.gov/advanced-viewer/. Accessed January 2024.
- ____. 2023. The National Map. https://apps.nationalmap.gov/viewer/ Accessed August 2023.
- Urbanek, R.P. and J.C. Lewis. 2020. Whooping Crane (*Grus americana*), version 1.0. In *Birds of the World* (A.F. Poole, Editor). Cornell Lab of Ornithology, Ithaca, NY, USA. https://doi.org/10.2173/bow.whocra.01. Accessed October 2023.
- Voellinger, Leonard R., Robert M. Rogers, and Patricia E. McCoy. 1990. *The Geoarchaeology* of the Hillebrandt Bayou Drainage Improvement, Jefferson County, Texas. Espey, Huston and Associates, Inc.; Austin.
- Washington, J. Philip. 2020. An Intensive Cultural Resources Survey for the Cheek PRM Site Project, Jefferson County, Texas. BGE, Inc.; Houston
- Weddle, Robert S. 1985. The Spanish Sea: The Gulf of Mexico in North American Discovery, 1500–1685. Texas A&M University Press, College Station, Texas.
- . 2023. "La Salle Expedition". *Handbook of Texas Online*. https://www.tshaonline.org/handbook/entries/la-salle-expedition. Accessed August 2023. Published by the Texas State Historical Association.
- Wheat, Joe Ben. 1953. The Addicks Dam Site: An Archeological Survey of the Addicks Dam Basin, Southeast Texas. River Basin Surveys Papers No. 4, Part 1. Bureau of American Ethnology Bulletin 154. Pp. 143-252.
- Wheeler, R.L., compiler. 1999. Fault number 924, Gulf-margin normal faults, Texas, in Quaternary fault and fold database of the United States: U.S. Geological Survey website. https://earthquake.usgs.gov/cfusion/qfault/show_report_AB_archive.cfm?fault_id=1022& section_id=. Accessed October 2023.
- Willey, Gordon R. and Phillip Phillips. 1958. Method and Theory in American Archaeology. Chicago: University of Chicago Press.
- Wolverton, S. and C.R. Randklev. 2016. Archaeological Data Indicate a Broader Late Holocene Distribution of the Sandbank Pocketbook (Unionidae: *Lampsilis satura* Lea 1852) in Texas. American Malacological Bulletin 34(2):133-137. http://dx.doi.org/10.4003/006.034.0209. Accessed October 2023.
- Wooster, Robert and Christine Moor Sanders. 2023. Spindletop Oilfield. Handbook of Texas Online. https://www.tshaonline.org/handbook/entries/spindletop-oilfield. Accessed August 2023. Published by the Texas State Historical Association.

- Wright, G.D., M.J. Harner, and J.D. Chambers. 2014. Unusual wintering distribution and migratory behavior of the Whooping Crane (*Grus americana*) in 2011–2012. The *Wilson Journal of Ornithology* 126(1), 115-120. https://doi.org/10.1676/13-071.1. Accessed October 2023.
- Young, Brandon S. 2020. Survey for State Highway 105 from SH 326 to Sweetgum Road, Hardin County, Texas, Beaumont District. Texas Department of Transportation; Sour Lake, Texas.

APPENDIX A AGENCY CORRESPONDENCE

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FEDERAL

Mr. Rob Lowe Southwest Regional Administrator Federal Aviation Administration 10101 Hillwood Parkway Fort Worth, TX 76177

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

Mr. Steven Sample Executive Director Military Aviation and Installation Assurance Siting Clearinghouse 3400 Defense Pentagon, Room 5C646 Washington, DC 20301-3400

Ms. Kate Hammond Regions 6, 7, and 8 Acting Director National Parks Service 12795 West Alameda Parkway Denver, CO 80225 IMRextrev@nps.gov

Ms. Whitny Howeth Program Manager, Resource Management Big Thicket National Preserve 6044 FM 420 Kountze, TX 77625

Ms. Kristy Oates State Conservationist NRCS Texas State Office 101 South Main Street Temple, TX 76501

Colonel Rhett A. Blackmon Commander and District Engineer U.S. Army Corps of Engineers – Galveston District CESWGRegulatoryInbox@usace.army.mil Real Estate Division U.S. Army Corps of Engineers – Galveston District swg-re@usace.army.mil

Attachment 1

Ms. Earthea Nance Region 6 Administrator U. S. Environmental Protection Agency 1201 Elm Street, Suite 500 Dallas, TX 75270

STATE

Ms. Leslie Savage Chief Geologist Railroad Commission of Texas P.O. Box 12967 Austin, TX 78711-2967

Ms. Kathryn Sauceda Region 10 Director - Beaumont Texas Commission on Environmental Quality 3870 Eastex Freeway Beaumont, TX 77703-1830

Mr. Dan Harmon Director, Aviation Division Texas Department of Transportation 6230 E. Stassney Lane Austin, TX 78744

Mr. Doug Booher Director, Environmental Affairs Division Texas Department of Transportation 6230 E. Stassney Lane Austin, TX 78744

Mr. Humberto "Tito" Gonzalez Jr., P.E. Director, Transportation Planning & Programming Texas Department of Transportation 6230 E. Stassney Lane Austin, TX 78744

Attachment 1 ENTERGY TEXAS INC. CYPRESS TO LEGEND 500 kV TRANSMISSION LINE PROJECT FEDERAL, STATE, AND COUNTY/LOCAL AGENCIES

Mr. Martin Gonzalez, P.E. Beaumont District Engineer Texas Department of Transportation 8350 Eastex Freeway Beaumont, TX 77708

Ms. Dawn Buckingham, M.D. Commissioner Texas General Land Office 1700 North Congress Ave., Suite 935 Austin, TX 78701-1495

Mr. Mark Wolfe Executive Director Texas Historical Commission P.O. Box 12276 Austin, TX 78711

Ms. Laura Zebehazy Program Leader Wildlife Habitat Assessment Program Texas Parks and Wildlife Department WHAB@tpwd.texas.gov

Mr. Michael Rezsutek J.D. Murphree Wildlife Management Area 10 Parks & Wildlife Dr. Port Arthur, TX 77640

Mr. Jeff Walker Executive Administrator Texas Water Development Board 1700 North Congress Avenue P.O. Box 13231 Austin, TX 78711-3231

Mr. Scott Hall, P.E. General Manager Lower Neches Valley Authority P.O. Box 5117 Beaumont, TX 77726-5117

COUNTY / LOCAL HARDIN COUNTY

The Honorable Wayne McDaniel County Judge Hardin County 300 West Monroe Street Kountze, TX 77625

The Honorable L.W. Cooper Jr. Hardin County Commissioner Precinct 1 1290 Highway 327 West Silsbee, TX 77656

The Honorable Chris Kirkendall Hardin County Commissioner Precinct 2 P.O. Box 1436 Kountze, TX 77625

The Honorable Amanda Young Hardin County Commissioner Precinct 3 P.O. Box 225 Saratoga, TX 77585

The Honorable Ernie Koch Hardin County Commissioner Precinct 4 P.O. Box 8166 Lumberton, TX 77657

Mr. Don Surratt Mayor City of Lumberton 836 North Main Lumberton, TX 77657

Mr. Steve Clark City Manager City of Lumberton 836 North Main Lumberton, TX 77657

ENTERGY TEXAS INC. CYPRESS TO LEGEND 500 kV TRANSMISSION LINE PROJECT FEDERAL, STATE, AND COUNTY/LOCAL AGENCIES

Ms. Jennifer McDaniel City Clerk/Permits City of Lumberton 836 North Main Lumberton, TX 77657

Mr. Nick Carter President City of Lumberton MUD P.O. Box 8065 Lumberton, TX 77657

J.A. McKim Chair Hardin County Historical Commission P.O. Box 2304 Kountze, TX 77625

Mr. Brad McEachern Superintendent Hardin-Jefferson ISD 520 West Herring Sour Lake, TX 77659

Dr. Tony Tipton Superintendent Lumberton ISD 121 South Main Street Lumberton, TX 77657

Dr. Shane Reyenga Superintendent Kountze ISD P.O. Box 460 Kountze, TX 77625

JEFFERSON COUNTY

The Honorable Jeff Branick County Judge Jefferson County 1149 Pearl Street Beaumont, TX 77701 The Honorable Vernon Pierce Jefferson County Commissioner Precinct 1 1149 Pearl Street, 4th Floor Beaumont, TX 77701 Attachment 1

The Honorable Cary Erickson Jefferson County Commissioner Precinct 2 7759 Viterbo Road, Suite #1 Beaumont, TX 77705

The Honorable Michael Shane Sinegal Jefferson County Commissioner Precinct 3 525 Lakeshore Drive Port Arthur, TX 77640

The Honorable Everett "Bo" Alfred Jefferson County Commissioner Precinct 4 1149 Pearl Street Beaumont, TX 77701

Mr. Pepe Dominguez Engineering Superintendent Jefferson County Engineering Department 1149 Pearl St, Fifth Floor Beaumont, TX 77701

Ms. Michelle Falgout County Engineer Jefferson County Engineering Department 1149 Pearl Street, Fifth Floor Beaumont, TX 77701

Mr. Joshua W. Allen Sr. President Jefferson County Drainage District No. 6 6550 Walden Road Beaumont, TX 77707

ENTERGY TEXAS INC. CYPRESS TO LEGEND 500 kV TRANSMISSION LINE PROJECT FEDERAL, STATE, AND COUNTY/LOCAL AGENCIES

Mr. Richard Beaumont Chairman Jefferson County Drainage District No. 7 P.O. Box 3244 Port Arthur, TX 77642

The Honorable Thurman Bartie Mayor City of Port Arthur P.O. Box 1089 Port Arthur, TX 77641

Mr. Ronald Burton City Manager City of Port Arthur P.O. Box 1089 Port Arthur, TX 77641

Ms. Flozelle Roberts Public Works Director City of Port Arthur P.O. Box 1089 Port Arthur, TX 77641

Ms. Barbara Emmons Mayor City of Bevil Oaks 7525 Sweetgum Road Beaumont, TX 77713

Mr. Mike Collier City Inspector City of Bevil Oaks 7525 Sweetgum Road Beaumont, TX 77713

Mr. Matt Lopez Mayor City of China P.O. Box 248 China, TX 77613 Mr. Roy West Mayor City of Beaumont P.O. Box 3827 Beaumont, TX 77701 Attachment 1

Mr. Bart Bartkowiak Director of Public Works City of Beaumont P.O. Box 3827 Beaumont, TX 77701

Ms. Demi Engman Planning Manager City of Beaumont P.O. Box 3827 Beaumont, TX 77701

Mr. Kenneth R. Williams City Manager City of Beaumont P.O. Box 3827 Beaumont, TX 77701

Mr. Don Albanese Mayor City of Nederland P.O. Box 967 Nederland, TX 77627

Mr. Randy Sonnier Mayor Pro Tem City of Nederland P.O. Box 967 Nederland, TX 77627

Mr. Robert Woods Public Works Director City of Nederland P.O. Box 967 Nederland, TX 77627

Attachment 1 ENTERGY TEXAS INC. CYPRESS TO LEGEND 500 kV TRANSMISSION LINE PROJECT FEDERAL, STATE, AND COUNTY/LOCAL AGENCIES

Ms. Theresa Goodness Chair Jefferson County Historical Commission 985 19th Street Beaumont, TX 77706

Dr. Shannon Allen Superintendent Beaumont ISD 3395 Harrison Avenue Beaumont, TX 77706

Dr. Mark Porterie Superintendent Port Arthur ISD 4801 9th Ave Port Arthur, TX 77642

Dr. Dwaine Augustine, Ed. D. Superintendent Hamshire-Fannett ISD 12702 2nd Street Hamshire, TX 77622

Ms. Kristi Heid Superintendent Sabine Pass ISD 5641 South Gulfway Drive Sabine Pass, TX 77655

NON-GOVERNMENTAL ORGANIZATION

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

Mr. Mark Steinbach Executive Director Texas Land Conservancy P.O. Box 162481 Austin, TX 78716 Ms. Lori Olson Executive Director Texas Land Trust Council P.O. Box 2677 Wimberley, TX 78676

Ms. Suzanne Scott Regional State Director, Texas The Nature Conservancy 200 E. Grayson, Suite 202 San Antonio, TX 78215

Ms. Shanna Burke Executive Director South East Texas Regional Planning Commission 2210 Eastex Freeway Beaumont, TX 77703

Attachment 1



POWER ENGINEERS, INC.

7600B N CAPITAL OF TEXAS HWY SUITE 320 AUSTIN, TX 78731 USA

PHONE 512-735-1800

November 9, 2023 (via Mail)

«Name» «Company_or_Title» «Department» «Address»

RE: Entergy Texas, Inc. Cypress to Legend 500 kV Transmission Line Project Hardin and Jefferson Counties, Texas POWER Engineers, Inc. Project No. 0242844

Dear «Name»:

Entergy Texas, Inc. (Entergy Texas) is planning to construct a new single-circuit 500 kilovolt (kV) transmission line approximately 35 miles in length (depending on the final route) in Hardin and Jefferson Counties. The proposed single-circuit transmission line would be routed from Entergy Texas's existing Cypress Substation to the existing Legend Substation and is needed to support significant electric load growth in the area. The existing Cypress Substation is located approximately 2.8 miles southeast of the intersection of Texas State Highway (SH) 327 and United States Highway 287. The existing Legend Substation is located approximately 0.7 mile southwest of the intersection of SH 73 and SH 82. There are no proposed routes for the project at this time. The study area, the existing Cypress Substation, the existing Legend Substation, and approximate locations of other existing transmission line facilities are shown on the enclosed study area map. The proposed single-circuit transmission line would be erected utilizing steel single-pole structures within a typical right-of-way that would be approximately 225 feet wide but may vary depending on location and conditions.

POWER Engineers, Inc. (POWER) is preparing a state-level environmental assessment and alternative route analyses for the proposed project that will support Entergy Texas's application to the Public Utility Commission of Texas (PUC) to amend its Certificate of Convenience and Necessity (CCN). POWER is currently in the process of gathering data on the existing environment and land use within the study area that will be used in the development of an environmental and land use constraints map. POWER will also identify potential alternative route segments to the project endpoints that consider environmental and land use constraints.

We are requesting any information concerning important environmental and land use concerns that you may have regarding the potential environmental effects from the construction of a transmission line within the designated study area. Your input will be an important consideration towards the identification of constraints, the development of alternative routes, and in the avoidance, minimization, and assessment of potential impacts to land use and the natural environment. In addition, POWER would appreciate receiving any relevant information you may have regarding major proposed development or construction, areas requiring permits or easements if crossed by a transmission line, or other matters you believe could affect, or be affected by this project.



November 9, 2023

Upon selection of a final route and approval by the PUC for the project, any necessary permits, easements and/or approvals will be obtained from the appropriate regulatory entities. Entergy Texas does not plan to receive any federal funding or federal assistance for this project.

Thank you for your assistance with this electric transmission line project. If you have any questions concerning this project or our request for information, please call me at 512-735-1811, or by email, <u>scott.childress@powereng.com</u>. Your earliest reply will be appreciated.

Sincerely,

Just Children

Scott Childress Environmental Project Manager

Enclosure: Study Area Map

e: Mr. Brad Coleman – Entergy



This page intentionally left blank.

| From: | 9-ASW-RA-Office (FAA) |
|--------------|---|
| То: | Childress, Scott |
| Subject: | [EXTERNAL] Power Engineers Letter (Hardin and Jefferson Counties) Project No. 0242844 |
| Date: | Wednesday, January 3, 2024 11:53:00 AM |
| Attachments: | 2023-11-9 Power Engineers-RL Signed.pdf |
| | 2023-11-9-Power Engineers.pdf |

CAUTION: This Email is from an EXTERNAL source. STOP. THINK before you CLICK links or OPEN attachments.

Good Afternoon,

Thank you for contacting the Regional Administrator of the Southwest Regional office. You'll find the original letter and the response letter attached.

Office of the Regional Administrator Federal Aviation Administration



U.S. Department of Transportation Federal Aviation Administration

Southwest Region

10101 Hillwood Parkway Fort Worth, TX 76177

December 29, 2023

Scott Childress 7600B N Capital of Texas HWY Suite 320 Austin, TX 78731

Dear Mr. Childress,

This is in response to your November 9, 2023, correspondence concerning the construction of a new single-circuit 500-kilovolt (kV) transmission line approximately 35 miles in length in Hardin and Jefferson Counties. You requested information regarding environmental and land use constraints within the study area. You also requested information about permits, easements, or other approvals that could affect the project.

As set forth in Title 14 of the Code of Federal Regulations Part 77, Objects that Affect the Navigable Airspace, the prime concern of the Federal Aviation Administration is the effect of certain proposed construction on the safe and efficient use of the navigable airspace.

To accomplish this mission, aeronautical studies are conducted based on information provided by sponsors on FAA Form 7460-1, Notice of Proposed Construction or Alteration. If your organization is planning to sponsor any construction or alterations that may affect navigable airspace, you must file FAA Form 7460-1 electronically via: <u>https://oeaaa.faa.gov/oeaaa/external/portal.jsp</u>.

For additional information and assistance, please feel free to contact the Obstruction Evaluation Group via email, <u>OEGroup@faa.gov</u>, at 10101 Hillwood Parkway, Fort Worth, Texas, 76177, or (817) 222-5954. Sincerely,

Rob Lowe Regional Administrator, Southwest Region

CC: Obstruction Evaluation Group, AJV-A520



Federal Aviation Administration

FEDERAL AVIATION ADMINISTRATION

OE/AAA®

OBSTRUCTION EVALUATION / AIRPORT AIRSPACE ANALYSIS

DESK REFERENCE GUIDE

SUBJECT: Add a New Case (Off Airport)

*You are required to have a registered e-filing account

All references to software products remain the protected trademarks of their manufacturers. The instructions in this document may reference Microsoft application(s). This is not meant in any way to express a preference for any particular product since there are many different browsers, programs, and operating systems available to the user. For simplicity only, one brand/product is used in the examples that follow.



If you've successfully registered, you can use your OE/AAA account to file your Notice of Proposed Construction or Alteration.

Note1: Exit this guide if you are filing an Off Airport Notice of Proposed Construction or Alteration for Wind Turbine /Met Tower (w/WT Farm) or Wind Turbine-Barge Crane structures.

Note2: Use this DRG to Add a New Case (Off Airport) to include:

- E-file a crane mounted on a barge vessel for construction Barge Crane (not associated with a wind turbine).
- E-file a Met Tower, not associated with a wind turbine farm, select structure type 'Met Tower (non-WT Farm).
- E-file a building with an auxiliary wind turbine mounted on a building or structure attached to a building, not associated with a wind turbine farm; select 'Building w/Wind Turbine'.
- For a wind turbine (not associated with a wind turbine farm), select "Wind Turbine."

Note3: To e-file **Wind Turbine /Met Tower (w/WT Farm) / Wind Turbine-Barge Crane** structure types, refer to the "Add a New Case (Off Airport) for Wind Turbine /Met Tower (w/WT Farm) /WT-Barge Crane" desk reference guide or the "Add Multiple Cases (Off Airport) for Wind Turbine /Met Tower (w/WT Farm)/ WT-Barge Crane" desk reference guide.



Federal Aviation Administration

Note4: If you're e-filing a **large Off Airport project** with the following eligible Structure Types:

- Antenna Tower
- Billboard
- Bridge
- Building
- Building w/Wind Turbine
- Catenary Wire
- Cell-On-Wheels
- Chimney
- Drilling Rig
- Feasibility Study
- Flagpole
- High Mast Illumination
- Landfill
- Light Pole
- Lighting Study
- Met Tower (non-WT Farm)
- Monopole
- Other w/Antenna
- Other w/o Antenna
- Power Line
- Sign
- Solar Panel
- Solar Tower
- Stack
- Tower
- Transmission Line
- Utility Pole
- Waste Management Facility
- Water Tank
- Workover Rig

Review the "Add Multiple Cases (Off Airport)" desk reference guide (DRG) to consider e-filing via the OE/AAA data import feature.



Add a New Case (Off Airport)

The OE/AAA electronic filing (e-file) system allows you to:

- Submit an FAA Form 7460-1 via an electronic data screen.
- Generate a map directly from your account to be submitted electronically with your filing.
- Track the status of your case as it moves through the study process.

From your OE/AAA Portal Page you have:

- Instant access to your determination, requests for additional information, etc... as they are issued by the FAA.
- The ability to attach surveys, and additional background information directly to your electronic case file(s).

Create a New Case

To create a new case, click the **Add New Case (Off Airport)** link. This will bring up the *Notice of Proposed Construction or Alteration* Page. Complete each section according to the instructions below.

OE/AAA Portal Page

| My Account | Off Airport Construction (includes on Military Airport) |
|------------------------------------|--|
| Name: User Name: Login Time: | My Cases (Off Airport) Add New Case (Off Airport) Add Multiple Cases (Off Airport) Add Supplemental Notice (7480-2 Form) |
| IP Address: | My Sponsorx Add New Sponsor Off Airport Contacts |
| Actions: | My Circ Comments |

Important: You must complete all required fields (indicated with an asterisk *) to successfully save your case. Missing data will result in a warning message at the top of your page identifying the required information.



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| (mm/dd/yyyy) | | | | 1 100010 1 1101 | | |
| find out, use the Notice Criteria Tool. If separate notice is required please ensure it is filed. | | | | | | |
| t is not filed, please state the reason in the Description of Proposal. | | | | | | |
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iOE/AAA[®] Internet Obstruction Evaluation / Airport Airspace Analysis


- A. ***Sponsor**: Select the <u>Sponsor</u> from the dropdown menu. This menu is populated from your *My Sponsors* list. The registered information will automatically display in your electronic public record as the Sponsor's Representative once the case has been completed and a valid FAA Determination is issued.
- B. *Notice Of: Select the type of proposal. New <u>Construction</u> would be a structure that has not yet been built. <u>Alteration</u> is a change to an existing structure such as the addition of a side mounted antenna, a change to the marking and/or lighting, a change to power and/or frequency, or a change to the height. <u>Existing</u> would be a correction to the latitude and/or longitude, a correction to the existing height, or if filing for an existing structure that has never been studied by the FAA.
- C. ***Duration**: If Permanent, so indicate. If Temporary, enter the estimated length of time the temporary structure will be up in Months/Days.
- D. **Work Schedule**: (*Not a Required Field*) Using the calendar icons next to the fields select the date that construction is expected to start and the date that construction should be completed.
- E. **State Filing**: (*Not a Required Field*) Indicate if the case has been filed with the state.
- F. *Structure Type: Select the type of structure from the <u>Structure</u> <u>Type</u> drop down list. "Note: Frequencies will not be accepted if your Structure Type is 'Lighting Study'."
- G. ***Structure Name**: Enter a name for the structure (e.g. 50 Ton Crane, Hotel, Tower, etc...)
- H. FCC Number: (Not a Required Field) If this is an existing tower that has been registered with the FCC, enter the Antenna Structure Registration number.
- I. **Prior ASN**: (*Not a Required Field*) If an FAA aeronautical study was previously conducted, enter the prior Aeronautical Study Number.



Federal Aviation Administration

Prior ASN data can be pre-populated into the Notice of Proposed Construction or Alteration-Off Airport form data fields. When the e-filer confirms the Prior ASN data, the following data fields are available for prepopulation:

- Latitude/Longitude
- Site Elevation
- Above Ground Level Height (determined AGL from valid prior ASN)
- Marking/Lighting (Recommended Marking /Lighting from valid prior ASN to requested Marking /Lighting)
- *Latitude/Longitude: Latitude and Longitude must be precise geographic coordinates entered in Degrees, Minutes, and Seconds to the hundredth of a second (e.g. 25-47-4.75 N, 80-19-7.26 W).
- K. ***Horizontal Datum**: Select either NAD83 or NAD27. North American Datum is a reference from which latitude/longitude measurements are made.
- L. ***Site Elevation**: Enter the site elevation above mean sea level expressed in whole feet rounded to the nearest foot (e.g. 12' 3" should be entered as 12). This data should match the ground contour elevations for the site.

• Add New Case (Off Airport) – Single e-file case entry: The OE/AAA system validates the Sight Elevation (SE) of e-filer's entered location; if it passes the National Elevation Data (NED) terrain elevation validation check, the System takes the e-filer to the Map verify step. E-filers are alerted if the SE does not Pass the NED check. If this occurs, you must either adjust the SE or check the "SE comments provided in Additional Info" checkbox and provide SE comments in the Additional Info text box to explain the discrepancy.

• Add New Case (Off Airport) - Additional Location(s) - Batch e-file entry: The OE/AAA system validates the SE entered on all Rows added when Save is selected; if they all pass the NED terrain elevation validation check, the system takes the e-filer back to the external e-Filing Form to certify their data entry and move to the Map verify step. The System validates all of the rows entered and alerts filers when the SE does not Pass the NED Data check for the location. If this occurs, you must either adjust the SE or check the "SE comments provided in Additional Info" checkbox and provide SE comments in the Additional Info text box to explain the discrepancy.



- M. * Structure Height: (AGL): Only for Structure Types that ARE NOT a traverseway. Your structure's height is the height above ground level in whole feet rounded to the next highest foot (e.g. 12' 3" should be entered as 13). The structure height includes anything mounted on top of the structure such as antennas, lightning rods, obstruction lights, etc.
- N. * Unadjusted Structure Height: (AGL): Only for Structure Types that ARE a traverseway. Your structure's height is the unadjusted structure height. Enter the unadjusted structure height above ground level in whole feet rounded to the next highest foot (e.g. 12' 3" should be entered as 13). The unadjusted structure height includes anything mounted on top of the structure such as antennas, lightning rods, obstruction lights, etc.

O. * Height Adjustment:

<u>Only for Structure Types that **ARE** a traverseway</u>. The Unadjusted Structure Height AGL is adjusted upward by the system to account for the expected height of vehicles (or the highest mobile object [as applicable]) using the traverseway selected from the Structure Type drop down list in the Structure Summary section of the data entry screen.

- For Structure Type "Waterway" and "Other Traverseway"
 The Unadjusted Structure Height AGL is adjusted upward one (1) foot (default) by the system. Enter the height of the highest mobile object or vehicle expected to use the traverseway into the Height Adjustment field.
 - For Structure Type "Private Road"
 The Unadjusted Structure Height AGL is adjusted upward ten (10) feet (default) by the system. Enter the height of the highest vehicle expected to use the traverseway into the Adjustment field.
- P. *Total Structure Height (AGL): <u>Only for Structure Types that ARE a</u> <u>traverseway</u>. The total of both the Unadjusted Structure Height and the Height Adjustment above ground level in whole feet rounded to the next highest foot (e.g. 12' 3" should be entered as 13).
- Q. *Requested Marking and Lighting: (Indicate the type Desired). The FAA Advisory Circular 70/7460-1 – Obstruction Marking and Lighting is recommended for determining the proper way to light and mark structures affecting navigable airspace. The AC can be accessed from the *Information*



Federal Aviation Administration

Resources section of the website using the *Relevant Advisory Circulars* link.

Requested Marking/Lighting options:

- None
- Red lights
- Red lights and paint
- Red lights and flags
- Paint and 24-hour med-strobes
- Paint and a med-dual system
- Spherical markers and red lights
- Flag Marker
- Spherical Markers
- Dual-red and medium intensity
- Dual-red and high intensity white
- White-medium intensity
- White-high intensity
- White Paint/Synchronized Red Lights
- White Paint Only
- Dual medium catenary
- Dual high catenary
- White-medium catenary
- White-high catenary
- Paint day, red flashing twilight & night
- Paint day, med-strobes twilight & night
- Paint day, hi-strobes twilight & night
- Other (if selected from the dropdown, enter the marking/lighting type in the "Other" field)
- R. **Aircraft Detection Lighting System**" (**ADLS**): (*Not a Required Field*) Control device to operate marking/lighting systems on structures.
- S. ***Current Marking/Lighting**: Indicate the current M/L on the structure; if a new structure, select N/A Proposed Structure.
- T. Current AGL: Required for structures being e-filed as existing or alteration.



- U. **Min Operating Height** (AGL): * For aeronautical study of a crane or construction equipment the maximum height should be listed above as the Structure Height (AGL). Additionally, provide the minimum operating height to avoid delays if impacts are identified that require negotiation to a reduced height. If the Structure Height and minimum operating height are the same enter the same value in both fields.
- V. ***Nearest City/State:** Enter the name of the nearest city and the actual state where the site will be located.
- W. ***Description of Location**: Enter a brief description of the actual location of the site including the address or the relationship of the structure to roads, airports, prominent terrain, existing structures, etc.
- X. ***Description of Proposal**: Enter a complete description that details the nature of the filing.
- Y. Add new location: When submitting more than one case (e.g. a crane and a building or four building points) the following required fields indicated with an asterisk (*) must be completed to successfully save additional locations: J, K, L, M, G, Q. Additional rows may be added in increments of 1 thru 5. To remove an additional row, select the Delete link.
- Z. Proposed Frequency Bands: (Not a Required Field) Check any that apply. "Note: Frequencies will not be accepted if your Structure Type is 'Lighting Study'."
- AA. Specific Frequencies: (Not a Required Field) any frequency band not listed in the Proposed Frequency Bands should be added here. Select the Add Specific Frequency link and enter the Low Frequency, High Frequency, Frequency Unit, Effective Radiated Power (ERP), and ERP Unit. Select [Save] or [Cancel] to be returned to the Case Data Entry page. If an e-filer intends to overlap protected FAA frequencies, specific coordination with the FAA Spectrum Engineering Group will be required. A textbox allows filers to submit rationale for the frequency overlap in the e-filed Notice of Proposed Construction or Alteration-Off Airport form. "Note: Frequencies will not be accepted if your Structure Type is 'Lighting Study'."



BB. **Clone Prior ASN frequencies** – (*Not a Required Field*) The Prior ASN field must be filled before entering frequencies. This link is displayed after the Specific Frequency Bands section. This link is only available if the e-filer adds a Prior ASN that has frequencies included in the case. When selected the applicable Proposed Frequency Bands and/or Specific Frequencies from the prior ASN auto populate and are available for edit by the e-filer prior to saving the draft. Once the e-filer saves this data, it becomes part of the current filing and is transmitted to the FAA with the new ASN. The e-filer is permitted to add additional frequencies if necessary after cloned frequencies are pre-populated but duplicate entries are not allowed. "Note: Frequencies will not be accepted if your Structure Type is 'Lighting Study'."

Selecting the **checkbox** to accept the certify statement.

When all required fields are completed, select the **[Save] button**. This will save the case data as a draft and take you to the *Project Summary* screen.

After case data has been saved as a draft, filers are taken to the Map Verification screen that displays all cases created on the previous Add New Case(s) Off Airport screen and require Map verification before submission.





Enlarged View





- Select the link labeled View Map to Verify (displayed above the map) when more than one map needs to be verified or click the Verify Map button (displayed below the map) to view a single case map.
 - Review the plotted structure location on the Map (red bulleye) to verify the crosshairs on the map match with your proposed structure location.
 - Select "Verify Map" (at the bottom of the map) once you have confirmed the structure location. This will save the verified map but <u>will NOT</u> <u>submit</u> the case to the FAA.



 It will return you to the Project Summary screen, where if needed, the "Structure" link is/are available to display saved draft(s) of the data form if entered case coordinates need to be revised.

NOTE: Once a map is verified, if the e-filer returns to the saved Off Airport data entry form draft and <u>re-certifies and saves</u> the form data, the filer is required to re-verify the map location prior to submission to the FAA.

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| LongRude 110" 20" 21 10" W | | 1 | | |

If the e-filer returns to the saved Off Airport data entry form draft [view data] but <u>cancels</u> (does not re-certify the entered data), they won't be required to re-verify the Map.

NOTE: You may continue to the Project Summary screen without verifying your map(s), however, before your case is eligible for submission to the FAA you will be required to verify your plotted location. This function will also be available on the next screen for you to complete later.



When the only or last listed map in a project on the Map Verification screen is verified or if you continue to the Project Summary screen without verifying your map(s) the *Project Summary screen* will be displayed. Towards the right side of the page there will be a <u>Map</u> column and an <u>Actions</u> column. The Actions column contains the **Clone**, **Delete**, and **Upload a PDF** links. The Map column contains the **Verify Map** link.

| | | Project Summary Add Another Case to this Project | Change the sponsor for this Project | |
|-----------------|-------------|---|-------------------------------------|---------------------------------|
| Structure | City, State | Lat/Long | Мар | Actions |
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From the Project Summary page filers can verify or re-verify plotted location(s). To submit your project you must verify the coordinates of each case listed below by verifying the map".

To **verify** or re-verify your plotted map location from the Project Summary screen once you've confirmed the structure location; select the **"Verify Map"** or **"Re-Verify"** under the "Map" column header. On the map, click the "Verify Map" button at the bottom of the map or click on the **"Cancel"** button to return to Project Summary screen.



Notice of Proposed Construction or Alteration - Off Airport

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| | | Ship | ong - Desk Reference Guide | Attaching Documents - Desk Raference Guide |



Attach Documents to Cases



For Off Airport cases you can upload PDF documents before and after submitting your case if needed.

Projects

One or more cases can be grouped into a <u>Project</u>. For example, each of the four building corner points can be a Case of a building Project. Project makes it easier to file, evaluate, manage, and approve related cases.

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Add a Case



On the *Project Summary screen* you may select the **Add Another Case to this Project** link to add another case to this project. The cases entered this way will have the same project number.



Federal Aviation Administration

Clone a Case



Another way to add a case to the project is to clone a new case from an existing case. E-filers can clone cases from the Project Summary screen of cases in their account regardless of the status (i.e. Draft/Submitted). To clone a case, click the **Clone** link. The cloning feature will copy most of the information over into a new *Case Data Entry* screen and link the cases together in a project. You may add as many cloned cases to your project as necessary. Once all of the maps for the project have been verified, the **[Submit]** button will appear on the *Project Summary* screen so that the entire project can be submitted to the FAA.

Delete a Case



You may only delete cases in Draft status. To delete a single case or a case from a project, select the **Delete** link located under the <u>Actions</u> header on the Project Summary screen. This will display the *Confirm Case Deletion* screen. To continue with the delete, select the **[I Confirm]** button to execute the deletion.

Submit to FAA

Note: Before submitting your case/project to the FAA, determine if you need to use the Clone or Delete features.

After the case data has been saved and map(s) verified, the **[Submit]** button will appear on the *Project Summary screen* to allow you to submit the case to the FAA. If you have provided all the information about your case or project, select the **[Submit]** button. This will take you to the *Confirm Project Submission* screen.



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| | | You may submit yo | Reference Guide Attacting I or Project to the FAA. | Documents - Desk Reference Guide Upload a PDF to the Project ease upload all supporting case documentation including the latest certified survey, if available |

Select the **[I Confirm]** button to submit the case or project to the FAA. When the submission is done, *OE/AAA* will display the *Project Submission Success* screen.

| Confirm Project Su Project Name: | bmission | |
|-------------------------------------|---|---|
| | Please confirm you would like to submit Project | and associated cases to the FAA for processing. |
| | 1 Confirm | Back |

The Aeronautical Study Number (ASN) assigned to your filed case(s) and other submission information is displayed. The Project Submission Success screen includes a link to a **state aviation contacts** map to determine if coordination of your proposed activity is necessary with your state aviation department.

| Project Submission Success Project Name | | |
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Please return to the system at a later date for status updates.

Attachment 1



POWER ENGINEERS, INC.

7600B N CAPITAL OF TEXAS HWY SUITE 320 AUSTIN, TX 78731 USA

PHONE 512-735-1800

November 9, 2023 (via Mail)

Mr. Rob Lowe Southwest Regional Administrator Federal Aviation Administration 10101 Hillwood Parkway Fort Worth, TX 76177

RE: Entergy Texas, Inc. Cypress to Legend 500 kV Transmission Line Project Hardin and Jefferson Counties, Texas POWER Engineers, Inc. Project No. 0242844

Dear Mr. Rob Lowe:

Entergy Texas, Inc. (Entergy Texas) is planning to construct a new single-circuit 500 kilovolt (kV) transmission line approximately 35 miles in length (depending on the final route) in Hardin and Jefferson Counties. The proposed single-circuit transmission line would be routed from Entergy Texas' existing Cypress Substation to the existing Legend Substation and is needed to support significant electric load growth in the area. The existing Cypress Substation is located approximately 2.8 miles southeast of the intersection of Texas State Highway (SH) 327 and United States Highway 287. The existing Legend Substation is located approximately 0.7 mile southwest of the intersection of SH 73 and SH 82. There are no proposed routes for the project at this time. The study area, the existing Cypress Substation, the existing Legend Substation, and approximate locations of other existing transmission line facilities are shown on the enclosed study area map. The proposed single-circuit transmission line would be erected utilizing steel single-pole structures within a typical right-of-way that would be approximately 225 feet wide but may vary depending on location and conditions.

POWER Engineers, Inc. (POWER) is preparing a state-level environmental assessment and alternative route analyses for the proposed project that will support Entergy Texas' application to the Public Utility Commission of Texas to amend its Certificate of Convenience and Necessity. POWER is currently in the process of gathering data on the existing environment and land use within the study area that will be used in the development of an environmental and land use constraints map. POWER will also identify potential alternative route segments to the project endpoints that consider environmental and land use constraints.

We are requesting any information concerning important environmental and land use concerns that you may have regarding the potential environmental effects from the construction of a transmission line within the designated study area. Your input will be an important consideration towards the identification of constraints, the development of alternative routes, and in the avoidance, minimization, and assessment of potential impacts to land use and the natural environment. In addition, POWER would appreciate receiving any relevant information you may have regarding major proposed development or construction, areas requiring permits or easements if crossed by a transmission line, or other matters you believe could affect, or be affected by this project.

November 9, 2023

Upon selection of a final route and approval by the Public Utility Commission for the project, any necessary permits, easements and/or approvals will be obtained from the appropriate regulatory entities. Entergy Texas does not plan to receive any federal funding or federal assistance for this project.

Thank you for your assistance with this electric transmission line project. If you have any questions concerning this project or our request for information, please call me at 512-735-1811, or by email, <u>scott.childress@powereng.com</u>. Your earliest reply will be appreciated.

Sincerely,

Aut Children

Scott Childress Environmental Project Manager

Enclosure: Study Area Map

c: Mr. Brad Coleman – Entergy





U.S. Department of Transportation Federal Aviation Administration

Southwest Region

10101 Hillwood Parkway Fort Worth, TX 76177

December 29, 2023

Scott Childress 7600B N Capital of Texas HWY Suite 320 Austin, TX 78731

Dear Mr. Childress,

This is in response to your November 9, 2023, correspondence concerning the construction of a new single-circuit 500-kilovolt (kV) transmission line approximately 35 miles in length in Hardin and Jefferson Counties. You requested information regarding environmental and land use constraints within the study area. You also requested information about permits, easements, or other approvals that could affect the project.

As set forth in Title 14 of the Code of Federal Regulations Part 77, Objects that Affect the Navigable Airspace, the prime concern of the Federal Aviation Administration is the effect of certain proposed construction on the safe and efficient use of the navigable airspace.

To accomplish this mission, aeronautical studies are conducted based on information provided by sponsors on FAA Form 7460-1, Notice of Proposed Construction or Alteration. If your organization is planning to sponsor any construction or alterations that may affect navigable airspace, you must file FAA Form 7460-1 electronically via: <u>https://oeaaa.faa.gov/oeaaa/external/portal.jsp</u>.

For additional information and assistance, please feel free to contact the Obstruction Evaluation Group via email, <u>OEGroup@faa.gov</u>, at 10101 Hillwood Parkway, Fort Worth, Texas, 76177, or (817) 222-5954. Sincerely,

Rob Lowe Regional Administrator, Southwest Region

CC: Obstruction Evaluation Group, AJV-A520

Attachment 1



United States Department of the Interior

NATIONAL PARK SERVICE Big Thicket National Preserve 6044 FM 420 Kountze, Texas 77625



IN REPLY REFER TO: BITH RM

March 6, 2025

Erik Grille, Capital Projects Manager Entergy Texas, Inc. 2107 Research Forest Drive The Woodlands, TX 77380 egrille@entergy.com

Subject: Entergy Existing Easement Review - SF-299 Application Review

Dear Mr. Grille,

Entergy Texas, Inc. (ETI) applied for a right-of-way (ROW) permit from Big Thicket National Preserve (Preserve), a National Park Service (NPS) unit, on February 7, 2025. The application proposes to rebuild existing electric transmission lines within their existing ETI easement.

We have reviewed your application, along with the easement documentation provided, and are pleased to inform you that the requested work aligns with the allowances outlined in the easements. As such, you do not require any additional authorization from the NPS to proceed with the proposed activities. However, we ask that you provide major updates on the progress of the project as it develops. These updates are essential for us to ensure compliance and maintain effective communication throughout the project. Please continue to provide updates to Resources Program Manager, Whitny Howeth at whitny_howeth@nps.gov.

If you have any questions or need further assistance, please do not hesitate to reach out to Ms. Howeth. Thank you for your cooperation, and we look forward to the successful completion of your project.

Sincerely,

Wayne Prokopetz Superintendent

cc:

Scott Childress, POWER Engineers, scott.childress@powereng.com Dani Zarlengo, Regional Right of Way Coordinator, dani_zarlengo@nps.gov

| From: | <u>CESWF-Permits@usace.army.mil</u> |
|----------|---|
| То: | <u>Gilbert, Alyssa;</u> CESWG Regulatory Inbox |
| Cc: | Childress, Scott; Brewer, Ashley |
| Subject: | [EXTERNAL] RE: Proposed Cypress to Legend 500kV Transmission Line Project |
| Date: | Thursday, November 9, 2023 12:46:07 PM |

CAUTION: This Email is from an EXTERNAL source. STOP. THINK before you CLICK links or OPEN attachments.

Ms. Gilbert,

Looks like this is meant for our Galveston District. I have included their permits on this email correspondence.

Natasha Gray Legal Instruments Examiner Regulatory Division U.S. Army Corps of Engineers 819 Taylor Street, Rm 3A37 Fort Worth, Texas 76102 Phone: 817-886-1461 Email: <u>natasha.a.gray@usace.army.mil</u>

Please do not mail hard copy documents to Regulatory staff or office, unless specifically requested. For further details on corresponding with us, please view our Electronic Application Submittals special public notice at: <u>https://www.swf.usace.army.mil/Portals/47/docs/regulatory/publicnotices/2020/PublicNoticeElectr</u> <u>onicApplications.pdf?ver=2019-11-21-123723-627 [swf.usace.army.mil]</u>

USACE Fort Worth District Regulatory Division Website <u>http://www.swf.usace.army.mil/Missions/Regulatory.aspx [swf.usace.army.mil]</u>

Please assist us in better serving you by completing the survey at the following website: <u>https://regulatory.ops.usace.army.mil/customer-service-survey/ [regulatory.ops.usace.army.mil]</u>

From: alyssa.gilbert@powereng.com <alyssa.gilbert@powereng.com>
Sent: Thursday, November 9, 2023 4:36 AM
To: CESWF-Permits@usace.army.mil
Cc: scott.childress@powereng.com; ashley.brewer@powereng.com
Subject: [Non-DoD Source] Proposed Cypress to Legend 500kV Transmission Line Project

Dear Colonel Blackmon,

On behalf of our client, Entergy Texas, Inc., attached please find a proposed project

information letter.

Thank you for your assistance with this proposed electric transmission line project. Please contact our project manager, Scott Childress, by phone at 512-735-1811, or by email at scott.childress@powereng.com, if you have any questions or require additional information.

Thank you,

ALYSSA GILBERT ENVIRONMENTAL SPECIALIST I ENV South Central PM/Planning III Department 512-500-0945

POWER Engineers, Inc. www.powereng.com

| From: | <u>SWG-RE</u> |
|----------|---|
| То: | <u>Gilbert, Alyssa</u> |
| Cc: | Childress, Scott; Brewer, Ashley |
| Subject: | [EXTERNAL] RE: Proposed Cypress to Legend 500kV Transmission Line Project |
| Date: | Monday, November 13, 2023 3:28:11 PM |

CAUTION: This Email is from an EXTERNAL source. STOP. THINK before you CLICK links or OPEN attachments.

Good afternoon,

Your letter was received. Once plans are finalized you can send them to me and also provide plans to the <u>CESWGRegulatoryInbox@usace.army.mil</u> inbox. I forwarded them your letter, but you may want to reach out to them if you haven't already. They're kind of like our front door to the Galveston district.

Thanks,

David Jordan Realty Specialist, M&D Branch USACE Galveston District Phone: (409)766-6348 Email: david.t.jordan@usace.army.mil

From: alyssa.gilbert@powereng.com <alyssa.gilbert@powereng.com>
Sent: Thursday, November 9, 2023 9:32 AM
To: SWG-RE <SWG-RE@usace.army.mil>
Cc: scott.childress@powereng.com; ashley.brewer@powereng.com
Subject: [Non-DoD Source] Proposed Cypress to Legend 500kV Transmission Line Project

To Whom it May Concern,

On behalf of our client, Entergy Texas, Inc., attached please find a proposed project information letter.

Thank you for your assistance with this proposed electric transmission line project. Please contact our project manager, Scott Childress, by phone at 512-735-1811, or by email at scott.childress@powereng.com, if you have any questions or require additional information.

Thank you,

ALYSSA GILBERT ENVIRONMENTAL SPECIALIST I ENV South Central PM/Planning III Department 512-500-0945

Attachment 1

POWER Engineers, Inc.

www.powereng.com

| From: | Jordan, David T CIV USARMY CESWG (USA) |
|----------|---|
| To: | Childress, Scott |
| Cc: | <u>Grille, Erik Daniel; Kennedy, Laura; Contreras, Mario</u> |
| Subject: | [EXTERNAL] RE: Proposed Entergy Cypress-Legend 500 kV Transmission Line Project - Meeting Request |
| Date: | Tuesday, August 20, 2024 10:13:39 AM |

CAUTION: This Email is from an EXTERNAL source. STOP. THINK before you CLICK links or OPEN attachments.

Hi Scott,

Based on the shp files there will be no RE interest. I know this is preliminary and subject to change, but unless you're significantly going out the study area there will be no RE interest. The closest USACE easement/deed is at least a couple miles away from the current study area. You can use this email to reference that it's been determined that there's no RE interest associated with the current proposed plans.

Thanks,

David Jordan Realty Specialist, M&D Branch USACE Galveston District Phone: (409)766-6348 Email: david.t.jordan@usace.army.mil

From: scott.childress@powereng.com <scott.childress@powereng.com>
Sent: Monday, August 19, 2024 4:10 PM
To: Jordan, David T CIV USARMY CESWG (USA) <David.T.Jordan@usace.army.mil>
Cc: Grille, Erik Daniel <egrille@entergy.com>; Kennedy, Laura <lkenn95@entergy.com>; Contreras, Mario <mcontre@entergy.com>
Subject: [Non-DoD Source] RE: Proposed Entergy Cypress-Legend 500 kV Transmission Line Project - Meeting Request

Hi David,

Attached are shapefiles of the study area and the preliminary alternative segments presented at the public open house. Please note, the segments are *preliminary and subject to change*, based upon input gathered at the public meeting from landowners, as well as information provided from agencies, such as the Corps.

Feel free to give me a call if you have additional questions. Otherwise, look forward to hearing from you and others.

Thanks,

SCOTT CHILDRESS PROJECT MANAGER ENVIRONMENTAL DIVISION

512-735-1811 512-803-3050 cell

POWER Engineers, Inc.

www.powereng.com

From: Jordan, David T CIV USARMY CESWG (USA) <<u>David.T.Jordan@usace.army.mil</u>>
Sent: Monday, August 19, 2024 1:17 PM
To: Childress, Scott <<u>scott.childress@powereng.com</u>>
Subject: [EXTERNAL] RE: Proposed Entergy Cypress-Legend 500 kV Transmission Line Project - Meeting Request

CAUTION: This Email is from an **EXTERNAL** source. **STOP**. **THINK** before you CLICK links or OPEN attachments.

Hi Scott,

Do you have any shp files of the potential routes or even just a shp file of the study area? Based on the maps you sent I don't believe there will be any RE interest, but I can't confirm until I'm able to receive some shp files. I'd much rather verify the RE interest before a meeting because it completely changes the process for you if there's RE tracts involved and minimizes the confusion.

Thanks,

David Jordan Realty Specialist, M&D Branch USACE Galveston District Phone: (409)766-6348 Email: <u>david.t.jordan@usace.army.mil</u>

From: scott.childress@powereng.com

Sent: Monday, August 19, 2024 12:36 PM

To: Jordan, David T CIV USARMY CESWG (USA) <<u>David.T.Jordan@usace.army.mil</u>>; Davis, Andria E. CIV USARMY CESWG (USA) <<u>Andria.E.Davis@usace.army.mil</u>>; VAN CLEAVE II, Robert E (Bobby) CIV USARMY CESWL (USA) <<u>Bobby.E.VanCleave@usace.army.mil</u>>; Knoll, Alex B CIV USARMY CESWG (USA) <<u>Alex.B.Knoll@usace.army.mil</u>>

Cc: Knoll, Sara C CIV USARMY CESWG (USA) <<u>Sara.C.Knoll@usace.army.mil</u>>; Edwards, Aron S CIV USARMY CESWG (USA) <<u>Aron.S.Edwards@usace.army.mil</u>>; Meng, Jiewu (James) CIV USARMY CESWG (USA) <<u>Jiewu.Meng@usace.army.mil</u>>; Grille, Erik Daniel <<u>egrille@entergy.com</u>>; <u>ifrye1@entergy.com</u>; Guempel, Andrew . <<u>aguempe@entergy.com</u>>; Kennedy, Laura <<u>lkenn95@entergy.com</u>>; Contreras, Mario <<u>mcontre@entergy.com</u>>; Adam Abeyta sadam.abeyta@transgloballlc.com; joseph.augustin@powereng.com; andrew.becker@powereng.com Subject: [Non-DoD Source] Proposed Entergy Cypress-Legend 500 kV Transmission Line Project -Meeting Request

Good morning all,

The Entergy Project Team met with Aron Edwards, Sara Knoll, and James Meng last week to discuss and review the preliminary alternative segments crossing or in the vicinity of Taylor Bayou.

Our goal was to:

- Identify Corps managed or regulated lands or areas such as, but not limited to, dredged and/or fill areas (e.g. Placement Areas);
- Identify Corps real estate interests (e.g. fee ownership, easements, ROWs, etc.);
- Perform a cursory review with Corps Engineering Team and discuss engineering requirements, such as:
 - Required transmission line wire clearances to tops of levees and/or any future plans to raise levees;
 - Required offset for structure/foundation from toe of levee and if these offsets are dependent upon a depth below grade;
 - Weight limits for equipment traversing levees;
 - Clearance requirements where transmission line would pass over open water associated with Taylor Bayou; and
 - Other concerns.

We understand that not everyone was on that call. Reaching out to see if we can meet virtually/callin within the next week or two to discuss these items and get your input.

For reference, attached is the Project letter sent out back in November 2023 and Real Estate's response letter, received last week. Below is a link to the Project website for additional information.

Project Landing Page <u>Cypress to Legend 500 kV Transmission Line Project (entergy-texas.com)</u>

Online Open House Page <u>Cypress to Legend 500 kV Transmission Line Project (power-viz.com)</u>

If you can provide a couple dates/time frames that work, we will schedule the call. Appreciate your time and flexibility in meeting with us to discuss this important project.

Thank you,

SCOTT CHILDRESS PROJECT MANAGER ENVIRONMENTAL DIVISION 7600B NORTH CAPITAL OF TEXAS HWY SUITE 320 AUSTIN, TX 78731 512-735-1811 512-803-3050 cell

POWER Engineers, Inc.

www.powereng.com



| From: | Hinton, Michael E CIV USARMY CESWG (USA) |
|--------------|--|
| То: | Childress, Scott |
| Subject: | [EXTERNAL] General Information Letter - SWG-2024-00344; Entergy Texas, Inc. Cypress to Legend 500 kV |
| | Transmission Line/Hardin-Jefferson Counties, Texas |
| Date: | Monday, August 12, 2024 4:52:20 PM |
| Attachments: | 2024-00344 General Information Letter New.pdf |

CAUTION: This Email is from an EXTERNAL source. STOP. THINK before you CLICK links or OPEN attachments.

Good Afternoon Mr. Childress,

How are you doing? Your letter dated November 9, 2023, to construct a new single-circuit 500 kilovolt (kV) transmission line approximately 35 miles in length (depending on the final route) in Hardin and Jefferson Counties, Texas, is attached. Take care of yourself and keep up the good work. Have a great day! Be safe, be breezy!



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

August 9, 2024

Evaluation Branch

SUBJECT: General Information Letter; File No. SWG-2024-00344; Entergy Texas, Inc. Cypress to Legend 500 kV Transmission Line/Hardin-Jefferson Counties, Texas

Scott Childress Power Engineers, Inc. 7600B North Capital of Texas Highway, Suite 320 Austin, Texas 78731

Dear Mr. Childress:

PLEASE NOTE: THIS IS NOT A PERMIT

This letter is in reference to your letter dated November 9, 2023, requesting any information concerning important environmental and land use concerns. The project site is located in Hardin and Jefferson 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/.