HOPETOWN

138 KV EXTENSION TRANSMISSION LINE PROJECT

Welcome to our virtual open house!

AEP Ohio representatives invite you to attend this virtual open house. We are committed to listening to your concerns and questions about this project. We welcome your feedback via telephone and email.

PROJECT NEED & BENEFITS

The project involves:

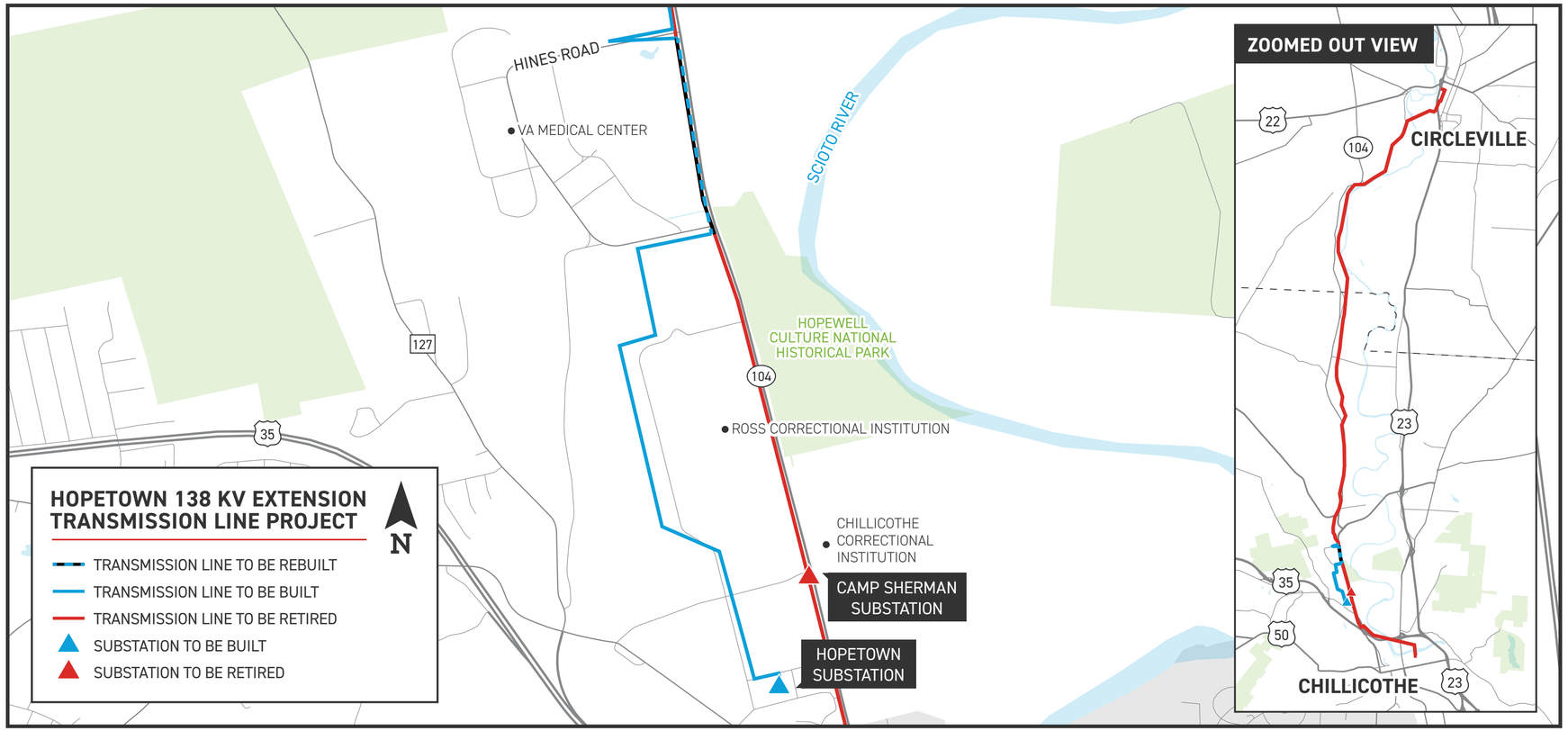
- Building Hopetown Substation off Pleasant Valley Road in Chillicothe.
- Retiring and removing the aging Camp Sherman Substation located off SR 104 in Chillicothe.
- Building about 2.5 miles of 138-kilovolt (kV) power line* to connect Hopetown Substation to the existing electric grid.

*This project requires Ohio Project Siting Board (OPSB) approval.

Why is the project important to our community?

The improvements:
- Enhance electric service reliability and capacity to better serve the growing power needs of local customers.
- Replace aging equipment from the 1920s with modern structures to meet current engineering standards.
- Reduce the likelihood of power outages and speed recovery of service when outages occur.

PROJECT MAP


HINES ROAD
VA MEDICAL CENTER
SCIOTO RIVER
HOPEWELL CULTURE NATIONAL HISTORICAL PARK
ROSS CORRECTIONAL INSTITUTION
CHILLICOTHE CORRECTIONAL INSTITUTION
CAMP SHERMAN SUBSTATION
HOPETOWN SUBSTATION
127
35
104
HOPETOWN 138 KV EXTENSION TRANSMISSION LINE PROJECT
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TRANSMISSION LINE TO BE REBUILT
TRANSMISSION LINE TO BE BUILT
TRANSMISSION LINE TO BE RETIRED
SUBSTATION TO BE BUILT
SUBSTATION TO BE RETIRED
ZOOMED OUT VIEW
22
104
CIRCLEVILLE
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35
50
CHILLICOTHE
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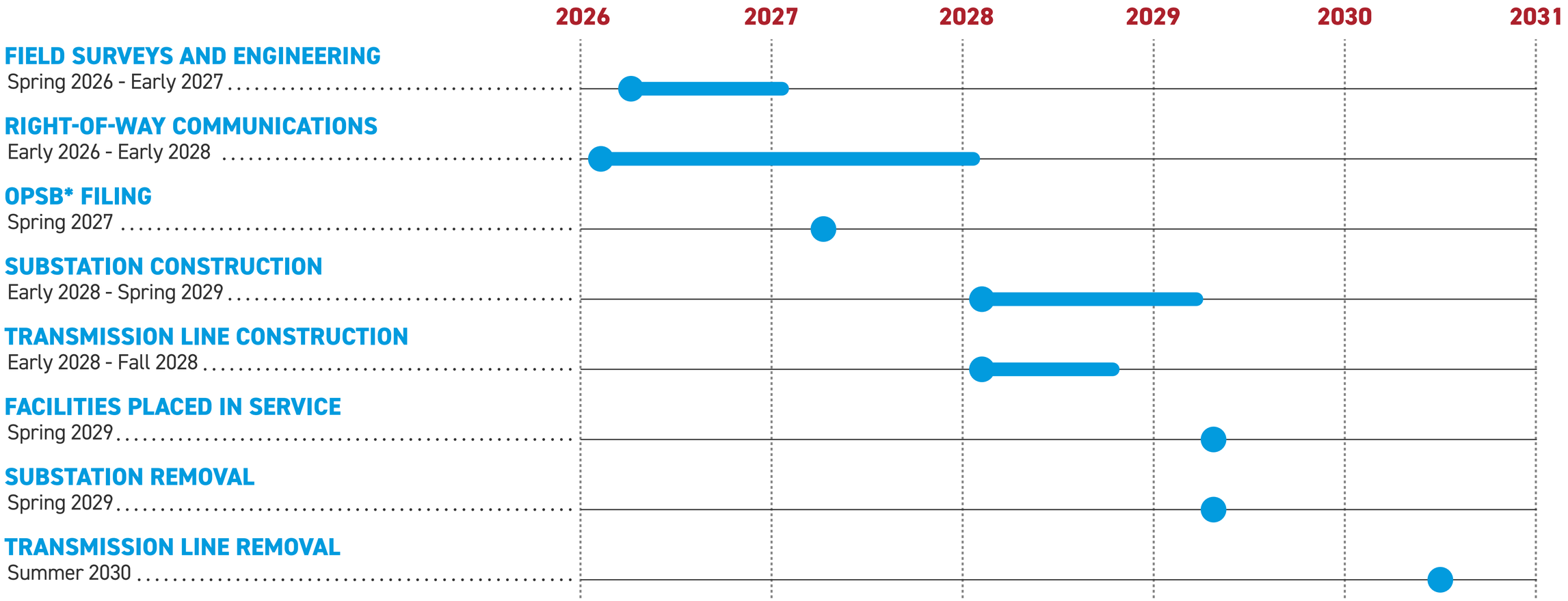
PROJECT TIMELINE

AEP OHIO
An AEP Company



*Ohio Power Siting Board

**Timeline subject to change.

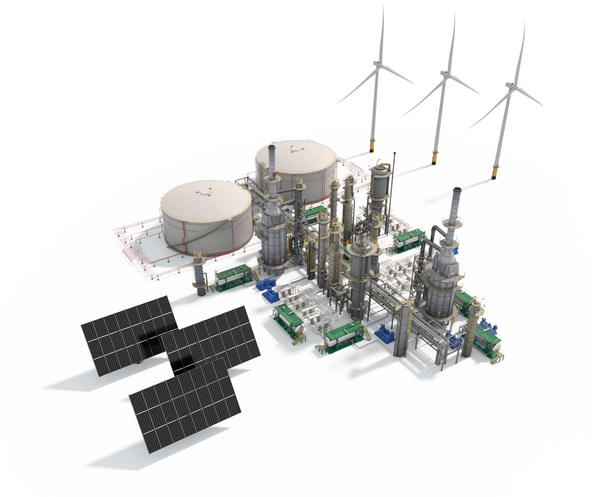
TYPICAL STRUCTURE

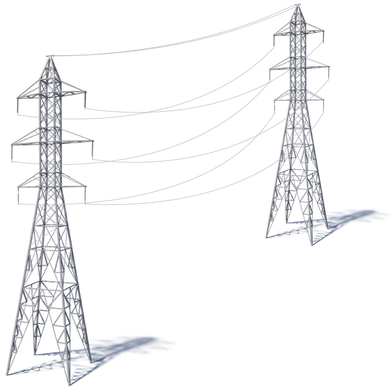
This project involves the use of single steel poles.

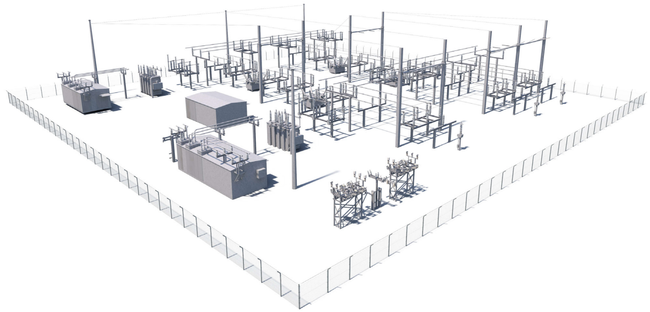
Typical Pole Height: Approximately 70 - 80 feet*
Right-of-Way Width: Approximately 80 -100 feet*

*Exact structure, height and right-of-way may vary

HOW THE SYSTEM WORKS





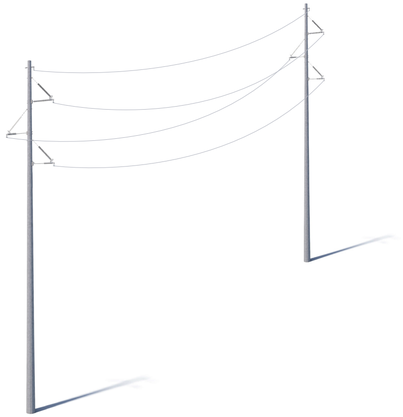


1. Generation Stations:
A generation station produces power to be transported long distances through transmission lines.

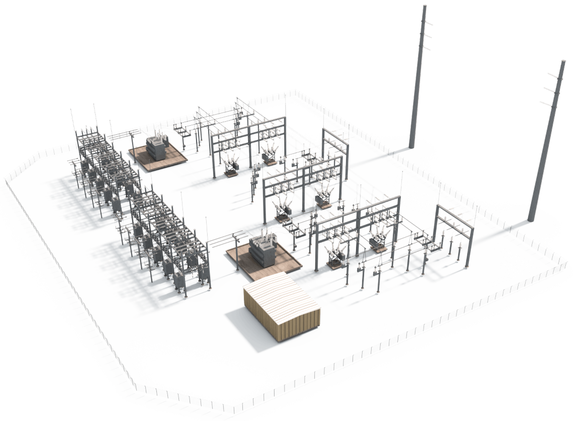
2. EHV Transmission:
Extra-high voltage (EHV) electric transmission lines are generally 765-kilovolt (kV), 500-kV and 345-kV.

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

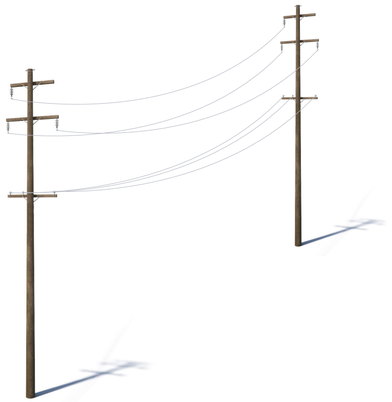
HOW THE SYSTEM WORKS



4. Local Transmission:
We typically use 69-kV and 138-kV transmission lines to move power shorter distances – for example, to different parts of a city or county.

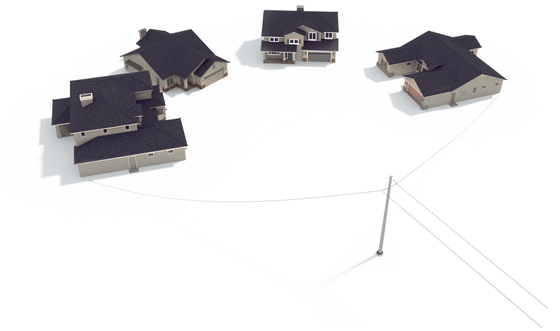


5. Distribution Substations:
Substations transform 69-kV and 138-kV electricity into lower distribution-level voltages such as 34.5-kV, 12-kV, or 7.2-kV.

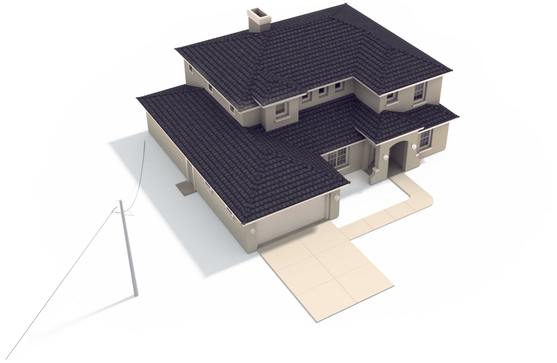


6. Primary Distribution:
These main lines (also called circuits) connect substations to large parts of the community.

HOW THE SYSTEM WORKS



7. Lateral Distribution:
These lower-capacity lines deliver electricity to neighborhoods and other smaller groups of customers.

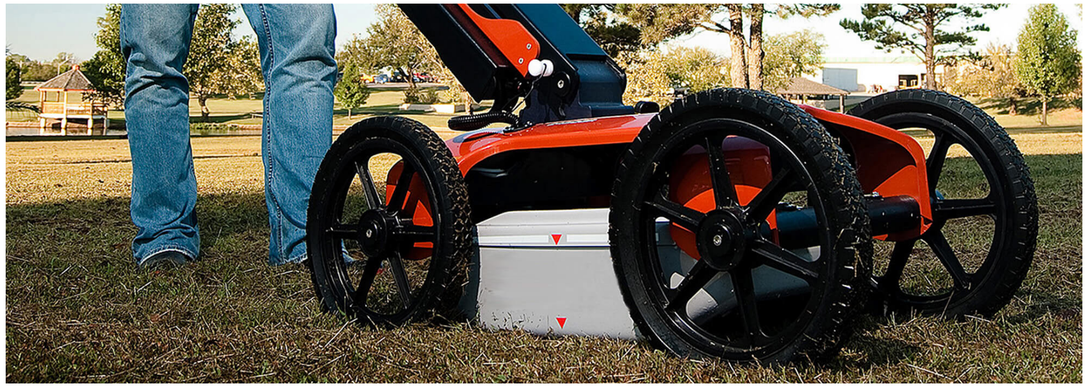


8. Individual Service:
Smaller transformers step down voltage to levels customers can use. Individual homes typically use 120/240 volts.

To use an analogy, electric transmission is like our national road system. Three kinds of power lines exist between power plants, homes and businesses:

- EHV lines are like interstate highways.
- High-voltage local transmission lines are like four-lane roads.
- Distribution lines are like two-lane roads that eventually connect to a driveway.

FIELD ACTIVITIES

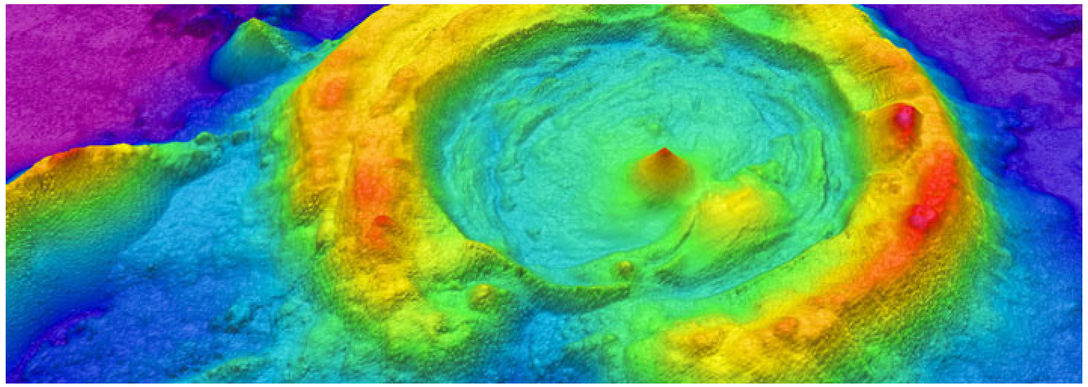


Ground Penetrating Radar: Ground Penetrating Radar (GPR) helps identify the location of underground utilities. A device that looks similar to a lawnmower, and is nondestructive to the soil, uses radio frequencies to detect objects below the ground's surface. Maps and images are created from the data.

Helicopter: Challenging terrain or other restrictions/obstructions can make accessing certain parts of a project area difficult. In these locations, crews use helicopters to install structures, string conductors, perform line work and maintain electric facilities. Company representatives work with local media outlets to communicate these activities to the public.

FIELD ACTIVITIES

Hydro Excavation: Crews use hydro excavation (hydrovac) in areas where many underground utilities are located near each other. This process involves using pressurized water to break down soil to expose underground utilities. Afterward, crews backfill the area. The process helps prevent damage to underground infrastructure while gathering important information.



LiDAR: LiDAR (Light Detection and Ranging) uses laser pulses to measure the distance of an object to the source. The data points result in digital 3D maps for accurate design and engineering. LiDAR surveying crews use mobile (car or aerial vehicle) or static (tripod) equipment.

FIELD ACTIVITIES

Soil Borings: Field crews use a drill to bring up soil samples and then backfill the holes. Testing the core samples helps determine soil conditions in the area. Soil conditions and types can affect structure location and foundation design.

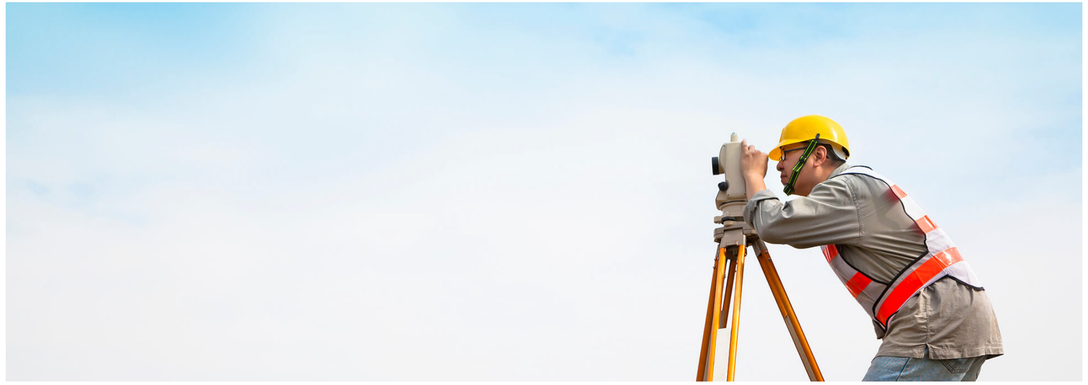
Cultural Resource Study: Field crews walk the area and conduct multiple excavation tests to identify historical and archaeological artifacts. Landowners also provide information about their property to survey crews.

FIELD ACTIVITIES

Environmental Survey: Surveyors collect information about the habitats and physical attributes of the project area. They also look for ecological concerns like wetlands, flood plains and forests. This process can help protect endangered species, such as the Indiana Bat and American Burying Beetle.

Unmanned aerial vehicles: Unmanned aerial vehicles (UAVs), or drones, perform aerial inspections and safely gather data and detailed images of electric facilities. Company employees and vendors comply with all commercial Federal Aviation Administration (FAA) guidelines. Company representatives work with local media outlets to communicate these activities to the public.

FIELD ACTIVITIES



Staking:

- Field crews use staking to mark the project area, identify utility equipment and pinpoint future structure locations. This process essentially transfers engineering and construction plans to the field.
- Right-of-way crews use staking to identify parcel boundaries, easement boundaries and other utility locations within the company's rights-of-way.
- Environmental crews use staking to identify wetlands or other environmentally sensitive areas.

Field Survey:

- Field survey crews help determine an appropriate route for a new transmission line by identifying constraints within the project area.
- Engineers conduct extensive studies of the terrain and soil to determine what types of structures and foundations are most suitable. They also gather information to create digital 3D maps of the project area to help engineer and design the project.

WHAT TO EXPECT DURING CONSTRUCTION

Construction Corridor Development

Crews prepare for construction by:

- Building access roads.
- Marking utilities and pole locations along the power line route using stakes and flags.
- Removing obstructions from the right-of-way easement area.
- Installing safety and environmental controls such as fencing.

As part of this process, crews clear the right-of-way:

- Forestry crews prepare for transmission line construction by clearing trees and woody-stemmed vegetation from the right-of-way.
- Crews may clear identified danger trees outside the right-of-way as allowed per the easement language.

WHAT TO EXPECT DURING CONSTRUCTION

Pole Installation

At most pole locations, crews:

- Assemble the pole and place it near the installation area.
- Install and stabilize the base of the new pole.
- Install and secure the new pole.

WHAT TO EXPECT DURING CONSTRUCTION

Wire Installation

Crews install new wires on the new poles along the power line route.

WHAT TO EXPECT DURING CONSTRUCTION

Facilities Placed In Service

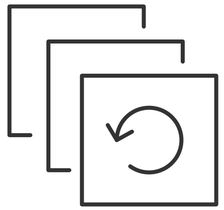
Crews energize the equipment after finishing pole and wire installations.

Post-Construction & Site Restoration

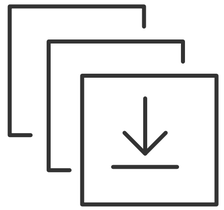
We restore properties to as close to their pre-construction condition as possible. Our teams work with individual landowners to address any property damage.

THANK YOU!

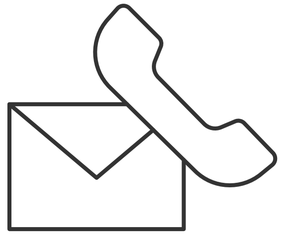
Thank you for visiting the project virtual open house. For more information and project updates please visit the project website, or contact us with any additional questions.



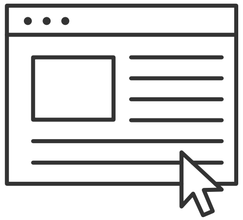
Replay Open House



Download Slide Deck



Contact Us



Visit Project Website