***Application of Oncor Electric Delivery Company LLC to Amend its Certificate of Convenience and Necessity for the Keller Wall Price - Keller Magnolia 138 kV Transmission Line Project and Keller Wall Price - Roanoke 138 kV Rebuild Project in Keller, Texas***

**PUBLIC UTILITY COMMISSION OF TEXAS ("PUC") DOCKET NO. 54733**

This notice is provided to notify you that Oncor Electric Delivery Company LLC ("Oncor") intends (1) to rebuild an existing double-circuit 138 kilovolt (kV) transmission line beginning at the existing Keller Wall Price Substation and extending approximately 0.3 miles to the northwest, and (2) to build a new double-circuit 138 kV transmission line parallel to the existing transmission line, beginning at the proposed Keller Wall Price Switch and extending approximately 0.3 miles to the northwest. The existing Keller Wall Price Substation is located west of State Highway 377, northeast of and adjacent to the intersection of Chisolm Trail and King Trail in Keller. The proposed Keller Wall Price Switch will be located directly adjacent to and south of the existing substation on Oncor's fee-owned property. Both transmission lines will be located entirely within Oncor's existing transmission line easement area. New structures will be needed to accommodate the new and rebuilt transmission lines. The estimated cost of this project is $12,018,000.

Persons with questions about the project may contact Michael Moore of Oncor at (214) 486-2093.

A detailed routing map may be reviewed at the following location:

| Display Location | Address |
|---|---|
| Keller Town Hall | 1100 Bear Creek Parkway<br>Keller, TX, 76248 |

***All routes and route segments included in this notice are available for selection and approval by the Public Utility Commission of Texas.***

The preferred method for you to file your request for intervention is electronically. If you decide to file a request for intervention electronically, you will be required to serve the request on all other parties by email. Therefore, please include your own email address on the intervention form. Instructions for electronic filing via the "PUC Filer" on the PUC's website can be found here: https://interchange.puc.texas.gov/filer. Instructions for using the PUC Filer are available at https://ftp.puc.texas.gov/public/puct-info/industry/filings/E-Filing_Instructions.pdf. For assistance with your electronic filing, please contact the PUC's Help Desk at (512) 936-7100 or helpdesk@puc.texas.gov. You can review materials filed in this docket on the PUC Interchange at: http://interchange.puc.texas.gov.

While the preferred method for submitting a request for intervention is electronically, you may file your request for intervention by mailing a hard copy of your request to the PUC. Any request must be received by the intervention deadline date of **May 8, 2023.** If you are not filing your

request for intervention electronically, mail the request for intervention and 10 copies of the request to:

Public Utility Commission of Texas
Central Records
Attn: Filing Clerk
1701 N. Congress Avenue
P.O. Box 13326
Austin, Texas 78711-3326

Persons who wish to intervene in the docket must also email or mail a copy of their request for intervention to all parties in the docket and all persons that have pending motions to intervene, at or before the time the request for intervention is electronically filed with, or mailed to, the PUC. ***The only way to fully participate in the PUC's decision on where to locate the transmission line is to intervene in the docket. It is important for an affected person to intervene because the utility is not obligated to keep affected persons informed of the PUC's proceedings and cannot predict which route may or may not be approved by the PUC.***

The deadline for intervention in the docket is **May 8, 2023**, and the PUC must receive a letter from you requesting intervention by that date if you choose to do so.

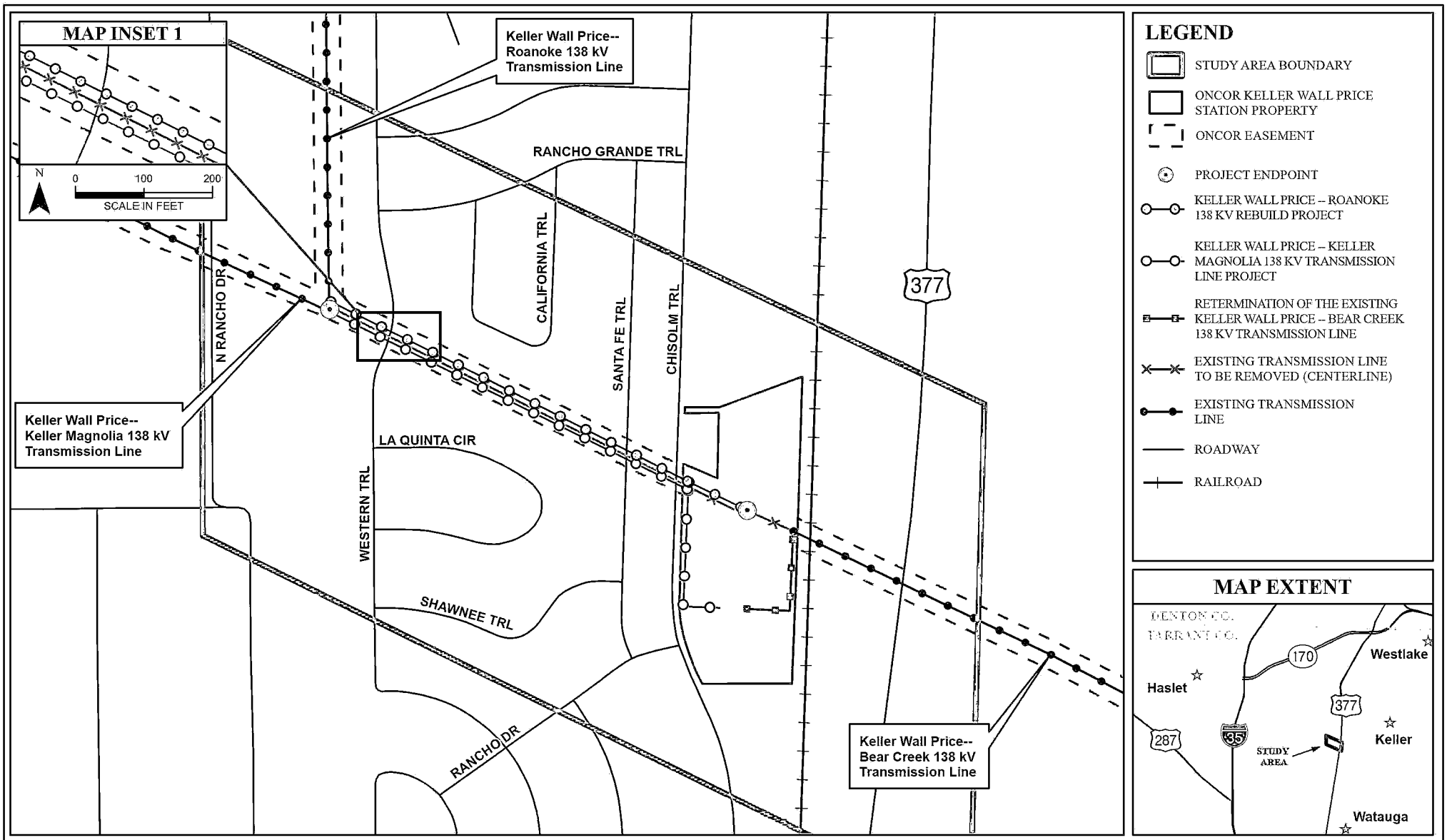
The PUC has a brochure titled "Landowners and Transmission Line Cases at the PUC." Copies of the brochure may be requested by contacting Michael Moore of Oncor at (214) 486-2093 or may be downloaded from the PUC's website at www.puc.state.tx.us. To obtain additional information about this docket, you may contact the PUC's Customer Assistance Hotline at (512) 936-7120 or (888) 782-8477. Hearing- and speech-impaired individuals with text telephones (TTY) may contact the PUC's Customer Assistance Hotline at (512) 936-7136 or toll free at (800) 735-2989. In addition to the intervention deadline, other important deadlines may already exist that affect your participation in this docket. As such, you should review the orders and other filings already made in the docket.

## KELLER WALL PRICE—KELLER MAGNOLIA 138 kV TRANSMISSION LINE PROJECT

This project begins from Oncor's existing Keller Wall Price station property, extending west approximately 135 feet to an angle point. From this angle point, the project extends approximately 425 feet in a northerly direction parallel to Chisolm Trail, within Oncor-owned property, to an angle point. From this angle point, the project extends in a northwesterly direction approximately 1,475 feet within existing Oncor easement areas to the project endpoint within an existing Oncor easement. This portion of the project crosses Chisolm Trail, Santa Fe Trail, and Western Trail.

## KELLER WALL PRICE—ROANOKE 138 kV REBUILD PROJECT

This project begins from Oncor's existing Keller Wall Price station property and extends in a northwesterly direction approximately 1,700 feet within existing Oncor easement areas to the project endpoint within an existing Oncor easement. The project crosses Chisolm Trail, Santa Fe Trail, and Western Trail.




# FIGURE 1

## DETAILED ROUTE DESCRIPTION MAP

KELLER WALL PRICE -- KELLER MAGNOLIA 138 kV TRANSMISSION LINE PROJECT
AND
KELLER WALL PRICE -- ROANOKE 138 kV REBUILD PROJECT

***Application of Oncor Electric Delivery Company LLC to Amend its Certificate of Convenience and Necessity for the Keller Wall Price - Keller Magnolia 138 kV Transmission Line Project and Keller Wall Price - Roanoke 138 kV Rebuild Project in Keller, Texas***

**PUBLIC UTILITY COMMISSION OF TEXAS ("PUC") DOCKET NO. 54733**

*Pipeline Owner/Operator*

This courtesy notice is provided to notify you that Oncor Electric Delivery Company LLC ("Oncor") intends (1) to rebuild an existing double-circuit 138 kilovolt (kV) transmission line beginning at the existing Keller Wall Price Substation and extending approximately 0.3 miles to the northwest, and (2) to build a new double-circuit 138 kV transmission line parallel to the existing transmission line, beginning at the proposed Keller Wall Price Switch and extending approximately 0.3 miles to the northwest. The existing Keller Wall Price Substation is located west of State Highway 377 and northeast of and adjacent to the intersection of Chisolm Trail and King Trail in Keller. The proposed Keller Wall Price Switch will be located directly adjacent to and south of the existing substation on Oncor's fee-owned property. Both transmission lines will be located entirely within the existing transmission line easement area. New structures will be needed to accommodate new and re-built transmission lines. The estimated cost of this project is $12,018,000.

Persons with questions about this project may contact Michael Moore of Oncor at (214) 486-2093.

A detailed routing map may be reviewed at the following location:

| Display Location | Address |
|---|---|
| Keller Town Hall | 1100 Bear Creek Parkway<br>Keller, TX 76248 |

***All routes and route segments included in this notice are available for selection and approval by the Public Utility Commission of Texas.***

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The deadline for intervention in the docket is **May 8, 2023**, and the PUC must receive a letter from you requesting intervention by that date if you choose to do so.

The PUC has a brochure titled "Landowners and Transmission Line Cases at the PUC." Copies of the brochure may be requested by contacting Michael Moore of Oncor at (214) 486-2093 or may be downloaded from the PUC's website at www.puc.state.tx.us. To obtain additional information about this docket, you may contact the PUC's Customer Assistance Hotline at (512) 936-7120 or (888) 782-8477. Hearing- and speech-impaired individuals with text telephones (TTY) may contact the PUC's Customer Assistance Hotline at (512) 936-7136 or toll free at (800) 735-2989. In addition to the intervention deadline, other important deadlines may already exist that affect your participation in this docket. As such, you should review the orders and filings already made in the docket.

Enclosures:

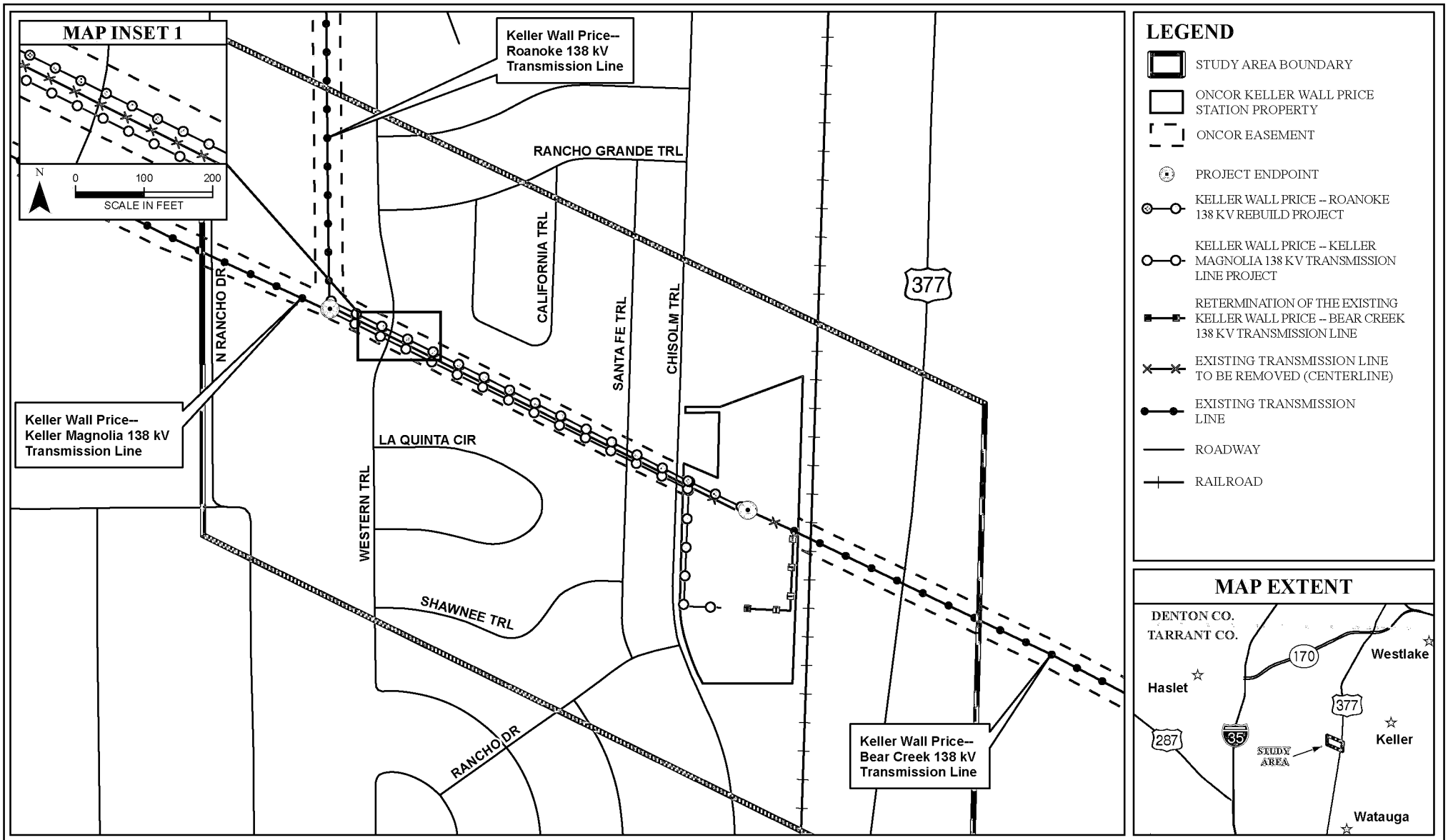
- Route Description and Map

## KELLER WALL PRICE—KELLER MAGNOLIA 138 kV TRANSMISSION LINE PROJECT

This project begins from Oncor's existing Keller Wall Price station property, extending west approximately 135 feet to an angle point. From this angle point, the project extends approximately 425 feet in a northerly direction parallel to Chisolm Trail, within Oncor-owned property, to an angle point. From this angle point, the project extends in a northwesterly direction approximately 1,475 feet within existing Oncor easement areas to the project endpoint within an existing Oncor easement. This portion of the project crosses Chisolm Trail, Santa Fe Trail, and Western Trail.

## KELLER WALL PRICE—ROANOKE 138 kV REBUILD PROJECT

This project begins from Oncor's existing Keller Wall Price station property and extends in a northwesterly direction approximately 1,700 feet within existing Oncor easement areas to the project endpoint within an existing Oncor easement. The project crosses Chisolm Trail, Santa Fe Trail, and Western Trail.




# FIGURE 1

## DETAILED ROUTE DESCRIPTION MAP

KELLER WALL PRICE -- KELLER MAGNOLIA 138 kV TRANSMISSION LINE PROJECT
AND
KELLER WALL PRICE -- ROANOKE 138 kV REBUILD PROJECT

**Michael Moore**
Regulatory Manager

March 23, 2023

Mr. John Silovsky – Director of Wildlife
Texas Parks and Wildlife Department
4200 Smith School Road
Austin, Texas 78744

**Re: PUC Docket No. 54733, *Application of Oncor Electric Delivery Company LLC to Amend its Certificate of Convenience and Necessity for the Keller Wall Price - Keller Magnolia 138 kV Transmission Line Project and Keller Wall Price - Roanoke 138 kV Rebuild Project in Keller, Texas***

Dear Mr. Silovsky:

Pursuant to the rules of the Public Utility Commission of Texas ("Commission"), please find enclosed a copy of the Environmental Assessment ("EA") attached to the application of Oncor Electric Delivery Company LLC ("Oncor") requesting certification for the Keller Wall Price - Keller Magnolia 138 kV Transmission Line Project and Keller Wall Price - Roanoke 138 kV Rebuild Project ("Proposed Transmission Line Project"), filed at the Commission on March 23, 2023, in Commission Docket No. 54733.

This docket concerns Oncor's request for approval to (1) rebuild an existing double-circuit 138 kilovolt (kV) transmission line beginning at the existing Keller Wall Price Substation and extending approximately 0.3 miles to the northwest, and (2) build a new double-circuit 138 kV transmission line parallel to the existing transmission line, beginning at the proposed Keller Wall Price Switch and extending approximately 0.3 miles to the northwest. The existing Keller Wall Price Substation is located west of State Highway 377, northeast of and adjacent to the intersection of Chisolm Trail and King Trail in Keller. The proposed Keller Wall Price Switch will be located directly adjacent to and south of the existing substation on Oncor's fee-owned property. Both transmission lines will be located entirely within Oncor's existing transmission line easement area. New structures will be needed to accommodate both transmission lines. The estimated cost of this project is $12,018,000. The EA provides a detailed description of the data gathered and analyzed by Halff Associates, the environmental/routing consultant retained by Oncor for the Proposed Transmission Line Project.

Oncor respectfully requests to be copied on any correspondence that TPWD might send to the Commission regarding this project. Please contact me if you have any questions regarding this transmittal or the Proposed Transmission Line Project.

Sincerely,

Michael Moore

cc w/o attachments:
Therese Harris, Public Utility Commission of Texas
Jaren Taylor, Vinson & Elkins LLP

**OATH**

STATE OF TEXAS §
§
COUNTY OF DALLAS §

I, Michael Moore, being duly sworn, file this application as Regulatory Manager II, Oncor Electric Delivery Company LLC ("Oncor"), and state that, in such capacity, I am qualified and authorized to file and verify such application on behalf of Oncor, am personally familiar with the maps and exhibits filed with this application, and have complied with all the requirements contained in the application; and, that all statements made and matters set forth therein and all exhibits attached thereto are true and correct. I further state that the application is made in good faith, that notice of its filing is being provided in accordance with 16 TAC §25.174, and that this application does not duplicate any filing presently before the Commission.

AFFIANT (Applicant's Authorized Representative)

SUBSCRIBED AND SWORN TO BEFORE ME, a Notary Public in and for the State of Texas, this 14th day of March, 2023.

MICHELE M GIBSON
Notary Public, State of Texas
Comm. Expires 06-30-2026
Notary ID 575631-8

Notary Public
My Commission expires: 06-30-2026

ATTACHMENT NO. 13

# STANDARD APPLICATION FOR A CERTIFICATE OF CONVENIENCE AND NECESSITY FOR A PROPOSED TRANSMISSION LINE

# DOCKET NO. 54733

***Submit seven (7) copies of the application and all attachments supporting the application. If the application is being filed pursuant to 16 Tex. Admin. Code §25.101(b)(3)(D) (TAC) or 16 TAC §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**

**Standard Application for a Certificate of Convenience and Necessity for a Proposed Transmission Line**
**and**
**Application for a Certificate of Convenience and Necessity for a Proposed Transmission Line Pursuant To 16 TAC §25.174**

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.**

| | |
|---|---|
| Applicant (Utility) Name: | Oncor Electric Delivery Company LLC ("Oncor") |
| Certificate Number: | 30043 |
| Street Address: | 1616 Woodall Rodgers Freeway<br>Dallas, Texas 75202 |
| Mailing Address: | 1616 Woodall Rodgers Freeway<br>Dallas, Texas 75202-1234 |

**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.**

Oncor will hold the sole ownership interest in the Keller Wall Price – Keller Magnolia 138 kV Transmission Line Project and the Keller Wall Price – Roanoke 138 kV Rebuild Project (collectively, the "Proposed Transmission Line Project").

| | | |
|---|---|---|
| **3.** | **Person to Contact:** | Michael Moore |
| | Title/Position: | Regulatory Manager II |
| | Phone Number: | (214) 486-2093 |
| | Mailing Address: | 1616 Woodall Rodgers Fwy, Suite 6A-015<br>Dallas, Texas 75202-1234 |
| | Email Address: | Michael.Moore@oncor.com |
| **3a.** | **Alternate Contact:** | Thomas Yamin |
| | Title/Position: | Director of Regulatory, Transmission & Planning |
| | Phone Number: | (214) 486-3512 |
| | Mailing Address: | 1616 Woodall Rodgers Fwy, Suite 6B-005<br>Dallas, Texas 75202-1234 |
| | Email Address: | Thomas.Yamin@oncor.com |
| **3b.** | **Legal Counsel:** | Jaren A. Taylor<br>Jared M. Jones |

| | |
|---|---|
| Phone Number: | (214) 220-7754 |
| Mailing Address: | Vinson & Elkins LLP<br>Trammell Crow Center<br>2001 Ross Avenue, Suite 3900<br>Dallas, Texas 75201 |
| Email Address: | jarentaylor@velaw.com<br>jjones@velaw.com |


Please contact Jaren Taylor with any inquiries regarding the project.

**4. Project Description:**

**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.**

**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.).**

**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.**

| | |
|---|---|
| **Name or Designation of Project:** | Keller Wall Price – Keller Magnolia 138 kV Transmission Line Project ("KWP-KM") and Keller Wall Price – Roanoke 138 kV Rebuild Project ("KWP-R") |
| **Design Voltage Rating (kV):** | 138 kV |
| **Operating Voltage Rating (kV):** | 138 kV |
| **Normal Peak Operating Current (A):** | 3,121 A |

Oncor proposes to re-build an existing double-circuit 138 kV transmission line segment and construct a new double-circuit 138 kV transmission line segment, all within Oncor's existing easement area. The rebuilt transmission line segment (KWP-R) will begin at the existing Keller Wall Price Substation, located west of United States Highway ("US") 377, northeast of and adjacent to the intersection of Chisolm Trail and King Trail in Keller, and extend approximately 0.3 mile to the northwest to the current location of the Keller Magnolia Tap. The new transmission line segment (KWP-KM) will begin at the new Keller Wall Price Switch, located directly adjacent to and south of the existing Keller Wall

Price Substation, and will parallel the existing transmission line for 0.3 mile to the proposed project's endpoint at the current location of the Keller Magnolia Tap. The new double-circuit transmission line segment and the rebuilt double-circuit transmission line segment will each be constructed on new monopole structures. Collectively, these two transmission line segments, along with work to establish the Keller Wall Price Switch, compose and define the Proposed Transmission Line Project.

As stated previously, the Proposed Transmission Line Project includes rebuilding an existing 138 kV transmission line segment and constructing a new 138 kV transmission line segment. Although the existing transmission line rebuild is a CCN-exempt project pursuant to 16 Texas Administrative Code § 25.101(c)(5)(B), Oncor includes that aspect of the Proposed Transmission Line Project in the Application out of an abundance of caution due to the interrelated nature of the work on KWP-KM and KWP-R and to provide maximum disclosure to landowners whose properties are already crossed by Oncor's existing transmission line easement.

The Proposed Transmission Line Project's route is approximately 0.3 mile in length.

The KWP-KM transmission line segment will terminate into the proposed Keller Wall Price Switch, which will be located directly adjacent to and south of the existing Keller Wall Price Substation, entirely on Oncor fee-owned property.

**5. Conductor and Structures:**

| | |
|---|---|
| **Conductor Size and Type:** | 1926.9 kcmil Cumberland ACSS/TW/HS/E3X* |
| **Number of conductors per phase:** | 1 |
| **Continuous Summer Static Current Rating (A):** | 3,121 A |
| **Continuous Summer Static Line Capacity at Operating Voltage (MVA):** | 746 MVA |
| **Continuous Summer Static Line Capacity at Design Voltage (MVA):** | 746 MVA |
| **Type and composition of Structures:** | Double-Circuit Steel Monopole |
| **Height of Typical Structures:** | 110 – 120 feet** |

* Aluminum conductor steel supported, trapezoidal-shaped wire, high-strength Cumberland conductor with E3X coating.

** This number reflects the approximate visible height of the structure from ground to structure top. Please see the drawing of the typical structures in Figure 1-2, page 1-7, of the *Environmental Assessment for Oncor Electric Delivery Company LLC's Proposed Keller Wall Price – Keller Magnolia 138 kV Transmission Line Project and Keller Wall Price – Roanoke 138 kV Rebuild Project in Tarrant County, Texas* ("Environmental Assessment"), prepared by Halff and included as Attachment No. 1.

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

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

Oncor selected the double-circuit 138 kV steel monopoles for numerous reasons including costs, technical specifications, structure footprint, ROW requirements of the existing easement, and the prior use of this type of structure for the existing transmission line. This structure type is also Oncor's current standard for new single- and double-circuit 138 kV construction.

**Provide dimensional drawings of the typical structures to be used in the project.**

A drawing of the typical structure is shown in Figure 1-2, page 1-7, of the Environmental Assessment included as Attachment No. 1.

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

**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.**

| | |
|---|---|
| **Miles of Right-of-Way** | Approximately 0.3 mile |
| **Miles of Circuit** | Approximately 1.2 miles (KWP-KM circuits – 0.6 miles and KWP-R circuits – 0.6 miles) |
| **Width of Right-of-Way** | 100 feet |
| **Percent of Right-of-Way Acquired** | 100%* |

*The Proposed Transmission Line Project will be constructed within Oncor's existing ROW area

**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.**

The study area is centered along the existing transmission line corridor in a relatively urban area in the City of Keller within Tarrant County, Texas. The endpoints of the Proposed Transmission Line Project are situated within the High Chaparral Addition, Phase I and II Subdivision within an easement that extends across residential lots along neighborhood side streets. Oncor and its predecessors have operated a transmission line in this right-of-way since at least the 1950s, and the existing transmission line pre-dates the surrounding residential development. Many houses and other structures associated with residential development are located in close proximity to the existing transmission line. Land use beneath or near the existing transmission line is common "backyard" use, including, but not limited to, storage sheds, playground equipment, and swimming pools.

A network of neighborhood streets facilitate transportation within the study area. US 377 is located east of the study area and represents the major thoroughfare that provides the primary point of access to these local streets. Union Pacific Railroad parallels US 377 to the west along the easternmost limits of the study area.

Specific discussion regarding natural, human, and cultural resources in the project area is set forth in Sections 3.1 through 3.8, pages 3-1 through 3-55, of the Environmental Assessment, included as Attachment No. 1.

**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.**

Keller Wall Price Substation

The dimensions of Oncor's Keller Wall Price Substation are approximately 354 feet by 338 feet. Rebuilding the KWP-R transmission line segment will not change the current dimensions of the Keller Wall Price Substation and will not require any station work at the Keller Wall Price Substation. The new KWP-KM transmission line will require modifications near the Keller Wall Price Substation, including removing one 138 kV air switch and adding two 138 kV H-frame dead-end structures to connect the new Keller Wall Price Switch. A diagram showing the dimensions and additional details regarding the existing layout of the Keller Wall Price Substation is included as Attachment No. 2.

**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.**

Keller Wall Price Switch

The KWP-KM transmission line segment will terminate into the proposed Keller Wall Price Switch, which will be located directly adjacent to and south of the existing Keller Wall Price Substation, entirely on Oncor's fee-owned property. The dimensions of the proposed Keller Wall Price Switch will be approximately 354 feet by 200 feet. New facilities will include six 138 kV circuit breakers, associated terminal equipment arranged in a 6-breaker ring bus configuration, and a control center. A diagram showing the dimensions and additional details regarding the proposed layout of the Keller Wall Price Switch is included as Attachment No. 2.

**8. Estimated Schedule:**

| **Estimated Dates of:** | **Start*** | **Completion*** |
|---|---|---|
| Right-of-way and Land Acquisition | 09/2023** | 05/2024** |
| Engineering and Design | 03/2023 | 11/2023 |
| Material and Equipment Procurement | 04/2023 | 12/2023 |

| | | |
|---|---|---|
| Construction of Facilities | 01/2024 | 05/2024 |
| Energize Facilities | 05/2024 | 05/2024 |

*Dates are based on 180-day CCN process due to ERCOT critical designation.
**Dates reflect coordination with landowners during the design and construction phases of the project. Does not reflect dates for acquiring new land/ROW because the Proposed Transmission Line Project will be built entirely within Oncor's existing ROW area.

**9. Counties:**

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

Tarrant County

**10. Municipalities:**

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

The Proposed Transmission Line Project will be constructed entirely within the city limits of the City of Keller.

**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.**

Evidence of consent for service in this area is publicly available and previously filed in PUCT Docket No. 45.

**11. Affected Utilities:**

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

No other electric utility will be served by or connected to the Proposed Transmission Line Project.

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

No other electric utility will be involved in the construction of the Proposed Transmission Line Project, and no other electric utility's existing facilities will be utilized. The Proposed Transmission Line Project will be constructed within existing Oncor right-of-way area and will connect Oncor-owned stations.

Existing Tri-County Electric Cooperative distribution lines are located adjacent to the existing transmission line corridor to the north and south. Oncor will coordinate with Tri-County Electric Cooperative during construction of the Proposed Transmission Line 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.**

Oncor proposes to finance the facilities included in the Proposed Transmission Line Project with a combination of debt and equity in compliance with its authorized capital structure, which is similar to the means used for previous construction projects. Oncor plans to utilize internally generated funds (equity) and proceeds received from the issuance of securities. Oncor will typically obtain short-term borrowings as needed for interim financing of its construction expenditures in excess of funds generated internally. These borrowings are then repaid through the issuance of long-term debt securities, the type and amount of which are as of yet undetermined.

Oncor is the sole applicant and, therefore, no other party will be reimbursed for any portion of the Proposed Transmission Line Project.

**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.**

| | **Transmission Facilities** | | **Station Facilities** |
|---|---|---|---|
| | KWP-KM | KWP-R | Keller Wall Price Switch |
| Right-of-way and Land Acquisition | $17,000 | $0 | $0 |
| Engineering and Design (Utility) | $30,000 | $30,000 | $0 |
| Engineering and Design (Contract) | $1,079,000 | $229,000 | $275,000 |
| Procurement of Material and Equipment (including stores) | $880,000 | $647,000 | $3,290,000 |
| Construction of Facilities (Utility) | $0 | $0 | $250,000 |

| | | | |
|---|---|---|---|
| Construction of Facilities (Contract) | $1,376,000 | $1,370,000 | $2,545,000 |
| Other (all costs not included in the above categories) | $0 | $0 | $0 |
| **Estimated Total Cost** | **$3,382,000** | **$2,276,000** | **$6,360,000** |
| **Total Estimated Cost of the Proposed Transmission Line Project** | **$12,018,000** | | |

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

Not applicable.

**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.**

**Overview**

The Proposed Transmission Line Project is needed to address reliability issues identified in post-contingency conditions. ERCOT designated this project as "critical to reliability" under 16 TAC § 25.101(b)(3)(D).

The Roanoke area, located approximately 15 miles north of Fort Worth, is one of the highest growth areas in the DFW Metroplex. The 345 kV transmission system in this area is part of a high-power transfer corridor connecting generation in the Panhandle to the DFW load center. The power transfer and load-serving capabilities of the system in this area depend on facilities developed as part of the Competitive Renewable Energy Zone, many of which are approaching their operating limits at current demand levels. Capacity limitations in the area are already limiting the development of new large-point loads. In the last 18 months, Oncor received several requests for interconnection in this area that it was limited in its ability to fulfill due to autotransformer and line overloads. Growth in the area will continue to increase demand and strain the transmission system.

Oncor performed power flow studies and contingency analysis in accordance with NERC Reliability Standard TPL-001-4 and the ERCOT Planning Guide. This analysis identified post-contingency system performance issues beginning in summer 2023, including thermal overloads, loading limitations, and voltage criteria exceedances.

The Proposed Transmission Line Project is the first in a series of projects, collectively called the Roanoke Area Upgrades Project, that will address the identified reliability issues and provide additional operational flexibility on the area transmission system in the Roanoke area. ERCOT reviewed the Roanoke Area Upgrades Project, including the Proposed Transmission Line Project, and endorsed it as a Tier 1 transmission projects that are critical to the reliability of the ERCOT system.

Thermal Overloads

Starting in summer 2023, the 345/138 kV autotransformers at Hicks and Roanoke and the Roanoke – Hicks 345 kV transmission line will exceed their emergency ratings under contingency conditions. Tables 1 and 2 below summarize the current configuration and resulting thermal overloads under N-1 and N-1-1 contingency events, as respectively defined in NERC TPL-001-4 Reliability Standard and the ERCOT Planning Guide. Overloading is shown as a percentage of an element's emergency rating. These tables were created using ERCOT's 2021 Regional Transmission Plan for the North and North Central weather zones ("2021 RTP NNC Cases") and 2021 Steady State Working Group ("SSWG") cases.

| **Monitored Element** | **Worst Contingency (N-1)** | **Worst Contingency Loading (% of Emergency Rating)** | | | | | |
|---|---|---|---|---|---|---|---|
| | | **2021 RTP NNC Cases** | | | **2021 SSWG Cases** | | |
| | | **2023** | **2024** | **2026** | **2027** | **2024** | **2028** |
| Roanoke 345/138 kV Autotransformer #1 | Roanoke 345/138 kV Autotransformer #2 (P1.3) | 92 | 94 | 96 | 96 | 101 | 110 |
| Roanoke 345/138 kV Autotransformer #2 | Roanoke 345/138 kV Autotransformer #1 (P1.3) | 94 | 95 | 98 | 98 | 101 | 110 |
| Roanoke – Hicks 345 kV double-circuit line | Loss of either Roanoke – Hicks 345 kV circuit (P1.2) | 89 | 87 | 91 | 93 | 99 | 107 |

Table 1 – Pre-project post N-1 contingency loading

| **Monitored Element** | **Worst Contingency (N-1-1)** | **Worst Contingency Loading (% of Emergency Rating)** | | | | | |
|---|---|---|---|---|---|---|---|
| | | **2021 RTP NNC Cases** | | | **2021 SSWG Cases** | | |
| | | **2023** | **2024** | **2026** | **2027** | **2024** | **2028** |
| Roanoke 345/138 kV Autotransformer #1 | Roanoke 345/138 kV Autotransformer + Roanoke | 111 | 110 | 114 | 114 | 124 | 135 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Roanoke 345/138 kV Autotransformer #2 | – West Denton/Lewisville 345 kV double-circuit line (ERCOT Requirement) | 111 | 110 | 114 | 114 | 124 | 135 |
| Hicks 345/138 kV Autotransformer #1 | Hicks 345/138 kV Autotransformer + Hicks – Alliance/Roanoke 345 kV double-circuit line (ERCOT Requirement) | 99 | 98 | 101 | 102 | 113 | 123 |
| Hicks 345/138 kV Autotransformer #2 | | 100 | 99 | 102 | 104 | 113 | 123 |
| Hicks – Roanoke 345 kV line | Panda Sherman Train and either Hicks – Roanoke 345 kV circuit (P3.2) | 95 | 93 | 97 | 99 | 104 | 113 |

Table 2 – Pre-project post N-1-1 contingency loading

Line Loading Limitations

Under peak load conditions, the Roanoke – Deen/Euless 138 kV double-circuit transmission line currently serves nearly 1,000 MW of load, as shown in Table 3. Planning criteria exceedances were observed following a NERC P2.1 contingency, where (1) the loss of the Euless Switch – Bedford Woodson Tap 138 kV line section, which is a portion of the overall Roanoke – Deen/Euless transmission line, results in the Roanoke – Park Vista line section (east circuit) loading to 102% of its operating limit in the 2021 SSWG 2024 summer peak case, and (2) the loss of the Deen Switch – Watauga 138 kV line section, which is a portion of the overall Roanoke – Deen/Euless transmission line, results in Roanoke – Park Vista line section (west circuit) loading to 102% of its operating limit in the 2021 SSWG 2027 summer peak case. This double circuit line is approaching its loadability limit which will restrict Oncor's ability to serve projected load growth in this area in the coming years. The coincident peak load in the Roanoke area between 2017 and 2020 has grown at an annual rate of ~3.1%, which is about double the annual growth rate of Oncor's overall coincident peak during this same period. Table 3 lists forecasted load on the Roanoke – Deen/Euless double circuit transmission line through 2028.

| **Line** | **2022** | **2023** | **2024** | **2025** | **2026** | **2027** | **2028** |
|---|---|---|---|---|---|---|---|
| Roanoke – Deen | 471 | 478 | 494 | 500 | 504 | 517 | 527 |
| Roanoke – Euless | 474 | 481 | 509 | 516 | 523 | 536 | 546 |
| Total | 945 | 959 | 1003 | 1016 | 1027 | 1053 | 1073 |

Table 3 – Forecasted load on Roanoke – Deen/Euless double-circuit line (MW)

Voltage Criteria Exceedances

Starting in 2028, with the loss of Handley Unit #5 followed by the Roanoke – Park Vista 138 kV line section, several buses on the Roanoke – Deen 138 kV transmission line experience voltages at or outside their emergency limits as shown in Table 4 (emergency limits for all listed elements are <0.90 or <0.95).

| Bus Number | Bus Name | Post Contingency Voltage (in p.u.) |
|---|---|---|
| 15100 | PARKVISTA1_8 | 0.890 |
| 2058 | CIRCLET_P8 | 0.892 |
| 559 | HERITAGE | 0.893 |
| 12033 | HRTAG1_T8 | 0.893 |
| 2036 | KELLER2_T8 | 0.894 |
| 33565 | KELLER2 | 0.894 |
| 2033 | KLR_MAG1_T8 | 0.895 |
| 2037 | WPKELLR1_8 | 0.899 |
| 566 | CHERRYGROV | 0.900 |
| 2035 | BEARCK3_8 | 0.902 |
| 12028 | CLYVIL2_8 | 0.905 |
| 2028 | CLYVIL2_T8 | 0.906 |

Table 4 – Post Contingency Voltage Criteria Exceedances

To address these reliability issues, Oncor recommended the Roanoke Area Upgrades Project to the ERCOT Regional Planning Group ("RPG"). ERCOT conducted an independent review, which also identified reliability issues in the area, including thermal overloads and voltage violations. Tables 5 and 6 below summarize ERCOT's findings.

| NERC Contingency Category | Overloaded Element | Voltage Level (kV) | Length (miles) | Loading % |
|---|---|---|---|---|
| P1: N-1 | Roanoke Transformer #1 and #2 | 345/138 | - | 101.68 |
| P6: (X-1 + N-1) | Roanoke Transformer #1 and #2 | 345/138 | - | 117.27 |
| P6: (X-1 + N-1) | Hicks Transformer #1 and #2 | 345/138 | - | 100.00 |
| P3: (G-1 + N-1) | Hicks to Roanoke | 345 | 9.6 | 100.73 |
| P3: (G-1 + N-1) | Hicks to Alliance | 345 | 5.8 | 100.28 |
| P6: (X-1 + N-1) | Kennedale to Century | 345 | 10.5 | 100.69 |
| P6: (X-1 + N-1) | Randol Mill Tap East to Randol Mill | 138 | 2.2 | 100.63 |
| P6: (X-1 + N-1) | Liggett Switch to DFW E East | 138 | 3.0 | 100.96 |
| P6: (X-1 + N-1) | Liggett Switch to Irving Valley View | 138 | 1.5 | 104.96 |

Table 5 – Thermal Overloads Observed in the Study Area for 2026 Summer Peak

| NERC Contingency Category | Substation | Voltage Level (kV) | Post-Contingency Voltage (pu) |
|---|---|---|---|
| P3: (G-1 + N-1) | Park Vista | 138 | 0.89 |
| P3: (G-1 + N-1) | Keller Tap | 138 | 0.90 |
| P3: (G-1 + N-1) | Keller Magnolia Tap | 138 | 0.90 |

| | | | |
|---|---|---|---|
| P6: (X-1 + N-1) | Heritage | 138 | 0.90 |
| P3: (G-1 + N-1) | Cherry Grove | 138 | 0.90 |

Table 6 – Voltage Violations Observed in the Study Area for 2026 Summer Peak

After conducting an independent review, ERCOT's RPG, Technical Advisory Committee, and Board of Directors approved the Roanoke Area Upgrades Project, which includes the following:

1. Construct a new Ramhorn Hill 345 kV switching station in a 10-breaker, breaker-and-a-half arrangement tapped into the existing double-circuit Hicks to Willow Creek 345 kV line. The existing Hicks and Willow Creek substations are owned by Oncor.

2. Construct a new Dunham 345 kV switching station in a 10-breaker, breaker-and-a-half arrangement tapped into the existing Lewisville to Krum West and Lewisville to Roanoke 345 kV lines. The existing Lewisville Substation is owned by Brazos Electric Cooperative. The existing Krum West and Roanoke Substations are owned by Oncor.

3. Construct two new Ramhorn Hill to Dunham 345 kV transmission lines, with conductor rated to at least 2987 MVA, in a new (estimated 18.4-mile) right-of-way, installed on new triple-circuit towers leaving one vacant 138 kV position.

4. Rebuild Exchange to Roanoke 345 kV double-circuit lines, upgrading both with conductors rated to at least 2987 MVA, using separate double-circuit capable structures for each line. The line ratings will be 1912/1912 MVA, limited by terminal equipment at Roanoke.

5. Construct a new Exchange to Roanoke 138 kV circuit, with conductor rated to at least 764 MVA, using one of the Exchange to Roanoke 345 kV line double-circuit capable structures.

6. Construct a new Exchange 345/138 kV Switching Station, adjacent to the Alliance 345 kV substation, with two new 600 MVA (nameplate) transformers in an 8-breaker, 345 kV breaker-and-a-half bus arrangement and a 9-breaker, 138 kV breaker-and-a-half arrangement. The normal/emergency ratings of the new transformers will be 700/750 MVA. Exchange will be connected to Hicks and Roanoke with 345 kV lines and connected to the converted Alliance Substation with 138 kV lines. The existing Alliance and Hicks Substations are owned by Oncor.

7. Convert the existing Alliance 345 kV load-serving substation to 138 kV load-serving operation.

8. Construct a new Exchange to Alliance 138 kV double-circuit line with conductors rated to at least 746 MVA.

9. Construct a new Alliance to Keller Magnolia and Alliance to Heritage 138 kV double-circuit line with conductors rated to at least 746 MVA in a new (estimated 1.4-mile) right-of-way. The existing Keller Magnolia and Heritage Substations are owned by Oncor.

10. Upgrade the existing Keller Magnolia to Heritage 138 kV line with conductor rated to at least 746 MVA to be installed on the Alliance to Keller Magnolia and Alliance to Heritage 138 kV double-circuit structures.

11. Upgrade the existing Heritage to Keller Magnolia Tap double-circuit lines with conductors rated to at least 746 MVA.

12. Construct a new 138 kV switching station at Keller Wall Price in a 6-breaker ring bus arrangement.

13. Disconnect the double-circuit Heritage to Keller Magnolia Tap lines at Keller Magnolia Tap and terminate both at Keller Wall Price by constructing two new 0.3-mile, 138 kV transmission lines added to the existing Keller Magnolia Tap to Keller Wall Price right-of-way with both new line conductors rated to at least 746 MVA. The existing Keller Magnolia Tap and Keller Wall Price Substation are owned by Oncor.

14. Retire the Keller Magnolia Tap.

The Proposed Transmission Line Project includes components 12, 13, and 14 of the overall Roanoke Area Upgrades Project, as listed above. Oncor will file separate CCN applications for other components of the Roanoke Area Upgrades Project as required by the Public Utility Commission of Texas.

The complete ERCOT Independent Review, dated July 19, 2022, is included as Attachment No. 3 to the Application. A system map showing all of the recommended Roanoke upgrades is included as Attachment No. 4.

**15. Alternatives to 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.**

**Oncor Review**

Oncor evaluated 3 alternatives to address the identified reliability concerns:

Oncor Option #1 (O1):

- Establish the Exchange 345/138 kV Switching Station, adjacent to Alliance 345 kV Substation, with two 600 MVA Autotransformers in a 8-breaker 345 kV breaker-and-a-half bus arrangement and a 9-breaker 138 kV breaker-and-a-half arrangement
- Convert the existing Alliance 345 kV load-serving substation to 138 kV operation
- Establish the Exchange – Keller Wall Price 138 kV double-circuit line using a conductor rated at least 3121 A or greater with the following upgrades:
- Construct the Exchange – Keller Magnolia 138 kV double-circuit line
- Upgrade the Keller Magnolia – Keller Wall Price Switch 138 kV line using double-circuit capable structures
- Establish a new 138 kV switching station at Keller Wall Price in a 6-breaker ring bus arrangement
- Disconnect the Keller Magnolia Tap – Heritage/Keller Magnolia line at Keller Magnolia Tap and terminate at Keller Wall Price by constructing a new 0.3-mile double-circuit 138 kV transmission line
- Establish the Ramhorn Hill 345 kV switching station in a 10-breaker, breaker-and-a-half arrangement
- Establish Dunham 345 kV switching station with in a 10-breaker, breaker-and-a-half arrangement
- Construct an estimated 18.4-mile triple-circuit line between Ramhorn Hill and Dunham with:
    - Two 345 kV circuits using conductor rated at least 5000 A
    - A vacant position for a future 138 kV circuit to support future load serving substations in growth areas
- Rebuild Exchange – Roanoke 345 kV double-circuit line using separate double-circuit capable structures for each line with conductor rated at least 5000 A and establish the Exchange – Roanoke 138 kV circuit using one of the Exchange – Roanoke 345 kV line double-circuit capable structures rated at least 3200 A
- Ensure all new 345 kV terminals at Exchange, Ramhorn Hill, and Dunham are rated 5000 A and 138 kV terminals at Exchange, Keller Wall Price, and Roanoke are rated 3200 A

Oncor Option #2 (O2):

- Establish Dunham 345 kV switching station in an 8-breaker, breaker-and-a-half arrangement
- Establish Dunham 138 kV switching station in a 5-breaker, breaker-and-a-half arrangement
- Establish two new 345/138 kV autotransformers at the proposed Dunham 345 kV switching station

- Construct an estimated 1-mile, 138 kV double-circuit line from Dunham to Cross Timbers with conductor rated 3200 A or greater

Oncor Option #3 (O3):

- Establish the Ramhorn Hill 345 kV switching station in a 10-breaker, breaker-and-a-half arrangement
- Establish Dunham 345 kV switching station in an 11-breaker, breaker-and-a-half arrangement
- Construct an estimated 18.4-mile, 345 kV double-circuit line from Ramhorn Hill to Dunham with conductor rated 5000 A or greater
- Establish Dunham 138 kV switching station in a 5-breaker, breaker-and-a-half arrangement
- Establish two new 345/138 kV autotransformers at the proposed Dunham 345 kV switching station
- Construct an estimated 1-mile, 138 kV double-circuit line from Dunham to Cross Timbers with conductor rated 3200 A or greater

Of the alternatives Oncor reviewed, Option #1 best addressed the identified reliability issues. While both Option #2 and Option #3 reduce some post-contingency thermal overloads, the steady-state analysis clearly demonstrates that Option #1 more effectively addresses thermal overloads, resolving overloads across all case years. Oncor's Option #1 also resolves load-serving limitations and voltage criteria exceedances on the Roanoke – Euless/Deen double-circuit transmission line, whereas Options #2 and #3 do not. The results of Oncor's analysis are summarized in Tables 7, 8, and 9 below.

| Element | Worst Contingency Loading (% of Emergency Rating) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2021 RTP NNC Cases | | | | | | | | | | | | | | | |
| | 2023 Summer | | | | 2024 Summer | | | | 2026 Summer | | | | 2027 Summer | | | |
| | Base | O1 | O2 | O3 | Base | O1 | O2 | O3 | Base | O1 | O2 | O3 | Base | O1 | O2 | O3 |
| Roanoke 345/138 kV Autotransformer #1 | 111 | 74 | 107 | 84 | 110 | 73 | 106 | 88 | 114 | 75 | 109 | 91 | 114 | 75 | 109 | 91 |
| Roanoke 345/138 kV Autotransformer #2 | 111 | 74 | 108 | 84 | 110 | 73 | 106 | 88 | 114 | 75 | 109 | 91 | 114 | 75 | 109 | 91 |
| Hicks 345/138 kV Autotransformer #1 | 99 | 66 | 96 | 72 | 98 | 65 | 95 | 71 | 101 | 66 | 98 | 72 | 102 | 66 | 99 | 72 |
| Hicks 345/138 kV Autotransformer #2 | 100 | 66 | 98 | 72 | 99 | 66 | 96 | 72 | 102 | 67 | 99 | 73 | 104 | 67 | 101 | 73 |
| Roanoke – Hicks 345 kV line | 95 | 71 | 97 | 57 | 93 | 71 | 95 | 56 | 97 | 73 | 98 | 58 | 99 | 75 | 100 | 59 |
| Performance Requirements Met | | Yes | No | Yes | | Yes | No | Yes | | Yes | No | Yes | | Yes | No | Yes |

Table 7 – Post Contingency Loading Comparison using RTP NNC Cases

| Element | Worst Contingency Loading (% of Emergency Rating) in 2021 SSWG Cases | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2024 Summer | | | | 2028 Summer | | | |
| | Base | O1 | O2 | O3 | Base | O1 | O2 | O3 |
| Roanoke 345/138 kV Autotransformer #1 | 124 | 82 | 121 | 95 | 135 | 89 | 131 | 103 |
| Roanoke 345/138 kV Autotransformer #2 | 124 | 82 | 121 | 95 | 135 | 89 | 131 | 103 |
| Hicks 345/138 kV Autotransformer #1 | 113 | 74 | 110 | 80 | 123 | 79 | 120 | 85 |
| Hicks 345/138 kV Autotransformer #2 | 113 | 74 | 110 | 80 | 123 | 79 | 120 | 85 |
| Roanoke – Hicks 345 kV line | 104 | 79 | 105 | 62 | 113 | 86 | 114 | 67 |
| Performance Requirements Met | | Yes | No | Yes | | Yes | No | No |

Table 8 – Post Contingency Loading Comparison using 2021 SSWG Cases

| Bus Number | Bus Name | Worst Contingency Voltage Results (in p.u.) 2028 Summer (2021 SSWG Case) | | | |
|---|---|---|---|---|---|
| | | Base | O1 | O2 | O3 |
| 15100 | PARKVISTA1_8 | 0.890 | >0.95 | 0.893 | 0.897 |
| 2058 | CIRCLET_P8 | 0.892 | >0.95 | 0.895 | 0.898 |
| 559 | HERITAGE | 0.893 | >0.95 | 0.896 | 0.900 |
| 12033 | HRTAG1_T8 | 0.893 | >0.95 | 0.896 | 0.900 |
| 2036 | KELLER2_T8 | 0.894 | >0.95 | 0.897 | 0.901 |
| 33565 | KELLER2 | 0.894 | >0.95 | 0.897 | 0.901 |
| 2033 | KLR_MAG1_T8 | 0.895 | >0.95 | 0.899 | 0.902 |
| 2037 | WPKELLR1_8 | 0.899 | >0.95 | 0.903 | 0.906 |
| 566 | CHERRYGROV | 0.900 | >0.95 | 0.903 | 0.906 |
| 2035 | BEARCK3_8 | 0.902 | >0.95 | 0.905 | 0.909 |
| 12028 | CLYVIL2_8 | 0.905 | >0.95 | 0.908 | 0.911 |
| 2028 | CLYVIL2_T8 | 0.906 | >0.95 | 0.909 | 0.912 |
| Performance Requirements Met | | | Yes | No | No |

Table 9 – Post Contingency Voltage Comparison using 2021 SSWG Case

After identifying Oncor's Option #1 as the superior option, Oncor prepared a submittal to ERCOT RPG recommending Option #1 as its preferred alternative.

**ERCOT Review**

In connection with evaluating Oncor's submittal, ERCOT's independent review initially evaluated four system improvement options to address the observed reliability issues. Table 10 shows the components of the four initial options. (Note that the numbering of the options reviewed by ERCOT does not correspond to the numbering of the options reviewed by Oncor.)

| Transmission Upgrade | Approx. Length of Line (miles) | Normal / Emergency Rating (MVA) | *Options* | | | |
|---|---|---|---|---|---|---|
| | | | 1 | *2** | *3* | *4* |
| Construct a new Ramhorn Hill 345-kV switching station in a 10-breaker breaker-and-a-half arrangement tapped into existing double-circuit Hicks to Willow Creek 345-kV lines | | | | ✓ | ✓ | ✓ |
| Construct a new Dunham 345-kV switching station in a 10-breaker breaker-and-a-half arrangement tapped into existing Lewisville to Krum West and Lewisville to Roanoke 345-kV lines | | | | ✓ | ✓ | ✓ |
| Construct two new Ramhorn Hill to Dunham 345-kV transmission lines, with conductor rated to at least 2987 MVA, in a new (estimated 18.4-mile) right-of-way installed on new triple-circuit towers leaving one 138-kV vacant position | 18.4 | 2987/2987 | | ✓ | ✓ | ✓ |
| Upgrade Hicks to Exchange 345-kV double-circuit line with conductors rated to at least 2987 MVA | 5.8 | 2987/2987 | ✓ | | | |
| Rebuild Exchange to Roanoke 345-kV double-circuit lines, upgrading both with conductors rated to at least 2987 MVA, using separate double-circuit capable structures for each line | 3.6 | 1912/1912** | | ✓ | | |
| Construct a new Exchange to Roanoke 138-kV circuit, with conductor rated to at least 764 MVA, using one of the Exchange to Roanoke 345-kV line double-circuit capable structures | 3.8 | 764/764 | | ✓ | | |
| Upgrade Exchange to Roanoke 345-kV double-circuit lines with conductor rating to at least 2987 MVA | 3.6 | 1912/1912** | ✓ | | ✓ | |
| Construct a new Exchange 345/138-kV Switching Station, adjacent to Alliance 345-kV substation, with two new 600 MVA transformers (nameplate) in an 8-breaker 345-kV breaker-and-a-half bus arrangement and a 9-breaker 138-kV breaker-and-a-half arrangement | | 700/750 | ✓ | ✓ | ✓ | ✓ |
| Convert the existing Alliance 345-kV load serving substation to 138-kV load serving operation | | | ✓ | ✓ | ✓ | ✓ |
| Construct a new Exchange to Alliance 138-kV double-circuit line with conductors rated to at least 746 MVA | 0.1 | 746/746 | ✓ | ✓ | ✓ | ✓ |
| Construct a new Alliance to Keller Magnolia and Alliance to Heritage 138-kV double-circuit line with conductors rated to at least 746 MVA | 1.4 Keller Magnolia<br>2.5 Heritage | 746/746 | ✓ | ✓ | ✓ | ✓ |
| Upgrade the existing Keller Magnolia to Heritage 138-kV line with conductor rated to at least 746 MVA to be installed on the Alliance to Keller Magnolia and Alliance to Heritage 138-kV double-circuit towers | 1.0 | 746/746 | ✓ | ✓ | ✓ | ✓ |

| | | | | | | |
|---|---|---|---|---|---|---|
| Upgrade the existing Heritage to Keller Magnolia Tap double-circuit lines with conductors rated to at least 746 MVA | 1.3 | 746/746 | ✓ | ✓ | ✓ | ✓ |
| Construct a new 138-kV switching station at Keller Wall Price in a 6-breaker ring bus arrangement | | | ✓ | ✓ | ✓ | ✓ |
| Disconnect the double-circuit Heritage to Keller Magnolia Tap lines at Keller Magnolia Tap and terminate both at Keller Wall Price by constructing two new 0.3-mile 138-kV transmission lines added to the existing Keller Magnolia Tap to Keller Wall Price right-of-way with both new line conductors rated to at least 746 MVA | 0.3 | 746/746 | ✓ | ✓ | ✓ | ✓ |
| Retire the Keller Magnolia Tap | | | ✓ | ✓ | ✓ | ✓ |

Table 10 – Components of the Four Initial Options Studied by ERCOT
*ERCOT's Option 2 is substantially the same as the option Oncor recommended after its internal review.
**Exchange to Roanoke 345-kV conductor will be capable of 2987/2987 MVA, however terminal equipment at Roanoke will limit the line ratings to 1912/1912 MVA.

ERCOT performed reliability assessments on the four initial options based on NERC Reliability Standard TPL-001-4, the applicable ERCOT Nodal Protocols, and Planning Criteria. ERCOT's initial reliability assessment identified thermal overload violations under ERCOT Option 1, resulting in it being eliminated from further evaluation. No reliability criteria violations were identified for ERCOT Options 2, 3, and 4, so ERCOT short-listed these options for further assessment.

To evaluate the operational flexibility of the short-listed options, ERCOT developed an off-peak scenario for planned maintenance outage (N-1-1) analysis. ERCOT first conducted an N-1-1 contingency analysis based on selected single-circuit prior outages, as well as based on selected double-circuit common tower prior outages for each short-listed option. As shown in Table 11 below, the performance was similar for each of the three short-listed options.

| | **Planned Maintenance Single Circuit Prior Outage** | | **Planned Maintenance Double Circuit Common Tower Prior Outage** | |
|---|---|---|---|---|
| | **Thermal Overloads** | **Voltage Instability** | **Thermal Overloads** | **Voltage Instability** |
| Option 2 | No | No | No | No |
| Option 3 | No | No | No | No |
| Option 4 | No | No | No | No |

Table 11 – Results of Planned Maintenance Outage Analysis

To further evaluate the operational flexibility provided by the short-listed options, ERCOT conducted an additional prior outage maintenance scenario based on input from Oncor. As shown in Table 12 below, ERCOT's Option 2 performed better under this scenario as it was the only short-listed option that did not show a Roanoke 345/138 kV transformer overload.

| | Planned Maintenance TSP Requested Scenario (X-1 + Double-Circuit Line Segment) | |
|---|---|---|
| | **Thermal Overloads** | **Voltage Stability** |
| Option 2 | No | Ok |
| Option 3 | Yes | Ok |
| Option 4 | Yes | Ok |

Table 12 – Results of TSP Requested Planned Maintenance Outage Analysis

To estimate and compare the long-term load-serving capabilities of the three short-listed options, ERCOT adjusted load-up in the substations identified in the Roanoke area in Oncor's submittal to RPG. To balance power, ERCOT adjusted down conforming load outside of the North Central weather zone and simulated N-1 contingencies.

Because ERCOT Option 2 offers better long-term load serving capability, better operational flexibility during transformer prior outage conditions, and better flexibility for future utilization associated with transmission between Exchange and Roanoke, ERCOT selected Option 2 as its preferred option.

ERCOT's analysis revealed that six 138 kV and one 345 kV transmission line thermal overloads would need to be addressed for all three of the short-listed options to increase long-term load serving capability. In addition, Options 3 and 4 would require additional transmission improvements to address overloading on the two existing 345/138 kV transformers at Roanoke to further increase load serving capability. Because Option 2 did not require these additional major transmission improvements, ERCOT selected Option 2 as the most favorable path for increasing long-term load serving capability.

A comparison of the three short listed options is shown in Table 13 below.

| | **Option 2** | **Option 3** | **Option 4** |
|---|---|---|---|
| Met ERCOT and NERC Reliability Criteria | Yes | Yes | Yes |
| Improved Operational Flexibility | Better | Yes | Yes |
| Long-term Load Serving Performance | Better | Yes | Yes |
| Capital Cost Estimates | $286 M | $264 M | $254 M |

Table 13 - Comparison of Short-Listed Options

ERCOT endorsed Option 2, including the Proposed Transmission Line Project, as a Tier 1 transmission project that is critical to the reliability of the ERCOT system pursuant to 16 TAC § 25.101(b)(3)(D).

Distribution alternatives will not resolve the identified reliability issues on the transmission system.

Bundling or upgrading conductor, adding transformers, or upgrading voltages alone will not address the identified reliability issues or provide the necessary level of service to meet electric demand in the Roanoke-Alliance area.

**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.**

A schematic of the transmission system in the proximate area of the Roanoke Area Upgrades Project, including the Proposed Transmission Line Project, is shown in Attachment No. 5. The location and voltage of existing transmission lines, substations, taps, ties, meter points or other facilities involving other utilities in relation to the Proposed Transmission Line Project are included. A map of the project area can be found in Figure 3-1 in Appendix D of the Environmental Assessment included as Attachment No. 1.

**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.**

Oncor retained Halff to prepare the Environmental Assessment. The objective of the Environmental Assessment was to provide information in support of this Application in addressing the requirements of Section 37.056(c)(4)(A)-(D) of the Texas Utilities Code, the Public Utility Commission ("PUC" or "Commission") CCN Application form, and 16 Texas Administrative Code ("TAC") § 25.101 as these apply to the Proposed Transmission Line Project. By examining existing environmental conditions, including the human and natural resources that are located in the project area, the Environmental Assessment appraises the environmental effects that could result from the construction, operation, and maintenance of the Proposed Transmission Line Project. The Environmental Assessment may also be used in support of any additional local, state, or federal permitting activities that may be required for the Proposed Transmission Line Project.

To assist Halff in its evaluation, Oncor provided information regarding the project endpoints and route, the need for the project, engineering and design requirements, construction practices, and ROW requirements.

The Proposed Transmission Line Project includes a single proposed route, for which all necessary ROW has been acquired, and which addresses the requirements of PURA and the PUC's Substantive Rules.

Specific discussion regarding selection of a study area, identification of constraints, and assessment of the proposed route is set forth in the Environmental Assessment. *See* Attachment No. 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 16 TAC §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.**

Oncor hosted one public participation meeting in accordance with 16 TAC § 22.52. It was attended by personnel from Oncor, Halff, and Integra Realty Resources ("Integra"), a contractor assisting Oncor in property abstracting. The public participation meeting was held on November 29, 2022, from 4:00 p.m. to 7:00 p.m., at the Suites of Keller Conference Center in Keller, Texas.

Oncor mailed a total of 99 individual written notices of the meeting to owners of property within 300 feet of the centerlines of KWP-KM and KWP-R in accordance with 16 TAC § 22.52. In consideration of horizontal accuracy limitations as it relates to appraisal district data and aerial photography interpretation, notification to property owners was over-inclusive, including properties crossed by or within 320 feet of the Proposed Transmission Line Project route centerlines. Public notices were published on November 16, 2022, in the *Fort Worth Star-Telegram* announcing the location, time, and purpose of the meeting. Oncor provided notice of the public meeting to the Department of Defense Siting Clearinghouse in accordance with 16 TAC § 22.52(a)(4).

The meeting was designed to solicit comments and input from residents, landowners, public officials, and other interested parties concerning the Proposed Transmission Line Project. The objectives of the meeting included promoting an understanding of the Proposed Transmission Line Project, including the purpose, need, and potential benefits and impacts; informing and educating the public with regard to the CCN certification process and schedule; and gathering information about the values and concerns of the public and community leaders.

The meeting was configured in an informal information station format rather than a formal speaker/audience format, with each station assigned to a particular aspect of the project or routing process and staffed with representatives from Oncor, Halff, and/or Integra. Each station had exhibits, maps, illustrations, aerial photography, or other information describing certain project aspects and subject matter information. Attendees were encouraged at the meeting's outset to visit each station in order, so the entire process could be explained in the general sequence of project development. Oncor has found this meeting format valuable due to its informality, which allows attendees to gather information most important to them and spend as much time as necessary with those particular project aspects. Additionally, individual discussions allow for and encourage more interaction from attendees who otherwise might be hesitant to participate in a more formal setting.

One individual signed in as attending the public participation meeting. No questionnaire was returned at the meeting or received by Oncor or Halff via mail, email, or phone at a later date.

Additional discussion concerning the public involvement program and specific information regarding the public participation meeting may be found in Section 2.4, pages 2-8 through 2-9, and Section 4.0, page 4-1, of the Environmental Assessment included as Attachment No. 1. A representative copy of the notice that was provided to property owners and a copy of the questionnaire provided to the meeting attendee is included in Appendix B of the Environmental Assessment.

**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).**

A one inch = 200 feet map (Figure 3-1) is included in the Appendix D map pocket of the Environmental Assessment included as Attachment No. 1. This base map includes sufficient cultural and natural features to identify the location of the route in the field. This map delineates the study area and proposed route for the Proposed Transmission Line Project. The map depicts existing facilities in the area of the Proposed Transmission Line Project, including taps, ties, meter points, or other utility facilities, as applicable, including the existing facilities that will interconnect with the Proposed Transmission Line Project. The map also depicts the approximate locations of radio transmitters and other electronic installations, airstrips, irrigated pasture or cropland, parks and recreational areas, historical and archeological sites, and environmentally sensitive areas, if any.

**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.**

Figure 3-1 in Appendix D depicts on an aerial photograph, as applicable: (1) the location of the proposed route for the KWP-KM and KWP-R transmission line segments; (2) the locations of all major public roads, including all federal and state roadways; (3) the locations of all known habitable structures on properties directly affected by the route; and (4) the boundaries (approximate or estimated according to best available information) of all properties directly affected by the route. In addition, the locations of radio transmitters and other electronic installations, airstrips, irrigated pasture or cropland, parks and recreational areas, historical and archeological sites, and any environmentally sensitive areas are depicted, if any.

**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.**

Attachment No. 6 is a table that cross references each habitable structure and directly affected property identified in Figure 3-1 (Appendix D map pocket) of the Environmental Assessment; the cross reference table includes corresponding landowner names and addresses. The ROW area in which the Proposed Transmission Line Project will be located has already been acquired.

**20. Permits:**

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

The following permits/approvals will be obtained after PUC approval of the CCN and prior to beginning construction, if necessary:

1. Texas Department of Transportation ("TxDOT") permit(s) for crossing a state-maintained roadway.
2. A Storm Water Pollution Prevention Plan ("SWPPP") will be prepared and a Notice of Intent will be submitted to the Texas Commission on Environmental Quality under the Texas Pollutant Discharge Elimination System ("TPDES") program.
3. A cultural resources survey plan will be developed with the Texas Historical Commission ("THC") for the proposed project.
4. Consultation with the U.S. Army Corps of Engineers will occur following the Commission's approval of this Application to determine appropriate requirements under Section 404/Section 10 Permit criteria.
5. Consultation with the U.S. Fish and Wildlife Service will occur following the Commission's approval of this Application to determine appropriate requirements under the Endangered Species Act.

**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.**

A listing of all habitable structures located within 300 feet of the proposed routes, along with a general description of each habitable structure and its distance from the centerlines of the proposed routes, is provided in the table in Attachment No. 7.

Figure 3-1 (Appendix D map pocket) of the Environmental Assessment depicts the locations of all known habitable structures directly affected by the proposed routes.

**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.**

There are no known AM radio transmitters located within 10,000 feet of the proposed route centerlines and no known FM radio transmitters located within 2,000 feet of the proposed route centerlines. There are no other communication towers or similar electronic installations located within 2,000 feet of the proposed route centerlines.

Please refer to Section 3.7.7, pages 3-46 through 3-47, and Section 5.7.6, page 5-13, of the Environmental Assessment included as Attachment No. 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.**

Halff's review of federal and state aviation/airport maps and directories, aerial photo interpretation, and reconnaissance survey identified: no FAA-registered airports with a runway greater than 3,200 feet in length within 20,000 feet of the proposed routes; no FAA-registered airport without a runway greater than 3,200 feet in length within 10,000 feet of the proposed routes; no heliports within 5,000 feet of the proposed routes; and no private airstrips within 10,000 feet of the proposed routes.

Please refer to Section 3.7.6, pages 3-46 through 3-58, and Section 5.7.5, pages 5-12 through 5-13, of the Environmental Assessment included as Attachment No. 1.

**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.**

Results of aerial photography interpretation and a field reconnaissance survey did not identify any agricultural land irrigated by traveling irrigation systems (rolling or pivot type) that will be traversed by the routes of the Proposed Transmission Line Project.

Please refer to Section 3.7.3, page 3-44; Section 5.7.3, page 5-11; and Table 5-1, page 5-16, of the Environmental Assessment included as Attachment No. 1.

**25. Notice:**

**Notice is to be provided in accordance with 16 TAC §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.**

A copy of the written direct notice, with attached map, that will be provided via first-class mail to the owners of land that will be "directly affected" by the Proposed Transmission Line Project, as that term is used in 16 TAC § 22.52(a)(3), is included as Attachment No. 8. The names and addresses of the directly affected landowners to whom notice will be mailed are included as Attachment No. 6. The list in Attachment No. 6 consists of landowner data obtained via the Tarrant County Tax Office and Tarrant County Appraisal District, and when necessary, via deed research.

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

A copy of the written direct notice, with attached map, that will be provided to utilities that are located within five miles of the routes is included as Attachment No. 9.

**C. Provide a copy of the written notice to county and municipal authorities, and the Department of Defense Siting Clearinghouse. Notice to the DoD Siting Clearinghouse should be provided at the email address found at http://www.acq.osd.mil/dodsc/ .**

osd.dod-siting-clearinghouse@mail.mil

A representative copy of the written notice, with attached map, that will be provided to county authorities is included as Attachment No. 9. The following county authorities will be provided the requisite notice on or before the filing date as required by Commission rules:

Tarrant County, County Judge
Tarrant County, County Commissioners
Tarrant County, County Administrator
Tarrant County, County Historical Commission

A representative copy of the written notice, with attached map, that will be provided to municipal authorities is included as Attachment No. 9. The following municipal authorities will be provided the requisite notice on or before the filing date, as required by Commission rules:

- City of Keller: Mayor, Mayor Pro Tem, Council Members, City Manager, City Secretary, Economic Development Manager
- Keller Independent School District
- City of Colleyville: Mayor, Mayor Pro Tem, Council Members, City Manager, Assistant City Manager, City Secretary
- City of Fort Worth: Mayor, Council Members, City Manager, Assistant City Manager, City Secretary
- City of Haltom City: Mayor, Mayor Pro Tem, Council Members, City Manager, Assistant City Manager, City Secretary
- City of Haslet: Mayor, Mayor Pro Tem, Council Members, City Secretary
- City of Hurst: Mayor, Council Members, City Manager, Assistant City Manager, City Secretary
- City of North Richland Hills: Mayor, Council Members, City Manager, Assistant City Manager, Deputy Assistant City Manager, City Secretary
- City of Roanoke: Mayor, Mayor Pro Tem, Council Members, City Manager, City Secretary

- City of Southlake: Mayor, Mayor Pro Tem, Deputy Mayor Pro Tem, Council Members, City Manager, Assistant City Manager, City Secretary
- City of Watauga: Mayor, Mayor Pro Tem, Council Members, City Manager, City Secretary
- City of Westlake: Mayor, Mayor Pro Tem, Council Members, Assistant Town Manager, Town Secretary

A representative copy of the written notice, with attached map, that will be provided to the Department of Defense Siting Clearinghouse at the email address specified above is included as Attachment No. 9. Additionally, notice will be provided to the Department of Defense Siting Clearinghouse, via first-class mail, at the physical address below:

DOD Siting Clearinghouse
3400 Defense Pentagon, Room 5C646
Washington, DC 20301-3400

A copy of the application and all attachments will also be provided to the Texas Office of Public Utility Counsel ("OPUC"). A representative copy of the written notice, with attached map, that will be provided to OPUC is included as Attachment No. 9.

**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.**

Notice for this Application will be published in the *Fort Worth Star-Telegram*, a newspaper of general circulation in Tarrant County. A representative copy of the general public notice to be published is included as Attachment No. 10.

Proof of publication will be provided in the form of publisher's affidavits and tear sheets following publication of this notice.

**For a CREZ application, in addition to the requirements of 16 TAC § 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.**

Not applicable.

**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.**

A review of federal, state, and local websites and maps, as well as field reconnaissance surveys, identified no recreational areas owned by a government body or an organized group, club or church within 1,000 feet of the route centerlines of the Proposed Transmission Line Project.

Please refer to Table 5-1, page 5-16; Section 3.7.2, page 3-44; and Section 5.7.2, page 5-10, of the Environmental Assessment included as Attachment No. 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.**

Research and a records review were conducted of the THC Historic Sites Atlas and the THC Archaeological Sites Atlas to locate known cultural resources within 1,000 feet of the proposed route centerlines. THC records indicated no historical sites known to be within 1,000 feet of the proposed route centerlines. THC records indicated no National Register of Historic Places ("NRHP"), State Antiquities Landmarks ("SALs"), or cemeteries recorded within 1,000 feet of the proposed route centerlines. No recorded archaeological sites or historic structures were located within 1,000 feet of the proposed route centerlines.

Please refer to Table 5-1, page 5-16; Section 3.8, pages 3-47 through 3-55; and Section 5.8, pages 5-13 through 5-15, of the Environmental Assessment included as Attachment No. 1.

**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.**

The Proposed Transmission Line Project is not located, either in whole or in part, within the coastal management program boundary as defined in 31 TAC §503.1.

**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.**

The Environmental Assessment prepared by Halff is included as Attachment No. 1.

**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 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.**

A copy of the Environmental Assessment and Application will be provided to the Texas Parks and Wildlife Department for review within seven days following the filing of the Application for the Proposed Transmission Line Project. Please refer to Attachment No. 12 for a copy of the transmittal letter with which the Environmental Assessment and Application will be sent to the TPWD.

**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.***

**31. List of Attachments to the CCN Application**

| | |
|---|---|
| Attachment No. 1: | Environmental Assessment |
| Attachment No. 2: | Layout of the Existing Keller Wall Price Substation with Proposed Modifications and Layout of the Proposed Keller Wall Price Switch |
| Attachment No. 3: | ERCOT's Independent Review of Oncor Roanoke Area Upgrades Project dated July 19, 2022 |
| Attachment No. 4: | Transmission Area Map showing ERCOT's Recommended Roanoke Area Upgrades |

| | |
|---|---|
| Attachment No. 5: | Schematic of Transmission System in Proximate Area of Project |
| Attachment No. 6: | List of Directly Affected Landowners for Notice |
| Attachment No. 7: | Habitable Structures within 300 Feet of the Proposed Routes |
| Attachment No. 8: | Copy of Notice to Directly Affected Landowners |
| Attachment No. 9: | Copy of Notice to Department of Defense Siting Clearinghouse, OPUC, Utility, County, and Municipalities |
| Attachment No. 10: | Copy of Newspaper/Public Notice |
| Attachment No. 11: | Copy of Courtesy Notice to Pipeline Owners/Operators |
| Attachment No. 12: | Transmittal Letter to TPWD |
| Attachment No. 13: | Affidavit |

The following files are not convertible:

Att 6 Listing of Directly Affected Land Owners for Notice.xlsx

Please see the ZIP file for this Filing on the PUC Interchange in order to access these files.

Contact centralrecords@puc.texas.gov if you have any questions.

# HABITABLE STRUCTURES WITHIN 300 FEET OF KELLER WALL PRICE —KELLER MAGNOLIA 138 KV TRANSMISSION LINE PROJECT

| Habitable Structure | Distance† | Direction | Description |
|---|---|---|---|
| 1 | 251 | NE | SFR‡ |
| 2 | 311 | SW | SFR |
| 3 | 252 | SW | SFR |
| 4 | 189 | SW | SFR |
| 5 | 127 | SW | SFR |
| 6 | 66 | SW | SFR |
| 7 | 55 | NE | SFR |
| 8 | 135 | NE | SFR |
| 9 | 189 | NE | SFR |
| 10 | 266 | NE | SFR |
| 12 | 255 | SW | SFR |
| 13 | 210 | SW | SFR |
| 14 | 140 | SW | SFR |
| 15 | 70 | SW | SFR |
| 16 | 45 | NE | SFR |
| 17 | 112 | NE | SFR |
| 18 | 176 | NE | SFR |
| 19 | 244 | NE | SFR |
| 21 | 264 | SW | SFR |
| 22 | 183 | SW | SFR |
| 23 | 109 | SW | SFR |
| 24 | 175 | NE | SFR |
| 25 | 311 | NE | SFR |
| 26 | 79 | SW | SFR |
| 27 | 85 | SW | SFR |
| 28 | 142 | NE | SFR |
| 29 | 289 | NE | SFR |
| 31 | 256 | SW | SFR |
| 32 | 103 | SW | SFR |
| 33 | 120 | NE | SFR |
| 34 | 276 | NE | SFR |
| 35 | 272 | NE | SFR |
| 37 | 250 | SW | SFR |
| 38 | 103 | SW | SFR |
| 39 | 107 | NE | SFR |
| 40 | 78 | SW | SFR |
| 41 | 111 | NE | SFR |
| 42 | 274 | NE | SFR |
| 43 | 79 | SW | SFR |
| 44 | 113 | NE | SFR |
| 45 | 314 | SW | SFR |
| 46 | 252 | SW | SFR |
| 47 | 165 | SW | SFR |
| 48 | 142 | NE | SFR |
| 49 | 202 | NE | SFR |

| Habitable Structure | Distance† | Direction | Description |
|---|---|---|---|
| 50 | 293 | NE | SFR |
| 52 | 261 | SW | SFR |
| 53 | 195 | SW | SFR |
| 54 | 132 | SW | SFR |
| 55 | 74 | SW | SFR |
| 56 | 47 | NE | SFR |
| 57 | 120 | NE | SFR |
| 58 | 181 | NE | SFR |
| 59 | 263 | NE | SFR |
| 60 | 307 | NE | SFR |
| 61 | 272 | NE | SFR |
| 62 | 285 | NE | SFR |
| 63 | 306 | NE | SFR |
| 64 | 310 | NE | SFR |
| 65 | 288 | SW | SFR |
| 66 | 225 | SW | SFR |
| 67 | 161 | SW | SFR |
| 68 | 92 | SW | SFR |
| 69 | 34 | NE | SFR |
| 70 | 104 | NE | SFR |
| 71 | 124 | E | SFR |
| 72 | 109 | E | SFR |
| 73 | 116 | E | SFR |
| 74 | 129 | E | SFR |
| 75 | 120 | NE | SFR |
| 76 | 143 | NE | SFR |
| 77 | 261 | NE | SFR |
| 78 | 227 | NE | SFR |
| 81 | 267 | NE | SFR |

# HABITABLE STRUCTURES WITHIN 300 FEET OF KELLER WALL PRICE —ROANOKE 138 KV REBUILD PROJECT

| Habitable Structure | Distance† | Direction | Description |
|---|---|---|---|
| 1 | 278 | NE | SFR‡ |
| 2 | 276 | SW | SFR |
| 3 | 217 | SW | SFR |
| 4 | 154 | SW | SFR |
| 5 | 92 | SW | SFR |
| 6 | 31 | SW | SFR |
| 7 | 90 | NE | SFR |
| 8 | 170 | NE | SFR |
| 9 | 224 | NE | SFR |
| 10 | 301 | NE | SFR |
| 11 | 306 | SW | SFR |
| 12 | 220 | SW | SFR |
| 13 | 175 | SW | SFR |
| 14 | 105 | SW | SFR |
| 15 | 35 | SW | SFR |
| 16 | 80 | NE | SFR |
| 17 | 147 | NE | SFR |
| 18 | 211 | NE | SFR |
| 19 | 279 | NE | SFR |
| 20 | 296 | SW | SFR |
| 21 | 229 | SW | SFR |
| 22 | 148 | SW | SFR |
| 23 | 74 | SW | SFR |
| 24 | 210 | NE | SFR |
| 26 | 44 | SW | SFR |
| 27 | 50 | SW | SFR |
| 28 | 177 | NE | SFR |
| 30 | 292 | SW | SFR |
| 31 | 221 | SW | SFR |
| 32 | 68 | SW | SFR |
| 33 | 155 | NE | SFR |
| 34 | 310 | NE | SFR |
| 35 | 306 | NE | SFR |
| 36 | 291 | SW | SFR |
| 37 | 216 | SW | SFR |
| 38 | 68 | SW | SFR |
| 39 | 141 | NE | SFR |
| 40 | 44 | SW | SFR |
| 41 | 144 | NE | SFR |
| 42 | 307 | NE | SFR |
| 43 | 46 | SW | SFR |
| 44 | 145 | NE | SFR |
| 45 | 281 | SW | SFR |
| 46 | 220 | SW | SFR |
| 47 | 133 | SW | SFR |
| 48 | 173 | NE | SFR |
| 49 | 233 | NE | SFR |
| 51 | 291 | SW | SFR |
| 52 | 230 | SW | SFR |
| 53 | 164 | SW | SFR |
| 54 | 101 | SW | SFR |
| 55 | 43 | SW | SFR |
| 56 | 76 | NE | SFR |
| 57 | 149 | NE | SFR |
| 58 | 210 | NE | SFR |
| 59 | 291 | NE | SFR |
| 65 | 258 | SW | SFR |
| 66 | 196 | SW | SFR |
| 67 | 132 | SW | SFR |
| 68 | 63 | SW | SFR |
| 69 | 61 | NE | SFR |
| 70 | 131 | NE | SFR |
| 71 | 198 | NE | SFR |
| 72 | 253 | NE | SFR |
| 81 | 300 | NE | SFR |

**Notes:**

* Direction represents the distance beginning from the habitable structure towards the provided project.

† To account for photographic interpretation limitations such as shadows, tree canopies, and horizontal accuracy of the photography, Halff identified all habitable structures within a measured distance of 320 feet of the alternative route centerline.

‡ Denotes single family residence.

**Michael Moore**
Regulatory Manager

March 23, 2023

Mr. John Silovsky – Director of Wildlife
Texas Parks and Wildlife Department
4200 Smith School Road
Austin, Texas 78744

**Re: PUC Docket No. 54733, *Application of Oncor Electric Delivery Company LLC to Amend its Certificate of Convenience and Necessity for the Keller Wall Price - Keller Magnolia 138 kV Transmission Line Project and Keller Wall Price - Roanoke 138 kV Rebuild Project in Keller, Texas***

Dear Mr. Silovsky:

Pursuant to the rules of the Public Utility Commission of Texas ("Commission"), please find enclosed a copy of the Environmental Assessment ("EA") attached to the application of Oncor Electric Delivery Company LLC ("Oncor") requesting certification for the Keller Wall Price - Keller Magnolia 138 kV Transmission Line Project and Keller Wall Price - Roanoke 138 kV Rebuild Project ("Proposed Transmission Line Project"), filed at the Commission on March 23, 2023, in Commission Docket No. 54733.

This docket concerns Oncor's request for approval to (1) rebuild an existing double-circuit 138 kilovolt (kV) transmission line beginning at the existing Keller Wall Price Substation and extending approximately 0.3 miles to the northwest, and (2) build a new double-circuit 138 kV transmission line parallel to the existing transmission line, beginning at the proposed Keller Wall Price Switch and extending approximately 0.3 miles to the northwest. The existing Keller Wall Price Substation is located west of State Highway 377, northeast of and adjacent to the intersection of Chisolm Trail and King Trail in Keller. The proposed Keller Wall Price Switch will be located directly adjacent to and south of the existing substation on Oncor's fee-owned property. Both transmission lines will be located entirely within Oncor's existing transmission line easement area. New structures will be needed to accommodate both transmission lines. The estimated cost of this project is $12,018,000. The EA provides a detailed description of the data gathered and analyzed by Halff Associates, the environmental/routing consultant retained by Oncor for the Proposed Transmission Line Project.

Oncor respectfully requests to be copied on any correspondence that TPWD might send to the Commission regarding this project. Please contact me if you have any questions regarding this transmittal or the Proposed Transmission Line Project.

Sincerely,

Michael Moore

cc w/o attachments:
Therese Harris, Public Utility Commission of Texas
Jaren Taylor, Vinson & Elkins LLP

## KELLER WALL PRICE—KELLER MAGNOLIA 138 kV TRANSMISSION LINE PROJECT

This project begins from Oncor's existing Keller Wall Price station property, extending west approximately 135 feet to an angle point. From this angle point, the project extends approximately 425 feet in a northerly direction parallel to Chisolm Trail, within Oncor-owned property, to an angle point. From this angle point, the project extends in a northwesterly direction approximately 1,475 feet within existing Oncor easement areas to the project endpoint within an existing Oncor easement. This portion of the project crosses Chisolm Trail, Santa Fe Trail, and Western Trail.

## KELLER WALL PRICE—ROANOKE 138 kV REBUILD PROJECT

This project begins from Oncor's existing Keller Wall Price station property and extends in a northwesterly direction approximately 1,700 feet within existing Oncor easement areas to the project endpoint within an existing Oncor easement. The project crosses Chisolm Trail, Santa Fe Trail, and Western Trail.