

THE POWER OF YOU - Delivering Right-Of-Way Solutions to Texas

Successes & Challenges from a Large Utility's Perspective

Oncor and TxDOT

Track 1 Session 2 Day 2 - 12/13/2023

Utility Week 2023



Presenters: Matt Reinhard and Richard Brewster



Matt graduated from the University of North Texas with a degree in Mechanical Engineering in The Spring of 2018. In September 2018, Matt would begin working for Oncor as a Line Design Engineer in the Transmission Line Engineering group. In Spring of 2020, Matt would take over all Transmission Line Relocation projects as a Project Manager primarily working on Transmission Line relocations for TxDOT highway projects. In 2022, Matt would then transition to the Oncor Regulatory group where he currently works.



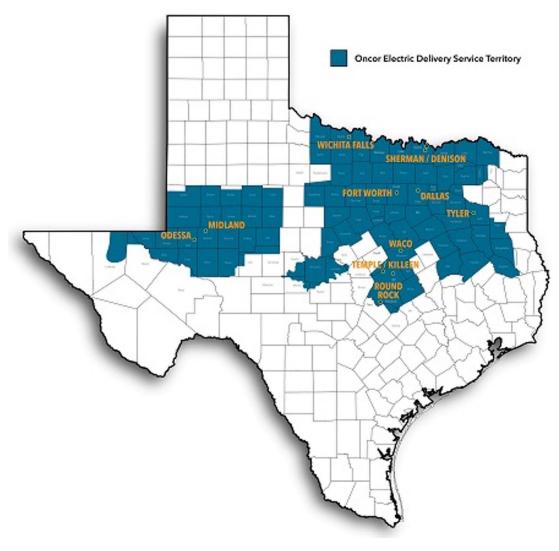
Richard Brewster - Oncor Electric Delivery, Dallas

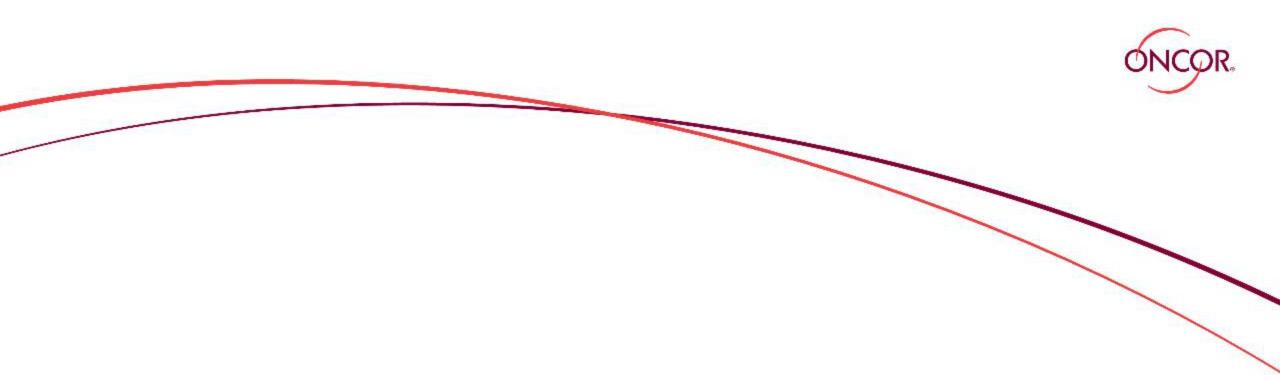
Richard has worked in the design arena in East Texas and the Dallas Area Metroplex for 41.5 years. Primary roles in the past have been distribution electric design for capital improvement projects for various municipalities, TXDOT, DART, railroads, etc. For the past 9+ years he has been in a Supervisory position overseeing all CIP projects located in the Eastern half of Oncor's service territory. Richard obtained a degree from Tyler Junior College in 1984, completed various continuing education courses and served on Company committees over the years.

Supporting Texas

• ONCOR'S ROLE IN TEXAS

- Largest electricity transmission and distribution company in TX
- "The poles and wires company" that <u>delivers</u> electricity
- Oncor does <u>not</u> own or operate power generation facilities, or sell, purchase or offer electricity retail services





Challenges and Successes - Transmission

Challenges – Transmission

• ROW

- Oncor Transmission will almost always be on private easement.
- Issues may arise in areas of overlapping easement between Oncor and TxDOT.
- ERCOT rules for outages
- ERCOT will not let Oncor take Transmission outages on lines during the Summer
 - This creates two construction seasons when actual work can take place.
 - ERCOT outage moratorium runs from May 15 September 15
 - Transmission work construction work will be done on de-energized lines: Must have a planned construction line outage for construction to begin.
 - Outages for Transmission can be difficult to obtain: Outages must be submitted 120 days prior to construction start. ERCOT can also cancel outages with up to 24 hours prior notice.

Challenges – Transmission

• Estimates vs Actuals – Contractor Labor Costs

 Can seem like hitting a "moving target" – Labor rates for bids continually changing.

Material Lead Times

- Structures for Transmission are purpose designed and built for that specific location
 - Leads to long lead times as structures for transmission will be either steel poles, concrete poles, or the steel lattice towers
 - Buy America compliancy
- Industry "Language Barrier"
- TxDOT doesn't speak Electric utility, Oncor doesn't speak Highway
 - This can make working out issues regarding project scope, ROW and even the eligibility ratio for the Standard Utility Agreement tricky

Factors for Success – Transmission

- Early Project Coordination
- Early coordination will allow for Transmission team to acquire survey. Work with TxDOT to determine eligibility ratio, Get agreements in place, work around material lead times and ERCOT rules to get construction started.

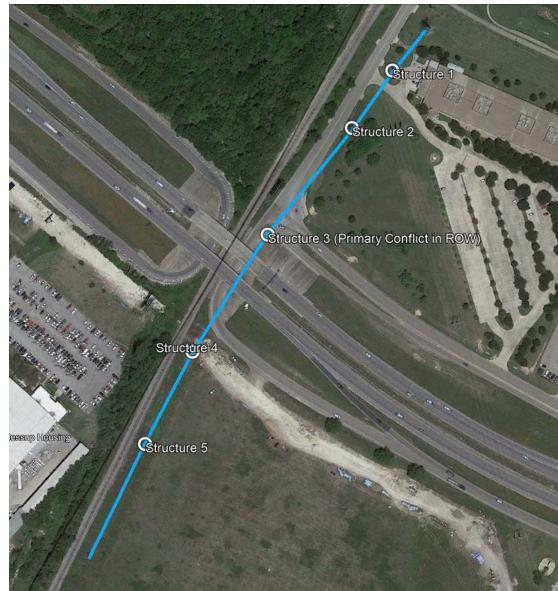
• Embracing "Spirit of Cooperation"

- Open mindedness and looking for "win/win" solutions
 - Always necessary Sometimes there are grey areas where TxDOT rules and Oncor Easement rights/PUC rules may be unclear or conflict
- Patience and creativity when working with our partners
 - Patience when trying to explain project scopes, easement rights, design solutions and policies.
 - Creativity in changing how we explain our designs/position on issues as well as creativity in looking for outside the box solutions which benefit both Oncor and TxDOT.



The Plan:

- TxDOT building new bridges on the service lanes to cross the railroad tracks
- Oncor would need to delete structure 3, and replace Structures 1, 4 and 5 with taller steel monopoles as well as move and replace structure 2 with a taller steel monopole to accommodate new bridges.
- Relocation would be completed before TxDOT let date in October 2021.
- But.....this project did not go according to plan.



• What Happened.....

- Challenges with COVID pandemic as root cause for what went wrong....
 - Work from home situation, coupled with retirements from Team Oncor led to breakdowns in communication.
 - Project Let Date would change.
 - Standard Utility Agreement would not be executed until December 2021, after project let date.
 - Concerns about feasibility of being able to relocate before the May 15, 2022 ERCOT outage restrictions.

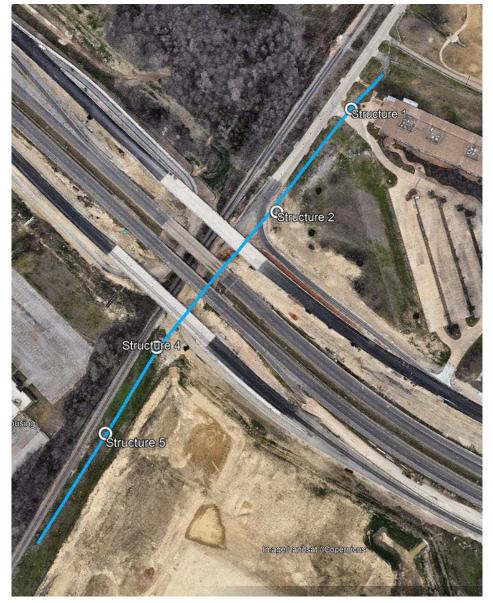
• The Solution:

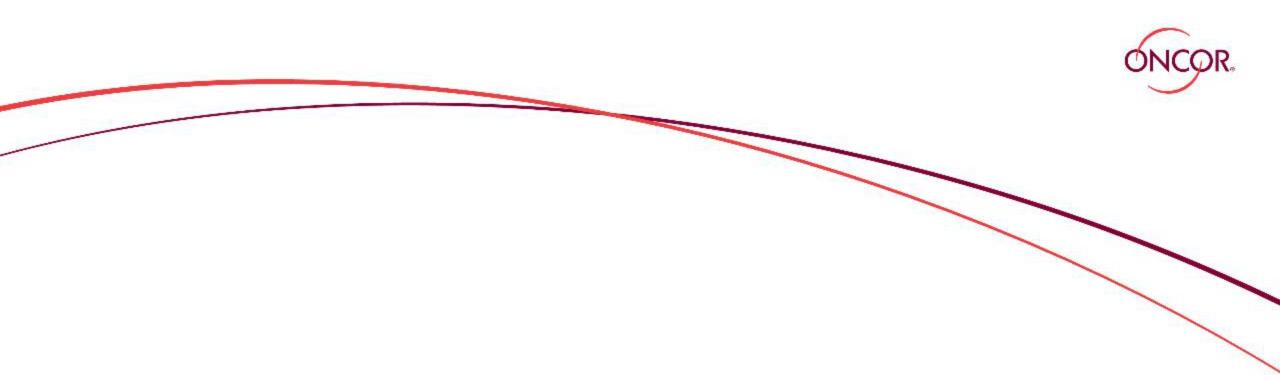
- Oncor would try to work with vendors and construction contractors to relocate before the May 15, 2022 ERCOT outage restrictions
- To Accomplish this feat Oncor and TxDOT would:
 - Hold Bi-Weekly meetings to coordinate design/construction. Oncor crews would be working on site at the same time as TxDOT contractors. Crews would need to work safely around each other.
 - Oncor would work with material vendors to get materials in time for springtime construction. Oncor would also work with construction contractors to line up available crews for possible spring construction
 - Try to schedule an April May outage.
 - Both Oncor and TxDOT would hope for a run of really good luck.....



The Results:

- Oncor would be able to get materials and construction contractors lined up for an April 4 Outage and construction start date.
- TxDOT moved contractors to another area of project work on while Oncor contractors relocated the Transmission line to accommodate new TxDOT construction.
- Construction went off as planned!!!
- Project was finished and Oncor crews moved off site around May 12, 2022.
- SUCCESS!!!!!!!!





Challenges and Successes - Distribution

Challenges – Distribution

Construction Area Protection

- Frequent trips to re-stake facility locations
- Potential damage to newly installed facilities
- Contractor Labor Costs
- Difficult to estimate relocation expenses accurately due to fluctuating labor costs.
 - Especially after contracts/agreements are signed

Challenges – Distribution

ROW and Utility Easements for Relocation

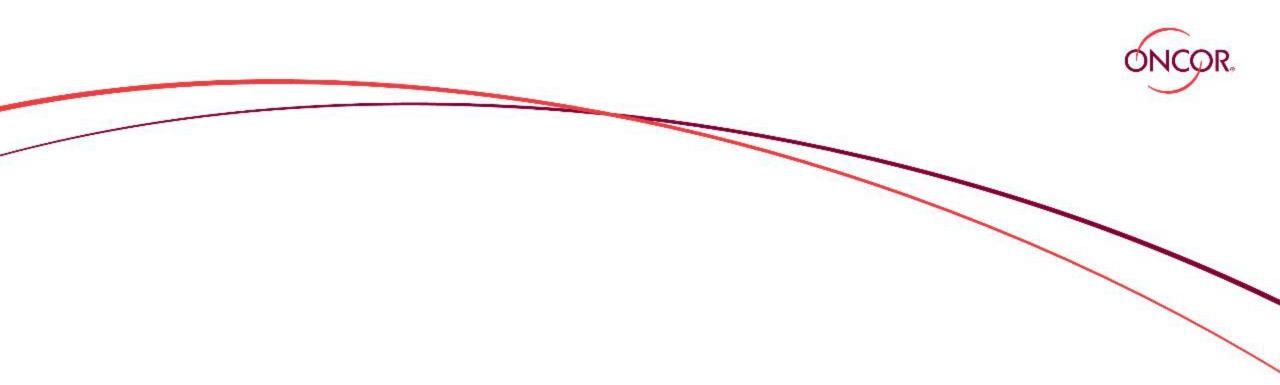
- Possibility of obtaining utility easements at the same time as securing new ROW for road construction.
 - May be an issue due to TxDOT not participating in utility land rights.
- Verifying and controlling utility placements into designated areas of new ROW
- Frequently encounter other underground utilities placed incorrectly affecting primary overhead installations along the ROW line.
 - Can lead to crowded ROW in areas designated for utilities.

Factors for Success – Distribution

- Advance notice and coordination of future TxDOT projects
- Policy change by TxDOT in recent years now provides for extended advance notice of upcoming projects.
 - Allows Oncor ample time to develop acceptable designs for relocation of facilities
 - Also allows for extended construction time prior to road construction let dates.
- Regular Coordination meetings between TxDOT and Oncor on each project
- Allows for regular discussions on projects where issues and need dates can be identified for design and construction of relocations.

I-35E CDA – Dallas District

- Scheduling helped to direct Oncor resources to most critical locations of the project early on in project timeline.
- Developed relationships with all parties involved from TxDOT and design/build contractor to coordinate construction
 - Allowed for prioritization of Oncor project schedules during project timeline.
- All of this gave Oncor the ability to allocate large contingents of contractor crews to prioritize and work on areas identified by TxDOT and the design/build contractor



Comments? Questions?



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