



Control Number: 51912



Item Number: 174

**PUC DOCKET NO. 51912
SOAH DOCKET NO. 473-21-2084**

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APPLICATION OF AEP TEXAS INC. TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE ANGSTROM-TO-GRISSOM DOUBLE-CIRCUIT 345-KV TRANSMISSION LINE IN BEE, REFUGIO, AND SAN PATRICIO COUNTIES	§ § § § § § §	PUBLIC UTILITY COMMISSION OF TEXAS
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ORDER

This Order addresses the application of AEP Texas Inc. to amend its certificate of convenience and necessity (CCN) for the Angstrom-to-Grissom single-circuit 345-kilovolt (-kV) transmission line in Bee, Refugio, and San Patricio counties. The State Office of Administrative Hearings (SOAH) administrative law judges (ALJs) filed a proposal for decision recommending approval of the CCN amendment for the transmission line along route N. However, as discussed below, the Commission approves AEP Texas's CCN amendment for the transmission line along route M. Therefore, the Commission adopts the proposal for decision in part and rejects it in part, including findings of fact and conclusions of law, for the reasons discussed in this Order.

The Commission makes the following modifications to the proposal for decision. First, the Commission determines that route M is the route that best meets the criteria and considerations under Public Utility Regulatory Act (PURA¹) § 37.056 and 16 Texas Administrative Code (TAC) § 25.101(b)(3). In routing transmission lines, the Commission is not bound by a SOAH ALJ's finding of fact or conclusion of law that does not properly apply Commission rules, policies, or prior decisions. In terms of the objective routing data, route M is similar to the proposal for decision's recommended route N and to the least expensive route, route L. Route M is estimated to cost more than route L but less than route N. Routes L, M, and N all cross landowners' properties in the northwest portion of the study area. But considering the impact on landowners, the Commission finds that route M is not only less expensive than route N and similar to route N

¹ Tex. Util. Code §§ 11.001–66.016.

in terms of paralleling property boundaries but also less disruptive in crossing properties compared to routes L and N.

In selecting route M, the Commission adds findings of fact 87A, 88A, 96A, 131A, 132A, 135A, 136A, 140A, 143A, 144A, 149A, 150A, 152A, 154A, and 155A and conclusion of law 10A. The Commission also modifies findings of fact 87, 180, 181, and 183, conclusion of law 9, and ordering paragraph 2.

In addition, the Commission modifies findings of fact 4, 9, and 10 and ordering paragraph 2 to clarify that in this Order the Commission is approving construction only of a single-circuit electric transmission line on double-circuit-capable structures. The Commission is not certifying a second circuit in this Order. The Commission also finds good cause because of the COVID-19 pandemic to grant an exception to the requirements of 16 TAC § 22.52(a)(4) for AEP Texas to have held an online public meeting instead of an in-person public meeting. The Commission modifies finding of fact 15 and conclusion of law 8 accordingly. In addition, the Commission deletes part of finding of fact 53 that is duplicative of finding of fact 84. The Commission also modifies finding of fact 29 to reflect the detail regarding proof of notice that is customary in the Commission's orders, corrects finding of fact 178, and modifies findings of fact 63, 87.d., and 135 and conclusion of law 3 for completeness. Finally, the Commission makes non-substantive changes for such matters as capitalization, spelling, grammar, punctuation, style, correction of numbering, readability, and conformity with the Commission's order-writing format.

I. Findings of Fact

The Commission adopts the following findings of fact.

Applicant

1. AEP Texas is a Delaware corporation registered with the Texas secretary of state under filing number 802611352.
2. AEP Texas owns and operates for compensation in Texas facilities and equipment to transmit and distribute electricity in the Electric Reliability Council of Texas (ERCOT) region.

3. AEP Texas is required under CCN numbers 30028 and 30170 to provide service to the public and retail electric utility service within its certificated service area.

Application

4. On April 16, 2021, AEP Texas filed with the Commission an application to amend its CCN number 30028 for the proposed Angstrom-to-Grissom single-circuit 345-kV transmission line on double-circuit-capable structures in Bee, Refugio, and San Patricio counties.
5. AEP Texas retained POWER Engineers, Inc. to prepare an environmental assessment and routing analysis for the proposed transmission line, which was included as part of the application.
6. On May 14, 2021, Commission Staff recommended the application be deemed administratively complete.
7. No party challenged the sufficiency of the application.
8. AEP Texas's application in this docket is sufficient.

Description of Proposed Transmission Line

9. The facilities proposed in the application include construction of a new single-circuit 345-kV transmission line. The proposed transmission line begins at the existing AEP Texas Angstrom station located approximately 4 miles east of the City of Sinton and approximately 0.5 miles north of state highway 188 in San Patricio County. The proposed transmission line extends to the existing AEP Texas Grissom station located approximately 8 miles southeast of the community of Skidmore, Texas and approximately 5.5 miles east of United States highway 181 in Bee County.
10. AEP Texas plans to construct the transmission line using double-circuit-capable BOLD™ steel lattice structures. The heights of the typical structures will range between 130 and 160 feet above grade.
11. AEP Texas will own, operate, and maintain the transmission line.

Routes

12. The transmission line proposed in the application is 17 to 24 miles in length, depending on the route selected.

13. The routes are based on a right-of-way width of approximately 150 feet.

Schedule

14. AEP Texas estimated that it would acquire all right-of-way and land by September 2022, finalize engineering and design by June 2023, procure material and equipment by June 2023, complete construction by December 2023, and energize the approved transmission line by December 2023.

Public Input

15. The COVID-19 pandemic and the social-distancing recommendations made by the Centers for Disease Control and Prevention and the State of Texas constitute good cause for AEP Texas to have held an on-line public meeting via WebEx rather than hold an in-person open-house meeting for this transmission line.
16. AEP Texas notified potentially affected landowners that it had created a transmission-line website where landowners could find their property and the proposed routing links on an interactive map and provide comments. Information was also included about the Commission's regulatory-approval process, the need for the transmission line, the routing-analysis process, and the type of transmission-line structures that AEP Texas was proposing for the transmission line.
17. AEP Texas held an on-line public meeting via WebEx on Tuesday, November 24, 2020, at 6:30 p.m. to provide information about the transmission line and to answer participants' questions. In the notice of the on-line public meeting, AEP Texas provided landowners with a questionnaire, like that typically provided at the in-person public meetings, and a pre-paid return envelope for landowners to submit their comments. The notice also identified multiple ways that landowners could contact AEP Texas, including a toll-free phone number, email, and through the transmission-line website.
18. AEP Texas mailed written notices of the public meetings to all owners of property within 500 feet of the centerline of each preliminary alternative routing link and to the United States Department of Defense Siting Clearinghouse. A total of 40 invitation letters were mailed to individuals and entities for the virtual public meeting.

19. A total of 11 individuals attended the virtual public meeting. AEP Texas received seven questionnaires.
20. POWER Engineers contacted federal, state, and local regulatory agencies, elected officials, and organizations regarding the proposed transmission line. All agency comments, concerns, and information received were taken into consideration by POWER Engineers and AEP Texas in developing the alternative links. Copies of correspondence with the various state and federal regulatory agencies and local and county officials and departments are included in appendix A of the environmental analysis.
21. AEP Texas evaluated and considered the public feedback in determining the routes to be included in the application. In response to comments and stakeholder input, several links were added or modified to improve the paralleling of apparent property lines or other physical features, improve the paralleling of compatible right-of-way, minimize impacts to existing constraints, and improve the geographic diversity of the routes. These modifications resulted in 62 alternative links.

Notice of the Application

22. On April 16, 2021, AEP Texas sent written notice of its application by first-class priority mail to each landowner, as stated on the current county tax rolls in Bee, Refugio, and San Patricio counties, Texas, who could be directly affected by the transmission line on any of the alternative routes.
23. On April 16, 2021, AEP Texas sent written notice of its application by first-class priority mail to each neighboring utility providing similar service within five miles of the alternative routes.
24. On April 16, 2021, AEP Texas sent written notice of its application by first-class priority mail to county officials in Bee, Refugio, and San Patricio counties, and to the municipal officials of municipalities located within five miles of the alternative routes.
25. On April 16, 2021, AEP Texas sent written notice of its application via email to the Department of Defense Siting Clearinghouse.

26. On April 16, 2021, AEP Texas sent written notice of its application by first-class priority mail to the Office of Public Utility Counsel.
27. On April 16, 2021, AEP Texas sent written notice of its application and a copy of the environmental analysis by first-class priority mail to the Texas Parks and Wildlife Department.
28. On April 22, 2021, AEP Texas caused notice of its application to be published in the *Bee-Picayune*, which is the newspaper having general circulation in Bee County; the *Refugio County Press*, which is the newspaper having general circulation in Refugio County; and *The News of San Patricio*, which is the newspaper having general circulation in San Patricio County.
29. On May 6, 2021, AEP Texas filed the affidavit of Mel L. Eckhoff, a regulatory consultant for American Electric Power Service Corporation (AEP Service Corp.), who testified that notice was provided as described in findings of fact 22 through 28. AEP Texas also included publishers' affidavits from the newspapers listed in finding of fact 28.
30. In State Office of Administrative Hearings (SOAH) Order No. 3 filed on May 19, 2021, the SOAH administrative law judges (ALJs) approved AEP Texas's provision of notice of the application in this proceeding.

Intervenors and Alignment of Intervenors

31. On May 10, 2021, Charles Schwarz was admitted as a party during the prehearing conference.
32. In SOAH Order No. 4 filed on June 17, 2021, the SOAH ALJs granted the motions to intervene filed by Jay Carr, Jr., on behalf of the property interest of Carr Ranches, Ltd., (Carr); Paul Turnbull, on behalf of the property interest of Turnbull Land & Cattle, Ltd., (Turnbull); the Welder Wildlife Foundation; Burke Hollow Corporation; Hughes C. Thomas; R. H. Welder Heirs, Ltd.; Oakes David Edwards, Jr.; Ford-Powers Family Properties, Ltd.; Diana Welder Hamilton Ranch Partnership, Ltd., E-H Partnership, Ltd., and Hamilton-Ingleside Limited (collectively, Hamilton); T. Michael O'Connor, individually as co-trustee of the Mary Madeline O'Connor Family Exempt Trust and as co-trustee of the Mary Madeline O'Connor Family Non-Exempt Trust (collectively,

T. Michael O'Connor); Rawhide Cattle Company, Inc.; Rooke Canfield Interests, Ltd.; F.B. Rooke & Sons, Ltd.; and F.B. Rooke, III Heirs, Ltd.

33. In SOAH Order No. 4 filed on June 17, 2021, the SOAH ALJs dismissed intervenor Charles Schwarz for failing to file direct testimony or a statement of position.
34. At the hearing on the merits, the following parties described themselves as the aligned intervenors: Welder Wildlife Foundation; Hughes C. Thomas; R. H. Welder Heirs, Ltd., Oakes David Edwards, Jr., and Ford-Powers Family Properties, Ltd.; Diana Welder Hamilton Ranch Partnership, Ltd., Hamilton-Ingleside Limited, and E-H Partnership Ltd., T. Michael O'Connor, individually as co-trustee of the Mary Madeline O'Connor Family Exempt Trust and as co-trustee of the Mary Madeline O'Connor Family Non-Exempt Trust; Rawhide Cattle Company, Inc., Rooke Canfield Interests, Ltd., F.B. Rooke & Sons, Ltd., F.B. Rooke, III Heirs, Ltd., and Burke Hollow Corporation.

Route Adequacy

35. AEP Texas's application presented 26 geographically diverse routes using a combination of 62 route links.
36. No party filed testimony or a position statement challenging whether the application provided an adequate number of reasonably differentiated routes to conduct a proper evaluation, and no party requested a hearing on route adequacy.
37. The application's 26 routes are an adequate number of reasonably differentiated routes to conduct a proper evaluation.

Statements of Position and Testimony

38. On April 16, 2021, AEP Texas filed in support of the application the direct testimonies of Teresa B. Trotman, a staff project manager in the transmission services department of AEP Service Corp.; Mina Y. Turner, an engineer principal in AEP West transmission planning for AEP Service Corp.; Stan A. Krause, transmission line engineering manager in the transmission-line engineering department of AEP Service Corp. for the ERCOT region; and Anastacia Santos, a project manager in the environmental division of POWER Engineers. These direct testimonies were admitted at the hearing.

39. On June 10, 2021, Hughes C. Thomas filed the direct testimony of Hughes C. Thomas. This direct testimony was admitted at the hearing.
40. On June 11, 2021, T. Michael O'Connor filed the direct testimony of T. Michael O'Connor. This direct testimony was admitted at the hearing.
41. On June 11, 2021, F.B. Rooke, III Heirs, Ltd. filed the direct testimony of Jeffery Neil Rooke. This direct testimony was admitted at the hearing.
42. On June 11, 2021, Rawhide Cattle Company, Inc. filed the direct testimony of Michael E. Gibbs. This direct testimony was admitted at the hearing.
43. On June 11, 2021, Burke Hollow Corporation filed the direct testimony of Kenneth T. Barrow. This direct testimony was admitted at the hearing.
44. On June 11, 2021, R. H. Welder Heirs, Ltd. filed the direct testimony of George Carson, Jr. This direct testimony was admitted at the hearing.
45. On June 11, 2021, Oakes David Edwards, Jr. filed the direct testimony of Oakes David Edwards, Jr. This direct testimony was admitted at the hearing.
46. On June 11, 2021, Ford-Powers Family Properties, Ltd. filed the direct testimony of William Daly Powers. This direct testimony was admitted at the hearing.
47. On June 11, 2021, Rooke Canfield Interests, Ltd. filed the direct testimony of N. J. Chehayeb-Coffman. This direct testimony was admitted at the hearing.
48. On June 11, 2021, Carr Ranch, Ltd. filed the direct testimony of John ("Jay") Carr, Jr. This direct testimony was admitted at the hearing.
49. On June 11, 2021, F. B. Rooke and Sons, Ltd. filed the direct testimony of Molly K. Rooke. This direct testimony was admitted at the hearing.
50. On June 11, 2021, Turnbull Land & Cattle, Ltd. filed the direct testimony of Paul R. Turnbull, III. This direct testimony was admitted at the hearing.
51. On June 11, 2021, Welder Wildlife Foundation filed the direct testimony of Terry Blankenship, Ph.D. This direct testimony was admitted at the hearing.

52. On June 11, 2021, Hamilton filed the direct testimony of Richard P. Thomas. This direct testimony was admitted at the hearing.
53. On June 28, 2021, Commission Staff filed the direct testimony of its witness John Poole. This direct testimony was admitted at the hearing.
54. On June 30, 2021, AEP Texas filed the supplemental testimonies of Ms. Trotman and Ms. Santos. These supplemental testimonies were admitted at the hearing.

Referral to SOAH for Hearing

55. On April 21, 2021, AEP Texas filed a request for expedited referral to SOAH because the proposed transmission line had been designated by ERCOT as critical to the reliability of the transmission system.
56. On April 21, 2021, the Commission referred this proceeding to SOAH and issued a preliminary order identifying the issues to be addressed in this proceeding.
57. On May 10, 2021, the SOAH ALJs convened a prehearing conference in this docket by videoconference, at which time a procedural schedule was discussed.
58. In SOAH Order No. 2 filed on May 14, 2021, the SOAH ALJs memorialized the prehearing conference held on May 10, 2021, and required the parties to file a revised procedural schedule.
59. In SOAH Order No. 3 filed on May 19, 2021, the SOAH ALJs adopted the parties' revised procedural schedule and scheduled the hearing on the merits to begin on July 6, 2021.
60. On July 1, 2021, AEP Texas and the intervenors filed an unopposed agreement in support of route ISR (intervenor settlement route). Commission Staff did not sign, but did not oppose, the agreement.
61. On July 1, 2021, AEP Texas, on behalf of the parties, filed a motion to cancel the hearing and the procedural schedule, admit evidence, and remand the proceeding to the Commission.
62. In SOAH Order No. 7 filed on July 2, 2021, the SOAH ALJs dismissed the case from SOAH's docket and granted the motion to admit evidence for the purpose of supporting and seeking approval of the parties' unopposed agreement.

63. On August 23, 2021, the Commission issued an order declining to accept the parties' unopposed agreement because of concerns about the cost of route ISR relative to other available routes and remanded the proceeding to SOAH for further processing, including, if required, a hearing on the merits.
64. In SOAH Order No. 9 filed on August 27, 2021, the SOAH ALJ set October 5 and 6, 2021, for a hearing on the merits and set October 4, 2021, as the deadline for AEP Texas to file a brief on uncontested issues.
65. In SOAH Order No. 11 filed on September 29, 2021, the SOAH ALJs granted the unopposed motion of intervenors Jay Carr, Jr., on behalf of the property interest of Carr Ranches, Ltd., and Paul Turnbull, on behalf of the property interest of Turnbull Land & Cattle, Ltd. (together, Carr and Turnbull) to move the date for the hearing on the merits from October 5 and 6, 2021, to October 13 and 14, 2021, and to move all remaining dates in the procedural schedule forward by eight days to correlate with this change.
66. On October 13, 2021, the hearing on the merits convened before SOAH ALJs Daniel Wiseman and Megan Johnson via videoconference. The following parties or aligned groups made appearances through their legal counsel and participated in the hearing on the merits: AEP Texas; Commission Staff; the aligned intervenors; and Carr and Turnbull, who are not part of the aligned intervenors. The hearing concluded on October 14, 2021.
67. The evidentiary record was left open at the hearing for the filing by AEP Texas of supplemental responses to Carr and Turnbull's first requests for information. The responses were filed on October 19, 2021, at which point the evidentiary record closed.

Adequacy of Existing Service and Need for Additional Service

68. Several large industrial customers are in the process of adding 370 megawatts (MW) of load in the area north of Corpus Christi that will need service in 2022. In addition, there is another 400 MW of load in the Sinton area to be in service in the fourth quarter of 2023 and another 528 MW of load to be in service in 2024 in the Gregory and Portland area. The existing transmission network cannot reliably serve this increased electrical load requirement.

69. On behalf of AEP Texas, AEP Service Corp. submitted a proposal to the ERCOT regional planning group for transmission network improvements to address the additional industrial loads in the area north of Corpus Christi.
70. After reviewing the proposal and several other alternatives, ERCOT endorsed the Corpus Christi North Shore project as a tier 1 transmission project in accordance with ERCOT Protocol Section 3.11.4. Among other transmission additions, the endorsement included the transmission line.
71. ERCOT designated the projects comprising the Corpus Christi North Shore project as critical to the reliability of the ERCOT system.
72. AEP Texas's application included a copy of the proposal submitted to the ERCOT regional planning group, a copy of the letter to American Electric Power signifying the endorsement of the ERCOT board of directors and ERCOT's independent review, and a detailed description of the analysis performed by ERCOT.
73. Distribution alternatives are not a viable solution to address service to the industrial loads addressed by the transmission line.
74. No party challenged the need for the transmission line.

Routing of the Transmission Line

75. The POWER Engineers project team included professionals with expertise in different environmental and land-use disciplines (geology and soils, hydrology and water quality, terrestrial ecology, wetland ecology, land use and aesthetics, and cultural resources) who were involved in data acquisition, routing analysis, and environmental analysis for the transmission line.
76. To identify alternative route links for the transmission line, POWER Engineers delineated a study area, sought public-official and agency input, gathered data regarding the study area, performed constraints mapping, identified alternative route links, and reviewed and adjusted the alternative route links following field reconnaissance and the public meetings.

77. POWER Engineers examined potential alternative routes taking into consideration the factors in PURA § 37.056(c)(4)(A) through (D), 16 TAC § 25.101, and the Commission's CCN application form.
78. From the alternative route links, POWER Engineers and AEP Texas identified 26 reasonable, feasible alternative routes. In identifying these, POWER Engineers considered a variety of information, including input from the public and public officials, geographic diversity within the study area, and an inventory and tabulation of a number of environmental and land-use criteria.
79. The consensus opinion of POWER Engineers' evaluators was to recommend alternative route M as the route that best addresses the requirements of PURA and Commission substantive rules from an environmental and land-use perspective, followed by routes N, L, T, and K.
80. AEP Texas considered POWER Engineers' recommendations as well as engineering and construction constraints, estimated cost, grid reliability, and security issues.
81. AEP Texas's application and testimony confirm that all proposed routes are viable and constructible.
82. AEP Texas identified route T as the route that best addresses the Commission's routing criteria.
83. Carr and Turnbull supported selection of route T as the route that best addresses the Commission's routing criteria.
84. Commission Staff identified route N as the route that best addresses the Commission's routing criteria.
85. The aligned intervenors identified route Z (as originally proposed or with certain modifications) as the route that best addresses the Commission's routing criteria.
86. All 26 alternative routes share a number of common positive attributes. In particular, of the 26 alternative routes:
 - a. None cross or are within 1,000 feet of any park or recreational area or are within the foreground visual zone of a park or recreational area;

- b. None cross any land irrigated by traveling systems;
 - c. None cross any farm-to-market roads;
 - d. None are within 10,000 feet of a Federal Aviation Administration-registered airfield with a runway less than 3,200 feet in length, are within 10,000 feet of a private airstrip, or are within 5,000 feet of a heliport;
 - e. None are within 10,000 feet of an AM radio transmitter;
 - f. None are within the foreground visual zone of any farm-to-market roads, or any parks of recreational areas;
 - g. None cross any known habitat of federally listed endangered or threatened species;
 - h. None are within 1,000 feet of any cemeteries;
 - i. None cross any cultural-resource sites; and
 - j. None cross any properties listed on the National Register of Historic Places or are within 1,000 feet of any properties listed on the National Register of Historic Places.
87. Based on the evidence presented, the SOAH ALJs found that route N best meets the regulatory and statutory criteria because, among other things:
- a. Route N is the second shortest route at 17.50 miles in length;
 - b. At \$53.394 million, route N is the third least costly route;
 - c. Route N has zero habitable structures within 500 feet of its centerline;
 - d. Route N parallels existing compatible rights-of-way or property boundaries for a total of 68.5% of the route; and
 - e. Route N presents an appropriate balance of the routing factors, and its negative attributes could be addressed with mitigation and the application of best-practice engineering design and construction methods.
- 87A. Based on the evidence presented, the Commission finds that route M best meets the regulatory and statutory criteria for the following reasons:
- a. Route M is the fourth shortest route at 17.64 miles in length;
 - b. At \$53.266 million, route M is the second least costly route;
 - c. Route M has zero habitable structures within 500 feet of its centerline;
 - d. Route M parallels existing compatible rights-of-way or property boundaries for a total of 72.4% of the route;

- e. Route M is similar to route N in terms of paralleling property boundaries and crosses properties less disruptively than other routes, including route N; and
 - f. Route M presents the best balance of the routing factors, and its negative attributes could be addressed with mitigation and the application of best-practice engineering design and construction methods.
88. Route N comprises the following route links: 1, 3, 5, 8, 9, 10, 13, 14, 24, 29, 30, and 31.
- 88A. Route M comprises the following route links: 1, 3, 5, 8, 9, 10, 13, 14, 17, 26, 27a, 27b, 28, 30, and 31.

Effect of Granting Certificate on Utilities Serving the Proximate Area

89. The transmission line will not be directly connected to any other electric utility.
90. Once all the Corpus Christi North Shore transmission improvements endorsed by ERCOT are made, the transmission line proposed in this docket along with other 345-kV and 138-kV transmission-line additions will improve the ability of the transmission network to provide electrical service to new large electrical-load customers, improve the reliability of the local transmission network, and reduce transmission congestion. This improved electrical-load service capability, improved transmission-service reliability, and reduced congestion will also benefit other electric utilities providing transmission service in the area and generation customers using this network to transport power into the ERCOT network.
91. The transmission line in this case will benefit the AEP Texas transmission network by adding a 345-kV source needed to fully serve a large new steel plant in the Sinton area.
92. It is unlikely that the construction of the transmission line along any route will adversely affect service by other utilities in the area.

Community Values

93. The purpose of the public meetings was to solicit input from landowners, public officials, and other interested persons about the transmission line and the preliminary alternative route links. Further, the public meetings were designed to promote a better understanding of the transmission line, including the purpose, need, potential benefits and effects, and

Commission certification process; inform the public of the routing procedure, schedule, and route-approval process; and gather and understand the values and concerns of the public and community leaders.

94. The principal concerns or issues presented by the landowners at the public meetings were maximizing distance from residences, businesses, and schools; maximizing length along highways or other roads; minimizing visibility of the lines; minimizing the impacts on streams and rivers; and minimizing length through wetlands and floodplains.
95. POWER Engineers' routing analysis and AEP Texas's eventual selection of the alternative routes filed in the application incorporated information received from the public meetings and from local, state, and federal agencies.
96. Route N adequately addresses community values.
- 96A. Route M adequately addresses community values.

Land Uses and Land Types

97. The area traversed by the alternative routes (the study area) for this transmission line is rural with little or no residential development.
98. The predominant land use in the study area is rangeland, pastureland, and agriculture. The majority of the study area has been impacted by agriculture, oil and gas activities, wind generation, and industrial development.
99. The study area is located within the Coastal Plains sub-province of the Gulf Coastal Prairies Physiographic Province. Elevations within the study area range between approximately 50 feet above mean sea level in the southeast to approximately 100 feet above mean sea level in the northwest portion of the study area.
100. All the links proposed by AEP Texas in this proceeding can be safely and reliably constructed and operated without significant adverse effects on uses of property.

Recreational and Park Areas

101. None of the alternative routes either cross or are located within 1,000 feet of any park or recreational areas.

102. It is unlikely that the transmission line along any route will adversely affect the use and enjoyment of any recreational or park areas.

Historical and Archeological Values

103. None of the alternative routes cross any recorded cultural-resources sites.
104. There are between zero and six recorded cultural-resource sites located within 1,000 feet of the centerlines of the alternative routes.
105. None of the alternative routes are located within 1,000 feet of any property listed on the National Register of Historic Places.
106. No cemeteries are crossed or located within 1,000 feet of any of the alternative routes.
107. It is unlikely that the transmission line along any route will adversely affect historical or archeological resources.

Aesthetic Values

108. All of the alternative routes have some portion that is located within the foreground visual zone of United States highways and state highways.
109. Routes V and W have the longest length of right-of-way within the foreground visual zone of United States highways and state highways, with approximately 8.22 miles each. Alternative routes A, J, K, L, M, N, S, and T have the shortest length, with approximately 1.01 miles each.
110. None of the alternative routes have any portion located within the foreground visual zone of farm-to-market roads.
111. None of the alternative routes have any portion of their right-of-way length located within the foreground visual zone of parks or recreational areas.
112. Overall, the character of the rural landscape within the study area includes relatively flat pasturelands scattered throughout. The residential, oil and gas developments, and wind generation facilities within the study area have already impacted the aesthetic quality within the region from public viewpoints.

Environmental Integrity

113. The environmental analysis and routing analysis analyzed the possible effects of the transmission line on numerous environmental factors.
114. Review of information from the Texas Natural Diversity Database, Texas Parks and Wildlife Department, and United States Fish and Wildlife Service indicate one potentially occurring plant species that is federally and state listed as endangered and 13 animal species that are federally listed within the study-area counties. There are also 30 animal species that are state-listed within the study-area counties.
115. None of the alternative routes have any length of right-of-way across known habitat of federally listed endangered or threatened species.
116. It is unlikely that the transmission line will have significant adverse impacts on populations of any federally listed endangered or threatened species.
117. AEP Texas can construct the transmission line in an ecologically sensitive manner on any currently proposed route.
118. AEP Texas will mitigate any effect on federally listed plant or animal species according to standard practices and measures taken in accordance with the Endangered Species Act.
119. It is appropriate for AEP Texas to protect raptors and migratory birds by following the procedures outlined in the following publications: *Reducing Avian Collisions with Power Lines: The State of the Art in 2012*, Edison Electric Institute and Avian Power Line Interaction Committee, Washington, D.C. 2012; *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006*, Edison Electric Institute, Avian Power Line Interaction Committee, and the California Energy Commission, Washington, D.C. and Sacramento, CA 2006; and *Avian Protection Plan Guidelines*, Avian Power Line Interaction Committee and United States Fish and Wildlife Service, April 2005. It is appropriate for AEP Texas to take precautions to avoid disturbing occupied nests and take steps to minimize the burden of construction on migratory birds during the nesting season of the migratory bird species identified in the area of construction.

120. It is appropriate for AEP Texas to minimize the amount of flora and fauna disturbed during construction of the transmission line.
121. It is appropriate for AEP Texas to re-vegetate cleared and disturbed areas using native species and consider landowner preferences and wildlife needs in doing so.
122. It is appropriate for AEP Texas to avoid, to the maximum extent possible, causing adverse environmental effects on sensitive plant and animal species and their habitats as identified by the Texas Parks and Wildlife Department and the United States Fish and Wildlife Service.
123. It is appropriate for AEP Texas to implement erosion-control measures and return each affected landowner's property to its original contours and grades unless the landowners agree otherwise. However, it is not appropriate for AEP Texas to restore original contours and grades where different contours or grades are necessary to ensure the safety or stability of any transmission line.
124. It is appropriate for AEP Texas to exercise extreme care to avoid affecting non-targeted vegetation or animal life when using chemical herbicides to control vegetation within right-of-way. The use of chemical herbicides to control vegetation within right-of-way is required to comply with the rules and guidelines established in the Federal Insecticide, Fungicide, and Rodenticide Act and with the Texas Department of Agriculture regulations.
125. It is appropriate for AEP Texas to use best management practices to minimize the potential burdens on migratory birds and threatened or endangered species.
126. It is unlikely that the transmission line along any route will adversely affect the environmental integrity of the surrounding landscape.

Engineering Constraints

127. AEP Texas evaluated engineering and construction constraints when developing routes.
128. There are no significant engineering constraints along any of the alternative routes that cannot be adequately addressed by using design and construction practices and techniques usual and customary in the electric utility industry.
129. All alternative routes are viable, feasible, and reasonable from an engineering perspective.

Estimated Costs

- 130. The estimated construction costs of the 26 alternative routes range from \$51,770,000 to \$72,962,000, not including the estimated substation termination costs of approximately \$10.6 million.
- 131. Route N is estimated to cost \$53,394,000, not including the estimated substation termination costs.
- 131A. Route M—which is estimated to cost \$53,266,000, not including the estimated substation termination costs—is estimated to cost slightly less than route N.
- 132. The estimated cost of route N is reasonable considering the range of cost estimates for the routes.
- 132A. The estimated cost of route M is reasonable considering the range of cost estimates for the routes.
- 133. AEP Texas will finance the transmission line through a combination of debt and equity.

Using or Paralleling Compatible Right-of-Way and Paralleling Property Boundaries

- 134. The alternative routes parallel existing transmission lines, other existing right-of-way, or apparent property boundaries for approximately 33% to approximately 77% of the length of the route depending on the route selected.
- 135. Route N parallels existing compatible right-of-way or property boundaries for a total of 68.5% of the route.
- 135A. Route M parallels existing compatible right-of-way or property boundaries for a total of 72.4% of the route.
- 136. Route N uses or parallels existing compatible right-of-way or apparent property boundaries to a reasonable extent.
- 136A. Route M uses or parallels existing compatible right-of-way or apparent property boundaries to a reasonable extent.

Prudent Avoidance

- 137. Prudent avoidance, as defined in 16 TAC § 25.101(a)(6), is the “limiting of exposures to electric and magnetic fields that can be avoided with reasonable investments of money and effort.”
- 138. All of the alternative routes conform to the Commission’s policy of prudent avoidance in that they reflect reasonable investments of money and effort to limit exposure to electric and magnetic fields.
- 139. Routes A, C, and F each have two habitable structures within 500 feet of their centerlines, which is the greatest number of habitable structures within 500 feet of the centerline of any of the alternative routes. All other routes have no habitable structures within 500 feet of their centerlines.
- 140. The construction of the transmission line along route N complies with the Commission’s policy of prudent avoidance.
- 140A. The construction of the transmission line along route M complies with the Commission’s policy of prudent avoidance.

Other Comparisons of Land Uses and Land Types

a. Radio Towers and Other Electric Installations

- 141. No commercial AM radio transmitters were identified within the study area or within 10,000 feet of any alternative route.
- 142. There are between zero and two frequency modulation radio transmitters, microwave relay stations, or other electronic installations located within 2,000 feet of the centerlines of the alternative routes.
- 143. There are no frequency modulation radio transmitters, microwave relay stations, or other electronic installations located within 2,000 feet of the centerlines of route N.
- 143A. There are no frequency modulation radio transmitters, microwave relay stations, or other electronic installations located within 2,000 feet of the centerlines of route M.
- 144. It is unlikely that the transmission line along route N will adversely affect any communication operations in the proximity of route N.

144A. It is unlikely that the transmission line along route M will adversely affect any communication operations in the proximity of route M.

b. Airstrips and Airports

145. There are between zero and one public airports registered with the Federal Aviation Administration with at least one runway longer than 3,200 feet located within 20,000 feet of the centerline of the alternative routes.

146. There are no airports registered with the Federal Aviation Administration without a runway more than 3,200 feet in length located within 10,000 feet of the centerline of any of the alternative routes.

147. There are no private airstrips located within 10,000 feet of the centerline of any of the alternative routes.

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

149. There are no public airports registered with the Federal Aviation Administration with at least one runway longer than 3,200 feet located within 20,000 feet of the centerline of route N.

149A. There are no public airports registered with the Federal Aviation Administration with at least one runway longer than 3,200 feet located within 20,000 feet of the centerline of route M.

150. It is unlikely that the transmission line along route N will adversely affect any airports, airstrips, or heliports.

150A. It is unlikely that the transmission line along route M will adversely affect any airports, airstrips, or heliports.

c. Irrigation Systems

151. None of the alternative routes cross land irrigated by known mobile irrigation systems.

152. It is unlikely that the transmission line along route N will adversely affect any agricultural lands with known mobile irrigation systems.

152A. It is unlikely that the transmission line along route M will adversely affect any agricultural lands with known mobile irrigation systems.

d. Pipelines

153. The alternative routes cross metallic pipelines transmitting hydrocarbons 11 to 22 times, depending on the route.

154. Route N crosses metallic pipelines transmitting hydrocarbons 11 times and does not parallel pipelines within 500 feet.

154A. Route M crosses metallic pipelines transmitting hydrocarbons 11 times and does not parallel pipelines within 500 feet.

155. It is unlikely that the transmission line along route N will adversely affect any crossed or paralleled metallic pipelines that transport hydrocarbons.

155A. It is unlikely that the transmission line along route M will adversely affect any crossed or paralleled metallic pipelines that transport hydrocarbons.

Texas Parks and Wildlife Department's Written Comments and Recommendations

156. The Texas Parks and Wildlife Department's Wildlife Habitat Assessment Program provided information and recommendations regarding the preliminary study area for the transmission line to POWER Engineers on October 15, 2020.

157. On June 9, 2021, the Texas Parks and Wildlife Department filed a letter making various comments and recommendations regarding the proposed transmission line.

158. The Texas Parks and Wildlife Department's comment letter identified route N as the route that best minimizes adverse effects on natural resources.

159. Before beginning construction, it is appropriate for AEP Texas to undertake appropriate measures to identify whether a habitat for potential endangered or threatened species exists and to respond appropriately.

160. AEP Texas will use avoidance and mitigation procedures to comply with laws protecting federally listed species.

161. AEP Texas will re-vegetate the new right-of-way as necessary and according to AEP Texas's vegetation-management practices, the storm water pollution prevention plan developed for construction of the transmission line, and (in many instances) landowner preferences or requests.
162. AEP Texas's standard vegetation removal, construction, and maintenance practices adequately mitigate concerns expressed by the Texas Parks and Wildlife Department.
163. AEP Texas will use appropriate avian protection procedures.
164. AEP Texas will comply with all environmental laws and regulations, including those governing threatened and endangered species.
165. AEP Texas will comply with all applicable regulatory requirements in constructing the proposed transmission line, including any applicable requirements under section 404 of the Clean Water Act.
166. AEP Texas will cooperate with the United States Fish and Wildlife Service and the Texas Parks and Wildlife Department if threatened or endangered species' habitats are identified during field surveys.
167. If construction affects federally listed species or their habitat or affects water under the jurisdiction of the United States Army Corps of Engineers or the Texas Commission on Environmental Quality, AEP Texas will cooperate with the United States Fish and Wildlife Service, the United States Army Corps of Engineers, and the Texas Commission on Environmental Quality, as appropriate, to coordinate permitting and perform any required mitigation.
168. The standard mitigation requirements included in the ordering paragraphs, coupled with AEP Texas's current practices, are reasonable measures for a utility to undertake when constructing a transmission line and are sufficient to address the Texas Parks and Wildlife Department's comments and recommendations.

Permits

169. Before beginning construction of the approved transmission line, AEP Texas will obtain any necessary permits from the Texas Department of Transportation or any other

- applicable state agency if the facilities cross state-owned or -maintained properties, roads, or highways.
170. Before beginning construction of the approved transmission line, AEP Texas will obtain a miscellaneous easement from the General Land Office if the transmission line crosses any state-owned riverbed or navigable stream.
 171. Before beginning construction of the approved transmission line, AEP Texas will obtain any necessary permits or clearances from federal, state, or local authorities.
 172. It is appropriate for AEP Texas, before commencing construction, to obtain a general permit to discharge under the Texas pollutant discharge elimination system for stormwater discharges associated with construction activities as required by the Texas Commission on Environmental Quality. In addition, because more than five acres will be disturbed during construction of the transmission line, it is appropriate for AEP Texas, before commencing construction, to prepare the necessary stormwater-pollution-prevention plan, to submit a notice of intent to the Texas Commission on Environmental Quality, and to comply with all other applicable requirements of the general permit.
 173. It is appropriate for AEP Texas to conduct a field assessment of the approved route before beginning construction of the transmission line approved by this Order to identify water resources, cultural resources, potential migratory bird issues, and threatened and endangered species' habitats disrupted by the transmission line. As a result of these assessments, AEP Texas will identify all necessary permits from Bee, Refugio, and San Patricio counties and federal and state agencies. AEP Texas will comply with the relevant permit conditions during construction and operation of the transmission line along the approved route.
 174. After designing and engineering the alignments, structure locations, and structure heights, AEP Texas will determine the need to notify the Federal Aviation Administration based on the final structure locations and designs. If necessary, AEP Texas will use lower-than-typical structure heights, line marking, or line lighting on certain structures to avoid or accommodate requirements of the Federal Aviation Administration.

Coastal Management Program

175. Under 16 TAC § 25.102(a), the Commission may grant a certificate for the construction of transmission facilities within the coastal management program boundary only when it finds that the proposed facilities comply with the applicable goals and policies of the Coastal Management Program or that the proposed facilities will not have any direct and significant effect on any of the applicable coastal natural resource areas as defined under Texas Natural Resources Code § 33.203 and 31 TAC § 501.3(b).
176. Coastal natural resource areas, as defined under Texas Natural Resources Code § 33.203 and 31 TAC § 501.3(b), include open waters of the Gulf of Mexico, waters under tidal influence, submerged lands, coastal wetlands, submerged aquatic vegetation, tidal sand and mud flats, oyster reefs, hard substrate reefs, coastal barriers, coastal shore areas, gulf beaches, critical dune areas, special hazard areas (floodplains, etc.), critical erosion areas, coastal historic areas, and coastal preserves.
177. Coastal barrier resource system units and other areas are identified and generally depicted on the maps on file with the United States secretary of state entitled “Coastal Barrier Resources System,” dated October 24, 1990, as replaced, modified, revised, or corrected under 16 United States Code § 3505.
178. The coastal-facility designation line, as defined by 31 TAC § 19.2(a)(22), delineates the area seaward of which facilities, such as transmission facilities, may be subject to the certification requirements of 31 TAC § 19.12.
179. A portion of some of the alternative routes are located within the Coastal Management Program boundary as defined in 31 TAC § 503.1.
180. AEP Texas will implement appropriate avoidance and minimization measures and will construct the transmission line along route M in accordance with the Coastal Management Program’s goals under 31 TAC § 501.12 and policies under 31 TAC § 501.16(a).
181. The proposed construction of the transmission line along route N or route M will not have any direct and significant effect on any of the applicable coastal natural resource areas as defined under Texas Natural Resources Code § 33.203 and 31 TAC § 501.3(b).

Effect on the State's Renewable Energy Goal

182. The Texas Legislature established a goal in PURA § 39.904(a) for 10,000 MW of renewable capacity to be installed in Texas by January 1, 2025. This goal has already been met.
183. The transmission line along route N or route M cannot adversely affect the goal for renewable energy development established in PURA § 39.904(a).

Limitation of Authority

184. It is reasonable and appropriate for a CCN order not to be valid indefinitely because it is issued based on the facts known at the time of issuance.
185. Seven years is a reasonable and appropriate limit to place on the authority granted in this Order for AEP Texas to construct the transmission line.

II. Conclusions of Law

The Commission adopts the following conclusions of law.

1. AEP Texas is a public utility as defined in PURA § 11.004(1) and an electric utility as defined in PURA § 31.002(6).
2. The Commission has jurisdiction over this matter under PURA §§ 14.001, 32.001, 37.051, 37.053, 37.054, and 37.056.
3. AEP Texas is required under PURA § 37.051(a) to obtain the approval of the Commission to construct the proposed transmission line and provide service to the public using those facilities.
4. SOAH exercised jurisdiction over the proceeding under PURA § 14.053 and Texas Government Code §§ 2003.021 and 2003.049.
5. The application is sufficient under 16 TAC § 22.75(d).
6. The Commission processed this docket in accordance with the requirements of PURA, the Administrative Procedure Act,² and the Commission's rules.

² Tex. Gov't Code §§ 2001.001–2001.903.

7. AEP Texas provided notice of the application in compliance with PURA § 37.054 and 16 TAC § 22.52(a).
8. There is good cause to grant an exception to the requirements of 16 TAC § 22.52(a)(4) for AEP Texas to have held an online public meeting instead of an in-person public meeting.
9. The transmission line using route M is necessary for the service, accommodation, convenience, or safety of the public within the meaning of PURA § 37.056.
10. The transmission line using route N complies with the Texas Coastal Management Program's requirements under 16 TAC § 25.102, goals under 31 TAC § 501.12, and applicable policies under 31 TAC § 501.16(a).
- 10A. The transmission line using route M complies with the Texas Coastal Management Program's requirements under 16 TAC § 25.102, goals under 31 TAC § 501.12, and applicable policies under 31 TAC § 501.16(a).

III. Ordering Paragraphs

In accordance with these findings of fact and conclusions of law, the Commission issues the following orders:

1. The Commission adopts the proposal for decision to the extent provided in this Order.
2. The Commission amends AEP Texas's CCN number 30028 to include the construction and operation of a 345-kV single-circuit transmission line along route M, (segments 1, 3, 5, 8, 9, 10, 13, 14, 17, 26, 27a, 27b, 28, 30, and 31) on double-circuit-capable structures. The Commission is not certifying a second circuit through this Order.
3. AEP Texas must consult with pipeline owners or operators in the vicinity of the approved route regarding the pipeline owners' or operators' assessment of the need to install measures to mitigate the effects of alternating-current interference on existing pipelines that are paralleled by the electric transmission line approved by this Order.
4. AEP Texas must conduct surveys, if not already completed, to identify metallic pipelines that could be affected by the transmission line approved by this Order and cooperate with pipeline owners in modeling and analyzing potential hazards because of alternating-current interference affecting metallic pipelines being paralleled.

5. AEP Texas must obtain all permits, licenses, plans, and permissions required by state and federal law that are necessary to construct the transmission line approved by this Order, and if AEP Texas fails to obtain any such permit, license, plan, or permission, it must notify the Commission immediately.
6. AEP Texas must identify any additional permits that are necessary, consult any required agencies (such as the United States Army Corps of Engineers and the United States Fish and Wildlife Service), obtain all necessary environmental permits, and comply with the relevant conditions during construction and operation of the transmission line approved by this Order.
7. If AEP Texas encounters any archeological artifacts or other cultural resources during construction, work must cease immediately in the vicinity of the artifact or resource, and AEP Texas must report the discovery to, and act as directed by, the Texas Historical Commission.
8. Before beginning construction, AEP Texas must undertake appropriate measures to identify whether a potential habitat for endangered or threatened species exists and must respond as required.
9. AEP Texas must use best management practices to minimize the potential harm to migratory birds and threatened or endangered species that is presented by the approved route.
10. AEP Texas must follow the procedures to protect raptors and migratory birds as outlined in the following publications: *Reducing Avian Collisions with Power Lines: State of the Art in 2012*, Edison Electric Institute and Avian Power Line Interaction Committee, Washington, D.C. 2012; *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006*, Edison Electric Institute, Avian Power Line Interaction Committee, and the California Energy Commission, Washington, D.C. and Sacramento, CA 2006; and *Avian Protection Plan Guidelines*, Avian Power Line Interaction Committee and United States Fish and Wildlife Service, April 2005. AEP Texas must take precautions to avoid disturbing occupied nests and take steps to minimize the burden of construction

on migratory birds during the nesting season of the migratory bird species identified in the area of construction.

11. AEP Texas must exercise extreme care to avoid affecting non-targeted vegetation or animal life when using chemical herbicides to control vegetation within the right-of-way. Herbicide use must comply with rules and guidelines established in the Federal Insecticide, Fungicide, and Rodenticide Act and with Texas Department of Agriculture regulations.
12. AEP Texas must minimize the amount of flora and fauna disturbed during construction of the transmission line, except to the extent necessary to establish appropriate right-of-way clearance for the transmission line. In addition, AEP Texas must re-vegetate using native species and must consider landowner preferences and wildlife needs in doing so. Furthermore, to the maximum extent practicable, AEP Texas must avoid adverse environmental effects on sensitive plant and animal species and their habitats, as identified by the Texas Parks and Wildlife Department and the United States Fish and Wildlife Service.
13. AEP Texas must implement erosion-control measures as appropriate. Erosion-control measures may include inspection of the right-of-way before and during construction to identify erosion areas and implement special precautions as determined reasonable to minimize the effect of vehicular traffic over the areas. Also, AEP Texas must return each affected landowner's property to its original contours and grades unless otherwise agreed to by the landowner or the landowner's representative. However, the Commission does not require AEP Texas to restore original contours and grades where a different contour or grade is necessary to ensure the safety or stability of the transmission line's structures or the safe operation and maintenance of the transmission line.
14. AEP Texas must cooperate with directly affected landowners to implement minor deviations in the approved route to minimize the disruptive effect of the transmission line. Any minor deviations in the approved route must only directly affect the landowners who were sent notice of the transmission line in accordance with 16 TAC § 22.52(a)(3) and have agreed to the minor deviation.

15. The Commission does not permit AEP Texas to deviate from the approved route in any instance in which the deviation would be more than a minor deviation without first further amending its CCN.
16. If possible, and subject to the other provisions of this Order, AEP Texas must prudently implement appropriate final design for the transmission line to avoid being subject to the Federal Aviation Administration's notification requirements. If required by federal law, AEP Texas must notify and work with the Federal Aviation Administration to ensure compliance with applicable federal laws and regulations. The Commission does not authorize AEP Texas to deviate materially from this Order to meet the Federal Aviation Administration's recommendations or requirements. If a material change would be necessary to meet the Federal Aviation Administration's recommendations or requirements, then AEP Texas must file an application to amend its CCN as necessary.
17. AEP Texas must minimize to the greatest practicable extent any potential adverse effects of the construction of the transmission line on coastal natural resource areas by designing and constructing the transmission line according to best management practices.
18. AEP Texas must include the transmission line approved by this Order on its monthly construction progress reports before the start of construction to reflect the final estimated cost and schedule in accordance with 16 TAC § 25.83(b). In addition, AEP Texas must provide final construction costs, with any necessary explanation for cost variance, after completion of construction when AEP Texas identifies all charges.
19. The Commission grants a good-cause exception to the requirements of 16 TAC § 22.52(a)(4) for AEP Texas to have held an online public meeting instead of an in-person public meeting.
20. The Commission limits the authority granted by this Order to a period of seven years from the date the Order is signed unless the transmission line is commercially energized before that time.
21. The Commission denies all other motions and any other requests for general or specific relief that have not been expressly granted.

Signed at Austin, Texas the 20th day of March 2022.

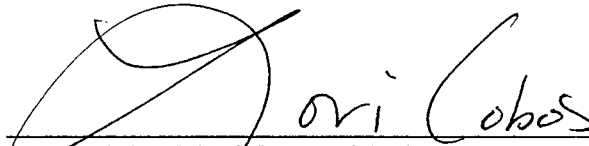
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