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FINDING OF NO SIGNIFICANT IMPACT
TENNESSEE VALLEY AUTHORITY
BIGGERSVILLE, MISSISSIPPI, 161-KILOVOLT TRANSMISSION LINE
PROVIDE DELIVERY POINT
ALCORN COUNTY, MISSISSIPPI

Tennessee Valley Authority (TVA) proposes to construct and operate a 161-kilovolt (kV) transmission line to supply electric power to a new substation being constructed near Biggersville, Mississippi, by Alcorn County Electric Power Association (ACEPA). The proposed transmission line would be 9.2 miles long and would connect the new Biggersville 161-kV Substation to TVA's Corinth 161-kV Substation.

The new transmission line and substation would ensure the area is provided with a strong, reliable, and affordable source of power for continued economic health and residential and commercial growth in the area. ACEPA's new substation would replace the need for the Reinzi 46-kV Substation that currently serves the area. The Reinzi 46-kV Substation's aging equipment has experienced overloads during peak power demand, increasing the potential risk of power outages. Following the construction of the transmission line, TVA proposes to retire the Reinzi 46-kV Substation.

TVA has reviewed the proposed action and reasonable alternatives in an environmental assessment (EA) prepared in accordance with its procedures for implementing the *National Environmental Policy Act* (NEPA). This EA is incorporated by reference.

Two primary alternatives, i.e., the No Action Alternative and an Action Alternative, were analyzed in the EA. Other potential action alternatives were considered, but they were eliminated from further consideration for various reasons described in the EA. In addition, TVA examined a number of different line routing alternatives.

Under the No Action Alternative, TVA would not construct a 161-kV transmission line to supply the new Biggersville 161-kV Substation. ACEPA could decide to construct a transmission line itself, and in that event, environmental impacts could be equal to or greater than the impacts analyzed in the EA depending on how ACEPA did this. If no line were constructed, the ACEPA substation would not be served, and reliability in the Biggersville area would not be improved. This would be exacerbated because the continued use of the Reinzi 46-kV Substation to supply power to the Biggersville area could result in power outages from the failure of overloaded equipment.

Under the Action Alternative, TVA would construct, operate, and maintain a new 161-kV transmission line to supply the new Biggersville Substation. Additionally, TVA would retire the Reinzi 46-kV Substation. Provision of power to the new substation directly from the TVA Corinth 161-kV Substation would provide service to ACEPA's planned substation and ensure a reliable power supply is available to serve the electric power needs in the Biggersville area. The preferred route of the new transmission line analyzed under the Action Alternative was selected from among 24 possible alternative routes to minimize potential impacts to various natural and cultural resources and to property owners.

Based on the analyses in the EA, TVA concludes that implementation of the Action Alternative would have minor and insignificant impacts on terrestrial vegetative or wildlife communities, aquatic life, groundwater, and visual and aesthetic quality. No effects to floodplain functions are anticipated, and the proposed action is consistent with Executive Order 11988 on floodplain management.

Approximately 72 acres of forestland would be cleared for the proposed transmission line right-of-way (ROW). This would increase the fragmentation of forests along the proposed transmission line route but is not anticipated to adversely affect plant or wildlife communities.

The proposed action would not affect endangered or threatened species or federally designated critical habitat because no federally listed species or their habitats occur in areas of the proposed transmission line ROW. No effects to recreation, parks, or natural areas are anticipated.

Clearing for the ROW would convert 5.78 acres of forested wetlands to emergent/scrub-shrub wetlands. Compensatory mitigation was not required by the U.S. Army Corps of Engineers for this wetland type conversion. However, to mitigate the loss of forested wetland in the context of cumulative impacts, TVA would compensate for the impacts by purchasing wetland mitigation credits at a ratio of 1:1 from the Wolf River Mitigation Bank in Fayette County, Tennessee. Because best management practices would be implemented during ROW maintenance, potential effects to wetlands and to water quality would be minor and insignificant.

The proposed action would not adversely affect any historic properties eligible for or listed in the National Register of Historic Places. The Mississippi State Historic Preservation Officer has concurred with this determination.

Mitigation

TVA will implement best management practices and other routine measures listed in the appendices of the EA during construction and operation of the proposed transmission line. To mitigate the loss and conversion of forested wetland in the context of cumulative impacts, TVA would compensate for the impacts by purchasing wetland mitigation credits at a ratio of 1:1 from the Wolf River Mitigation Bank in Fayette County, Tennessee. TVA has not identified the need for any other nonroutine mitigation measures to further reduce potential environmental impacts.

Conclusion and Findings

Based on the findings listed above and the analyses in the EA, we conclude that the proposed action involving the construction and operation of a new transmission line would not be a major federal action significantly affecting the environment. Accordingly, an environmental impact statement is not required. This finding is contingent upon adherence to the mitigation measure described above.



1/15/10

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Date Signed