

FINDING OF NO SIGNIFICANT IMPACT TENNESSEE VALLEY AUTHORITY

POWER PURCHASE AGREEMENT – LATITUDE SOLAR CENTER, HARDEMAN COUNTY, TENNESSEE

The Tennessee Valley Authority (TVA) proposes to execute a 20-year power purchase agreement (PPA) through its Renewable Standard Offer (RSO) program with Latitude Solar Center, LLC, an affiliate of Coronal Development Services LLC, for the electricity generated by a proposed solar photovoltaic (PV) facility in Hardeman County, Tennessee. The solar facility would have a generating capacity of 20 megawatts (direct current) that would be delivered to the TVA system through an interconnection with a Bolivar Electric Authority (BEA) substation.

TVA produces or obtains electricity from a diverse portfolio of energy sources including nuclear, fossil, hydro, solar, wind, and biomass. In 2011, TVA completed an Integrated Resource Plan (IRP) and associated environmental impact statement that identified the resources TVA would use to meet the energy needs of the TVA region over the 20-year planning period. Cost-effective renewable energy, including energy generated by solar PV, is one of the energy resources recommended in the IRP. Since 2011, TVA has undertaken several efforts to expand the contribution of renewable energy in its generation portfolio, including the establishment of the RSO program. The recently completed 2015 IRP reiterated the continued expansion of TVA's use of renewable energy. The proposed PPA would help meet this need and the Providence Solar Center project would provide cost-effective renewable energy consistent with TVA goals.

TVA must decide whether to execute the PPA. If TVA does execute the PPA, Latitude Solar Center (LSC) would construct and operate the solar facility. The potential effects of TVA's proposed action, including the effects of constructing and operating the solar facility, are described in an environmental assessment (EA) which is incorporated herein by reference.

Alternatives

The subject EA evaluates two alternatives: the No Action Alternative and the Proposed Action Alternative. Under the No Action Alternative, TVA would not execute the PPA with Latitude Solar Center for the purchase of power generated by the proposed solar facility. TVA would rely on other sources of generation to meet its renewable energy goals.

Under the Proposed Action Alternative, TVA would execute the PPA and LSC would construct and operate the solar facility a short distance southwest of Whiteville, Tennessee. LSC is considering two facility designs; both would occupy about 135 acres of a 160-acre tract of farmland. LSC's preferred Option 1 design would utilize multiple parallel north-south oriented rows of PV panels on single-axis tracking structures supported by metal posts driven into the ground. The alternative Option 2 design would utilize PV panels mounted to multiple parallel east-west oriented fixed-tilt metal racks. For both facility designs, part of the site would be lightly graded to facilitate the installation and operation of the solar arrays. Buried electrical cables would connect the arrays to direct current-to-alternating current inverters and transformers. A new 1.9-mile, 12.47-kilovolt overhead power line would be constructed to connect the facility to

the BEA Union Springs Substation which is connected to the TVA transmission system. About half of the new power line would be on new 60-foot wide right-of-way and the remainder would be within an existing roadside and utility right-of-way. The solar facility would be enclosed by security fencing and revegetated as necessary with grass or other low-growing plants.

TVA's preferred alternative is the Proposed Action Alternative. This alternative would fulfill the purpose and need for the action by providing TVA and its customers with additional renewable generating capacity with minor direct and indirect impacts.

Impacts Assessment

The potential impacts of the proposed action are described in detail in the EA. Implementation of the proposed action would change the land use of the proposed solar facility site from agricultural to industrial. No residents would be displaced. Adjacent land uses are mostly agricultural with a few woodlands to the east and south. Although the use of the site for a solar facility was not compatible with its previous forestry-agriculture-recreational zoning, the Hardeman County Planning Commission amended the zoning definition to allow solar facilities as a use permitted on appeal. The Commission approved LSC's permit on appeal subject to several requirements which LSC has incorporated into the facility design. Most of the site is classified as prime farmland. While the construction and operation of the solar facility would remove the site from agricultural production, there would be little long-term impact on the soil productivity and the impacts on prime farmland would not be significant. The prime farmland on the site represents about 0.1 percent of the prime farmland in the county. Because of the temporary nature of the impacts to prime farmlands, the U.S. Department of Agriculture indicated that a detailed assessment under the Farmland Protection Policy Act was not necessary.

Impacts to groundwater would be minimal. A few streams and wetlands occur in the project area. Streams and wetlands on the solar facility site would not be directly affected and buffers would be established and maintained around them. The proposed power line would cross several streams. Vegetation clearing along the streams would be minimized to the extent feasible and the placement of power poles in stream beds and other direct impacts to streams would be avoided. LSC would implement best management practices during construction and operation to minimize impacts to streams and wetlands and impacts to streams and wetlands would be insignificant. The project area is not located in a floodplain. The proposed action would be consistent with the requirements of Executive Order 11988 (Floodplain Management) and Executive Order 11990 (Protection of Wetlands).

The solar facility site is cropland and the associated plant and animal communities are common, of relatively low diversity and widespread. Approximately 6.4 acres of the proposed power line route is fragmented upland forest. The forest type, as well as the plant and animal species present, is widespread in the region. The clearing of the forest would have minor, adverse local effects to plants and animals and minimal effects on their regional populations. Overall impacts vegetation and wildlife would be insignificant.

The forested portion of the proposed power line route provides potential summer roost habitat for the endangered Indiana bat and the threatened northern long-eared bat, both of which are listed under the Endangered Species Act (ESA). No other species listed or proposed for listing under the ESA are known or likely to occur on the project site and no other state-listed species are known or likely to occur along the power line route or within the footprint of the solar facilities. Direct impacts to the listed bats would be avoided by conducting tree removal between August 1 and March 31. TVA has consulted with the U.S. Fish and Wildlife Service (USFWS)

under Section 7 of the ESA on the potential effects of the proposed action on the two bats. In a letter dated August 17, 2016, the USFWS concurred with TVA's determination that the proposed action would not jeopardize the continued existence of the two listed bats provided tree clearing occurs between August 1 and March 31 and LSC makes a payment to Tennessee's Imperiled Bat Conservation Fund to offset the loss of forest. LSC has made this payment. With adherence to these mitigation measures, impacts to endangered and threatened species would be insignificant.

No archaeological or architectural/historic resources eligible for inclusion on the National Register of Historic Places occur on or in the immediate vicinity of the proposed solar facility. TVA has determined that there would be no effects on historic properties and the Tennessee State Historic Preservation Office concurred with this determination.

Construction activities would result in minor and short-term impacts to air quality and transportation. Once operating, the solar facility would have beneficial impacts to air quality and greenhouse gas emissions as it would offset power that would otherwise be generated, at least in part, by fossil fuel combustion. Few sensitive noise receptors occur in the project area. One of these is a cemetery adjacent to the site boundary. LSC would suspend any construction activities in the vicinity of the cemetery during any funeral services or other events. Construction noise would be of short duration and restricted to normal weekday work hours and, with the restriction regarding the cemetery, off-site noise impacts would be insignificant. Portions of the proposed facility would be visible from a lightly traveled rural road adjacent to part of the site boundary. Overall visual impacts would be insignificant due to the low profile of the proposed facility and existing partial screening by trees on the site perimeter.

The proposed action would result in beneficial socioeconomic impacts during construction due to the short-term increase in employment and purchase of materials, equipment, and services. The increase in the local property tax base resulting from the construction of the facilities would result in a small, long-term beneficial effect. There would be no disproportionate adverse effects on minority or low-income populations.

Public and Intergovernmental Review

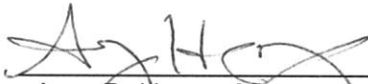
A draft of the EA was issued for public and agency review. TVA received comments on the draft EA from the Tennessee Department of Environment and Conservation, USFWS, Southern Environmental Law Center, Southern Alliance for Clean Energy, and the mayor of Whiteville. None of these comments opposed TVA's proposed action. TVA has carefully reviewed the comments and addressed them in the final EA. TVA has consulted with the State Historic Preservation Office and federally recognized Native American tribes on the potential effects to historic properties and with the USFWS on the potential effects to endangered and threatened species.

Mitigation

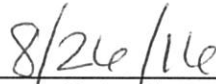
LSC would use routine best management practices such as dust suppression, erosion controls, and maintenance of buffers to minimize impacts to air and water resources. To reduce potential noise impacts, construction activities in the vicinity of the adjacent cemetery would be suspended during funeral services or other events at the cemetery. In accordance with the terms of the endangered species consultation, tree clearing would occur between August 1 and March 31. TVA has not identified the need for additional mitigation measures to further reduce the anticipated environmental impacts.

Conclusion and Findings

Based upon the analyses documented in the EA, TVA concludes that its proposed action of executing the PPA with Latitude Solar Center, LLC, and the subsequent construction and operation of the solar generating facility by LSC, would not be a major federal action significantly affecting the environment. Accordingly, an environmental impact statement is not required.



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Date Signed