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FINDING OF NO SIGNIFICANT IMPACT
TENNESSEE VALLEY AUTHORITY
SELMER-WEST ADAMSVILLE 161-KV TRANSMISSION LINE AND SWITCHING STATION
MCNAIRY COUNTY, TENNESSEE

The Tennessee Valley Authority (TVA) proposes to improve reliability of the existing power supply system within McNairy County, Tennessee by constructing and operating a new 161-kilovolt (kV) transmission line and switching station. The proposed 15-mile-long Selmer-West Adamsville 161-kV Transmission Line would connect TVA's existing Selmer 161-kV Substation to the proposed West Adamsville 161-kV Switching Station, which would connect to TVA's Pickwick Hydro Plant-Henderson 161-kV Transmission Line northwest of Selmer, Tennessee. The proposed transmission line would provide an additional source of power to the Selmer Substation and several nearby substations that are fed from a common power source. Additionally, to improve local system reliability, TVA would perform various upgrades to existing transmission assets. These include installation of fiber optic ground wires, installation of additional communication and operating equipment at existing facilities, and updating the TVA system map boards to reflect the new assets.

The proposed action is the subject of an environmental assessment (EA) prepared by TVA. The EA is incorporated by reference.

Two alternatives, i.e., the No Action Alternative and the Action Alternative, were evaluated. 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 transmission line routing alternatives and switching station site options.

Under the No Action Alternative, TVA would not construct the proposed transmission line or switching station and would not perform upgrades to local transmission assets. As a result, the TVA power system in the project area would be at risk for substation and transmission line overloading and possible loss of service.

Under the Action Alternative, the preferred alternative, TVA would take various actions to improve the power supply in the McNairy County area of southwest Tennessee. In addition to constructing a new 15-mile long transmission line, these actions include installing new transmission assets and upgrading certain existing transmission system assets as described below.

- Modify existing communications equipment and add expand the yard at the existing Selmer 161-kV Substation to accept additional electrical equipment;
- Install fiber optic ground wire along TVA's existing Pickwick Hydro Plant-Henderson 161-kV Transmission Line from the proposed West Adamsville 161-kV Switching Station to the existing North Adamsville 161-kV Substation and replace structures as needed;
- Install fiber optic ground wire from Structures 129 to144 along the de-energized Pickwick Hydro Plant-S. Jackson No. 2 161-kV Transmission Line and replace structures as needed;

- Install telecommunications connections at the Henderson and the South Jackson, Tennessee 161-kV substations and at the Pickwick Hydro Plant 161-kV Switchyard; and
- Modify the TVA system map boards to include the names and numbers of the new transmission line and switching station.

Based on the analyses in the EA, TVA determined that with the implementation of appropriate best management practices and other measures to avoid adverse effects to water quality, adoption of the Action Alternative would have minor and insignificant effects on groundwater, surface water quality, and aquatic life. Clearing for the 186-acre right-of-way would result in removal of approximately of 74 acres of forest, which would be maintained in early successional habitat. Although resident wildlife would be displaced during construction, effects to local vegetation and wildlife would be minor and insignificant.

Potential effects to local aesthetic quality would be minor and insignificant. There would be no effects to the availability of prime farmlands, recreational opportunities, or natural areas. Direct, immediate economic benefits would be minor; however, the availability of a reliable power source would provide long-term indirect economic benefits to the local area.

Portions of the proposed transmission line as well as certain access roads would be located within the 100-year floodplain. Overhead transmission lines (including support structures) and access roads are considered repetitive actions for purposes of Executive Order 11988 (Floodplain Management). The ROW would be revegetated where natural vegetation is removed to minimize impacts to floodplain values, and new access road construction would be undertaken in a manner that does not increase flood elevations. Thus, the proposed action is consistent with Executive Order 11988.

A total of 0.39 acres of forested wetlands would be converted to emergent or scrub-shrub wetland habitat. There is no practicable alternative that would avoid impacts to wetlands altogether. However, any impacts to wetlands and floodplains would be minimized consistent with the requirements of Executive Order 11990 (Protection of Wetlands).

Based on field surveys, TVA determined that no NRHP-eligible historic properties are present within the areas of potential effect. The Tennessee State Historic Preservation Officer concurred with TVA's determination of no effect to historic properties. Accordingly, TVA's obligations under Section 106 of the National Historic Preservation Act are satisfied.

No federally listed aquatic species or designated critical habitats are known to occur in McNairy County. Appropriate best management practices, including the establishment of streamside management zones, would be implemented during construction and maintenance of the proposed facilities. As a result, no direct, indirect or cumulative impacts to federally or state-listed threatened and endangered aquatic species are expected. No federally listed plant species or their habitats would be affected, because none are known to occur in the project area. Potential adverse effects to Elliott's blueberry, a state-listed plant, would be reduced to insignificant levels with the implementation of the measures described below and in Sections 2.7 and 4.6.2.2 of the EA.

No significant impacts are anticipated to state-listed animal species from implementing the proposed project. Gray bat foraging habitat in the project area would be affected during construction of the proposed transmission line. TVA determined that the proposed actions may affect, but are not likely to adversely affect the gray bat. Adoption of the Action Alternative

would result in the removal of 6.4 acres of potentially suitable habitat for the federally listed Indiana bat and the northern long-eared bat, which is proposed for federal listing. TVA would remove trees between October 15 and March 31, when the bats are hibernating elsewhere. Thus, TVA determined that any indirect or cumulative effects to Indiana bats would be discountable. The proposed actions may affect, but would not likely adversely affect the Indiana bat and they would not jeopardize the existence of the northern long-eared bat.

To offset potential effects to Indiana bats due to habitat loss, TVA established a Memorandum of Agreement with the U.S. Fish and Wildlife Service, whereby TVA would contribute $23,040 to the Indiana Bat Conservation Fund to promote the conservation and recovery of the Indiana bat. Thus, the requirements of Section 7 of the Endangered Species Act are satisfied.

TVA posted information about the project, including a map of alternative routes and feedback mechanisms, on its website. Public officials were briefed on the project. Potentially affected property owners, along with public officials, were invited to a project open house held on July 19, 2012, in Selmer, Tennessee. TVA used local news outlets and placed notices in the local newspapers to notify the public of the meeting, which was attended by 107 people.

At the open house, TVA presented a network of 17 alternative transmission line routes comprised of 21 different line segments along with three possible switching station sites. A 30-day public review and comment period was held following the open house, and TVA accepted public comments on the proposed action.

At the conclusion of the comment period, TVA adjusted some of the proposed transmission line route segments in response to comments received. TVA announced a preferred Selmer-West Adamsville 161-kV Transmission Line route and the preferred site for the proposed West Adamsville 161-kV Switching Station to the public in October 2011. After the announcement, letters were sent to affected property owners, and information was provided to the public through TVA's website.

TVA consulted with the Tennessee Historic Preservation Office, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and 11 federally recognized Native American tribes concerning the proposed project.

Mitigation

TVA will implement, or require adherence to, the routine measures listed in the EA during the construction and operation of the proposed transmission line, switching station, and access roads and during the proposed transmission system upgrades. In addition, the following non-routine measures will be taken to protect and mitigate potential adverse effects to the state-listed Elliot's blueberry:

- TVA has taken cuttings from the Elliott's blueberry plant in the proposed ROW. Plants will be grown in a nursery until ready for out planting.

- As part of the post-construction revegetation efforts, at least 10 blueberry plants propagated from cuttings will be replanted along the northwest facing edge of the ROW.

- If there is an unexpected failure of the propagation efforts, the Elliott's blueberry located in the proposed ROW will be transplanted to the edge of the ROW before clearing. If plants generated from cuttings are successfully propagated, the Elliott's blueberry currently on the proposed ROW would not be transplanted.

- The area where the Elliot's blueberry would be planted will be identified on the project engineering plans.

- The Elliot's blueberry would be planted and the location identified using GPS coordinates to define a site polygon. This information would be added to the TVA Sensitive Area Review database so the species would not be inadvertently damaged during future reclearing of the ROW. For at least 5 years post-construction localized treatment using backpack or vehicle-mounted sprayers would be excluded near the plants. Additionally, broadcast herbicide application would be prohibited on the site as long as the blueberries are present.

In accordance with the stipulations of the Memorandum of Agreement between TVA and the U.S. Fish and Wildlife Service, TVA has contributed $23,040 to the Indiana Bat Conservation Fund to promote the conservation and recovery of the Indiana bat. Additionally, TVA would institute the following measure to avoid adverse effects to Indiana bats:

- TVA will selectively remove Indiana bat roosting habitat between the dates of October 15, 2014 and March 31 (i.e., when this habitat is unoccupied because the bats are hibernating elsewhere) and contribute $23,040 to the Indiana Bat Conservation Fund to promote the conservation and recovery of the Indiana bat.

TVA has not identified the need for any other non-routine mitigation measures to further reduce potential environmental impacts.

Conclusion and Findings

Based on the findings listed above and the analyses in the EA, we conclude that the construction of a new switching station and transmission line and upgrading associated local transmission assets as described above would not be a major federal action significantly affecting the environment. This finding of no significance is contingent upon adherence to the mitigation measures described above. Accordingly, an environmental impact statement is not required.

January 6, 2015

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Date Signed