

PROPOSED CHANGES TO PROJECT ACTIVITIES FOR THE ELORA SOLAR ENERGY CENTER ENVIRONMENTAL ASSESSMENT

February 2021

In compliance with the National Environmental Policy Act (NEPA), the Tennessee Valley Authority (TVA) completed an environmental assessment (EA) and issued a finding of no significant impact (FONSI) in February 2020 for the Elora Solar Energy Center in Lincoln County, Tennessee. The proposed Elora Solar Energy Center would be constructed and operated by Elora Solar and would have alternating current (AC) generating capacity of up to 150 megawatts (MW). To interconnect to TVA's existing electrical grid, Elora Solar would build the new Elora Solar 161-kV transmission line (TL) that would connect the proposed on-site Elora Solar 161-kV Substation to TVA's proposed Mann Road 161-kV Switching Station at the northern extent of the new TL. TVA would connect the new Mann Road 161-kV Switching Station to TVA's existing Winchester-Fayetteville 161-kV TL and install fiber-optic overhead ground wire on this existing TL. Under the terms of the conditional PPA, TVA would purchase the electric output from the solar facility for an initial term of 20 years, subject to satisfactory completion of all applicable environmental reviews.

The No Action Alternative and Proposed Action Alternative were analyzed in the Final EA. Under the No Action Alternative, the proposed project would not be implemented and no project-related impacts to environmental resources would occur. The total disturbance area would be approximately 1,775 acres (1,707 acres of land for the solar facility and associated components; work along 68 acres of the existing TVA line and access roads). TVA selected the Proposed Action Alternative as its preferred Alternative.

Implementation of the Proposed Action Alternative would disturb approximately 97 acres of forest, 1,471 acres of agricultural lands (cultivated crops), and 7 acres of existing transmission line right-of-way. Direct mortality to some wildlife species would occur if those individuals are immobile during the vegetation clearing phase. Individuals would also be impacted if vegetation clearing occurred during their breeding/nesting seasons. Some long-term habitat loss would occur due to the clearing of approximately 97 acres of currently forested land on the Project Site and conversion to native grasses and/or other noninvasive vegetation. These changes would result in effects to common wildlife. Potentially suitable summer roosting habitat for the Indiana bat and northern long-eared bat would be removed for the construction of the proposed solar facility and electrical interconnection. TVA determined that the Proposed Action may affect but is not likely to adversely affect the northern long-eared bat and the Indiana bat. Consultation under Section 7 of the Endangered Species Act was performed with the United States Fish and Wildlife Service on November 19, 2019. Concurrence was received on November 26, 2019, on the condition that suitable habitat removal must occur between October 15 and March 31. The Project is not likely to adversely affect other federally or state-listed species or migratory bird species of concern.

Field surveys conducted in 2019 within the previously analyzed NEPA boundary found the project would impact six palustrine emergent (PEM) wetlands and one palustrine forested (PFO) wetland for a total of 0.1 acre. Additionally, the transmission line would impact four additional PEM wetlands and two PFO wetlands. The impacted area would total approximately 0.06 acres. Wetland fill is not anticipated, and impacts are subject to the conditions under the Section 404 and Section 401 of the Clean Water Act and ARAP permits.

TVA determined that the Project would have no effects on any cultural resources listed or determined eligible for listing in the National Register of Historic Places. Pursuant to the National Historic Preservation Act, TVA consulted with the Tennessee State Historic Preservation Officer (TN SHPO) and interested federally recognized Indian tribes regarding this agency determination. On December 9, 2019, TN SHPO concurred that the Project as currently proposed would not adversely affect any historic properties. The Jena Band of Choctaw Indians responded and had no objections to the Project.

Changes to the Proposed Action

Since the Final EA was published in February 2020, there have been minor changes to the Proposed Action Alternative analyzed in the Final EA. These changes resulted in the need to clear 0.06 acre of potential Indiana bat and northern long-eared bat habitat and conduct cultural and wetland field surveys on 5.64 acres of TL pole structure access routes identified outside the previously analyzed 1,707-acre project site (see Figure 1).

One pole access route would involve removal of trees from approximately 0.06 acre within an estimated 200-foot-long, 15-foot-wide linear area. Use of this access route would require equipment to traverse the pastureland contiguous to the area of tree clearing. This new area is adjacent to habitat previously identified as being suitable for summer roosting federally listed bats; TVA is assuming the 0.06 acres is also suitable bat habitat. The additional acreage of potentially suitable habitat does not change the total disturbed acreage previously reported in the US Fish and Wildlife Service (USFWS) consultation letter dated November 19, 2019. Therefore, the previous USFWS consultation does not need to be updated. The agreed-upon clearing timeframe during the non-active season for summer roosting federally listed bats (October 15-March 31) will remain the same. Overall, with identified seasonal tree clearing restrictions, TVA determined that changes to the Proposed Action Alternative would not result in significant effects to the federally listed threatened or endangered species or the state-listed species identified as having the potential to use the project site. In an email dated December 4, 2020, USFWS agreed with TVA's determinations for federally listed species and confirmed that a not-likely-to-adversely-affect determination remains appropriate.

Because of the potential for heavy equipment traversing the proposed TL pole structure access routes, shovel testing to determine the presence of cultural resources was necessary. HDR conducted pedestrian reconnaissance and shovel testing on the 5.64 acres encompassing the proposed TL pole structure access routes, including the area of tree clearing (0.06 acre), on December 10 and 11, 2020. The field survey determined that no cultural deposits are present in these locations. TVA notified THC of their finding of no historic properties affected and received concurrence from THC on January 7, 2021. SHPO concurred that no historic properties would be affected by this undertaking. TVA also notified interested federally recognized Indian tribes on January 7, 2021. Chickasaw Nation responded on February 2, 2021, indicating they are in support of the proposed undertaking.

On January 20, 2021, HDR reviewed the proposed TL pole structure access routes for United States Army Corps of Engineers and Tennessee Department of Environment and Conservation (TDEC) regulated surface water features, as overseen by a certified Professional Wetland Scientist and Tennessee Qualified Hydrologic Professional. Three surface water features were identified during the field delineation: two potentially jurisdictional wetlands and one nonjurisdictional wet weather conveyance (WWC). Wetland 1 is located adjacent to the south of access route to Poles 19 and 20, Wetland 2 intersects the access route to Poles 19 and 20, and WWC 1 intersects the access route to Poles 17 and 18. Based on the findings, the Project will avoid Wetland 1 altogether and will avoid impacts to Wetland 2 by utilizing wetland matting (i.e., timber or composite mats) in the location where Wetland 2 intersects with the access route to Poles 19 and 20.

Discussion of Impacts

No additional impacts to potentially affected environmental resource areas are expected to occur under the scope change. All mitigation measures, including best management practices, erosion and sediment control, required permits, and project commitments, will remain the same as identified under the Final EA and FONSI.

Conclusion

The proposed action changes would result in 0.06 acres of bat roosting habitat being removed outside the non-active season (October 15-March 31). This acreage amount does not change the analyses in the February 2020 EA or the USFWS determination. Ground disturbance would not result in impacts to cultural resources based on shovel testing at the site, and wetland avoidance utilizing wetland matting would occur. Therefore, the EA and FONSI continue to be valid in impact assessments and conclusions.



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Date Signed

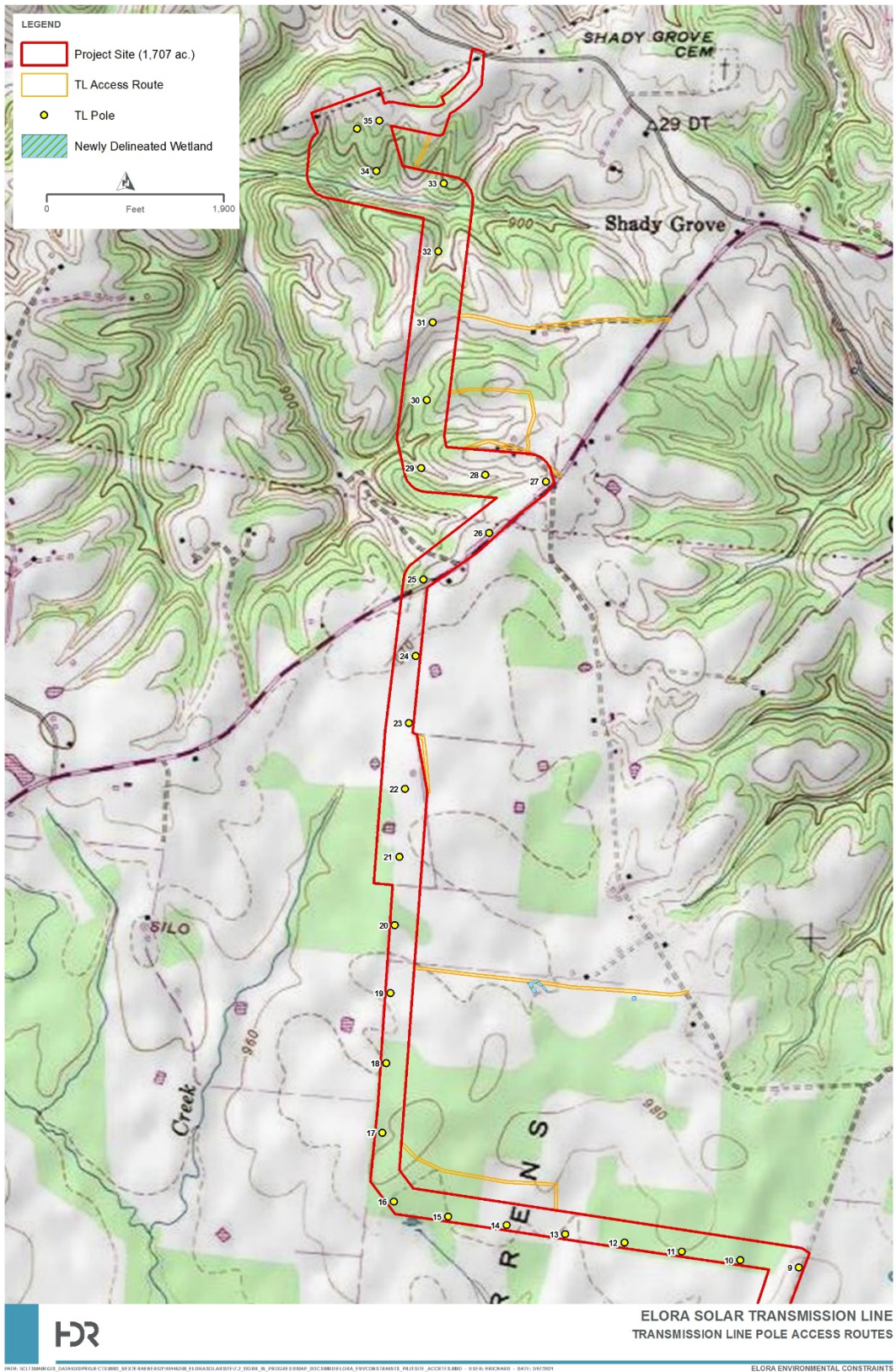


Figure 1. Areas of Additional Tree Removal and Access Route at Elora Solar Farm, Lincoln County, Tennessee