

Northeast Oklahoma Transmission Enhancement Project – Additional Information and FAQ

Why Does This Project Exist?

The need for the Northeast Oklahoma Transmission Enhancement Project (NEOTEP) was mandated by the Southwest Power Pool (SPP) after engineering analysis showed increasing risks of outages, voltage instability, and insufficient transmission capacity to support future growth and grid resiliency. SPP, the Regional Transmission Organization (RTO) overseeing the power grid across 14 states, required this project as part of a regional effort to strengthen the transmission system.

Importantly, this requirement originated from a targeted study within SPP's 2024 Integrated Transmission Planning (ITP) process. That study relied on focused contingency cases modeled around Winter Storm Elliott, a major severe-weather event used to evaluate grid performance under stress. While Winter Storm Uri was not directly modeled in those cases, the widespread outages and reliability challenges from Uri underscored the need for more robust extreme weather planning, highlighting that severe winter events are becoming more common and more disruptive.

SPP's planning process also considers:

- Regional load forecasts
- North American Electric Reliability Corporation (NERC) reliability standard and planning criteria
- Extreme-weather contingency modeling
- Interstate power flows

Learn more about SPP here: [SPP Wavelength](#).

Who is Oklahoma TransCo?

AEP Oklahoma Transmission Company, Inc. (Oklahoma TransCo) is a transmission-only entity responsible for owning, operating, and maintaining high voltage transmission infrastructure within Oklahoma. The Southwest Power Pool (SPP) directly assigned this project to American Electric Power (AEP), an affiliate of Oklahoma TransCo, which will manage its design, construction, and related work. Oklahoma TransCo coordinates with the regional transmission organization and is subject to oversight by the Oklahoma Corporation Commission and the Federal Energy Regulatory Commission.

Key Project Benefits

NEOTEP is a regional reliability project driven by SPP's study of transmission system performance during extreme winter events, specifically Winter Storm Elliott, with lessons from Winter Storm Uri contributing to the need for more robust planning. Building these lines will improve the ability of Oklahoma and the region to withstand major winter storms and reduce stress on an aging system across the eastern portions of SPP's footprint, including northeast Oklahoma.

The Delaware–Buffalo Flats and Delaware–Monett 345-kV transmission lines were approved through SPP's publicly available 2024 ITP report: [2024-itp-assessment-report-v10.pdf](#). Collectively, AEP representatives refer to the Oklahoma portion of these lines as NEOTEP for public communication purposes.

Additional Project Benefits:

- Enhance electric service reliability and quality.
- Reduce the frequency and duration of transmission-related power outages.
- Improve the ability to deliver power during extreme weather events.
- Reduces strain on overburdened and aging infrastructure.
- Helps stabilize wholesale electricity costs and provide long-term cost benefits
- Provides operators the flexibility to reroute power and accelerate restoration during outages.
- Optimize operations and lower the cost to deliver power across the region.
- Improve the transmission of low-cost energy to eastern areas of the SPP footprint, including northeast Oklahoma.
- Improves reliability for households, schools, farms and manufacturers.
- Increases county tax revenue, which can support schools, fire departments and road improvements due to this infrastructure investment.

What the Project Includes

The project involves building approximately 100 miles of 345-kilovolt (kV) transmission line in Washington, Nowata, Craig and Ottawa counties, and upgrading equipment at the Delaware Substation to accommodate the new transmission lines.

The improvements are part of a larger regional reliability effort mandated by the RTO, Southwest Power Pool (SPP), to strengthen the power grid. In total, SPP mandated construction of over 300 miles of 345-kV power lines in parts of Oklahoma, Kansas, and Missouri.

Designed With Oklahoma in Mind

Typical structures range from 100–135 feet tall, spaced roughly 850–1300 feet apart with a 150-foot right-of-way. **Multiple route options are still under review, and no final route has been selected.**

This allows flexibility to evaluate alternatives and adjust routing to reduce impacts on landowners, agricultural operations and sensitive environmental areas. Community input, landowner feedback and coordination with local officials play an important role as route evaluations continue.

Much of the area under consideration for this project is rural, with strong agricultural traditions and deep ties to the land. Routing decisions will carefully consider the following:

- Existing land uses, such as farming, ranching, and forestry.
- Minimizing impacts to agricultural operations, including field access and irrigation where possible.
- Where reasonable, utilize existing compatible infrastructure corridors (such as existing transmission lines or transportation routes), when feasible, to reduce fragmentation of land.
- Respecting property ownership and land stewardship with ongoing landowner engagement throughout the routing process.

The goal is to design routes that meet reliability needs while recognizing the importance of working lands and rural livelihoods.

Landowner Rights and Transparency

Utilities must provide clear routing information, work with landowners to negotiate any necessary easements, compensate landowners for those easements, balance impacts to agricultural operations, and comply fully with all state, local and federal requirements. The company is committed to working with landowners as much as possible to limit impact to their property.

Community Engagement Matters

Nearly 400 Oklahomans attended the first round of open houses in February 2026, offering meaningful feedback that is already shaping route evaluations. Additional opportunities for input will occur throughout the process, including at future open houses in summer 2026.

Regulatory Process and COA Approval

Before construction can begin, the project must receive a Certificate of Authority (COA) from the Oklahoma Corporation Commission (OCC). This process provides formal regulatory oversight and review.

Once the COA application is filed, it becomes part of a public docket. As part of the COA process, AEP provides notice to all required stakeholders, holds public meetings in each county where the transmission project will traverse, and participates in a hearing on the merits before the OCC. During this hearing, the Commission will review the proposed final route and overall project to determine if it is in the public interest.

Landowners and stakeholders may submit written or verbal public comments in the docket, which become part of the official record. Stakeholders may also choose to intervene in the

COA case. Intervenors become parties to the proceeding and may participate under the terms of the procedural order and the Commission's Chapter 5 Rules of Practice.

More information about the COA process, public participation, and how to file comments or intervene is available on the Oklahoma Corporation Commission website: [Oklahoma Corporation Commission](https://www.okcc.gov).

A Transparent, Multi-Year Process

The project follows a structured path including public engagement, route evaluation, environmental studies, and review by the OCC. This ensures accountability and community-driven outcomes. More information on the project schedule can be found by visiting the project website: psoklahoma.com/NEOTEP.

Answering your Questions

Why is this project needed, and why now?

SPP's long-term planning identified growing transmission constraints that become critical during extreme winter weather events. Events like Winter Storms Uri and Elliott exposed existing weaknesses, particularly the region's reliance on aging, heavily loaded 138-kV lines and limited pathways to move power during peak demand.

Because transmission projects take years to plan and build, waiting would increase the risk of major outages, reduce operators' ability to respond to emergencies, and leave Oklahoma communities more vulnerable. SPP approved this project because the conditions driving the need already exist, and proactive construction of this facility is required to meet regional reliability standards to prevent future disruptions.

Will this project only benefit customers outside of Oklahoma?

No. Regional reliability investments directly benefit local reliability, especially areas like northeast Oklahoma. This project is not being built for other states at Oklahoma's expense; it is being built to address real and significant reliability needs within northeast Oklahoma. As a network facility, it strengthens the transmission system where it is most constrained and vulnerable, delivering durable reliability benefits to Oklahoma families, farmers, businesses, and communities. At the same time, these local improvements naturally contribute to a stronger, more resilient regional grid.

Oklahoma plays a critical role in the regional power system as both an energy producer and a connection point in the transmission network. While this project strengthens the broader SPP grid, regional reliability directly translates into local reliability. When the regional system is stronger:

- Oklahoma can import power more easily during emergencies
- Local outages are less likely to create larger outage events
- Restoration happens faster when problems occur

What does an easement mean, and how does it affect day-to-day use of property?

An easement allows an electric utility to build, operate, and maintain transmission facilities on a defined portion of a property, while the landowner continues to own and use the land.

Most everyday uses can continue within an easement area, including:

- Lawns, yards, and gardens (Fences, driveways, walking trails, sidewalks)
- Farming and agricultural activities
- Other uses that do not interfere with the safe operation of the transmission line

Landowners are always encouraged to review easement documents carefully and ask questions so they understand how the easement applies to their specific property. Please refer to the Property Easements information provided on the project website for further information: [What Are Property Easements](#).

Can local solar power, batteries, or distribution upgrades replace transmission lines?

Local resources like solar, battery storage, and distribution level upgrades play an important role in the energy system, but they cannot replace the function of high voltage transmission lines for regional reliability.

The reliability challenges identified after Winter Storm Uri (2021) and Winter Storm Elliott (2022) were not caused by a lack of local generation alone. They were driven by the inability to move power into stressed areas when demand surged.

High-voltage transmission lines:

- Move electricity long distances efficiently
- Allow operators to redirect power in real time during emergencies
- Prevent localized problems from cascading into widespread outages

Local solar, batteries, and distribution upgrades do not provide the same system-wide flexibility or scale, particularly during prolonged cold weather events.

Does the project support data centers or green energy?

This project is not driven by any single specific generation source or customer type. This is an SPP-mandated project to bolster regional transmission grid reliability, and it's driven by past grid impacts during extreme winter weather events.

Our role in this project is not to determine where power is produced or who ultimately uses it. Oklahoma TransCo is responsible for building and maintaining the "electric highway" that moves energy reliably across the region.

The transmission system must be planned and upgraded in advance to ensure communities have a stable, resilient grid regardless of whether electricity comes from traditional generation, renewable resources, or future development. This transmission line project is part of long-term system planning to strengthen the overall network, not to serve a single facility or industry.

Can transmission line EMF (electric magnetic frequency) pose health risks to people, livestock, and wildlife?

EMF levels around transmission lines stay well below established safety limits and drop quickly with distance. Decades of research show no proven harm to people, livestock, or wildlife from the EMF levels associated with high voltage lines. Please refer to the project website for further information on EMF: [What are Electric and Magnetic Fields?](#)

Will property values decrease?

Transmission lines do not affect all properties the same way. In some cases, most often where a line is very close or highly visible, property value impacts may occur. In many other cases, little to no measurable effect is observed. AEP takes these differences into account through careful routing, design, and ongoing coordination with landowners.

Transmission routing and design consider property impacts alongside reliability, engineering, and environmental factors. Common practices include:

- Maximizing distance from habitable structures
- Using existing utility corridors to reduce additional property impacts
- Adjusting structure placement and alignment to reduce visual impacts

Landowner input can help identify site-specific concerns that may not be evident in early studies.

Will public safety and emergency access be affected by downed lines?

Modern transmission projects incorporate stronger design standards, redundancy, and resiliency measures to reduce the likelihood and impact of outages, especially during extreme weather.

Utilities maintain detailed emergency response and restoration plans, regularly train with first responders, and participate in mutual assistance programs to speed safe repairs. Restoration is prioritized to protect public safety and critical services such as hospitals, water systems, and emergency facilities.

While downed transmission lines are serious, they are rare and managed through coordinated emergency response, proven safety procedures, and investments that improve overall grid reliability and public safety.

Do landowners have a say?

Landowners have multiple opportunities to provide input throughout the project.

AEP conducted in-person public open houses in Ottawa, Craig, Nowata, and Washington counties in early February 2026 as a consideration to landowners, giving them the opportunity to review route segments, ask questions, and provide feedback before any final decisions are made. A Virtual Open House is also available on the project website for those who could not attend in-person open houses.

Because this project is on an expedited timeline, AEP sent notifications as soon as route segments were developed to provide the greatest possible notice and time for landowners to participate. While mail delivery issues can occasionally occur, AEP ensured outreach was issued promptly and transparently.

Landowners may submit comments in a variety of ways:

- Comment forms at in-person open house events
- Online tools via the interactive project map on the website
- Project email address: psa_outreach@aep.com
- Project phone number (toll free): 833-214-4653
- Submitting comments via online form at bottom of project website

Although the formal comment deadline for route segments was Feb. 23, 2026, the hotline and voicemail will remain available, and comments will continue to be reviewed.

Landowner input is one of several important factors considered when selecting the final route. While changes cannot be guaranteed, feedback can influence routing and design decisions, particularly where landowner insights identify site-specific concerns or impacts that may not have been evident during preliminary studies.

Landowner participation continues through OCC oversight, including a public hearing to review the proposed final route.

Will this increase my electric bill?

Large SPP transmission projects are funded regionally, so costs are shared across multiple states and millions of customers, not borne solely by local communities. They're also recovered over decades, which keeps the impact on a typical residential bill relatively small.

These projects strengthen reliability, reduce congestion, and expand access to lower-cost power across the region, including Oklahoma.