Control Number: 51023

Item Number: 769

Addendum StartPage: 0

SOAH DOCKET NO. 473-21-0247
PUC DOCKET NO. 51023

RECEIVED
2021 APR 27 PM 2:04

| | | |
|---|---|---|
| APPLICATION OF CITY OF SAN ANTONION TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE SCENIC LOOP 138-KV TRANSMISSION LINE PROJECT IN BEXAR COUNTY, TEXAS | § | BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARNGS |

## SECOND ERRATA TO THE DIRECT TESTIMONY OF JOHN POOLE

The Staff (Staff) of the Public Utility Commission of Texas (Commission) files the following Second Errata to the Direct Testimony of John Poole, originally filed on March 22, 2021. This second errata includes an additional route option proposed by an intervenor and makes necessary corrections to certain data points. This filing includes a redlined copy of Mr. Poole's testimony with the second errata and a clean copy of Mr. Poole's testimony with all errata, both attached hereto.

Dated: April 27, 2021

Respectfully submitted,

**PUBLIC UTILITY COMMISSION OF TEXAS**
**LEGAL DIVISION**

Rachelle Nicolette Robles
Division Director

/s/ Rustin Tawater
Rustin Tawater
State Bar No. 24110430
1701 N. Congress Avenue
P.O. Box 13326
Austin, Texas 78711-3326
(512) 936-7230
(512) 936-7268 (facsimile)
rustin.tawater@puc.texas.gov

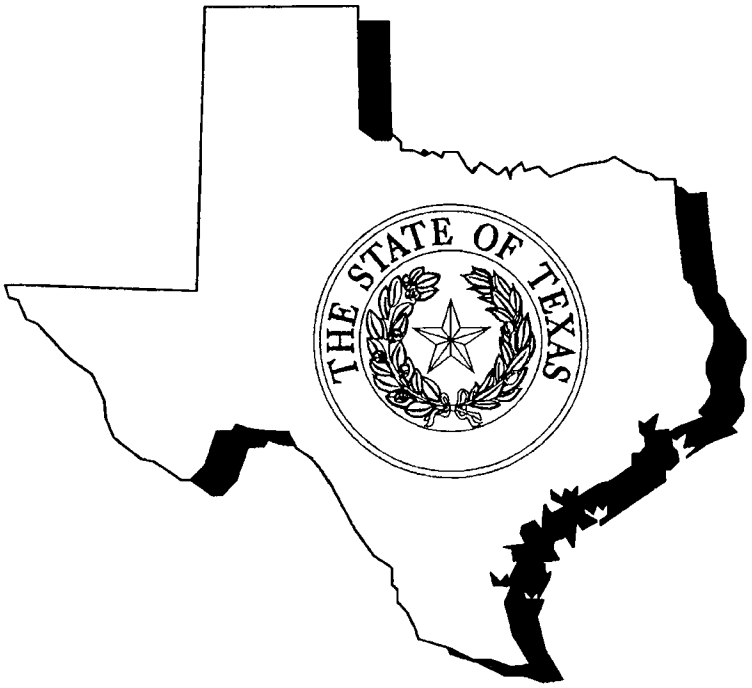
**SOAH DOCKET NO. 473-21-0247**
**PUC DOCKET NO. 51023**
**CERTIFICATE OF SERVICE**

I certify that, unless otherwise ordered by the presiding officer, notice of the filing of this document was provided to all parties of record via electronic mail on April 27, 2021, in accordance with the Order Suspending Rules, issued in Project No. 50664.

/s/ Rustin Tawater
Rustin Tawater

SOAH DOCKET NO. 473-21-0247
PUC DOCKET NO. 51023

| | | |
|---|---|---|
| APPLICATION OF THE CITY OF SAN ANTONIO ACTING BY AND THROUGH THE CITY PUBLIC SERVICE BOARD (CPS ENERGY) TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE PROPOSED SCENIC LOOP 138-KV TRANSMISSION LINE IN BEXAR COUNTY | § | BEFORE THE STATE OFFICE<br><br>OF<br><br>ADMINISTRATIVE HEARINGS |




SECOND ERRATA TO DIRECT TESTIMONY OF

JOHN POOLE, P.E., ENGINEER

INFRASTRUCTURE DIVISION

PUBLIC UTILITY COMMISSION OF TEXAS

APRIL 276, 2021

TABLE OF CONTENTS

**ATTACHMENTS**

## I. STATEMENT OF QUALIFICATIONS

**Q. Please state your name, occupation and business address.**

A. My name is John Poole. I am employed by the Public Utility Commission of Texas (Commission) as an Engineer within the Infrastructure Division. My business address is 1701 North Congress Avenue, Austin, Texas 78701.

**Q. Please briefly outline your educational and professional background.**

A. I have a Bachelor of Science degree in Electrical Engineering. I completed my degree in December of 2014 and have been employed at the Commission since February 2015. A more detailed resume is provided in Attachment JP-1.

**Q. Are you a registered professional engineer?**

A. Yes, I am a registered Professional Engineer in Texas and my member number is 133982.

**Q. Have you previously testified as an expert before the Commission?**

A. Yes. A list of previous testimony is provided in Attachment JP-2.

## II. SCOPE OF TESTIMONY

**Q. What is the purpose of your testimony in this proceeding?**

A. The purpose of my testimony is to present Commission Staff's recommendations

concerning the application of the City of San Antonio, acting by and through the City Public Service Board (CPS Energy) to amend its Certificate of Convenience and Necessity (CCN) to construct a new double circuit 138-kilovolt (kV) electric transmission line to be built on brown colored steel monopole structures in Bexar County, Texas.[1] The proposed transmission line will connect the existing Ranchtown to Menger Creek 138-kV to the proposed Scenic Loop Substation that will be located in one of several locations in the area of the intersection of Scenic Loop Road and Toutant Beauregard Road (Proposed Project).[2]

**Q. What is the scope of your testimony?**

A. The scope of my testimony is to provide Commission Staff's recommendation regarding the need for the project and regarding selection of routes from among the alternative routes presented by CPS Energy and intervenors.

**Q. What are the statutory requirements that a utility must meet to amend its CCN to construct a new transmission line?**

A. Section 37.056(a) of the Public Utility Regulatory Act (PURA)[3] states that the Commission may approve an application for a CCN only if the Commission finds that the CCN is necessary for the service, accommodation, convenience, or safety

[1] Application of the City of San Antonio Acting by and through the City Public Service Board (CPS Energy) to Amend its Certificate of Convenience and Necessity for the Proposed Scenic Loop 138-kV Transmission Line Project in Bexar County (Application) at 4-5 (July 22, 2020).

[2] Application at 7.

[3] Public Utility Regulatory Act, Tex. Util. Code Ann. §§ 11.001-66.016 (PURA).

of the public. Further, PURA provides that the Commission shall approve, deny, or modify a request for a CCN after considering the factors specified in PURA § 37.056(c), which are as follows:

(1) the adequacy of existing service;

(2) the need for additional service;

(3) the effect of granting the certificate on the recipient of the certificate and any electric utility serving the proximate area; and

(4) other factors, such as:

(A) community values;

(B) recreational and park areas;

(C) historical and aesthetic values;

(D) environmental integrity;

(E) the probable improvement of service or lowering of cost to consumers in the area if the certificate is granted; and

(F) to the extent applicable, the effect of granting the certificate on the ability of this state to meet the goal established by PURA § 39.904(a).

**Q. Do the Commission's rules provide any instruction regarding routing criteria?**

A. Yes. 16 Texas Administrative Code (TAC) § 25.101(b)(3)(B) requires that an application for a new transmission line address the criteria in PURA § 37.056(c), and that upon considering those criteria, engineering constraints and costs, the line

shall be routed to the extent reasonable to moderate the impact on the affected community and landowners, unless grid reliability and security dictate otherwise. The following factors shall be considered in the selection of CPS Energy's alternative routes:

(i) whether the routes parallel or utilize existing compatible rights-of-way for electric facilities, including the use of vacant positions on existing multiple-circuit transmission lines;

(ii) whether the routes parallel or utilize existing compatible rights-of-way, including roads, highways, railroads, or telephone utility rights-of-way;

(iii) whether the routes parallel property lines or other natural or cultural features; and

(iv) whether the routes conform with the policy of prudent avoidance.

**Q. What issues identified by the Commission must be addressed in this docket?**

A. In the Order of Referral and Preliminary Order issued on September 29, 2020, the Commission identified the following issues that must be addressed:

1. Is CPS Energy's application to amend its CCN adequate? Does the application contain an adequate number of reasonably differentiated alternative routes to conduct a proper evaluation? In answering this question, consideration must be given to the number of proposed alternatives, the locations of the proposed transmission line, and any associated proposed facilities that influence the location of the line.

Consideration may also be given to the facts and circumstances specific to the geographic area under consideration, and to any analysis and reasoned justification presented for a limited number of alternative routes. A limited number of alternative routes is not in itself a sufficient basis for finding an application inadequate when the facts and circumstances or a reasoned justification demonstrates a reasonable basis for presenting a limited number of alternatives. If an adequate number of routes is not presented in the application, the ALJ must allow CPS Energy to amend the application and to provide proper notice to affected landowners; if CPS Energy chooses not to amend the application, the ALJ may dismiss the case without prejudice.

2. Are the proposed facilities necessary for the service, accommodation, convenience, or safety of the public within the meaning of PURA § 37.056(a) taking into account the factors set out in PURA § 37.056(c)? In addition,

   a) How does the proposed facility support the reliability and adequacy of the interconnected transmission system?

   b) Does the proposed facility facilitate robust wholesale competition?

   c) What recommendation, if any, has an independent organization, as defined in PURA § 39.151, made regarding the proposed facility?

   d) Is the proposed facility needed to interconnect a new transmission service customer?

3. Is the transmission project the better option to meet this need when

compared to employing distribution facilities? If CPS Energy is not subject to the unbundling requirements of PURA § 39.051, is the project the better option to meet the need when compared to a combination of distributed generation and energy efficiency?

4. Which proposed transmission line route is the best alternative weighing the factors set forth in PURA § 37.056(c) and 16 TAC § 25.101(b)(3)(B)?

5. Are there alternative routes or facilities configurations that would have a less negative impact on landowners? What would be the incremental cost of those routes?

6. If alternative routes or facility configurations are considered due to individual landowner preference:

   a) Have the affected landowners made adequate contributions to offset any additional costs associated with the accommodations?

   (b) Have the accommodations to landowners diminished the electric efficiency of the line or reliability?

7. On or after September 1, 2009, did the Texas Parks and Wildlife Department provide any recommendations or informational comments regarding this application in accordance with Section 12.0011(b) of the Texas Parks and Wildlife Code? If so, please address the following issues:

   a) What modifications, if any, should be made to the proposed project as a result of any recommendations or comments?

b) What conditions or limitations, if any, should be included in the final order in this docket as a result of any recommendations or comments?

c) What other disposition, if any, should be made of any recommendations or comments?

d) If any recommendation or comment should not be incorporated in this project or the final order, or should not be acted upon, or is otherwise inappropriate or incorrect in light of the specific facts and circumstances presented by this application or the law applicable to contested cases, please explain why that is the case.

8. Are the circumstances for this line such that the seven-year limit discussed in section III of this Order should be changed?

**Q. Which issues in this proceeding have you addressed in your testimony?**

A. I have addressed all issues included in the Order of Referral and Preliminary Order and the requirements of PURA § 37.056 and 16 TAC § 25.101.

**Q. If you do not address an issue or position in your testimony, should that be interpreted as Staff supporting any other party's position on that issue?**

A. No. The fact that I do not address an issue in my testimony should not be construed as agreeing, endorsing, or consenting to any position taken by any other party in this proceeding.

**Q. What have you relied upon or considered to reach your conclusions and make your recommendation?**

A. I have relied upon my review and analysis of the data contained in CPS Energy's application and the application's accompanying attachments, including the *Environmental Assessment* (EA)[4] prepared by Power Engineers, Inc. (Power Engineers). I have also relied upon my review of the direct testimonies and statements of position filed in this proceeding by or on behalf of CPS Energy and the intervenors, responses to requests for information, and the letters from the Texas Parks and Wildlife Department (TPWD) to Ms. Rachelle Robles, dated September 10, 2020 and February 18, 2021.[5]

## III. CONCLUSIONS AND RECOMMENDATIONS

**Q. Based on your evaluation of CPS Energy's application and other relevant material, what conclusions have you reached regarding the application and the Proposed Project?**

1. I conclude that the application is adequate and that CPS Energy's proposed routes are adequate in number and geographic diversity.
2. I conclude that the application complies with the notice requirements in 16 TAC § 22.52(a).

[4] Application Attachment 1

[5] Attachment JP-3 and JP-4.

3. I conclude that, taking into account the factors set out in PURA § 37.056(c), the Proposed Project is necessary for the service, accommodation, convenience and safety of the public.

4. I conclude that the Proposed Project is the best option to meet the need when compared with other alternatives.

5. I conclude that Route P (Substation Site 6, Segments 50, 15, 22, 25, 37, 38, and 43) is the best route when weighing, as a whole, the factors set forth in PURA § 37.056(c)(4) and in 16 TAC § 25.101(b)(3)(B).

6. I conclude that TPWD recommended mitigation measures regarding the application, and that the mitigation measures I recommend on Pages 12 through 15 of my testimony, as well as mitigation measures recommended in the environmental concerns on pages 30~~28~~ through 33~~31~~ of my testimony, are sufficient to address TPWD's mitigation recommendations. I also conclude that CPS Energy has the resources and procedures in place in order to accommodate the mitigation recommendations.

**Q. What recommendation do you have regarding CPS Energy's application?**

A. I recommend that the Commission approve CPS Energy's application to amend their CCN in order to construct a new 138-kV electric transmission line in Bexar County, Texas.

I also recommend that the Commission order CPS Energy to construct the Proposed Project on Route P (Substation Site 6, Segments 50, 15, 22, 25, 37, 38, and 43). I further recommend that the Commission include in its order approving

CPS Energy's application the following paragraphs in order to mitigate the impact of the Proposed Project:

1. CPS Energy shall conduct surveys, if not already completed, to identify pipelines that could be affected by the transmission lines and coordinate with pipeline owners in modeling and analyzing potential hazards because of alternating-current interference affecting pipelines being paralleled.
2. If CPS Energy encounters any archeological artifacts or other cultural resources during project construction, work must cease immediately in the vicinity of the artifact or resource, and the discovery must be reported to the Texas Historical Commission. In that situation CPS Energy must take action as directed by the Texas Historical Commission.
3. CPS Energy must follow the procedures to protect raptors and migratory birds as 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. CPS Energy 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.

4. CPS Energy must exercise extreme care to avoid affecting non-targeted vegetation or animal life when using chemical herbicides to control vegetation within rights-of-way. CPS Energy must ensure that the use of chemical herbicides to control vegetation within the rights-of-way complies with rules and guidelines established in the Federal Insecticide Fungicide and Rodenticide Act and with Texas Department of Agriculture regulations.

5. CPS Energy must minimize the amount of flora and fauna disturbed during construction of the transmission lines, except to the extent necessary to establish appropriate right-of-way clearance for the transmission lines. In addition, CPS Energy must revegetate, using native species and must consider landowner preferences and wildlife needs in doing so. Furthermore, to the maximum extent practical, CPS Energy must avoid adverse environmental influence on sensitive plant and animal species and their habitats, as identified by the TPWD and the United States Fish and Wildlife Service (USFWS).

6. CPS Energy 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 necessary. CPS Energy 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.

CPS Energy is not required to restore the original contours and grades where a different contour or grade is necessary to ensure the safety or stability of the project's structures or the safe operation and maintenance of the lines.

7. CPS Energy must use best management practices to minimize the potential impacts to migratory birds and threatened or endangered species.

8. CPS Energy must cooperate with directly affected landowners to implement minor deviations from the approved route to minimize the burden of the transmission lines. Any minor deviations from the approved route must only directly affect landowners who were sent notice of the transmission line in accordance with 16 TAC § 22.52(a)(3) and landowners that have agreed to the minor deviation.

9. CPS Energy must report the transmission line approved by the Commission 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, CPS Energy must provide final construction costs, with any necessary explanation for cost variance, after completion of construction when all costs have been identified.

**Q. Does your recommended route differ from the route that CPS Energy believes best addresses the requirements of PURA and the Commission's rules?**

A. Yes. CPS Energy believes Route Z best meets the requirements of PURA and the

Commission's rules.[6] However, in CPS Energy's Application Amendment, it appears CPS Energy replaced the original Route Z with Route Z1 following some segment adjustments.[7]

## IV. PROJECT JUSTIFICATION

### A. DESCRIPTION OF THE PROJECT

**Q. Please describe the Proposed Project.**

A. The Proposed Project consists of the construction of a new double circuit 138-kV electric transmission line to be built on brown colored steel monopole structures in Bexar County, Texas.[8] The transmission line project will begin at the proposed CPS Energy Scenic Loop Substation, that will be built in one of seven locations in the area of the intersections of Scenic Loop Road and Toutant Beauregard Road. The transmission line will then proceed generally westwards to one of six points along the existing CPS Energy Ranchtown to Menger Creek 138-kV transmission line.[9] CPS Energy proposes to support the transmission line using single circuit steel single pole structures generally ranging between 70 to 130 feet in height.[10]

[6] Application at 29.

[7] Amendment to CPS Energy's Application (Application Amendment) at 2 (Dec. 22, 2020).

[8] Application at 4-5.

[9] Application at 3.

[10] Application Attachment 1 at 1-17 through 1-20.

**Q. Does CPS Energy's application contain a number of alternative routes sufficient to conduct a proper evaluation?**

A. Yes. CPS Energy's application and application amendment proposed three routes from Substation Site 1 (Routes A, B1, and C1), three routes routes from Substation Site 2 (Routes D1, E, and F1), six routes from Substation Site 3 (Routes G1, H, I1, J1, K, and L), one route from Substation Site 4 (Route M1), two routes from Substation Site 5 (Routes N1 and O), eight routes from Substation Site 6 (Routes P, Q1, R1, S, T1, U1, V, and W), and eight routes from Substation Site 7 (Routes X1, Y, Z1, AA1, BB, CC, DD, and EE). Four routes then terminate at the existing CPS Energy Ranchtown to Menger Creek 138-kV transmission line at Segment 40 (Routes A, E, H, and Y), nine routes terminate at Segment 46b (Routes B1, C1, D1, I1, M1, T1, X1, Z1, and DD), four routes terminate at Segment 49a (Routes G1, J1, AA1, and EE), seven routes terminate at Segment 43 (Routes F1, K, N1, P, R1, BB, and CC), four routes terminate at Segment 44 (Routes O, Q1, V, and W), and three routes terminate at Segment 45 (Routes L, S, and U1).[11]

Eight~~Seven~~ further routes have been proposed by intervenors in this proceding, Routes AA2,[12] Dreico 1, Dreico 2, Dreico 3, Dreico 4, Dreico 5, ~~and~~ Dreico 6,~~.~~[13] And Z2.[14] All of these proposed eight~~seven~~ routes start from Substation Site 7. Four~~Three~~ of these routes terminate at Segment 46b (Routes Dreico 2, Dreico 4,

[11] Application Amendment Attachment 2 at Table 2-1.

[12] Lisa Chandler's First Requests for Information to CPS Energy at 7, (Jan 25, 2021).

[13] Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, and Crighton Development Co.'S First Set of Requests for Information to CPS Energy at 6, (Feb 12, 2021).

[14] Bexar Ranch, L.P.'s First Requests for Information and for Admissions to CPS Energy at 1, (April 14, 2021).

and Dreico 6, and Z2) and four terminate at Segment 49a (Routes AA2, Dreico 1, Dreico 3, and Dreico 5).

**Q. Is the Proposed Project located within the incorporated boundaries of any municipality?**

A. None of alternative routes would be constructed within an incorporated municipality.[15]

## B. TEXAS COASTAL MANAGEMENT PROGRAM

**Q. Does any part of this project lie within the Texas Coastal Management Program (TCMP) boundary?**

A. No. The Proposed Project is not located, either in whole or in part, within the TCMP boundary.[16]

## C. NEED FOR THE PROJECT

**Q. Could you briefly summarize the need for the project?**

**A.** Yes. As stated in the Application, this CCN is needed to address a projected 4-7 percent annual growth rate in the northwest corner of Bexar County.[17] This growth

[15] Application at 8.

[16] Application at 41.

[17] Application Attachment 13 at 5.

is projected to see the 2018 load in the area of Scenic Loop grow from 149,952 kilowatts (kW) to 255,932 kW by 2031. This CCN would also address the very long distribution circuits origination from the CPS Energy La Sierra and Fair Oaks Ranch Substations which are up to seven times longer than the average CPS Energy distribution circuit needed to support the current load. The combination of this load growth and long distribution circuits is projected, by Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) in its Scenic Loop Substation Analysis Report attached to the application as Attachment 13, to reach the existing distribution system's reliability limit by 2024.[18]

**Q. Has an independent organization, as defined in PURA § 39.151, determined that there is a need for the Proposed Project?**

A. No. This project is for a transmission line to service load growth and is therefore classified as a Tier 4 Neutral project. The Electric Reliability Council of Texas (ERCOT) protocols do not require Tier 4 Neutral projects to be submitted to ERCOT for review.[19]

**Q. Are the proposed facilities necessary for the service, accommodation, convenience, or safety of the public within the meaning of PURA § 37.056(a)?**

A. Yes. In my opinion, based on the data and load projections provided by CPS

[18] Application Attachment 13 at 44.

[19] Application at 4.

Energy and Burns & McDonnell in the Scenic Loop Substation Analysis Report,[20] it is evident that this project is necessary and is the best way to address the reliability issues resulting from the load growth in the area.

## D. PROJECT ALTERNATIVES

**Q. Did CPS Energy consider distribution alternatives to the Proposed Project?**

A. Yes. Burns & McDonnell studied five different alternatives to the Proposed Project, three of which were distribution alternatives.[21]

**Q. What was the conclusion Burns & McDonnell reached as a result of that study?**

A. Burns & McDonnell investigated three distribution alternatives and none of them met the reliability criteria for serving both the forcasted load growth and resolving the issues with the length of the distribution circuits in a cost effective fashion.[22] Burns & McDonnell also investigated distributed generation alternatives but these were substantially more expensive then the transmission project alternative.[23] Burns & McDonnell therefore concluded that the current Proposed Project by CPS

[20] Application Attachment 13.

[21] Application Attachment 13 at 39.

[22] Application Attachment 13 at 37-41.

[23] Application Attachment 13 at 38-40.

Energy was the most cost-effective solution..[24]

**Q. Do you agree that the Proposed Project is the best option when compared to other alternatives?**

A. Yes.

## V. ROUTING

### A. STAFF RECOMMENDATION

**Q. What routes do you recommend upon considering all factors, including the factors in PURA § 37.056(c) and 16 TAC § 25.101(b)(3)(B)?**

A. Based on my analysis of all the factors that the Commission must consider under PURA § 37.056 and 16 TAC § 25.101, I recommend that Route P be approved for the Proposed Project. The basis for my recommendation is discussed in more detail in the remainder of my testimony.

**Q. Which route did CPS Energy select as the route that it believes best meets the requirements of PURA and the Commission's rules?**

A. CPS Energy selected Route Z as the route that it believes best meets the requirements of PURA and the Commission's rules.[25] However, in CPS Energy's

[24] Application at 17.

[25] Application at 29.

Application Amendment, it appears CPS Energy replaced the original Route Z with Route Z1 following some segment adjustments.[26]

## B. COMMUNITY VALUES

**Q. Has CPS Energy sought input from the local community regarding community values?**

A. Yes. CPS Energy held a public meeting as required by 16 TAC § 22.52(a)(4). The public meeting was conducted on October 3, 2019, from 5:30 pm to 7:30 pm at the Cross Mountain Church, 24891 Boerne Stage Road in San Antonio, Texas.[27] CPS Energy sent 592 notices of the meeting to land owners owning property within 300 feet of each of the proposed alternative route segment centerlines.[28] Notice of the meeting was also published in the San Antonio Express News on September 22 and 29, 2019.[29] A total of 172 individuals signed in at the meeting and CPS Energy received 146 questionnaire responses at, or shortly after, the meeting with 40 additional questionnaires received later.[30]

**Q. Did members of the community who returned questionnaires express concerns about the Proposed Project?**

[26] Application Amendment at 2.

[27] Application Attachment 1 at 6-1.

[28] Application Attachment 1 at 6-1.

[29] Application Attachment 1 at 6-1.

[30] Application Attachment 1 at 6-2.

A. Yes. CPS Energy received 186 questionnaires at and after the public meeting. Section 6.0 of Attachment 1 of CPS Energy's application, the EA, contains a discussion and summary of the questionnaire responses. The respondents were asked to rank criteria in routing the project that they considered to be the most important. The two criteria that ranked highest were maximizing distance from residences and visibility of structures.[31] The respondents were asked to list any segments or substation sites for which they had concerns. The segments which had the most negative comments were Segments 15, 26, and 16.[32] The Substation Sites which had the most negative comments were Substation sites 5, 2, and 4. However, other segments such as Segments 46a, 42a, 26a, and 54 were added only after the public meetings and thus did not receive any direct opposition at the meetings.[33] Likewise some substation sites such as Substation Site 6 and Substation Site 7 were added only after the public meetings and thus did not receie any direct opposition at the meetings.[34]

**Q. In your opinion, would construction of the Proposed Project on Route P mitigate the concerns expressed by members of the community at the open houses?**

A. In my opinion, Route P would mitigate some of the concerns expressed by

[31] Application Attachment 1 at 6-2.

[32] Application Attachment 1 at 6-4.

[33] Application Attachment 1 at 6-5 and Application Amendment Attachment 2 at 33-35.

[34] Application Attachment 1 at 6-5.

members of the community at the open houses. Route P does contain one of the segments negatively mentioned in the questionnaires received during and after the public meetings, Segment 15. The criteria that ranked first in the questionnaires received during and after the public meeting was maximizing distance from residences. Route P has only 17~~2~~ habitable structures within 300 feet of the centerline of its segments, which is tied for the fourth~~fifth~~ fewest among the 39~~1~~ alternative routes. The criteria that ranked second in the questionnaires received during and after the public meeting was reducing visibility of structures and Route P is 4.89 miles long, which is the ninth~~eighth~~ longest route and only 0.43~~36~~ miles longer than the shortest route.[35]

I will specifically address recreational and park areas, historical values, aesthetic values, environmental integrity, engineering constraints, costs, moderation of impact on the affected community and landowners, and right-of-way later in my testimony.

**Q. Are property values and the impact on future/potential development factors considered by the Commission in a CCN proceeding under PURA § 37.056(c)(4) or in 16 TAC § 25.101(b)(3)(B)?**

A. No. PURA and the Commission's rules do not list these two issues as factors that are to be considered by the Commission in a CCN proceeding. However, these

[35] Rebuttal Testimony of Lisa Meaux Exhibit LBM-1R (April 7, 2021) and CPS Energy's response to Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, and Crighton Development Co.'s First Request for Information 1-1 (March 1, 2021) and CPS Energy's Response to Bexar Ranch, L.P.'s First Request for Information to CPS Energy at Attachent 1-1b (April 23, 2021).

rules do require consideration of using or paralleling existing rights-of-way, which may minimize concerns about these impacts.

**Q. Are there any routes that did not receive specific opposition from intervenors?**

A. No.

## C. RECREATIONAL AND PARK AREAS

**Q. Are any parks or recreational areas located within 1,000 feet of the centerline of any of the alternative routes?**

A. No, none of the proposed alternative routes cross or are located within 1,000 feet of any park or recreation area.[36]

## D. HISTORICAL VALUES

**Q. Are there possible impacts from the Proposed Project on archeological and historical values, including known cultural resources crossed by any of the proposed alternative routes or that are located within 1,000 feet of the centerline of any of the alternative routes?**

A. There are seventeen recorded archeological or historical sites with an additional three National Register of Historic Places (NRHP) listed resources and two

[36] Application Amendment Attachment 2 at 4-25.

cemeteries are within 1,000 feet from the centerline of at least one routing segment of the proposed alternative routes.[37] Some routes, such as Routes A, B1, C1, D1, E, G1, H, I1, J1, M1, X1, Y, Z1, AA1, DD, EE, AA2, Dreico 1, Dreico 2, Dreico 3, Dreico 4, Dreico 5, ~~and~~ Dreico 6, and Z2 do not cross any cultural resource sites and but every route has at least one cultural site within 1,000 feet of their centerlines.[38] Route P crosses one recorded archeological or historic site and crosses one NRHP listed site. Route P has 10 additional archeological or historic sites within 1,000 feet of its centerline along with one cemetery within 1,000 feet of its centerline.[39] The table below shows the proposed alternative routes in this project and how many cultural resources they cross and the number of additional cultural resources within 1,000 feet of each of their centerlines.[40]

| Route | Number of Recorded Archeological or Historical Sites Crossed | Number of additional Recorded Archeological or Historical Sites within 1,000 feet of the centerline | Number of NRHP listed properties crossed | Number of additional NRHP listed properties within 1,000 feet of the centerline | Number of Cemeteries within 1,000 feet of the centerline |
|---|---|---|---|---|---|
| A | 0 | 0 | 0 | 1 | 0 |
| H | 0 | 0 | 0 | 1 | 0 |
| K | 0 | 0 | 1 | 0 | 0 |

[37] Application Amendment Attachment 2 at 4-27.

[38] Rebuttal Testimony of Lisa Meaux Exhibit LBM-1R (April 7, 2021) and CPS Energy's response to Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, and Crighton Development Co.'s First Request for Information 1-1 (March 1, 2021).

[39] *Id.*

[40] *Id.*.

| | | | | | |
|---|---|---|---|---|---|
| L | 0 | 0 | 1 | 0 | 0 |
| BB | 0 | 0 | 1 | 0 | 0 |
| CC | 0 | 0 | 1 | 0 | 0 |
| E | 0 | 2 | 0 | 1 | 0 |
| X1 | 0 | 2 | 0 | 1 | 0 |
| Dreico 3 | 0 | 2 | 0 | 1 | 0 |
| Dreico 4 | 0 | 2 | 0 | 1 | 0 |
| C1 | 0 | 2 | 0 | 1 | 1 |
| D1 | 0 | 2 | 0 | 1 | 1 |
| I1 | 0 | 2 | 0 | 1 | 1 |
| J1 | 0 | 2 | 0 | 1 | 1 |
| M1 | 0 | 2 | 0 | 1 | 1 |
| Z1 | 0 | 2 | 0 | 1 | 1 |
| AA1 | 0 | 2 | 0 | 1 | 1 |
| DD | 0 | 2 | 0 | 1 | 1 |
| EE | 0 | 2 | 0 | 1 | 1 |
| AA2 | 0 | 2 | 0 | 1 | 1 |
| Dreico 5 | 0 | 2 | 0 | 1 | 1 |
| Dreico 6 | 0 | 2 | 0 | 1 | 1 |
| Z2 | 0 | 2 | 0 | 1 | 1 |
| B1 | 0 | 2 | 0 | 2 | 1 |
| G1 | 0 | 2 | 0 | 2 | 1 |
| Y | 0 | 2 | 0 | 2 | 1 |
| Dreico 1 | 0 | 2 | 0 | 2 | 1 |

| | | | | | |
|---|---|---|---|---|---|
| Dreico 2 | 0 | 2 | 0 | 2 | 1 |
| V | 1 | 0 | 1 | 0 | 0 |
| O | 1 | 1 | 1 | 0 | 0 |
| S | 1 | 1 | 1 | 0 | 0 |
| W | 1 | 1 | 1 | 0 | 0 |
| **P** | **1** | **10** | **1** | **0** | **1** |
| T1 | 1 | 12 | 0 | 1 | 2 |
| F1 | 2 | 12 | 1 | 0 | 1 |
| N1 | 2 | 12 | 1 | 0 | 1 |
| Q1 | 2 | 12 | 1 | 0 | 1 |
| R1 | 2 | 12 | 1 | 0 | 1 |
| U1 | 2 | 12 | 1 | 0 | 1 |

The lengths of the proposed alternative routes that cross areas of high archeological potential range from 1.44 miles for Route H to 4.77 miles for Route U1.[41] Route P crosses 2.49 miles of high archeological potential, which is the 14th least of the proposed alternative routes. While Route P has 10 Recorded Archeological or Historical Sites sites and 1 cemetery within 1,000 feet of its centerline, it only crosses 1 Recorded Archeological or Historical Site and 1 NHRP listed property while being 14th among all proposed alternative routes in areas of high archeological potential crossed. Therefore, I conclude that Route P is acceptable from a historical values perspective.

[41] Rebuttal Testimony of Lisa Meaux Exhibit LBM-1R (April 7, 2021) and CPS Energy's response to Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, and Crighton Development Co.'s First Request for Information 1-1 (March 1, 2021).

Should the Commission order that one of the routes that crosses a Recorded Archeological or Historical Sites site be constructed (Routes V, O, S, W, P, T1, F1, N1, Q1, R1, or U1), CPS Energy should work with the Texas Historical Commission to determine what appropriate actions should be taken to mitigate the impacts on the site. If any further archeological or cultural resources are found during construction of the proposed transmission line, CPS Energy should immediately cease work in the vicinity of the archeological or cultural resources, and should immediately notify the Texas Historical Commission.

## E. AESTHETIC VALUES

**Q. In your opinion, which of the proposed routes would result in a negative impact on aesthetic values, and which portions of the study area will be affected?**

A. In my opinion, all of the proposed alternative routes would result in a negative impact on aesthetic values, some routes more than others, depending on the visibility from homes and public roadways. Temporary effects would include views of the actual transmission line construction (e.g. assembly and erection of the structures) and of any clearing of right-of-way. Permanent effects would involve the visibility of the structures and the lines. I therefore conclude that aesthetic values would be impacted throughout the study area, and that these temporary and permanent negative aesthetic effects will occur on any proposed alternative routes approved by the Commission. However, Route P is the

ninth~~eighth~~ shortest of the proposed alternative routes, only 0.43~~36~~ miles longer than the shortest route, and impacts the fourth fewest habitable structures of the proposed alternative routes, both of which would help to mitigate those impacts compared to the majority of the proposed alternative routes in this docket.

## F. ENVIRONMENTAL INTEGRITY

**Q. Please provide a general description of the area traversed by the proposed alternative routes.**

A. The area traversed by the project is within the the transitional area between the Balcones Escarpment/Blackland Prairies and the Edwards Plateau physiographic region of Texas. The region's topography is characterized by flat upper surfaces, interspersed by drainages that open up into larger draws or box canyons. The study area has its lowest elevation at approximately 1,250 feet above mean sea level and its highest elevation at 1,400 feet above mean sea level. The elevation tends to decrease from northeast to southeast.[42]

**Q. What was involved in your analysis of the environmental impact of the Proposed Project?**

A. I reviewed the information provided in the Application and the EA, the

[42] Application Attachment 1 at 3-1.

Application Amendment, the direct testimonies and statements of position of the intervenors, responses to requests for information, and the letters from TPWD to Ms. Rachelle Robles, dated September 10, 2020 and February 18, 2021.[43]

**Q. Based on your review of the information identified above, in your opinion, will the Proposed Project present a significant negative impact to environmental integrity?**

A. No. Transmission lines do not often create many long-term impacts on soils. Most of those impacts will be during intial construction and would be erosion and soil compaction. However, CPS Energy has confirmed that it will employ erosion control during initial construction.[44] Impacts on vegetation would be the result of clearing and maintaining the right-of-way, and the length of upland woodland or brushland along the right-of-way of the proposed alternative routes range from 3.05 miles for Route Dreico 6 to 6.52 miles for Route V.[45] Power Engineers do not anticipate encountering endangered or threatened plant or animal species in the study area, though the bracted twistflower, the Madla Cave meshweaver, two unnamed beetles, the Helotes mold beetle, the whooping crane, or golden-cheeked warbler might occur.[46] In the event endangered or threatened plant or animal species are encountered, CPS Energy should attempt to span or avoid them as

[43] Attachment JP-3 and JP-4.

[44] Application Amendment Attachment 2 at 4-9.

[45] Rebuttal Testimony of Lisa Meaux Exhibit LBM-1R (April 7, 2021) and CPS Energy's response to Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, and Crighton Development Co.'s First Request for Information 1-1 (March 1, 2021).

[46] Application Amendment Attachment 2 at 4-16.

much as practicable. None of the proposed alternative routes cross any known occupied habitat for any federally listed endangered or threatened species.[47] Nevertheless, construction of some of the alternative routes could, at some locations, present a negative impact on the environment.

In its letter dated February 18, 2021, TPWD stated that it selects Route DD as the route having the least potential impact on environmental integrity.[48]

**Q. In your opinion, how would construction of the Proposed Project on Route P compare from an environmental perspective to construction on the other routes?**

A. The Proposed Project is expected to cause only short-term effects to water, soil, and ecological resources during the initial construction phase. Route P is generally ranked well among the proposed alternative routes in most alternative categories. It has the 11th~~sixth~~ least length of right-of-way across the Edwards Aquifer contributing zone, it has the ninth~~fifth~~ least length across FEMA mapped 100-year floodplains, and it has the sixth~~fifth~~ least stream crossings. However, Route P does cross 25.11 acres of golden-cheeked warbler modeled habitat designated as 3-Moderate High and 4-High Quality which is the worst of any route.[49] CPS Energy has not yet confirmed this or the presence of the golden-cheeked warbler in the

[47] Application Amendment Attachment 2 at 4-15.

[48] Attachment JP-4 at 2.

[49] Rebuttal Testimony of Lisa Meaux Exhibit LBM-1R (April 7, 2021) and CPS Energy's response to Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, and Crighton Development Co.'s First Request for Information 1-1 (March 1, 2021).

study area via field survey. TPWD recommended that CPS should, prior to conducting surveys of the approved alternative route, contact the United States Fish and Wildlife Services (USFWS) for appropriate survey protocols for surveying for golden-cheeked warblers.[50]

**Q. Do you conclude that Route P is acceptable from an environmental and land use perspective?**

A. Yes.

## G. ENGINEERING CONSTRAINTS

**Q. Are there any possible engineering constraints associated with this project?**

A. There are no specific engineering constraints that are not present in typical transmission line projects. In my opinion, all of the possible constraints can be adequately addressed by using design and construction practices and techniques that are usual and customary in the electric utility industry.

**Q. Are there any special circumstances in this Project that would warrant an extension beyond the seven-year limit for the energization of the line?**

A. No, CPS Energy has not described any special circumstances that would merit an extension of this limit for this project.

[50] Attachemnt JP-3 at 4.

## H. COSTS

**Q. What are CPS Energy's estimated costs of constructing the Proposed Project on each of the proposed alternative routes?**

A. Attachment 3 of the Application Amendment, Exhibit SDL-2R of the Rebuttal Testimony of Scott D. Lyssy on behalf of CPS Energy, and CPS Energy's response to Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, ~~and~~ Crighton Development Co.'s First Request for Information 1-1, and CPS Energy's Supplemental Response to Bexar Ranch L.P.'s First Request for Information to CPS Energy Supplemental Attachment 1-1a lists CPS Energy's estimated costs of constructing each proposed route. The cost of each route has three components: the proposed CPS Energy Scenic Loop Substation, the transmission line, and a 10% contingency fee to cover unknown project costs not evident at the time of the estimate.[51] The cost for the Scenic Loop Substation varies, depending on which subsite is selected.[52] The table below shows the total estimated cost, with all three components included, for each of the routes from least expensive to the most expensive proposed alternative route:

| Route | Estimated Cost of the Route |
|---|---|
| Z2 | $37,638,580.00 |
| AA1 | $38,291,571.63 |
| Z1 | $38,474,771.50 |

[51] Application Amendment at 136-138.

[52] Application Amendment at 138.

| | |
|---|---|
| Dreico 6 | $38,815,298.00 |
| DD | $38,996,942.59 |
| AA2 | $39,048,155.00 |
| EE | $39,757,434.71 |
| Dreico 5 | $40,113,172.00 |
| Dreico 4 | $41,670,814.00 |
| Y | $42,723,886.97 |
| BB | $42,741,654.35 |
| Dreico 2 | $42,745,438.00 |
| I1 | $42,877,497.33 |
| **P** | **$43,408,742.18** |
| R1 | $43,522,858.14 |
| Dreico 3 | $43,829,483.00 |
| CC | $43,897,472.16 |
| D1 | $43,904,817.64 |
| J1 | $44,068,605.60 |
| Dreico 1 | $44,720,445.00 |
| X1 | $45,496,086.62 |
| Q1 | $45,890,914.04 |
| M1 | $46,044,319.76 |
| K | $46,467,251.17 |
| N1 | $46,803,781.14 |
| T1 | $47,259,332.79 |
| C1 | $47,373,300.80 |
| F1 | $49,658,757.14 |
| B1 | $50,551,923.25 |
| U1 | $50,562,535.51 |
| G1 | $51,216,233.88 |
| W | $52,869,827.60 |
| H | $53,621,914.79 |
| L | $54,086,148.54 |
| V | $54,169,034.11 |
| E | $54,505,459.92 |
| A | $54,695,383.90 |
| S | $55,327,169.75 |
| O | $56,194,702.73 |

As the table illustrates, Route P is the 14~~13~~th least expensive proposed alternative route.

**Q. Could you briefly discuss the routes less expensive than Route P and why Route P is still preferred?**

A. Yes. All Routes that are less expensive than Route P impact more habitable structures. Routes AA1, BB, DD, Z1, and AA2 have more habitable structures within 300 feet of their centerlines and make less use of compatible right-of-way or property lines as a percentage of their length. Routes EE, Dreico 2, Dreico 4, and Dreico 5 have more habitable structures within 300 feet of its centerline, make less use of compatible right-of-way or property lines as a percentage of its length, and are longer. Routes Y and I1 have more habitable structures within 300 feet of their centerlines and are longer.

**Q. Does CPS Energy's estimated cost of constructing the Proposed Project appear to be reasonable?**

A. After reviewing CPS Energy's estimates, the estimated costs for the alternative routes are roughly what I would expect considering the terrain. However, the reasonableness of the final installed cost of the completed project will be determined at a future date in the course of a rate proceeding.

## I. MODERATION OF IMPACT ON THE AFFECTED COMMUNITY AND LANDOWNERS

**Q. Do the Commission's rules address routing alternatives intended to moderate the impact on landowners?**

A. Yes. Under 16 TAC § 25.101(b)(3)(B), "the line shall be routed to the extent

reasonable to moderate the impact on the affected community and landowners unless grid reliability and security dictate otherwise."

**Q. Subsequent to filing its application, has CPS Energy made or proposed any routing adjustments to accommodate landowners?**

A. Yes. These routing adustments were made in CPS Energy's Application Amendment.

**Q. Has CPS Energy proposed any specific means by which it will moderate the impact of the Proposed Project on landowners or the affected community other than adherence to the Commission's orders, the use of good utility practices, acquisition of and adherence to the terms of all required permits, and what you have discussed above?**

A. Not to my knowledge.

## J. RIGHT-OF-WAY

**Q. Do the Commission's rules address routing along existing corridors?**

A. Yes. The following factors are to be considered under 16 TAC § 25.101(b)(3)(B):

(i) whether the routes utilize existing compatible rights-of-way, including the use of vacant positions on existing multiple-circuit transmission lines;

(ii) whether the routes parallel existing compatible rights-of-way;

(iii) whether the routes parallel property lines or other natural or cultural features; and

(iv) whether the routes conform with the policy of prudent avoidance.

## 1. USE AND PARALLELING OF EXISTING, COMPATIBLE RIGHT-OF-WAY (INCLUDING APPARENT PROPERTY BOUNDARIES)

**Q. Describe how CPS Energy proposes to use existing, parallel, or compatible right-of-way for the Proposed Project.**

A. Each proposed alternative route parallels apparent property boundaries and parallels or utilizes existing compatible rights-of-way. The percentage of Route P length that parallels or utilizes existing compatible right-of-way and apparent property boundaries is approximately 71% of its length. The table below summarizes the overall length, the length parallel to a compatible rights-of-way or to a property boundary, and the total percentage of parallel rights-of-way used by the proposed alternative routes. Commission Rule 16 TAC § 25.101(b)(3)(B) does not consider existing pipeline rights-of-way as compatible rights-of-way.

| Route | Length (Miles) | Length Parallel to Right-of-Way (Miles) | Percentage |
|---|---|---|---|
| A | 6.66 | 5.50 | 82.59% |
| Y | 5.23 | 4.27 | 81.53% |
| H | 6.32 | 5.09 | 80.46% |

| | | | |
|---|---|---|---|
| E | 6.62 | 4.99 | 75.38% |
| T1 | 5.93 | 4.46 | 75.24% |
| Dreico 6 | 4.57 | 3.36 | 73.52% |
| CC | 5.23 | 3.84 | 73.43% |
| V | 6.60 | 4.82 | 73.01% |
| M1 | 5.85 | 4.25 | 72.67% |
| I1 | 5.03 | 3.59 | 71.43% |
| Z2 | 4.46 | 3.18 | 71.30% |
| **P** | **4.89** | **3.47** | **71.00%** |
| DD | 4.64 | 3.27 | 70.49% |
| F1 | 5.66 | 3.97 | 70.12% |
| K | 5.29 | 3.71 | 70.07% |
| BB | 4.73 | 3.30 | 69.81% |
| D1 | 5.22 | 3.62 | 69.38% |
| Q1 | 5.56 | 3.83 | 68.80% |
| N1 | 5.33 | 3.64 | 68.28% |
| Dreico 2 | 5.32 | 3.63 | 68.23% |
| Z1 | 4.53 | 3.09 | 68.21% |
| B1 | 6.19 | 4.19 | 67.69% |
| Dreico 4 | 5.27 | 3.55 | 67.36% |
| C1 | 5.77 | 3.82 | 66.23% |
| X1 | 5.34 | 3.46 | 64.87% |
| R1 | 4.76 | 3.06 | 64.32% |
| L | 6.91 | 4.38 | 63.42% |
| O | 6.83 | 4.21 | 61.58% |
| U1 | 6.36 | 3.74 | 58.77% |
| Dreico 5 | 4.92 | 2.88 | 58.54% |
| W | 6.25 | 3.63 | 58.03% |
| AA1 | 4.82 | 2.72 | 56.48% |
| EE | 4.99 | 2.81 | 56.22% |
| J1 | 5.46 | 3.04 | 55.71% |
| Dreico 1 | 5.67 | 3.15 | 55.56% |
| Dreico 3 | 5.62 | 3.07 | 54.63% |
| G1 | 6.20 | 3.31 | 53.37% |
| AA2 | 4.89 | 2.59 | 52.92% |

| | | | |
|---|---|---|---|
| S | 6.73 | 3.31 | 49.09% |

As the chart shows, Route P is the ninth~~eighth~~ shortest route and ranks 12~~11~~th in terms of percentage of compatible right-of-way compared to the other alternative routes.

**Q. Could you briefly discuss the routes with a higher percentage of compatible right-of-way and why Route P is still preferred?**

A. Yes. Routes A, H, E, T1, CC, V, and M1 are more expensive, have more habitable structures within 300 feet of their centerlines, and are longer. Routes Y and I1 have more habitable structures within 300 feet of their centerlines and are longer. Routes Dreico 6 and Z2 haves more habitable structures within 300 feet of their~~its~~ centerlines.

## 2. PARALLELING OF NATURAL OR CULTURAL FEATURES

**Q. Describe how CPS Energy proposes to parallel natural or cultural features for the Proposed Project.**

A. None of the proposed alternative routes parallel natural or cultural features.

## K. PRUDENT AVOIDANCE

**Q. Define prudent avoidance.**

A. Prudent avoidance is defined by 16 TAC § 25.101(a)(6) as follows: "The limiting of exposures to electric and magnetic fields that can be avoided with reasonable investments of money and effort."

**Q. How can exposure to electric and magnetic fields be limited when routing transmission lines?**

A. Primarily by proposing alternative routes that would minimize, to the extent reasonable, the number of habitable structures located in close proximity to the routes.

**Q. How many habitable structures are located in close proximity to each of the proposed alternative routes?**

A. The table below ranks the number of habitable structures that are within 300 feet of the centerline of the proposed routes in this project.

| Route | Number of habitable structures |
|---|---|
| Q1 | 12 |
| U1 | 12 |
| R1 | 13 |
| **P** | **17** |
| N1 | 17 |
| F1 | 18 |
| BB | 27 |
| S | 29 |
| W | 29 |
| AA2 | 30 |
| Z1 | 31 |

| | |
|---|---|
| AA1 | 31 |
| V | 32 |
| EE | 32 |
| Z2 | 32 |
| O | 33 |
| DD | 33 |
| Dreico 5 | 33 |
| Dreico 6 | 34 |
| T1 | 37 |
| L | 38 |
| K | 39 |
| Y | 40 |
| X1 | 41 |
| Dreico 3 | 41 |
| J1 | 42 |
| Dreico 4 | 42 |
| D1 | 44 |
| I1 | 44 |
| M1 | 44 |
| Dreico 1 | 44 |
| Dreico 2 | 45 |
| C1 | 49 |
| G1 | 53 |
| CC | 57 |
| E | 61 |
| H | 62 |
| B1 | 64 |
| A | 72 |

There are 17 habitable structures that are within 300 feet of the centerline of Route P. Therefore, Route P ranks tied for fourth among all the proposed alternative routes with regard to this criterion.

**Q. Could you briefly discuss the routes with the same or fewer habitable structures and why Route P is still preferred?**

A. Yes. Route Q1, U1, and N1 are more expensive, make less use of compatible right-of-way or property lines as a percentage of their length, and are longer. Route R1 is more expensive and makes less use of compatible right-of-way or property

lines as a percentage of its length.

**Q. Do you conclude that CPS Energy's proposed alternative routes have minimized, to the extent reasonable, the number of habitable structures located in close proximity to the routes?**

A. Yes.

## VI. CONCLUSION

**Q. In your opinion, is any one of the proposed alternative routes better than all of the other routes in all respects?**

A. No.

**Q. If no proposed alternative route is better than all of the others in all respects, why have you recommended Route P instead of the other proposed alternative routes?**

A. In summary, after analyzing all the factors that the Commission must consider under PURA § 37.056 and 16 TAC § 25.101, I conclude that Route P best meets the criteria of PURA and the Commission's rules because:

(1) Route P is the 14~~13~~th least expensive route at $43,408,742.18,

(2) Route P is tied for fourth-least number of habitable structures within 300 feet of its centerline with 17,

(3) Route P is the ninth~~eighth~~ shortest route at 4.89 miles, and

(4) Route P is 12~~11~~th best proposed alternative route utilizing existing compatible right-of-way and property lines at 71% of its total length.

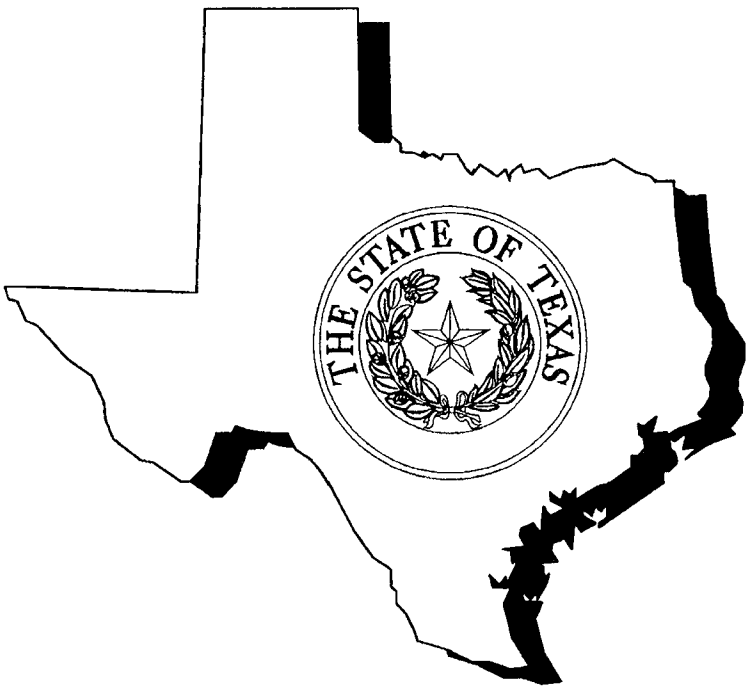
Route P, like all of the proposed alternative routes, has some advantages and some disadvantages as I have discussed in my testimony. However, I consider Route P overall to have the most advantages and to be superior to the other proposed alternative routes.

**Q. Does this conclude your testimony?**

A. Yes.

SOAH DOCKET NO. 473-21-0247
PUC DOCKET NO. 51023

| | | |
|---|---|---|
| APPLICATION OF THE CITY OF SAN ANTONIO ACTING BY AND THROUGH THE CITY PUBLIC SERVICE BOARD (CPS ENERGY) TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE PROPOSED SCENIC LOOP 138-KV TRANSMISSION LINE IN BEXAR COUNTY | § | BEFORE THE STATE OFFICE<br>OF<br>ADMINISTRATIVE HEARINGS |




# DIRECT TESTIMONY WITH ALL ERRATA OF

JOHN POOLE, P.E., ENGINEER

INFRASTRUCTURE DIVISION

PUBLIC UTILITY COMMISSION OF TEXAS

APRIL 27, 2021

TABLE OF CONTENTS

**ATTACHMENTS**

## I. STATEMENT OF QUALIFICATIONS

**Q. Please state your name, occupation and business address.**

A. My name is John Poole. I am employed by the Public Utility Commission of Texas (Commission) as an Engineer within the Infrastructure Division. My business address is 1701 North Congress Avenue, Austin, Texas 78701.

**Q. Please briefly outline your educational and professional background.**

A. I have a Bachelor of Science degree in Electrical Engineering. I completed my degree in December of 2014 and have been employed at the Commission since February 2015. A more detailed resume is provided in Attachment JP-1.

**Q. Are you a registered professional engineer?**

A. Yes, I am a registered Professional Engineer in Texas and my member number is 133982.

**Q. Have you previously testified as an expert before the Commission?**

A. Yes. A list of previous testimony is provided in Attachment JP-2.

## II. SCOPE OF TESTIMONY

**Q. What is the purpose of your testimony in this proceeding?**

A. The purpose of my testimony is to present Commission Staff's recommendations

concerning the application of the City of San Antonio, acting by and through the City Public Service Board (CPS Energy) to amend its Certificate of Convenience and Necessity (CCN) to construct a new double circuit 138-kilovolt (kV) electric transmission line to be built on brown colored steel monopole structures in Bexar County, Texas.[1] The proposed transmission line will connect the existing Ranchtown to Menger Creek 138-kV to the proposed Scenic Loop Substation that will be located in one of several locations in the area of the intersection of Scenic Loop Road and Toutant Beauregard Road (Proposed Project).[2]

**Q. What is the scope of your testimony?**

A. The scope of my testimony is to provide Commission Staff's recommendation regarding the need for the project and regarding selection of routes from among the alternative routes presented by CPS Energy and intervenors.

**Q. What are the statutory requirements that a utility must meet to amend its CCN to construct a new transmission line?**

A. Section 37.056(a) of the Public Utility Regulatory Act (PURA)[3] states that the Commission may approve an application for a CCN only if the Commission finds that the CCN is necessary for the service, accommodation, convenience, or safety

[1] Application of the City of San Antonio Acting by and through the City Public Service Board (CPS Energy) to Amend its Certificate of Convenience and Necessity for the Proposed Scenic Loop 138-kV Transmission Line Project in Bexar County (Application) at 4-5 (July 22, 2020).

[2] Application at 7.

[3] Public Utility Regulatory Act, Tex. Util. Code Ann. §§ 11.001-66.016 (PURA).

of the public. Further, PURA provides that the Commission shall approve, deny, or modify a request for a CCN after considering the factors specified in PURA § 37.056(c), which are as follows:

(1) the adequacy of existing service;

(2) the need for additional service;

(3) the effect of granting the certificate on the recipient of the certificate and any electric utility serving the proximate area; and

(4) other factors, such as:

(A) community values;

(B) recreational and park areas;

(C) historical and aesthetic values;

(D) environmental integrity;

(E) the probable improvement of service or lowering of cost to consumers in the area if the certificate is granted; and

(F) to the extent applicable, the effect of granting the certificate on the ability of this state to meet the goal established by PURA § 39.904(a).

**Q. Do the Commission's rules provide any instruction regarding routing criteria?**

A. Yes. 16 Texas Administrative Code (TAC) § 25.101(b)(3)(B) requires that an application for a new transmission line address the criteria in PURA § 37.056(c), and that upon considering those criteria, engineering constraints and costs, the line

shall be routed to the extent reasonable to moderate the impact on the affected community and landowners, unless grid reliability and security dictate otherwise. The following factors shall be considered in the selection of CPS Energy's alternative routes:

(i) whether the routes parallel or utilize existing compatible rights-of-way for electric facilities, including the use of vacant positions on existing multiple-circuit transmission lines;

(ii) whether the routes parallel or utilize existing compatible rights-of-way, including roads, highways, railroads, or telephone utility rights-of-way;

(iii) whether the routes parallel property lines or other natural or cultural features; and

(iv) whether the routes conform with the policy of prudent avoidance.

**Q. What issues identified by the Commission must be addressed in this docket?**

A. In the Order of Referral and Preliminary Order issued on September 29, 2020, the Commission identified the following issues that must be addressed:

1. Is CPS Energy's application to amend its CCN adequate? Does the application contain an adequate number of reasonably differentiated alternative routes to conduct a proper evaluation? In answering this question, consideration must be given to the number of proposed alternatives, the locations of the proposed transmission line, and any associated proposed facilities that influence the location of the line.

Consideration may also be given to the facts and circumstances specific to the geographic area under consideration, and to any analysis and reasoned justification presented for a limited number of alternative routes. A limited number of alternative routes is not in itself a sufficient basis for finding an application inadequate when the facts and circumstances or a reasoned justification demonstrates a reasonable basis for presenting a limited number of alternatives. If an adequate number of routes is not presented in the application, the ALJ must allow CPS Energy to amend the application and to provide proper notice to affected landowners; if CPS Energy chooses not to amend the application, the ALJ may dismiss the case without prejudice.

2. Are the proposed facilities necessary for the service, accommodation, convenience, or safety of the public within the meaning of PURA § 37.056(a) taking into account the factors set out in PURA § 37.056(c)? In addition,

   a) How does the proposed facility support the reliability and adequacy of the interconnected transmission system?

   b) Does the proposed facility facilitate robust wholesale competition?

   c) What recommendation, if any, has an independent organization, as defined in PURA § 39.151, made regarding the proposed facility?

   d) Is the proposed facility needed to interconnect a new transmission service customer?

3. Is the transmission project the better option to meet this need when

compared to employing distribution facilities? If CPS Energy is not subject to the unbundling requirements of PURA § 39.051, is the project the better option to meet the need when compared to a combination of distributed generation and energy efficiency?

4. Which proposed transmission line route is the best alternative weighing the factors set forth in PURA § 37.056(c) and 16 TAC § 25.101(b)(3)(B)?

5. Are there alternative routes or facilities configurations that would have a less negative impact on landowners? What would be the incremental cost of those routes?

6. If alternative routes or facility configurations are considered due to individual landowner preference:

   a) Have the affected landowners made adequate contributions to offset any additional costs associated with the accommodations?

   (b) Have the accommodations to landowners diminished the electric efficiency of the line or reliability?

7. On or after September 1, 2009, did the Texas Parks and Wildlife Department provide any recommendations or informational comments regarding this application in accordance with Section 12.0011(b) of the Texas Parks and Wildlife Code? If so, please address the following issues:

   a) What modifications, if any, should be made to the proposed project as a result of any recommendations or comments?

b) What conditions or limitations, if any, should be included in the final order in this docket as a result of any recommendations or comments?

c) What other disposition, if any, should be made of any recommendations or comments?

d) If any recommendation or comment should not be incorporated in this project or the final order, or should not be acted upon, or is otherwise inappropriate or incorrect in light of the specific facts and circumstances presented by this application or the law applicable to contested cases, please explain why that is the case.

8. Are the circumstances for this line such that the seven-year limit discussed in section III of this Order should be changed?

**Q. Which issues in this proceeding have you addressed in your testimony?**

A. I have addressed all issues included in the Order of Referral and Preliminary Order and the requirements of PURA § 37.056 and 16 TAC § 25.101.

**Q. If you do not address an issue or position in your testimony, should that be interpreted as Staff supporting any other party's position on that issue?**

A. No. The fact that I do not address an issue in my testimony should not be construed as agreeing, endorsing, or consenting to any position taken by any other party in this proceeding.

**Q. What have you relied upon or considered to reach your conclusions and make your recommendation?**

A. I have relied upon my review and analysis of the data contained in CPS Energy's application and the application's accompanying attachments, including the *Environmental Assessment* (EA)[4] prepared by Power Engineers, Inc. (Power Engineers). I have also relied upon my review of the direct testimonies and statements of position filed in this proceeding by or on behalf of CPS Energy and the intervenors, responses to requests for information, and the letters from the Texas Parks and Wildlife Department (TPWD) to Ms. Rachelle Robles, dated September 10, 2020 and February 18, 2021.[5]

## III. CONCLUSIONS AND RECOMMENDATIONS

**Q. Based on your evaluation of CPS Energy's application and other relevant material, what conclusions have you reached regarding the application and the Proposed Project?**

1. I conclude that the application is adequate and that CPS Energy's proposed routes are adequate in number and geographic diversity.
2. I conclude that the application complies with the notice requirements in 16 TAC § 22.52(a).

[4] Application Attachment 1

[5] Attachment JP-3 and JP-4.

3. I conclude that, taking into account the factors set out in PURA § 37.056(c), the Proposed Project is necessary for the service, accommodation, convenience and safety of the public.

4. I conclude that the Proposed Project is the best option to meet the need when compared with other alternatives.

5. I conclude that Route P (Substation Site 6, Segments 50, 15, 22, 25, 37, 38, and 43) is the best route when weighing, as a whole, the factors set forth in PURA § 37.056(c)(4) and in 16 TAC § 25.101(b)(3)(B).

6. I conclude that TPWD recommended mitigation measures regarding the application, and that the mitigation measures I recommend on Pages 12 through 15 of my testimony, as well as mitigation measures recommended in the environmental concerns on pages 30 through 33 of my testimony, are sufficient to address TPWD's mitigation recommendations. I also conclude that CPS Energy has the resources and procedures in place in order to accommodate the mitigation recommendations.

**Q. What recommendation do you have regarding CPS Energy's application?**

A. I recommend that the Commission approve CPS Energy's application to amend their CCN in order to construct a new 138-kV electric transmission line in Bexar County, Texas.

I also recommend that the Commission order CPS Energy to construct the Proposed Project on Route P (Substation Site 6, Segments 50, 15, 22, 25, 37, 38, and 43). I further recommend that the Commission include in its order approving

CPS Energy's application the following paragraphs in order to mitigate the impact of the Proposed Project:

1. CPS Energy shall conduct surveys, if not already completed, to identify pipelines that could be affected by the transmission lines and coordinate with pipeline owners in modeling and analyzing potential hazards because of alternating-current interference affecting pipelines being paralleled.
2. If CPS Energy encounters any archeological artifacts or other cultural resources during project construction, work must cease immediately in the vicinity of the artifact or resource, and the discovery must be reported to the Texas Historical Commission. In that situation CPS Energy must take action as directed by the Texas Historical Commission.
3. CPS Energy must follow the procedures to protect raptors and migratory birds as 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. CPS Energy 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.

4. CPS Energy must exercise extreme care to avoid affecting non-targeted vegetation or animal life when using chemical herbicides to control vegetation within rights-of-way. CPS Energy must ensure that the use of chemical herbicides to control vegetation within the rights-of-way complies with rules and guidelines established in the Federal Insecticide Fungicide and Rodenticide Act and with Texas Department of Agriculture regulations.

5. CPS Energy must minimize the amount of flora and fauna disturbed during construction of the transmission lines, except to the extent necessary to establish appropriate right-of-way clearance for the transmission lines. In addition, CPS Energy must revegetate, using native species and must consider landowner preferences and wildlife needs in doing so. Furthermore, to the maximum extent practical, CPS Energy must avoid adverse environmental influence on sensitive plant and animal species and their habitats, as identified by the TPWD and the United States Fish and Wildlife Service (USFWS).

6. CPS Energy 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 necessary. CPS Energy 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.

CPS Energy is not required to restore the original contours and grades where a different contour or grade is necessary to ensure the safety or stability of the project's structures or the safe operation and maintenance of the lines.

7. CPS Energy must use best management practices to minimize the potential impacts to migratory birds and threatened or endangered species.

8. CPS Energy must cooperate with directly affected landowners to implement minor deviations from the approved route to minimize the burden of the transmission lines. Any minor deviations from the approved route must only directly affect landowners who were sent notice of the transmission line in accordance with 16 TAC § 22.52(a)(3) and landowners that have agreed to the minor deviation.

9. CPS Energy must report the transmission line approved by the Commission 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, CPS Energy must provide final construction costs, with any necessary explanation for cost variance, after completion of construction when all costs have been identified.

**Q. Does your recommended route differ from the route that CPS Energy believes best addresses the requirements of PURA and the Commission's rules?**

A. Yes. CPS Energy believes Route Z best meets the requirements of PURA and the

Commission's rules.[6] However, in CPS Energy's Application Amendment, it appears CPS Energy replaced the original Route Z with Route Z1 following some segment adjustments.[7]

## IV. PROJECT JUSTIFICATION

### A. DESCRIPTION OF THE PROJECT

**Q. Please describe the Proposed Project.**

A. The Proposed Project consists of the construction of a new double circuit 138-kV electric transmission line to be built on brown colored steel monopole structures in Bexar County, Texas.[8] The transmission line project will begin at the proposed CPS Energy Scenic Loop Substation, that will be built in one of seven locations in the area of the intersections of Scenic Loop Road and Toutant Beauregard Road. The transmission line will then proceed generally westwards to one of six points along the existing CPS Energy Ranchtown to Menger Creek 138-kV transmission line.[9] CPS Energy proposes to support the transmission line using single circuit steel single pole structures generally ranging between 70 to 130 feet in height.[10]

[6] Application at 29.

[7] Amendment to CPS Energy's Application (Application Amendment) at 2 (Dec. 22, 2020).

[8] Application at 4-5.

[9] Application at 3.

[10] Application Attachment 1 at 1-17 through 1-20.

**Q. Does CPS Energy's application contain a number of alternative routes sufficient to conduct a proper evaluation?**

A. Yes. CPS Energy's application and application amendment proposed three routes from Substation Site 1 (Routes A, B1, and C1), three routes routes from Substation Site 2 (Routes D1, E, and F1), six routes from Substation Site 3 (Routes G1, H, I1, J1, K, and L), one route from Substation Site 4 (Route M1), two routes from Substation Site 5 (Routes N1 and O), eight routes from Substation Site 6 (Routes P, Q1, R1, S, T1, U1, V, and W), and eight routes from Substation Site 7 (Routes X1, Y, Z1, AA1, BB, CC, DD, and EE). Four routes then terminate at the existing CPS Energy Ranchtown to Menger Creek 138-kV transmission line at Segment 40 (Routes A, E, H, and Y), nine routes terminate at Segment 46b (Routes B1, C1, D1, I1, M1, T1, X1, Z1, and DD), four routes terminate at Segment 49a (Routes G1, J1, AA1, and EE), seven routes terminate at Segment 43 (Routes F1, K, N1, P, R1, BB, and CC), four routes terminate at Segment 44 (Routes O, Q1, V, and W), and three routes terminate at Segment 45 (Routes L, S, and U1).[11]

Eight further routes have been proposed by intervenors in this proceding, Routes AA2,[12] Dreico 1, Dreico 2, Dreico 3, Dreico 4, Dreico 5, Dreico 6,[13] And Z2.[14] All of these proposed eight routes start from Substation Site 7. Four of these routes terminate at Segment 46b (Routes Dreico 2, Dreico 4, Dreico 6, and Z2) and four

[11] Application Amendment Attachment 2 at Table 2-1.

[12] Lisa Chandler's First Requests for Information to CPS Energy at 7, (Jan 25, 2021).

[13] Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, and Crighton Development Co.'S First Set of Requests for Information to CPS Energy at 6, (Feb 12, 2021).

[14] Bexar Ranch, L.P.'s First Requests for Information and for Admissions to CPS Energy at 1, (April 14, 2021).

terminate at Segment 49a (Routes AA2, Dreico 1, Dreico 3, and Dreico 5).

**Q. Is the Proposed Project located within the incorporated boundaries of any municipality?**

A. None of alternative routes would be constructed within an incorporated municipality.[15]

## B. TEXAS COASTAL MANAGEMENT PROGRAM

**Q. Does any part of this project lie within the Texas Coastal Management Program (TCMP) boundary?**

A. No. The Proposed Project is not located, either in whole or in part, within the TCMP boundary.[16]

## C. NEED FOR THE PROJECT

**Q. Could you briefly summarize the need for the project?**

**A.** Yes. As stated in the Application, this CCN is needed to address a projected 4-7 percent annual growth rate in the northwest corner of Bexar County.[17] This growth is projected to see the 2018 load in the area of Scenic Loop grow from 149,952

[15] Application at 8.

[16] Application at 41.

[17] Application Attachment 13 at 5.

kilowatts (kW) to 255,932 kW by 2031. This CCN would also address the very long distribution circuits origination from the CPS Energy La Sierra and Fair Oaks Ranch Substations which are up to seven times longer than the average CPS Energy distribution circuit needed to support the current load. The combination of this load growth and long distribution circuits is projected, by Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) in its Scenic Loop Substation Analysis Report attached to the application as Attachment 13, to reach the existing distribution system's reliability limit by 2024.[18]

**Q. Has an independent organization, as defined in PURA § 39.151, determined that there is a need for the Proposed Project?**

A. No. This project is for a transmission line to service load growth and is therefore classified as a Tier 4 Neutral project. The Electric Reliability Council of Texas (ERCOT) protocols do not require Tier 4 Neutral projects to be submitted to ERCOT for review.[19]

**Q. Are the proposed facilities necessary for the service, accommodation, convenience, or safety of the public within the meaning of PURA § 37.056(a)?**

A. Yes. In my opinion, based on the data and load projections provided by CPS Energy and Burns & McDonnell in the Scenic Loop Substation Analysis Report,[20]

[18] Application Attachment 13 at 44.

[19] Application at 4.

[20] Application Attachment 13.

it is evident that this project is necessary and is the best way to address the reliability issues resulting from the load growth in the area.

## D. PROJECT ALTERNATIVES

**Q. Did CPS Energy consider distribution alternatives to the Proposed Project?**

A. Yes. Burns & McDonnell studied five different alternatives to the Proposed Project, three of which were distribution alternatives.[21]

**Q. What was the conclusion Burns & McDonnell reached as a result of that study?**

A. Burns & McDonnell investigated three distribution alternatives and none of them met the reliability criteria for serving both the forcasted load growth and resolving the issues with the length of the distribution circuits in a cost effective fashion.[22] Burns & McDonnell also investigated distributed generation alternatives but these were substantially more expensive then the transmission project alternative.[23] Burns & McDonnell therefore concluded that the current Proposed Project by CPS Energy was the most cost-effective solution..[24]

---

[21] Application Attachment 13 at 39.

[22] Application Attachment 13 at 37-41.

[23] Application Attachment 13 at 38-40.

[24] Application at 17.

**Q. Do you agree that the Proposed Project is the best option when compared to other alternatives?**

A. Yes.

## V. ROUTING

### A. STAFF RECOMMENDATION

**Q. What routes do you recommend upon considering all factors, including the factors in PURA § 37.056(c) and 16 TAC § 25.101(b)(3)(B)?**

A. Based on my analysis of all the factors that the Commission must consider under PURA § 37.056 and 16 TAC § 25.101, I recommend that Route P be approved for the Proposed Project. The basis for my recommendation is discussed in more detail in the remainder of my testimony.

**Q. Which route did CPS Energy select as the route that it believes best meets the requirements of PURA and the Commission's rules?**

A. CPS Energy selected Route Z as the route that it believes best meets the requirements of PURA and the Commission's rules.[25] However, in CPS Energy's Application Amendment, it appears CPS Energy replaced the original Route Z with Route Z1 following some segment adjustments.[26]

[25] Application at 29.

[26] Application Amendment at 2.

## B. COMMUNITY VALUES

**Q. Has CPS Energy sought input from the local community regarding community values?**

A. Yes. CPS Energy held a public meeting as required by 16 TAC § 22.52(a)(4). The public meeting was conducted on October 3, 2019, from 5:30 pm to 7:30 pm at the Cross Mountain Church, 24891 Boerne Stage Road in San Antonio, Texas.[27] CPS Energy sent 592 notices of the meeting to land owners owning property within 300 feet of each of the proposed alternative route segment centerlines.[28] Notice of the meeting was also published in the San Antonio Express News on September 22 and 29, 2019.[29] A total of 172 individuals signed in at the meeting and CPS Energy received 146 questionnaire responses at, or shortly after, the meeting with 40 additional questionnaires received later.[30]

**Q. Did members of the community who returned questionnaires express concerns about the Proposed Project?**

A. Yes. CPS Energy received 186 questionnaires at and after the public meeting. Section 6.0 of Attachment 1 of CPS Energy's application, the EA, contains a

[27] Application Attachment 1 at 6-1.

[28] Application Attachment 1 at 6-1.

[29] Application Attachment 1 at 6-1.

[30] Application Attachment 1 at 6-2.

discussion and summary of the questionnaire responses. The respondents were asked to rank criteria in routing the project that they considered to be the most important. The two criteria that ranked highest were maximizing distance from residences and visibility of structures.[31] The respondents were asked to list any segments or substation sites for which they had concerns. The segments which had the most negative comments were Segments 15, 26, and 16.[32] The Substation Sites which had the most negative comments were Substation sites 5, 2, and 4. However, other segments such as Segments 46a, 42a, 26a, and 54 were added only after the public meetings and thus did not receive any direct opposition at the meetings.[33] Likewise some substation sites such as Substation Site 6 and Substation Site 7 were added only after the public meetings and thus did not receie any direct opposition at the meetings.[34]

**Q. In your opinion, would construction of the Proposed Project on Route P mitigate the concerns expressed by members of the community at the open houses?**

A. In my opinion, Route P would mitigate some of the concerns expressed by members of the community at the open houses. Route P does contain one of the segments negatively mentioned in the questionnaires received during and after the

[31] Application Attachment 1 at 6-2.

[32] Application Attachment 1 at 6-4.

[33] Application Attachment 1 at 6-5 and Application Amendment Attachment 2 at 33-35.

[34] Application Attachment 1 at 6-5.

public meetings, Segment 15. The criteria that ranked first in the questionnaires received during and after the public meeting was maximizing distance from residences. Route P has only 17 habitable structures within 300 feet of the centerline of its segments, which is tied for the fourth fewest among the 39 alternative routes. The criteria that ranked second in the questionnaires received during and after the public meeting was reducing visibility of structures and Route P is 4.89 miles long, which is the ninth longest route and only 0.43 miles longer than the shortest route.[35]

I will specifically address recreational and park areas, historical values, aesthetic values, environmental integrity, engineering constraints, costs, moderation of impact on the affected community and landowners, and right-of-way later in my testimony.

**Q. Are property values and the impact on future/potential development factors considered by the Commission in a CCN proceeding under PURA § 37.056(c)(4) or in 16 TAC § 25.101(b)(3)(B)?**

A. No. PURA and the Commission's rules do not list these two issues as factors that are to be considered by the Commission in a CCN proceeding. However, these rules do require consideration of using or paralleling existing rights-of-way, which may minimize concerns about these impacts.

[35] Rebuttal Testimony of Lisa Meaux Exhibit LBM-1R (April 7, 2021) and CPS Energy's response to Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, and Crighton Development Co 's First Request for Information 1-1 (March 1, 2021) and CPS Energy's Response to Bexar Ranch, L P.'s First Request for Information to CPS Energy at Attachent 1-1b (April 23, 2021).

**Q. Are there any routes that did not receive specific opposition from intervenors?**

A. No.

## C. RECREATIONAL AND PARK AREAS

**Q. Are any parks or recreational areas located within 1,000 feet of the centerline of any of the alternative routes?**

A. No, none of the proposed alternative routes cross or are located within 1,000 feet of any park or recreation area.[36]

## D. HISTORICAL VALUES

**Q. Are there possible impacts from the Proposed Project on archeological and historical values, including known cultural resources crossed by any of the proposed alternative routes or that are located within 1,000 feet of the centerline of any of the alternative routes?**

A. There are seventeen recorded archeological or historical sites with an additional three National Register of Historic Places (NRHP) listed resources and two cemeteries are within 1,000 feet from the centerline of at least one routing segment

[36] Application Amendment Attachment 2 at 4-25.

of the proposed alternative routes.[37] Some routes, such as Routes A, B1, C1, D1, E, G1, H, I1, J1, M1, X1, Y, Z1, AA1, DD, EE, AA2, Dreico 1, Dreico 2, Dreico 3, Dreico 4, Dreico 5, Dreico 6, and Z2 do not cross any cultural resource sites and but every route has at least one cultural site within 1,000 feet of their centerlines.[38] Route P crosses one recorded archeological or historic site and crosses one NRHP listed site. Route P has 10 additional archeological or historic sites within 1,000 feet of its centerline along with one cemetery within 1,000 feet of its centerline.[39] The table below shows the proposed alternative routes in this project and how many cultural resources they cross and the number of additional cultural resources within 1,000 feet of each of their centerlines.[40]

| Route | Number of Recorded Archeological or Historical Sites Crossed | Number of additional Recorded Archeological or Historical Sites within 1,000 feet of the centerline | Number of NRHP listed properties crossed | Number of additional NRHP listed properties within 1,000 feet of the centerline | Number of Cemeteries within 1,000 feet of the centerline |
|---|---|---|---|---|---|
| A | 0 | 0 | 0 | 1 | 0 |
| H | 0 | 0 | 0 | 1 | 0 |
| K | 0 | 0 | 1 | 0 | 0 |
| L | 0 | 0 | 1 | 0 | 0 |

[37] Application Amendment Attachment 2 at 4-27.

[38] Rebuttal Testimony of Lisa Meaux Exhibit LBM-1R (April 7, 2021) and CPS Energy's response to Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, and Crighton Development Co.'s First Request for Information 1-1 (March 1, 2021).

[39] *Id*

[40] *Id.*.

| | | | | | |
|---|---|---|---|---|---|
| BB | 0 | 0 | 1 | 0 | 0 |
| CC | 0 | 0 | 1 | 0 | 0 |
| E | 0 | 2 | 0 | 1 | 0 |
| X1 | 0 | 2 | 0 | 1 | 0 |
| Dreico 3 | 0 | 2 | 0 | 1 | 0 |
| Dreico 4 | 0 | 2 | 0 | 1 | 0 |
| C1 | 0 | 2 | 0 | 1 | 1 |
| D1 | 0 | 2 | 0 | 1 | 1 |
| I1 | 0 | 2 | 0 | 1 | 1 |
| J1 | 0 | 2 | 0 | 1 | 1 |
| M1 | 0 | 2 | 0 | 1 | 1 |
| Z1 | 0 | 2 | 0 | 1 | 1 |
| AA1 | 0 | 2 | 0 | 1 | 1 |
| DD | 0 | 2 | 0 | 1 | 1 |
| EE | 0 | 2 | 0 | 1 | 1 |
| AA2 | 0 | 2 | 0 | 1 | 1 |
| Dreico 5 | 0 | 2 | 0 | 1 | 1 |
| Dreico 6 | 0 | 2 | 0 | 1 | 1 |
| Z2 | 0 | 2 | 0 | 1 | 1 |
| B1 | 0 | 2 | 0 | 2 | 1 |
| G1 | 0 | 2 | 0 | 2 | 1 |
| Y | 0 | 2 | 0 | 2 | 1 |
| Dreico 1 | 0 | 2 | 0 | 2 | 1 |
| Dreico 2 | 0 | 2 | 0 | 2 | 1 |

| | | | | | |
|---|---|---|---|---|---|
| V | 1 | 0 | 1 | 0 | 0 |
| O | 1 | 1 | 1 | 0 | 0 |
| S | 1 | 1 | 1 | 0 | 0 |
| W | 1 | 1 | 1 | 0 | 0 |
| **P** | **1** | **10** | **1** | **0** | **1** |
| T1 | 1 | 12 | 0 | 1 | 2 |
| F1 | 2 | 12 | 1 | 0 | 1 |
| N1 | 2 | 12 | 1 | 0 | 1 |
| Q1 | 2 | 12 | 1 | 0 | 1 |
| R1 | 2 | 12 | 1 | 0 | 1 |
| U1 | 2 | 12 | 1 | 0 | 1 |

The lengths of the proposed alternative routes that cross areas of high archeological potential range from 1.44 miles for Route H to 4.77 miles for Route U1.[41] Route P crosses 2.49 miles of high archeological potential, which is the 14th least of the proposed alternative routes. While Route P has 10 Recorded Archeological or Historical Sites sites and 1 cemetery within 1,000 feet of its centerline, it only crosses 1 Recorded Archeological or Historical Site and 1 NHRP listed property while being 14th among all proposed alternative routes in areas of high archeological potential crossed. Therefore, I conclude that Route P is acceptable from a historical values perspective.

Should the Commission order that one of the routes that crosses a Recorded

[41] Rebuttal Testimony of Lisa Meaux Exhibit LBM-1R (April 7, 2021) and CPS Energy's response to Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, and Crighton Development Co.'s First Request for Information 1-1 (March 1, 2021).

Archeological or Historical Sites site be constructed (Routes V, O, S, W, P, T1, F1, N1, Q1, R1, or U1), CPS Energy should work with the Texas Historical Commission to determine what appropriate actions should be taken to mitigate the impacts on the site. If any further archeological or cultural resources are found during construction of the proposed transmission line, CPS Energy should immediately cease work in the vicinity of the archeological or cultural resources, and should immediately notify the Texas Historical Commission.

## E. AESTHETIC VALUES

**Q. In your opinion, which of the proposed routes would result in a negative impact on aesthetic values, and which portions of the study area will be affected?**

A. In my opinion, all of the proposed alternative routes would result in a negative impact on aesthetic values, some routes more than others, depending on the visibility from homes and public roadways. Temporary effects would include views of the actual transmission line construction (e.g. assembly and erection of the structures) and of any clearing of right-of-way. Permanent effects would involve the visibility of the structures and the lines. I therefore conclude that aesthetic values would be impacted throughout the study area, and that these temporary and permanent negative aesthetic effects will occur on any proposed alternative routes approved by the Commission. However, Route P is the ninth shortest of the proposed alternative routes, only 0.43 miles longer than the shortest

route, and impacts the fourth fewest habitable structures of the proposed alternative routes, both of which would help to mitigate those impacts compared to the majority of the proposed alternative routes in this docket.

## F. ENVIRONMENTAL INTEGRITY

**Q. Please provide a general description of the area traversed by the proposed alternative routes.**

A. The area traversed by the project is within the the transitional area between the Balcones Escarpment/Blackland Prairies and the Edwards Plateau physiographic region of Texas. The region's topography is characterized by flat upper surfaces, interspersed by drainages that open up into larger draws or box canyons. The study area has its lowest elevation at approximately 1,250 feet above mean sea level and its highest elevation at 1,400 feet above mean sea level. The elevation tends to decrease from northeast to southeast.[42]

**Q. What was involved in your analysis of the environmental impact of the Proposed Project?**

A. I reviewed the information provided in the Application and the EA, the Application Amendment, the direct testimonies and statements of position of the intervenors, responses to requests for information, and the letters from TPWD to

[42] Application Attachment 1 at 3-1.

Ms. Rachelle Robles, dated September 10, 2020 and February 18, 2021.[43]

**Q. Based on your review of the information identified above, in your opinion, will the Proposed Project present a significant negative impact to environmental integrity?**

A. No. Transmission lines do not often create many long-term impacts on soils. Most of those impacts will be during intial construction and would be erosion and soil compaction. However, CPS Energy has confirmed that it will employ erosion control during initial construction.[44] Impacts on vegetation would be the result of clearing and maintaining the right-of-way, and the length of upland woodland or brushland along the right-of-way of the proposed alternative routes range from 3.05 miles for Route Dreico 6 to 6.52 miles for Route V.[45] Power Engineers do not anticipate encountering endangered or threatened plant or animal species in the study area, though the bracted twistflower, the Madla Cave meshweaver, two unnamed beetles, the Helotes mold beetle, the whooping crane, or golden-cheeked warbler might occur.[46] In the event endangered or threatened plant or animal species are encountered, CPS Energy should attempt to span or avoid them as much as practicable. None of the proposed alternative routes cross any known

[43] Attachment JP-3 and JP-4.

[44] Application Amendment Attachment 2 at 4-9.

[45] Rebuttal Testimony of Lisa Meaux Exhibit LBM-1R (April 7, 2021) and CPS Energy's response to Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, and Crighton Development Co.'s First Request for Information 1-1 (March 1, 2021).

[46] Application Amendment Attachment 2 at 4-16.

occupied habitat for any federally listed endangered or threatened species.[47] Nevertheless, construction of some of the alternative routes could, at some locations, present a negative impact on the environment.

In its letter dated February 18, 2021, TPWD stated that it selects Route DD as the route having the least potential impact on environmental integrity.[48]

**Q. In your opinion, how would construction of the Proposed Project on Route P compare from an environmental perspective to construction on the other routes?**

A. The Proposed Project is expected to cause only short-term effects to water, soil, and ecological resources during the initial construction phase. Route P is generally ranked well among the proposed alternative routes in most alternative categories. It has the 11th least length of right-of-way across the Edwards Aquifer contributing zone, it has the ninth least length across FEMA mapped 100-year floodplains, and it has the sixth least stream crossings. However, Route P does cross 25.11 acres of golden-cheeked warbler modeled habitat designated as 3-Moderate High and 4-High Quality which is the worst of any route.[49] CPS Energy has not yet confirmed this or the presence of the golden-cheeked warbler in the study area via field survey. TPWD recommended that CPS should, prior to

[47] Application Amendment Attachment 2 at 4-15.

[48] Attachment JP-4 at 2.

[49] Rebuttal Testimony of Lisa Meaux Exhibit LBM-1R (April 7, 2021) and CPS Energy's response to Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, and Crighton Development Co.'s First Request for Information 1-1 (March 1, 2021).

conducting surveys of the approved alternative route, contact the United States Fish and Wildlife Services (USFWS) for appropriate survey protocols for surveying for golden-cheeked warblers.[50]

**Q. Do you conclude that Route P is acceptable from an environmental and land use perspective?**

A. Yes.

## G. ENGINEERING CONSTRAINTS

**Q. Are there any possible engineering constraints associated with this project?**

A. There are no specific engineering constraints that are not present in typical transmission line projects. In my opinion, all of the possible constraints can be adequately addressed by using design and construction practices and techniques that are usual and customary in the electric utility industry.

**Q. Are there any special circumstances in this Project that would warrant an extension beyond the seven-year limit for the energization of the line?**

A. No, CPS Energy has not described any special circumstances that would merit an extension of this limit for this project.

[50] Attachemnt JP-3 at 4.

## H. COSTS

**Q. What are CPS Energy's estimated costs of constructing the Proposed Project on each of the proposed alternative routes?**

A. Attachment 3 of the Application Amendment, Exhibit SDL-2R of the Rebuttal Testimony of Scott D. Lyssy on behalf of CPS Energy, and CPS Energy's response to Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, Crighton Development Co.'s First Request for Information 1-1, and CPS Energy's Supplemental Response to Bexar Ranch L.P.'s First Request for Information to CPS Energy Supplemental Attachment 1-1a lists CPS Energy's estimated costs of constructing each proposed route. The cost of each route has three components: the proposed CPS Energy Scenic Loop Substation, the transmission line, and a 10% contingency fee to cover unknown project costs not evident at the time of the estimate.[51] The cost for the Scenic Loop Substation varies, depending on which subsite is selected.[52] The table below shows the total estimated cost, with all three components included, for each of the routes from least expensive to the most expensive proposed alternative route:

| Route | Estimated Cost of the Route |
|---|---|
| Z2 | $37,638,580.00 |
| AA1 | $38,291,571.63 |
| Z1 | $38,474,771.50 |
| Dreico 6 | $38,815,298.00 |
| DD | $38,996,942.59 |

[51] Application Amendment at 136-138.

[52] Application Amendment at 138.

| | |
|---|---|
| AA2 | $39,048,155.00 |
| EE | $39,757,434.71 |
| Dreico 5 | $40,113,172.00 |
| Dreico 4 | $41,670,814.00 |
| Y | $42,723,886.97 |
| BB | $42,741,654.35 |
| Dreico 2 | $42,745,438.00 |
| I1 | $42,877,497.33 |
| **P** | **$43,408,742.18** |
| R1 | $43,522,858.14 |
| Dreico 3 | $43,829,483.00 |
| CC | $43,897,472.16 |
| D1 | $43,904,817.64 |
| J1 | $44,068,605.60 |
| Dreico 1 | $44,720,445.00 |
| X1 | $45,496,086.62 |
| Q1 | $45,890,914.04 |
| M1 | $46,044,319.76 |
| K | $46,467,251.17 |
| N1 | $46,803,781.14 |
| T1 | $47,259,332.79 |
| C1 | $47,373,300.80 |
| F1 | $49,658,757.14 |
| B1 | $50,551,923.25 |
| U1 | $50,562,535.51 |
| G1 | $51,216,233.88 |
| W | $52,869,827.60 |
| H | $53,621,914.79 |
| L | $54,086,148.54 |
| V | $54,169,034.11 |
| E | $54,505,459.92 |
| A | $54,695,383.90 |
| S | $55,327,169.75 |
| O | $56,194,702.73 |

As the table illustrates, Route P is the 14th least expensive proposed alternative route.

**Q. Could you briefly discuss the routes less expensive than Route P and why Route P is still preferred?**

A. Yes. All Routes that are less expensive than Route P impact more habitable

structures. Routes AA1, BB, DD, Z1, and AA2 have more habitable structures within 300 feet of their centerlines and make less use of compatible right-of-way or property lines as a percentage of their length. Routes EE, Dreico 2, Dreico 4, and Dreico 5 have more habitable structures within 300 feet of its centerline, make less use of compatible right-of-way or property lines as a percentage of its length, and are longer. Routes Y and I1 have more habitable structures within 300 feet of their centerlines and are longer.

**Q. Does CPS Energy's estimated cost of constructing the Proposed Project appear to be reasonable?**

A. After reviewing CPS Energy's estimates, the estimated costs for the alternative routes are roughly what I would expect considering the terrain. However, the reasonableness of the final installed cost of the completed project will be determined at a future date in the course of a rate proceeding.

## I. MODERATION OF IMPACT ON THE AFFECTED COMMUNITY AND LANDOWNERS

**Q. Do the Commission's rules address routing alternatives intended to moderate the impact on landowners?**

A. Yes. Under 16 TAC § 25.101(b)(3)(B), "the line shall be routed to the extent reasonable to moderate the impact on the affected community and landowners unless grid reliability and security dictate otherwise."

**Q. Subsequent to filing its application, has CPS Energy made or proposed any routing adjustments to accommodate landowners?**

A. Yes. These routing adustments were made in CPS Energy's Application Amendment.

**Q. Has CPS Energy proposed any specific means by which it will moderate the impact of the Proposed Project on landowners or the affected community other than adherence to the Commission's orders, the use of good utility practices, acquisition of and adherence to the terms of all required permits, and what you have discussed above?**

A. Not to my knowledge.

## J. RIGHT-OF-WAY

**Q. Do the Commission's rules address routing along existing corridors?**

A. Yes. The following factors are to be considered under 16 TAC § 25.101(b)(3)(B):

(i) whether the routes utilize existing compatible rights-of-way, including the use of vacant positions on existing multiple-circuit transmission lines;

(ii) whether the routes parallel existing compatible rights-of-way;

(iii) whether the routes parallel property lines or other natural or cultural features; and

(iv) whether the routes conform with the policy of prudent avoidance.

## 1. USE AND PARALLELING OF EXISTING, COMPATIBLE RIGHT-OF-WAY (INCLUDING APPARENT PROPERTY BOUNDARIES)

**Q. Describe how CPS Energy proposes to use existing, parallel, or compatible right-of-way for the Proposed Project.**

A. Each proposed alternative route parallels apparent property boundaries and parallels or utilizes existing compatible rights-of-way. The percentage of Route P length that parallels or utilizes existing compatible right-of-way and apparent property boundaries is approximately 71% of its length. The table below summarizes the overall length, the length parallel to a compatible rights-of-way or to a property boundary, and the total percentage of parallel rights-of-way used by the proposed alternative routes. Commission Rule 16 TAC § 25.101(b)(3)(B) does not consider existing pipeline rights-of-way as compatible rights-of-way.

| Route | Length (Miles) | Length Parallel to Right-of-Way (Miles) | Percentage |
|---|---|---|---|
| A | 6.66 | 5.50 | 82.59% |
| Y | 5.23 | 4.27 | 81.53% |
| H | 6.32 | 5.09 | 80.46% |
| E | 6.62 | 4.99 | 75.38% |
| T1 | 5.93 | 4.46 | 75.24% |
| Dreico 6 | 4.57 | 3.36 | 73.52% |
| CC | 5.23 | 3.84 | 73.43% |
| V | 6.60 | 4.82 | 73.01% |
| M1 | 5.85 | 4.25 | 72.67% |

| | | | |
|---|---|---|---|
| I1 | 5.03 | 3.59 | 71.43% |
| Z2 | 4.46 | 3.18 | 71.30% |
| **P** | **4.89** | **3.47** | **71.00%** |
| DD | 4.64 | 3.27 | 70.49% |
| F1 | 5.66 | 3.97 | 70.12% |
| K | 5.29 | 3.71 | 70.07% |
| BB | 4.73 | 3.30 | 69.81% |
| D1 | 5.22 | 3.62 | 69.38% |
| Q1 | 5.56 | 3.83 | 68.80% |
| N1 | 5.33 | 3.64 | 68.28% |
| Dreico 2 | 5.32 | 3.63 | 68.23% |
| Z1 | 4.53 | 3.09 | 68.21% |
| B1 | 6.19 | 4.19 | 67.69% |
| Dreico 4 | 5.27 | 3.55 | 67.36% |
| C1 | 5.77 | 3.82 | 66.23% |
| X1 | 5.34 | 3.46 | 64.87% |
| R1 | 4.76 | 3.06 | 64.32% |
| L | 6.91 | 4.38 | 63.42% |
| O | 6.83 | 4.21 | 61.58% |
| U1 | 6.36 | 3.74 | 58.77% |
| Dreico 5 | 4.92 | 2.88 | 58.54% |
| W | 6.25 | 3.63 | 58.03% |
| AA1 | 4.82 | 2.72 | 56.48% |
| EE | 4.99 | 2.81 | 56.22% |
| J1 | 5.46 | 3.04 | 55.71% |
| Dreico 1 | 5.67 | 3.15 | 55.56% |
| Dreico 3 | 5.62 | 3.07 | 54.63% |
| G1 | 6.20 | 3.31 | 53.37% |
| AA2 | 4.89 | 2.59 | 52.92% |
| S | 6.73 | 3.31 | 49.09% |

As the chart shows, Route P is the ninth shortest route and ranks 12th in terms of percentage of compatible right-of-way compared to the other alternative routes.

**Q. Could you briefly discuss the routes with a higher percentage of compatible right-of-way and why Route P is still preferred?**

A. Yes. Routes A, H, E, T1, CC, V, and M1 are more expensive, have more habitable structures within 300 feet of their centerlines, and are longer. Routes Y and I1 have more habitable structures within 300 feet of their centerlines and are longer. Routes Dreico 6 and Z2 have more habitable structures within 300 feet of their centerlines.

## 2. PARALLELING OF NATURAL OR CULTURAL FEATURES

**Q. Describe how CPS Energy proposes to parallel natural or cultural features for the Proposed Project.**

A. None of the proposed alternative routes parallel natural or cultural features.

## K. PRUDENT AVOIDANCE

**Q. Define prudent avoidance.**

A. Prudent avoidance is defined by 16 TAC § 25.101(a)(6) as follows: "The limiting of exposures to electric and magnetic fields that can be avoided with reasonable investments of money and effort."

**Q. How can exposure to electric and magnetic fields be limited when routing**

**transmission lines?**

A. Primarily by proposing alternative routes that would minimize, to the extent reasonable, the number of habitable structures located in close proximity to the routes.

**Q. How many habitable structures are located in close proximity to each of the proposed alternative routes?**

A. The table below ranks the number of habitable structures that are within 300 feet of the centerline of the proposed routes in this project.

| Route | Number of habitable structures |
|---|---|
| Q1 | 12 |
| U1 | 12 |
| R1 | 13 |
| **P** | **17** |
| N1 | 17 |
| F1 | 18 |
| BB | 27 |
| S | 29 |
| W | 29 |
| AA2 | 30 |
| Z1 | 31 |
| AA1 | 31 |
| V | 32 |
| EE | 32 |
| Z2 | 32 |
| O | 33 |
| DD | 33 |
| Dreico 5 | 33 |
| Dreico 6 | 34 |
| T1 | 37 |
| L | 38 |
| K | 39 |
| Y | 40 |
| X1 | 41 |
| Dreico 3 | 41 |
| J1 | 42 |

| | |
|---|---|
| Dreico 4 | 42 |
| D1 | 44 |
| I1 | 44 |
| M1 | 44 |
| Dreico 1 | 44 |
| Dreico 2 | 45 |
| C1 | 49 |
| G1 | 53 |
| CC | 57 |
| E | 61 |
| H | 62 |
| B1 | 64 |
| A | 72 |

There are 17 habitable structures that are within 300 feet of the centerline of Route P. Therefore, Route P ranks tied for fourth among all the proposed alternative routes with regard to this criterion.

**Q. Could you briefly discuss the routes with the same or fewer habitable structures and why Route P is still preferred?**

A. Yes. Route Q1, U1, and N1 are more expensive, make less use of compatible right-of-way or property lines as a percentage of their length, and are longer. Route R1 is more expensive and makes less use of compatible right-of-way or property lines as a percentage of its length.

**Q. Do you conclude that CPS Energy's proposed alternative routes have minimized, to the extent reasonable, the number of habitable structures located in close proximity to the routes?**

A. Yes.

## VI. CONCLUSION

**Q. In your opinion, is any one of the proposed alternative routes better than all of the other routes in all respects?**

A. No.

**Q. If no proposed alternative route is better than all of the others in all respects, why have you recommended Route P instead of the other proposed alternative routes?**

A. In summary, after analyzing all the factors that the Commission must consider under PURA § 37.056 and 16 TAC § 25.101, I conclude that Route P best meets the criteria of PURA and the Commission's rules because:

(1) Route P is the 14th least expensive route at $43,408,742.18,

(2) Route P is tied for fourth-least number of habitable structures within 300 feet of its centerline with 17,

(3) Route P is the ninth shortest route at 4.89 miles, and

(4) Route P is 12th best proposed alternative route utilizing existing compatible right-of-way and property lines at 71% of its total length.

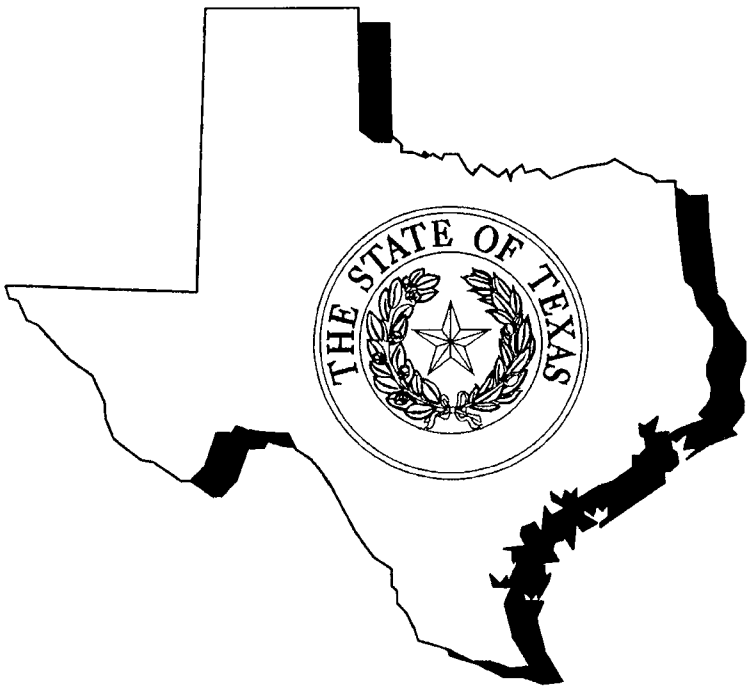
Route P, like all of the proposed alternative routes, has some advantages and some disadvantages as I have discussed in my testimony. However, I consider Route P overall to have the most advantages and to be superior to the other proposed alternative routes.

**Q. Does this conclude your testimony?**

A. Yes.

SOAH DOCKET NO. 473-21-0247
PUC DOCKET NO. 51023

| | | |
|---|---|---|
| APPLICATION OF THE CITY OF SAN ANTONIO ACTING BY AND THROUGH THE CITY PUBLIC SERVICE BOARD (CPS ENERGY) TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE PROPOSED SCENIC LOOP 138-KV TRANSMISSION LINE IN BEXAR COUNTY | § | BEFORE THE STATE OFFICE<br><br>OF<br><br>ADMINISTRATIVE HEARINGS |




# DIRECT TESTIMONY WITH ALL ERRATA OF

JOHN POOLE, P.E., ENGINEER

INFRASTRUCTURE DIVISION

PUBLIC UTILITY COMMISSION OF TEXAS

APRIL 27, 2021

TABLE OF CONTENTS

**ATTACHMENTS**

## I. STATEMENT OF QUALIFICATIONS

**Q. Please state your name, occupation and business address.**

A. My name is John Poole. I am employed by the Public Utility Commission of Texas (Commission) as an Engineer within the Infrastructure Division. My business address is 1701 North Congress Avenue, Austin, Texas 78701.

**Q. Please briefly outline your educational and professional background.**

A. I have a Bachelor of Science degree in Electrical Engineering. I completed my degree in December of 2014 and have been employed at the Commission since February 2015. A more detailed resume is provided in Attachment JP-1.

**Q. Are you a registered professional engineer?**

A. Yes, I am a registered Professional Engineer in Texas and my member number is 133982.

**Q. Have you previously testified as an expert before the Commission?**

A. Yes. A list of previous testimony is provided in Attachment JP-2.

## II. SCOPE OF TESTIMONY

**Q. What is the purpose of your testimony in this proceeding?**

A. The purpose of my testimony is to present Commission Staff's recommendations

concerning the application of the City of San Antonio, acting by and through the City Public Service Board (CPS Energy) to amend its Certificate of Convenience and Necessity (CCN) to construct a new double circuit 138-kilovolt (kV) electric transmission line to be built on brown colored steel monopole structures in Bexar County, Texas.[1] The proposed transmission line will connect the existing Ranchtown to Menger Creek 138-kV to the proposed Scenic Loop Substation that will be located in one of several locations in the area of the intersection of Scenic Loop Road and Toutant Beauregard Road (Proposed Project).[2]

**Q. What is the scope of your testimony?**

A. The scope of my testimony is to provide Commission Staff's recommendation regarding the need for the project and regarding selection of routes from among the alternative routes presented by CPS Energy and intervenors.

**Q. What are the statutory requirements that a utility must meet to amend its CCN to construct a new transmission line?**

A. Section 37.056(a) of the Public Utility Regulatory Act (PURA)[3] states that the Commission may approve an application for a CCN only if the Commission finds that the CCN is necessary for the service, accommodation, convenience, or safety

[1] Application of the City of San Antonio Acting by and through the City Public Service Board (CPS Energy) to Amend its Certificate of Convenience and Necessity for the Proposed Scenic Loop 138-kV Transmission Line Project in Bexar County (Application) at 4-5 (July 22, 2020).

[2] Application at 7.

[3] Public Utility Regulatory Act, Tex. Util. Code Ann. §§ 11.001-66.016 (PURA).

of the public. Further, PURA provides that the Commission shall approve, deny, or modify a request for a CCN after considering the factors specified in PURA § 37.056(c), which are as follows:

(1) the adequacy of existing service;

(2) the need for additional service;

(3) the effect of granting the certificate on the recipient of the certificate and any electric utility serving the proximate area; and

(4) other factors, such as:

(A) community values;

(B) recreational and park areas;

(C) historical and aesthetic values;

(D) environmental integrity;

(E) the probable improvement of service or lowering of cost to consumers in the area if the certificate is granted; and

(F) to the extent applicable, the effect of granting the certificate on the ability of this state to meet the goal established by PURA § 39.904(a).

**Q. Do the Commission's rules provide any instruction regarding routing criteria?**

A. Yes. 16 Texas Administrative Code (TAC) § 25.101(b)(3)(B) requires that an application for a new transmission line address the criteria in PURA § 37.056(c), and that upon considering those criteria, engineering constraints and costs, the line

shall be routed to the extent reasonable to moderate the impact on the affected community and landowners, unless grid reliability and security dictate otherwise. The following factors shall be considered in the selection of CPS Energy's alternative routes:

(i) whether the routes parallel or utilize existing compatible rights-of-way for electric facilities, including the use of vacant positions on existing multiple-circuit transmission lines;

(ii) whether the routes parallel or utilize existing compatible rights-of-way, including roads, highways, railroads, or telephone utility rights-of-way;

(iii) whether the routes parallel property lines or other natural or cultural features; and

(iv) whether the routes conform with the policy of prudent avoidance.

**Q. What issues identified by the Commission must be addressed in this docket?**

A. In the Order of Referral and Preliminary Order issued on September 29, 2020, the Commission identified the following issues that must be addressed:

1. Is CPS Energy's application to amend its CCN adequate? Does the application contain an adequate number of reasonably differentiated alternative routes to conduct a proper evaluation? In answering this question, consideration must be given to the number of proposed alternatives, the locations of the proposed transmission line, and any associated proposed facilities that influence the location of the line.

Consideration may also be given to the facts and circumstances specific to the geographic area under consideration, and to any analysis and reasoned justification presented for a limited number of alternative routes. A limited number of alternative routes is not in itself a sufficient basis for finding an application inadequate when the facts and circumstances or a reasoned justification demonstrates a reasonable basis for presenting a limited number of alternatives. If an adequate number of routes is not presented in the application, the ALJ must allow CPS Energy to amend the application and to provide proper notice to affected landowners; if CPS Energy chooses not to amend the application, the ALJ may dismiss the case without prejudice.

2. Are the proposed facilities necessary for the service, accommodation, convenience, or safety of the public within the meaning of PURA § 37.056(a) taking into account the factors set out in PURA § 37.056(c)? In addition,

   a) How does the proposed facility support the reliability and adequacy of the interconnected transmission system?

   b) Does the proposed facility facilitate robust wholesale competition?

   c) What recommendation, if any, has an independent organization, as defined in PURA § 39.151, made regarding the proposed facility?

   d) Is the proposed facility needed to interconnect a new transmission service customer?

3. Is the transmission project the better option to meet this need when

compared to employing distribution facilities? If CPS Energy is not subject to the unbundling requirements of PURA § 39.051, is the project the better option to meet the need when compared to a combination of distributed generation and energy efficiency?

4. Which proposed transmission line route is the best alternative weighing the factors set forth in PURA § 37.056(c) and 16 TAC § 25.101(b)(3)(B)?

5. Are there alternative routes or facilities configurations that would have a less negative impact on landowners? What would be the incremental cost of those routes?

6. If alternative routes or facility configurations are considered due to individual landowner preference:

   a) Have the affected landowners made adequate contributions to offset any additional costs associated with the accommodations?

   (b) Have the accommodations to landowners diminished the electric efficiency of the line or reliability?

7. On or after September 1, 2009, did the Texas Parks and Wildlife Department provide any recommendations or informational comments regarding this application in accordance with Section 12.0011(b) of the Texas Parks and Wildlife Code? If so, please address the following issues:

   a) What modifications, if any, should be made to the proposed project as a result of any recommendations or comments?