



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

March 1, 2023

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

SUBJECT: ANNUAL ASSESSMENT LETTER FOR WATTS BAR NUCLEAR PLANT,
UNITS 1 AND 2 - REPORT 05000390/2022006 AND 05000391/2022006

Dear Jim Barstow:

The NRC has completed its end-of-cycle performance assessment of Watts Bar Nuclear Plant, Units 1 and 2, reviewing performance indicators (PIs), inspection results, and enforcement actions from January 1, 2022, through December 31, 2022. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility. The NRC concluded that overall performance at your facility preserved public health and safety. The baseline inspection program was completed at your facility as defined in Inspection Manual Chapter 2515, "Light-Water Reactor Inspection Program - Operations Phase."

The NRC determined the performance at Watt Bar Nuclear Plant, Units 1 and 2, during the most recent quarter was within the Licensee Response Column, the highest performance category of the NRC's Reactor Oversight Process (ROP) Action Matrix, because all inspection findings had very low safety significance (i.e., Green), and all PIs were within the expected range (i.e., Green). Therefore, the NRC plans to conduct ROP baseline inspections at your facility.

The enclosed inspection plan lists the inspections scheduled through December 31, 2024. 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.

In response to the COVID-19 public health emergency (PHE), the NRC adjusted inspection plans and schedules to safeguard the health and safety of both NRC and licensee staff while still effectively implementing the ROP. While the PHE continues, overall conditions throughout the country support performance of our inspection and oversight activities returning to normal onsite presence by our resident and region-based inspectors and completion of nominal baseline inspection samples. We continue to monitor site-specific conditions and, as discussed in our November 2, 2021, memo, "Implementation of Inspection Programs Following Re-Entry from the Public Health Emergency for the Reactor Safety Program"

(ML21295A302), it may be necessary to alter how and when we perform our inspection and oversight activities as we balance the importance of protecting the health and safety of our staff with the need to conduct effective oversight that supports the NRC's critical safety mission.

For inspections requiring extensive coordination with offsite organizations, such as evaluated emergency preparedness exercises, NRC guidance and frequently asked questions for security and emergency preparedness can be found here: <https://www.nrc.gov/about-nrc/covid-19/security-ep/>. Similarly, the NRC has developed guidance if force-on-force inspections cannot be completed as scheduled due to an emergency, such as the COVID-19 PHE. These changes help ensure the health and safety of both NRC and licensee staff while maintaining the NRC's important safety and security mission during the COVID-19 PHE. The attached inspection plan is accurate on the date of issuance but remains subject to change based on approval of potential exemption requests or other changes needed due to changing conditions in the COVID-19 PHE. NRC staff will contact your appropriate regulatory affairs staff in order to coordinate inspection planning and scheduling.

Beginning on January 1, 2023, the engineering inspection frequency will transition from a triennial (3-year) to a quadrennial (4-year) cycle. The new engineering inspection program will consist of a "Comprehensive Engineering Team Inspection (CETI)"^[1] and three "Focused Engineering Inspections (FEIs)" that will be performed in each quadrennial cycle. For the cycle beginning in 2023, the FEIs will be: "Fire Protection Team Inspection," "Commercial Grade Dedication" and "Age-Related Degradation"^[2].

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.

[1] Aspects of the Design Basis Assurance Inspection (DBAI), Evaluations of Changes, Tests, & Experiments, and Heat Sink inspections will be included in the new CETI inspection. Previously scheduled Evaluation of Changes, Tests, & Experiments and Heat Sink inspections have been cancelled and removed from attached Report 22.

[2] The Age-Related Degradation procedure is publicly available, and the NRC plans to implement the first inspection of this type beginning in July 2023.

J. Barstow

3

Sincerely,



Signed by McKown, Louis
on 03/01/23

Louis J. McKown, Chief
Reactor Projects Branch 5
Division of Reactor Projects

Docket Nos. 05000390 and 05000391

License Nos. NPF-90 and NPF-96

Enclosure: Watts Bar Inspection/Activity Plan
(03/01/2023- 12/31/2024)

cc Distribution via ListServ

SUBJECT: ANNUAL ASSESSMENT LETTER FOR WATTS BAR NUCLEAR PLANT, UNITS 1 AND 2 - REPORT 05000390/2022006 AND 05000391/2022006 Dated March 1, 2023

DISTRIBUTION:

R2EICS

RidsNrrDro

RidsNrrPMWattsBarResource

ROAssessment Resource

PUBLIC

ADAMS ACCESSION NUMBER: ML23058A151

<input checked="" type="checkbox"/> SUNSI Review		<input checked="" type="checkbox"/> Non-Sensitive <input type="checkbox"/> Sensitive		<input checked="" type="checkbox"/> Publicly Available <input type="checkbox"/> Non-Publicly Available	
OFFICE	RII/DRP	RII/DRP	RII/DRP		
NAME	S. Ninh	W. Deschaine	L. McKown		
DATE	02/27/2023	02/27/2023	03/1/2023		

Site Inspection Activity Plan

Watts Bar

03/01/2023 - 12/31/2024

Unit	Start	End	Activity	CAC	Title	Staff Count
CYBER SECURITY INSPECTION						4
1,2	3/6/2023	3/10/2023	IP 71130.10	000741	Cybersecurity	
RP OCCUPATIONAL RADIATION SAFETY BASELINE INSPECTION						3
1,2	4/17/2023	4/21/2023	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
1,2	4/17/2023	4/21/2023	IP 71124.03	000727	In-Plant Airborne Radioactivity Control and Mitigation	
1,2	4/17/2023	4/21/2023	IP 71124.04	000728	Occupational Dose Assessment	
1,2	4/17/2023	4/21/2023	IP 71124.05	000729	Radiation Monitoring Instrumentation	
1,2	4/17/2023	4/21/2023	IP 71151	000746	Performance Indicator Verification	
1,2	5/15/2023	5/19/2023	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
1,2	5/15/2023	5/19/2023	IP 71124.03	000727	In-Plant Airborne Radioactivity Control and Mitigation	
1,2	5/15/2023	5/19/2023	IP 71124.04	000728	Occupational Dose Assessment	
1,2	5/15/2023	5/19/2023	IP 71124.05	000729	Radiation Monitoring Instrumentation	
1,2	5/15/2023	5/19/2023	IP 71151	000746	Performance Indicator Verification	
UNIT 1 IN-SERVICE INSPECTION						1
1	4/24/2023	4/28/2023	IP 71111.08P	000702	Inservice Inspection Activities (PWR)	
FOCUSED ENGINEERING INSPECTION (CGD)						3
1,2	6/12/2023	6/16/2023	IP 71111.21N.03	001808	Commercial Grade Dedication	
1,2	6/26/2023	6/30/2023	IP 71111.21N.03	001808	Commercial Grade Dedication	
TARGET SET INSPECTION						2
1,2	7/10/2023	7/14/2023	IP 71130.14	000743	Review of Power Reactor Target Sets	
RP PUBLIC RADIATION SAFETY BASELINE INSPECTION						2
1,2	7/31/2023	8/4/2023	IP 71124.06	000730	Radioactive Gaseous and Liquid Effluent Treatment	
1,2	7/31/2023	8/4/2023	IP 71124.07	000731	Radiological Environmental Monitoring Program	
1,2	7/31/2023	8/4/2023	IP 71151	000746	Performance Indicator Verification	
PROBLEM IDENTIFICATION AND RESOLUTION						4
1,2	8/7/2023	8/11/2023	IP 71152B	000747	Problem Identification and Resolution	
1,2	8/21/2023	8/25/2023	IP 71152B	000747	Problem Identification and Resolution	
EMERGENCY PREPAREDNESS EXERCISE INSPECTION						5
1,2	7/2/2023	8/26/2023	IP 71114.08	000723	Exercise Evaluation - Scenario Review	
1,2	8/14/2023	8/18/2023	IP 71114.01	000716	Exercise Evaluation	
1,2	8/14/2023	8/18/2023	IP 71114.04	000719	Emergency Action Level and Emergency Plan Changes	
1,2	8/14/2023	8/18/2023	IP 71151	001397	Performance Indicator Verification	
SECURITY BASELINE INSPECTION						2

Site Inspection Activity Plan

1,2	10/30/2023	11/3/2023	IP 71130.04	000736	Equipment Performance, Testing, and Maintenance	
1,2	10/30/2023	11/3/2023	IP 71130.07	000739	Security Training	
UNIT 2 IN-SERVICE INSPECTION +SG +RVH						1
2	11/6/2023	11/24/2023	IP 71111.08P	000702	Inservice Inspection Activities (PWR)	
FOCUSED ENGINEERING INSPECTIONS (AGE-RELATED)						3
1,2	1/22/2024	1/26/2024	IP 71111.21N.04	001832	Age-Related Degradation	
1,2	2/5/2024	2/9/2024	IP 71111.21N.04	001832	Age-Related Degradation	
OPERATION ON AN ISFSI						2
1,2	2/26/2024	3/1/2024	IP 60855	001001	Operation Of An ISFSI	
SECURITY BASELINE INSPECTION						1
1,2	2/26/2024	3/1/2024	IP 71130.02	000734	Access Control	
1,2	2/26/2024	3/1/2024	IP 71130.09	001656	Security Plan Changes	
1,2	2/26/2024	3/1/2024	IP 71151	001338	Performance Indicator Verification	
SECURITY BASELINE INSPECTION						3
1,2	7/22/2024	7/26/2024	IP 71130.05	000737	Protective Strategy Evaluation	
WATTS BAR INITIAL LICENSE EXAM						5
1,2	8/18/2024	8/24/2024	OV	000956	FB-OR-ONSITE VALIDATION OF INITIAL LICENSE EXAMINATION (OV)	
1,2	9/22/2024	10/5/2024	EXAD	000500	FB-OR-INITIAL LICENSE EXAM ADMINISTRATION (EXAD)	
WATTS BAR REQUAL INSPECTION						2
1,2	9/23/2024	9/27/2024	IP 71111.11B	000704	Licensed Operator Requalification Program and Licensed Operator Performance	
MATERIAL CONTROL AND ACCOUNTING						1
1,2	10/14/2024	10/18/2024	IP 71130.11	000742	Material Control and Accounting (MC&A)	
UNIT 1 IN-SERVICE INSPECTION +SG						2
1	11/4/2024	11/15/2024	IP 71111.08P	000702	Inservice Inspection Activities (PWR)	
RP RAD SAFETY OCCUPATIONAL 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	
EMERGENCY PREPAREDNESS PROGRAM INSPECTION						2
1,2	12/9/2024	12/13/2024	IP 71114.02	000717	Alert and Notification System Testing	
1,2	12/9/2024	12/13/2024	IP 71114.03	000718	Emergency Response Organization Staffing and Augmentation System	
1,2	12/9/2024	12/13/2024	IP 71114.04	000719	Emergency Action Level and Emergency Plan Changes	
1,2	12/9/2024	12/13/2024	IP 71114.05	000720	Maintenance of Emergency Preparedness	
1,2	12/9/2024	12/13/2024	IP 71151	001397	Performance Indicator Verification	