

FINDING OF NO SIGNIFICANT IMPACT TENNESSEE VALLEY AUTHORITY

POWER PURCHASE AGREEMENT FOR RENEWABLE ENERGY FROM LANDFILL GAS - INSTALLATION OF GENERATING CAPACITY AT THE CITY OF BRISTOL' S SANITARY LANDFILL WASHINGTON COUNTY, VIRGINIA

The Tennessee Valley Authority (TVA) proposes to enter into a power purchase agreement (PPA) with INGENCO Renewable Development, LLC (INGENCO) under TVA's Renewable Standard Offer (RSO) program for the acquisition of electric power generated at the City of Bristol's Sanitary Landfill (landfill) in Washington County, Virginia. This power would be generated by twelve (12) landfill gas (LFG)-fueled reciprocating engines proposed to be installed at the existing landfill site. While a total of eighteen (18) Detroit Series 60, 12.7 liter engines (and the associated equipment and controls) will be installed, six (6) of these engines will be used only in stand-by capacity. The standby engines would also be available for potential future expansion of the site's generating capacity.

To help fulfill the objectives of its 2011 Integrated Resource Plan, 2007 Strategic Plan and 2008 Environmental Policy, TVA has expanded the contribution of renewable and low greenhouse gas-emitting sources in its generation portfolio. Utilization of LFG to produce electricity qualifies as a renewable power source under the RSO program. The more energy generated from renewable resources such as LFG, the less energy would need to be generated from nonrenewable resources such as fossil fuels.

The landfill presently operates an open flare, which burns excess LFG emitted from the decomposing buried waste. The installation of this new generation system of eighteen (18) 475 horsepower engines would result in an installed generating capacity of 6.30 megawatts (MW) at the landfill. Only 12 of these engines will be initially used to generate power for INGENCO's RSO contract which is based on a gross nameplate capacity of 4.50 MW. Using the LFG to generate electricity will reduce the amount of LFG being burned in the flare or escaping directly into the air (i.e., fugitive emissions) and reduce/avoid emissions from TVA's existing fossil-fueled generating units. The potential environmental effects of this proposed action are described in an environmental assessment (EA), which is incorporated by reference.

Alternatives

The subject EA evaluates two alternatives, i.e., the No Action Alternative and the Action Alternative. Under the No Action Alternative, TVA would not purchase power from the new generators for the RSO program, and the LFG-fueled engine systems may not be installed by INGENCO. The excess LFG produced by the landfill would continue to be flared to the atmosphere at a rate of up to 2,400 standard cubic feet per minute.

Under the Action Alternative, TVA would enter into a PPA to purchase 4.50 MW electric power generated from the proposed INGENCO facility near Bristol, Virginia for the RSO program. Eighteen LFG-fueled engines would be installed by INGENCO along with a shelter building, heating oil storage tanks, and other associated facilities after site preparation is completed. Any remaining LFG would be flared. TVA's Preferred Alternative is the Action Alternative under

which TVA would enter into a PPA with INGENCO to purchase power generated from the installation of a 4.50 MW LFG engine system at the landfill for the RSO program.

Impacts Assessment

The project would not have impacts on wetlands, aquatic ecology, hazardous and nonhazardous wastes, natural areas, visual resources, and floodplains. The proposed action is consistent with Executive Order (EO) 11988 Floodplain Management. The impacts on vegetation and wildlife, water quality, noise, transportation, hazardous materials storage (heating oil), and environmental justice would be minimal and insignificant. The proposed action would not require permitting under Sections 401 and 404 of the Clean Water Act and complies with EO 11990 Protection of Wetlands.

No suitable habitat for federally or state-listed species occur within the project area. Therefore there would be no effects to threatened or endangered species or their habitats. The requirements of Section 7 of the Endangered Species Act are satisfied.

The project would have minor, beneficial impacts on air quality because of the combustion of methane to produce electricity (avoiding the release of this methane) and the displacement of other fossil fuel use to produce electricity. There will also be marginal socioeconomic benefits with the creation of about six permanent jobs.

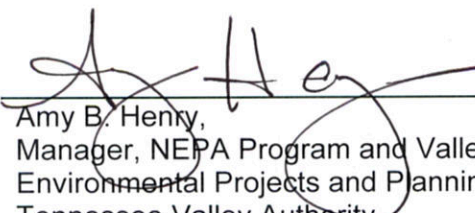
The proposed project's area of potential effect does not contain archaeological or cultural resources. The project, thus, has no potential to affect historic properties. Pursuant to 36CFR Part 800.3(a) (1), the requirements of Section 106 of the National Historic Preservation Act are satisfied.

Mitigation

Best management practices and other routine measures will be implemented by INGENCO during construction and installation activities. Virginia Department of Environmental Quality regulates air emissions, water quality, and hazardous material storage, imposes compliance requirements, and ensures monitoring compliance. TVA has not identified the need for any non-routine mitigation measures to reduce potential environmental impacts.

Conclusion and Findings

Based on the findings in the EA, TVA concludes that its entering into a PPA with INGENCO, as described under the Action Alternative, will not be a major federal action significantly affecting the environment. Accordingly, an environmental impact statement is not required.



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Date Signed