



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

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August 25, 2016

**Via Electronic Mail to [cpnicholson@tva.gov](mailto:cpnicholson@tva.gov)**

Charles P. Nicholson, PhD  
NEPA Compliance  
Tennessee Valley Authority  
400 West Summit Hill Drive, WT 11D  
Knoxville, TN 37902-1499

Dear Dr. 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 Selmer North I Solar Project* (Draft EA). The applicant, TVA, proposes to enter into a power purchase agreement (PPA) with Selmer North I, LLC, a facility-specific entity affiliated with Silicon Ranch Corporation (SRC), to purchase the electric power generated by a proposed solar photovoltaic (PV facility) near Selmer, McNairy County, Tennessee. Selmer I North (Selmer I), the proposed solar facility, would have direct current (DC) generating capacity of 20 megawatts (MW) and would be constructed and operated by SRC. The PPA would be executed through TVA's Renewable Standard Offer program, under which TVA agrees to purchase qualifying renewable energy at set prices for a 20-year period. The proposed Selmer I solar facility would occupy approximately 99 acres of a 231-acre tract owned by SRC, approximately 1 mile southeast of Selmer. The solar generating facility would consist of multiple parallel rows of PV panels on single-axis tracking structures, DC to alternating current (AC) inverters, and transformers. The Selmer I facility would be connected to a distribution line owned/maintained by Pickwick Electric Cooperative (Pickwick Electric), which would transmit power to the TVA network. TVA's 2015 Integrated Resource Plan (IRP) recommends continued expansion of renewable energy generating capacity, including the addition of between 175 and 800 MW of solar capacity by 2023. The proposed PPA with Selmer North I, LLC is consistent with the recommendations in the 2015 IRP and the planning direction approved by the TVA Board of Directors.

Actions considered in detail within the Draft EA include:

- No Action Alternative – Under the No Action Alternative, TVA would not purchase the power generated by the project under the 20-year PPA with Selmer North I, LLC and the solar facility would not be constructed and operated by SRC.
- Proposed Action Alternative – Under the Proposed Action Alternative, TVA would enter into the 20-year PPA with Selmer North I, LLC and SRC would construct and operate the 20-MW Selmer I single-axis tracking PV solar power facility in McNairy County, Tennessee. The proposed Selmer I facility would occupy approximately 99 acres of land in the northern portion of the site, which is comprised of two

currently farmed tracts approximately 1 mile southeast of the town of Selmer. The proposed facility would connect to Pickwick Electric's Forrest Hills Substation via a distribution line which would be rebuilt.

TDEC's **Division of Archaeology (DoA)**, the **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 alternatives.

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 alternatives:

- Based on the type of project and the habitat within the project area, DNA does not anticipate any impacts to rare, threatened, or endangered plant species from this project. However, DNA notes that the Hatchie Burrowing Crayfish (*Fallicambarus hortoni*) has been collected approximately 2.2 air miles northwest of the proposed site as recently as 2009. Images from the Draft EA suggest that potentially suitable hydric soils are present in the project area. A properly timed pedestrian survey is needed to evaluate burrowing crayfish activity. The Tennessee Wildlife Resource Agency (TWRA) can provide guidance regarding additional surveys needed to determine the species composition of any burrowing crayfish on the project site, as warranted. DNA recommends that TVA coordinate this project with the TWRA (Rob Todd, [rob.todd@tn.gov](mailto:rob.todd@tn.gov), 615-781-6577) to ensure that legal requirements for protection of state listed rare animals are addressed.

TDEC'S **Division of Water Resources (DWR)** has reviewed the Draft EA. At this time, the Division has no further comments since the site has been and is being permitted under applicable Tennessee rules and regulations.

- The site already has an Aquatic Resources Alteration Permit (ARAP), #NRS16.125 under the name of McCarthy Building Company, which authorizes the construction of 60' of a 60" high-density polyethylene pipe for site access and four storm water outfalls from the onsite storm water retention areas to unnamed tributaries to Oxford Creek.
- DWR has issued National Pollutant Discharge Elimination System (NPDES) construction stormwater permit, #TN0081825, to co-applicants Silicon Ranch Corporation (owner) and McCarthy Building Companies, Inc. (operator) for the Selmer Site 1. This permit allows for grading and disturbing 98 acres, in preparation for solar panel installation. Coverage under this permit will replace coverage under permit #TNR121827.

The Division encourages TVA and its contractors to continue to follow best management practices as outlined in current permits and to involve the department through both the Nashville Central Office and Jackson Environmental Field Office in any future water resources permit activities at the site.

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 solid or hazardous waste permit-, compliance-, or enforcement-related issues within the site location.<sup>1</sup>
- Table 3.10-1 on page 3-56 outlines the project's waste management plans, which include disposing of all nonhazardous construction waste and nonhazardous office waste in a Class III landfill or recycling nonhazardous construction waste and nonhazardous office waste whenever possible. DSWM notes that

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<sup>1</sup> DSWM identified one open complaint related to dumping of tires and other solid waste within one mile of the proposed site.

the Class III landfill located in McNairy County is currently not in operation and would not be allowed to accept the waste streams identified for disposal if the landfill was operational. DSWM recommends that the Final EA note that the disposal of nonhazardous waste will be appropriately managed at an operating Class I landfill.

- Page 3-56 of the Draft EA notes that universal wastes and unusable materials will be handled, stored, and managed per General Universal Waste requirements. Table 3.10-2 on page 3-57 further notes that spent batteries (lead acid/lithium ion) will be recycled. In both these instances, DSWM recommends that the Final EA indicate that Tennessee Universal Waste requirements will be followed, as Tennessee's requirements for universal waste are unique in many circumstances from those of other states.<sup>2</sup>
- Table 3.10-2 on page 3-57 references "nonRCRA hazardous wastes," which are identified as used oil, used hydraulic fluid, oils and grease, oily rags, oil absorbent, and oil filters. DSWM notes that "NonRCRA hazardous wastes" is not a waste classification used in Tennessee.<sup>3</sup> If these wastes are handled under the state's used oil regulations and appropriate solid waste regulations, these materials would not be considered hazardous wastes in Tennessee. It should be noted that if they become contaminated and exhibit the characteristics of a hazardous waste or contain a listed hazardous waste, they would require the appropriate method of disposal at a hazardous waste disposal facility. DSWM recommends that these distinctions be noted in the Final EA.

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:

- The proposed project does not directly include references to any demolition of buildings on site, activities which are likely to produce fugitive dust emissions that may need to be mitigated if present. APC comments that if any structures are to be demolished, an asbestos demolition notification and proper pre demolition surveys to identify any regulated asbestos containing materials present must be completed in advance of demolition. If demolition activities will occur, APC recommends including these requirements in the Final EA.
- The Draft EA references open burning activity of tree or limb debris as part of land clearing operations. APC recommends that the Final EA include 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>4</sup>
- Table 3.7-1 on page 3-40 references emissions of National Ambient Air Quality Standards (NAAQS) pollutants in McNairy County for 2011. APC recommends including a table detailing individual emission standard limits by pollutant established at the national level as a basis for comparison in the Final EA.<sup>5</sup>
- Finally, the authors also present an analysis of the benefits from implementation of the proposed project which will potentially minimally reduce/offset greenhouse gas emissions associated with fossil fuel power production. 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.

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<sup>2</sup> TDEC Hazardous Waste Management Rule 0400-12-01 et seq., <http://share.tn.gov/sos/rules/0400/0400-12/0400-12-01/0400-12-01-12.20150210.pdf>.

<sup>3</sup> NonRCRA hazardous waste is a classification that appears in other state's regulations, for example California.

<sup>4</sup> TDEC APC Rule 1200-3-4-.01 et seq., <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>5</sup> The current EPA NAAQS table is available at <https://www.epa.gov/criteria-air-pollutants/naaqs-table>.

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

- Under Section 3.6.2.2 (Noise: Environmental Consequences: Proposed Action Alternative) and Section 3.7.2.2 (Air Quality and Greenhouse Gas Emissions: Environmental Consequences: Proposed Action Alternative), OEP recommends consideration be given to using electric-powered lawn equipment, which is as much as fifty percent (50%) quieter than traditional gas-operated models, in the Final EA. Electric-powered lawn equipment has zero air emissions onsite, reduces petroleum-fuel purchases, and eliminates used oil waste.<sup>6</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 that TVA consider adding a subsection in Section 3 of the Final EA to address potential Electro Magnetic Field (EMF) impact. There is increased stakeholder awareness regarding possible EMF impact and utility scale solar projects.<sup>7</sup>

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,



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<sup>6</sup> Lawn equipment could be charged on site with the energy generated.

<sup>7</sup> For example, EMF impact was addressed in a question and answers document produced by the Massachusetts Departments of Energy Resources, Massachusetts Department of Environmental Protection, and Massachusetts Clean Energy Center. EMF is addressed in the document from page 10 to 13 and may be found at [www.mass.gov/eea/docs/doer/renewables/solar/solar-pv-guide.pdf](http://www.mass.gov/eea/docs/doer/renewables/solar/solar-pv-guide.pdf).