

FINDING OF NO SIGNIFICANT IMPACT
TENNESSEE VALLEY AUTHORITY
MONROE, TENNESSEE - PROVIDE 161-KILOVOLT (KV) DELIVERY POINT
OVERTON COUNTY, TENNESSEE

Proposed Action and Need

Tennessee Valley Authority (TVA) proposes to construct and operate a 161-kV transmission line to supply a new substation being constructed near Monroe, Tennessee, by the Upper Cumberland Electric Membership Corporation (UCEMC). The proposed transmission line would be 5.5 miles long and would connect the new substation to the TVA Huntsville-Livingston 161-kV Transmission Line. The new transmission line and substation would provide a more reliable power supply to UCEMC customers. TVA has reviewed the proposed action and reasonable alternatives in an environmental assessment (EA) prepared in accordance with its procedures implementing the *National Environmental Policy Act*. This EA is incorporated by reference.

Alternatives

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 Monroe Substation. Implementation of this alternative would not provide needed additional power to the Monroe area to regulate the current voltage issues and meet the projected growth. Additionally, power outages could result from the failure of overloaded equipment at the Livingston Substation.

Under the Action Alternative, TVA would construct, operate, and maintain a new 161-kV transmission line to supply the new Monroe Substation. Provision of power to the new substation directly from the TVA Huntsville-Livingston 161-kV Transmission Line would reduce the load on the TVA Livingston Substation as well as meet the current and projected power demands in the Monroe area. The preferred route of the new transmission line analyzed under the Action Alternative was selected from among several possible alternative routes to minimize potential impacts to various natural and cultural resources and to property owners.

Impacts Assessment

Based on the analyses in the EA, TVA concludes that implementation of the Action Alternative would have minor and insignificant impacts on terrestrial and aquatic life, threatened and endangered species, surface water, groundwater, wetlands, historical and archaeological resources, visual and aesthetic quality, socioeconomics, and global warming. No effects to floodplain functions are anticipated, and the proposed action is consistent with Executive Order 11988 on floodplain management.

Approximately 23 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.

Because of the karst topography, precautions would be taken to avoid adverse effects to caves and sinkholes along the proposed transmission line ROW. The proposed action is not likely to adversely affect endangered or threatened species, and the U.S. Fish and Wildlife Service has concurred with this determination.

Clearing for the ROW would convert 0.17 acre of forested wetland to emergent wetland. Compensatory mitigation was not required by the U.S. Army Corps of Engineers. 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 affect parks, managed areas, or ecologically significant sites.

The proposed action would not adversely affect any historic properties eligible for or listed in the National Register of Historic Places. The Tennessee 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. TVA will implement the following nonroutine mitigation measures to reduce the anticipated environmental impacts.

- Due to the mature karst terrain, herbicides with groundwater contamination warnings will not be used within the 2.75-mile transmission line ROW beginning south of Linder Mountain Road to the Livingston-Jamestown 161-kV Transmission Line tap point. Vegetation management guidelines and procedures as described in Appendix E would be followed during ROW maintenance.

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 of no significant impact is contingent upon adherence to the identified mitigation measures.



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Date Signed