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Project Number: 2012-36

FINDING OF NO SIGNIFICANT IMPACT
TENNESSEE VALLEY AUTHORITY
MEMPHIS REGIONAL MEGASITE POWER SUPPLY

The State of Tennessee owns approximately 4,100 acres in the Stanton, Tennessee, area between Memphis and Jackson. The State-prepared property was certified as a "megasite" (property ready for development by large-scale manufacturing) in 2006 by McCallum-Sweeney Consulting, and is now being marketed by the State to major corporations with the intent of promoting jobs, developing property, and creating a tax base for the State. The Memphis Regional Megasite property and adjoining land owned by the State (referred to hereinafter as "Megasite") are located in Haywood and Fayette counties, Tennessee. The State of Tennessee has requested TVA plan for and provide a power supply to the State-owned Megasite that would facilitate the future development of that site. The exact power needs for the Megasite have not been identified at this time pending the future recruitment of customers/corporations (referred to hereinafter as "tenant") for the use of the Megasite.

TVA proposes to site and plan for transmission line loop (referred to hereinafter as "TL") routes capable of supporting both a 6.5-mile 161-kilovolt (kV) and a 3.4-mile 500-kV TL power supply option (Figure 1-1). TVA would purchase right-of-way (ROW) easements that provide the necessary rights to construct, operate, and maintain the proposed TL route. The ROW easements TVA proposes to acquire total approximately 158 acres. These easements would accommodate various widths to allow TVA the flexibility to provide the voltage needed at the Megasite. TVA would construct either a 161-kV *or* a 500-kV double-circuit "loop" TL depending on the State's determination of the power supply option (161-kV or 500-kV) needed for the Megasite.

The potential environmental effects of this proposed action are described in an environmental assessment (EA), which is incorporated by reference.

Alternatives

The subject EA evaluates two alternatives in detail, *i.e.*, the No Action Alternative and the Action Alternative (TVA Provides a Power Supply to the Megasite). TVA also considered other alternatives, including alternative TL routes, in identifying its preferred action alternative.

Under the No Action Alternative, TVA would not provide a power supply to serve the Megasite located in southern Haywood County and northern Fayette County, contrary to its mission to support economic development across the valley. In this case, the State would seek to obtain the power supply through alternative means. Should the State of Tennessee independently provide transmission service by constructing a new TL, the potential environmental effects of implementing the No Action Alternative would likely be comparable to those of the Action Alternative described in Chapter 4. Likewise, the potential impacts for a TL constructed by anyone else would be similar to the impacts assessed in the proposed Action Alternative. However, some variability of impacts could occur as effects of the construction would be dependent upon various factors, such as the route chosen and the construction methods used.

If the project were cancelled, no direct environmental effects are anticipated, as environmental conditions along the ROW that TVA proposes to acquire would remain essentially unchanged from current conditions.

Under the Action Alternative, TVA would identify a preferred ROW route that could be utilized for either the option of a 161-kV TL or the option of a 500-kV TL to supply power to the State-owned Megasite. The proposed TL would provide power to the Megasite utilizing a TL "loop" from either the Cordova-South Jackson 161-kV TL or the Haywood Switching Station-Cordova 500-kV TL. The construction of the line would not occur until the State makes its determination on the power supply option for the Megasite. Planning for both potential voltages allows for the siting, environmental review, and ROW easement acquisition to be completed so that construction of the TL can begin upon the State's determination of the required power voltage. Planning in advance for the TL connection to the Megasite allows the State to better market the Megasite to potential industrial tenants.

TVA would purchase easements along the preferred ROW route giving it the rights to construct, operate, and maintain a TL to provide a power supply to serve the Megasite. These easements would be of various widths depending on the voltage that the State determines is needed at the Megasite.

The 161-kV TL power supply option would require that two 161-kV circuits be installed on steel-pole, double-circuit structures. The 6.5-mile route would begin between existing Structures 205 and 206 on TVA's Cordova-South Jackson 161-kV TL and would end at the Megasite. The proposed 161-kV TL ROW would require about 2.4 miles of new 100-foot-wide ROW, from the beginning point to the route interception with TVA's Haywood Switching Station-Cordova 500-kV TL ROW. At this junction, the 161-kV route would turn and run parallel with the existing Haywood Switching Station-Cordova 500-kV TL for about 0.7 mile, sharing the 40-foot-wide ROW. TVA would purchase an additional 60-foot-wide ROW along this section. The 161-kV route would then turn northwest and continue for 3.4 miles on a 300-foot-wide ROW that could be utilized for either the 161-kV or 500-kV TL circuits.

The 500-kV TL power supply option would require that two 500-kV circuits be installed as separate circuits. Lattice-type steel structures would be used for this loop separated by 125 feet between the circuit centerlines. The 500-kV TL power supply option would begin between existing Structures 428 and 427 on TVA's Haywood Switching Station-Cordova 500-kV TL and end at the Megasite. The easement would be 300-foot wide for this power supply option. The EA addresses the construction, operation, and future ROW maintenance of the proposed TL. To facilitate the operation of the proposed TL, TVA would modify the TVA system map boards to include the names and numbers of the new TLs.

Impacts Assessment

The EA documents potential effects to the following resources: land use; aquatic life; vegetation; wildlife; endangered and threatened species (aquatic animals, terrestrial animals, and plants) and their critical habitats; water quality; floodplains; wetlands; archaeological and historic resources; aesthetic resources; recreation, parks, and managed areas; and socioeconomics and environmental justice.

If the No Action Alternative were adopted, and the State chose not to develop the megasite because of the power limitations, its goals to provide jobs to the area and increase the tax base for the State would not be met. Additionally, the area would lose residential, commercial, and

industrial development opportunities. Potential socioeconomic effects under the No Action Alternative would likely affect all populations in the region negatively.

Overall, the Action Alternative would have no disproportionate impacts to disadvantaged populations, notwithstanding the higher minority population and higher poverty level for the larger Haywood County area. The provision of providing additional power through a local power company creates the potential for industrial growth in the area over the long-term (20 years or more). This could result in some localized long-term and cumulative socioeconomic benefits as compared to the No Action Alternative. Additional employment opportunities and power supply in the area would provide a resource that could more successfully accommodate residential, commercial, and industrial expansion and development. However, any such future developments are speculative. No noticeable adverse social or economic effects, including changes in local property values, are likely. Potential effects on traffic would likely be minor and short-term in nature.

Vegetation in the project area is composed of cultivated agricultural fields, pastures, forest, maintained power line ROWs, or disturbed sites in various stages of residential development. All forested areas encountered are fragmented and the largest contiguous stand covers just eight acres. Pasture and other agricultural operations are consistent with TL operations. Under the Action Alternative, approximately 51 acres of forested land within the proposed ROW would be cleared. The construction of the proposed TL would require changes in land use from forest to early successional habitats; however, potential effects to vegetation, local wildlife populations or habitat, or aquatic life would be minor and insignificant. Potential effects from electromagnetic fields would be minor, and the proposed TL would not pose an increased hazard for electric shock or from lightning. Because construction of the proposed TL would take place over a short period, potential effects to local noise and air quality would be minor and insignificant, and the amount of solid waste produced would be minor.

Suitable foraging and summer roosting habitat for the two federally listed species, Indiana bat and northern long-eared bat, exist in the vicinity of the proposed ROW. Three locations, totaling 9.6 acres, were determined to be suitable for summer roosting. Prior to the commencement of construction, consultation with the United States Fish and Wildlife Service (USFWS) under Section 7 of the Endangered Species Act would be completed for potential impacts to Indiana bat and northern long-eared bat habitat from the removal of suitable habitat for these species. If warranted, TVA would enter into a Conservation Memorandum of Agreement (MOA) with the USFWS to offset indirect impacts to Indiana bat and northern long-eared bat potentially resulting from the removal of suitable habitat for these species. Consultation would be completed prior to any clearing or construction along the proposed ROW. No ground disturbing activities would occur along this proposed ROW until TVA has fulfilled its obligations under Section 7 of the Endangered Species Act. With implementation of mitigation and conservation measures identified in the MOA through the Section 7 process, impacts to the two bat species would not be significant.

With the use of appropriate best management practices, potential effects to surface water, groundwater, and wetlands would be minor and insignificant. The proposed TL would not cross floodplain areas. As such, construction, operation, and maintenance of the proposed TL would not have an impact on floodplains. In compliance with EO 11990 (Protection of Floodplains), TVA has determined that there is no practicable alternative to completely avoiding all wetland impacts. TVA has considered all means to avoid wetlands where practicable and to minimize impacts to wetlands where routing through a wetland would be unavoidable, resulting in the

least wetland disturbance. Likewise, TVA's proposed action is consistent with the requirements of EO 11990.

TVA finds that there are no historic properties (archaeological or architectural) eligible for listing in the NRHP within the APE. Therefore, the undertaking, i.e., implementing the Action Alternative, would have no direct, indirect, or cumulative effects on sensitive cultural resources. TVA consulted with the Tennessee State Historic Preservation Office (SHPO) and two federally recognized Native American tribes concerning the proposed project. The Tennessee SHPO agreed with TVA's findings and determinations. No adverse comments were received from the tribes consulted on the proposed undertaking or on TVA's determination of "no effects" on historic properties.

Most changes in local visual character would occur during TL construction. The visual presence of the new TL would not contrast significantly with the established landscape character. Construction, operation, and maintenance of the proposed TL could cause minor shifts in local informal recreation. No managed or natural areas would be affected. No Wild and Scenic Rivers or rivers listed on the Nationwide Rivers Inventory would be affected. Under the No Action Alternative, changes to the scenic quality of the area could occur over time as factors such as population trends, land use and development, recreational patterns, and cultural, ecological, and educational interests affect scenic quality within the area. Under the Action Alternative, changes in the scenic quality of the area could occur at a more accelerated pace than the No Action Alternative as more development may come to the area due to the power supply. However, since future development is speculative, enough time would elapse so that viewers adjust to the new TL and any associated infrastructure before any future development.

Public and Intergovernmental Review

TVA developed a public communication plan that included a website with information about the project, a map of the alternative TL routes, and feedback mechanisms. Public officials were briefed on the project. Potentially affected property owners, along with 30 public officials, were specifically invited to a project open house. TVA used local news outlets and placed notices in the local newspapers to notify other interested members of the public of the open house.

At the open house, TVA presented a network of alternative TL routes comprised of 20 different line segments to the public. A 30-day public review and comment period was held following the open house, and TVA accepted public comments on the proposed action. Subsequently, TVA issued a draft EA followed by a 24-day public review and comment period. Comments received on the draft EA have been addressed in the final EA.

TVA coordinated the Draft EA with the U. S. Fish and Wildlife Service, U. S. Army Corp of Engineers, the Tennessee Historical Commission, the Tennessee Department of Environment and Conservation, and other entities identified in Chapter 6 of the EA. Additionally, the Section 106 review for impacts to historic properties was coordinated with the TNSHPO and the two federally recognized Native American tribes with an interest in the proposed project.

Mitigation

TVA will implement, or require adherence to, the routine measures listed in the EA during the construction, operation, and maintenance of the proposed TL and associated access roads. In addition, the following non-routine measure would be applied during construction and operation of the proposed TL to reduce the potential for adverse environmental effects.

- TVA would enter into a Conservation MOA with USFWS to offset potential indirect effects to Indiana bat and/or northern long-eared bat resulting from habitat removal during construction of the transmission line.

This mitigation measure is described in more detail in the EA, in Section 4.2.6.3.

Conclusion and Findings

Based on the findings listed above and the analyses in the EA, we conclude that TVA's proposed action would not be a major federal action significantly affecting the environment. Accordingly, an environmental impact statement is not required. This finding of no significant impact is contingent upon adherence to the mitigation measures described above.

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Amy B. Henry, Manager
NEPA Programs and Valley Projects
Environment
Tennessee Valley Authority

Date Signed