

**FINDING OF NO SIGNIFICANT IMPACT**  
**TENNESSEE VALLEY AUTHORITY**  
OXFORD-COFFEEVILLE 161-KV TRANSMISSION LINE

The Tennessee Valley Authority (TVA) proposes to improve the existing power supply in an area of northern Mississippi served by Tallahatchie Valley Electric Power Association (TVEPA) and North East Mississippi Electric Power Association (NEMEPA). TVA's proposal would construct, operate, and maintain a new 29-mile 161-kilovolt (kV) transmission line (TL) south of Oxford, Mississippi and between a point just north of County Road 300 and TVA's Coffeeville 161-kV Substation. This new line would complete the connection to the Oxford 161-kV Substation, creating an Oxford-Coffeeville TL. The proposed project would require approximately 206 acres of new right-of-way (ROW) and 109 acres of existing ROW. The new TL would be constructed using mostly single steel-pole, single-circuit structures. TVA would also provide a new delivery point to NEMEPA's planned new Taylor 161-kV Substation, which would be built adjacent to the Oxford-Coffeeville TL ROW and south of Highway 328 in Taylor, Mississippi.

The proposed action is the subject of an environmental assessment (EA) prepared by TVA. The EA is incorporated by reference. The EA addresses the construction, operation, and ROW maintenance of the proposed TL.

**Alternatives**

Two alternatives (the No Action Alternative and the Action Alternative) were addressed in the EA. TVA also considered other alternatives, including alternative TL routes, in identifying its preferred action alternative.

Under the No Action Alternative, TVA would not construct the proposed TL. As a result, the TVA power system in the TVEPA and NEMEPA service areas would continue to operate under current conditions, increasing the risk of substation and TL overloading, loss of service, and the possibility of violations of NERC reliability criteria. TVA's ability to provide reliable service to address economic development and future residential and commercial growth in the northern Mississippi area, including Grenada, would be jeopardized, which would not support TVA's overall mission.

The Action Alternative involves the construction, operation, and maintenance of a 29-mile 161-kV TL starting on the south side of Oxford at County Road 300 and ending at the existing Coffeeville Substation, creating an Oxford-Coffeeville TL. TVA would also provide a delivery point to NEMEPA's proposed new Taylor 161-kV Substation by installing two switch structures in the ROW of the new Oxford-Coffeeville 161-kV TL. TVA would provide the standard revenue metering package for NEMEPA to install its new substation. Additionally, TVA would install a new breaker bay with associated metering, communication, and protective equipment at its Oxford 161-kV Substation, and two new bays and a switchhouse at its Coffeeville 161-kV Substation. The new equipment at the Coffeeville Substation requires the purchase of approximately 2.12 acres adjacent to the existing substation and relocation of an intermittent stream to facilitate the proposed substation expansion. The TVA map board displays would be updated to reflect the new facilities. Two laydown yards and a spoil storage area adjacent to

the substation expansion are proposed to be utilized during construction of the TL and associated activities. The Action Alternative is TVA's preferred alternative.

### **Impacts Assessment**

The EA documents potential effects to the following resources: aquatic life; vegetation; wildlife; endangered and threatened species (aquatic animals, terrestrial animals, and plants) and their critical habitats; water quality; floodplains; wetlands; archaeological and historic resources; aesthetic resources; recreation, parks, and managed areas; and socioeconomics and environmental justice.

If the No Action Alternative were adopted, a decline in the reliability of electric service for some customers would be likely in the future. Service problems and interruptions likely would gradually become more frequent and more severe. These outages would have negative impacts on the ability of businesses in the area to operate. Residents of the area would also incur negative impacts from outages, such as more frequent loss of power. These conditions would diminish the quality of life for residents in the area and would likely have negative impacts on property values in the area. Potential socioeconomic effects under the No Action Alternative would likely affect all populations in the region negatively.

Based on the analysis of the proposed Action Alternative, there would be no effects to geological characteristics. Potential effects from electromagnetic fields would be minor, and the proposed TL would not pose an increased hazard for electric shock or from lightning. Because construction of the proposed line would be short-term, potential effects to local air quality would be minor and insignificant, and the amount of solid waste produced would be minor. Potential effects from noise would be temporary and insignificant. Potential effects on traffic would likely be minor and short-term in nature. Potential effects to local visual quality would be temporary and minor. Construction, operation, and maintenance of the proposed TL could cause shifts in local informal recreation, but these would be minor.

Overall, the Action Alternative would have no disproportionate impacts to disadvantaged populations. Providing an additional source of power would help maintain reliable service in the area, thereby avoiding the potential increase in negative impacts from lack of reliability. No noticeable adverse social or economic effects, including changes in local property values, are likely.

Because appropriate best management practices (BMPs) will be implemented during construction, operation, and maintenance of the proposed TL, potential effects to groundwater would be minor and insignificant. For similar reasons, any effects to surface water quality and aquatic life are expected to be temporary and minor. However, the expansion of the substation will require 460 linear feet of an intermittent unnamed tributary to Turkey Creek to be disturbed and relocated. TVA will adhere to the conditions required by the U.S. Army Corps of Engineer's permit. The relocated stream would be longer than the existing stream; therefore, there would be "no net loss" and no mitigation would be required.

The proposed TL would cross floodplain areas of several streams. Efforts were made during the siting process to avoid or minimize impacts to floodplains. However, because of other social, environmental, and engineering factors considered in the siting process, there was no practicable alternative that would allow for complete avoidance of floodplains, or minimization of potential floodplain impacts. Consistent with Executive Order (EO) 11988, overhead TLs and related support structures are considered to be repetitive actions in the 100-year floodplain (46 FR 22845). The conducting wires of the TL would be located well above the 100-year flood

elevation. Portions of ten access roads could be located within the 100-year floodplain. The laydown yards would be located outside of the 100-year floodplain, which would be consistent with EO 11988.

The proposed substation expansion would require the relocation of an intermittent stream. The Federal Emergency Management Agency Flood Insurance Rate Map does not show a 100-year floodplain in this tributary. For compliance with EO 11988, stream relocations are not considered to be repetitive actions in the floodplain. There is no practicable alternative to relocating the stream, because the substation already exists, and there is no other space on the substation parcel for the expansion to occur. The watershed of the tributary at the substation is about 0.4 square miles. The stream relocation would be consistent with EO 11988 provided adverse impacts would be minimized. Adverse impacts to floodplains will be minimized by adherence to regulations applicable to stream relocations.

To minimize adverse impacts, any road construction or improvements will be done in such a manner that upstream flood elevations will not be increased. To minimize adverse impacts on natural and beneficial floodplain values, TVA will implement standard BMPs during construction and adhere to the TVA subclass review criteria for TL location in floodplains. Also, all road construction/improvements will be done in such a manner that upstream flood elevations will not be increased and the relocation of the stream associated with the substation expansion will be conducted in accordance with applicable stream relocation regulations. As such, construction, operation, and maintenance of the proposed TL would have no significant impact on floodplains.

Construction of the proposed TL would result in the clearing of approximately 213 acres of forest. At the local level, this would constitute a minor loss of forest resources. Almost all of the forests within the footprint of the proposed ROW area have been previously cleared. Areas of native vegetation within the proposed ROW and substation expansion site would be adversely affected by clearing, but most sites would likely recover to pre-project conditions within a few years. ROW clearing and maintenance would displace various wildlife species, but would not adversely affect local populations.

With the implementation of standard BMPs, the proposed project would not affect the habitat of state-listed red salamander and mole kingsnake or federally listed bald eagle and wood stork. Therefore, there would be no impacts to these species. Implementation of the Proposed Action Alternative would not affect federally or state-listed plant or aquatic species or designated critical habitat because neither occurs in the proposed ROW, access roads, laydown yards, or proposed substation expansion site.

Approximately 75.9 acres of suitable summer roosting habitat for the federally listed northern long-eared (NLEB) bat occurs in the proposed ROW corridor. As part of TVA's Endangered Species Act programmatic biological assessment for bats, TVA programmaticly quantified and minimized removal of potentially suitable summer roosting habitat during the time of potential occupancy by NLEB. There are no records of NLEB within 10 miles of the proposed actions. Accordingly, TVA will track and document the removal of potentially suitable summer roost trees and include this information in annual reporting in accordance with Section 7(a)(2) consultation. Additionally, if removal of suitable bat roost tree habitat needs to occur when bats may be present on the landscape, TVA will conduct mist net surveys and/or set aside funding to be applied towards future bat-specific conservation projects in accordance with TVA's programmatic biological assessment for bats. A number of activities associated with the proposed action, including tree clearing, were addressed in TVA's programmatic biological assessment for evaluating impacts of routine actions on federally listed bats in accordance with

ESA Section 7(a)(2) (TVA 2017). For those activities with the potential to affect federally listed bats, TVA committed to implementing specific conservation measures. Therefore, direct and indirect impacts to federally listed bat species are expected to be minor.

The proposed project would span 11.08 acres of wetland, requiring the conversion of about 6.13 acres of forested and scrub-shrub wetlands to emergent wetlands. The forested wetlands would be cleared during construction. Similarly, all wetland areas located within the proposed TL ROW would be subject to periodic vegetation management, and maintained as herbaceous or scrub-shrub wetland vegetation or open water. Efforts were made during the TL siting process to avoid or minimize wetlands. However, because of project and topographic constraints, and because of the goal of minimizing impacts to other environmental and social resources, no practicable alternative was available that would allow complete avoidance of wetlands. Potential wetland impacts would be reduced during the TL construction and ROW maintenance activities through implementation of appropriate BMPs and compliance with all federal and state wetland regulations. Due to the minimal wetland conversion proposed relative to forested wetland present at a watershed scale, no significant wetland impacts are anticipated to result from this project. The proposed action is consistent with EO 11990 (Protection of Wetlands).

TVA conducted six Phase I archaeological surveys, an archaeological reconnaissance survey, Phase II testing studies of three archaeological sites, and two surveys of historic architectural resources to identify historic properties in the undertaking's area of potential effect (APE). With one exception, for each of the above-listed cultural resources investigations, TVA completed consultation with the Mississippi State Historic Preservation Officer (SHPO) and federally recognized Indian tribes. These consulting parties agreed with TVA's determinations regarding the National Register of Historic Places eligibility of all cultural resources identified in the APE and that the proposed undertaking will result in no effects on historic properties. With regard to the proposed spoil storage area adjacent to the Coffeenville Substation, TVA has initiated consultation with the Mississippi SHPO and federally recognized Indian tribes regarding the finding of "no historic properties," comments are pending. TVA will not perform work within the proposed spoil storage area prior to receiving final concurrence from the Mississippi SHPO and federally recognized Indian tribes.

### **Public Review**

TVA developed a public communication plan that included a website with information about the project, a map of the alternative routes, and feedback mechanisms. Public officials and property owners who could potentially be affected by, or lived near, any of the route alternatives were invited to a project open house. TVA used local news outlets and notices placed in the local newspapers to notify other interested members of the public of the open houses. The Open House was held in Water Valley, Mississippi on March 3, 2016. At the open house, TVA presented a network of alternative TL routes, comprised of 21 different line segments. A 30-day public review and comment period was held following the open houses, and TVA accepted public comments on the alternative TL routes and other issues.

## Mitigation

TVA will implement the routine environmental protection measures listed in the EA. In addition to those routine measures, the following non-routine measures will be implemented to reduce potential adverse environmental effects.

- To compensate for the conversion of 6.13 acres of forested and scrub-shrub wetlands to emergent wetlands, TVA will mitigate the loss of trees by purchasing wetland mitigation credits prior to construction of the proposed TL.
- The relocation of the stream associated with the substation expansion will be conducted in accordance with applicable stream relocation regulations.
- As part of TVA's programmatic biological assessment for bats, TVA will track and document the removal of potentially suitable summer roost trees and include this information in annual reporting in accordance with Section 7(a)(2) consultation. Additionally, if removal of suitable bat roost tree habitat needs to occur when bats may be present on the landscape, TVA will conduct mist net surveys and/or set aside funding to be applied towards future bat-specific conservation projects in accordance with the programmatic biological assessment.
- TVA will arrange the proposed tree clearing schedule with the land manager of the Springdale Natural Area and Wildlife Management Area to minimize conflicts with hunting activities within the protected areas.
- TVA will not perform any activities within the proposed Coffeeville Substation spoil storage area prior to completing consultation with the Mississippi SHPO and federally recognized Indian tribes.

## Conclusion and Findings

Based on the findings listed above and the analyses in the EA, we conclude that the proposed action of constructing a 29-mile 161-kV TL to supply power to an area of northern Mississippi and new NEMEPA substation and associated activities would not be a major federal action significantly affecting the environment. This finding of no significant impacts is contingent upon adherence to the mitigation measures described above. Accordingly, an environmental impact statement is not required.



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Date Signed