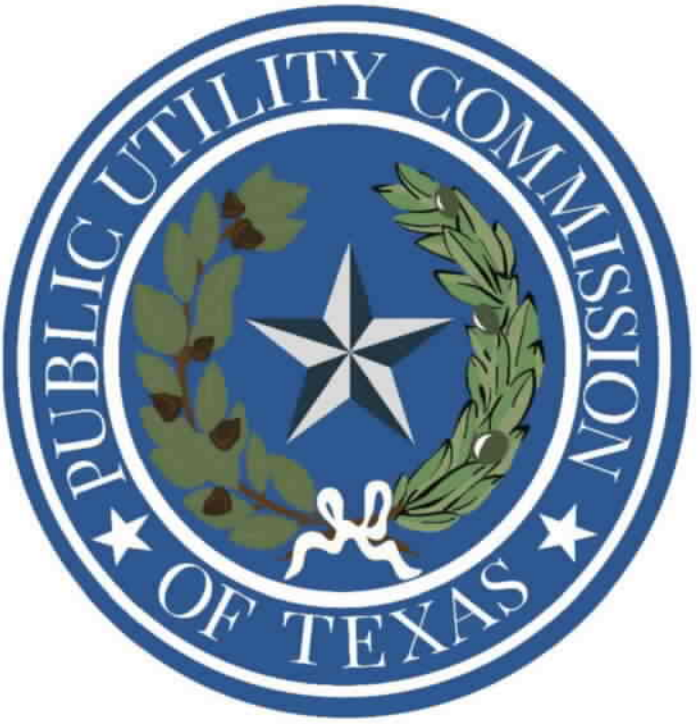

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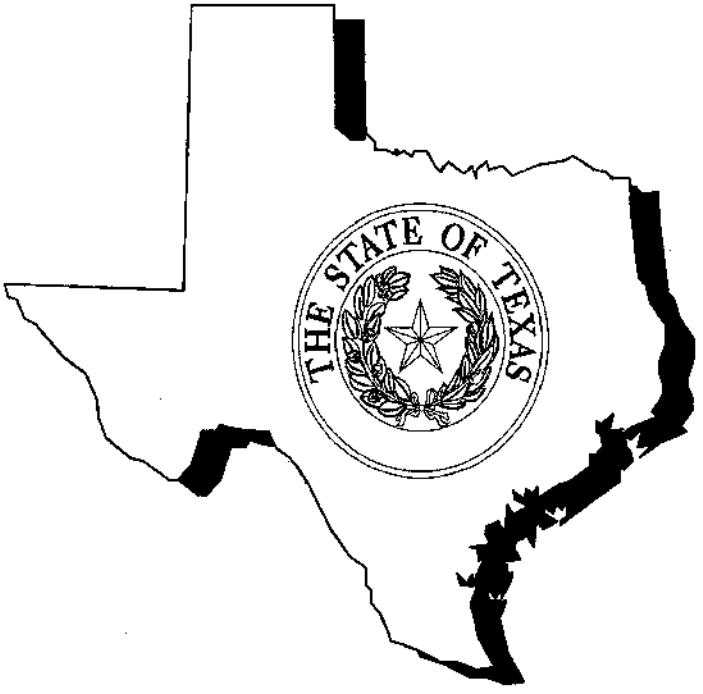
PUC DOCKET NO. 56799

APPLICATION OF ONCOR	**§**	**BEFORE THE STATE OFFICE**
ELECTRIC DELIVERY COMPANY	**§**	
LLC TO AMEND ITS	**§**	
CERTIFICATE OF CONVENIENCE	**§**	**OF**
AND NECESSITY FOR THE	**§**	
REITER SWITCH-TESORO 345-KV	**§**	
TRANSMISSION LINE IN ECTOR	**§**	
AND MIDLAND COUNTIES	**§**	**ADMINISTRATIVE HEARINGS**



DIRECT TESTIMONY OF

CAITLIN GASPAR

INFRASTRUCTURE DIVISION

PUBLIC UTILITY COMMISSION OF TEXAS

September 6, 2024

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ATTACHMENTS

I. STATEMENT OF QUALIFICATIONS

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

A. My name is Caitlin Gaspar. I am employed by the Public Utility Commission of Texas ("PUC" or the "Commission") as a Project Engineer in the Infrastructure Division. My business address is 1701 North Congress Avenue, Austin, Texas 78711-3326.

Q. Please briefly outline your educational and professional background.

A. I have a Bachelor of Science in Mechanical Engineering from Drexel University. I completed my degree in 2017 and have been employed at the Commission since June 2024. A more detailed summary of my experience is provided in Exhibit CG-1.

Q. Are you a registered professional engineer?

A. No.

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

A. No.

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 Oncor Electric Delivery Company LLC (Oncor) to amend its

Certificate of Convenience and Necessity (CCN) to construct a new, double circuit 345 kV transmission line that begins at Oncor's planned Reiter Switch in Ector County and ends at Oncor's existing Tesoro Switch in Midland County.[1] The proposed line will address reliability needs in the Permian Basin region of West Texas that have arisen due to load growth, load integration requests, and age of existing facilities. The Electric Reliability Council of Texas (ERCOT) has also determined the need for the proposed transmission line and has identified it as a Tier 1 project.[2]

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 a new transmission line is necessary for the service, accommodation, convenience, or safety of the public.[4] Further, the Commission shall approve, deny, or modify a request for a transmission line 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;

[1] Application of Oncor Electric Delivery Company LLC to Amend its Certificate of Convenience and Necessity for the Reiter Switch - Tesoro Switch 345 kV Transmission Line in Ector and Midland Counties at 3 (Jul. 25, 2024) (Application).

[2] *Id.* at 11.

[3] Tex. Util. Code Ann. §§ 11.001-66.017.

[4] PURA § 37.056(a).

(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, including any potential economic or reliability benefits associated with dual fuel and fuel storage capabilities in areas outside the ERCOT power region; and

(F) the need for extending transmission service where existing or projected electrical loads will be underserved, including where:

(i) the existing transmission service is unreasonably remote;

(ii) the available capacity is unreasonably limited at transmission or distribution voltage level; or

(iii) the electrical load cannot be interconnected in a timely

manner.[5]

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 the applicant's alternate 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 filed on July 26, 2024, the Commission identified the following issues that must be addressed:

[5] PURA § 37.056(c).

1. Is the applicant'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 transmission 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 Administrative Law Judge (ALJ) must allow the applicant to amend the application and to provide proper notice to affected landowners; however, if the applicant chooses not to amend the application, then the ALJ may dismiss the case without prejudice.
2. Did the applicant provide notice of the application in accordance with 16 TAC § 22.52(a)(1), (2), and (3) and PURA § 37.054(c)(1) and (2)?
3. Did the applicant provide notice of the public meeting in accordance with 16 TAC § 22.52(a)(4)?
4. What were the principal concerns expressed in the questionnaire responses received at or after any public meetings held by the applicant regarding the proposed transmission facilities?

5. Taking into account the factors set out in PURA § 37.056(c), are the proposed transmission facilities necessary for the service, accommodation, convenience, or safety of the public within the meaning of PURA § 37.056(a)? In addition, please address the following issues:
   a. How do the proposed transmission facilities support the reliability and adequacy of the interconnected transmission system?
   b. Do the proposed transmission facilities facilitate robust wholesale competition?
   c. What recommendation, if any, has an independent organization, as defined in PURA § 39.151, made regarding the proposed transmission facilities?
   d. Are the proposed transmission facilities needed to interconnect a new transmission service customer?
6. In considering the need for additional service under PURA § 37.056(c)(2) for a reliability transmission project, please address the historical load, forecasted load growth, and additional load currently seeking interconnection.
7. Are the proposed transmission facilities the better option to meet the need addressed by this application when compared to using distribution facilities, distributed generation (if the applicant is a bundled utility), energy efficiency, or a combination of these solutions? In answering this issue, if the proposed transmission facilities include a new transmission line to address distribution load growth, please address the following:
   a. the data used to calculate the applicant's load-growth projections that support the need for a transmission-line solution;
   b. the date, origin, and relevance of the data used to calculate the applicant's load-growth projections;

c. the assumptions made and relied on to generate the load-growth projections, including but not limited to the assumed rates of load growth, the factors (if any) applied to calculate forecasted loads for new developments in the need study area, and adjustments (if any) made to forecasted loads to account for customer load served by any other electric utilities also providing electric service within the applicant's need study area;

d. the location, described in writing and depicted on a map, of the boundaries of the need study area and all existing transmission facilities (including proposed substations or switching stations) within the need study area used for the load-growth projections;

e. if included in the applicant's load-growth projections, the nature, scope, and location depicted on a map of the following loads:

   i. the applicant's current consumers,

   ii. the applicant's pending load request, and

   iii. future development projects included in the applicant's load-growth projections;

f. the location depicted on a map of the existing load center, the load center including existing load and currently requested loads, and the load center including existing load, currently requested loads, and the applicant's projected load growth;

g. the location and identity of any existing transmission lines, whether inside or outside the need study area, that are as close as, or closer to, any load-serving substation proposed in this application compared to the existing transmission line or substation used for the proposed interconnection or tap;

h. the location and identity of any existing substations with remaining transformer capacity, whether inside or outside the need study area, that are as close as, or closer to, any load-serving substation proposed in this application compared to the existing transmission line or substation used for the proposed interconnection or tap;

i. if other utilities are providing distribution service within the applicant's need study area, the location and nature of the other utilities' distribution facilities described in writing and depicted on a map;

j. an analysis of the feasibility, design, and cost effectiveness of a distribution-voltage level alternative that uses the same point(s) of interconnection or tap and endpoint(s) and that is routed along the same alternative routes as the transmission-level radial line that is requested to be approved;

k. the applicant's planning study or other reports reflecting the nature and scope of new-build distribution facilities or existing distribution-facility upgrades necessary for projected load growth anticipated before the projected load growth that is the basis for this application; and

l. a comparative cost analysis between all new-build distribution facilities or existing distribution-facility upgrades and the proposed radial transmission facilities that segregates the distribution-alternative costs to support the pending load requests and specific future development loads from general load growth in the need study area.

8. Weighing the factors set forth in PURA § 37.056(c) and 16 TAC § 25.101(b)(3)(B), which proposed transmission-line route is the best alternative?

9. Are there alternative routes or configurations of facilities that would have a less negative effect on landowners? What would be the incremental cost of those routes or configurations of facilities?
10. If alternative routes or configurations of facilities are considered because of individual landowners' preferences, please address the following issues:
    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?
11. Are the proposed transmission facilities necessary to meet state or federal reliability standards?
12. What is the estimated cost of the proposed transmission facilities to consumers?
13. What is the estimated congestion cost savings for consumers that may result from the proposed transmission facilities considering both current and future expected congestion levels and the ability of the proposed transmission facilities to reduce those congestion levels?
14. Are the best management practices for construction and operating transmission facilities that are standard in the Commission's electric CCN orders adequate? If not, what additional practices should be required for the proposed transmission facilities?
15. For each additional practice proposed, please address the following:
    a. What is the additional cost to design, construct, and operate the proposed transmission facilities, including the cost to consumers?
    b. What benefit, if any, will the proposed practice provide?

c. What effect, if any, will the proposed practice have on the reliability of the transmission system?

d. What effect, if any, will the proposed practice have on the design, construction, or operation of the proposed transmission facilities?

e. What effect, if any, will the proposed practice have on the expected date to energize the proposed transmission facilities?

16. Did the Texas Parks and Wildlife Department (TPWD) provide any recommendations or informational comments regarding this application in accordance with Texas Parks and Wildlife Code § 12.0011(b)? If so, how should the Commission respond through its order?

17. What permits, licenses, plans, or permission will be required for construction and operation of the proposed transmission facilities? If any alternative route requires permission or an easement from a state or federal agency, please address in detail the following:

a. What agency is involved, and what prior communication has the applicant had with the agency regarding the proposed transmission facilities?

b. Has the agency granted the required permission or easement? If not, when is a decision by the agency expected?

c. What contingencies are in place if the agency does not grant the required permission or easement or if the process to obtain the required permission or easement would materially affect the estimated cost, proposed design plans, or anticipated timeline to construct the proposed transmission facilities?

18. Is any part of the proposed transmission facilities located within the coastal management program boundary as defined in 31 TAC § 27.1(a)? If so, please address the following issues:
    a. Do the facilities comply with the goals and applicable policies of the Coastal Management Program in accordance with 16 TAC § 25.102(a)?
    b. Will the facilities have any direct and significant effects on any of the applicable coastal natural resource areas specified in 31 TAC § 26.3(b)?
19. Are the circumstances for this line such that the seven-year limit discussed in Section VI of this Order should be changed?
20. Will anything occur during construction that will preclude or limit a generator from generating or delivering power or that will adversely affect the reliability of the ERCOT system?
21. If complete or partial agreement of the parties is reached on a route that relies on modifications to the route segments as noticed in the application, please address the following issues:
    a. Did the applicant comply with the additional notice requirements of 16 TAC § 22.52(a)(2) and (a)(3)(C)?
    b. Was written consent obtained from landowners directly affected by the proposed modifications to the route segments?

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

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

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

A. I have relied upon analysis of the data contained in Oncor's application and the application's accompanying attachments, including the *Reiter Switch – Tesoro Switch 345 kV Transmission Line Environmental Assessment and Alternative Route Analysis* (EA) as Attachment 1 prepared by Halff Associates, Inc. (Halff). I have also relied on my review of the direct testimonies and statements of position filed in this proceeding by or on behalf of Oncor and the intervenors.

III. CONCLUSIONS AND RECOMMENDATIONS

Q. Based on your evaluation of Oncor'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 Oncor'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).

3. I conclude that given 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 10 is the best route when weighing the factors set forth in PURA § 37.056(c)(4) and in 16 TAC § 25.101(b)(3)(B).

Q. What recommendations do you have regarding Oncor's application?

A. I recommend that the Commission approve Oncor's application to amend its CCN to construct a new double-circuit 345-kV transmission line beginning at Reiter Switch in Ector County and ending at Tesoro Switch in Midland County. I also recommend that the Commission order Oncor to construct the proposed transmission line on Route 10 (Segments A, B4, D3, F4, H4, I4, I5, I6, and J). I further recommend that the Commission include in its order approving Oncor's application the following paragraphs to mitigate the impact of the proposed project:

1. Oncor shall conduct surveys to identify pipelines that could be affected by the proposed transmission line, if not already completed, and coordinate with pipeline owners in modeling and analyzing potential hazards because of alternating-current interference affecting pipelines being paralleled.

2. If Oncor or its contractors encounter any archeological artifacts or other cultural resources during project construction, work shall cease immediately in the vicinity of the resource, and the discovery shall be reported to the Texas Historical Commission. In that situation, Oncor shall take action as directed by the Texas Historical Commission.

3. Oncor 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. Oncor 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. Oncor shall exercise extreme care to avoid affecting non-targeted vegetation or animal life when using chemical herbicides to control vegetation within the right-of-way (ROW) and shall ensure that such herbicide use shall comply with rules and guidelines established in the Federal Insecticide Fungicide and Rodenticide Act and with the Texas Department of Agriculture regulations.

5. Oncor shall minimize the amount of flora and fauna disturbed during construction of the transmission line, except to the extent necessary to establish appropriate ROW clearance for the transmission line. In addition, Oncor shall revegetate, using native species, and shall consider landowner preferences in doing so. Furthermore, to the maximum extent practicable, Oncor shall avoid adverse environmental impact to sensitive plant and animal species and their habitats, as identified by the Texas Parks and Wildlife Department and the U.S. Fish and Wildlife Service.

6. Oncor shall implement erosion control measures as appropriate. Erosion control measures may include inspection of the ROW before and during construction to identify erosion areas and implement special precautions as determined necessary. Also, Oncor shall return each affected landowner's property to its original contours

and grades unless otherwise agreed to by the landowner or the landowner's representative. Oncor shall not be required to restore original contours and grades where 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 line.

7. Oncor shall use best management practices to minimize the potential impact to migratory birds and threatened or endangered species.

8. Oncor shall cooperate with directly affected landowners to implement minor deviations in the approved route to minimize the impact of the transmission line. Any minor deviations to the approved route shall only directly affect landowners that received notice of the transmission line in accordance with 16 TAC § 22.52(a)(3) and shall directly affect only those landowners that have agreed to the minor deviation.

9. Oncor 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, Oncor 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 one that Oncor believes best addresses the requirements of PURA and the Commission's rules?

A. No. Oncor believes Route 10 best addresses the requirements of PURA and the

Commission's rules.

IV. PROJECT JUSTIFICATION

A. DESCRIPTION OF THE PROJECT

Q. Please describe the proposed project.

A. Oncor proposes to construct a new, double-circuit 345-kV transmission line that begins at Reiter Switch in Ector County and ends at Tesoro Switch in Midland County. The planned Reiter Switch will be located approximately 1.2 miles north of the intersection of State Highway (SH) Loop 338 and Farm-to-Market Road 3503, south of Odessa, Texas. The existing Tesoro Switch is located approximately 1.5 miles southeast of the intersection of Interstate Highway 20 and SH Loop 338, near Odessa, Texas.[6] Depending on the route selected, the line will be between approximately 4.0 to 5.2 miles in length and will be built using 1926.9 kcmil aluminum conductor steel supported trapezoidal-shaped wire on double-circuit lattice steel tower. The proposed line will have a capacity of 3,070 Mega Volt-Amps (MVA).[7]

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

A. Yes. Oncor's application proposed 21 routes for the proposed project.[8]

Q. Is the proposed project located within the incorporated boundaries of any

[6] Application at 4.

[7] *Id.*

[8] *Id.*, Attachment 10 at 2.

municipality?

A. No portion of the alternative routes would be constructed within a municipal boundary.[9]

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.[10]

B. NEED FOR THE PROJECT

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

A. In its application, Oncor states the proposed 345-kV transmission line is needed to address reliability issues in the Permian Basin region. With increased load growth in the area, Oncor states the proposed line will expand and upgrade their transmission system. In ERCOT's Permian Basin Load Interconnection Study Report, Oncor's proposed transmission line is listed as a resolution to overload condition on the Odessa EHV 345/138-kV autotransformer.[11] Additionally, this study also identified the proposed transmission line project as necessary by the summer of 2028 to resolve potential thermal overload violations during certain contingency conditions. The proposed line will address these reliability violations under North American Electric Reliability Corporation (NERC), specifically NERC Reliability Standard TPL-001-5.1.[12]

[9] *Id.* at 8.

[10] *Id.* at 22.

[11] *Id.* at 11.

[12] *Id.* at 12.

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

A. Yes, ERCOT has identified a need for the project and has listed it as a Tier 1 Project with a projected in-service date by summer of 2028.[13]

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. Based on the information provided by Oncor in their application, direct testimonies, and responses to requests for information, it is evident that there is a proven need for the proposed project.

C. PROJECT ALTERNATIVES

Q. Did Oncor consider distribution or transmission alternatives to the proposed project?

A. In the application, Oncor states that there were other transmission alternatives evaluated in the Permian Basin Load Interconnection Study. These options were found to be lower performing or more costly than the proposed project. Oncor also states other solutions such as distribution alternatives, adding transformers, upgrading voltage, or bundling conductors would not resolve the reliability issues.[14]

Q. Did Oncor investigate other alternatives to the proposed project?

A. Not to my knowledge.

[13] *Id.* at 11.

[14] *Id.* at 12.

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 route 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 10 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 Oncor select as the route which they believe best addresses the requirements of PURA and the Commission's rules?

A. Oncor selected Route 10 as the route which they believe best addresses the requirements of PURA and the Commission's rules.[15]

B. COMMUNITY VALUES

Q. Has Oncor sought input from the local community regarding community values?

A. Yes. Oncor published notice of the proposed project in the *Odessa American* and in the

[15] *Id.* at 14.

Midland Reporter-Telegram on July 31, 2024.[16] The proposed line traverses property owned by seven landowners, including Oncor. No public meeting was held, because the prerequisites for public meetings under 16 TAC § 22.52(a)(4) were not met.[17]

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.

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. Halff noted there are no parks, trails, or recreational points of interest within 1,000 feet of the ROW centerline for any of the alternative routes.[18]

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 alternative routes or that are located within 1,000 feet of the centerline of any of the alternative routes?

A. Proposed routes have zero recorded historical and archeological sites that are within the

[16] *See* Oncor's Affidavit Attesting to the Provision of Newspaper Notice (Aug. 14, 2024).

[17] Application at 14.

[18] *Id.*, Attachment 10 Table 2.

ROW.[19]

E. AESTHETIC VALUES

Q. In your opinion, which of the proposed alternative 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 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 ROWs. 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 route approved by the Commission.

F. ENVIRONMENTAL INTEGRITY

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

A. The study area is located in Ector and Midland Counties with a portion in the City of Odessa. Most of the area is rural, undeveloped land primarily used for oil and gas production or livestock grazing, but there are two isolated residential developments as well as commercial developments in the study area.[20]

Q. What was involved in your analysis of the environmental impact of the proposed

[19] *Id.* at 21.

[20] *Id.*, Attachment 1 at 3.7.1.

project?

A. I reviewed the information provided in the EA, included as Attachment 1 of the Application, and the direct testimonies and/or statements of position of the intervenors.

Q. Did your analysis include the review of the TPWD recommendations and informational comments following their review of the Application?

A. No. At the time of preparing this testimony, TPWD has not yet filed their recommendations and comments regarding the Application.

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. I agree with Halff that the construction of a transmission line project will have no significant effect on the physiographic or geologic features and resources of the area. The erection of the transmission structures would require removal and minor disturbance of small amounts of near-surface materials but would have no measurable impact on the geologic resources or features along any of the alternative routes. The construction and operation of transmission lines normally create very few long-term adverse impacts on soils.[21] The major potential impact on soils is from erosion and soil compaction.[22] Erosion is generally high during initial clearing of the ROW.[23] In order to minimize negative impact during construction, appropriate mitigation measures need to be implemented. Erosion and stream sedimentation can be controlled as required by procedures set forth in the Storm

[21] *Id.*, Attachment 1 at Section 5.2.1.

[22] *Id.*

[23] *Id.*

Water Pollution Prevention Plan.[24] Revegetation of the areas with potential erosion problems needs to happen immediately after construction.[25] I believe that negative impacts from soil erosion will be minimized by implementing adequate design and construction practices that are customary in the electric utility industry.

Q. In your opinion, how would construction of the proposed project on Route 10 compare from an environmental perspective to construction on the other alternative routes?

A. The proposed project is expected to cause only short-term effects to water, soil, and ecological resources during the initial construction phase. According to Table 2 in the Routing Memo, none of routes cross cropland/hay meadow, upland woodlands, or riparian areas nor do they cross potential wetlands, streams, lakes or ponds. Route 10 crosses 21,458 feet of rangeland pasture. Alternative routes vary from 19,374 feet to 25,844 feet crossing rangeland pasture. None of the proposed routes have rare plants within the ROW nor do they cross through occupied habitat of federally listed endangered or threatened species.[26]

Q. Do you conclude that Route 10 is acceptable from an environmental and land use perspective?

A. Yes.

G. ENGINEERING CONSTRAINTS

[24] *Id.*

[25] *Id.*

[26] *Id.*, Attachment 10, Table 2.

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

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

H. COSTS

Q. What are Oncor's estimated costs of constructing the proposed project on each of the proposed alternative routes?

A. Tables included in Attachment 3 of the Application provide Oncor's total estimated cost of constructing each proposed route, including the station facilities. The table below summarizes the estimated total cost and length of each proposed transmission line, from the least expensive route to most expensive route:[27]

Route	Length (Miles)	Total Estimated Cost
52	4.20	$23,418,000
10	**4.43**	**$23,540,000**
7	4.42	$24,939,000
1	4.43	$24,943,000
6	4.24	$25,030,000
53	4.26	$25,114,000
66	4.26	$25,114,000
4	4.28	$26,015,000
27	4.38	$26,040,000
5	4.22	$26,090,000
61	4.05	$26,259,000
46	4.05	$27,816,000
15	4.75	$28,528,000
65	4.11	$29,007,000

[27] *Id.*, Attachment 3.

50	4.11	$29,161,000
73	5.06	$29,266,000
13	4.66	$29,766,000
88	4.78	$30,300,000
123	5.23	$30,682,000
14	4.61	$31,016,000
106	5.15	$34,219,000

As the table illustrates, Route 10 is the second least costly route of all the proposed alternative routes. The costs indicated also includes station work necessary for the project, which is the same for all routes at $5,425,000.[28]

Q. Could you briefly discuss the less expensive routes and why Route 10 is still preferred?

A. Yes. Route 52 is the least expensive with a cost of $23,418,00. Route 52 however has 0 feet that parallel apparent property boundaries while Route 10 has 5,895 feet. Additionally, Route 52 has 1,713 feet within existing Oncor easement or fee-owned property while Route 10 has 2,379 feet. Overall, Route 52 has 1,713 feet of paralleling to existing ROW compared to Route 10 at 8,274 feet.[29] The preferred route 10 has more feet and a higher percentage of route paralleling existing ROW compared to Route 52 making it more favorable.

Q. Does Oncor's estimated costs of constructing the proposed transmission line appear to be reasonable?

A. After reviewing Oncor's estimated costs, I believe they are reasonable. However, the

[28] *Id.* at 10.

[29] *Id.*, Attachment 10 Table 2.

reasonableness of the final installed cost of the completed project will be determined at a future date in a transmission cost-of-service 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. 16 TAC § 25.101(b)(3)(B) provides that "the line must 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 Oncor made or proposed any routing adjustments to accommodate landowners?

A. Not to my knowledge.

Q. Has Oncor 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. RIGHTS-OF-WAY

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

A. Yes. 16 TAC § 25.101(b)(3)(B) provides that the following factors are to be considered:

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

(ii) whether the routes parallel existing compatible ROWs;

(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 ROW (INCLUDING APPARENT PROPERTY BOUNDARIES)

Q. Describe how Oncor proposes to use existing compatible ROWs for the proposed project.

A. Each proposed alternative route parallels apparent property boundaries and existing compatible ROWs.[30] The percentage of Route 10 is 35.37% and is in the middle of the table that is sorted by percent of total length parallel to existing ROW and apparent property lines shown below. The highest percentage route is Route 13, but it is greater than 20% more costly than the least expensive route. Route 52 is the least expensive route but is second to last in the table at 7.72%.

[30] *Id.*, Attachment 10 Table 2.

Route	Length (Miles)	Length of route parallel to apparent property boundaries (Miles)	Length of route within existing Oncor easement or fee-owned property (Miles)	Total length of route parallel to existing compatible rights-of-way (Miles)	Percent of Total Length Parallel to Existing ROW and Apparent Property Lines (%)
13	4.66	2.44	0.32	3.18	68.29
14	4.61	2.44	0.32	3.04	65.88
4	4.28	1.12	0.45	2.74	64.04
5	4.22	1.12	0.45	2.63	62.37
6	4.24	1.12	0.45	2.21	52.07
106	5.15	1.90	0.63	2.53	49.08
7	4.42	1.64	0.45	2.09	47.37
46	4.05	0.51	0.32	1.90	46.95
15	4.75	1.79	0.32	2.11	44.39
50	4.11	1.15	0.32	1.76	42.94
10	**4.43**	**1.12**	**0.45**	**1.57**	**35.37**
1	4.43	1.12	0.45	1.57	35.37
61	4.05	0.00	0.32	1.39	34.31
88	4.78	0.00	0.32	1.50	31.31
65	4.11	0.64	0.32	1.25	30.48
53	4.26	0.81	0.32	1.13	26.56
73	5.06	0.78	0.32	1.10	21.75
27	4.38	0.46	0.32	0.78	17.72
123	5.23	0.17	0.51	0.69	13.13
52	4.20	0.00	0.32	0.32	7.72
66	4.26	0.00	0.32	0.32	7.62

2. PARALLELING OF NATURAL OR CULTURAL FEATURES

Q. Describe how Oncor proposes to parallel natural or cultural features for the proposed project.

A. None of the proposed routes parallel streams within 100 feet.[31]

K. PRUDENT AVOIDANCE

[31] *Id.*

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. Exposure to electric and magnetic fields can be limited when routing transmission lines primarily by proposing alternative routes that would minimize, to the extent reasonable, the number of habitable structures located near the routes.

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

A. There are no habitable structures within 500 feet of the centerline for any of the proposed routes.[32]

Q. Do you conclude that Oncor proposed alternative routes that 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 <u>all</u> of the

[32] *Id.*

other routes in <u>all</u> respects?

A. No.

Q. If no proposed alternative route is better than all of the others in all respects, why have you recommended Route 10 instead of one of the other 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 10 best meets the criteria of PURA and the Commission's rules for the following reasons:

1. Route 10 is approximately 4.43 miles in length and is only 0.38 miles longer than the shortest routes, Routes 46 and 61.[33]
2. Route 10 parallels existing compatible corridors for approximately 35.34% of its total length.[34]
3. Route 10 costs $23,540,000, which is the second least expensive of the 21 proposed routes.[35]
4. Route 10 contains no habitable structures within 500 feet of its centerline.[36]
5. Route 10 is acceptable from the aspect of community values, recreational and park areas, historical and aesthetic values, and environmental integrity.

Overall, I consider Route 10 to have the most advantages and to be superior to the other

[33] *Id.*

[34] *Id.*

[35] *Id.*, Attachment 3

[36] *Id.*, Attachment 10 Table 2

proposed alternative routes.

Q. Does this conclude your testimony?

A. Yes.

CG-1 Qualifications of Caitlin Gaspar

CAITLIN GASPAR

Professional Summary

Results driven engineer with a strong initiative with full-time professional experience in the energy industry. Track record of success in team environments - combining a focused business development mindset, superior communication and relationship management skills.

Work History

Project Engineer, 06/2024 to current

Public Utility Commission of Texas– Austin, TX

- Identifies and analyzes issues relating to electric infrastructure planning, construction, operations, and maintenance, including service quality, facility need, and cost
- Provides recommendations and written testimony for contested proceedings including certificate of convenience and necessity, and rate proceedings
- Collaborates seamlessly with different divisions including Rate Regulation, Legal, and Market Analysis

Senior Power Scheduler and System Operator, 01/2022 to 05/2024

Tenaska Power Services – Dallas, TX

- Collaborated with Day-Ahead Traders, Energy Managers and customers to verify all submission are made accurately and timely for the day ahead market and the real time market
- Continuous compliance with applicable market and operational rules for the following markets: ERCOT, PJM, ISONE, MISO, SPP, CAISO, and NYISO
- Monitored and evaluated real-time dispatch of customer power generation facilities and controllable and load resources across the United States
- Coordinated with regional transmission organizations and power plant personnel from coal, natural gas, nuclear, wind, solar and battery facilities

High School Physics Teacher, 08/2020 to 06/2021

Highland Park High School – Dallas, TX

- Taught according to the Texas Essential Knowledge and Skills for Physics I and Physics I Honors
- Worked closely with colleagues to develop activities for both online and in person students
- Tutored one on one with students after class to help accommodate all learning styles

Mechanical Engineer, 06/2019 to 06/2020

Heritage Institute of Sustainability – Dallas, TX

- Performed water and energy audits for commercial and institutional facilities such as hospitals, hotels, universities, and high schools

- Analyzed and evaluated data collected from audits in order to make energy saving recommendations
- Constructed and edited reports for clients outlining the audit results in addition to costs associated with energy saving actions, the payback period as well as potential rebates
- Third party design review for mechanical and plumbing drawings for Dallas Independent School District

Research Assistant, 05/2018 to 02/2019

Southern Methodist University – Dallas, TX

- Adapted existing microrobotic research model to prototype a proposed solution for direct drug delivery in medical applications
- Fabricated alginate microrobots using a centrifuged method in accordance with design specifications and tolerances.

Education

Bachelor of Science: Mechanical Engineering, Cum Laude, June 2017

Drexel University - Philadelphia, PA