



Filing Receipt

Filing Date - 2024-07-25 03:34:35 PM

Control Number - 56799

Item Number - 5

PUC DOCKET NO. 56799

**DIRECT TESTIMONY
OF KALEB ROBERTS, WITNESS FOR
ONCOR ELECTRIC DELIVERY COMPANY LLC**

I. POSITION AND QUALIFICATIONS	2
II. PURPOSE OF TESTIMONY	2
III. DESCRIPTION OF PROPOSED TRANSMISSION LINE PROJECT	3
IV. PROJECT SCHEDULE AND FINANCING.....	4
V. STRUCTURE AND CONDUCTOR SELECTION	5
VI. PROJECT ENDPOINTS.....?	6
VII. NEIGHBORING UTILITIES AND POLITICAL SUBDIVISIONS	7
VIII. COST ESTIMATES	7
IX. ENGINEERING CONSTRAINTS	8
X. PROJECT PERMITTING	9
XI. GENERATION IMPACTS.....	10
XII. CONCLUSION	10
AFFIDAVIT	11

Exhibit KR-1 Resume of Kaleb Roberts

1 **DIRECT TESTIMONY OF KALEB ROBERTS**

2 **I. POSITION AND QUALIFICATIONS**

3 Q. PLEASE STATE YOUR NAME, EMPLOYMENT POSITION, AND
4 BUSINESS ADDRESS.

5 A. My name is Kaleb Roberts. I am employed as a Senior Engineer in the
6 Transmission Engineering Line Design group at Oncor Electric Delivery
7 Company LLC ("Oncor"). My business address is 777 Main St., Suite 707,
8 Fort Worth, Texas 76102.

9 Q. PLEASE DESCRIBE YOUR PROFESSIONAL QUALIFICATIONS.

10 A. I am the lead Oncor engineer responsible for the design, development, and
11 execution of the Reiter Switch-Tesoro Switch 345 kV transmission line
12 project ("Proposed Transmission Line Project"). I have been employed at
13 Oncor as a Senior Engineer since June of 2022. Prior to my employment
14 at Oncor, my professional experience was dedicated to engineering and
15 project management at another electric utility. I am a licensed professional
16 engineer in the State of Texas (License No. 151189). I received a Bachelor
17 of Science degree in Construction Engineering and Management
18 Technology from Purdue University North Central in 2010. My educational
19 and professional qualifications are more fully presented in my resume,
20 which is attached hereto as Exhibit KR-1.

21 Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE THE
22 PUBLIC UTILITY COMMISSION OF TEXAS ("COMMISSION")?

23 A. No, I have not.

24 **II. PURPOSE OF TESTIMONY**

25 Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

26 A. The purpose of my direct testimony is to introduce, support, describe, and
27 sponsor the project schedule, financing, and cost estimates included in
28 Oncor's Standard Application for a Certificate of Convenience and
29 Necessity ("CCN") for a Proposed Transmission Line filed in this docket (the
30 "Application"). My testimony will also introduce, support, sponsor, and

PUC Docket No. 56799

Roberts – Direct
Oncor Electric Delivery Company LLC
Reiter Switch-Tesoro Switch 345 kV CCN

1 describe the following aspects associated with the Proposed Transmission
2 Line Project: structure and conductor selection; station construction;
3 neighboring utilities and political subdivisions; known engineering
4 constraints; project permitting; and generation impacts.

5 I sponsor Oncor's responses to Application Question Nos. 1-13 and
6 20, as well as Attachment Nos. 2-3 to the Application. The Application, as
7 it may be amended and/or supplemented, will be offered into evidence by
8 Oncor at the hearing on the merits. My direct testimony was prepared by
9 me or under my direct supervision. The facts and statements set forth in
10 the portions of the Application that I sponsor are true and correct to the best
11 of my knowledge.

12 **III. DESCRIPTION OF PROPOSED TRANSMISSION LINE PROJECT**

13 Q. PLEASE GENERALLY DESCRIBE THE PROPOSED TRANSMISSION
14 LINE PROJECT.

15 A. The Proposed Transmission Line Project is part of Oncor's overall West
16 Texas 345 kV Infrastructure Rebuild Project, which ERCOT endorsed. The
17 Proposed Transmission Line Project includes constructing a new 4.0- to
18 5.2-mile, double-circuit 345 kV transmission line connecting Oncor's
19 planned Reiter Switch station in Ector County to Oncor's existing Tesoro
20 Switch station in Midland County. The transmission line is proposed to be
21 built on double-circuit lattice steel towers.

22 The planned Reiter Switch will be energized independent of the
23 Proposed Transmission Line Project before the start of construction for the
24 proposed transmission line. The Tesoro Switch is already in-use. This
25 project seeks approval to construct the proposed transmission line and
26 station work needed to terminate the line at each of the switching stations.

27 The Proposed Transmission Line Project will be designed and
28 constructed to meet or exceed the specifications and/or criteria set forth in
29 the latest edition of the National Electrical Safety Code ("NESC"), the

1 statutes of the State of Texas, the Commission's rules, and Oncor's
2 standard design practices.

3 Q. WILL NEW PERMANENT RIGHT-OF-WAY ("ROW") BE REQUIRED FOR
4 THE PROPOSED TRANSMISSION LINE PROJECT?

5 A. Yes. The Proposed Transmission Line Project will require a standard right-
6 of-way ("ROW") width of approximately 160 feet, although additional ROW
7 width and/or alternate structures may be required in certain areas to
8 address engineering constraints.

9 **IV. PROJECT SCHEDULE AND FINANCING**

10 Q. WHAT IS THE CURRENT SCHEDULE FOR THE PROPOSED
11 TRANSMISSION LINE PROJECT?

12 A. The schedule for the Proposed Transmission Line Project was developed
13 based on a 180-day approval timeline. The following schedule is premised
14 on Commission approval of the Proposed Transmission Line Project by
15 January 2025:

Description	Start	Completion
ROW and Land Acquisition	February 2025	December 2026
Engineering and Design	March 2025	April 2026
Material and Equipment Procurement	July 2025	July 2026
Construction of Facilities	July 2026	December 2026
Energize Facilities	--	December 2026

16 Q. HOW WILL THE PROPOSED TRANSMISSION LINE PROJECT BE
17 FINANCED?

18 A. As explained in the Application, Oncor proposes to finance the facilities
19 included in the Proposed Transmission Line Project with a combination of
20 debt and equity in compliance with its authorized capital structure, which is
21 similar to the means used for previous construction projects. Oncor plans
22 to utilize internally generated funds (equity) and proceeds received from the
23 issuance of securities. Oncor will typically obtain short-term borrowings as
24 needed for interim financing of its construction expenditures in excess of

1 funds generated internally. These borrowings are then repaid through the
2 issuance of long-term debt securities, the types and amounts of which are
3 as of yet undetermined. Oncor is the sole applicant for the Proposed
4 Transmission Line Project, and therefore no other party will be reimbursed
5 for any portion of this project.

6 **V. STRUCTURE AND CONDUCTOR SELECTION**

7 Q. WHAT STRUCTURES DID ONCOR SELECT FOR CONSTRUCTION OF
8 THE PROPOSED TRANSMISSION LINE PROJECT?

9 A. Oncor will construct the Proposed Transmission Line Project primarily on
10 double-circuit lattice steel towers with a typical structure height of 120 feet
11 and an estimated maximum structure height of 180 feet. After evaluating
12 numerous factors relating to the study area, including, but not limited to,
13 span length between structures, structure footprints, construction and
14 maintenance issues, commodity and labor costs, ROW requirements,
15 impacts to affected landowners, and constraints in the study area, Oncor
16 affirmed the use of this structure for the Proposed Transmission Line
17 Project. A typical 345 kV double-circuit lattice steel tower is shown in Figure
18 1-2 in the *Environmental Assessment and Alternative Route Analysis for the*
19 *Proposed Reiter Switch—Tesoro Switch 345 kV Transmission Line Project*
20 *in Ector and Midland Counties, Texas* ("Environmental Assessment"), which
21 is included as Attachment No. 1 to the Application. Section 1.3 of the
22 Environmental Assessment also discusses Oncor's selected structure type.

23 Q. WHAT CONDUCTOR DOES ONCOR PROPOSE TO USE FOR THE
24 PROPOSED TRANSMISSION LINE PROJECT?

25 A. The 345 kV circuits will be installed using 1926.9 kcmil aluminum conductor
26 steel supported, trapezoidal-shaped wire ("ACSS/TW") conductor. The
27 continuous summer static current rating for this conductor is 5,138 amperes,
28 and the line capacity at both operating and design voltage is 3,070
29 megavolt-amperes ("MVA").

1 Q. IS ONCOR'S CHOSEN CONDUCTOR THE MOST COST-EFFECTIVE
2 AND RELIABLE OPTION FOR THE PROPOSED TRANSMISSION LINE
3 PROJECT?

4 A. Yes. ERCOT's independent review requires that this line be constructed
5 with conductors rated to at least 3,070 MVA. Considering this ERCOT
6 requirement for the Proposed Transmission Line Project, it is both prudent
7 and necessary to install the 1926.9 kcmil ACSS/TW conductor.

8 **VI. PROJECT ENDPOINTS**

9 Q. WILL ANY STATION WORK BE REQUIRED FOR THE PROPOSED
10 TRANSMISSION LINE PROJECT?

11 A. Yes. The Proposed Transmission Line Project will include station work and
12 expansion necessary to connect the proposed line at each station. Because
13 the Proposed Transmission Line Project will connect to two of the initial 345
14 kV breakers at the planned Reiter Switch, the station work for that endpoint
15 will include only the minimal work needed to terminate the Proposed
16 Transmission Line Project into the Reiter Switch. The Tesoro Switch station
17 work will include a four-breaker, breaker-and-a-half expansion of the 345 kV
18 switchyard and associated controls needed for connection. Oncor will be
19 solely responsible for all aspects of the Proposed Transmission Line
20 Project.

21 Q. PLEASE DESCRIBE THE EXISTING TESORO SWITCH STATION.

22 A. Oncor's existing Tesoro Switch is located approximately 1.5 miles
23 southeast of the intersection of Interstate Highway ("IH") 20 and State
24 Highway ("SH") Loop 338 near Odessa, Texas. The above-mentioned
25 station work, which includes expansion, is required at the Tesoro Switch for
26 connection to the Proposed Transmission Line Project. The dimensions
27 and details of the Tesoro Switch are included in the Application as
28 Attachment No. 2-A. Construction of the Proposed Transmission Line
29 Project will not change the current dimensions of the Tesoro Switch.

30 Q. PLEASE DESCRIBE THE PLANNED REITER SWITCH STATION.

PUC Docket No. 56799

**Roberts – Direct
Oncor Electric Delivery Company LLC
Reiter Switch-Tesoro Switch 345 kV CCN**

1 A. The planned Reiter Switch station will include a 345/138 kV switchyard prior
2 to construction of the Proposed Transmission Line Project. The Reiter
3 Switch Oncor-owned property is located approximately 1.2 miles north of
4 the intersection of SH Loop 338 and FM 3503, south of Odessa, Texas.
5 The dimensions and details of the Tesoro Switch are included in the
6 Application as Attachment No. 2-B.

7 As I stated previously, the construction of the Proposed
8 Transmission Line Project will not begin until after operation of the Reiter
9 Switch commences. Specifically, the Reiter Switch will initially include the
10 cut-in of two existing Oncor 345 kV circuits: (1) the Odessa EHV Switch to
11 Moss Switch, and (2) the Odessa EHV Switch to Wolf Switch.

12 **VII. NEIGHBORING UTILITIES AND POLITICAL SUBDIVISIONS**

13 Q. ARE ANY OTHER ELECTRIC UTILITIES INVOLVED WITH THE
14 PROPOSED TRANSMISSION LINE PROJECT?

15 A. No. Oncor is the sole applicant for the Proposed Transmission Line Project
16 and will construct the transmission line and related station facilities.

17 Q. PLEASE IDENTIFY THE POLITICAL SUBDIVISIONS IN WHICH THE
18 PROPOSED TRANSMISSION LINE PROJECT WILL BE LOCATED.

19 A. The boundary of Ector and Midland counties runs through the middle of the
20 study area, with the City of Odessa extending into the northwest portion of
21 the study area. The Proposed Transmission Line Project is not located
22 within any other political subdivisions, including unincorporated towns or
23 communities.

24 **VIII. COST ESTIMATES**

25 Q. WHAT ARE THE ESTIMATED COSTS OF THE TRANSMISSION LINE
26 WORK FOR THE PROPOSED TRANSMISSION LINE PROJECT?

27 A. As detailed in Attachment No. 3 to the Application, I estimate that
28 transmission line costs to construct the Proposed Transmission Line
29 Project, excluding station costs, will range from approximately \$17,993,000

1 to approximately \$28,794,000, depending on the route selected by the
2 Commission.

3 Q. WHAT ARE THE ESTIMATED COSTS OF THE STATION FACILITIES
4 ASSOCIATED WITH THE PROPOSED TRANSMISSION LINE PROJECT?

5 A. As detailed in Attachment No. 3 to the Application and in response to CCN
6 Application Question No. 13, I estimate that station costs to construct the
7 Proposed Transmission Line Project will total approximately \$5,425,000.
8 Neither station requires any ROW or land acquisition for the necessary
9 station work.

10 The Proposed Transmission Line Project requires modifications to
11 the existing Tesoro Switch. For the planned Reiter Switch, the Proposed
12 Transmission Line Project includes only the equipment necessary for
13 termination. Termination costs are included in the estimated transmission
14 line costs, as shown in my response to CCN Application Question No. 13.

15 Q. PLEASE PROVIDE A BREAKDOWN OF ONCOR'S ESTIMATED
16 STATION COSTS FOR TESORO SWITCH STATION.

17 A. Oncor's estimated station costs for the modifications to Oncor's existing
18 Tesoro Switch station include approximately: \$156,000 for Oncor
19 engineering and design; \$190,000 for contract engineering and design;
20 \$3,094,000 for material and equipment procurement, including stores; and
21 \$1,985,000 for contract labor and construction.

22 **IX. ENGINEERING CONSTRAINTS**

23 Q. WHAT ARE SOME EXAMPLES OF ENGINEERING CONSTRAINTS?

24 A. Examples of engineering constraints may include, but are not limited to:
25 existing residential development; oil, gas, or water wells; flood-prone areas;
26 pipeline ROWs; highway crossings; uneven or unstable terrain; unfavorable
27 soil conditions; and bodies of water.

28 Q. PLEASE DESCRIBE THE KNOWN ENGINEERING CONSTRAINTS.

29 A. One of the primary engineering constraints within the study area for the
30 Proposed Transmission Line Project is the existence of numerous oil and

1 gas wells and pipelines. While most of the study area consists of rural,
2 undeveloped land, additional engineering constraints include: electrical
3 transmission lines; transportation corridors (e.g., SH Loop 338 and Farm-
4 to-Market Road 3503), residential subdivisions, and the City of Odessa
5 urban area.

6 Q. ARE THERE ANY KNOWN ENGINEERING CONSTRAINTS
7 ASSOCIATED WITH THE PROPOSED ROUTE FOR THE PROPOSED
8 TRANSMISSION LINE PROJECT?

9 A. At this time, the proposed routing alternatives do not present any known
10 engineering constraints that cannot be resolved with additional
11 consideration by Oncor during the design and construction phases following
12 approval of the Proposed Transmission Line Project. There may exist
13 unknown engineering constraints that would require further adjustments if
14 discovered through the survey process.

15 **X. PROJECT PERMITTING**

16 Q. WILL ANY PERMITS BE REQUIRED FOR THE PROPOSED
17 TRANSMISSION LINE PROJECT IN ADDITION TO THE CCN SOUGHT
18 IN THIS PROCEEDING?

19 A. Yes, assuming that the Commission approves the Application, it is likely that
20 additional permits will be necessary to construct the Proposed
21 Transmission Line Project. Following approval, and prior to construction,
22 Oncor will acquire all necessary permits/approvals and make all required
23 notifications. Oncor will coordinate with the Texas Department of
24 Transportation regarding any crossings of interstate and state highways
25 and of state-maintained roadways. If required, Oncor will prepare a Storm
26 Water Pollution Prevention Plan and submit a Notice of Intent to the Texas
27 Commission on Environmental Quality under the Texas Pollutant Discharge
28 Elimination System program. A cultural resources survey plan will be
29 developed with the Texas Historical Commission for the approved project.
30 Consultation with the United States Army Corps of Engineers will occur, as

1 necessary, following Commission approval of the Application to determine
2 appropriate permit requirements, including consultation under Section 404
3 of the Clean Water Act. If necessary, consultation with the U.S. Fish and
4 Wildlife Service will occur following Commission approval of the Application
5 to determine appropriate requirements under the Endangered Species Act.
6 Texas General Land Office miscellaneous easements will also be acquired
7 as necessary for crossing properties involving State of Texas property
8 interests, such as navigable streams.

9 Q. IS ANY PART OF THE PROPOSED TRANSMISSION FACILITIES
10 LOCATED WITHIN THE COASTAL MANAGEMENT PROGRAM
11 BOUNDARY AS DEFINED IN 31 TEXAS ADMINISTRATIVE CODE
12 § 503.1?

13 A. No. The Proposed Transmission Line Project is entirely outside the coastal
14 management program boundary.

15 **XI. GENERATION IMPACTS**

16 Q. DOES ONCOR EXPECT ANY GENERATOR TO BE PRECLUDED OR
17 LIMITED FROM GENERATING OR DELIVERING ELECTRICITY TO THE
18 ERCOT GRID DUE TO CONSTRUCTION OF THE PROPOSED
19 TRANSMISSION LINE PROJECT, OR THAT ONCOR'S CONSTRUCTION
20 WILL ADVERSELY AFFECT THE RELIABILITY OF THE ERCOT
21 SYSTEM?

22 A. No, Oncor does not anticipate that construction of the Proposed
23 Transmission Line Project will preclude or limit a generator from generating
24 or delivering power, or adversely affect the reliability of the ERCOT system.
25 As further discussed in Oncor witness Jared Gurley's direct testimony, the
26 Proposed Transmission Line Project will address reliability issues that may
27 otherwise limit the generation or delivery of electricity on the ERCOT grid.

28 **XII. CONCLUSION**

29 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

30 A. Yes, it does.

AFFIDAVIT

STATE OF TEXAS §
§
COUNTY OF TARRANT §

BEFORE ME, the undersigned authority, on this day personally appeared Kaleb Roberts who, having been placed under oath by me, did depose as follows:

"My name is Kaleb Roberts. I am of legal age and a resident of the State of Texas. The foregoing testimony and exhibit offered by me are true and correct, and the opinions stated therein are, to the best of my knowledge and belief, accurate, true and correct."



Kaleb Roberts

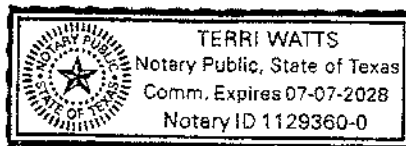
SUBSCRIBED AND SWORN TO BEFORE ME on this 24th day of July, 2024.



Notary Public, State of Texas

My Commission Expires

07-07-2028



PUC Docket No. 56799

Roberts – Direct
Oncor Electric Delivery Company LLC
Reiter Switch-Tesoro Switch 345 kV CCN

Kaleb Roberts
210 Sandstone Way Gordon, TX 76453
(219) 393-9539

Profile

I have 13 years' experience in the Electric Utility industry with a concentration in engineering and project management. I have the ability to plan, design, and manage projects and project teams. I currently serve as a Senior Engineer in Oncor's Transmission Engineering Line Design Department where I design, lead, and oversee engineering responsibilities related to Oncor's transmission line design projects. I am currently seeking the Manager Transmission I - Line Design position that is posted for Oncor.

Education

Purdue University North Central, 1401 S. U.S. 421 Westville, IN 46391
BS Construction Engineering and Management Technology - Graduated December 2010
AS Architectural Technology - Graduated December 19, 2008

Licenses

Professional Engineer – Texas – January 2024

Certifications

PMP® PMI Project Management Certification – February 2015

Skills

Distribution & Transmission Design	Proficient Understanding of Industry Codes
Leadership Skills	Project Management Skills
Ability to multi-task	Supervisory experience

Work experience

Oncor

- Transmission Line Design Engineer – June 2022 – Present
 - Produce engineering designs, drawings, specifications, and BOMs for transmission line construction projects 69kV – 345kV in accordance with Company practices and industry codes
 - Prepare budgetary cost estimates and Work Authorizations to obtain financial approval
 - Communicate, coordinate, and interface with other internal and external stakeholders to assure that line designs and construction practices are appropriate
 - Provide design solutions and engineering designs as requested to resolve issues
 - Provide technical assistance to Transmission operations and maintenance
 - Incorporates personnel and public safety as a priority in the design of all projects
 - Work with multiple stakeholder groups to lead positive change and improvements to processes and procedures
 - Provide leadership and guidance to internal and external engineering teams
 - Actively look for opportunities to teach and provide insight into engineering designs
 - Serve as Oncor's SME on steel lattice tower designs

NIPSCO

- Transmission Line Engineer – October 2018 – June 2022
 - Plan, estimate, design and manage complex electric transmission line projects according to Company Standards, sound engineering practices, and applicable codes.
 - Prepare detailed drawings, permits, easements, material estimates, and reservations; along with all other documents required for project completion.
 - Manage projects to completion and provide engineering direction throughout the project life cycle.
 - Work with external engineering contractors to ensure project quality, constructability, as well as conformance to all company standards and applicable codes.
 - Provide technical support for the operations of all Company and customer transmission lines.
 - Research, specify, order, and coordinate material purchases and establish stocking levels of major transmission line electrical equipment.
 - Verify Transmission Line Engineering's methods and procedures are kept current with the latest and best industry safety requirements and engineering practices.
 - Interfaces and works with various interconnected companies, utilities, and entities such as INDOT, REMC, FERC, NERC, and Midwest ISO where appropriate.
- Engineer III / Joint Facilities Project Manager - June 2014 – October 2018
 - Manage Joint Use contracts to ensure contracts are current, compliant with FCC, State, and local guidelines, as well as NIPSCO standards. Support documentation by acquiring and maintaining a record of all bonds and insurance certificates for each company.
 - Create and update policies, procedures, standards, job aids, PM tools, and processes.
 - Managed and was responsible for initiating, planning, executing, monitoring and controlling, and closing of new attachment request projects.
 - Monitors FCC timelines and ensures all projects are in compliance.
 - Continuously improving processes to enhance operational excellence.
 - Manages Colocations projects (communications equipment/towers in our substations or on our transmission towers) dealing with equipment upgrades, installs, and retires.
 - Interact and coordinate with multiple internal and external stakeholders to meet customer requirements.
 - Represent company as SME regarding wireline/wireless attachments
 - Engineer electric system improvement and reliability projects
- Distribution Project Engineer – June 2011 – June 2014
 - Evaluate, design, estimate, and project manage the maintenance and construction of electric distribution systems.
 - Design and manage all projects in accordance with applicable requirements, standards and codes, ensuring safe, reliable service to customers.
 - Design and manage maintenance/system improvement projects to ensure timely completion of compliance and/or system related issues.

- Manage customer requirements for electric service by meeting customer and project milestones within a timely manner.
 - Engineer and manage Public Improvement Projects
 - Prepare/complete complex detailed CAD drawings, permits, easements, other relevant documents, and document projects in computerized systems.
 - Provide engineering oversight, coordination, and direction to all project stakeholders
- Engineering Technician – December 2010 - June 2011
 - Worked with customers to fulfill their electrical and gas services.
 - Design and manage System Improvement projects
 - Worked on specialty projects - Meter encroachments
- Engineering - Electrical Standards Intern - June 2010 - December 2010
 - Revised and update standards.
 - Revise and update pole book.
 - Investigate problems with electric part failures or issues.
 - Analysis part problems and help resolve issues.

References

Andrew Cook
Manager Transmission Line Design
Oncor Electric Delivery Company LLC
Fort Worth, TX 76102
(817) 455-0367

Jerrid Yankauskas
Manger Electric Transmission Line Engineering
NIPSCO
Merrillville, IN 46410
(219) 647-5036

Eric Groat
Electric Line Manager
NIPSCO
Crown Point, Indiana 46307
(574) 536-4879