



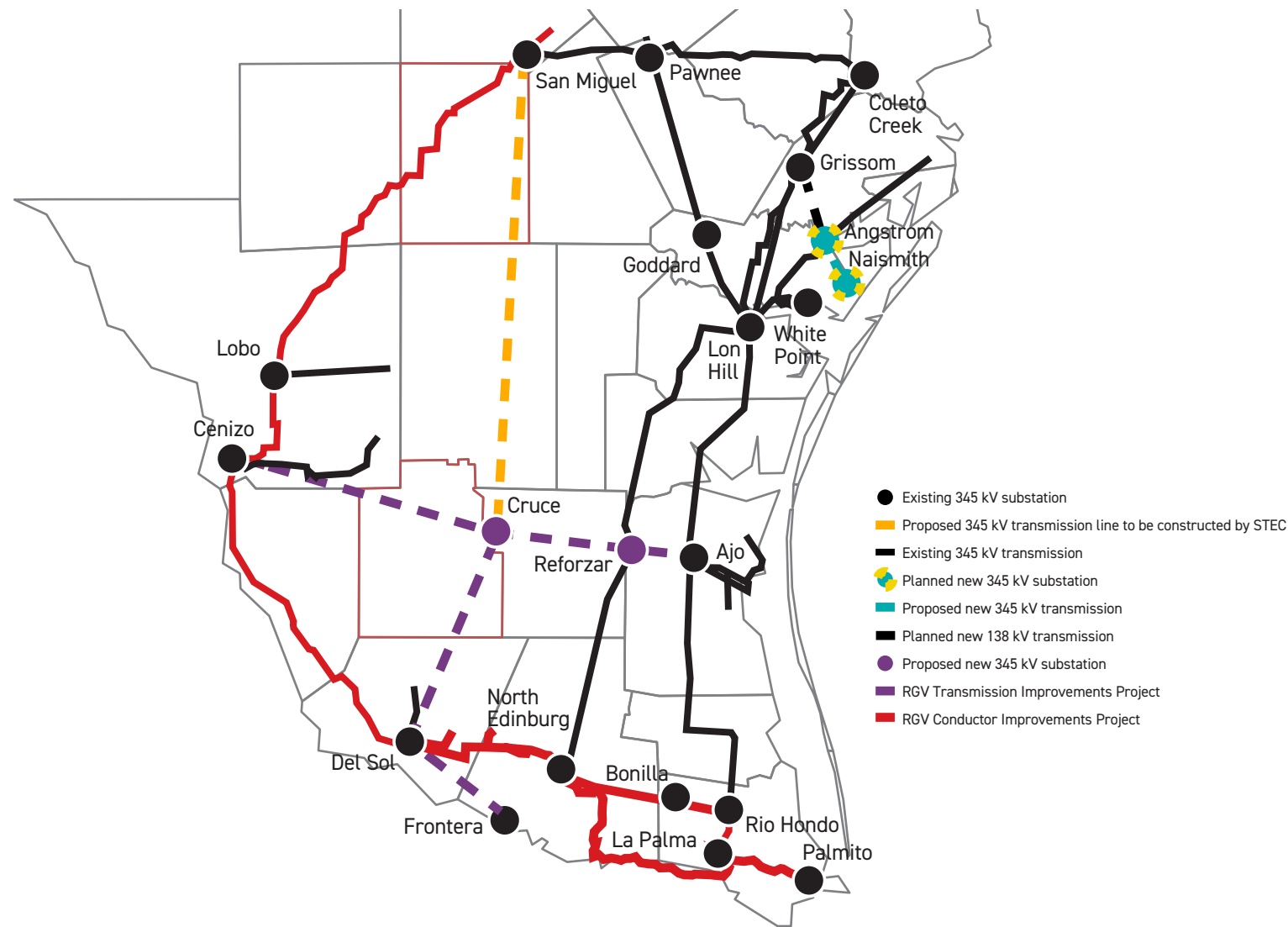
# DEL SOL - FRONTERA

## TRANSMISSION IMPROVEMENTS PROJECT

## WELCOME TO OUR VIRTUAL OPEN HOUSE

As a result of the COVID-19 pandemic and social distancing recommendations made by the Centers for Disease Control and Prevention (CDC), AEP Texas invites you to attend this virtual open house in order to minimize in-person contact. AEP Texas remains committed to listening to your concerns and answering your questions, but we are also committed to keeping our customers and employees safe and healthy. We welcome your feedback via telephone and email as we strive to make the most informed decisions possible.

# REGION OVERVIEW



Following Texas' winter storms in February 2021, the Electric Reliability Council of Texas (ERCOT) recognized the need for additional transmission lines in the Rio Grande Valley (RGV) and endorsed AEP Texas and Electric Transmission Texas (ETT) plans for transmission system improvements to strengthen the region's system.

AEP Texas and ETT developed the RGV Transmission Improvements Project to implement these necessary improvements for reliability in the Valley, and plan to add about 190 miles of 345-kilovolt (kV) transmission line and two substations to the Texas grid by the end of 2026.



# REGION OVERVIEW

The Rio Grande Valley Transmission Improvements Project encompasses five separate transmission line projects, each requiring separate Certificate of Convenience and Necessity approval by the PUC. These projects are in development and require feedback from the community prior to filing regulatory applications with the Public Utility Commission of Texas (PUC).

## DEL SOL – FRONTERA

Counties: Starr and Hidalgo  
Open Houses: Oct. 2022

## CRUCE – DEL SOL

Counties: Duval, Jim Hogg, Brooks, Starr  
Open Houses: Dec. 2022

## CENIZO – CRUCE

Counties: Webb, Zapata, Jim Hogg, Duval, Brooks  
Open Houses: Feb. 2023

## CRUCE – REFORZAR

Counties: Duval, Jim Hogg, Jim Wells,  
Brooks, Kleberg, Kennedy  
Open Houses: Feb. 2023

## AJO – REFORZAR

Counties: Brooks, Kleberg, Kennedy  
Open Houses: Feb. 2023

Affected landowners within the project areas can expect to receive notification of the projects and open houses. \*Dates subject to change

# PROJECT NEED & BENEFITS

## WHY IS THE PROJECT IMPORTANT TO OUR COMMUNITY?

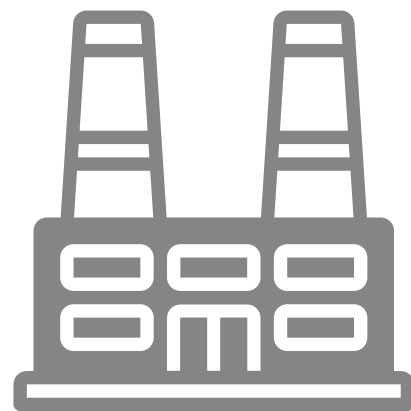
### THE DEL SOL - FRONTERA TRANSMISSION IMPROVEMENTS PROJECT BENEFITS THE VALLEY BY:

- Improving regional reliability and resiliency with the addition of a new 345-kV transmission line that has been determined critical by ERCOT.
- Helping strengthen the power grid against severe weather events.
- Reducing the likelihood and duration of wide, community-sustained outages.
- Providing additional capacity for growth and economic development

# HOW THE SYSTEM WORKS

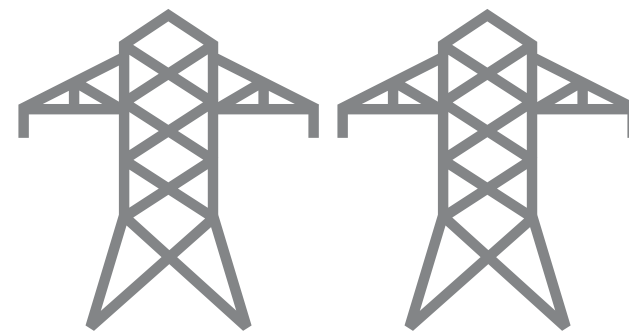
## HIGH VOLTAGE

LOCAL TRANSMISSION >>



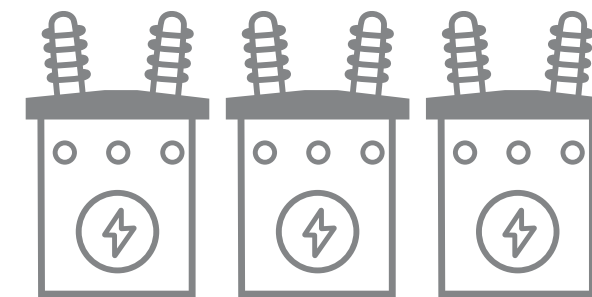
### 1) GENERATION STATIONS

AEP Texas produces electricity at coal, natural gas, nuclear, wind and hydro-electric power stations and then transports it long distances over transmission lines.



### 2) EHV TRANSMISSION

Extra High Voltage (EHV) electric transmission lines are generally 765 kilovolt (kV), 500 kV, and 345 kV on AEP Texas' system.



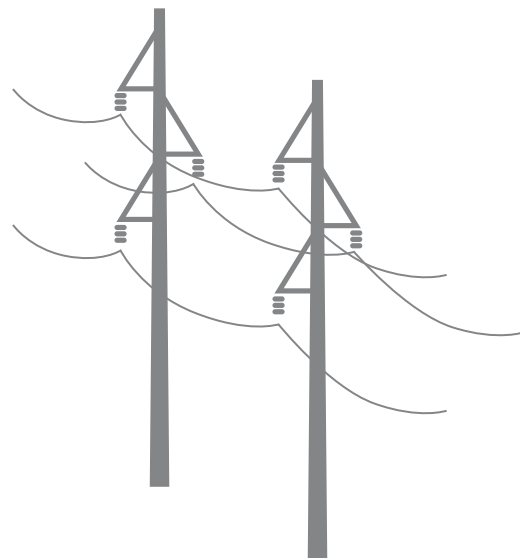
### 3) SUBSTATIONS

Substations direct the flow of electricity and either decrease or increase voltage levels for transport.

# HOW THE SYSTEM WORKS

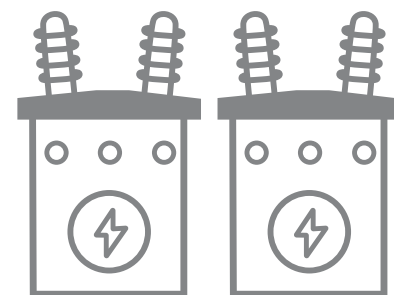
## LOCAL TRANSMISSION

DISTRIBUTION >>



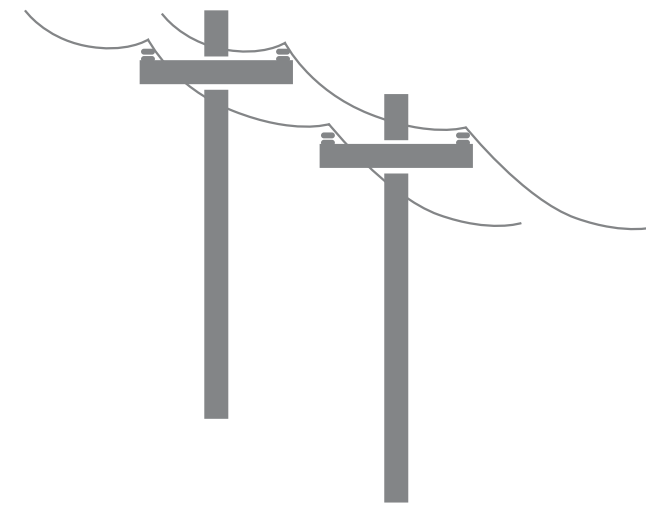
### 4) LOCAL TRANSMISSION

AEP Texas typically uses 69 kV and 138 kV transmission lines to move power shorter distances - for example, to different parts of a city or county.



### 5) SUBSTATION

Substations transform 69 kV and 138 kV electricity into lower distribution level voltages such as 34.5 kV, 12 kV, or 7.2 kV.

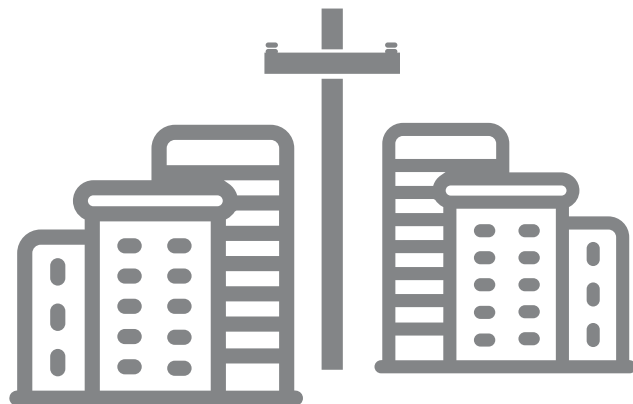


### 6) PRIMARY DISTRIBUTION

These main lines (also called circuits) connect substations to large parts of the community.

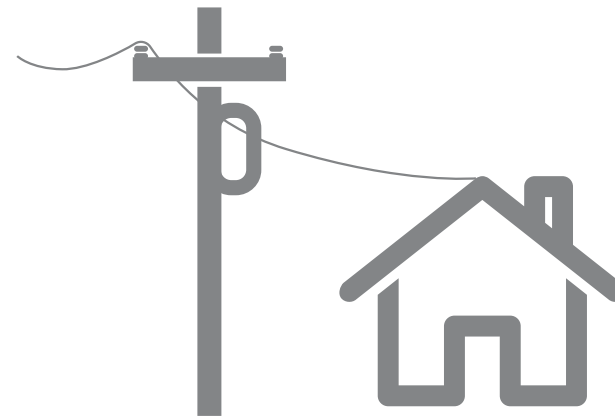
# HOW THE SYSTEM WORKS

## DISTRIBUTION



### 7) LATERAL DISTRIBUTION

These smaller capacity lines deliver electricity to neighborhoods and other smaller groups of customers.



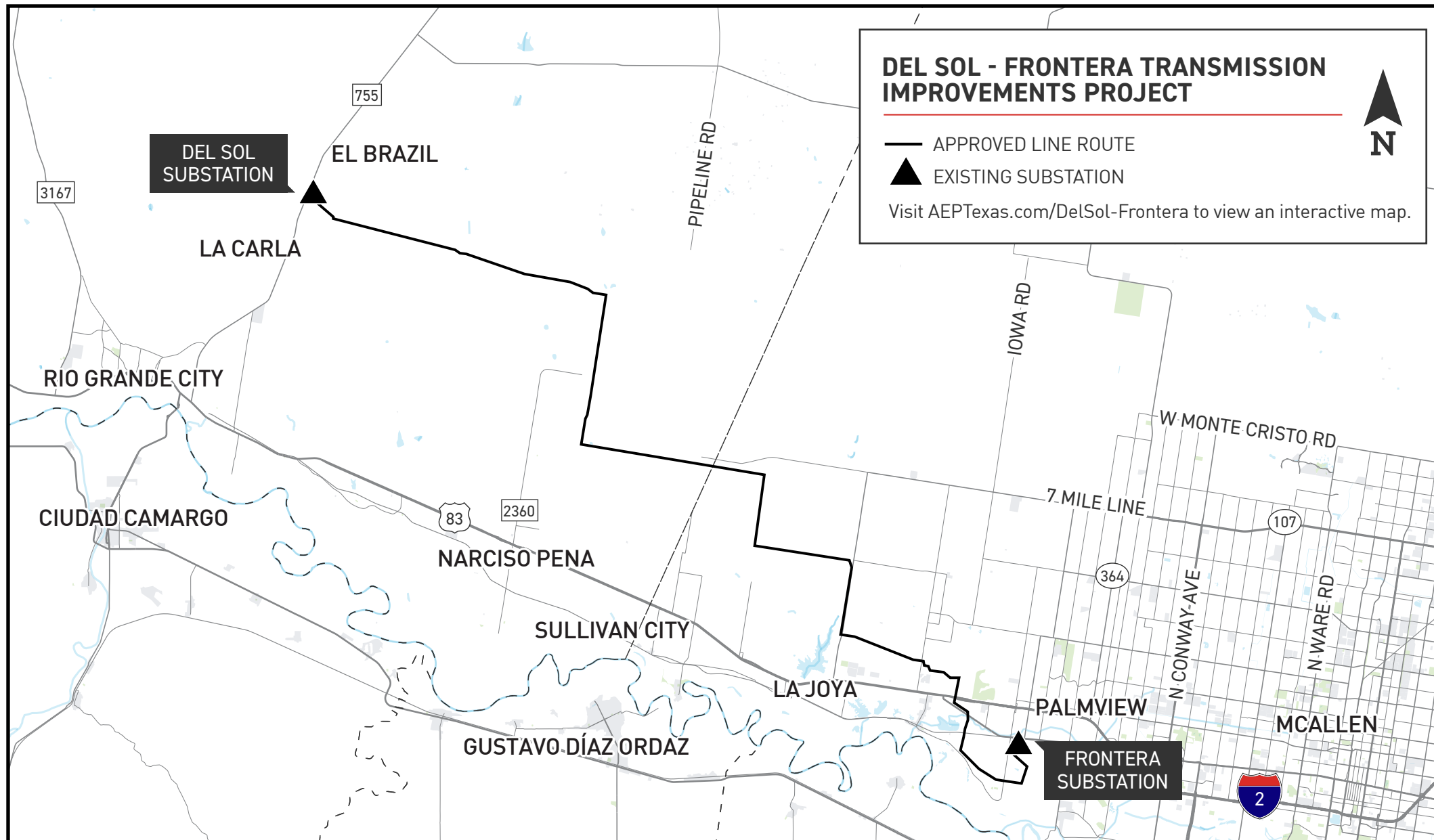
### 8) INDIVIDUAL SERVICE

Smaller transformers step down voltage to levels customers can use. 120/240 volts is typical for an individual residence.

TO USE AN ANALOGY, ELECTRIC TRANSMISSION IS SIMILAR TO OUR NATIONAL ROAD SYSTEM. THREE KINDS OF POWER LINES EXIST BETWEEN POWER PLANTS AND HOMES AND BUSINESSES:

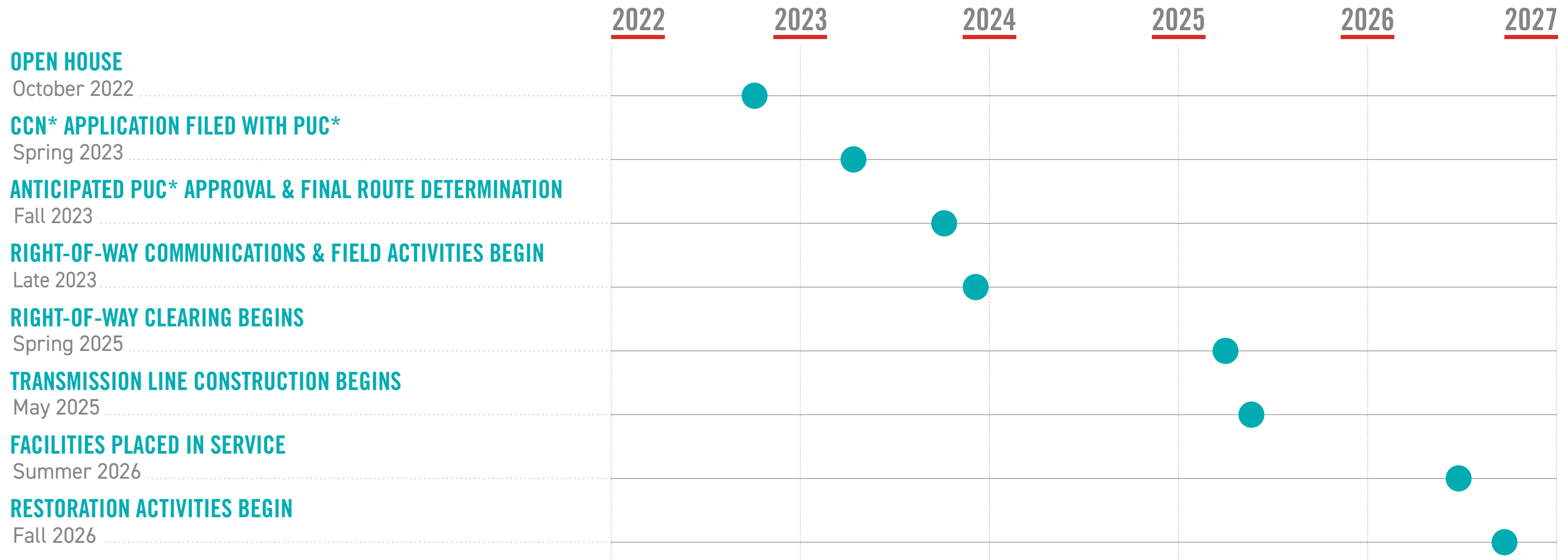
- Extra-high Voltage (EHV) lines are like electrical interstate highways.
- High-voltage local transmission lines are like four-lane roads.
- Distribution lines are like two-lane roads that eventually connect to your driveway.

# PROJECT MAP





# PROJECT SCHEDULE



\*CCN: Certificate of Convenience and Necessity; PUC: Public Utility Commission of Texas

\*\*Timeline subject to change.

# TRANSMISSION LINE PROJECT REVIEW PROCESS

A transmission addition is determined necessary for service reliability or connection of new load/generation.

## TRANSMISSION ROUTING PROCESS:

### ENVIRONMENTAL ASSESSMENT AND ROUTING STUDY

- Define study area
- Identify routing link constraints

### ESTABLISH PRELIMINARY ROUTING LINKS

- Invite public involvement (tonight's Open House)
- Finalize links, develop routes

### SELECT ALTERNATIVE ROUTES FOR FILING

## PUC APPROVAL PROCESS:

### AEP TEXAS FILES APPLICATION AT PUC

- Direct mail notice of application to landowners, local public officials, and electric utilities
- Publication of notice in local newspaper
- 45-Days intervention period

### IF NO HEARING IS REQUESTED

- Application approved administratively in 80 days

### IF HEARING IS REQUESTED

- Application processed within one year
- Hearing by administrative law judge (ALJ)
- ALJ makes recommendation to PUC

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## PUC MAKES THE FINAL DECISION:

- Approve or deny application
- If approved, decides location of approved route



# TRANSMISSION ROUTING PROCESS

## ENVIRONMENTAL ASSESSMENT & ROUTING STUDY:

### DEFINE STUDY AREA

- Based on the end points for the transmission line
- Large enough for an adequate number of geographically diverse routes

### IDENTIFY ROUTING CONSTRAINTS

- Obtain aerial photos of the study area
- Request information from federal, state, and local agencies
- Gather information regarding natural, cultural, and human resources
- Gather data from published literature and on-ground inspection
- Gather property boundary information from public records
- Identify potential constraint areas such as communities, subdivisions, airports
- Identify environmental and land-use constraints
- Identify compatible routing opportunities such as existing utility corridors

## ESTABLISH ALTERNATIVE ROUTES:

### INVITE PUBLIC INVOLVEMENT (TONIGHT'S OPEN HOUSE)

- Notify landowners of project and open house meetings
- Provide maps showing potential preliminary routing links
- Hold open house meetings to describe the project and solicit input
- Evaluate input from open house meeting attendees and questionnaires
- Respond to inquiries
- Evaluate any additional input from the public, local officials, and agencies
- Revise preliminary routing links as necessary

### EVALUATE ALTERNATIVE ROUTES CONSIDERING FACTORS SUCH AS:

- Environment
- Land Use
- Compatible Easements
- Apparent Property Boundaries
- Parks & Recreational Areas
- Historical & Archaeological Lines
- Engineering Constraints
- Cost

### SELECT ALTERNATIVE ROUTES FOR FILING

# PROPOSED STRUCTURES



The project includes AEP's BOLD (Breakthrough in Overhead Line Design) technology, which are capable of operating more efficiently than conventional transmission pole designs.

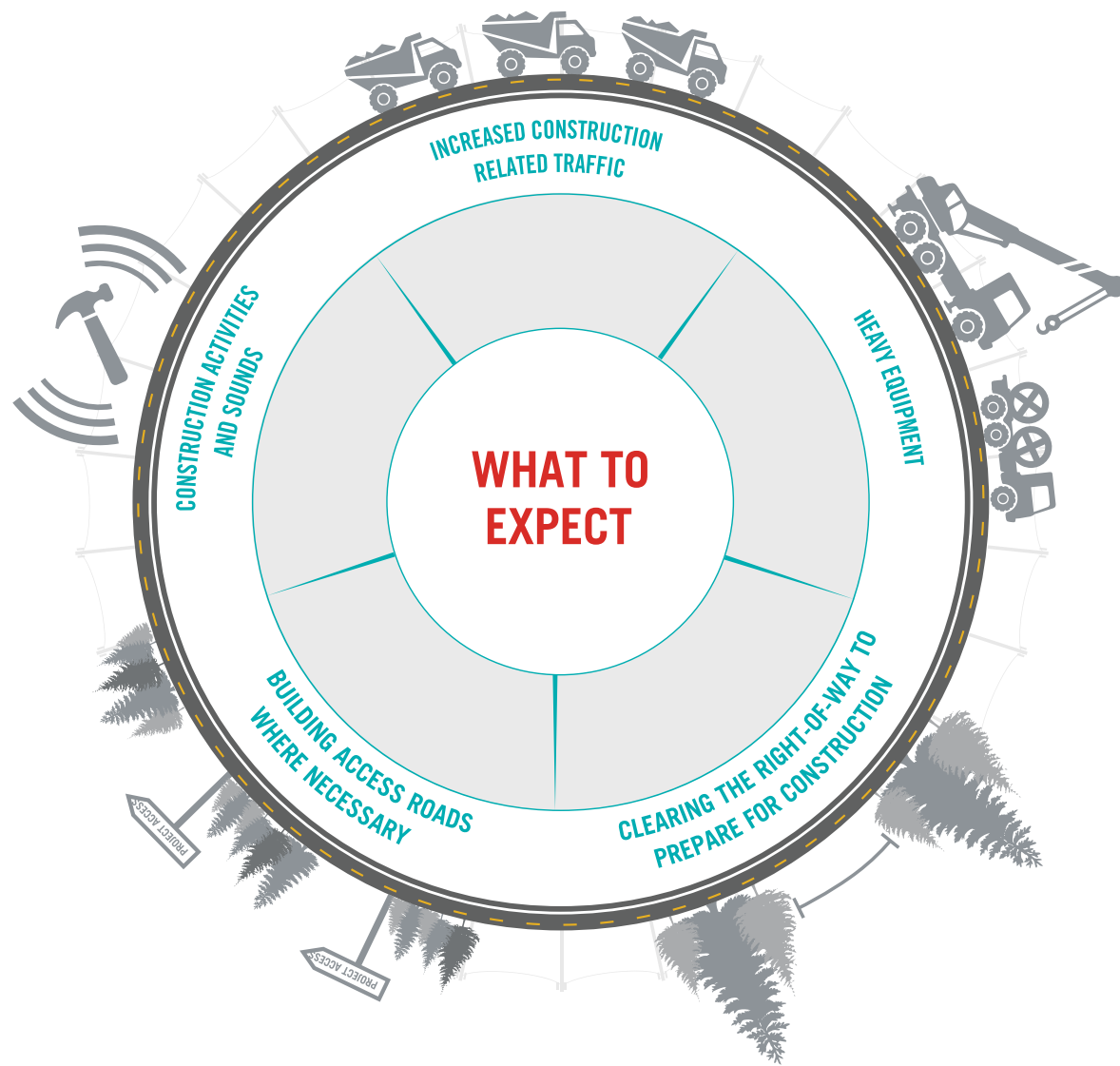
Typical Height: **140 feet\***

Typical Distance Between Structures: **Approximately 1000 feet\***

Typical Right-of-Way Width: **150 feet\***

\*Exact structure type, heights, right-of-way widths and spacing may vary based on location

# CONSTRUCTION PROCESS



AEP Texas understands the work related to transmission grid improvements can sometimes be an inconvenience. That's why we make every effort during the construction process to be respectful of the environment and our neighbors, while safely working to ensure reliable electric service.

AEP Texas plans to work with individual property owners throughout the construction process. Team members will provide details of upcoming work and listen to customer feedback on how we can lessen the impact of our work. In the event damages should occur during the construction process, we will work to restore property as close to its original state as possible.

# RIGHT-OF-WAY

**AEP TEXAS HAS TWO KEY PHILOSOPHIES THAT PERTAIN TO POWER LINE RIGHTS-OF-WAY:**



**1** Routes should cause the least possible disturbance to people and the environment.



**2** Property owners should be fairly compensated for any land rights that must be acquired.



# RIGHT-OF-WAY

AEP Texas studies the land and, wherever possible, proposes routes that reduce impacts on property owners. AEP Texas reaches out to landowners in the following ways:

## TO GAIN RIGHT-OF-ENTRY TO BEGIN:

- Environmental assessments
- Appraisal work
- Land surveying, soil boring and below grade study
- Cultural and historic resource reviews

## TO SECURE RIGHT-OF-WAY AND COMMUNICATE:

- Landowner compensation
- Terms and conditions of easement
- Width of the right-of-way

## TO OUTLINE AEP TEXAS' CONSTRUCTION PROCESS WITH A SPECIFIC FOCUS ON:

- Property restoration
- Damage mitigation as appropriate



# DEL SOL - FRONTERA

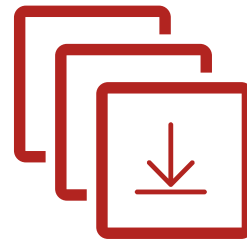
## TRANSMISSION IMPROVEMENTS PROJECT

### THANK YOU!

Thank you for visiting the project virtual open house. For more information and project updates please visit the project website, or contact us with any additional questions.



**REPLAY  
OPEN HOUSE**



**DOWNLOAD  
SLIDE DECK**



**CONTACT US**



**VISIT PROJECT  
WEBSITE**