

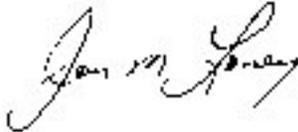
Document Type: EA-Administrative Record
Index Field: FONSI
Project Name: Ranger, NC, 161-kV
Transmission System Upgrade
Project Number: 2004-80

April 14, 2005

W. Terry Boston, MR 3H-C

**ENVIRONMENTAL ASSESSMENT (EA) AND FINDING OF NO SIGNIFICANT IMPACT
(FONSI) - RANGER, NORTH CAROLINA, SUBSTATION - PROVIDE 161-KV
DELIVERY POINT**

In accordance with the National Environmental Policy Act (NEPA) and TVA's implementing procedures, Environmental Policy and Planning is issuing the attached EA and FONSI as documentation of TVA's NEPA review of the Ranger, North Carolina, Substation - Provide 161-kV Delivery Point. As stated in the FONSI, we conclude that the proposed action with implementation of the standard commitments will not have a significant impact on the quality of the environment.



Jon M. Loney, Manager
NEPA Administration
Environmental Policy and Planning

AEM

Attachments: EA and FONSI

cc: M. H. Dunn, ET 11A-K
K. J. Jackson, WT 11A-K
E. Robinson, ET 12A-K
J. W. Shipp, Jr., MR 2T-C
R. E. Sparry, MR 4G-C (w/Attachments)
EDMS, SP 1D-C (w/Attachments)

Prepared by Anita E. Masters (EP&P); reviewed by Charles P. Nicholson (EP&P) with concurrence of Kimberly D. Choate (TPS) and Gregory R. Signer (OGC).

Page intentionally blank

FINDING OF NO SIGNIFICANT IMPACT TENNESSEE VALLEY AUTHORITY

RANGER, NORTH CAROLINA SUBSTATION - PROVIDE 161-KV DELIVERY POINT

The Proposed Action

Tennessee Valley Authority (TVA) proposes to build a 4.9-mile, 161-kilovolt (kV) transmission line connecting TVA's Murphy-Weaver 161-kV Transmission Line to Blue Ridge Mountain Electric Membership Corporation's (BRMEMC) planned Ranger Substation in Cherokee County, North Carolina. The transmission line would be constructed with a combination single-pole and double-pole (H-frame) steel structures on new right-of-way 100 feet in width and occupying about 60 acres.

Background

The purpose of the proposed action is to serve the planned Ranger Substation and to provide an adequate and reliable supply of electricity to the Ranger Community of Cherokee County, North Carolina. The major power supply to this area is a delivery point from TVA's 161-kV transmission system to BRMEMC's Weaver 161-69-kV Substation. This substation then supplies a radial distribution line to BRMEMC's Nottely 69-kV Substation that serves the Ranger Community. As a result of increasing electrical loads from residential and small commercial growth, the substation and distribution circuits are expected to exceed their capability by summer 2006. The distributor is experiencing system load and voltage problems, and the proposed action would address this need by providing a new 161-kV connection to the TVA transmission system. TVA prepared the attached Environmental Assessment (EA) that is incorporated by reference in this Finding of No Significant Impact.

Alternatives

While planning this project, TVA and BRMEMC considered various means of providing an adequate and reliable supply of electricity to the Ranger Community. In addition to the proposed action (the Preferred Alternative) and the No Action Alternative, TVA considered one additional Action Alternative. Under this additional alternative, BRMEMC would increase the transformer capacity at its Nottely 69-kV Substation, renovate and expand the 13-kV switchyard, and construct two three-phase 13-kV distribution circuits to the Ranger area. This alternative is not TVA's Preferred Alternative because it would result in higher costs to BRMEMC and have potentially similar or greater impacts as the proposed action due to the additional length of new transmission line. In addition, this alternative would not provide service to the Ranger Substation that BRMEMC has decided to construct. The No Action Alternative is not preferred because it would not meet the existing and projected power demands of the project area.

During the development of the proposed action, TVA considered two alternative routes for the proposed transmission line. These alternative routes run roughly east to west from the existing Murphy-Weaver 161-kV Transmission Line to the site of the planned Ranger Substation. The preferred transmission line route was modified and identified based on a number of factors including public input, reduction of potential environmental impacts, less property-ownership impacts, 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 66 percent of the approximately 60 acres of new transmission line right-of-way is forested and would be converted to nonforested 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. Two federally-listed terrestrial species (one plant; one animal) are known from Cherokee County. In addition, one federally-listed animal species has been reported from several nearby counties. Habitat for these three species was not located along the proposed transmission line; therefore, no federally-listed species would be affected by the proposed action. One terrestrial plant, 15 terrestrial animals, and one aquatic animal, all state listed, have been reported from the project area. Potential habitat along the proposed transmission line was identified for 12 of the state-listed terrestrial animal species. These species could be affected. However, alternative habitat is common in the area for six of the species, and streamside management zones and Best Management Practices (BMPs), including erosion control measures, would protect the stream habitats for the remaining six species. As a result, any impacts to the state-listed species would be insignificant.

The proposed transmission line is in the watershed of the Nottely River in the Tennessee River basin. The transmission line would cross perennial and intermittent streams 13 times and numerous wet-weather conveyances. No unusual aquatic communities are known from the affected watercourses; however, one important sport fish, trout, is stocked in the project area by both Georgia and North Carolina and has been collected approximately 1 mile upstream of the Nottely River transmission line crossing. None of the streams in the project area are identified on the state 303(d) list. BMPs and other streamside protection measures would be used to minimize the impacts of the 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.

No wetlands occur in the project area. 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. Impacts to recreation activities, transportation, and visual aesthetics would be insignificant. No parks, managed areas, or ecologically significant sites would be affected.

One historic property was identified as potentially eligible for listing in the National Register of Historic Places. TVA determined the property and the viewshed between the transmission line and the historic property would not be affected because of an existing woodland buffer. Pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations, at 30 Code of Federal Regulations Part 800, TVA coordinated these findings with the North Carolina State Historic Preservation Officer, who had no comment.

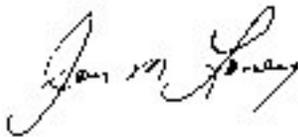
Mitigation

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 and laydown area 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 BMPs.

Environmental Policy and Planning's National Environmental Policy Act (NEPA) Administration staff has determined that the quality of the human environment would not be significantly impacted and that preparation of an Environmental Impact Statement is not required.



April 14, 2005

Jon M. Loney, Manager
NEPA Administration
Environmental Policy and Planning
Tennessee Valley Authority

Date Signed