APPLICATION OF

CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC FOR A CERTIFICATE OF CONVENIENCE AND NECESSITY FOR A PROPOSED 138KV TRANSMISSION LINE WITHIN HARRIS AND MONTGOMERY COUNTIES

DOCKET NO. 55768

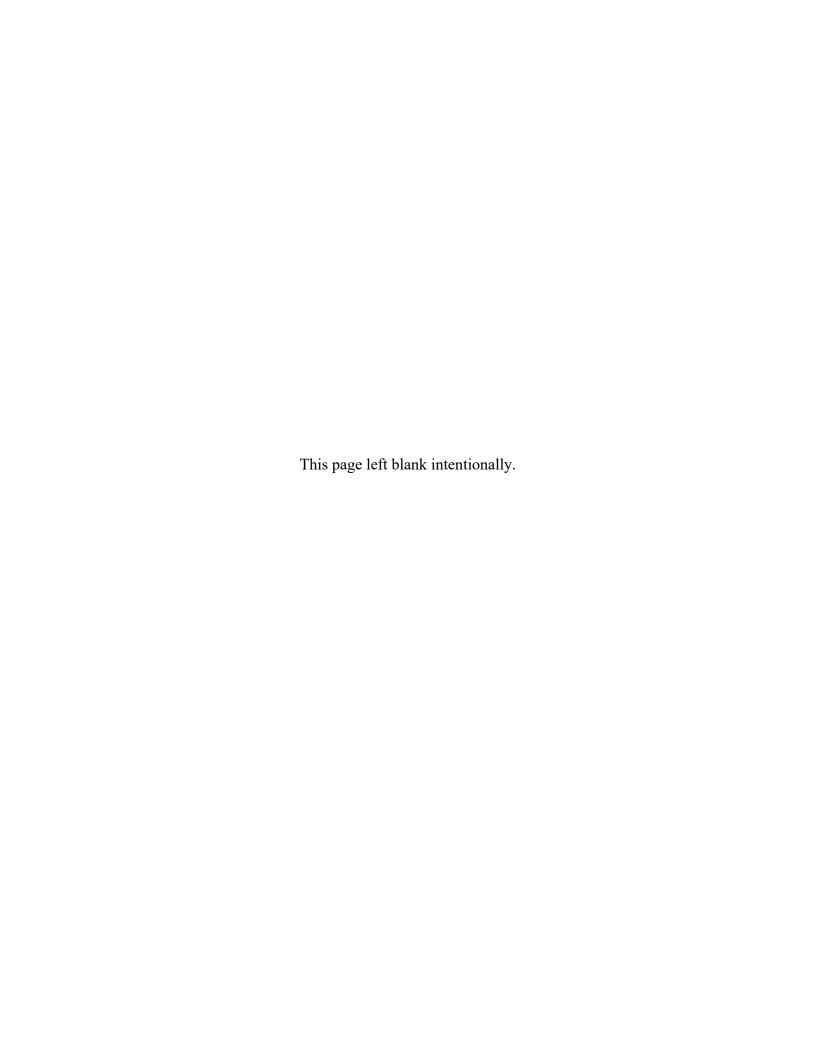
Submit seven (7) copies of the application and all attachments supporting the application. If the application is being filed pursuant to P.U.C. SUBST. R. 25.101(b)(3)(D) or P.U.C. Subst. R. 25.174, include in the application all direct testimony. The application and other necessary documents shall be submitted to:

Public Utility Commission of Texas

Attn: Filing Clerk

1701 N. Congress Ave.

Austin, Texas 78711-3326



DOCKET NO. 55768

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Attachments:

- Environmental Assessment and Alternative Route Analysis for the 138kV Mill Creek
 Project in Montgomery and Harris Counties, Texas
- 2. City of Tomball Franchise Agreement
- 3. Cost Estimate for Proposed Primary Transmission Line Routes
- 4. 138kV Mill Creek Transmission Study
- 5. Schematic of CenterPoint Houston's Existing Transmission System
- 6. Directly Affected Landowner Habitable Structures
- 7. DoD Notice
- 8. Written Direct Notice to Landowners and List of Notified
- 9. Written Direct Notice to Utility and Pipeline Owners Paralleled or Crossed and List of Notified
- Written Direct Notice to County and Municipal Authorities and List of Officials Notified
- 11. Written Direct Notice to the Office of Public Utility Counsel
- 12. Newspaper Notice
- 13. Transmittal Letter to Texas Parks and Wildlife Department
- 14. Affidavit of Bradley J. Diehl

Note: As used herein, the term "joint application" refers to an application for proposed transmission facilities for which ownership will be divided. All applications for such facilities should be filed jointly by the proposed owners of the facilities.

1. Applicant (Utility) Name: For joint applications, provide all information for each applicant.

Name: CenterPoint Energy Houston Electric, LLC ("CenterPoint Houston")

Certificate Number: 30086

Street Address: 1111 Louisiana Street, Houston, Texas 77002

Mailing Address: P.O. Box 1700, Houston, Texas 77251-1700

2. Please identify all entities that will hold an ownership interest or an investment interest in the proposed project but which are not subject to the Commission's jurisdiction.

CenterPoint Houston will hold the sole ownership interest in the Proposed Project.

3. Person to Contact: For joint applications, provide all information for each applicant.

Name: Robert W. Jackson

Title/Position: Manager, Regulatory and Rates

Phone Number: 713-207-5584

Mailing Address: P.O. Box 1700, Houston, Texas 77251-1700

Email Address: robert.jackson@centerpointenergy.com

Alternate Contact: Peggy Sorum

Title/Position: Director, Regulatory and Rates

Phone Number: 713-207-3583

Mailing Address: P.O. Box 1700, Houston, TX 77251-1700

Email Address: peggy.sorum@centerpointenergy.com

Legal Counsel: Mickey S. Moon

Phone Number: 713-702-7231

Mailing Address: P.O. Box 1700, Houston, TX 77251-1700

Email Address: mickey.moon@centerpointenergy.com

4. Project Description:

Name or Designation of Project: 138kV Mill Creek Project

Provide a general description of the project, including the design voltage rating (kV), the operating voltage (kV), the CREZ Zone(s) (if any) where the project is located (all or in part), any substations and/or substation reactive compensation constructed as part of the project, and any series elements such as sectionalizing switching devices, series line compensation, etc. For HVDC transmission lines, the converter stations should be considered to be project components and should be addressed in the project description.

Response: The proposed 138kV Mill Creek Transmission Project (the Proposed Project) is a new 138kV double circuit line in southern Montgomery County and northern Harris County, Texas. CenterPoint Houston has studied historical load data and forecast load projections for ten years and determined that the new Mill Creek distribution substation, constructed as part of the Proposed Project, is needed to support existing customers, area load growth, and multiple commercial and residential developments planned for the area. The proposed transmission line will connect an existing 138kV circuit in the CenterPoint Houston transmission network to one of three proposed distribution substation sites (Substation Sites A, B, or C). The 138kV Mill Creek Project transmission line design voltage rating and operating voltage rating are both 138kV and the line is not located in a CREZ zone. The Mill Creek substation is not expected to require any type of reactive compensation. The only series elements associated with the Proposed Project are sectionalizing switching devices and other typical in-series substation elements at the new Mill Creek substation.

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If the project will be owned by more than one party, briefly explain the ownership arrangements between the parties and provide a description of the portion(s) that will be owned by each party. Provide a description of the responsibilities of each party for implementing the project (design, Right-Of-Way acquisition, material

procurement, construction, etc.).

Response: CenterPoint Houston will own, operate, and maintain all transmission line facilities, including conductors, wires, structures, hardware, and rights-of-way. CenterPoint Houston will also own, operate, and maintain the substation facilities. CenterPoint Houston will implement all aspects of the Proposed Project, including

design, right-of-way acquisition, material procurement, and construction.

If applicable, identify and explain any deviation in transmission project components from the original transmission specifications as previously approved by the Commission or recommended by a PURA §39.151 organization.

Response: This provision is not applicable to the Proposed Project.

5. **Conductor and Structures:**

Conductor Size and Type: 959.6 kcmil ACSS/TW Suwannee (Aluminum Conductor, Steel Supported Trapezoidal Wire)

Number of conductors per phase: Two

Continuous Summer Static Current Rating (A): 3512

Continuous Summer Static Line Capacity at Operating Voltage (MVA): 838

Continuous Summer Static Line Capacity at Design Voltage (MVA): 838

Type and composition of Structures:

Response: The typical structures for all route segments will be double-circuit steel lattice towers with a vertical phase configuration in an 80-foot-wide right-of-way ("ROW") for the proposed alternative route segments. Depending on the terrain and

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other considerations, such as existing CenterPoint Houston structure designs and the length of span between structures and clearance requirements needed to cross waterways, wetlands areas, FAA determinations or utility and roadway crossings, CenterPoint Houston may require wider ROW and alternative structure types, such as tubular steel poles or concrete poles with a vertical configuration in a 80-foot wide ROW and flat-tap steel lattice tower with a horizontal configuration in a 180-foot wide ROW to approach and dip under existing transmission lines. In the event where a structure is needed to terminate a fiber cable inside the substation, a concrete pole would be considered. The exact location or extent of the different ROW widths or the use of different structure types cannot be determined until a route is approved, surveys are conducted, and more detailed engineering designs are completed.

Height of Typical Structures:

Response: The typical structure height of a lattice steel tower will be approximately 90 to 140 feet tall depending on the terrain and required National Electrical Safety Code ("NESC") clearances. The typical height of a tubular steel pole will be approximately 60 to 190 feet tall depending on the terrain and required National Electrical Safety Code ("NESC") clearances. The typical height of a concrete pole will be approximately 90 to 120 feet tall depending on the terrain and required National Electrical Safety Code ("NESC") clearances. The typical height of a narrow base steel pole will be approximately 90 to 120 feet tall depending on the terrain and required National Electrical Safety Code ("NESC") clearances. The typical height of a steel flat tap structure will be approximately 35 to 55 feet tall depending on the terrain and required National Electrical Safety Code ("NESC") clearances. The exact range of different structure heights cannot be determined until a route is approved, surveys are conducted, and more detailed engineering designs are complete.

Explain why these structures were selected; include such factors as landowner preference, engineering considerations, and costs comparisons to alternate

structures that were considered. Provide dimensional drawings of the typical structures to be used in the project.

Response: The structures originally considered include double-circuit vertical lattice and single circuit horizontal lattice steel towers, double-circuit vertical concrete poles, and double-circuit vertical and single circuit horizontal steel poles.

Why typical structures were selected [Explanation should include overall number and types of designs evaluated and main reason for selection of "typical structures" selected for construction of project.]

Landowner Preference

When asked on the questionnaire if respondents had a preference for the type of transmission line structure being proposed for the Project, 30 of the 43 respondents (70 percent) answered yes, 2 (5 percent) indicated that they did not have a preference, and the remaining 11 (26 percent) left the question blank. Of the 30 responses answering yes, 10 (33 percent) of the respondents indicated a preference for buried transmission lines, 9 (30 percent) preferred no lines at all, 5 (17 percent) preferred double-circuit steel poles, and 4 (13 percent) would prefer a structure that would have the least impact. One respondent (3 percent) that preferred no lines, indicated that the least obtrusive structure was preferred if any were constructed. Of the 10 respondents who preferred buried transmission lines, 5 indicated the double-circuit steel poles were preferred if the lines must be above ground. The total percentage does not add up to 100 percent due to respondents submitting miscellaneous comments.

Engineering Considerations

For each alternative structure, the factors considered included the following:

- soil conditions throughout the study area,
- span length,
- conductor capacity,
- nominal ROW requirements,

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construction and maintenance issues,

live-line maintenance issues,

potential land-use issues, and

costs.

Cost Comparisons

Cost estimates were developed for the Proposed Project using the different structure

types. A comparison of the costs showed that the lowest cost solution utilized

double-circuit vertical lattice steel towers. This was the structure type used for the

base line of the screening estimates for the review of the primary transmission line

routes. CenterPoint Houston also took a sampling of the primary transmission line

routes and developed estimated costs using steel poles. These screening estimates

validated that routes using double-circuit vertical lattice steel towers were the least

cost option. The primary transmission line routes estimated with tubular steel poles

for the entirety were the most expensive at approximately 11.5% higher cost. The

primary transmission line routes estimated with tangent concrete poles and lattice

steel tower angle structures were approximately 1.0% higher costs. This cost

differential changed depending on the number of angles in the route, but the trend

was the same.

Dimensional Drawings

The dimensional drawings of the typical structures to be used are shown in Figures

1-3 through 1-7 of the EA, Attachment 1, for the proposed Project prepared by

TRC Companies, Inc. ("TRC").

For joint applications, provide and separately identify the above-required

information regarding structures for the portion(s) of the project owned by each

applicant.

Response: Not applicable. This is not a joint application.

6. **Right-of-way:**

Miles of Right-of-Way: Approximately 2.84 to 4.11 miles

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Miles of Circuit: Approximately 5.68 to 8.22 miles

Width of Right-of-Way: 80-180 feet (new)

Percent of Right-of-Way Acquired: 0%

The following table (Table 1) contains the miles of ROW required, miles of circuit required, width of ROW required, and percent of ROW acquired for the 23 primary transmission line routes.

Table 1: Right-of-Way

		Alternati ve Route 1-A	Alternative Route 2-A	Alternative Route 3-A	Alternative Route 4-A		Alternative Route 6-A	Alternative Route 7-A	Alternative Route 8-A	Alternative Route 9-B	Alternative Route 10-B			Alternative Route 13-B		Alternative Route 15-B		Alternative Route 17-C		Alternative Route 19-C	Alternative Route 20-C	Alternative Route 21-C	Alternative Route 22-C	Alternative Route 23-C
F	OW	TT-LL- II-HH- V-P-C	TT-KK- GG-P-C	TT-KK- JJ-HH-V- P-C	TT-KK- GG-P-O- E-B	TT-KK- GG-P-O- E-D-A2- A1	TT-KK- GG-P-O- E-D-A2- WW	SS-NN- FF-DD- BB-Z-X- Q-H-F2- XX-A1	SS-NN- MM2- MM1-II- HH-V-P- C	MM1-II- HH-V- P-C	MM1-II- HH-V-P- O-E-B	MM1-II- HH-V-P- O-E-D- A2-A1	FF-DD- BB-AA- Z-X-Q- H-F2- XX-A1	FF-DD- BB-R2- R1-J-H- F2-XX- A1	FF-DD- BB-R2- R1-K-L- G-F2- XX-A1	FF-EE-T- S-M-G- F2-XX- A1	RR-PP- QQ-NN- MM2- MM1-II- HH-V-P- O-E-D- A2-A1	RR-PP- OO- MM2- MM1-II- HH-V-P- O-E-B	RR-PP- QQ-NN- FF-DD- BB-AA- Z-X-Q- H-F2- XX-A1	RR-PP- QQ-NN- FF-DD- BB-R2- R1-J-I-E- B	RR-PP- QQ,-NN- FF-DD- BB-R2- R1-J-H- F2-XX- A1	U-S-N-L- G-F2- XX-WW	U-S-M- G-F2- XX-WW	VV-TT-KK- GG-P-O- E-B
Requi	red (miles)	3.26	2.98	3.07	3.05	3.31	3.37	3.86	3.42	2.84	2.92	3.18	3.39	3.39	3.33	3.96	3.69	3.40	3.78	3.62	3.78	4.07	4.11	3.90
Circu	it (miles)	6.52	5.96	6.14	6.10	6.62	6.74	7.72	6.86	5.68	5.82	6.34	7.00	7.00	6.88	7.92	7.60	5.96	8.00	7.58	8.02	8.36	8.42	7.80
Width	New	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
(feet)	Existing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Acqu	ired (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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For joint applications, provide and separately identify the above-required information for each route for the portion(s) of the project owned by each applicant.

Response: Not applicable. This is not a joint project.

Provide a brief description of the area traversed by the transmission line. Include a description of the general land uses in the area and the type of terrain crossed by the line.

Response: The Proposed Project is located north of Houston, Texas in southern Montgomery County and northern Harris County. The area is urban to suburban, mostly developed with residential and agricultural land use, with scattered commercial use. Some of the lower lying and wetter areas are wooded and undeveloped. The study area is generally categorized as an urban setting.

7. Substations or Switching Stations:

List the name of all existing HVDC converter stations, substations or switching stations that will be associated with the new transmission line. Provide documentation showing that the owner(s) of the existing HVDC converter stations, substations and/or switching stations have agreed to the installation of the required project facilities.

Response: There are no existing HVDC converter stations, substations or switching stations that will be associated with the new transmission line.

List the name of all new HVDC converter stations, substations or switching stations that will be associated with the new transmission line. Provide documentation showing that the owner(s) of the new HVDC converter stations, substations and/or switching stations have agreed to the installation of the required project facilities.

Response: No new HVDC converter stations will be required for the Project.

8. Estimated Schedule:

Estimated Dates of:	Start	<u>Completion</u>
Right-of-way and Land Acquisition	June 2024	May 2025
Engineering and Design	June 2024	October 2024
Material and Equipment Procurement	October 2024	October 2025
Construction of Facilities	January 2026	August 2026
Energize Facilities	August 2026	August 2026

Process will begin upon final order

9. Counties:

For each route, list all counties in which the route is to be constructed.

Response: The 23 primary transmission line routes are in Montgomery and Harris Counties, Texas. The following table (Table 2) identifies counties in which the routes will be constructed:

Table 2: Primary Transmission Line Route Counties

Alternative Route	Montgomery County	Harris County
1-A	Х	
2-A	Х	
3-A	Х	
4-A	Х	
5-A	X	
6-A	X	
7-A	X	X
8-A	Х	
9-B	X	
10-B	Х	
11-B	X	
12-B	X	X
13-B	X	X
14-B	Х	X
15-B	Х	X
16-C	Х	
17-C	Х	
18-C	Х	X
19-C	Х	

Alternative Route	Montgomery County	Harris County
20-C	X	X
21-C	X	X
22-C	X	X
23-C	X	

10. Municipalities:

For each route, list all municipalities in which the route is to be constructed.

Response: Primary transmission line routes 7-A, 12-B, 13-B, 14-B, 15-B, 18-C, 20-C, 21-C, and 22-C cross into Harris County and the municipality of Tomball. The remaining Alternative Routes would not be constructed within any municipality.

For each applicant, attach a copy of the franchise, permit or other evidence of the city's consent held by the utility, if necessary or applicable. If franchise, permit, or other evidence of the city's consent has been previously filed, provide only the docket number of the application in which the consent was filed. Each applicant should provide this information only for the portion(s) of the project which will be owned by the applicant.

Response: See Attachment 2.

11. Affected Utilities:

Identify any other electric utility served by or connected to facilities in this application.

Response: The facilities proposed in this Application will not serve another electric utility or connect with the facilities owned by another electric utility.

Describe how any other electric utility will be affected and the extent of the other utilities' involvement in the construction of this project. Include any other electric utilities whose existing facilities will be utilized for the project (vacant circuit positions, ROW, substation sites and/or equipment, etc.) and provide documentation

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showing that the owner(s) of the existing facilities have agreed to the installation of the required project facilities.

Response: No other electric utility will be affected by or involved in the construction of the proposed project.

12. Financing:

Describe the method of financing this project. For each applicant that is to be reimbursed for all or a portion of this project, identify the source and amount of the reimbursement (actual amount if known, estimated amount otherwise) and the portion(s) of the project for which the reimbursement will be made.

Response: CenterPoint Houston will finance this Project from its general corporate funds.

13. **Estimated Costs:**

Provide cost estimates for each route of the proposed project using the following table. Provide a breakdown of "Other" costs by major cost category and amount. *Provide the information for each route in an attachment to this application.*

Response: See Attachment 3 for the cost estimates for each alternative route proposed for the Project including a breakdown of "Other" costs by major cost category and amount.

For joint applications, provide and separately identify the above-required *information for the portion(s) of the project owned by each applicant.*

Response: Not applicable. This is not a joint application.

14. **Need for the Proposed Project:**

For a standard application, describe the need for the construction and state how the proposed project will address the need. Describe the existing transmission system and conditions addressed by this application. For projects that are planned to accommodate load growth, provide historical load data and load projections for at least five years. For projects to accommodate load growth or to address reliability issues, provide a description of the steady state load flow analysis that justifies the

project. For interconnection projects, provide any documentation from a transmission service customer, generator, transmission service provider, or other entity to establish that the proposed facilities are needed. For projects related to a Competitive Renewable Energy Zone, the foregoing requirements are not necessary; the applicant need only provide a specific reference to the pertinent portion(s) of an appropriate commission order specifying that the facilities are needed. For all projects, provide any documentation of the review and recommendation of a PURA §39.151 organization.

Response: The 138kV Mill Creek Transmission Project is needed to provide 138kV electric transmission service to the new Mill Creek distribution substation. The new distribution substation is needed to reliably serve projected distribution load growth in the Magnolia/Tomball/The Woodlands area. This part of the CenterPoint Houston system is experiencing load growth as a result of new residential, commercial, and light industrial developments. The completion of Section 1A and 1B of the State Highway 249 Extension (Aggie Expressway) has been a contributing factor in the growth of this area. The existing distribution substations in Magnolia, Tomball, and The Woodlands areas (which include three existing 35kV substations and one existing 12kV) have or will soon reach capacity limits that will prevent them from reliably serving the growing energy demands in this region. The Proposed Mill Creek Transmission Project will provide needed capacity to the new Mill Creek distribution substation so that CenterPoint Houston can reliably serve its current and future customers in the area. The Proposed Mill Creek Transmission Project will also enhance the reliability of the CenterPoint Houston transmission and distribution system by increasing switching flexibility and reducing the number and duration of scheduled maintenance outages on transmission and distribution lines in the Magnolia/Tomball/The Woodlands areas.

The northwest Houston and southwest Montgomery County areas have experienced rapid growth that has included the addition of new residents, schools, subdivisions, retail centers, commercial buildings, growing healthcare, and more. Load served by two existing distribution substations in the area, Pinehurst and

Tomball (35 kV), grew by around 24% and 22% respectively between 2018 and 2023. With the large industrial, commercial, and residential developments that are both underway and planned in the area, the distribution load that is currently served from the three existing substations is forecasted to grow approximately 50 MW between 2023 and 2032, with a combined load increase of almost 10% between 2023 and 2032.

CenterPoint Houston evaluated 138kV connection options to identify reliable and cost-effective options to serve the new Mill Creek substation. The manner in which the Proposed 13kV Mill Creek Transmission Project will address the need to serve load as well as a description of the steady state load flow analysis that justifies the Proposed Project is included in the report included as **Attachment 4** to this Application. In addition, the existing transmission system and condition addressed are also summarized in the report.

The Proposed Project has not been reviewed by ERCOT because it is a Tier 4 "Neutral Project." ERCOT Nodal Protocols section 3.11.4.3(f)(vi) states:

A project shall be considered a neutral project if it consists entirely of:

A project to serve a new Load unless such project would create a new transmission circuit between two stations (other than looping an existing circuit into the new Load-serving station).

The Proposed 138kV Mill Creek Transmission Project loops the existing 138kV CenterPoint Houston Pinehurst to Tomball transmission circuit 81 into a new load serving station; therefore, this project is neutral under ERCOT Nodal Protocols and ERCOT review is unnecessary.

The 6-year load history for the existing distribution substations in the area and preliminary 10-year load forecast for the new Mill Creek distribution substation is shown in **Table 3** below. The Stone Lake substation does not show any historical load because it is newly constructed. The actual 2023 peak load for the existing substations as of the date CenterPoint Houston filed this application was 212 MW at Pinehurst, 205 MW at Tomball, and 60 MW at Stone Lake for a total peak load for the area in 2023 to date of 477 MW. These peak loads are given as when each

individual substation hit their peak for the year. For Stone Lake it was in July, and both Pinehurst and Tomball hit their peak in August. Loading on these substations varies depending on the time of year and time of day. In general, peak loading occurs in August each year. However, new loads continue to be energized year-round and the full realization of the peak 2023 load will not materialize until peak 2024. Additionally, Stone Lake is a new substation. Its first distribution circuit was energized in February 2023 and the last designed circuit energized in June 2023. As such, Stone Lake's load is arriving at a slower pace over the course of 2023 than CenterPoint Houston had initially projected. CenterPoint Houston anticipates the Stone Lake load to ultimately materialize as projected given the growth occurring in the area. The load projections for the other existing substations are on track with CenterPoint Houston's load projections as shown in Table 3.

Table 3: 6-Year History and 10-Year Load Forecast for Mill Creek Substation

Substation Name	kV]	HISTORIO	CAL (MW)		FORECAST (MW)									
		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Mill Creek	35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.80	70.89	70.97	71.06	71.15	71.24	71.32	71.41
Pinehurst	35	169.8	176.36	168.79	186.22	183.77	210.3	237.94	252.75	207.46	207.71	207.97	206.22	208.22	208.73	208.99	209.25
Tomball 12kV	12	16.25	15.66	15.76	15.91	15.69	15.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tomball 35kV	35	152.48	156.18	161.36	169.02	169.02	186.2	172.13	178.70	163.95	164.15	164.35	164.55	164.75	164.95	165.16	165.36
Stone Lake	35	0.00	0.00	0.00	0.00	0.00	0.00	112.95	115.91	118.95	112.07	115.01	118.03	121.12	124.30	127.56	127.72
TOTAL		338.53	348.20	345.91	371.15	368.77	412.41	523.02	547.36	561.16	554.82	558.31	561.86	565.50	569.22	573.03	573.74

15. Alternatives to Proposed Project:

For a standard application, describe alternatives to the construction of this project (not routing options). Include an analysis of distribution alternatives, upgrading voltage or bundling of conductors of existing facilities, adding transformers, and for utilities that have not unbundled, distributed generation as alternatives to the project. Explain how the project overcomes the insufficiencies of the other options that were considered.

Response:

a) Distribution Alternative –

CenterPoint Houston was not able to identify any other distribution alternatives that would provide reliable service for its existing customers and future load growth. There are several factors that impacted this analysis. First, although there are three existing substations in the general area, one substation, Tomball is dual voltage with 12kV & 35kV. The existing 12kV Tomball circuits are already planned to be converted to 35kV. These converted circuit will continue to serve the same load as well as providing additional capacity to serve growth around Tomball. The converted circuits will not provide the additional capacity needed to serve the projected load growth that CenterPoint intends to serve with Mill Creek. For distribution voltages, 35kV provides more capacity than 12kV and is therefore better suited to reliably serve this load growth. Two of the other substations, Tomball (35kV) and Pinehurst, have seen significant load growth over the last six years which is expected to continue. Load served by Pinehurst grew by almost 24% between 2018 and 2023, and load at Tomball (35kV) grew by over 22% during that same period. Stonelake is a new substation that was constructed to serve load growth around the northwest portion of the Grand Parkway 99. This area is approximately 11 miles away from the proposed Mill Creek substation sites and therefore not suited to serve the load growth around that area.

The load growth in this area is on the edge of CenterPoint's service boundary, meaning CenterPoint Houston can only serve load from the west and south with our boundary on the north and east. Because of the amount of load currently served from the existing distribution substations and the projected load growth in the area, CenterPoint Houston determined that it could not reliably continue to serve the area without additional distribution substation capacity. Under present load conditions, should one of the existing substations' transformers fail, and/or the three to four feeders the transformers serve fail, the remaining substations have just enough contingency capacity to continue serving the area. However, with the projected additional load in the area, the existing substations could have trouble reliably serving load in a contingency event.

In addition, once CenterPoint Houston identified the need for additional capacity, it also identified the need to locate that new distribution capacity in an area that does not have an existing distribution substation. This will allow for the load growth that is closer to the existing distribution substations to be served by those facilities and minimize the need to have long distribution feeders to serve areas further away. While CenterPoint Houston does not have a specific limit to the distance of its distribution lines, the longer distribution lines travel the greater the likelihood of reliability issues. The approximate distances from Tomball to the projected load growth is approximately 5.55 miles, and approximately 10.71 miles from Stone Lake. These distances are straight line measurements, and an actual distribution circuit lengths would be longer than the straight-line distances listed. The longer a distribution line is, the more likely it is to encounter the environmental and operational challenges that create power quality and reliability disturbances. A longer line increases the chance of encountering a lightning strike, automobile collision, wildlife or vegetation disturbance, severe weather, vandalism, equipment failures, or insulator flashovers. The addition of Mill Creek would help reduce the overall exposure of existing circuits, some of which exceed 10 miles in length, and keep any new circuits to a reasonable length based on the area. While the Pinehurst substation is only a little more than 3.5 miles from the area to be served by the new Mill Creek substation, it continues to see significant growth. In addition, the capacity

from the new Mill Creek substation is needed to serve load growth and support reliable operations during a contingency event.

b) Upgrading Voltage/Bundling Conductors/Adding Transformer –

Upgrading voltage or bundling of conductors of existing facilities or adding transformers would not provide the additional capacity necessary to serve projected load growth.

Most of the existing substations in the area are 35kV, which is the highest level of distribution voltage for CenterPoint Houston, so they cannot be upgraded. The wire size used for distribution feeders in the area is the maximum CenterPoint Houston uses. In the case of the Tomball substation, the small amount of remaining 12kV feeders out of Tomball (12kV) serves a very localized area of Tomball and there are current plans in the form of a Distribution Development Plan (DDP) to upgrade that remaining 12kV to 35kV. These upgraded 35kV distribution circuits will continue to serve the existing load as well as the additional load growth around the Tomball Substation. As such, these upgraded circuits would not provide the additional capacity necessary to serve the projected load growth that CenterPoint plans to serve with the Mill Creek substation.

Bundling of conductors at the overhead distribution level is not standard industry practice. CenterPoint Houston has investigated bundling conductors in other circumstances in the past and ruled it out as it would lead to cascading effects to protection, coordination, and equipment. Bundling transmission conductors would not provide the needed distribution capacity to directly serve the identified load growth.

c) Distributed Generation –

CenterPoint Houston is an unbundled utility; therefore, it did not consider distributed generation as an alternative to the proposed project.

16. Schematic or Diagram:

For a standard application, provide a schematic or diagram of the applicant's transmission system in the proximate area of the project. Show the location and voltage of existing transmission lines and substations, and the location of the construction. Locate any taps, ties, meter points, or other facilities involving other utilities on the system schematic.

Response: A schematic of CenterPoint Houston's existing transmission system in the proximate area of the project in Montgomery and Harris Counties is included as **Attachment 5.**

17. Routing Study:

Provide a brief summary of the routing study that includes a description of the process of selecting the study area, identifying routing constraints, selecting potential line segments, and the selection of the routes. Provide a copy of the complete routing study conducted by the utility or consultant. State which route the applicant believes best addresses the requirements of PURA and P.U.C. Substantive Rules.

Response: The methodologies and assumptions that were used to conduct the Environmental Assessment and Alternative Route Analysis for the Mill Creek Project ("EA") are consistent with Section 37.056(c)(4)(A) through (D) of the Public Utility Regulatory Act ("PURA"), P.U.C. Proc. R. 22.52(a)(4), P.U.C. Subst. R. 25.101(b)(3)(B), and the Commission's policy of prudent avoidance. The methodology used to complete the EA is summarized below.

TRC developed an initial base map to delineate the study area boundary for the Proposed Project and initiate data collection activities. TRC, with input from CenterPoint Houston, identified the initial study area boundaries based on the geography and physiography of the area, the location of the distribution load center, and the existing 138kV transmission line circuits for the Proposed Project tie points. The study area was defined to provide an area large enough to develop an adequate set of geographically diverse alternative routes and to minimize potential land use

conflicts with the study area. The western study area study area boundary is located near Hardin Store Road, the southern study area boundary is located along the Montgomery/Harris County border generally following Spring Creek, the eastern study area parallels FM 2978 Road in Magnolia and the Burlington Northern Santa Fe Railroad, the Northern boundary begins near Hardin Store Road in Magnolia to the north. Near the northern edge of the Study Area are a Burlington Northern-Santa Fe railroad and two CenterPoint Houston 345kV transmission lines. The presence of the railroad and these lines has been shown to cause interference in the electrical system. Accordingly, CenterPoint Houston has installed mitigation in the area to limit this interference. To avoid costly avoidance of the installed mitigation and the creation of additional interference from the proposed new transmission line, CenterPoint Houston excluded this area from the Study Area.

Initial reconnaissance surveys were conducted, and 31 evaluation criteria were developed. Data was collected pertaining to land use, ecology, recreational and park areas, historical and aesthetic values, and environmental integrity. Project scoping letters were sent to federal, state, and local agencies and officials to solicit additional information. Available 2022 aerial photography and geographic information system ("GIS") coverage with associated metadata were reviewed, and relevant resource data were selected and mapped. TRC conducted a resource analysis for development of an environmental and land use composite constraints map.

TRC identified 56 feasible and geographically diverse primary transmission line segments. A public meeting was conducted in accordance with P.U.C. Proc. R. 22.52 (a)(4). Modifications to the preliminary transmission line segments were completed based on the results of the public meeting, and a reconnaissance survey. The segments were combined into 23 primary transmission line routes presented in this Application. Data was then tabulated for the evaluation criteria for each resulting primary transmission line route and a comparative potential impact assessment was completed. CenterPoint Houston analyzed the engineering feasibility and provided an estimated cost analysis for each of the primary transmission line routes. TRC incorporated these factors into the analysis and consensus process for the

recommendation of nine Alternative Routes (2-A, 4-A, 5-A, 9-B, 10-B, 11-B, 16-C, 17-C, and 23-C). CenterPoint Houston reviewed TRC's recommendations and concurred that each of the nine Alternative Routes were feasible from an engineering, constructability, and cost perspective. A comparison between the Alternative Routes was completed to select the route that addresses the requirements of PURA and PUC Substantive Rules.

Alternative Route 4-A was recommended by TRC as the route that best addresses the requirements of PURA and PUC Substantive Rules based on the following rationale:

- It is the fourth shortest route at 3.05 miles.
- It has the fewest number of habitable structures within 300 feet of the route centerline of all the primary Alternative Routes with 16.
- It has no habitable structures to be relocated or removed (within 40 feet of the route centerline).
- It crosses approximately 1.1 mile of NWI mapped wetlands (PSS).
- It has a comparable number of stream crossings (6).
- It does not have any known recorded historical or archeological sites or NRHP-listed or determined-eligible properties within the ROW.

CenterPoint Houston concurred with the selection of Alternative Route 4-A for the above reasons and because it is one of the least cost Alternative Routes and the route that best addresses the requirements of PURA and PUC Substantive Rules.

A copy of the EA conducted by TRC is provided in **Attachment 1**.

18. Public Meeting or Public Open House:

Provide the date and location for each public meeting or public open house that was held in accordance with P.U.C. PROC. R. 22.52. Provide a summary of each public meeting or public open house including the approximate number of attendants, and a copy of any survey provided to attendants and a summary of the responses

received. For each public meeting or public open house provide a description of the method of notice, a copy of any notices, and the number of notices that were mailed and/or published.

Response: Pursuant to P.U.C. Proc. R. 22.52(a)4 a public meeting must be held if twenty-five (25) or more landowners would receive direct notice. CenterPoint Houston hosted one open-house public meeting. The open-house public meeting was held on December 15, 2022 at the Tomball Community Center, 221 Market Street in Tomball, TX 77375, from 5:00 p.m. – 8:00 p.m.

A total of 71 people signed in at the public meeting with a total of 97 people in attendance based on the information provided by those that signed in. CenterPoint Houston personnel registered visitors and handed out questionnaires and information packets. The questionnaire solicited comments from landowners and other visitors, in addition evaluations of the information presented in the public meetings were included. A copy of the questionnaire can be found in **Appendix A** of the EA, **Attachment 1**. Section 3.6.2 of the EA, **Attachment 1**, includes a detailed description of the public meetings and the responses received to the questionnaires.

CenterPoint Houston also provided two manned GIS computer stations at each meeting. Landowners were provided the opportunity to view their properties or areas of interest in more detail at the GIS stations. TRC staff recorded their comments in digital format and provided an annotated 8.5" X 11" color snapshot of the area of interest for the attendee to take home.

A copy of the public meeting notice can be found in **Appendix A** of the EA. Individual notification letters announcing the public meetings were directly mailed by CenterPoint Houston to 331 landowners whose property is located within 300 feet of each of the preliminary transmission line segments. Because aerial photography and the county's parcel shapefile sometimes vary horizontally, CenterPoint Houston used a 320-foot distance in determining which properties to notify.

19. Routing Maps:

Base maps should be a full scale (one inch = not more than one mile) highway map of the county or counties involved, or other maps of comparable scale denoting sufficient cultural and natural features to permit location of all routes in the field. Provide a map (or maps) showing the study area, routing constraints, and all routes or line segments that were considered prior to the selection of the routes. Identify the routes and any existing facilities to be interconnected or coordinated with the project. Identify any taps, ties, meter points, or other facilities involving other utilities on the routing map. Show all existing transmission facilities located in the study area. Include the locations of radio transmitters and other electronic installations, airstrips, irrigated pasture or cropland, parks and recreational areas, historical and archeological sites (subject to the instructions in Question 27), and any environmentally sensitive areas (subject to the instructions in Question 29).

Response: The following maps showing the study area, routing constraints, and routing segments are provided the EA, included in **Attachment 1** of this application:

- Figure 3.2 Primary Transmission Line Routes (Topographic Base Map)
- Figure 3.3. Habitable Structures and Other Land Use Features in the Vicinity of the Primary Transmission Line Routes (Aerial Photograph Base Map with CCN Inventory Items)

Provide aerial photographs of the study area displaying the date that the photographs were taken or maps that show (1) the location of each route with each route segment identified, (2) the locations of all major public roads including, as a minimum, all federal and state roadways, (3) the locations of all known habitable structures or groups of habitable structures (see Question 19 below) on properties directly affected by any route, and (4) the boundaries (approximate or estimated according to best available information if required) of all properties directly affected by any route.

Response: Aerial photographs of the study area that show the requested route information, major roadways, habitable structures, and property boundaries are included as Figure 3-3 of the EA, **Attachment 1**.

For each route, cross-reference each habitable structure (or group of habitable structures) and directly affected property identified on the maps or photographs with a list of corresponding landowner names and addresses and indicate which route segment affects each structure/group or property.

Response: A cross-reference of each habitable structure and directly affected property within 300 feet identified on the maps or photographs with a list of corresponding landowner names and addresses is included in **Attachment 6**.

20. Permits:

List all permits and/or approvals required by other governmental agencies for the construction of the proposed project. Indicate whether each permit has been obtained.

Response: Specific information concerning possible permits or approvals required by other governmental agencies for the construction of the Project is discussed in greater detail in Section 1.2 of the EA (Attachment 1).

United States Army Corps of Engineers ("USACE"): The Project could require USACE's Nationwide Permit ("NWP") 57 (Electrical Utility Line and Telecommunication Activities), a new permit that authorizes discharges of dredged or fill material into waters of the United States and structures or work in navigable waters for crossings of those waters associated with the construction, maintenance, or repair of electric utility lines and telecommunication lines. An "electric utility line and telecommunication line" is defined as any cable, line, fiber optic line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and internet, radio, and television communication. Activities include electrical utility line and communication lines; electrical line and telecommunication substations; foundations for overhead electrical line or telecommunication line towers, poles,

and anchors; and access roads. Certain activities authorized by this NWP require reporting (a pre-construction notification or PCN), and the maximum authorized loss of waters of the U.S. is 1/2-acre for each single and complete project. Additionally, to comply with TCEQ, Soil Erosion and Sediment Controls under General Condition 12 are required. Postconstruction Total Suspended Solids (TSS) controls under General Condition 25 are required. If losses to waters of the U.S. exceed 1/2-acre, or the conditions are exceeded, an Individual Permit would be required. No permit or authorization from USACE has been obtained at this time.

- United States Fish and Wildlife Service ("USFWS"): USFWS is charged with the responsibility for enforcement of federal wildlife laws and providing comments on proposed construction projects with a federal nexus under the National Environmental Protection Act ("NEPA"), and within the framework of several federal laws including the Endangered Species Act ("ESA"), Migratory Bird Treaty Act ("MBTA"), and Bald and Golden Eagle Protection Act. TRC reviewed the USFWS listed species for Montgomery County, Texas and solicited Texas Natural Diversity Database records from Texas Parks and Wildlife Department ("TPWD"). Upon PUC approval of a route, coordination with the USFWS Texas Coastal Ecological Services Field Office may be required to determine the need for any required species-specific surveys or additional permitting under Section 7 of the ESA and the MBTA. No permit or authorization from USFWS has been obtained at this time.
- The U.S. Department of Defense ("DoD") Military Aviation and Installation Assurance Siting Clearinghouse: 16 T.A.C. § 22.52 requires the DoD be notified and an affidavit attesting to the notification shall also be provided with the application. The DoD shall also be provided written notice of the public meeting and if a public meeting is not held, the DoD shall be notified of the planned filing of the application prior to the completion of the routing study. The DoD was notified and invited to the public meeting (Attachment 7). CenterPoint Houston will complete an affidavit attesting to this notification.

- Federal Aviation Administration ("FAA"): Based on FAA notification criteria and the route selected by PUC, the Project may require a Notice of Proposed Construction or Alteration, FAA Form 7460-1, to be completed and submitted to the FAA Southwest Regional Office in Fort Worth, Texas. No permit or authorization from the FAA has been obtained at this time.
- <u>Floodplain Management</u>: Coordination with floodplain administrators for the counties within the Project study area may be required after PUC route approval to determine if any permits or mitigation is necessary. No permits or authorizations from such administrators have been obtained at this time.
- Texas Commission on Environmental Quality ("TCEQ"): The Project may require a Texas Pollution Discharge Elimination System General Permit and the development of a Stormwater Pollution Prevention Plan ("SWPPP"), which is a TCEQ stormwater discharge-related requirement. A determination of the need for SWPPP will be made after PUC approval of the route for the line. A Section 401 Water Quality Certificate from TCEQ may also be required if the Project requires an USACE Individual Permit for proposed impacts to surface waters and/or wetlands as previously discussed. No permit or authorization from TCEQ has been obtained at this time.
- <u>Texas Historical Commission ("THC")</u>: If necessary, CenterPoint Houston will conduct an on-the-ground cultural resources survey of the approved transmission line route and obtain clearance from THC. No permit or authorization from THC has been obtained at this time.
 - Texas Department of Transportation ("TxDOT"): If the PUC-approved transmission line is located within the ROW of, or crosses, any state-maintained road or highway, CenterPoint Houston will be required to obtain a road crossing permit. No permit or authorization from TxDOT has been obtained at this time.
 - <u>Texas General Land Office ("GLO")</u>: GLO requires a miscellaneous easement for ROW within any coastal submerged lands (tidally influenced) or state-owned riverbeds, and navigable streams (non-tidal). A miscellaneous easement may be

required if the ROW for the approved transmission line crosses areas meeting these criteria. No permit or authorization from GLO has been obtained at this time.

21. Habitable structures:

For each route list all single-family and multi-family dwellings and related structures, mobile homes, apartment buildings, commercial structures, industrial structures, business structures, churches, hospitals, nursing homes, schools, or other structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis within 300 feet of the centerline if the proposed project will be constructed for operation at 230kV or less, or within 500 feet of the centerline if the proposed project will be constructed for operation at greater than 230kV. Provide a general description of each habitable structure and its distance from the centerline of the route. In cities, towns or rural subdivisions, houses can be identified in groups. Provide the number of habitable structures in each group and list the distance from the centerline of the route to the closest and the farthest habitable structure in the group. Locate all listed habitable structures or groups of structures on the routing map.

Response: The number of habitable structures within 300 feet of the Proposed Alternative Route centerlines range from 16 on Proposed Alternative Routes 4-A, 5-A, and 6-A to 107 on Proposed Alternative Route 22-C. **Attachment 6** lists the habitable structure map identification number, general description, and approximate distance from the centerline of all habitable structures located within 300 feet of the Proposed Alternative Routes. The locations of these structures are shown on Figure 3-3 of the EA, **Attachment 1**.

To account for any margin of error and to ensure that all habitable structures were properly identified, TRC included habitable structures within 320 feet of the centerline of each alternative route.

22. Electronic Installations:

For each route, list all commercial AM radio transmitters located within 10,000 feet of the center line of the route, and all FM radio transmitters, microwave relay stations, or other similar electronic installations located within 2,000 of the center line of the route. Provide a general description of each installation and its distance from the center line of the route. Locate all listed installations on a routing map.

Response: There is one known commercial AM radio transmitter located within 10,000 feet of the centerline of the primary transmission line routes. There are six known communication towers (FM radio transmitters, microwave relay stations, or other similar electronic installations) that are located within 2,000 feet of the primary transmission line routes. The number of FM radio transmitters, microwave towers, and other electronic installations located within 2,000 feet of the alternative route centerlines range from one on routes 7-A, 12-B, 13-B, 14-B, 15-B, 18-C, 20-C, 21-C, and 22-C, to three on routes 23-6. The locations of these electronic installations are shown on Figure 3-3, **Appendix C**, of the EA, **Attachment 1**.

23. Airstrips:

For each route, list all known private airstrips within 10,000 feet of the center line of the project. List all airports registered with the Federal Aviation Administration (FAA) with at least one runway more than 3,200 feet in length that are located within 20,000 feet of the center line of any route. For each such airport, indicate whether any transmission structures will exceed a 100:1 horizontal slope (one foot in height for each 100 feet in distance) from the closest point of the closest runway. List all listed airports registered with the FAA having no runway more than 3,200 feet in length that are located within 10,000 feet of the center line of any route. For each such airport, indicate whether any transmission structures will exceed a 50:1 horizontal slope from the closest point of the closest runway. List all heliports located within 5,000 feet of the center line of any route. For each such heliport, indicate whether any transmission structures will exceed a 25:1 horizontal slope from the closest point of the closest landing and takeoff area of the heliport. Provide a general description of each listed private airstrip, registered airport, and heliport;

and state the distance of each from the center line of each route. Locate and identify all listed airstrips, airports, and heliports on a routing map.

Response: No private airstrips are mapped within 10,000 feet of the Proposed Alternative Route centerlines. No FAA-registered airports with a runway longer than 3,200 feet are mapped within 20,000 feet of the proposed centerline of the Alternative Routes. One FAA-registered airport (David Wayne Hooks Memorial), a regional airport, is approximately 30,000 feet (5.7 miles) southeast of the Study Area. Based on proposed project structures and lack of airports, heliports, and airstrips near or within the Study Area, the Project will likely not require FAA notification or clearance. No heliports are located within 5,000 feet of the Proposed Alternative Route centerlines.

24. Irrigation Systems:

For each route identify any pasture or cropland irrigated by traveling irrigation systems (rolling or pivot type) that will be traversed by the route. Provide a description of the irrigated land and state how it will be affected by each route (number and type of structures etc.). Locate any such irrigated pasture or cropland on a routing map.

Response: The Proposed Alternative Routes do not cross agricultural irrigation systems.

25. Notice:

Notice is to be provided in accordance with P.U.C. Proc. R. 22.52.

A. Provide a copy of the written direct notice to owners of directly affected land.

Attach a list of the names and addresses of the owners of directly affected land receiving notice.

Response: A copy of the written direct notice to owners of directly affected land is provided in **Attachment 8**. A list of the names and addresses of the landowners receiving notice is provided in **Attachment 8**. In accordance with PUC Proc. R. 22.52(a)(4), CenterPoint Houston mailed notice directly to the landowners, as stated on the current county tax rolls, who would be directly affected by this application

by having a habitable structure within 300 feet of the centerline or owning land that would be crossed by any of the Proposed Alternative Routes.

B. Provide a copy of the written notice to utilities that are located within five miles of the routes.

Response: CenterPoint Houston mailed written notice to Entergy, the only utility that is within five miles of the Proposed Alternative Routes. A copy of the notice is provided as **Attachment 9**.

In addition to notifying electric utilities located within five miles of an alternative route, CenterPoint Energy also mailed written notice to owners of pipelines with facilities paralleled or crossed by an alternative route. A copy of the written notice to such pipeline owners is provided as **Attachment 9**.

C. Provide a copy of the written notice to county and municipal authorities.

Response: A copy of the written notice to county and municipal authorities and a list of officials notified are provided as **Attachment 10**. A copy of the written notice to the Office of Public Utility Counsel is provided as **Attachment 11**.

D. Provide a copy of the notice that is to be published in newspapers of general circulation in the counties in which the facilities are to be constructed. Attach a list of the newspapers that will publish the notice for this application. After the notice is published, provide the publisher's affidavits and tear sheets.

Response: Please see Attachment 12.

For a CREZ application, in addition to the requirements of P.U.C. PROC. R. 22.52 the applicant shall, not less than twenty-one (21) days before the filing of the application, submit to the Commission staff a "generic" copy of each type of alternative published and written notice for review. Staff's comments, if any, regarding the alternative notices will be provided to the applicant not later than seven days after receipt by Staff of the alternative notices, Applicant may take into

consideration any comments made by Commission staff before the notices are published or sent by mail.

Response: This provision is not applicable, because it is not a CREZ project.

26. Parks and Recreation Areas:

For each route, list all parks and recreational areas owned by a governmental body or an organized group, club, or church and located within 1,000 feet of the center line of the route. Provide a general description of each area and its distance from the center line. Identify the owner of the park or recreational area (public agency, church, club, etc.). List the sources used to identify the parks and recreational areas. Locate the listed sites on a routing map.

Response: No parks or recreational areas are crossed or within 1,000 feet of any of the primary transmission line routes. A general discussion is presented in Section 2.2 of the EA (**Attachment 1**).

27. Historical and Archeological Sites:

For each route, list all historical and archeological sites known to be within 1,000 feet of the center line of the route. Include a description of each site and its distance from the center line. List the sources (national, state or local commission or societies) used to identify the sites. Locate all historical sites on a routing map. For the protection of the sites, archeological sites need not be shown on maps.

Response: A literature review and records search was conducted on the THC's restricted Archeological and Historic Sites Atlas (THC-Atlas) to identify known historical and archeological sites located within 1,000 feet of the primary transmission line routes. This review also included a review of historic topographic quadrangles.

Based on this review, one prehistoric site, 41MQ44, is crossed by the primary transmission line routes. Archeological site 41MQ44, located approximately 1,000 feet from a proposed route, consists of a lithic scatter with unassessed National Register of Historical Places ("NRHP") eligibility status.

No NRHP-listed properties are located within 1,000 feet of the primary transmission line routes ROW centerlines.

Based on data from the THC-Atlas and topographic maps, two cemeteries, the Pate Cemetery and John English Cemetery are located within 1,000 feet of the primary transmission line routes. None of these cemeteries are crossed by the primary transmission line routes.

These sites are shown on Figure 3-3 of Appendix C of the EA, **Attachment 1**. For the protection of the archeological sites, they are not shown on the routing maps.

28. Coastal Management Program:

For each route, indicate whether the route is located, either in whole or in part, within the coastal management program boundary as defined in 31 T.A.C. §503.1. If any route is, either in whole or in part, within the coastal management program boundary, indicate whether any part of the route is seaward of the Coastal Facilities Designation Line as defined in 31 T.A.C. §19.2(a)(21). Using the designations in 31 T.A.C. §501.3(b), identify the type(s) of Coastal Natural Resource Area(s) impacted by any part of the route and/or facilities.

Response: None of the 23 Proposed Alternative Routes are located within the Coastal Management Zone (CMZ).

29. Environmental Impact:

Provide copies of any and all environmental impact studies and/or assessments of the project. If no formal study was conducted for this project, explain how the routing and construction of this project will impact the environment. List the sources used to identify the existence or absence of sensitive environmental areas. Locate any environmentally sensitive areas on a routing map. In some instances, the location of the environmentally sensitive areas or the location of protected or endangered species should not be included on maps to ensure preservation of the areas or species. Within seven days after filing the application for the project, provide a copy of each environmental impact study and/or assessment to the Texas Parks and Wildlife Department (TPWD) for its review at the address below. Include

Application of CenterPoint Energy Houston Electric, LLC for a Certificate of Convenience and Necessity

for a Proposed 138kV Transmission Line within Montgomery and Harris Counties

with this application a copy of the letter of transmittal with which the studies/assessments were or will be sent to the TPWD

Wildlife Habitat Assessment Program

Wildlife Division

Texas Parks and Wildlife Department

4200 Smith School Road

Austin, Texas 78744

The applicant shall file an affidavit confirming that the letter of transmittal and studies/assessments were sent to TPWD.

Response: CenterPoint Houston contracted with TRC to evaluate the environmental impact of the proposed project. A copy of the EA prepared by TRC is included as **Attachment 1** to this application. The EA includes environmental sources, routing maps with environmentally sensitive areas identified, and information on protected and endangered species within or near the study area.

CenterPoint Houston will provide a copy of the Application and EA to TPWD within seven days after the application is filed. A copy of the letter of transmittal to TPWD is provided as **Attachment 13** to this application. An affidavit from Bradley J. Diehl confirming that the letter of transmittal and a copy of the EA were sent to TPWD will be sent to the PUC.

30. Affidavit

Attach a sworn affidavit from a qualified individual authorized by the applicant to verify and affirm that, to the best of their knowledge, all information provided, statements made, and matters set forth in this application and attachments are true and correct.

Response: An affidavit from Bradley J. Diehl is provided as Attachment 14.

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