

TENNESSEE VALLEY AUTHORITY

Moore County Solar Environmental Impact Statement

AGENCY: Tennessee Valley Authority.

ACTION: Record of Decision.

SUMMARY: The Tennessee Valley Authority (TVA) has decided to adopt the preferred alternative identified in its final environmental impact statement (Final EIS) for the Moore County Solar Project. The Final EIS was made available to the public on December 9, 2022. A Notice of Availability (NOA) of the Final EIS was published in the *Federal Register* on December 16, 2022. TVA's preferred alternative, analyzed in the Final EIS as the Proposed Action Alternative, consists of TVA executing a power purchase agreement (PPA) with SR Tullahoma, LLC (SR Tullahoma), a wholly owned subsidiary of Silicon Ranch Corporation (SRC), to purchase power generated by the proposed 200-megawatt (MW) alternating current (AC) solar photovoltaic (PV) facility, which would occupy approximately 1,873 acres of a 3,463-acre Project Site, two miles west of the city of Tullahoma, within the metropolitan limits of Lynchburg in Moore County, Tennessee. The Project would connect to TVA's existing adjacent Franklin–Wartrace No. 2 161-kilovolt (kV) transmission line (TL) that extends north-south through the Project Site. To interconnect to TVA's existing electrical grid, SR Tullahoma and TVA would build an on-site 161-kV substation and switchyard, respectively, and TVA would replace the existing overhead ground wire with new fiber-optic overhead ground wire along an approximately 9.8-mile portion of the TL. This alternative would achieve

the purpose and need of the Project to meet the demand for increased renewable energy generation established in TVA's 2019 Integrated Resource Plan (IRP).

ADDRESSES: To access and review the Final EIS, this Record of Decision (ROD), and other project documents, go to TVA's website at <https://www.tva.gov/nepa>.

FOR FURTHER INFORMATION CONTACT: Ashley Pilakowski, NEPA Project Manager, Tennessee Valley Authority, 400 West Summit Hill Drive, WT 11B Knoxville, TN 37902; telephone 865-632-2256; or email aapilakowski@tva.gov.

SUPPLEMENTARY INFORMATION: This notice is provided in accordance with the Council on Environmental Quality's regulations (40 Code of Federal Regulations (CFR) 1500 through 1508) and TVA's procedures (18 CFR 1318) for implementing the National Environmental Policy Act (NEPA). TVA is a corporate agency of the United States that provides electricity for business customers and local power distributors serving 10 million people in the Tennessee Valley—an 80,000-square-mile region comprised of Tennessee and parts of Virginia, North Carolina, Georgia, Alabama, Mississippi, and Kentucky. TVA receives no taxpayer funding and derives virtually all revenues from the sale of electricity. In addition to operating and investing revenues in its power system, TVA provides flood control, navigation, and land management for the Tennessee Valley watershed and provides economic development and job creation assistance within the Service area.

In June 2019, TVA completed its 2019 IRP and associated EIS. The 2019 IRP, which updated the 2015 IRP, identified the various resources that TVA intends to use to meet the energy needs of the TVA region over a 20-year planning period, while achieving TVA's objectives to deliver reliable, low-cost, and cleaner energy with fewer

environmental impacts. The 2019 IRP recommends the expansion of solar generating capacity of up to 14,000 MW by 2038.

TVA has prepared an EIS pursuant to NEPA to assess the environmental impacts of the Proposed Action to execute a PPA with SR Tullahoma to purchase power generated by the proposed 200-MW AC solar PV facility, which would occupy an approximately 1,873-acre portion of the Project Site, include the construction of an on-site 161-kV substation and switchyard, and include the interconnection of the solar PV facility to the existing adjacent Franklin–Wartrace No. 2 161-kV TL and associated network upgrades.

Alternatives Considered

TVA considered a no action and one action alternative in the Draft EIS and Final EIS.

No Action Alternative. Under the No Action Alternative, TVA would not implement the PPA with SR Tullahoma to purchase the power generated by Moore County Solar, and SR Tullahoma would not develop a solar PV facility at this location. TVA would pursue other actions to meet its renewable energy goals established in the 2019 IRP.

Proposed Action Alternative. Under the Proposed Action Alternative, TVA would execute the PPA with SR Tullahoma to purchase power generated by the proposed 200-MW AC solar PV facility known as Moore County Solar, which would occupy approximately 1,873 acres of a 3,463-acre Project Site, two miles west of the city of Tullahoma, within the metropolitan limits of Lynchburg in Moore County, Tennessee. The Project would connect to TVA’s existing adjacent Franklin–Wartrace No. 2 161-kV TL that extends north-south through the Project Site. To interconnect to TVA’s existing

electrical grid, SR Tullahoma and TVA would build an on-site 161-kV substation and switchyard, respectively, and TVA would replace the existing overhead ground wire with new fiber-optic overhead ground wire along an approximately 9.8-mile portion of the TL extending eastward from the Project Site. Under the PPA, SR Tullahoma would construct, operate, and maintain Moore County Solar for a 20-year period. At the end of the 20-year PPA, SR Tullahoma would assess whether to cease operations at the solar facility or to replace equipment, if needed, and attempt to enter into a new PPA with TVA or make some other arrangement to sell the power.

Purpose and Need. The purpose and need of the Proposed Action is to meet the demand for increased renewable energy generation and partially fulfill the renewable energy goals established in the 2019 IRP. TVA's preferred alternative for fulfilling its purpose and need is the Proposed Action Alternative, which would generate renewable energy for TVA and its customers with only minor to moderate environmental impacts due to the implementation of best management practices (BMPs) and minimization and mitigation efforts. Implementation of the Project would help meet TVA's renewable energy goals and would help TVA meet customer-driven energy demands on the TVA system.

Environmentally Preferred Alternative

The No Action Alternative would result in the lowest level of environmental impacts as the impacts associated with construction and operation of the solar facility would not occur. However, the No Action Alternative does not meet the purpose and need for the project. Overall, environmental consequences associated with the Proposed Action Alternative would be minor to moderate with the implementation of BMPs and minimization and mitigation efforts. During construction, minor, temporary increases to

noise, traffic, and health and safety risks, as well as minor, temporary effects to air quality, greenhouse gas (GHG) emissions, visual aesthetics, and utilities would occur. Construction and operations would have minor, localized effects on soil erosion and sedimentation and minor, beneficial, and indirect effects to surface waters and wetlands, floodplains, and aquatic life. Adverse impacts would be minimized or mitigated by implementation of BMPs and specific measures designed to mitigate effects, such as clearing select areas of vegetation by hand to reduce disturbance to West Fork Rock Creek, North Fork Blue Creek, and Spring Creek. SR Tullahoma will also avoid siting Project components and the management of SRC's regenerative energy program in identified sensitive plant and animal resource areas (except for buried or overhead electrical lines within 50 feet of Raysville and Cumberland Springs roads) in accordance with an Avoidance Agreement between TVA and SR Tullahoma. Following construction, the Project Site would be revegetated and maintained as a meadow with a mix of perennial and annual grasses and forbs to attract pollinators and serve as fodder for grazing sheep in the fenced areas of the Project. Beneficial effects on socioeconomics would also occur with construction and operation of the Project.

Construction of the Project would result in minor impacts to U.S. Army Corps of Engineers (USACE)-jurisdictional ephemeral streams and wetlands, non-USACE-jurisdictional ditches and open waters, and Tennessee Department of Environment and Conservation (TDEC)-regulated wetlands for road crossings, solar panel arrays and solar panel blocks. These impacts would be permitted by Clean Water Act (CWA) Section 404/401 permits through USACE and TDEC, as applicable to the jurisdiction of these waters. In accordance with TVA requirements, 50-foot buffers surrounding wetlands and

non-impaired perennial and intermittent streams and 60-foot buffers surrounding impaired perennial and intermittent streams on the Project Site would be maintained as avoidance measures.

The Project land use would change from primarily forest management, including timbering operations, and some agricultural activities to industrial uses. Regenerative agricultural practices planned in association with the Project (i.e., sheep operations) would allow for some agricultural uses to continue to occur on site. These would partially offset the primary change of land use to industrial uses.

Approximately 850 acres of forest that potentially provide high- to low-quality summer roosting habitat for endangered and threatened bats would be cleared during winter months as much as feasible, when bats are not likely to be present on the Project Site. The TL upgrade work would be carried out in a manner to avoid impacts to endangered species. TVA has consulted with the U.S. Fish and Wildlife Service (USFWS) under Section 7 of the Endangered Species Act, and USFWS concurred with TVA's determination that the Project may affect but is not likely to adversely affect the federally listed gray bat, Indiana bat, and northern long-eared bat. Impacts to the two state listed reptile species, eastern slender glass lizard and northern pine snake, and the two bird species, Bachman's sparrow and common barn owl, would be localized and minor. The Project would have no effect on the other federally listed species that were identified as having the potential to occur on or near the Project Site.

The Project would not adversely affect the National Register of Historic Places-eligible Motlow House, located adjacent to the Project Site due to forested screening and its distance of 0.2 to 0.5 miles from the Project. The Project would avoid the Old Jabel

Ray Homeplace Cemetery by a minimum 250-foot avoidance buffer and, thus, not visually affect the cemetery. TVA consulted with the Tennessee Historical Commission and federally recognized Indian tribes under Section 106 of the National Historic Preservation Act regarding these findings and avoidance measures.

Public Involvement

On May 3, 2021, TVA published a Notice of Intent (NOI) in the *Federal Register* (86 FR 23484) announcing plans to prepare either an EIS or an environmental assessment (EA) to assess the potential environmental effects associated with constructing, operating, maintaining, and decommissioning the Moore County Solar PV facility in Moore County, Tennessee. The NOI initiated a 30-day public scoping period that concluded on June 4, 2021. The NOI solicited public input on the scope of the EIS and the environmental issues that should be considered in the EIS. During the public scoping period, TVA received comments from the U.S. Geological Survey; U.S. Environmental Protection Agency (USEPA); Tennessee Natural Heritage Program, part of TDEC; Southeastern Grasslands Initiative; and two private individuals. Comments were related to purpose and need, agency coordination, alternatives, mitigation measures, land use, water resources, biological resources, air quality and GHG emissions, socioeconomics, and environmental justice. Based on the comments received, as well as the results of field surveys and other considerations, TVA decided that the appropriate level of review for the Project was an EIS.

TVA released the Draft EIS for public review in April 2022. The NOA for the Draft EIS was published in the *Federal Register* on April 22, 2022 (87 FR 24158) initiating a 45-day public comment period, which ended on June 6, 2022. To solicit

public input, the availability of the Draft EIS was announced in regional and local newspapers serving the project area and on TVA's social media accounts. A news release was issued to the media and posted on TVA's website. The Draft EIS was posted on TVA's website, and hard copies were made available by request. During the public comment period, on May 23, 2022, TVA held a live virtual public meeting to describe the Project and address questions in a live question-and-answer session. A recording of the session was made available following the meeting for public viewing. TVA accepted comments submitted through mail, email, a comment form on TVA's public website, and during the virtual public meeting. TVA received a total of 32 comments from 16 comment submittals. Comments were received from Arnold Air Force Base, Southeastern Grasslands Initiative, TDEC, USEPA, and 14 individuals (with some combining comment submittals) on the Draft EIS. TVA carefully reviewed the comments received and, where appropriate, revised text in the Final EIS. The NOA for the Final EIS was published in the *Federal Register* on December 16, 2022 (87 FR 77106).

Decision

TVA certifies, in accordance with 40 CFR 1505.2(b), that the agency has considered all of the alternatives, information, analyses, material in the record determined to be relevant, and submitted by State, Tribal, and local governments and public commenters for consideration in developing the Final EIS. TVA has decided to implement the preferred alternative of the EIS, which would result in the construction, operation, maintenance, and eventual decommissioning of the proposed solar PV facility, as well as the construction, operation, and maintenance of a substation and associated facilities to

interconnect the solar PV facility to TVA's existing electrical transmission network. This alternative would achieve the purpose and need of the Project.

Mitigation Measures

SR Tullahoma and TVA would employ standard practices and routine measures and other project-specific measures to avoid, minimize, and mitigate adverse impacts from implementation of the Proposed Action Alternative. SR Tullahoma and TVA would also implement minimization and mitigation measures based on BMPs, permit requirements, and adherence to erosion and sediment control plans. Non-routine mitigation measures associated with land use and soils, biological, visual and public health, safety and transportation are included below:

- Land Use and Soils
 - Utilize SRC's regenerative energy program, including perennial and annual, non-invasive pollinator-attractive plantings, biological vegetation management (e.g., grazing sheep), and other measures that improve the land within the Project Site;
- Biological Resources
 - Avoid siting Project components and managing SRC's regenerative energy program in identified sensitive plant and animal resource areas (except for buried or overhead electrical lines within 50 feet of Raysville and Cumberland Springs roads) in accordance with an Avoidance Agreement between TVA and SR Tullahoma (Appendix A of the Final EIS), and

- Install signage and/or temporary construction fencing around avoidance areas and identify avoidance areas on site plans and constraints maps;
- Visual Resources
 - Install and maintain 60-foot-wide vegetative buffer along the Project fence perimeter where the facility would otherwise be visible from public rights-of-way and residences in accordance with *A Resolution to Amend the Text of the Metropolitan Lynchburg and Moore County Zoning Ordinance Establishing Regulations for Solar Energy Systems as Permitted Use in the A-1-Agriculture-Forestry District and Establishing Regulations Governing the Development of Solar Energy Systems*, as approved or amended by the Board of Zoning Appeals prior to construction start; and
- Public Health and Safety and Transportation
 - In accordance with Federal Aviation Administration recommendations, file Form 7460-2, Notice of Actual Construction or Alteration, any time the Project is abandoned or within five days after the construction reaches its greatest height.

Dated: January 19, 2023



Christopher W. Hansen

Vice President, Origination and Renewables

Tennessee Valley Authority