



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION II
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ATLANTA, GEORGIA 30303-1200

July 08, 2026

EAF-RII-2025-0184

Joseph Quinn
Vice President, Fleet Support
Tennessee Valley Authority
1101 Market Street, LP 4A-C
Chattanooga, TN 37402-2801

SUBJECT: WATTS BAR NUCLEAR PLANT – 95001 SUPPLEMENTAL INSPECTION
SUPPLEMENTAL REPORT 05000390/2026040 AND 05000391/2026040 AND
FOLLOW-UP ASSESSMENT LETTER

Dear Joseph Quinn:

On June 4, 2026, the U.S. Nuclear Regulatory Commission (NRC) completed a supplemental inspection using Inspection Procedure 95001, "Supplemental Inspection Response to Action Matrix Column 2 (Regulatory Response) Inputs." On June 4, 2026, the NRC inspection team discussed the results of this inspection and the implementation of your corrective actions with Chris Reneau, Site Vice President, and other members of your staff.

The NRC performed this inspection to review your station's actions in response to a White finding in the Emergency Preparedness cornerstone which was documented and finalized in NRC Inspection Report 05000390,05000391/2025090. On May 11, 2026, you informed the NRC that your station was ready for the supplemental inspection.

The NRC determined that your staff's evaluation identified the cause of the White finding. Specifically, Emergency Preparedness ownership was not clearly defined for conducting system reviews, assessing Emergency Preparedness (EP) regulatory impacts, and developing recovery plans related to Equipment Important to Emergency Response (EITER).

The inspectors concluded the corrective actions to preclude repetition of the root and contributing causes of the White finding were effective and adequately prioritized considering safety significance and regulatory compliance. In addition, the inspectors determined that evaluations were documented at a sufficient level of detail, including relevant operating experience, and identified the root causes, extent-of-condition, and extent-of-cause of the performance issue. Based on the results of the inspection, the inspectors concluded that the objectives of the IP 95001 supplemental inspection were met.

The NRC determined that completed or planned corrective actions were sufficient to address the performance issue that led to the White finding previously described. Therefore, the performance issue will be closed and no longer considered as an Action Matrix input as of the date of the exit meeting. Based on the guidance in Inspection Manual Chapter 0305, "Operating

Reactor Assessment Program,” and the results of this inspection, the NRC has determined that Watts Bar, Units 1 and 2, will transition to the Licensee Response Column (Column 1) of the Action Matrix as of June 4, 2026.

No findings or violations of more than minor significance were identified during this inspection.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at and at the NRC Public Document Room in accordance with Title 10 of the <http://www.nrc.gov/reading-rm/adams.html> Code of Federal Regulations 2.390, “Public Inspections, Exemptions, Requests for Withholding.”

Sincerely,

A handwritten signature in black ink, appearing to read 'RT', is positioned above the typed name of the signatory.

Signed by Ryan Taylor on 07/08/26

Ryan C. Taylor, Chief
Reactor Projects Branch E
R2 Division of Reactor Projects

Docket Nos. 05000390 and 05000391
License Nos. NPF-90 and NPF-96

Enclosure:
As stated

cc w/ encl: GovDelivery Subscriber

U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report

Docket Numbers: 05000390 and 05000391

License Numbers: NPF-90 and NPF-96

Report Numbers: 05000390/2026040 and 05000391/2026040

Enterprise Identifier: I-2026-040-0000

Licensee: Tennessee Valley Authority

Facility: Watts Bar Nuclear Plant

Location: Spring City, Tennessee

Inspection Dates: June 1, 2026 to June 4, 2026

Inspectors: A. Price, Resident Inspector

Approved By: Ryan C. Taylor, Chief
Reactor Projects Branch E
R2 Division of Reactor Projects

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting a 95001 supplemental inspection at Watts Bar Nuclear Plant, in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to for more information. <https://www.nrc.gov/reactors/operating/oversight.html>

List of Findings and Violations

No findings or violations of more than minor significance were identified.

Additional Tracking Items

Type	Issue Number	Title	Report Section	Status
NOV	05000390,05000391/2025 090-01	Failure to Maintain Public Address System EAF-RII- 2025-0184	95001	Closed

INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at . Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards. <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>

OTHER ACTIVITIES – TEMPORARY INSTRUCTIONS, INFREQUENT AND ABNORMAL

95001 - Supplemental Inspection Response to Action Matrix Column 2 (Regulatory Response) Inputs

The inspectors reviewed and selectively challenged aspects of the licensee's problem identification, causal analysis, and corrective actions in response to a White finding and associated Notice of Violation (NOV) of Title 10 of the Code of Federal Regulations (10 CFR) 50.54(q)(2)(i) and 10 CFR 50.47(b)(10) that was identified by NRC inspectors when a review of corrective action documentation and testing records of the plant's public address (PA) system revealed that the licensee failed to address non-functional PA speakers in accordance with licensee procedure NPG-SPP-18.3.5, "Equipment Important to Emergency Response," Revision 7 (2017). The final significance determination of the White finding and NOV is documented in NRC inspection report 05000390,05000391/2025090 dated December 15, 2025 (Agency Documents Access and Management (ADAMS) Accession Number ML25342A080).

Objective: Ensure that the root and contributing causes of individual and collective white performance issues are understood.

Under this objective, the inspectors reviewed the root cause analysis (RCA) report that the licensee conducted for the failure to address non-functional PA speakers in accordance with licensee procedure NPG-SPP-18.3.5, "Equipment Important to Emergency Response." Specifically, between February 2019 and June 2025, the licensee failed to characterize the continuous and progressive failure of multiple PA speakers as a "loss of function" and failed to take actions to evaluate the condition, implement viable compensatory measures, and prioritize restoration of the non-functional PA speakers as specified in procedure NPG-SPP-18.3.5. The inspectors' review consisted of an evaluation of the following: the licensee's identification of the issue, when and how long the issue existed, prior opportunities for identification, documentation of significant plant-specific consequences and compliance concerns, use of systematic methodology to identify causes with a sufficient level of supporting detail, consideration of prior occurrences, identification of extent-of-condition and extent-of-cause, and identification of any potential programmatic weaknesses in performance.

NRC Assessment: The inspectors concluded that this objective was met. The licensee's RCA determined that EP ownership was not clearly defined for conducting system reviews, assessing EP regulatory impacts, and developing recovery plans related to Equipment Important to Emergency Response (EITER). This resulted in the PA speakers degrading

over time without adequate resolution or compensatory measures.

a. Identification and Exposure Time. The licensee identified a significant number of non-functional PA speakers during periodic testing as early as 2013, and in August 2025, the station recognized that the number of non-functional PA speakers exceeded the 25 percent threshold contained in NRC Inspection Manual, Chapter 0609, Appendix B. The site also implemented compensatory measures in June of 2023, but NRC inspectors later determined that the measures in place were not reasonably comparable to the PA system's required function because they would conflict with security's duties during a hostile action event. The RCA does state that in June of 2025, the NRC inspectors identified that the site failed to characterize the continuous and progressive failure of multiple PA speakers as a "loss of function" and to take actions to evaluate the condition, implement viable compensatory measures, and prioritize restoration of non-functional PA speakers as specified in NPG-SPP-18.3.5. The inspectors determined that identification and exposure time were appropriately assessed in the RCA.

b. Identification Opportunities. The RCA identified that the licensee had missed the opportunity to address management of EITER as early as 2013 when it was found that approximately 18 percent of the speaker areas were non-functional and no CRs were generated as a result. The RCA also identified a missed opportunity to address the management of EITER in 2013 when an unrelated issue with an unavailable radiation monitor prompted a causal evaluation that identified weaknesses with EITER tracking and management. The RCA stated that the resulting corrective actions did not provide effective measures for evaluating and resolving out of service EITER. The RCA appropriately identified these and several other missed opportunities to address the non-functional PA speakers.

c. Risk and Compliance. Although the EP manager was responsible for EITER oversight, the governing procedures did not provide guidance for conducting system reviews or determining regulatory, safety, or emergency plan impacts. The licensee performed an evaluation of the safety consequences and identified that the root and contributing causes had a potential to reduce defense-in-depth across nuclear, industrial, and radiation safety domains. The risk significance of non-functional PA speakers was not recognized by the licensee, and this allowed a degradation of PA speaker coverage and impacted assembly and accountability, evacuation, and security-related announcements. The degraded PA system also affected the ability to notify personnel of industrial hazards and security threats. The degraded PA speakers would also limit the effectiveness of communicating during a radiological event and could delay protective actions, thereby increasing potential exposure. The inspectors concluded that the licensee appropriately understood the risk and compliance aspects of the White finding.

d. Methodology. The RCA employed a systematic, evidence-based methodology to determine the root and contributing causes. Specifically, the licensee's RCA utilized a diverse set of techniques in conducting the investigation including event and causal factors charting, organizational effectiveness and programmatic checklists, nuclear safety culture assessment, procedure reviews, interviews, benchmarking, and a review of previously completed PA speaker maintenance. The inspectors assessed the analysis methodology as appropriate.

e. Level of Detail. The RCA team utilized a formal cause analysis process to identify the problems and determine corrective actions. The inspectors determined that the RCA was

performed commensurate with the safety significance and complexity of the performance issue and was of sufficient detail to identify the root and contributing causes, extent-of-condition, and extent-of-cause.

f. Operating Experience. The licensee considered a Watts Bar condition report (CR) from 2013 that documented regulatory radiation monitors not in service with causes that were similar to those identified in the PA speaker RCA. The actions developed for the radiation monitor issue improved the process for tracking and maintaining EP equipment but not the monitoring, risk reviews, or recovery of that equipment. The PA speaker root cause and associated actions created processes to monitor and recover equipment such that long-term degradation is prevented. Industry OE as well as related NRC findings at other sites were also reviewed for similarities relating to long-term degradation that led to a cumulative regulatory impact. The inspectors determined that the licensee appropriately considered prior occurrences and operating experience (OE) during the root cause analysis.

g. Extent-of-Condition and Cause. The licensee applied the same-similar evaluation technique to evaluate the extent-of-condition. The inspectors reviewed the safety culture traits in NUREG-2165, "Safety Culture Common Language," referenced in IMC 0310-06, "Cross-Cutting Areas and Aspects," and determined that they were appropriately considered during the licensee's evaluations of the root causes, extent-of-condition, and extent-of-cause. The inspectors determined that the licensee's evaluation identified the extent-of-condition and extent-of-cause of the performance issue.

Objective: Ensure that the extent-of-condition and extent-of-cause of individual and collective white performance issues are identified.

Under this objective, the inspectors independently assessed the licensee's RCA, associated corrective actions, procedures, and work orders (WO) to evaluate the licensee's extent-of-condition and extent-of-cause.

NRC Assessment: The team concluded that this objective was met. The inspectors found that the licensee appropriately identified the extent-of-condition and extent-of-cause for the performance issue.

Extent-of-Condition and Cause. The inspectors determined that the licensee's RCA identified the extent-of-condition and the extent-of-cause of the performance issue. Specifically, the RCA addressed the functional and testing status of all PA speakers at Watts Bar and evaluated vulnerabilities for PA speaker functionality at Sequoyah Nuclear Plant (SQN) and Browns Ferry Nuclear Plant (BFN) that could result in additional NRC violations. The RCA also appropriately considered regulatory vulnerabilities resulting from other non-functioning EITER as well as process weaknesses that result in improper ownership of evaluation and resolution of equipment.

Objective: Ensure that completed corrective actions to address and preclude repetition of white performance issues are timely and effective.

Under this objective, the inspectors assessed the appropriateness and timeliness of the licensee's corrective actions.

NRC Assessment: The inspectors concluded that this objective was met. The inspectors determined that the completed corrective actions the licensee had implemented were timely

and effective.

a. Completed Corrective Actions to Prevent Recurrence (CAPRs)

(1) CAPR-01: Revise NPGSPP- 18.3.5, Equipment Important to Emergency Response, to establish clear ownership for determining the significance of non-functional EITER, communicating significance of failures, establishing recovery plans, and performing self-assessments.

(2) CAPR-02: Revise NPG-SPP-18.3, Emergency Preparedness, Section 3.3, EP Oversight Council Review, to require a review of EITER to include out of service equipment, equipment restoration plans, adverse trends, etc.

The inspectors determined that CAPR-01 and CAPR-02 were both appropriate and timely in addressing RC-01, "Emergency Preparedness ownership was not clearly defined for conducting system reviews, assessing EP regulatory impacts, and developing recovery plans related to EITER," because the procedural changes were appropriate and had already been implemented. The effectiveness review plan includes appropriate qualitative measures of success for these CAPRs.

b. Other Completed Corrective Actions

(1) CA-010: Following completion of speaker repairs, reperform the PA Speaker PM, 600124697, to ensure acceptance criteria was met and functionality has been restored.

The inspectors determined that CA-010 was appropriate and timely in addressing the Direct Cause, "Public address speakers have degraded over time without adequate resolution or establishment of effective compensatory measures," because the licensee had already completed the PA speaker repairs and testing and verified the functionality of the PA system. The inspectors observed a sample of the PA speaker testing.

The inspectors sampled other completed corrective actions (non-CAPRs) for the root and contributing causes to determine the appropriateness and timeliness of the actions to correct each cause documented in CR 2032295. The inspectors reviewed these completed corrective actions and determined that they were timely and appropriate.

Objective: Ensure that pending corrective action plans direct prompt and effective actions to address and preclude repetition of white performance issues.

Under this objective, the inspectors assessed the appropriateness and timeliness of the licensee's planned corrective actions.

NRC Assessment: The team concluded that this objective was met. There are no pending CAPRs.

a. Other Planned Corrective Actions

The inspectors reviewed the licensee's planned corrective actions and determined that they were appropriate to address the direct, root, and contributing causes identified in the RCA report. The planned corrective actions include tracking an investment request to ensure a

project is in place for speaker upgrades and installation in uncovered areas as well as the need to perform the final effectiveness review in accordance with the RCA report.

Conclusion

Overall, the inspectors determined that the licensee's problem identification, causal analyses, and corrective actions sufficiently addressed the performance issues that led to the White finding. The inspectors determined that the corrective actions have been prioritized commensurate with the significance and regulatory compliance, corrective actions taken were prompt and effective, and the Notice of Violation related to the supplemental inspection is sufficiently addressed. All inspection objectives, as described in Inspection Procedure 95001, were met and the finding is closed.

INSPECTION RESULTS

No findings were identified.

EXIT MEETINGS AND DEBRIEFS

The inspectors verified that no proprietary information was retained or documented in this report.

- On June 4, 2026, the inspectors presented the 95001 supplemental inspection results to Chris Reneau, Site Vice President, and other members of the licensee staff. Immediately following the exit meeting, Ryan Taylor, Chief, Projects Branch E, conducted the Regulatory Performance Meeting with Chris Reneau and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
95001	Corrective Action Documents	CR 2032295 Level 1 Evaluation (RCA) Report	NRC 95-001 for WBN PA Non-Functional Speakers Exceeds the 25% Guidance of the SDP	Rev 2
		CR 2049921	Deficiencies and Failure of O-PI-OPS-PA	11/10/2025
		CR 2059673	Speakers still needing WOs for repair	01/06/2026
		CR 2069100	Revision needed for BFN EPI 0 244 TST001	02/20/2026
		CR 2072393	PA speaker effectiveness review deficiency	03/05/2026
		CR 2075154	PD-3: WBN 2026 Pre-95001 SA CR 2055914, Objective 4, CAPR-01 not completed as written.	03/18/2026
		CR 2075159	PD-4: WBN 2026 Pre-95001 SA CR 2055914, Objective 4, CAPR-02 not completed as written. Condition Information	03/18/2026
		CR 2075261	PD-7: WBN 2026 Pre-95001 SA CR 2055914, Objective 4, 2032295-007 not completed as written.	03/18/2026
		CR 2075270	PD-8: WBN 2026 Pre-95001 SA CR 2055914, Objective 4, 2032295-009 closure did not procedure requirem	03/18/2026
		CR 2075275	PD-9: WBN 2026 Pre-95001 SA CR 2055914, Objective 4, CR action 2032295-006 not completed as written	03/18/2026
		CR 2075279	LO-1: WBN 2026 Pre-95001 SA CR 2055914, Objective 4, CR action 2032295-008 may need clarification.	03/18/2026
		CR 2076227	PD-11: WBN 2026 Pre-95001 SA CR 2055914, Objective 4, EFR action 2032295-023 did not address eqs	03/23/2026
		CR 2076733	LO-3: WBN 2026 Pre-95001 SA CR 2055914, CR action 2032295-004 need clarification Condition Information	03/25/2026
		CR 2076746	PD-12: WBN 2026 Pre-95001 SA CR 2055914, Objective 7, Compensatory Measures need improvement	03/25/2026
		CR 2076751	PD-13: WBN 2026 Pre-95001 SA CR 2055914, Objective 4, CR action 2032295-005 did not meet procedure	03/25/2026
		CR 2080889	CR 2075270 did not address all the issues cited	04/14/2026
		CR 2081361	CR 2076733 did not follow the requirements of NPG-SPP-	04/16/2026

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			22.600	
		CR 2081403	CR 2032295 was not revised as required by 2032295-011	04/16/2026
		CR 2083767	U1 Cntmt Speakers need to be reinstalled	04/27/2026
		CR 2083801	Test PA speakers that were previously not found during performance of 0-PI-OPS-PA.	04/28/2026
		CR 2083945	CR 2081361 did not correct any issues.	04/28/2026
		CR 2087359	CR 2081403 is a plan for a plan	05/14/2026
		CR 2087368	Issue with CRs 2075154 and 2075159	05/14/2026
		CR 2088876	CR 2080889 did not follow MRC direction	05/21/2026
	Corrective Action Documents Resulting from Inspection	CR 2090980	WBN NRC 95001 Inspection - Issue with NPG-SPP-18.3.5 attachment 7	06/02/2026
	Miscellaneous	PA Speaker Testing Tracker	PA speaker testing and status tracking spreadsheet for 0-PI-OPS-PA, 1-PI-OPS-PA, 2-PI-OPS-PA	06/02/2026
	Procedures	0-PI-OPS-PA	Plant Public Address System	Rev 08
		1-PI-OPS-PA	Unit 1 Containment and Annulus Plant Public Address System	Rev 02
		2-PI-OPS-PA	Unit 2 Containment and Annulus Plant Public Address System	Rev 01
		NPG-SPP-07.1.4	Work Order Prioritization	Rev 33
		NPG-SPP-18.3	Emergency Preparedness	Rev 27
		NPG-SPP-18.3.5	Equipment Important to Emergency Response	Rev 19
		NPG-SPP-22.306	Level 1 Evaluations	Rev 10
	Self-Assessments	CR 2055914	Emergency Preparedness Speakers pre-95001 Inspection Self-Assessment	04/08/2026