

FINDING OF NO SIGNIFICANT IMPACT TENNESSEE VALLEY AUTHORITY

CONTINUED OPERATION OF JOHNSONVILLE
COMBUSTION TURBINE UNITS 1 THROUGH 10
EAXX-455-00-000-17407 42293

The Tennessee Valley Authority (TVA) is proposing to continue operation of ten combustion turbine (CT) units located at the Johnsonville Reservation in Humphreys County, Tennessee. The proposed action involves continuing to operate these CT units to enhance system stability and reliability during peak demand periods, particularly those driven by extreme weather events such as heat waves and winter storms.

As outlined in the final EAs for the Paradise and Colbert Combustion Turbine Plants and the Johnsonville Aeroderivative Combustion Turbines Project, Johnsonville CT (CT) Units 1 through 16 were slated for retirement and decommissioning after all the new aeroderivative CT units became fully operational. TVA is now proposing the continued operation of CT Units 1 through 10 to support the region's sustained load growth and reinforce the resilience of the TVA power grid. By keeping these ten units in operation, TVA would preserve an estimated 650 MW of needed dispatchable capacity.

Accordingly, TVA prepared an environmental assessment (EA) to analyze the potential environmental impacts associated with the continued operation of Johnsonville CT Units 1 through 10.

TVA evaluated two alternatives to the proposed action: Alternative A- No Action, and Alternative B- Continued Operation of Johnsonville CT Units 1 through 10.

Under Alternative A, TVA would discontinue operation of CT Units 1 through 10 at the Johnsonville Reservation. These units would proceed toward decommissioning, consistent with the action evaluated in the Paradise and Colbert Combustion Turbine Plants EA and the associated FONSI. This alternative would result in the loss of up to 650 MW of dispatchable generation capacity, reducing TVA's ability to respond to peak demand events and potentially requiring the development of alternative generation resources or procurement from external sources. While this alternative does not meet the stated purpose and need, it is retained for comparative analysis as required under NEPA.

Under Alternative B, TVA would continue to operate CT Units 1 through 10 at the Johnsonville Reservation to preserve 650 MW of flexible, dispatchable capacity critical for supporting TVA's power system, particularly during extreme weather events and periods of high demand.

Based on the preliminary analysis, TVA concluded that implementation of Alternative B would not affect land use, prime farmland, geology or soils, vegetation, wetlands, floodplains, visual resources, cultural resources, recreation, navigation, or managed and natural areas. Therefore, these resources were not evaluated in further detail in the EA. Further analysis of resources that could be affected by the project concluded that construction and operation activities associated with Alternative B would result in minor to negligible impacts to air quality, climate and greenhouse gas (GHG) emissions, noise, socioeconomics, groundwater, aquatic ecology,

wildlife and surface water, transportation, solid and hazardous waste, and public health and safety.

TVA released the Draft Environmental Assessment (EA) for public review on September 17, 2025, initiating a 15-day public comment period. The Draft EA was made available on TVA's NEPA website (<http://tva.com/nepa>) to facilitate public access and review. To promote broad public awareness, TVA also published notices of availability in local newspapers serving the Humphreys County area, including The Camden Chronicle (Camden, TN) and The News-Democrat (Waverly, TN).

In addition to this public outreach, TVA coordinated with relevant local, state, and federal agencies by distributing the Draft EA for review and comment.

TVA received comments from the following entities:

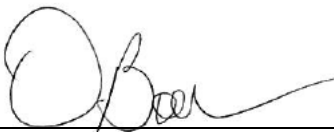
- Agencies: Tennessee Department of Environment and Conservation (TDEC), U.S. Environmental Protection Agency (EPA)
- Public: One individual member of the public

Comments were accepted via mail and email through the close of the comment period on October 2, 2025. All substantive comments received during the public and agency review period were carefully considered in the preparation of the Final EA.

TVA would maintain the current level of public health and safety protection while supporting regional energy reliability. Continued adherence to regulatory standards and TVA's safety practices would ensure that risks to workers and the surrounding community remain low.

Conclusion and Findings

Based on the findings listed above and the analyses in the EA, we conclude that the proposed action of continuing operation of ten combustion turbine units at the Johnsonville Reservation would not be a major federal action significantly affecting the environment. Accordingly, an environmental impact statement is not required.



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Tennessee Valley Authority

November 7, 2025

Date Signed