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Project Name: ORNL Primary 161-kV Substation and Transmission Line Connections
Project Number: 2005-85

REEVALUATION OF FINDING OF NO SIGNIFICANT IMPACT (FONSI)

TENNESSEE VALLEY AUTHORITY

OAK RIDGE NATIONAL LABORATORY PRIMARY 161-KV SUBSTATION AND TRANSMISSION LINE CONNECTIONS
ANDERSON AND ROANE COUNTIES, TENNESSEE

Background

On May 26, 2005, the Tennessee Valley Authority (TVA) issued an environmental assessment (EA) and a FONSI on a proposal to construct a substation and power distribution lines at the Oak Ridge National Laboratory (ORNL). Construction plans for the proposed substation include grading and leveling the site. Excess spoil material was not anticipated, as a balanced cut and fill within the substation "footprint" was planned. However, subsequent site planning revealed that approximately 7,000 cubic yards of soil would be generated that could not be spoiled on the substation site due to space limitations. TVA proposes to use this excess soil to fill a low area between the substation site and Ramsey Drive, the road that is located immediately north of the substation site (see figure 1-1 in the EA). (Ramsey Drive is an extension of Melton Valley Drive, and was identified erroneously as Melton Valley Drive in the EA.) If necessary, some of this soil may be placed within the 161-kV connection right-of-way between the substation and the Fort Loudoun-Spallation Neutron Source 161-kV Transmission Line.

Logging debris at the substation site, which consists of limbs, tops, and stumps, will be chipped. Original plans called for mixing these chips with onsite fill material; however, due to space restrictions, disposal of this residue on the substation site may not be feasible. In this event, TVA proposes to dispose of the material by spreading it at one or more of the following locations:

- along the western and southwestern edges of the substation site;
- within the 300-foot wide connector line right-of-way between the substation and the Fort Loudoun-Spallation Neutron Source Transmission Line; and,
- along portions of the Fort Loudoun-Spallation Neutron Source Line that are easily accessible to equipment.

Impacts Assessment

Potential effects to various resources were evaluated in the original EA, and the findings of that analysis remain valid. The proposed soil disposal site is located adjacent to the substation site within the right-of-way of the 161-kV lines connecting the substation to the Fort Loudoun-Spallation Neutron Source Transmission Line. This area was included in the original environmental review, and no significant environmental effects would result from the construction and operation of the proposed facilities. The placement of material at this site would fill the low area between Ramsey Drive and the substation. Because this area has been recently disturbed by logging and clearing activities, no additional effects to terrestrial biological resources are anticipated. This soil is not contaminated, and appropriate best management

practices would be taken 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.

Woody debris would be chipped and stored on the substation site until its disposal. This material is not contaminated. Because the material would be dispersed, rather than piled, the potential for changes in soil pH is minor. Thus, disposal of woody debris is not expected to alter surface water quality or adversely affect aquatic resources. The creation of a dense groundcover from chipped debris disposal would temporarily affect the local plant community; however, the original plant composition would likely re-establish quickly as the debris decomposes. This ground cover would act as mulch and would prevent erosion and enhance water retention by the soil. Thus, these modifications to the original proposed action are not expected to result in any adverse environmental effects.

Mitigation

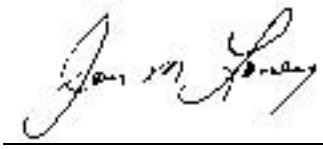
The original FONSI included two mitigation measures to reduce the potential for adverse effects to water quality and aquatic resources. The following additional routine measures have been added to reduce the potential for adverse effects to aquatic resources and water quality.

- Appropriate best management practices will be taken to stabilize extra fill material to prevent erosion and to ensure that sediment does not contaminate local surface waters.

- Chipped woody debris from the substation site will be disposed of by mixing with soil, by burying, or by dispersing material on the ground surface.

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 additional analysis, 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.



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Date Signed