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ERRATA SHEET

TENNESSEE VALLEY AUTHORITY

TRANSMISSION SYSTEM VEGETATION MANAGEMENT

FINAL PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

OCTOBER 2019

The Transmission System Vegetation Management Final Programmatic Environmental Impact Statement (PEIS) was released on August 30, 2019. Soon after posting of the Final PEIS, it was discovered that letters providing comments on the PEIS submitted by the Commonwealth of Virginia and the United States Environmental Protection Agency (EPA), were inadvertently omitted from Appendix A – Response to Comments. The letters were submitted during the official Draft PEIS comment period.

TVA has reviewed the letters as all others that are addressed in Appendix A of the PEIS, including an analysis of content to identify if comments are sufficiently addressed in the consolidated comment response prepared to address general comments of similar nature. In addition, comments were reviewed to identify discrete comments contained in the letters that warrant an additional response.

Comments and TVAs responses are summarized below and should be considered as an addition to Appendix A. The letters in their entirety are attached to this errata sheet. and both letters have been added to the Appendix B of the PEIS posted on the TVA Web site (https://www.tva.gov/Environment/Environmental-Stewardship/Environmental-Reviews/Transmission-System-Vegetation-Management-Program) made available to readers, and will be distributed with future copies of the document.

The following Virginia state agencies reviewed the Draft PEIS and submitted comments in a letter dated September 12, 2018:

- Virginia Department of Environmental Quality (DEQ)
- Department of Conservation and Recreation (DCR)
- Department of Health (VDH)
- Department of Transportation (VDOT)

Comment: DEQ Southwest Regional Office (SWRO) notes that no long-term adverse impacts to water quality are anticipated to result from this project. Short-term water quality impacts resulting from surface runoff should be minimized by using Best Management Practices (BMPs).Coordinate with the DEQ SWRO (Martha Chapman, 276-676-4845) for more information about specific impairments. In general, DEQ recommends that stream and wetland impacts be avoided to the maximum extent practicable. To minimize unavoidable impacts to wetlands and waterways, DEQ recommends the following practices:

- Employ BMPs to avoid or minimize impacts
- Submit a Joint Permit Application (JPA) for impacts to surface waters and wetlands, as necessary. Upon receipt of the JPA, DEQ VWP staff will review the proposed project in accordance with VWP permit regulations and current VWP permit program guidance

Response: As stated in the PEIS, effects to resources would be minimized through sound planning, incorporation of TVAs O-SAR process as a BMP and use of other established TVA transmission-related environmental protection practices and standard BMPs. Additional information on BMPs for transmission line rights-of-way can be found on TVAs website: https://www.tva.com/Energy/Transmission-System/Transmission-System-Projects.

Typically, management of the transmission ROW does not trigger the need for any stormwater or fill permitting. However, if needed TVA would obtain all necessary permits.

Comment: According to the DEQ Air Division, the TVA transmission corridor is located in a designated ozone attainment area within Virginia. During future construction actions, fugitive dust must be kept to a minimum by using control methods outlined in 9 VAC 5-50-60 *et seq.* of the *Regulations for the Control and Abatement of Air Pollution.* According to the DEQ Air Division, the TVA transmission corridor is located in a designated ozone attainment area within Virginia. If future project activities include the open burning of construction material or the use of special incineration devices, this activity must meet the requirements under 9 VAC 5-130 *et seq.* of the *Regulations* for open burning and may require a permit. The *Regulations* provide for, but do not require, the local adoption of a model ordinance concerning open burning. The applicant should contact county officials to determine what local requirements, if any, exist.

Response: Impacts to air quality from vegetation management are expected to be minor. TVA agrees with all requirements and if open burning is conducted, TVA would adhere to all applicable state and local statutes or approvals.

Comment: DEQ's Division of Land Protection and Revitalization (DLPR) staff recommends a review of its data files to determine if there are any waste sites located in close proximity to a project site(s). Site searches would include the following categories: CERCLIS, RCRA/Hazardous Waste, Solid Waste, Voluntary Remediation Program (VRP) sites, Formerly Used Defense Sites (FUDS), and Petroleum Release sites.

DEQ encourages all construction projects and facilities to implement pollution prevention principles, including the reduction, reuse, and recycling of all solid wastes generated. All generation of hazardous wastes should be minimized and handled appropriately.

Response: Comment noted; however, this PEIS is concerned with vegetation management activities on existing lines rather than construction of new lines, which each received site-specific NEPA reviews.

Disposition of solid waste resulting from vegetation control is identified in Chapter 4.17.2 of the PEIS. Hazardous wastes and solid waste generated by TVA during vegetation control activities would be handled and disposed of according to the appropriate state and local regulations. Vegetative waste is typically mulched or placed in windrows along the transmission ROW boundary. Solid vegetative waste may be left in place for decomposition with approval from the local landowner/manager or could be mulched and spread throughout the transmission ROW. Larger woody debris not suitable for mulching may be placed as windrows along the edge of the transmission ROW.

Comment: According to the appendix in the Draft Programmatic Environmental Impact State for the TVA Transmission System Vegetation Management, numerous natural heritage resources are within or adjacent to the TVA powerlines in Virginia. Alternative B in the EIS appears to be the less intensive method for vegetation management with less reliance on herbicides and is DCR-DNH's preferred alternative.

Response: Comment noted. However, Alternative C emerged as TVAs preferred alternative as Alternative B entails the cyclical treatment of the entire transmission ROW to maintain the floor and would not be expected to result in a vegetative end condition that is as compatible as Alternative C (see PEIS Section 4.23.4).

Comment: DCR-DNH recommends continuing updates of the locations of documented natural heritage resources occurrences through the VA DCR-DNH and TVA data exchange agreement to avoid and minimize impacts to these resources. Re-submit project information and map for an update on this natural heritage information if the scope of the project changes and/or six months has passed before it is utilized as new and updated information is continually added to Biotics.

Response: Comment noted; the TVA Regional Natural Heritage program has shared access with the Virginia Natural Heritage Program database and reviews that information when vegetation maintenance is planned in Virginia. TVA data are shared with Virginia Natural Heritage Program under a reciprocal data sharing agreement.

Comment: DCR-DNH also identified specific BMPs for vegetation management on transmission lines in areas where Natural Heritage Resources (Rare, Threatened and Endangered) are within the ROW.

Response: TVA has reviewed the BMPs identified. DCR-DNH recommends maintenance of vegetation using annual mowing in the non-growing season between 15 October and April 1 and minimal to no use of chemicals especially in sensitive areas with documented natural heritage resources. However, less than 15 miles of TVA transmission line are located in Virginia. The vast majority of those ROW occur in degraded areas that are highly unlikely to support state listed species; no ROW in Virginia supports federally listed plants. A few sections of TVA ROW could support state listed plant species. These areas are included in the O-SAR database. In areas where species potentially occur, TVA refrains from using broadcast herbicide application and defaults to mowing or selective application of herbicide to woody species. Given the low probability of the presence of state-listed plants on TVA ROW in Virginia, TVA believes the avoidance measures in place are sufficient.

DCR-DNH also recommends TVA develop and implement an invasive species plan to be included as part of the maintenance practices for ROW which includes an invasive species inventory and methods for treating invasive species. In addition, DCR-DNH recommends that ROW restoration and maintenance practices include revegetation using native species, robust monitoring, and adaptive management if revegetation isn't successful or if invasive species outbreaks occur. Most of the transmission ROW is on private property and maintenance is conducted with the goal achieve to TVAs desired end-state condition of a mix of herbaceous and low-growing shrub species that is compatible with the safe and reliable operation of the transmission line system. TVA does monitor the state of the ROWs on a cyclic basis but the

primary focus is for threats to clearance to the transmission lines. If disturbance is created TVA would restore the area in accordance with our BMP manual, which addresses invasive species but we will not monitor the ROW simply for review of invasive species.

Additional information on BMPs for transmission line rights-of-way can be found on TVAs website: https://www.tva.com/Energy/Transmission-System/Transmission-System-Projects.

Comment: Due to the legal status of some of the natural heritage resources in Virginia within the project area, DCR recommends coordination with United States Fish and Wildlife (USFWS) and Virginia Department of Game and Inland Fisheries to ensure compliance with protected species legislation.

Response: Prior to yearly vegetation management activities, TVA would identify records for rare species, important natural communities, natural areas, and/or conservation/managed areas within the proposed project boundary by consulting the TVA Regional Natural Heritage database. New records are routinely added to this database by TVA through coordination with the state heritage programs and the USFWS, as well as through findings by TVA surveys. TVA would consult with the USFWS as appropriate when federally listed species could be potentially affected by the proposed project. Guidance is provided by TVA environmental compliance staff to TVA vegetation management staff and contractors through the O-SAR process. This guidance includes avoidance and minimization measures designed to protect rare, threatened and endangered species, important natural communities, natural areas, and/or conservation/managed areas.

Comment: The PEIS (page 179) states that none of the vegetation management methods would affect groundwater quality. In TVAs service area groundwater use is characterized by municipal public supply wells in areas of high population and private domestic wells in rural areas. The VDH Office of Drinking Water (VDH-ODW) provided county-wide information on public water sources that may be impacted by the vegetation management activities for the four affected counties in Virginia. VDH-ODW recommended specific management activities to minimize impacts to public water sources and noted that potential impacts to the public water distribution system or sanitary sewage collection system should be verified with the local utility.

Response: Comment noted. TVA reviewed the BMPs identified. The recommendation to field mark wells within a 1,000-foot-radius from the project site is not feasible as TVA only has the right to access TVA ROW a large percent of that distance would be well outside of our legal right to access. However, as identified in the PEIS, effects to resources would be minimized through sound planning, incorporation of TVAs O-SAR process as a BMP and use of other established TVA transmission-related environmental protection practices and BMPs. For example, TVA is diligent about the selection and use of herbicides in proximity to surface waters so as to avoid transport of potentially detrimental herbicide constituents to receiving waters, including groundwater.

Comment: The VDOT Planning and Investment Management Division reviewed the proposal and determined that the project will have no known impacts to transportation infrastructure.

Response: Comment noted.

Comment: DEQ advocates that principles of pollution prevention and sustainability be used in all construction projects as well as in facility operations. Effective siting, planning, and on-site BMPs will help to ensure that environmental impacts are minimized. However, pollution prevention and sustainability techniques also include decisions related to construction materials, design, and operational procedures that will facilitate the reduction of wastes at the source.

Response: TVA believes that the concept of Integrated Vegetation Management (IVM) provides the greatest flexibility for decisions regarding transmission ROW management; thus,

all of the alternatives it considered in the PEIS are based on the IVM concept. The goal of IVM is to provide an integrated and balanced approach of vegetation management that considers the overall long-term effect on public health and safety, reliability of electric transmission, environmental stewardship, and cost.

EPA submitted comments on the PEIS in a letter dated September 19, 2018. EPA comments and TVA's responses are summarized below.

Comment: The EPA has rated the Preliminary Draft Environmental Impact Statement as Lack of Objections (LO). Although TVA has identified Alternative C as the preferred alternative, EPA prefers Alternative D from a habitat enhancement standpoint. The EPA has not identified any significant environmental impacts to the proposed action that would require substantive changes to the DPEIS or require the TVA's consideration of different alternatives to management of vegetation in TVA ROW.

Response: Comment noted.

Comment: The EPA recommends that TVA consider the ROW vegetation management strategy of disking. Disking involves the purposeful disturbance of the soil to release sod-bound fields, reduce litter accumulation, create bare ground, stimulate germination of desirable seed-producing plants and increase insect population for birds to feed upon.

Response: The PEIS addresses the potential environmental, social, and economic impacts associated with the proposed management of vegetation within its transmission rights-of-way. Accordingly, the analysis of impacts in the PEIS adopts a regional perspective. TVA does not consider disking applicable for ROW management on a large scale for several reasons including:

- Most of TVA's transmission system is located on private lands and TVA typically acquires perpetual rights through purchased easements on these lands to manage vegetation. Disking on a large scale would be not be consistent with normal procedure on private lands.
- Disking would have the highest potential of activities to impact sensitive archaeological sites and traditional cultural properties should they be present. Disking causes ground disturbance from the initial activity as well as increasing the potential for erosion that could further impact cultural resources. The majority of the activities in the preferred alternative has little to no potential to impact cultural resources, which was agreed upon by the 7 SHPOs and federally recognized Indian tribes that have an interest in TVA's Power Service Area
- Wetland avoidance, minimization, and mitigation measures are conducted in accordance with BMPs (TVA 2017a) and applicable wetland regulations. Disking falls under the definition of plowing, which would be considered a regulated activity in a jurisdictional wetland that is not part of an ongoing farming operation. Avoidance strategies take into consideration wetlands identified using desktop resources, including NWI data and O-SAR. If disking were included as an activity for ROW vegetation management, our initial wetland review process would have to be much more involved to ensure compliance.

Comment: The EPA acknowledges TVA's efforts on its climate adaption plan and recommends that the opportunities identified in the plan are carried forward in the 12 sector plans.

Response: Comment noted**.** TVA has adopted a climate adaptation plan that establishes

adaptation planning goals and describes the challenges and opportunities climate change may present to its mission and operations.. The stated goal of TVA's adaptation planning process is to ensure that TVA continues to achieve its mission and program goals and to operate in a secure, effective and efficient manner in a changing climate.

Comment: The EPA would like to emphasize the importance of TVA developing a vegetation re-clearing plan as stated in Section 3.1.1 and 3.1.2 of the Draft PEIS that states that a specific vegetation re-clearing plan would be established for each transmission line project area based on local terrain conditions, species composition, growth form, and vegetative density to assist In the preservation of the diverse plant and animal species that exists within the TVA ROW (including potentially ESA species).

Response: As noted in Section 3.1, TVA has developed a stepwise process incorporated under all of the proposed vegetation management alternatives to ensure that vegetation management proactively protects environmental resources, considers land use and land ownership, and enhances health and safety. Step 3 of that process includes the review of identification of sensitive or natural resources within the area of activity and implementation of any special requirements associated with performing work in those areas. To protect sensitive resources on transmission line ROWs, TVA developed the O-SAR process as an integral component of all of its vegetation management practices including TVA's Stepwise Vegetation Management process.