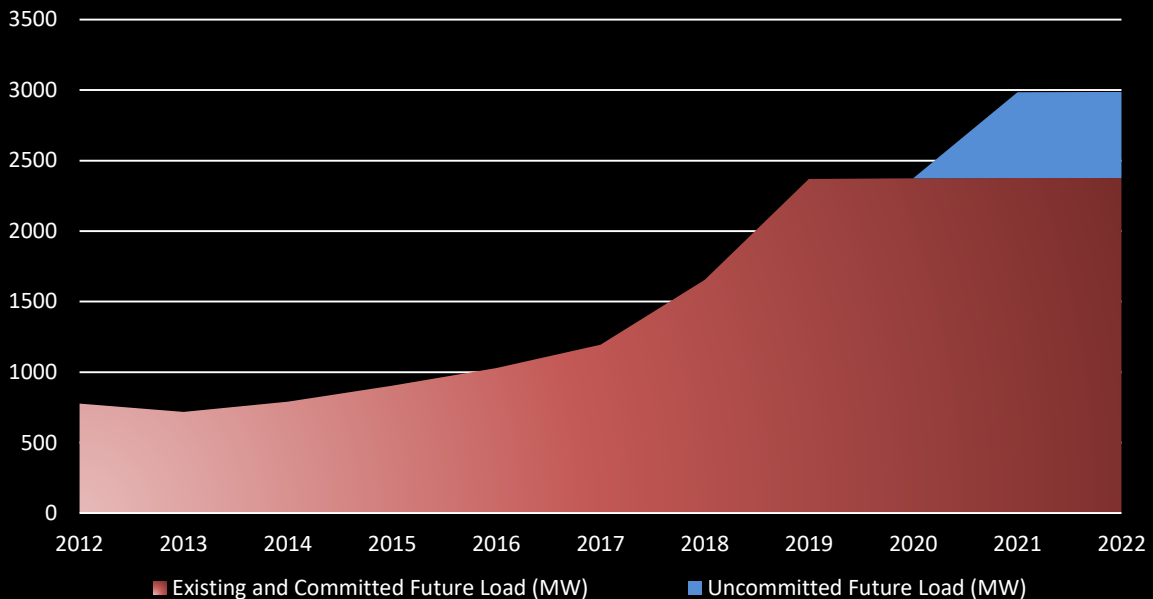


Project Need-Transmission

345 kV Bailey - Jones Creek

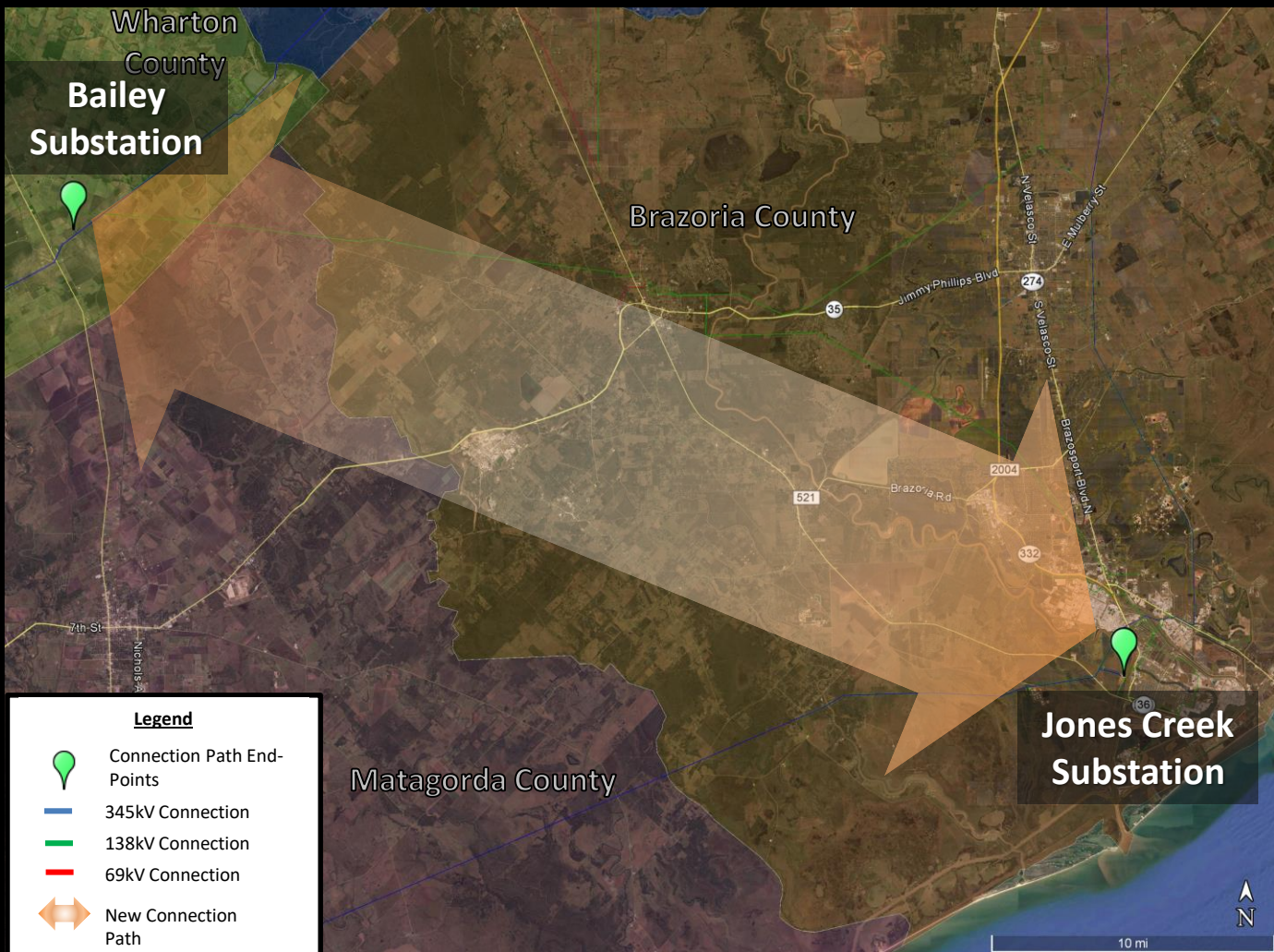
Freeport/Brazoria Area Load Forecast



- ❖ **Serve new load in the Brazoria/Freeport area.** The Brazoria/Freeport region's business-friendly environment has sustained significant load growth, nearly doubling since 2012. It is forecasted to have an approximate 130% load growth between 2016 and 2019. Additionally, 600 MW of potential load growth by 2022 is under evaluation. The new Bailey to Jones Creek transmission line is needed to serve these new loads.
- ❖ **Increase reliability in the Brazoria/Freeport area.** The new Bailey to Jones Creek transmission line increases the capacity and voltage stability of the region, ensuring the area will remain attractive to future economic growth.
- ❖ **Support future growth.** The Bailey to Jones Creek transmission line will provide additional options to serve future load growth beyond 2022.

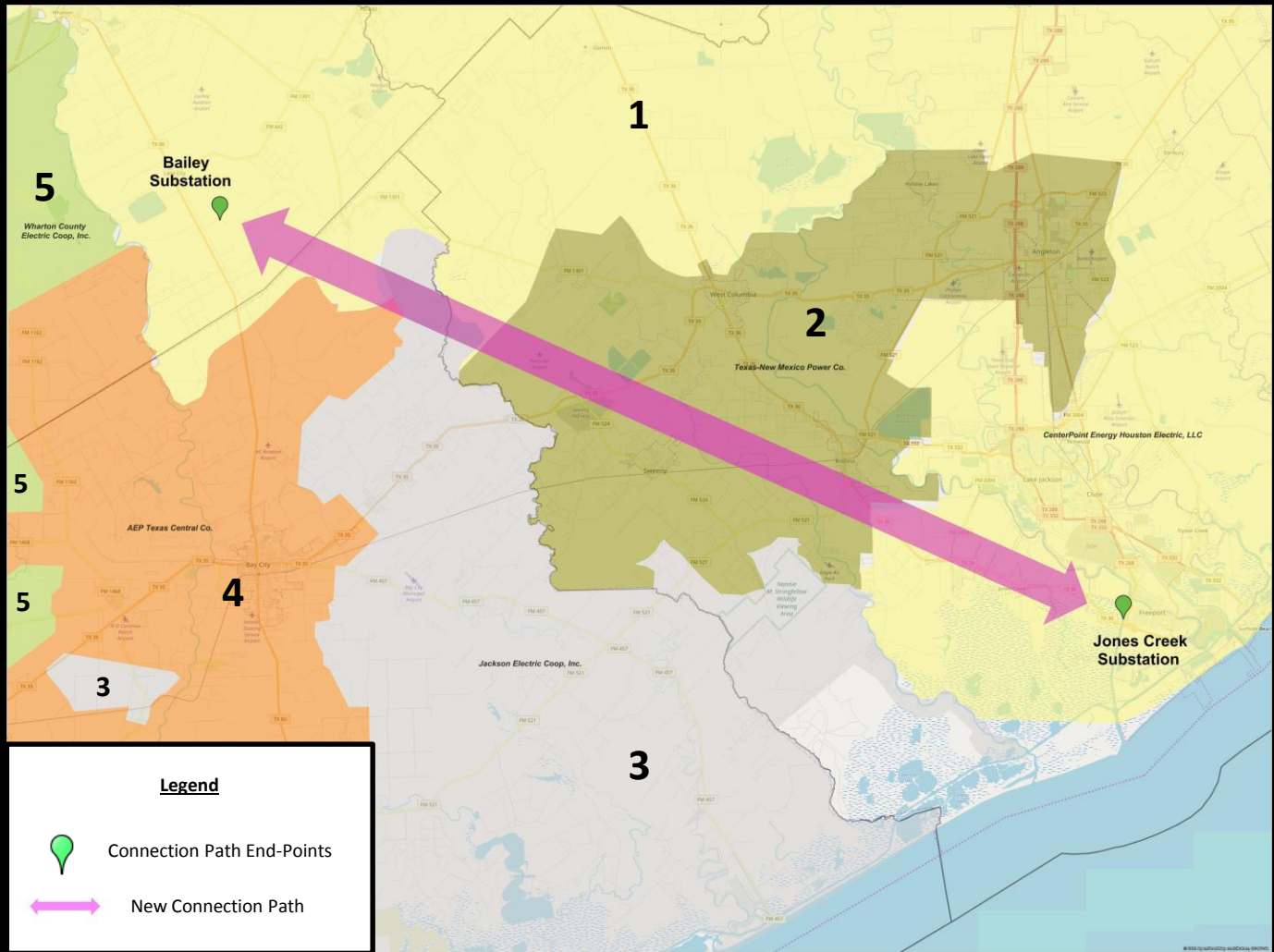
Project Need-Transmission

345 kV Bailey - Jones Creek



- ❖ Both CenterPoint Energy and ERCOT independently concluded that constructing a new 345kV connection between Bailey and Jones Creek substations is needed to improve the system reliability of the region.
- ❖ ERCOT studied 5 different endpoint combinations for the project.
- ❖ The project will improve the reliability and load serving capabilities of the ERCOT transmission system.

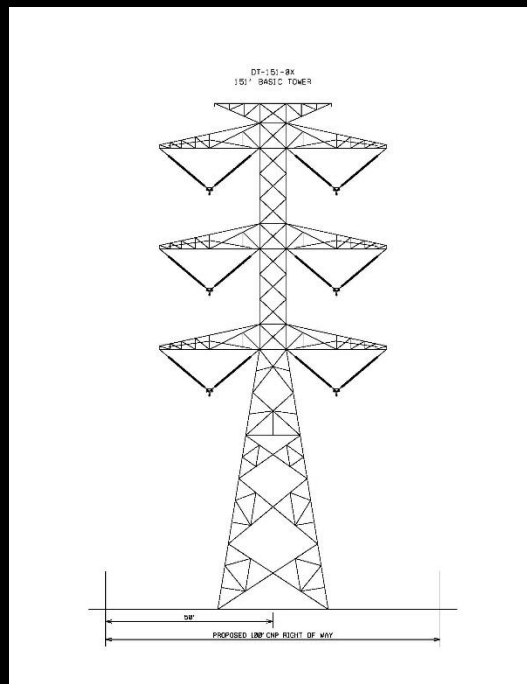
Electric Utility Service Areas in the Project Study Area



| # | Electric Utility Service Area | Transmission Grid NERC Region/ISO |
|---|------------------------------------|-----------------------------------|
| 1 | CenterPoint Energy | TRE/ERCOT |
| 2 | Texas-New Mexico Power Company | TRE/ERCOT |
| 3 | Jackson Electric Coop, Inc. | TRE/ERCOT |
| 4 | AEP Texas Central Company | TRE/ERCOT |
| 5 | Wharton County Electric Coop, Inc. | TRE/ERCOT |

Typical 345 kV Construction Double-Circuit Steel Towers-Vertical 100' Wide Right-of-Way

*ROW width may vary according to span length

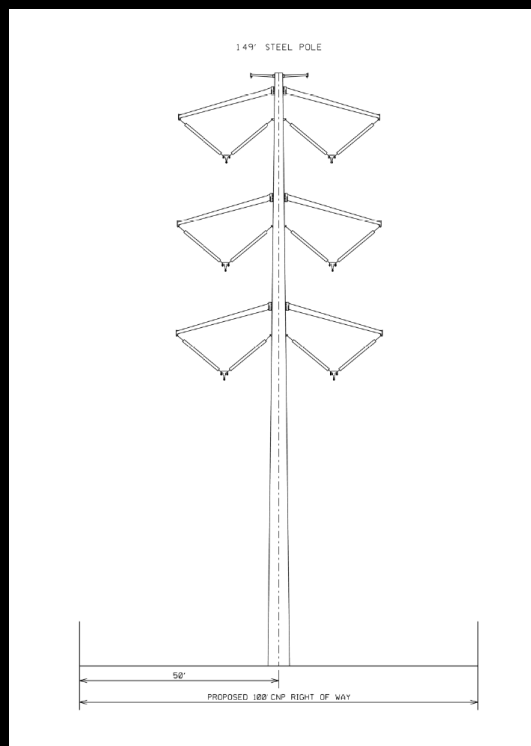
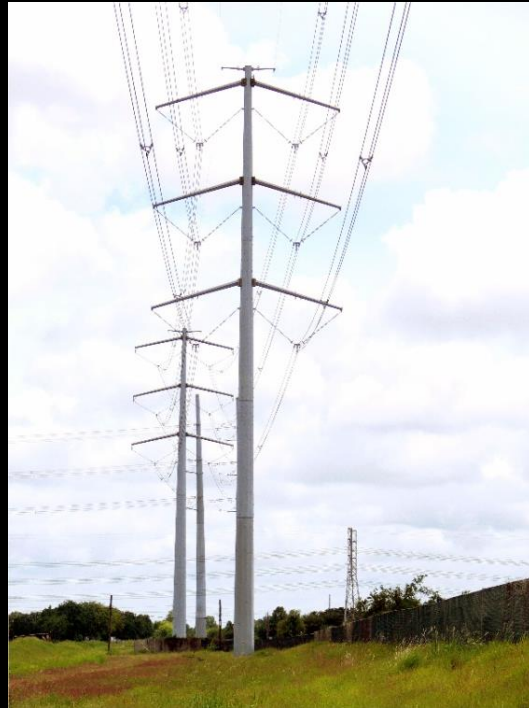


Typical 345 kV Construction

Double-Circuit Steel Poles

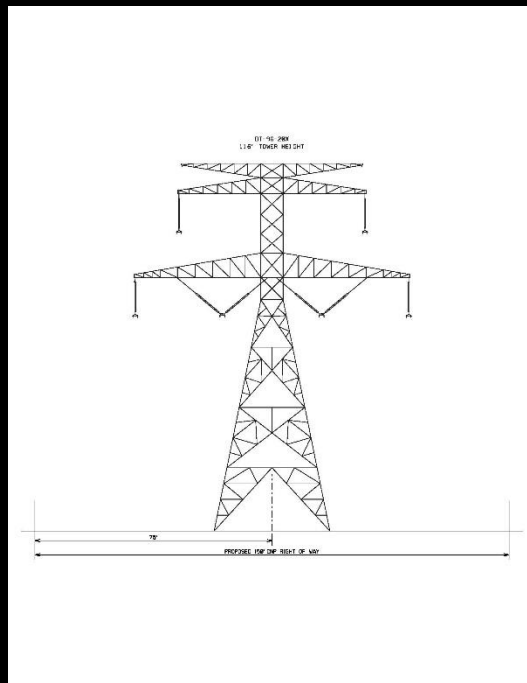
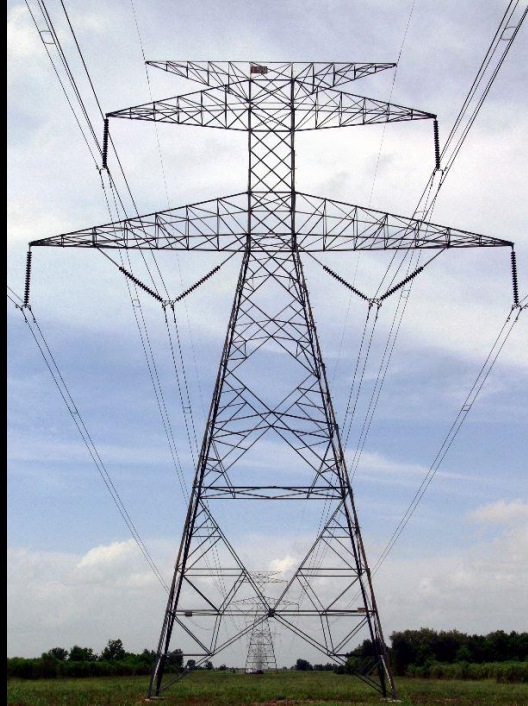
100' Wide Right-of-Way

*ROW width may vary according to span length



Typical 345 kV Construction Double-Circuit Steel Towers-Delta 150' Wide Right-of-Way

*ROW width may vary according to span length



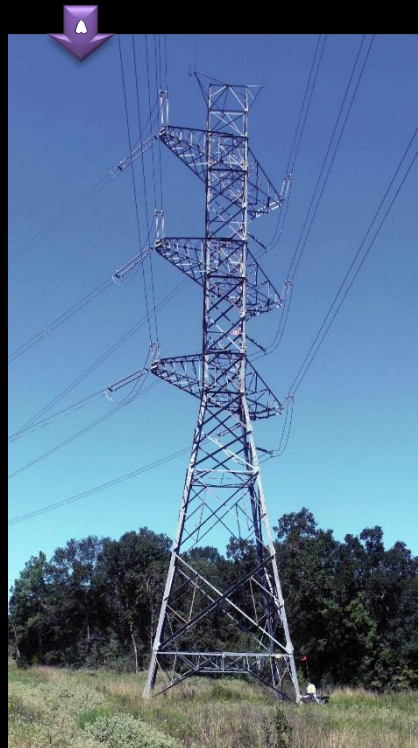
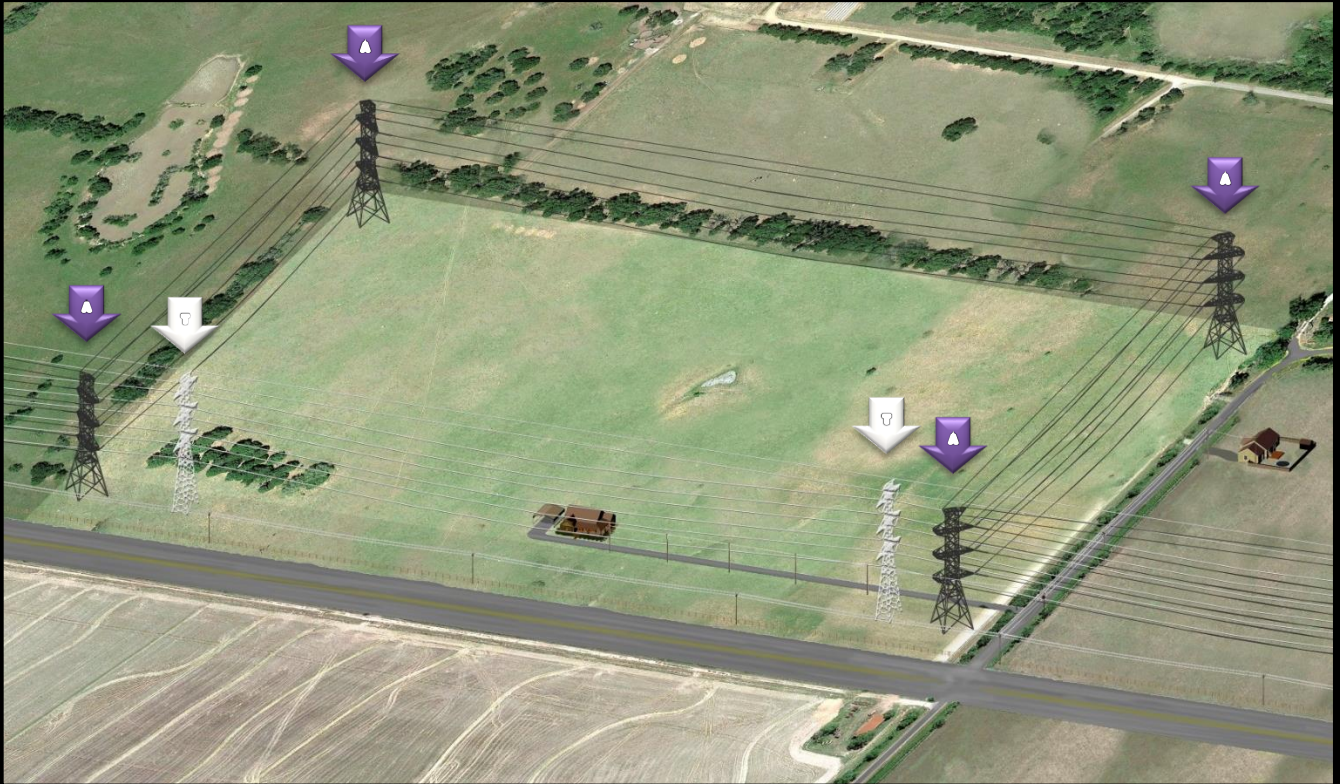
Typical 345 kV Steel Tower Angle Structure



Typical 345 kV Steel Pole Angle Structure



EXAMPLE: TRANSMISSION STRUCTURE REQUIREMENTS ROUTING ALONG ROADWAY VS. REAR PROPERTY



EXAMPLE: TRANSMISSION STRUCTURE REQUIREMENTS ROUTING ALONG ROADWAY VS. REAR PROPERTY LINES

