



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE 37243-0435

ROBERT J. MARTINEAU, JR.
COMMISSIONER

BILL HASLAM
GOVERNOR

June 3, 2016

Via Electronic Mail to cpnicholson@tva.gov

Charles P. Nicholson

NEPA Compliance

Tennessee Valley Authority

400 West Summit Hill Drive, WT 11D

Knoxville, TN 37902

Dear Charles P. Nicholson:

The Tennessee Department of Environment and Conservation (TDEC) appreciates the opportunity to provide comments on the Tennessee Valley Authority (TVA) *Draft Environmental Assessment for the Latitude Solar Center Project* (Draft EA). The applicant, TVA, proposes to enter into a power purchase agreement (PPA) with Latitude Solar Center (LSC), LLC, an affiliate of Coronal Development Services, LLC, for electricity generated by LSC's proposed 20-megawatt (MW) direct current (DC) solar photovoltaic (PV) generating facility near the unincorporated community of Whiteville in Hardeman County, Tennessee. The proposed solar energy facility would occupy up to 135 acres of a 160-acre tract that LSC will lease for a 20-year period with two 5-year extension options from a private property owner. The proposed solar PV facility would be connected via a 1.9-mile 12.47-kilovolt (kV) overhead power line to the nearby Union Springs Substation, which is owned by Bolivar Electric Authority (BEA). Cost-effective renewable energy, including energy generated by solar PV, is one of the energy resources recommended in TVA's 2015 Integrated Resource Plan (IRP). The proposed PPA with LSC is consistent with the alternative strategies evaluated in the 2015 IRP and the planning direction approved by the TVA Board of Directors in August 2015.

Actions considered in detail within the Draft EA include:

- Alternative A – No Action Alternative – Under the No Action Alternative, TVA would not purchase the power generated by the project under the PPA with LSC. In the absence of the PPA, LSC would not construct and operate the proposed solar facility and interconnection line. Environmental conditions in the project area would remain unchanged in the immediate future.
- Alternative B – Proposed Action Alternative – TVA would enter into a PPA with LSC to purchase the electricity generated from the proposed solar energy facility for a 20-year period. LSC would construct, operate, and maintain a 20-MW DC PV solar power generation facility on a 160-acre privately-owned land tract located near the Town of Whiteville in northwest Hardeman County, Tennessee. The proposed solar array and associated improvements (e.g., access roads, fence) would occupy approximately 135 acres of the 160-acre property as either a single axis tracking system or a fixed tilt array system. In addition, a laydown area of approximately 5 acres would be within the 135 acre area. The 135 acres of land would be cleared and graded as necessary during construction. The solar farm perimeter would be

surrounded by opaque or semiopaque, chain-link security fencing, with slats of earth tone colors to at least 6 feet in height with at least three strands of barbed wire.

TDEC's **Division of Archaeology (DoA), Division of Air Pollution Control (APC), Tennessee Geological Survey (TGS), and Tennessee State Parks and Real Property Management** have reviewed the Draft EA and have no specific comments regarding the proposed action or its alternative.

TDEC's **Division of Natural Areas (DNA)** has reviewed the Draft EA with respect to rare species and critical habitat and has the following comments on the proposed action and its alternative:

- Based on the lack of suitable habitat for state listed species within the project area, DNA does not anticipate adverse impacts to rare species.
- Under Section 3.1.2.2 "Alternative B –Proposed Action Alternative," DNA recommends that TVA consider Red Cedar, Winged Elm, Sumac, Rubus, Southern Red Oak, Post Oak, Black Oak, Hickory, or American Holly where an evergreen vegetative buffer is needed in the context of the Proposed Action Alternative in the Final EA. ¹

TDEC'S **Division of Water Resources (DWR)** has reviewed the Draft EA and has the following comments on the proposed action and its alternative:

- Under Section 3.12.1 "Affected Environment," DWR recommends that a Hydrologic Determination (HD) be conducted on any stream that would be impacted by either new site access road crossings or utility crossings by horizontal directional drill (HDD) and that the HD be included in the context of the Proposed Action Alternative in the Final EA.
- Under Section 3.13.2.2 "Alternative B – Proposed Action Alternative," DWR recommends that the impacts to wetlands be limited to temporary impacts. If permanent alternation of wetland is required then an individual Aquatic Resource Alternation Permit (ARAP) and mitigation will be required.
- DWR recommends that TVA and its contractors contact the TDEC Jackson Field Office to determine which type of construction stormwater permit will be required for the site grading included in the Proposed Action Alternative.²

TDEC's **Division of Solid Waste Management (DSWM)** has reviewed the Draft EA and has the following comments on the proposed action and its alternative:

- Based on the information available in TDEC's WasteBin database and files, DSWM did not identify any permit, compliance, or enforcement solid or hazardous waste related issues within the site location.³
- Tennessee's Solid Waste Management program dates back to 1972, so there could conceivably be disposal in this area that predates TDEC's program. Any wastes which may be unearthed during the project would be subject to a hazardous waste determination, and must be managed appropriately. DSWM recommends that TVA consider the management of potential wastes unearthed in the context of the Proposed Action Alternative in the Final EA.

¹ These species are likely to respond well to the site landscape position and environment. Red Cedar would provide a consistent visual screen year round and American Holly would be a strong additional choice as it may help to fill in any visual gaps that may develop as the Red Cedar matures.

² The TDEC Jackson Field Office can be reached at 731-512-1300.

³ TDEC's WasteBin did contain record of a dumping complaint 1000 feet southwest of the southwest corner of the proposed location. In 2014, DSWM received complaints that a tanker from Evergreen Tank Solutions was dumping near a drainage way on this property. The complaint was referred to the Division of Remediation (DOR), which collected and analyzed soil samples. No contaminants were identified and the site was closed out.

TDEC's **Office of Energy Programs (OEP)** has reviewed the Draft EA and has the following comments on the proposed action and its alternative:

- Under Section 3.6 .1 “ Affected Environment” and Section 3.7.1 “Affected Environment,” OEP recommends TVA consider using electric-powered lawn equipment, which is as much as fifty percent (50%) quieter than traditional gas-operated models.⁴
- OEP recommends TVA include what type of coolants(s) will be used for the proposed transformers in the context of the Proposed Action Alternative in the Final EA.
- OEP comments that the site is within the New Madrid Seismic Zone. During a major seismic event, this area is expected to experience increased soil amplification and liquefaction. OEP recommends that TVA consider the potential for this site to be impacted by a seismic event and address considerations pertaining to seismic activities in the context of the Proposed Action Alternative in the Final EA.
- OEP is supportive of another decentralized power supply in the state. In the event of an energy emergency, the site may provide an emergency source of electricity that could serve critical infrastructure and facilities (e.g., hospitals, shelters, food banks) in the region.

TDEC appreciates the opportunity to comment on this Draft EA. Please note that these comments are not indicative of approval or disapproval of the proposed action or its alternatives, nor should they be interpreted as an indication regarding future permitting decisions by TDEC. Please contact me should you have any questions regarding these comments.

Sincerely,



Dr. Kendra Abkowitz
Director of Policy and Planning
Phone: (615)-532-8689

cc: Mark Norton, TDEC, DoA
Lacey Hardin, TDEC, APC
Ron Zurawski, TDEC, TGS
Bill Avant, TDEC, TSP
Stephanie A. Williams, TDEC, DNA
James Sutherland, TDEC, DWR
Lisa Hughey, TDEC, DSWM
Molly Cripps, TDEC, OEP

⁴ Lawn equipment could be charged on site with the energy generated and reduce petroleum-fuel purchases as well as decrease maintenance costs.