



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION II
245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

September 2, 2014

Mr. Joseph W. Shea
Vice President, Nuclear Licensing
Tennessee Valley Authority
1101 Market Street, LP 3D-C
Chattanooga, TN 37402-2801

**SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR THE WATTS BAR NUCLEAR PLANT
UNIT 1, NRC INSPECTION REPORT 005000390/2014006**

Dear Mr. Shea:

On August 14, 2014, the NRC completed its mid-cycle performance review of Watts Bar Nuclear Plant Unit 1. The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from July 1, 2013, through June 30, 2014. 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 determined the performance at Watts Bar Unit 1 during the most recent quarter was within the Licensee Response Column of the NRC's Reactor Oversight Process (ROP) Action Matrix because all inspection findings had very low (i.e., green) safety significance, and all PIs indicated that your performance was within the nominal, expected range (i.e., green). Therefore, the NRC plans to conduct ROP baseline inspections at your facility.

Performance at the Watts Bar Nuclear Plant Unit 1 during the fourth quarter of 2013 was within the Degraded Cornerstone Column of the NRC's Reactor Oversight Process (ROP) Action Matrix because of one White and one Yellow finding in the Mitigating Systems cornerstone.

On December 20, 2013, the NRC completed a supplemental inspection in accordance with Inspection Procedure 95002, "Supplemental Inspection for One Degraded Cornerstone or Any Three White Inputs in a Strategic Performance Area." Based on the results of this inspection, the NRC determined that your staff adequately addressed the causes for both of these findings. Therefore, both findings were closed and Watts Bar Unit 1 transitioned to the Licensee Response Column of the NRC's ROP Action Matrix on January 1, 2014.

The enclosed inspection plan lists the inspections scheduled through December 31, 2015. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the last nine months of the inspection plan are tentative and may be revised at the end-of-cycle performance review. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes. This inspection plan does not include security related inspections, which will be sent via separate, non-publicly available correspondence.

In addition to the ROP baseline inspections at your facility, we also plan on conducting infrequently performed inspections which include: Problem Identification and Resolution, Component Design Basis Inspection, Triennial Heat Sink Inspection, IP 43004, Inspection of Commercial Grade Dedication Programs, and IP 92702 inspection for follow-up of the December 22, 2009, Confirmatory Order. The NRC also plans to perform Temporary Instruction (TI) 2515/191: Inspection of the Licensee's Implementation of Mitigating Strategies and Spent Fuel Instrumentation Orders and Emergency Preparedness/Staffing Plans.

In response to the accident at Fukushima, the Commission issued Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," which requires licensees to develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities following a beyond-design-basis external event. Additionally, the Commission issued Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," which requires licensees to have a reliable means of remotely monitoring wide-range Spent Fuel Pool levels to support effective prioritization of event mitigation and recovery actions in the event of a beyond-design-basis external event. The NRC is conducting audits of licensee efforts towards compliance with these Orders. The audit included an onsite component in order for the NRC to evaluate licensee plans for complying with the Orders, as described in site-specific submittals, and to receive and review information relative to associated open items. This onsite component was completed for Watts Bar in March 2014. Therefore, the NRC will perform TI 2515/191 Inspection of the Licensee's Implementation of Mitigating Strategies and Spent Fuel Instrumentation Orders and Emergency Preparedness/Staffing Plans. A site-specific inspection plan for the visit will be provided in advance to allow sufficient time for preparations.

In accordance with 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 404-997-4607 with any questions you have regarding this letter.

Sincerely,

/RA/

Jonathan H. Bartley, Chief
Reactor Projects Branch 6
Division of Reactor Projects

Docket Nos.: 50-390
License Nos. NPF-90

Enclosure: Watts Bar Inspection/Activity Plan
(09/01/2014 – 12/31/2015)

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PUBLICLY AVAILABLE NON-PUBLICLY AVAILABLE SENSITIVE NON-SENSITIVE
ADAMS: Yes ACCESSION NUMBER: SUNSI REVIEW COMPLETE FORM 665 ATTACHED

OFFICE	RII:DRP	RII:DRP					
SIGNATURE	JDH /RA/	JHB /RA/					
NAME	JHamman	JBartley					
DATE	08/27/2014	08/26/2014					
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

J. Shea

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Letter to Joseph W. Shea from Jonathan H. Bartley dated September 2, 2014

SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR THE WATTS BAR NUCLEAR PLANT
UNIT 1, NRC INSPECTION REPORT 005000390/2014006

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ROP Assessment

ROP Reports

Institute of Nuclear Power Operations (INPO)

Watts Bar

Inspection / Activity Plan

09/01/2014 - 12/31/2015

Unit Number	Planned Dates Start	Planned Dates End	Inspection Activity	Title	No. of Staff on Site
			EP - EP PROGRAM INSPECTION		3
1	10/06/2014	10/10/2014	IP 7111402	Alert and Notification System Testing	
1	10/06/2014	10/10/2014	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1	10/06/2014	10/10/2014	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1	10/06/2014	10/10/2014	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1	10/06/2014	10/10/2014	IP 71151	Performance Indicator Verification	
			OL RQ - REQUAL INSP		2
1	11/17/2014	11/21/2014	IP 711111B	Licensed Operator Requalification Program	
			PI&R - PROBLEM IDENTIFICATION AND RESOLUTION		4
1	12/01/2014	12/05/2014	IP 71152B	Problem Identification and Resolution	
1	12/15/2014	12/19/2014	IP 71152B	Problem Identification and Resolution	
			CDBI - COMPONENT DESIGN BASES INSPECTION		10
1	02/23/2015	02/27/2015	IP 7111121	Component Design Bases Inspection	
1	03/16/2015	03/20/2015	IP 7111121	Component Design Bases Inspection	
1	03/30/2015	04/03/2015	IP 7111121	Component Design Bases Inspection	
1	04/13/2015	04/17/2015	IP 7111121	Component Design Bases Inspection	
			HS - TRIENNIAL HEAT SINK PERFORMANCE		1
1	06/08/2015	06/12/2015	IP 7111107T	Heat Sink Performance	
			RP - RP OCCUPATIONAL BASELINE WEEK 1		3
1	10/05/2015	10/09/2015	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	10/05/2015	10/09/2015	IP 71124.02	Occupational ALARA Planning and Controls	
1	10/05/2015	10/09/2015	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	10/05/2015	10/09/2015	IP 71124.04	Occupational Dose Assessment	
1	10/05/2015	10/09/2015	IP 71124.05	Radiation Monitoring Instrumentation	
1	10/05/2015	10/09/2015	IP 71151	Performance Indicator Verification	
			ISI - UNIT 1 IN-SERVICE INSPECTION		1
1	10/12/2015	10/16/2015	IP 7111108P	Inservice Inspection Activities - PWR	
			RP - RP OCCUPATIONAL BASELINE WEEK 2		3
1	10/19/2015	10/23/2015	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	10/19/2015	10/23/2015	IP 71124.02	Occupational ALARA Planning and Controls	
1	10/19/2015	10/23/2015	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	10/19/2015	10/23/2015	IP 71124.04	Occupational Dose Assessment	
1	10/19/2015	10/23/2015	IP 71124.05	Radiation Monitoring Instrumentation	

This report does not include INPO and OUTAGE activities.

This report shows only on-site and announced inspection procedures.

Enclosure

Watts Bar

Inspection / Activity Plan

09/01/2014 - 12/31/2015

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		RP	- RP OCCUPATIONAL BASELINE WEEK 2	3
1	10/19/2015 10/23/2015	IP 71151	Performance Indicator Verification	
		EP	- EP EXERCISE	5
1	11/16/2015 11/20/2015	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1	11/16/2015 11/20/2015	IP 7111407	Exercise Evaluation - Hostile Action (HA) Event	
1	11/16/2015 11/20/2015	IP 71151	Performance Indicator Verification	

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