



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
245 PEACHTREE CENTER AVENUE N.E., SUITE 1200
ATLANTA, GEORGIA 30303-1200

August 28, 2024

James Barstow
Vice President, Nuclear Regulatory Affairs & Support Services
Tennessee Valley Authority
1101 Market Street, LP 4A-C
Chattanooga, TN 37402-2801

SUBJECT: UPDATED INSPECTION PLAN AND ASSESSMENT FOLLOW-UP LETTER
FOR WATTS BAR NUCLEAR PLANT, UNITS 1 AND 2 - REPORT
05000390/2024005 AND 05000391/2024005

Dear James Barstow:

The enclosed inspection plan lists the inspections scheduled through June 30, 2026, for Watts Bar Nuclear Plant Units 1 and 2. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the last twelve months of the inspection plan are tentative and may be revised. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes.

Watts Bar Unit 2 remains in the Regulatory Response Column of the Reactor Oversight Process (ROP) Action Matrix due to a White Performance Indicator (PI) for Unplanned Scrams per 7000 Critical Hours in the first quarter of 2024. Because this PI returned to the Green performance band in the second quarter of 2024 the NRC has opened a parallel White PI finding, for tracking purposes only, which will remain open until Watts Bar Unit 2 satisfies the objectives of the appropriate supplemental inspection. Therefore, in addition to ROP baseline inspections, the NRC plans to conduct a supplemental inspection in accordance with Inspection Procedure 95001, Supplemental Inspection Response to Action Matrix Column 2 (Regulatory Response) Inputs. This inspection will be scheduled when you notify the NRC of your readiness.

The NRC identified a cross-cutting theme in the Challenge the Unknown aspect of the Human Performance cross-cutting area for Units 1 and 2. Specifically, six findings were identified in the assessment period that demonstrated a trend in Challenge the Unknown (H.11). TVA has initiated causal analyses to address this trend. The NRC will review the your efforts to address these trends consistent with cross-cutting theme follow-up actions in IMC 0305 and, should a theme continue to be present at the next assessment cycle, the agency will continue to take actions prescribed in IMC 0305 to monitor your efforts to address the theme.

In accordance with Title 10 of the Code of Federal Regulations (10 CFR) 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Please contact me at (404) 997-4545 with any questions you may have regarding this letter.

Sincerely,



Signed by Franke, Mark
on 08/28/24

Mark E. Franke, Director
Division of Reactor Projects

Docket Nos. 05000390, 05000391
and 07201048
License Nos. NPF-90 and NPF-96

Enclosure:
Watts Bar Inspection/Activity Plan
(09/01/2024- 06/30/2026)

cc Distribution via ListServ

SUBJECT: UPDATED INSPECTION PLAN AND ASSESSMENT FOLLOW_UP LETTER FOR WATTS BAR NUCLEAR PLANT, UNITS 1 AND 2 - REPORT 05000390/2024005 AND 05000391/2024005 DATED AUGUST 28, 2024

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NAME	J. Hamman	D. Hardage	L. McKown	M. Franke	
DATE	8/27/2024	8/27/2024	8/27/2024	8/28/2024	

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SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting a NRC 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 <https://www.nrc.gov/reactors/operating/oversight.html> for more information.

List of Findings and Violations

Parallel White Finding for White Performance Indicator		
Cornerstone	Significance	Report Section
Initiating Events	White FIN 05000391/2024005-01 Open	71151
A White Performance Indicator (Unplanned Scrams per 7000 Critical Hours) recently returned to the Green performance band based on its calculation. However, a supplemental inspection is required to return Watts Bar Unit 2 to the Licensee Response Column. This parallel White Finding will serve as a tracking mechanism to maintain the licensee in the Regulatory Response Column of the Action Matrix until satisfactory completion of the required IP 95001 supplemental inspection.		

Additional Tracking Items

None.

Watts Bar

09/01/2024 - 06/30/2026

Unit	Start	End	Activity	CAC	Title	Staff Count
EMERGENCY PREPAREDNESS PROGRAM INSPECTION						2
1,2	10/7/2024	10/11/2024	IP 71114.02	000717	Alert and Notification System Testing	
1,2	10/7/2024	10/11/2024	IP 71114.03	000718	Emergency Response Organization Staffing and Augmentation System	
1,2	10/7/2024	10/11/2024	IP 71114.04	000719	Emergency Action Level and Emergency Plan Changes	
1,2	10/7/2024	10/11/2024	IP 71114.05	000720	Maintenance of Emergency Preparedness	
1,2	10/7/2024	10/11/2024	IP 71151	001397	Performance Indicator Verification	
WATTS BAR INITIAL LICENSE EXAM						5
1,2	9/15/2024	9/21/2024	OV	000956	FB-OR-Onsite Validation Of Initial License Examination (OV)	
1,2	10/20/2024	11/2/2024	EXAD	000500	FB-OR-Initial License Exam Administration (EXAD)	
RP OCCUPATIONAL RAD SAFETY AND TRANSPORTATION BASELINE INSPECTION						2
1,2	11/4/2024	11/8/2024	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
1,2	11/4/2024	11/8/2024	IP 71124.08	000732	Radioactive Solid Waste Processing & Radioactive Material Handling, Storage, & Transportation	
1,2	11/4/2024	11/8/2024	IP 71151	000746	Performance Indicator Verification	
UNIT 1 IN-SERVICE INSPECTION +SG						2
1	11/11/2024	11/22/2024	IP 71111.08P	000702	Inservice Inspection Activities (PWR)	
MATERIAL CONTROL AND ACCOUNTING						1
1,2	11/11/2024	11/14/2024	IP 71130.11	000742	Material Control and Accounting (MC&A)	
FORCE-ON-FORCE PLANNING AND EXERCISE WEEKS - WB						5
1,2	1/13/2025	1/17/2025	IP 71130.03	000735	Contingency Response - Force-On-Force Testing	
1,2	2/3/2025	2/7/2025	IP 71130.03	000735	Contingency Response - Force-On-Force Testing	
FOCUSED ENGINEERING INSPECTION (FPTI)						3
1,2	2/10/2025	2/14/2025	IP 71111.21N.05	001646	Fire Protection Team Inspection (FPTI)	
1,2	2/24/2025	2/28/2025	IP 71111.21N.05	001646	Fire Protection Team Inspection (FPTI)	
CYBER SECURITY INSPECTION						4
1,2	3/31/2025	4/4/2025	IP 71130.10	000741	Cybersecurity	
UNIT 2 IN-SERVICE INSPECTION +SG						1
2	4/21/2025	5/2/2025	IP 71111.08P	000702	Inservice Inspection Activities (PWR)	
RP OCCUPATIONAL RAD SAFETY BASLINE INSPECTION						3

Enclosure

1,2	4/14/2025	4/18/2025	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
1,2	4/14/2025	4/18/2025	IP 71124.03	000727	In-Plant Airborne Radioactivity Control and Mitigation	
1,2	4/14/2025	4/18/2025	IP 71124.04	000728	Occupational Dose Assessment	
1,2	4/14/2025	4/18/2025	IP 71124.05	000729	Radiation Monitoring Instrumentation	
1,2	4/14/2025	4/18/2025	IP 71151	000746	Performance Indicator Verification	
1,2	4/28/2025	5/2/2025	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
1,2	4/28/2025	5/2/2025	IP 71124.03	000727	In-Plant Airborne Radioactivity Control and Mitigation	
1,2	4/28/2025	5/2/2025	IP 71124.04	000728	Occupational Dose Assessment	
1,2	4/28/2025	5/2/2025	IP 71124.05	000729	Radiation Monitoring Instrumentation	
1,2	4/28/2025	5/2/2025	IP 71151	000746	Performance Indicator Verification	
SECURITY BASELINE INSPECTION						1
1,2	5/12/2025	5/15/2025	IP 71130.02	000734	Access Control	
1,2	5/12/2025	5/15/2025	IP 71130.09	001656	Security Plan Changes	
1,2	5/12/2025	5/15/2025	IP 71151	001338	Performance Indicator Verification	
PROBLEM IDENTIFICATION AND RESOLUTION						4
1,2	8/4/2025	8/8/2025	IP 71152B	000747	Problem Identification and Resolution	
1,2	8/18/2025	8/22/2025	IP 71152B	000747	Problem Identification and Resolution	
EMERGENCY PREPAREDNESS EXERCISE INSPECTION						5
1,2	11/17/2025	11/21/2025	IP 71114.04	000719	Emergency Action Level and Emergency Plan Changes	
1,2	11/17/2025	11/21/2025	IP 71114.07	000722	Exercise Evaluation - Hostile Action (HA) Event	
1,2	11/17/2025	11/21/2025	IP 71151	001397	Performance Indicator Verification	
WATTS BAR INITIAL EXAM						4
1,2	12/15/2025	12/19/2025	OV	000956	FB-OR-Onsite Validation Of Initial License Examination (OV)	
1,2	1/11/2026	1/24/2026	EXAD	000500	FB-OR-Initial License Exam Administration (EXAD)	
TVA CORPORATE SECURITY INSPECTION AA/FFD (WB)						2
1,2	1/12/2026	1/15/2026	IP 71130.01	000733	Access Authorization	
1,2	1/12/2026	1/15/2026	IP 71130.08	000740	Fitness-For-Duty Program	
COMPREHENSIVE ENGINEERING TEAM INSPECTION (CETI)						7
1,2	2/9/2026	2/13/2026	IP 71111.21M	000713	Comprehensive Engineering Team Inspection	
1,2	2/23/2026	2/27/2026	IP 71111.21M	000713	Comprehensive Engineering Team Inspection	
SECURITY BASELINE INSPECTION						3
1,2	3/23/2026	3/26/2026	IP 71130.01	000733	Access Authorization	

1,2 3/23/2026 3/26/2026 IP 71130.02 000734 Access Control

1,2 3/23/2026 3/26/2026 IP 71130.08 000740 Fitness-For-Duty Program

1,2 3/23/2026 3/26/2026 IP 71130.09 001656 Security Plan Changes

1,2 3/23/2026 3/26/2026 IP 71130.14 000743 Review of Power Reactor Target Sets

1,2 3/23/2026 3/26/2026 IP 71151 001338 Performance Indicator Verification

UNIT 1 IN-SERVICE INSPECTION +SG 1

1 5/4/2026 5/15/2026 IP 71111.08P 000702 Inservice Inspection Activities (PWR)

SECURITY BASELINE INSPECTION 2

1,2 6/22/2026 6/25/2026 IP 71130.04 000736 Equipment Performance, Testing, and Maintenance

1,2 6/22/2026 6/25/2026 IP 71130.07 000739 Security Training
