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FINDING OF NO SIGNIFICANT IMPACT
TENNESSEE VALLEY AUTHORITY
NORTH DAYTON POWER SYSTEM IMPROVEMENTS
FINAL ENVIRONMENTAL ASSESSMENT
MEIGS AND RHEA COUNTIES, TENNESSEE

The Tennessee Valley Authority (TVA) proposes to provide power for the growing load within the Nokian Tyres Manufacturing Facility and increase the power reliability in Dayton, Tennessee (TN) located within Rhea County, TN. To accomplish this, TVA proposes to construct, operate, and maintain 12 miles of new double circuit 161-kV transmission line (TL) with Optical Ground Wire. The proposed new Loop to North Dayton 12-mile TL would be built using double-circuit, steel pole structures centered on existing and new 100-foot-wide right of way (ROW). Of the proposed 12 miles, 7.8 miles will consist of vacant existing 75ft wide ROW of the Athens-Dayton TL with an additional 12.5ft of clearing proposed on each side of the ROW for this portion of the route to expand from 75 to 100 feet wide.

The proposed action is the subject of an environmental assessment (EA) prepared by TVA. The EA is incorporated by reference. The EA addresses the construction, operation, and right-of-way (ROW) maintenance of the proposed TL.

Alternatives

Two alternatives (the No Action Alternative and the Action Alternative) were addressed in the EA. TVA also considered other alternative TL routes in identifying its preferred Action Alternative.

Under the No Action Alternative, TVA would not construct the proposed Loop to North Dayton 12-mile TL and associated North Dayton 161-kV Switching Station expansion. As a result, the TVA power system within Rhea County, TN areas would continue to operate under current conditions, increasing the risk of voltage and thermal loading problems, loss of service, and occurrences of violations to NERC reliability criteria. TVA's ability to provide reliable service and add electrical capacity to support economic development within the area, including Nokian Tyres Manufacturing Facility, would be jeopardized, which would not support TVA's overall mission.

Considering TVA's obligation to provide reliable electric service and support economic development within the Valley, the No Action Alternative is not a reasonable alternative. However, the potential environmental effects of adopting the No Action Alternative were considered in the EA to provide a baseline for comparison with respect to the potential effects of implementing the proposed action.

Under the Action Alternative, TVA would construct, operate, and maintain the proposed Loop to North Dayton 12-mile TL and the existing ROW would be expanded from 75 to 100 feet wide. Proposed upgrades to the existing TVA North Dayton 161-kV Switching Station include two new bays and breakers. To ensure that the areas within Rhea County, TN have a continuous reliable source of power, and that the Nokian Tyres

Manufacturing Facility has additional electrical capacity for future load growth, TVA would provide new electric service to the area. The construction of these power system improvements would meet these needs.

Impacts Assessment

The EA documents potential effects to the following resources: aquatic life; vegetation; wildlife; endangered and threatened species (aquatic animals, terrestrial animals, and plants) and their critical habitats; water quality (surface waters and groundwater); 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, a decline in the reliability of electric service for some customers would be likely in the future. Service problems and interruptions likely would gradually become more frequent and more severe. These outages would have negative impacts on the ability of businesses in the area to operate. Residents of the area would also incur negative impacts from outages, such as more frequent loss of power. These conditions would diminish the quality of life for residents in the area and would likely have negative impacts on property values in the area. Potential socioeconomic effects under the No Action Alternative would likely affect all populations in the region negatively.

Based on the analysis of the proposed Action Alternative, there would be no effects to geological characteristics. 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 be short-term, potential effects to local air quality would be minor, and the amount of solid waste produced would be minor. Potential effects from noise would be temporary and minor. Potential effects on traffic would likely be minor and short-term in nature. Potential effects to local visual quality would be temporary and minor. Construction, operation, and maintenance of the proposed TL could cause shifts in local informal recreation, but these would be minor.

Overall, the Action Alternative would have no disproportionate impacts to disadvantaged populations. Providing an additional source of power would help maintain reliable service in the area, thereby avoiding the potential increase in negative impacts from lack of reliability. No noticeable adverse social or economic effects, including changes in local property values, are likely.

Because appropriate best management practices (BMPs) will be implemented during construction, operation, and maintenance of the proposed TL, potential effects to groundwater would be minor and insignificant. For similar reasons, any effects to surface water quality and aquatic life are expected to be temporary and minor.

The proposed TL would cross floodplain areas of several streams. Efforts were made during the siting process to avoid or minimize impacts to floodplains. However, because of other social, environmental, and engineering factors considered in the siting process, there was no practicable alternative that would allow for complete avoidance of floodplains. Consistent with Executive Order (EO) 11988, overhead TLs and related support structures are considered to be repetitive actions in the 100-year floodplain (46 FR 22845). The conducting wires of the TL would be located well above the 100-year flood elevation. Portions of several access roads would be located within the 100-year floodplain. The laydown yards would be located outside of the 100-year floodplain, which would be consistent with EO 11988.

To minimize adverse impacts, any road construction or improvements outside the Little Richland Creek floodway will be done in such a manner that upstream flood elevations will not be increased by more than 1.0 foot. To minimize adverse impacts on natural and beneficial floodplain values, TVA will implement standard BMPs during construction and adhere to the TVA subclass review criteria for TL location in floodplains. As such, construction, operation, and maintenance of the proposed TL would have no significant impact on floodplains.

Construction of the proposed TL would result in the clearing of approximately 93 acres of forest. At the local level, this would constitute a minor loss of forest resources. Almost all of the forests within the footprint of the proposed ROW area have been previously cleared. Areas of native vegetation within the proposed ROW and substation construction sites would be adversely affected by clearing, but most sites would likely recover to pre-project conditions within a few years. The State listed prairie goldenrod was identified within the project area. With commitments and BMPs in place, ROW clearing and maintenance would displace various wildlife species, but would not adversely affect local populations and it is expected that they would return to the project area upon completion of actions.

Records of one state-listed species (Norton's Cave beetle), two federally listed species (gray bat and northern long-eared bat), and one federally protected species (bald eagle) are present within three miles of the proposed project footprint. Norton's Cave beetle is known from a cave a mile away. Proposed actions are far enough away from this cave such that no impacts are expected to occur. The nearest known potentially active bald eagle nest is approximately 2.5 miles from the project area. No nests or individuals are known from the project action area, and none were observed during field surveys in August 2019 and June 2020.

Approximately 13.3 acres of suitable summer roosting habitat for the federally listed northern long-eared bat (NLEB) occurs in the proposed ROW corridor. As part of TVA's Endangered Species Act (ESA) Programmatic Agreement (PA) biological assessment for bats, TVA programmatically quantified and minimized removal of potentially suitable summer roosting habitat during the time of potential occupancy by NLEB. During field surveys TVA documented 27 suitable roost trees along the proposed ROW and within the switching station sites. A number of activities associated with the proposed action, including tree clearing, were addressed in TVA's PA biological assessment for evaluating impacts of routine actions on federally listed bats in accordance with ESA Section 7(a)(2). For those activities with the potential to affect federally listed bats, TVA committed to implementing specific conservation measures. Therefore, direct and indirect impacts to federally listed bat species are expected to be minor.

The proposed project would span 12.42 acres of wetland, requiring the conversion of about 4.62 acres of forested and scrub-shrub wetlands to emergent wetlands. The forested wetlands would be cleared during construction. Similarly, all wetland areas located within the proposed TL ROW would be subject to periodic vegetation management, and maintained as herbaceous or scrub-shrub wetland vegetation or open water. Efforts were made during the TL siting process to avoid or minimize wetlands. However, because of project and topographic constraints, and because of the goal of minimizing impacts to other environmental and social resources, no practicable alternative was available that would allow complete avoidance of wetlands. Potential wetland impacts would be reduced during the TL construction and ROW maintenance activities through implementation of appropriate BMPs and compliance with all federal and state wetland regulations. Due to the minimal wetland conversion proposed relative to forested wetland present at a watershed scale, no significant wetland impacts are anticipated to result from this project. The proposed action is consistent with the Protection of Wetlands EO 11990.

TVA conducted a Phase I archaeological survey to identify historic properties in the undertaking's area of potential effect (APE). The survey resulted in the identification of 24 newly recorded architectural resources in TN. For the 24 newly recorded resources, TVA determined, in consultation, that none of the individual structures are eligible for National Register of Historic Places (NRHP) listing due to lack of architectural distinction and inability to associate these resources to historic person(s) or event(s). Two archaeological sites, 40MG9 and 40MG75, as well as a small cemetery in the APE, could be adversely affected by the project. In order to avoid adverse effects, TVA has committed to placing wetland mats along the access route where it crosses the sites, plus a "do not disturb" 30 meter buffer. The Jim Godsey House, an NRHP-listed property, is within the APE. At its closest, the proposed TL would be over 1/3 of a mile to the southwest. Although construction of the TL may result in a change to the properties' viewshed, the change would not result in an adverse effect. With the added site buffers and aforementioned commitments in place, TVA finds that no historic properties would be affected by the undertaking as currently designed.

TVA completed consultation with the Tennessee State Historic Preservation Office (THPO) and federally recognized Indian tribes. The Cherokee Nation responded to the TL survey, expressing concern about TVA's survey of only the portion of site 40MG303 within the APE. TVA responded stating that alternatives for avoiding the entirety of the site had been considered, but rerouting the TL here would have resulted in a significant redesign of a portion of the line. Furthermore, TVA stated that for undertakings considered "critical infrastructure" projects (e.g., TL and associated access routes), it was TVA's practice to limit its archaeological survey and archaeological APE to the project footprint. These consulting parties agreed with TVA's determinations regarding the NRHP eligibility of all cultural resources identified in the APE and that the proposed undertaking will result in no adverse effects on historic properties.

Public Review

TVA developed a public communication plan that included a website with information about the project, a map of the alternative routes, and feedback mechanisms. Public officials and property owners who could potentially be affected by, or lived near, any of the route alternatives were invited to a project open house. TVA used local news outlets and notices placed in the local newspapers to notify other interested members of the public of the open houses. The open house was held in Dayton, Tennessee on September 20, 2018. At the open house, TVA presented a network of alternative TL routes, comprised of 7 different TL segments. A 30-day public review and comment period was held following the open house, and TVA accepted public comments on the alternative TL routes and other issues.

Mitigation

TVA will implement the routine environmental protection measures listed in the EA. In addition to those routine measures, the following non-routine measures will be implemented to reduce potential adverse environmental effects:

- Wetland mats would be placed along the access route where it crosses two sites, plus a "do not disturb" 30 meter buffer would be placed around a small cemetery in the APE
- Construction schedules in this area will be coordinated with the TWRA site manager (Greg Atchley at 423-693-6604) contact to minimize impacts to hunting.

- To compensate for the impacted 4.62 acres of forested and scrub-shrub wetlands to emergent wetlands, TVA would mitigate the loss of trees by purchasing wetland mitigation credits prior to construction of the proposed TL.
- As part of TVA's Programmatic Agreement (PA) biological assessment for bats, TVA would track and document the removal of potentially suitable summer roost trees and include this information in annual reporting in accordance with ESA Section 7(a)(2) consultation. Additionally, if removal of suitable bat roost tree habitat needs to occur when bats may be present on the landscape, TVA would set aside funding to be applied towards future bat-specific conservation projects in accordance with the PA biological assessment.
- ROW Forester or Environmental Technician would contact TVA botanist before construction to coordinate avoidance measures and access in Prairie goldenrod portions of the ROW.
- Prairie goldenrod sites would be added to the O-SAR database so the species can be protected, to the extent practicable, during future vegetation management activities.
- To avoid impacts to a recorded osprey nest, No construction, vegetation removal, or ground disturbing activities may occur within 660ft of this nest while the nest is active (typically March- July).

Conclusion and Findings

Based on the findings listed above and the analyses in the EA, TVA concludes that the proposed actions included in improving power supply to Meigs and Rhea Counties, TN would not be a major federal action significantly affecting the environment. This finding of no significant impacts is contingent upon adherence to the mitigation measures described above. Accordingly, an Environmental Impact Statement is not required.



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Date Signed