



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

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COMMISSIONER

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March 7, 2016

**Via Electronic Mail to [cpnicholson@tva.gov](mailto: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 Wildberry Solar Center Project* (Draft EA). The applicant, TVA, proposes to execute a power purchase agreement (PPA) with Wildberry Solar Center, LLC (WSC), an affiliate of Coronal Development Services LLC, for electricity generated by WSC's proposed 20-megawatt (MW) solar photovoltaic (PV) facility near the City of Moscow, Tennessee. The proposed solar farm would occupy up to 135 acres of a 347-acre site that WSC would lease for a 20-year period with 5-year extension options from the single private property owner. The proposed solar PV facility would be connected to the Chickasaw Electric Cooperative (CEC) distribution grid at an interconnection point located on the solar facility site. The existing 2.2-mile long CEC distribution line that runs west along Tennessee Highway 57 (TN 57) from the site to CEC's Moscow Substation would be upgraded to accommodate the electricity that would be generated by the proposed facility. TVA's 2015 Integrated Resource Plan (IRP) recommends the continued expansion of renewable energy generating capacity, including the addition of between 175 and 800 MW of solar capacity by 2023. The proposed action would help meet this need for additional solar capacity.

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 Renewable Standard Offer (RSO) PPA with WSC. In the absence of the PPA, WSC would not construct and operate the proposed solar facility, and CEC would not make the upgrades to its electrical system necessary to transmit the power generated by the facility. TVA would continue to rely on other sources of generation described in the 2015 IRP to ensure an adequate energy supply and to meet its goals for increased renewable and low-greenhouse gas emitting generation. 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 WSC through the RSO program to purchase the electricity generated from the proposed solar energy system for a 20-year period. WSC would construct, operate, and maintain a 20-MW direct current (DC) PV solar power generation facility on approximately 347 acres of privately owned land located near the City of Moscow in southern Fayette County, Tennessee. The proposed solar array and associated improvements (e.g., access roads, fence) would occupy approximately 135 acres of the project site, as either a single-axis tracking system, or a fixed-tilt array system. In addition, a laydown area (approximately 5 acres) within the fenced area

would be required and would be located in an area with no known environmental constraints (e.g., wetlands, streams).

TDEC's **Tennessee Geological Survey (TGS), Division of Archeology (DoA), 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 Air Pollution Control (APC)** has reviewed the Draft EA and has the following comments on the proposed action and its alternative:

- If any open burning activity of tree or limb debris is being considered as part of land clearing operations, APC recommends that TVA include in the Final EA that such activities will be conducted in a manner to encourage good smoke dispersion and in accordance with the state open burning regulatory requirements.<sup>1</sup> However, because of the proximity to a local school, APC does not recommend that open burning be conducted on site as a means to dispose of the tree and other vegetation as part of land clearing operations.
- APC comments that the Environmental Protection Agency (EPA) National Ambient Air Quality Standards (NAAQS) citation in Table 3-1 "National Ambient Air Quality Standards" references an out of date source and recommends that TVA reference the current NAAQS EPA website in the Final EA.<sup>2</sup>
- APC comments that the proposed project does not directly include references to the demolition of any on-site buildings.<sup>3</sup> However, if any structures are demolished, an asbestos demolition notification must be provided in advance and proper pre demolition surveys to identify any regulated asbestos containing materials (ACM) present would be required.
- APC commends TVA for pursuing additions to their power generation network that are non-polluting and produce little to no impact to the air environment.

TDEC's **Division of Natural Areas (DNA)** has reviewed the Draft EA and has the following comments on the proposed action and its alternative:

- DNA comments that the project area has been previously impacted by agriculture use and the habitat for state and federally listed plants appears scarce in the project vicinity. Therefore, DNA does not anticipate adverse impacts to rare, threatened or endangered plant species.
- To ensure that legal requirements for protection of the state listed rare animals are addressed, DNA recommends TVA coordinate with the Tennessee Wildlife Resources Agency<sup>4</sup> and with U.S. Fish and Wildlife Service Field Office, Cookeville, Tennessee<sup>5</sup> in regard to potential impacts to federally listed species and tree removal in the context of the Proposed Action Alternative.
- For stabilization of disturbed areas, DNA advocates the use of native trees, shrubs, and warm season grasses, where practicable. DNA recommends that care should be taken to prevent re-vegetation of disturbed areas with plants listed by the Tennessee Exotic Pest Plant Council as harmful exotic plants.<sup>6</sup>

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

- In Section 3.12.2.2, "Alternative B– Proposed Action Alternative," TVA discusses minimizing the disturbance of stream beds during the installation of buried electrical conduits by using horizontal

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<sup>1</sup> TDEC APC Rule 1200-3-4-.01 *et al.*, <http://share.tn.gov/sos/rules/1200/1200-03/1200-03-04.pdf>. Additional information on open burning in Tennessee is available at <https://tn.gov/environment/article/apc-open-burning> and <http://www.burnsafetn.org/>.

<sup>2</sup> The current EPA NAAQS website is <http://www3.epa.gov/ttn/naaqs/criteria.html>.

<sup>3</sup> In section 3.4.1 "Affected Environment," TVA states "[t]here are buildings currently located on the property, including a former farm equipment storage shed with an attached smaller shed on each side; a sawmill building with two attached smaller sheds; and an adjacent carport."

<sup>4</sup> Recommended Tennessee Wildlife Resources Agency contact is Rob Todd, [rob.todd@tn.gov](mailto:rob.todd@tn.gov), 615-781-6577.

<sup>5</sup> U.S. Fish and Wildlife Service Field Office, Cookeville, Tennessee phone number is 931-525-4970.

<sup>6</sup> Additional information can be found at <http://www.tneppc.org/>.

direction drilling from adjacent upland areas. Based on information provided in the Draft EA, DWR comments that use of the horizontal directional drilling method would likely require a “no – notice” general permit for utility line crossings since there would be no direct impact to the bed or bank of a stream.

- In Section 3.13.2.2, “Alternative B– Proposed Action Alternative,” TVA discusses the potential impacts to wetlands. DWR comments that permanent impacts to wetlands, including conversion from forested to scrub-shrub, would require a proposed mitigation offset either on site or through use of local mitigation banks. DWR recommends that the site be designed in a manner that avoids fragmenting wetlands on or off site.<sup>7</sup> Also, DWR comments that the impacts to wetlands would exceed the maximum allowable to be considered de minimus and recommend that TVA mention the preparation of an application for an Individual Aquatic Resource Alteration Permit (ARAP) in the context of the Proposed Action Alternative in the Final EA. Further, DWR recommends that storm water outfalls, if possible, be directed such that they provide input into on site wetlands and retention to provide additional stormwater filtration benefits prior to flowing into the Wolf River.

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 the TDEC’s WasteBin database and files, DSWM did not identify any solid or hazardous waste facilities that conflict with the proposed action in or around the impacted parcel.<sup>8</sup>
- 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.

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 2.1.2 “Alternative B – Proposed Action,” OEP recommends TVA consider using electric-powered lawn equipment, which are as much as fifty percent (50%) quieter than traditional gas-operated models and reduce petroleum-fuel purchases and used oil waste.<sup>9</sup>
- 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.
- OEP recommends TVA include what type of coolant(s) will be used for the proposed transformers in the context of the Proposed Action Alternative in the Final EA.
- OEP comments that the WSC 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.

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<sup>7</sup> One method that can be used is to design road and fill zones such that they are moved to the outer fringe of wetlands rather than bisecting them where ever possible.

<sup>8</sup> DSWM comments that review of data associated with hazardous waste generators in the general vicinity of Moscow, Tennessee identified Glasteel-Division of Stabilit America Inc. as a large quantity generator of hazardous wastes and Troxel Company as a small quantity generator of hazardous wastes. Troxel was noted on the RCRAInfo database as having a GPRA 2020 list but is coded as having Human Exposures controlled, Groundwater controlled and Final Remedies in place. State Remediation is currently the lead agency for the Troxel site which is approximately 2-3 miles west of Moscow. DSWM notes that a Superfund National Priorities List (NPL) site, Chemet, was previously located immediately west of the Moscow-La Grange Elementary School.<sup>8</sup> Upon completion of remediation activities (i.e. soil removal) at the Chemet site, confirmation sampling was performed and site was removed from the NPL.

<sup>9</sup> Lawn equipment could be charged on site with the energy generated.

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,

A handwritten signature in cursive script that reads "Kendra Abkowitz".

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

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