

FINDING OF NO SIGNIFICANT IMPACT TENNESSEE VALLEY AUTHORITY

PURCHASE OF POWER GENERATED AT THE PULASKI ENERGY PARK SOLAR FARM EXPANSIONS, GILES COUNTY, TENNESSEE

TVA proposes to enter into two 20-year power purchase agreements (PPAs) with Silicon Ranch Investments, Inc., under the Renewable Standard Offer program (RSO) for the electricity generated by the proposed 198-kilowatt (kW) Phase 4 and the 197-kW Phase 5 expansions of the Pulaski Energy Park near Pulaski, Giles County, Tennessee. The expansions would increase the generating capacity of the Pulaski Energy Park from 1.4 megawatts (MW) to approximately 1.8 MW.

The Pulaski Energy Park is located on a 25-acre tract in an existing industrial park approximately 4 miles southeast of Pulaski. The expansions would occupy about 2.3 acres that have been previously cleared and graded. A total of approximately 1,460 photovoltaic (PV) panels would be installed on ground-mounted racks arranged in east-west rows and supported by metal posts driven into the ground. Rack-mounted wiring would connect the PV panels to inverters, which would be connected to an existing onsite pad-mounted transformer. The transformer is electrically connected to an adjacent Pulaski Electrical System (PES) substation, which would transmit the power from the expansion facilities to the TVA transmission network. PES would install two new billing meters; no other upgrades to PES facilities would be necessary. The chain-link fencing surrounding the existing PV facilities would be rebuilt to enclose the new PV facilities. Once construction is completed, the site would be revegetated as necessary with low-growing grasses. Vegetation within the fenced area would be maintained by periodic mowing.

The anticipated environmental impacts of TVA's proposed action of entering into the PPAs, as well as those of the resulting construction and operation of the proposed solar farm expansions, are the subject on an environmental assessment (EA) which is incorporated by reference. The EA evaluates two alternatives, i.e., the No Action Alternative and the Action Alternative. Under the No Action Alternative, TVA would not enter into the PPAs and the solar farm expansions would not be constructed. Under the Action Alternative, TVA would enter into the PPAs and the solar farm expansions would be constructed and operated as described above.

The construction of the proposed solar farm expansions have negligible adverse effects on air quality and its operation would have a small beneficial effect on air quality, including reduced emissions of greenhouse gases, due to the generation of emissions-free electricity that would otherwise likely be generated in part by fossil fuels. No noise would be generated by operation of the solar facilities; noise from construction and periodic maintenance would be short-term and have negligible off-site impacts. No water bodies occur in the immediate vicinity and use of best management practices would minimize erosion or sedimentation during construction activities. No impacts to surface waters or groundwater are anticipated. No wetlands or floodplains occur in the project area and the proposed action complies with Executive Orders 11988 on floodplain management and 11990 on wetlands.

The two expansion sites have been previously cleared and graded and there would be little impact on vegetation and wildlife. No federally or state-listed endangered or threatened species would be affected. Visual impacts of the solar farm expansion would be negligible, and there would be no effects on land use or prime farmland. Socioeconomic impacts would be minor and beneficial, and there would be no disproportionate impacts to minority and low-income populations. No historic properties would be affected.

Mitigation

TVA has not identified the need for mitigation measures to reduce the anticipated environmental impacts.

Conclusion and Findings

Based on the findings in the EA, TVA concludes that the proposed action of entering into the PPAs with Silicon Ranch Investments, and the subsequent construction and operation of the solar farm expansions, would not be a major Federal action significantly affecting the environment. Accordingly, preparation of an environmental impact statement is not required.



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Date Signed