

FINDING OF NO SIGNIFICANT IMPACT

KENTUCKY DAM-NASHVILLE 161-kV TRANSMISSION LINE TAP AND SCREAMING EAGLES SUBSTATION

The Proposed Action

The Tennessee Valley Authority (TVA) and the U.S. Army propose a joint project to improve the reliability of electric service at Fort Campbell in Montgomery County, Tennessee. TVA proposes to construct and operate a new 161-kV substation and a 7.3-mile single circuit 161-kV transmission line. The substation and all but about 0.9 mile of the transmission line would be located on Fort Campbell. The transmission line would connect to TVA's existing Kentucky Dam-Nashville 161-kV transmission line. The proposed line would be built with a combination single-pole and H-frame steel structures on new right-of-way 100 feet in width and occupying about 88 acres. The substation would be built on a 4-acre tract adjacent to an existing 69-kV substation. TVA would also make associated communications improvements by upgrading a radio at its Montgomery 500-kV Substation and reprogramming communication equipment at the Power Business Center and the System Operations Center in Chattanooga. The Army would transfer the site of the proposed substation to TVA and grant TVA a permanent easement for the portion of the new transmission line on Fort Campbell.

Background

The purpose of the proposed action is to improve the reliability of the supply of electricity to Fort Campbell. TVA currently supplies electricity to the fort through a single, short, 69-kV connection. This single source connection has caused the base to experience a significant number of outages in recent years, and does not meet the needs of the Army. The proposed action would correct this problem by providing a new 161-kV connection to the TVA transmission system.

Alternatives

The Army considered various means of improving the electrical supply to Fort Campbell and determined that a new substation and connecting transmission line was the only feasible alternative. The proposed action was then jointly developed by the Army and TVA, and is the preferred alternative of both agencies. The No Action alternative is not preferred because it would not meet the Army's need for a more reliable electrical supply.

During the development of the proposed action, TVA and the Army considered four alternative routes for the proposed transmission line. These alternative routes run from TVA's existing Kentucky Dam-Nashville 161-kV transmission line to the site identified by the Army for the new substation. Preliminary analyses showed that none of the routes had substantial environmental impacts. The preferred route was identified because it best met the Army's criteria of siting as much of the line as possible on Fort Campbell,

avoiding training facilities, and minimizing potential interference with air traffic. This preferred route is analyzed in detail in the Environmental Assessment (EA).

Impact 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 forty percent of the approximately 88 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 or state-listed endangered or threatened plants or aquatic animals are known to occur or are likely to occur within the project area, and consequently no impacts to these species are anticipated. Habitat for five state-listed terrestrial animals could be affected; these species, however, are fairly common in the Fort Campbell area and impacts to them would be insignificant. Two bats federally listed as endangered, the gray bat and the Indiana bat, have been reported from Fort Campbell and suitable foraging and roosting habitat for these bats may be impacted. In accordance with Fort Campbell's endangered species management plan, impacts to these species would be avoided by restricting right-of-way clearing in the specified area of potential habitat to between September 16 and March 31. With implementation of this commitment, no effects on these species are anticipated. The U.S. Fish and Wildlife Service has concurred with this determination.

The proposed transmission line would cross two emergent wetlands with a total of about 2.6 acres within the proposed right-of-way. The proposed transmission line would also cross a 43-acre forested wetland, and result in the clearing and conversion of 2.0 acres of this wetland to emergent or scrub-shrub wetlands. No structures would be placed in wetlands. Impacts to these wetlands would be further minimized through the use of Best Management Practices and overall wetland impacts would be insignificant.

The proposed transmission line and substation are in the watershed of the Little West Fork Red River. The transmission line would cross perennial streams twice, cross ponds and portions of a small lake five times, cross one intermittent stream, and cross numerous wet weather conveyances. No unusual aquatic communities are known from these watercourses. The Little West Fork Red River downstream of the proposed action is classified as partially supporting its designated uses. Best Management Practices 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.

The proposed substation construction would not affect floodplains. 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 the Executive Order on Floodplains. The project is compatible with current land uses, and the proposed action would not negatively affect prime farmland. A portion of the transmission line would be in the vicinity of developed recreation facilities on Fort Campbell. Use of some of these facilities would be impacted during construction activities. These impacts would be short-term and insignificant, and following the completion of construction and site restoration, no long-term impacts to these facilities are anticipated. No ecologically significant sites would be affected, and visual impacts would be insignificant.

Four archaeological sites and nine historic structures were identified during a survey of the project area. Two of these resources, a previously identified archaeological site and the previously identified Clarksville Base historic district, were determined eligible for listing in the National Register of Historic Places (NRHP). The transmission line was rerouted to avoid impacting the eligible archaeological site. The Clarksville Base historic district would be affected. Because the viewshed from contributing resources within the district would not change and other portions of the district would be screened by tree cover, TVA has determined that this effect would not be adverse. The Tennessee State Historic Preservation Officer has concurred with TVA's determination of no adverse impacts.

Mitigation

The proposed action contains standard measures, including the use of Best Management Practices and other practices listed in the appendices of the EA, including the establishment of streamside management zones, to minimize environmental impacts. In order to minimize impacts to Indiana bat habitat, the following mitigation measure would be employed:

- Clearing trees for right-of-way construction in a section of the proposed route near Lake Taal from survey station 291+50 to station 333+02 would take place between September 16 and March 31.

Conclusion and Findings

The Final Environmental Assessment for this proposal concludes that construction and operation of the substation and transmission line would not result in significant adverse impact upon the environment. This conclusion takes into account the implementation of the standard commitments, such as the use of Best Management Practices. It is also based on the implantation of the mitigation measure mentioned above.

Environmental Policy and Planning's NEPA Administration staff reviewed the Final EA and agreed with this conclusion, and determined that the preparation of an environmental impact statement is not required.

<original signed by JML>

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Date