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FINDING OF NO SIGNIFICANT IMPACT TENNESSEE VALLEY AUTHORITY

TRANSMISSION SYSTEM ROUTINE PERIODIC VEGETATION MANAGEMENT FISCAL YEAR 2024

The Tennessee Valley Authority (TVA) proposes to manage the vegetation within its active transmission system rights-of-way (ROW) to assure the safe and reliable operation of its transmission facilities. TVA proposes in Fiscal Year 2024 (FY24) to target previously cleared or maintained areas of the transmission system in TVA's twelve managed ROW Sectors across TVA's power service area. Approximately one-third of the transmission system would be addressed in FY24. Routine vegetation management control methods were evaluated in TVA's programmatic Transmission System Vegetation Management Environmental Impact Statement (PEIS) released in 2019.

TVA will perform these vegetation management practices consistent with an injunction issued on July 31, 2017, by the U.S. District Court for the Eastern District of Tennessee, pursuant to *Sherwood v. TVA*, No. 3-12-cv-156. TVA issued the above reference PEIS after a decision in *Sherwood v. TVA* requiring TVA to take a hard look at the consequences of TVA's vegetation management practices. TVA will not, however, fully implement the PEIS program under this EA. All areas proposed for vegetation management within ROW segments have been previously cleared and continuously maintained, and tree work would be limited to immediate hazard trees unless and until the *Sherwood* injunction is dissolved. Further, tree removal in Buffer Zones, those areas located between the outside edge of the ROW and the wire zone, was not included in the analysis of this EA. Instead, analysis was limited to trees that would present a risk to the reliability of the transmission system.

The proposed action is the subject of an environmental assessment (EA) prepared by TVA. The EA is incorporated by reference. The EA tiers from the broader bounding analysis within the PEIS and incorporates by reference information from the body of related TVA environmental reviews listed therein.

Alternatives

Two alternatives are addressed in the associated EA. Under the No Action Alternative (Alternative A), TVA would not implement the proposed action. The Action Alternative (Alternative B) involves implementing its yearly process of routine periodic vegetation management in each of TVA's twelve managed Sectors in TVA's Power Service Area encompassing approximately one-third of the transmission system's ROW.

Under the No Action Alternative (Alternative A), TVA would not implement routine vegetation management on ROWs within the TVA Power Service Area. As a result, the existing ROW would increasingly contain vegetation incompatible with TVA's transmission system. The volume of non-compatible woody vegetation within the previously cleared ROWs, now increased due to the above referenced injunction, would continue to pose an increasing risk of interruption or service loss to the transmission system. TVA's ability to provide reliable service within the TVA Power Service Area would be jeopardized, which would not support TVA's overall mission and risk violating national electric reliability standards.

FY24 Transmission System Routine Periodic Vegetation Management

The No Action Alternative does not adequately address the potential for service outages from trees growing into the line, falling into the line, or creating a fire hazard to the transmission lines and structures, and thereby creates an increased risk to reliability. The No Action Alternative also does not adequately address the risk to public safety that can stem from wildfires caused by power lines. In addition, the No Action Alternative would lead to a marked increase in worker safety concerns, due to the increased risk of serious injuries and fatalities associated with the increased need to undertake manual removal of large danger trees.

Consequently, TVA has determined the No Action Alternative is not a viable or reasonable vegetation management alternative.

Under the Action Alternative, TVA's Preferred Alternative, TVA would use an Integrated Vegetation Management (IVM) approach to perform vegetation management, as further described in the tiered PEIS, on approximately one-third of TVA's transmission system ROWs. IVM would be utilized to promote the establishment of a plant community "end-state" dominated by low-growing herbaceous and shrub-scrub species that do not interfere with the safe and reliable operation of the transmission system. The goal of this vegetation management alternative would be to allow compatible vegetation to establish and propagate to reduce the presence of woody species.

TVA would predominantly use herbicides during routine floor vegetation management and a mix of mechanical and manual methods to remove trees. Noxious or invasive plant species would predominantly be controlled by a mix of methods dominated by mechanical techniques and herbicide application. By comparison, tall growing incompatible trees and shrubs typically would be controlled using a more balanced application of all techniques (manual, mechanical, and herbicide).

Under the Action Alternative, compatible trees and shrubs would be allowed in areas maintained actively by others (such as residential lands, orchards, forest plantations, agricultural lands or other similar areas). Where terrain conditions provide for higher clearances (i.e., ravines, steep slopes etc.), vegetation may not conflict with the safe and reliable operation of the transmission lines, and thus would not need to be removed.

Impacts Assessment

The EA documents the site-specific potential effects to the following resources: vegetation; wildlife; aquatic ecology; threatened and endangered species (plants, terrestrial animals, and aquatic animals) and their critical habitats; water quality (surface waters); wetlands; and managed and natural areas, parks and recreation; archaeological and historic resources.

Tree clearing along the ROW margins will result in a negligible overall change to plant habitats present on the landscape. Localized applications of herbicide will result in some level of off-target impact. In situations where the woody stem count is high on a given ROW, even localized application of herbicides could produce substantial impacts to non-target species. However, these areas of high woody stem count would be unlikely to support high-quality herbaceous habitats. In drier transmission line ROW areas with rocky or sandy soils, localized herbicide application could foster herbaceous plant communities that are rare on the landscape.

Each method of vegetation control has the potential to impact wildlife species and their habitats. Manual control methods typically have a greater potential for disturbance than herbicide applications. Mowing, chainsaws, soil/ground disturbance due to machinery and heavy equipment could directly impact species. Increased levels of noise could also stress nearby

individuals. Ground disturbance resulting in sedimentation or contamination could impact sensitive cave systems deep underground. Herbicide application will be applied to woody species leaving ground cover available for wildlife and thus minimizing erosion, sedimentation, and potential damage to nesting and tunneling wildlife. All herbicides currently used by TVA have been determined to be practically non-toxic to slightly toxic to mammals, birds and terrestrial invertebrates (bees) with the exception of Tebuthiuron which was determined to be moderately toxic to mammals. When working near aquatic features, TVA uses EPA-registered, and TVA approved herbicides determined to be safe for use near aquatic environments that are applied in accordance with label directions.

Because appropriate best management practices (BMPs) will be implemented during floor work and hazard/danger tree vegetation management on transmission system ROWs, and proper implementation and application of herbicides will be used, any potential effects would be insignificant to surface water quality, aquatic life, managed and natural areas, parks and recreation. Additionally, TVA will use the Office-Level Sensitive Area Review (O-SAR) process to identify sensitive areas and modify actions to minimize the potential for impacts (seasonal restrictions, restricted activities) to important plant and animals and their habitats. As such, the proposed vegetation management activities would not have significant impacts on terrestrial plant or animal ecology of the region. TVA will coordinate activities with appropriate land management personnel, as appropriate.

Review of the TVA Regional Natural Heritage database indicated there are records of 8 federally and 110 state-listed species known from within 50 feet of the ROWs where vegetation management is proposed in FY24. Additionally, there are records of one federally protected species and two species proposed for federal listing. Review of the USFWS Information for Planning and Consultation (IPaC) database system indicated six additional federally listed terrestrial animal species have the potential to be impacted by the proposed actions.

TVA consulted with the USFWS as part of the PEIS to assess the impacts of routine activities associated with TVA's transmission system vegetation management program on all species listed under the ESA (other than the federally listed bat species addressed in separate 2018 and 2023 programmatic consultations) with potential to occur in the TVA power service area. This consultation was completed and the USFWS issued a Biological Opinion in May 2019 concurring with TVA's effects determinations. BMPs and conservation measures developed in conjunction with this consultation to avoid and minimize effects to sensitive species will be integrated into TVA's transmission ROW vegetation management procedures.

As part of the consultation, TVA concluded, and the USFWS concurred, that the ROW Vegetation Management program is likely to adversely affect the seven federally listed plant species (Price's potato-bean, leafy prairie-clover, whorled sunflower, fleshy-fruit gladecress, Spring Creek bladderpod, white fringeless orchid, and large-flowered skullcap) known to occur in or adjacent to ROW plots proposed for FY24 work. However, while the program may affect individual plants from time to time, TVA does not anticipate that vegetation management activities would extirpate any populations from the ROW. In fact, conditions in the ROW are favorable for a majority of the seven federally listed plants known from plots where work would occur. For example, site-specific analysis found that no suitable off-ROW habitat occurs adjacent to leafy prairie-clover and Mohr's Barbara's buttons populations that would intersect planned FY24 vegetation management work. The open ROW is necessary for the survival of the species at these sites. TVA ROW vegetation management proposed for FY24, would result in insignificant short-term impacts to individual federally and state-listed plants as well as long-term beneficial impacts to populations of those same species. Additionally, the USFWS

FY24 Transmission System Routine Periodic Vegetation Management

consultation resulted in a “may affect, but not likely to adversely affect” determination for all federally listed terrestrial animal species (excluding bats, bog turtle, monarch butterfly, and alligator snapping turtle). TVA consulted separately for the four federally listed bat species which are addressed in a programmatic consultation. TVA determined that none of the activities associated with ROW vegetation management have the potential to adversely affect gray bat or Virginia big-eared bat. Vegetation management activities (primarily tree removal), were determined to likely adversely affect Indiana bat and northern long-eared bat. The USFWS issued a Biological Opinion in April 2018, concurring with TVA’s effects determinations and issued an Incidental Take Statement that authorizes TVA’s ROW vegetation management practices over a 20-year term. This consultation was updated in May 2023 in response to uplisting of northern long-eared bat from “threatened” to “endangered.” Species- and/or group-specific (e.g. SMZs) restrictions and guidance have been developed for all federally listed and most state-listed resources in the study area. Therefore, no impacts are anticipated to aquatic animal species from the proposed FY24 work.

Migratory bird species have the potential to be impacted. While the USFWS IPaC database identified 34 species as having the potential to occur in the action area, over a third of those species are only likely to be found in the action area during migration. Proposed actions are not expected to significantly impact populations of migratory birds.

A total of 9,974 acres of potential wetland area have been identified within the ROW Sectors proposed for vegetation management in FY24. Mechanical mowing in wetlands may only be conducted under dry conditions, such as in the dry season when soil saturation would most likely be reduced. Spot spray herbicide, localized herbicide, and broadcast herbicide, aerial herbicide application methods may be selected depending on the management needs. There is potential for herbicide application to affect wetlands not identified during the O-SAR process or apparent to ROW management crews. However, only aquatic-approved herbicide would be permissible near water features. Consideration of site-specific characteristics would ensure that any potential runoff, leaching, or drift of herbicide is contained when applied in or near a wetland. With these measures and the implementation of standard wetland BMPs within locations where mapped NWI and O-SAR wetlands are present and vegetation management activities are necessary, no significant wetland impacts are anticipated.

A range of cultural resources have the potential to be present within the ROW including prehistoric Native American archaeological sites, historic era archaeological sites, and Traditional Cultural Properties including intact original Unicoi Turnpike/Trail of Tears segments. Only portions of the ROWs subject to this EA have undergone systematic Phase I archaeological surveys since the mid-1990s in association with reviews under Section 106 of the National Historic Preservation Act. Much of the survey work was conducted during the planning stages and prior to new construction of the transmission lines. As a result, numerous archaeological sites within the transmission system have been identified and evaluated with respect to their eligibility status for listing on the National Register of Historic Places. Most vegetation management activities proposed within the ROW have little to no potential to affect cultural resources. Activities with the potential to cause soil disturbance can disturb sub-surface cultural deposits related to both prehistoric and historic era archaeological sites. However, this potential effect would be low as activities are focused on maintaining vegetation within an established transmission system ROW. The use of spot or localized herbicides as a method to control vegetation within the study area, would not adversely affect cultural resources. However, broadcast and aerial spray, which is rarely used, have the potential to affect culturally significant and traditionally used native plants should they be present. Methods involving manual vegetation activities include the use of hand tools for either pulling or cutting vegetation and

have a low potential for disturbance of subsurface cultural resources given that vegetation would be cut and not actually removed from the soil. The use of machinery within the transmission system ROW has the potential to disturb sensitive above-ground historic resources, if present.

TVA executed a Programmatic Agreement (PA) in consultation with the Advisory Council on Historic Preservation, seven SHPOs and all federally recognized Indian tribes with an interest in the region. The PA establishes a program alternative for compliance with the Section 106 of NHPA that would allow compliance to be achieved more efficiently through consultation at the programmatic level. The PA set forth procedures and criteria for an alternative process for all existing TVA operation and maintenance activities that are similar and repetitive in nature. Most of the activities associated with ROW vegetation management are covered within this PA.

Public Review

The FY24 Transmission System Routine Periodic Vegetation Management draft EA was released for a 14-day public comment period on September 12, 2023. The availability of the draft EA was posted on TVA’s website and announced through area media outlets. Comments received on the draft have been addressed in Appendix B of the final EA.

Mitigation

TVA will implement the routine environmental protection measures as listed in the EA. TVA employs standard practices when constructing, operating, and maintaining transmission lines, structures, and the associated ROW and access roads. These can also be found on TVA’s Transmission organization’s website.

Conclusion and Findings

Based on the findings listed above and the analyses in the EA, we conclude that the proposed action of implementing vegetation management activities within TVA’s transmission system ROWs in FY24 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.



S. Dawn Booker
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10/19/2023

Date Signed

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