

FINDING OF NO SIGNIFICANT IMPACT
TENNESSEE VALLEY AUTHORITY
COLUMBUS-DEKALB 161-KV TRANSMISSION LINE – TAP TO PAULETTE

The Proposed Action

The Tennessee Valley Authority (TVA) proposes to construct a new 8-mile, single-circuit 161-kV transmission line in Noxubee County, Mississippi, between its Columbus-DeKalb 161-kV Transmission Line and a new Paulette 161-kV Substation that Four County Electric Power Association (EPA) has decided to build. The proposed line would be built with a combination of single-pole and H-frame steel structures on a new right-of-way 100 feet in width and occupying about 83 acres. TVA would install a switch in the Columbus-DeKalb tap line and provide low-side metering at the new Paulette Substation.

Background

The purpose of the proposed action is to provide an adequate and reliable supply of electricity to Four County EPA's service territory in Noxubee County. This area is presently served by three Four County EPA substations that are served by TVA's Columbus-DeKalb 161-kV Transmission Line. Current planned development is expected to cause overloading on the existing 13-kV system and two of the three substations that supply Noxubee County in 2004. The proposed action would correct this problem by providing a new 161-kV connection to the TVA transmission system.

Alternatives

While planning this project, TVA and Four County EPA considered various means of providing an adequate and reliable supply of electricity to the Noxubee County area. In addition to the proposed action (the Preferred Alternative) and the No Action Alternative, TVA considered one additional Action Alternative. Under this additional alternative, Four County EPA would increase the capacity of its South Macon 161-kV Substation, construct an additional 7.5 miles of transmission line from this substation to its Shuqualak Substation, and convert the circuits on 10 miles of an existing distribution line. TVA would provide metering. This alternative is not TVA's Preferred Alternative because it would result in both higher costs to Four County EPA and TVA and have potentially similar impacts as the proposed action. In addition, this alternative would not provide service to the Paulette Substation that Four County EPA has decided to construct. The No Action Alternative is not preferred because it would not meet the power demands of the project area.

During the development of the proposed action, TVA considered five alternative routes for the proposed transmission line. These alternative routes run roughly west to east from either a connection point with the Columbus-DeKalb Transmission Line or the Four County EPA's South Macon Substation to the site of the proposed Paulette Substation. The preferred route was selected based on a number of factors including public input,

reduction of potential environmental impacts, avoidance or lessening severance of property, and avoidance of cemeteries, schools, and other cultural features. This preferred route is analyzed in detail in the Environmental Assessment (EA).

Impacts Assessment

The EA concludes that the impacts to terrestrial plant and animal communities would be minor and insignificant. No uncommon plant or animal communities occur in the project area. About 40 percent of the approximately 83 acres of new transmission line right-of-way is forested and would be converted to non-forested habitats. The forest in this area is already heavily fragmented, and the impacts of the resulting forest loss and increased forest fragmentation would be small. No federally listed endangered or threatened plants or animals are known to occur or are likely to occur within the project area, and consequently no impacts to these species are anticipated. Five plant species of conservation concern in Mississippi were identified along the proposed transmission line, which was relocated to avoid these populations. Four terrestrial animals and one aquatic animal of conservation concern in Mississippi have been reported from Noxubee County. In addition, potential habitat was identified for these animals along the proposed transmission line. These species could be affected; however, because habitat for these species is fairly common in the project area, any potential impacts would be insignificant. No significant impacts on any animals of conservation concern in Mississippi are anticipated.

The proposed transmission line would cross 18 separate wetland areas with a total of about 10 acres within the proposed right-of-way. Nine of these wetlands, consisting of a total of about 4.1 acres, are forested, and the remainder are emergent or scrub-shrub wetlands. Impacts to wetlands would be minimized through the use of Best Management Practices (BMPs), and overall wetland impacts would be insignificant. There is no practicable alternative that would completely avoid wetlands in the area.

The proposed transmission line and substation are in the watershed of the Noxubee River. The transmission line would cross perennial streams eight times, cross ponds three times, cross six intermittent streams, and cross numerous wet-weather conveyances. No unusual aquatic communities are known from these watercourses. None of the streams in the proposed project area are on the state 303 (d) list of impaired waters. BMPs and other streamside protection measures would be used to minimize the impacts of transmission line construction and operation on area streams. With the implementation of these measures, impacts to streams, aquatic life, and water quality are expected to be insignificant.

Portions of the transmission line would be located in identified floodplains. Construction in these areas would not result in any increase in flood hazard, and the proposed action is consistent with Executive Order 11988 for Floodplains. The project is compatible with current land uses, and the proposed action would not negatively affect prime farmland. Impacts to recreation activities, transportation, and visual aesthetics would be insignificant. No parks, managed areas, or ecologically significant sites would be affected.

One archaeological site and one historic structure were identified during a survey of the project area. TVA has determined that neither of the potentially eligible sites would be

affected by the proposed action. This determination was submitted to the Mississippi State Historic Preservation Officer, whose concurrence was obtained when he chose not to respond within the 30-day period provided by applicable regulations.

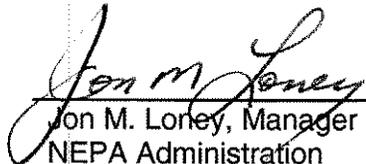
Mitigation

The proposed action contains standard measures including the use of BMPs, the establishment of streamside management zones, and other practices listed in the appendices of the EA to minimize environmental impacts. No nonroutine mitigation measures are required for this project.

Conclusion and Findings

The Final EA for this proposal concludes that construction and operation of the transmission line would not result in significant adverse impacts upon the environment. This conclusion takes into account the implementation of the standard commitments, such as the use of BMPs.

Environmental Policy and Planning's NEPA Administration staff have reviewed the Final EA and agreed with this conclusion and have determined that the preparation of an Environmental Impact Statement is not required.



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Date Signed