



## TENNESSEE VALLEY AUTHORITY

### Chatuge Dam Safety Modifications

**AGENCY:** Tennessee Valley Authority.

**ACTION:** Notice of Intent.

**SUMMARY:** The Tennessee Valley Authority (TVA) intends to prepare an environmental impact statement (EIS) under the National Environmental Policy Act (NEPA) to address the potential environmental impacts associated with the proposed modification of the Chatuge Dam Spillway, low-level outlet (LLO), and the dam embankment. Based on evaluations conducted between 2016 and 2022, TVA determined that the risk of uncontrolled releases due to spillway failure exceeds TVA's risk tolerance for dam safety.

**DATES:** The public scoping period begins with the publication of this Notice of Intent in the *Federal Register*. To ensure consideration, comments must be postmarked, submitted online, or emailed no later than May 28, 2025. To facilitate the scoping process, TVA will be holding in-person meetings in Clay County, North Carolina and Towns County, Georgia. Additionally, TVA will hold two virtual public meetings. The meeting locations, dates, and times will be posted on <https://www.TVA.com/nepa>.

**ADDRESSES:** Written comments should be sent to Erica McLamb, NEPA Compliance Specialist, 1101 Market Street LPE5S, Chattanooga, Tennessee 37402. Comments may also be submitted online at <https://www.tva.com/nepa> or by email at [nepa@tva.gov](mailto:nepa@tva.gov).

**FOR FURTHER INFORMATION CONTACT:** Erica McLamb by email to [nepa@tva.gov](mailto:nepa@tva.gov), by phone at (423) 751-8022, or by mail at the address above.

**SUPPLEMENTARY INFORMATION:** The EIS identification number is EISX-455-00-000-1735297828. This notice is provided in accordance with the National

Environmental Policy Act (NEPA), as amended (42 U.S. Code [U.S.C.] 4321 et seq.) and TVA regulations and procedures (18 CFR part 1318).

TVA's Chatuge Reservoir is located on the Hiwassee River. The reservoir is approximately 13 miles long and extends southeast from Chatuge Dam, located in Clay County, North Carolina, into Towns County, Georgia. TVA operates the reservoir for many purposes, including flood control, power generation, water supply, recreation, and augmentation of downstream water flows. Chatuge Reservoir has a flood-storage capacity of 62,600 acre-feet between an elevation (El.) of 1918 and 1928 feet.

TVA operates Chatuge Dam according to seasonal curves that guide operations. The guide curve represents idealized target operations, with a low point of El. 1915 in the middle of February when flood risk is highest, and a high point of El. 1926 around Memorial Day. The flood guide varies from El. 1918 in the winter to El. 1926 in the summer; all volume above the flood guide is reserved for flood control storage. Thus, in a year with normal rainfall, the water level in Chatuge Reservoir varies about 10 feet from summer to winter to provide seasonal flood storage. These operating levels were implemented pursuant to TVA's Reservoir Operations Study.

During its program of dam safety risk assessments and integration of dam safety industry findings, TVA concluded the chute slab of the primary spillway at Chatuge Dam is in poor condition. TVA determined that the potential for removal of one or more sections of the chute slab during a rare flood event poses a dam safety risk outside of TVA tolerances. TVA also investigated secondary sources of dam safety risk associated with internal erosion through the dam. TVA judged that the internal erosion risks were of lesser magnitude and within widely accepted tolerable risk guidelines.

Beginning in December 2023, TVA implemented additional monitoring and inspections of the spillway, repaired joints and sealed cracks in the spillway slab and walls, and supplemented the existing Chatuge Dam Emergency Action Plan for spillway

failures to reduce risks. However, the risk of spillway damage and failure remains higher than TVA's risk tolerance. TVA proposes potential modifications to the Chatuge spillway and low-level outlet works (LLOW) to reduce the risk associated with Chatuge Dam.

TVA is also considering modifications to the dam embankment.

### *Project Purpose and Need*

The purpose of the proposed action is to reduce risks to human health and safety and improve flood control. The proposed action is needed to ensure the continued safe operation of the Chatuge Dam for hydrogeneration, flood control, water supply, and recreation. Additionally, the proposed action is needed to ensure TVA can reliably meet river flow obligations necessary to maintain aquatic habitat and public water supply through improved reliability in the event of an outage at the hydropower plant. The project would also ensure that TVA can operate the Chatuge Dam and Reservoir in furtherance of TVA's statutory mission to manage the Tennessee River system, its tributaries, and its associated resources.

### *Preliminary Proposed Action and Alternatives*

TVA anticipates the EIS will evaluate a No Action Alternative and four Action Alternatives. Under the No Action Alternative (Alternative A), TVA would not perform any modification of the Chatuge Dam spillway, LLOW, or embankment, and would continue to maintain these components in their current state. TVA would continue to monitor and inspect the spillway, repairing joints and sealing cracks in the spillway slab and walls as needed; however, the risk of spillway damage and failure would continue to exceed TVA's risk tolerance.

To reduce the potential for spillway activation during the construction for all Action Alternatives, TVA would draw down the Chatuge Reservoir during the construction period. The maximum drawdown of the reservoir would be to an elevation of 1,908 feet, which is 10 feet below normal winter pool. The estimated drawdown

duration for each alternative is described below; however, the drawdown could be extended due to the need to maintain dam safety requirements, weather delays, and unforeseen circumstances encountered during construction.

Alternatives B and C would include rehabilitation of the existing spillway and replacement of the Howell Bunger Valve. The spillway would be rehabilitated by reconstruction of the existing contraction joints (Alternative B) or by installing a concrete overlay (Alternative C). The construction and drawdown duration for Alternative B could be up to eight years. The construction and drawdown duration for Alternative C could be up to six years.

Alternative D would include construction of a new spillway and abandonment of the existing spillway, replacement of the Howell Bunger Valve, and dam embankment stabilization. The new spillway, located west of the existing spillway, would be designed convey all the water from the Probable Maximum Flood (PMF) which is 108,000 cubic feet per second (cfs). Construction of Alternative D could last up to six years and require the reservoir to be drawn down for up to four years.

Alternative E would include construction of a new gated spillway, rehabilitation of the existing spillway, replacement of the Howell Bunger Valve, and dam embankment stabilization. The new service spillway, located west of the existing spillway would be designed to pass a maximum discharge of 68,000 cfs through a gated crest. The auxiliary spillway will maintain its current design discharge capacity of 39,000 cfs. Construction of Alternative E could last up to seven years and would require a reservoir drawdown up to five years.

#### *Anticipated Environmental Impacts*

The EIS will include a detailed evaluation of the environmental, social, and economic impacts associated with implementation of the proposed action. Resource areas to be addressed in the EIS include but are not limited to air quality; aquatics; botany;

climate change; cultural resources; floodplains; geology and groundwater; land use; noise and vibration; health and safety; soils; surface water; water supply, socioeconomics; threatened and endangered species; transportation; visual resources; waste; wetlands; and wildlife. Measures to avoid, minimize, and mitigate adverse effects will be identified and evaluated in the EIS.

#### *Anticipated Permits and Other Authorizations*

TVA's proposed action would require an Individual Permit under Section 404 of the Clean Water Act; Section 401 Water Quality Certification; a North Carolina Construction Stormwater Permit; compliance with Section 106 of the National Historic Preservation Act; and compliance with Section 7 of the Endangered Species Act; and other applicable Executive Orders, local, Federal, and state regulations.

#### *Public Participation and Scoping Process*

Scoping is integral to the process for implementing NEPA and provides a mechanism to ensure that issues are identified early and properly studied; issues of little significance do not consume substantial time and effort; the draft EIS is thorough and balanced; and delays caused by an inadequate EIS are avoided. TVA seeks comment and participation from all interested parties for identification of potential alternatives, information, and analyses relevant to this proposal.

Information about this project is available at <https://www.tva.com/nepa>, which includes a link to an online public comment page. Comments must be received or postmarked no later than May 28, 2025. Federal, state, and local agencies and Native American Tribes are also invited to provide comments. Please note that any comments received, including names and addresses, will become part of the project administrative record and will be available for public inspection. To facilitate the scoping process, TVA will hold two in-person public open house meetings and a virtual public meeting; see the project website for information on the meeting dates and times.

### *EIS Preparation and Schedule*

Following the scoping period, TVA may develop a scoping report that will be published online. The scoping report will summarize public and agency comments that were received and identify the projected schedule for completing the environmental review process. Following analysis of the affected resources, TVA will prepare a draft EIS for public review and comment. One or more preliminary preferred alternatives may be identified in the Draft EIS; however, the final decision on the proposed modifications of the Chatuge Dam components (spillway, Howell Bunger valve, and embankment) will be based on several factors including the conclusions of the EIS, relevant federal and state law requirements, engineering and risk evaluations, and financial considerations.

TVA anticipates holding public open house meetings after releasing the draft EIS. TVA expects to release the draft EIS in late 2025/early 2026 and a final EIS in late 2026/early 2027. TVA anticipates the Record of Decision will be posted at least 30 days after the release of the final EIS.

**Authority:** 18 CFR 1318.402.

**Dawn Booker,**

*Senior Manager, NEPA Compliance.*

[FR Doc. 2025-06830 Filed: 4/18/2025 8:45 am; Publication Date: 4/21/2025]