

REEVALUATION OF FINDING OF NO SIGNIFICANT IMPACT

TENNESSEE VALLEY AUTHORITY

PLATEAU 500-KV SUBSTATION Cumberland County, Tennessee

Background

On November 13, 2013, the Tennessee Valley Authority (TVA) issued an environmental assessment (EA) and a Finding of No Significant Impact (FONSI) on a proposal to construct and operate the Plateau 500-kV Substation and associated transmission line connections in Cumberland County, Tennessee. Construction plans for the proposed substation include grading and leveling the site. The assessment in the EA assumed that if additional fill were required, material would be obtained from an existing, commercial borrow pit that had already been approved/permitted.

Subsequent site planning revealed that up to approximately 160,000 cubic yards of fill material would be needed to adequately build up the site for the substation. This fill material will not be obtained from an existing, commercial borrow area as previously contemplated. Rather, TVA proposes to obtain this borrow material from an approximately 58-acre parcel located off of Plateau Road and immediately adjacent to the Plateau 500-kV Substation site (see Figure 1).

The proposed parcel has been previously cleared and is currently in crop rotation. Topsoil would be removed and then segregated onsite. Suitable fill material would then be removed. The topsoil would be replaced and the parcel would be re-vegetated according to the property owner wishes. Soil used for borrow would be obtained according to specifications in Appendix C of the 2013 EA. Appropriate best management practices will be implemented to stabilize extra fill material to prevent erosion and to ensure that sediment does not contaminate local surface waters. Wetlands and streams will be avoided during activities to obtain borrow and restore the borrow area. Less than 50 acres would be disturbed to obtain the required amount of fill for the substation construction.

Impacts Assessment

Potential effects to various resources were evaluated in the original EA, and the findings of that analysis remain valid. The proposed borrow area is located northeast and adjacent to the Plateau 500-kV Substation site. To investigate potential effects of the Plateau 500-kV Substation, TVA identified environmental resources in a broad area, including threatened and endangered species (county wide and within 5-mile radius), terrestrial and aquatic ecology (3-miles radius for plants, 5-mile radius for animals, 10-mile radius for aquatic animals), and managed areas (3-mile radius). Thus, the environmental resources that could potentially be affected by the proposed borrow area were described in the original EA. In June 2015, TVA conducted field surveys of the additional 58-acre parcel to assess potential site-specific effects to resources as a result of the construction and operation of a borrow pit therein. Using the site-specific data, TVA evaluated the potential environmental effects of the utilization of a portion of the 58-acre parcel as a borrow area for obtaining the fill (see checklists 32764 and 33268 in Appendix A).

No significant direct, indirect, or cumulative environmental effects would result from the use of borrow area to obtain fill for the construction and operation of the proposed facilities. Because this area has been recently disturbed by agricultural activities, no additional effects to terrestrial biological resources are anticipated. No suitable habitat for the federally listed as threatened spotfin chub or the state-listed tangerine darter occurs within the borrow area. Because appropriate BMPs would be implemented, no impacts to these species are anticipated as a result of the proposed project. No federally listed or state-listed plant species, or habitat capable of supporting listed species exists in the proposed borrow area. The state-listed golden-winged warbler was observed during field surveys in 2013 in the vicinity of the project footprint. Riparian and wetland habitat used by this species would be avoided, as would the surrounding parcel edges where vegetation is overgrown. No effects to this species are likely since these areas would be avoided and similar habitat is plentiful in the surrounding landscape. The federally listed as endangered Indiana bat and threatened northern long-eared bat would not be affected. No suitable summer roosting habitat is available and no caves or other potential winter roosting structures are known for these species. By using standard best management practices (BMP), the proposed action would have no measureable effect on foraging bats. The proposed actions are not expected to impact populations of these federally or state-listed species. Thus, the requirements of Section 7 of the Endangered Species Act are satisfied.

Eight ephemeral streams (wet-weather conveyances) and four ponds were identified within or adjacent to the proposed borrow area. Appropriate BMPs would be followed to stabilize fill material so that runoff would not reach surface waters. Thus, adverse effects to water quality from this modification are not expected to be significant. Six wetlands totaling 2.75 acres were identified within or 50-feet from the disturbance area; however, the areas of disturbance would be adjusted such that no wetlands would be impacted. Potential wetland effects have been avoided; thus, the proposed action is consistent with the requirements of Executive Order 11990 (Protection of Wetlands). The borrow area would not affect any floodplains or their functions; thus, the action is consistent with the requirements of Executive Order 11988 (Floodplain Management).

TVA evaluated prime farmland effects related to the project in accordance with the 1981 Farmland Protection Policy Act. Approximately 54 percent of the site is considered prime farmland. The proposed action would temporarily change the current land use from agricultural to vacant land use. The top-soil would be removed and segregated during the removal of the fill material at the borrow site. The top-soil would then be replaced, making the land available for agricultural use. Consistent with the requirements of the Farmland Protection Policy Act, a Farmland Conversion Impact Rating was completed using input from local U.S. Department of Agriculture's Natural Resource Conservation Service (NRCS) staff. The NRCS "Relative Value of Farmland to be Converted" in the area was given a score of 34 out of a possible maximum of 100. The "Site Assessment Criteria" rating yielded a score of 54.5, out of a possible 160. The site assessment score was low due to the size of the area, amount of area that is wooded, the lack of barns or farm structures on the site, the lack of impact on existing farming operations, the small percentage of prime farmland affected, and the return of the land to the landowner for agricultural use. The overall Farmland Conversion Impact Rating for the site was 88.5. Because this score is less than the threshold score of 160, loss of this site for agricultural uses would constitute a minor loss of farmland resources. Along with the 4.4 acres of prime farmland affected by the substation, the cumulative effect to prime farmland in the area would small. Thus, the requirements of the federal Farmland Protection Policy Act are satisfied. .

An archaeological survey resulted in the identification of three archaeological isolated finds. TVA recommended that all three isolated finds are ineligible for inclusion in the National Register of Historic Places due to a lack of stratified deposits and to a paucity of artifacts. In a letter received on August 18, 2015, the Tennessee State Historic Preservation Officer concurred with these findings. United Keetoowah Band of Cherokee Indians in Oklahoma responded stating they had reviewed the proposal and did not have comments or objections. No comments were received from other Native American tribes.

Mitigation

The original FONSI included two mitigation measures to reduce the potential for adverse effects to Indiana bat roosting habitat. The following additional routine measure has been added to reduce the potential for adverse effects to aquatic resources, water quality, and wetlands.

- The six delineated wetlands located within or 50-feet from the disturbance area would be avoided.

Additionally, to ensure that prime farmland on the proposed parcel would not be affected, the following measure would be implemented:

- Top-soil would be removed and segregated during the removal of the fill material at the borrow site. The top-soil would then be replaced, making the land available for agricultural use.

Conclusion and Findings

With the implementation of the routine mitigation measures listed in the EA and the above commitments, the potential environmental effects of the proposed modifications would be insignificant. These modifications would have no effect on federally-listed species. There would be no historic properties affected. Based on the original EA and the additional analysis contained herein, we conclude that the original proposed action and the proposed modifications would not constitute a major federal action significantly affecting the environment. Accordingly, an environmental impact statement is not required.



Amy B. Henry, Manager
NEPA Program and Valley Initiatives
Environmental Permitting and Compliance
Tennessee Valley Authority



Date Signed

Attachments:

Categorical Exclusion Checklist 33268
Categorical Exclusion Checklist 32764