

SOUTHEAST BARTLESVILLE

TRANSMISSION IMPROVEMENTS PROJECT

WELCOME TO OUR VIRTUAL OPEN HOUSE

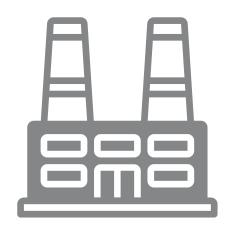
As a result of the COVID-19 pandemic and social distancing recommendations made by the Centers for Disease Control and Prevention (CDC), PSO invites you to attend this virtual open house in order to minimize in-person contact. PSO remains committed to listening to your concerns and answering your questions, 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.



HOW THE SYSTEM WORKS

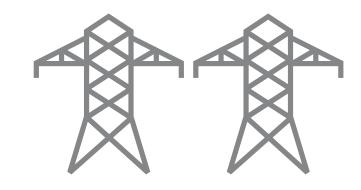
LOCAL TRANSMISSION >>

HIGH VOLTAGE



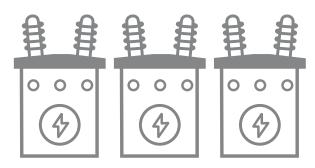
1) GENERATION STATIONS

PSO produces electricity at coal, natural gas and wind power stations and then transports it long distances over transmission lines.



2) EHV TRANSMISSION

Extra-high Voltage (EHV) electric transmission lines are generally 345-kilovolt (kV) on PSO's system.



3) SUBSTATIONS

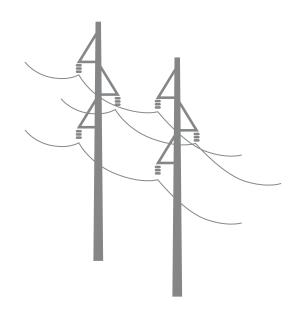
Substations direct the flow of electricity and either decrease or increase voltage levels for transport.



HOW THE SYSTEM WORKS

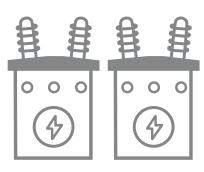
DISTRIBUTION >>

LOCAL TRANSMISSION



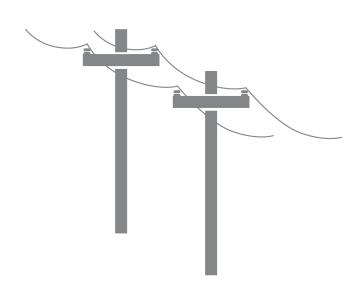
4) LOCAL TRANSMISSION

PSO 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

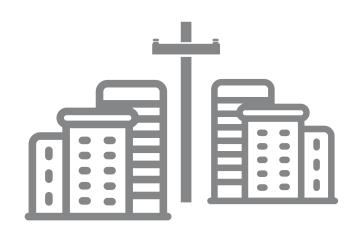
These main lines (also called circuits) connect substations to large parts of the community.





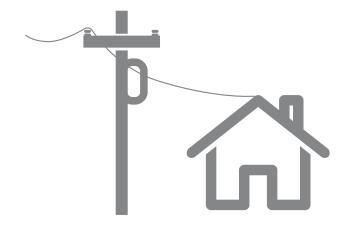
HOW THE SYSTEM WORKS

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 -- typically 120 or 240 volts for individual residences.

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 NEED & BENEFITS

WHY IS THE PROJECT IMPORTANT TO OUR COMMUNITY?

ENHANCED RELIABILITY

The Southeast Bartlesville Transmission Improvements Project upgrades the power line to provide more reliable electrical service to area customers.

UPGRADED INFRASTRUCTURE

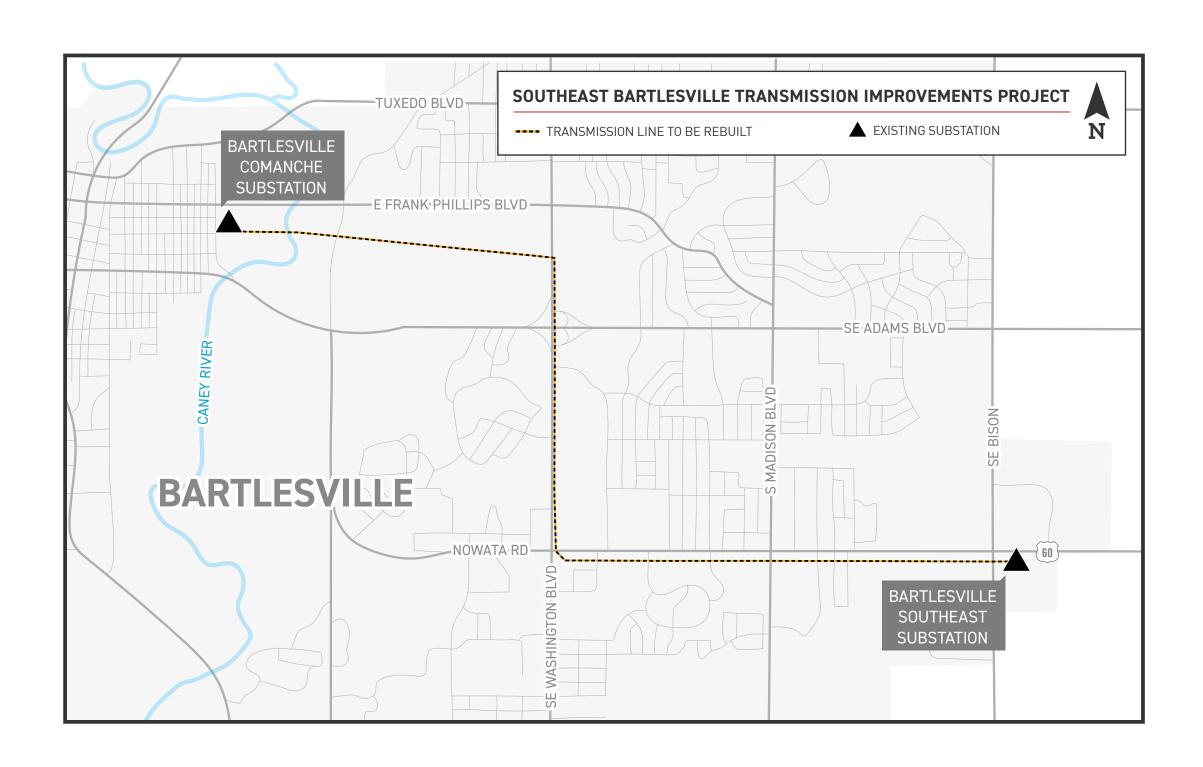
The project replaces aging wooden poles from the 1960s with modern steel poles to reduce maintenance frequency, strengthen the line against weather impacts and decrease the likelihood of larger, community-sustained power outages.

MEETING FUTURE NEEDS

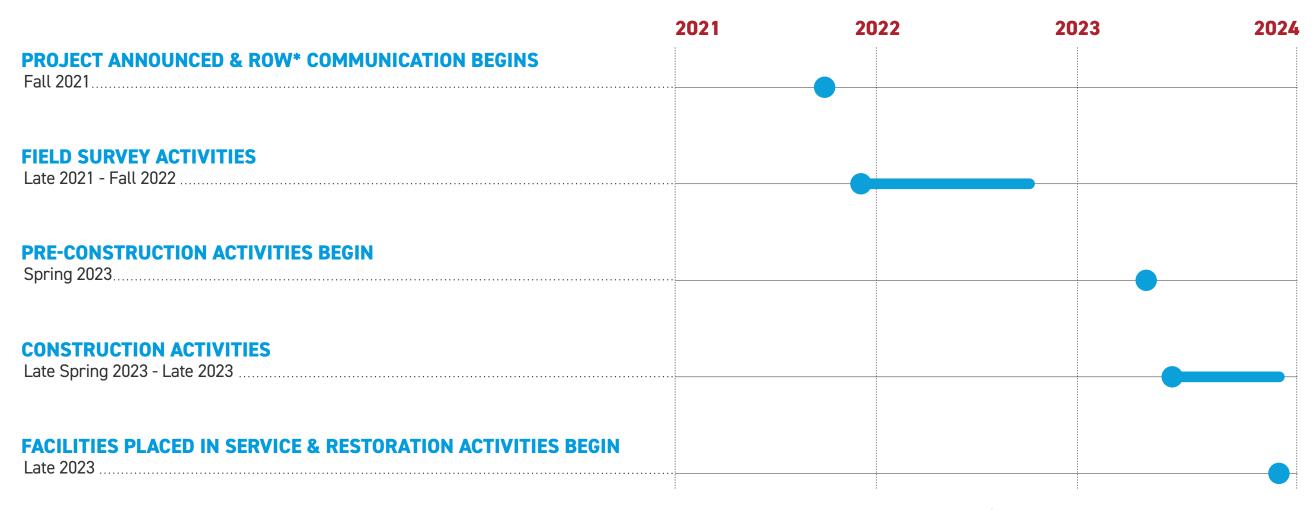
The system needs to be upgraded in order to meet current and future power demands in the area.



PROJECT MAP



PROJECT SCHEDULE



*ROW: Right-of-Way **Timeline subject to change



TYPICAL STRUCTURES



Structure Height Approximately 85 feet*

PSO crews plan to install steel single poles on this project.

Typical Structure Height: Approximately 85 feet*

Typical Distance Between Structures: Approximately 300 feet*

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



RIGHT-OF-WAY

AT PSO, WE HAVE TWO KEY PHILOSOPHIES THAT PERTAIN TO POWER LINE RIGHTS-OF-WAY:



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



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



RIGHT-OF-WAY

PSO project teams study the land and, wherever possible, propose routes that reduce impacts on property owners. PSO representatives reach out to landowners in the following ways:

TO GAIN RIGHT-OF-ENTRY TO BEGIN:

- Environmental assessments
- Appraisal work
- Land surveying, soil boring and other field activities
- 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 PSO'S CONSTRUCTION PROCESS WITH A SPECIFIC FOCUS ON:

- Property restoration
- Damage mitigation as appropriate



VEGETATION MANAGEMENT



WHAT IS VEGETATION MANAGEMENT?

The practice of controlling the growth of trees and other woody stemmed vegetation in line corridors and around substations, while maintaining respect for the environment.

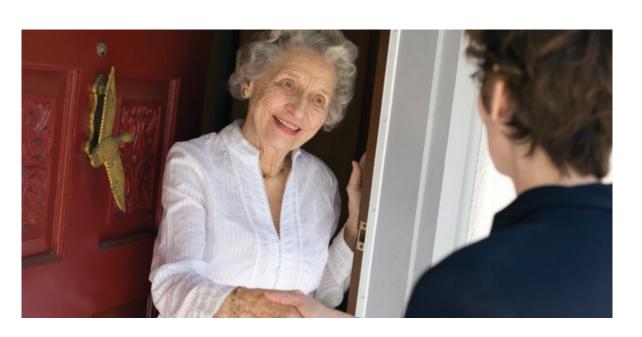
WHY IS IT DONE?



To minimize power outages caused by trees and other plants coming into contact with power lines.

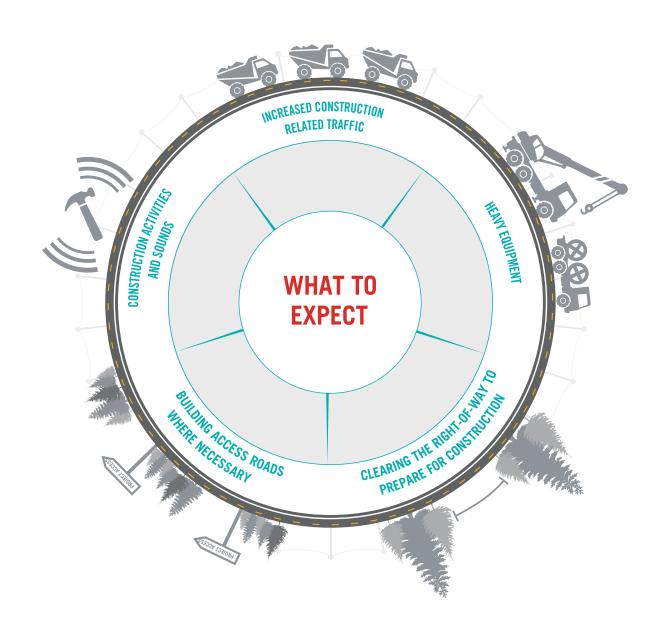
THE GOALS OF PSO'S VEGETATION MANAGEMENT PROGRAM ARE TO:

- Protect our system and minimize outages
- Minimize any adverse environmental impacts
- Ensure compliance with all applicable laws and regulations
- Perform our work as safely as possible
- · Maintain a positive relationship with land owners and the public





CONSTRUCTION PROCESS



PSO representatives understand 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.

PSO representatives plan 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.



SOUTHEAST BARTLESVILLE 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