



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

September 4, 2012

Mr. Joseph W. Shea  
Manager, Corp. Nuclear Licensing Programs  
Tennessee Valley Authority  
1101 Market Street, LP 4B-C  
Chattanooga, TN 37402-2801

**SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR WATTS BAR NUCLEAR PLANT  
UNIT 1, REPORT 05000390/2012006**

Dear Mr. Shea:

On August 16, 2012, the NRC completed its mid-cycle performance review of the Watts Bar Nuclear Plant. The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from July 1, 2011, through June 30, 2012. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility. This assessment reflects the integration of the Security Cornerstone into the ROP performance assessment program.

The NRC determined the performance at Watts Bar Unit 1 during the most recent quarter was within the Regulatory Response Column of the NRC's Reactor Oversight Process (ROP) Action Matrix because of one greater-than-green Security Cornerstone input as described in Report Number 05000390/2011402 sent on September 20, 2011. On June, 29, 2011, the NRC completed a supplemental inspection for the security issue. Based on the successful completion of the supplemental inspection, the finding was removed from the assessment process after four quarters and Watts Bar Unit 1 will return to the Licensee Response Column in the 3<sup>rd</sup> quarter 2012. Therefore, based on all other inspection findings having very low (i.e., Green) safety significance and all PIs indicating your performance was within the nominal, expected range (i.e., Green), the NRC plans to conduct ROP baseline inspections at your facility.

The enclosed inspection plan lists the inspections scheduled through December 31, 2013. Routine inspections performed by resident inspectors are not included in the inspection plan. In addition to the baseline inspections, consistent with the Agency's actions related to Fukushima, the NRC will perform TI-187, "Inspection of Near-Term Task Force Recommendation 2.3 Flooding Walkdowns" and TI-188 "Inspection of Near-Term Task Force Recommendation 2.3 Seismic Walkdowns." We also plan on conducting initial reactor operator licensing examinations and Temporary Instruction (TI) 2515/182, Review of the Implementation of the Industry Initiative to Control Degradation of Underground Piping and Tanks. 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

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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 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 404-997-4521 with any questions you have regarding this letter.

Sincerely,

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Scott M. Shaeffer, Chief  
Reactor Projects Branch 6  
Division of Reactor Projects

Docket No. 50-390  
License No. NPF-90

Enclosure: Watts Bar Inspection / Activity Plan (09/01/2012 – 12/31/2013)

cc w/encl: (See page 3)

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## Watts Bar

## Inspection / Activity Plan

09/01/2012 - 12/31/2013

Unit Number	Planned Dates Start End	Inspection Activity	Title	No. of Staff on Site
1	09/17/2012 09/21/2012	<b>EB3 ISI</b> IP 7111108P	<b>- UNIT 1 INSERVICE INSPECTION</b> Inservice Inspection Activities - PWR	1
1	09/24/2012 09/28/2012	<b>EB3SGISI</b> IP 7111108P	<b>- UNIT 1 SG INSERVICE INSPECTION</b> Inservice Inspection Activities - PWR	1
1	10/15/2012 10/19/2012	<b>PSB1EP</b> IP 7111402	<b>- EMERGENCY PREPAREDNESS INSPECTION</b> Alert and Notification System Testing	3
1	10/15/2012 10/19/2012	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1	10/15/2012 10/19/2012	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1	10/15/2012 10/19/2012	IP 71151	Performance Indicator Verification	
1	11/12/2012 11/16/2012	<b>OL RQ</b> IP 7111111B	<b>- REQUAL INSPECTION</b> Licensed Operator Requalification Program	2
1	02/04/2013 02/08/2013	<b>PI&amp;R</b> IP 71152B	<b>- PROBLEM IDENTIFICATION AND RESOLUTION</b> Problem Identification and Resolution	8
1	02/18/2013 02/22/2013	IP 71152B	Problem Identification and Resolution	
1	02/25/2013 03/01/2013	<b>OL EXAM</b> V23389	<b>- INITIAL EXAM PREP</b> WATTS BAR/MARCH 2013 INITIAL EXAM AT POWER FACILITIES	3
1	03/18/2013 03/22/2013	<b>OL EXAM</b> V23389	<b>- INITIAL EXAM - WEEK 1</b> WATTS BAR/MARCH 2013 INITIAL EXAM AT POWER FACILITIES	3
1	03/25/2013 03/29/2013	<b>OL EXAM</b> V23389	<b>- INITIAL EXAM - WEEK 2</b> WATTS BAR/MARCH 2013 INITIAL EXAM AT POWER FACILITIES	1
1	06/03/2013 06/07/2013	<b>TI-182</b> IP 2515/182	<b>- TI-182 BURIED PIPING/TANK - PHASE 1</b> Review of the Implementation of the Industry Initiative to Control Degradation of Underground Piping	1
1	07/22/2013 07/26/2013	<b>PSB1-RP</b> IP 71124.01	<b>- RP OCCUPATIONAL BASELINE</b> Radiological Hazard Assessment and Exposure Controls	5
1	07/22/2013 07/26/2013	IP 71124.02	Occupational ALARA Planning and Controls	
1	07/22/2013 07/26/2013	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	07/22/2013 07/26/2013	IP 71124.04	Occupational Dose Assessment	
1	07/22/2013 07/26/2013	IP 71124.05	Radiation Monitoring Instrumentation	
1	07/22/2013 07/26/2013	IP 71151	Performance Indicator Verification	
1	08/05/2013 08/09/2013	<b>PSB1-RP</b> IP 71124.01	<b>- RP OCCUPATIONAL BASELINE WEEK2</b> Radiological Hazard Assessment and Exposure Controls	2
1	08/05/2013 08/09/2013	IP 71124.02	Occupational ALARA Planning and Controls	
1	08/05/2013 08/09/2013	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	08/05/2013 08/09/2013	IP 71124.04	Occupational Dose Assessment	

This report does not include INFO and OUTAGE activities.

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

Enclosure

Unit Number	Planned Dates Start End	Inspection Activity	Title	No. of Staff on Site
1	08/05/2013 08/09/2013	<b>PSB1-RP</b> IP 71124.05	<b>- RP OCCUPATIONAL BASELINE WEEK2</b> Radiation Monitoring Instrumentation	2
1	08/05/2013 08/09/2013	IP 71151	Performance Indicator Verification	
1	08/20/2013 08/22/2013	<b>WB TFPI</b> IP 7111105T	<b>- WB - TRIENNIAL FIRE PROTECTION INSP</b> Fire Protection [Triennial]	4
1	09/09/2013 09/13/2013	IP 7111105T	Fire Protection [Triennial]	
1	09/23/2013 09/27/2013	IP 7111105T	Fire Protection [Triennial]	
1	09/23/2013 09/27/2013	<b>OL EXAM</b> V23395	<b>- INITIAL EXAM PREP</b> WATTS BAR/JUNE 2013 INITIAL EXAM AT POWER FACILITIES	3
1	10/14/2013 10/18/2013	<b>OL EXAM</b> V23395	<b>- INITIAL EXAM WEEK 1</b> WATTS BAR/JUNE 2013 INITIAL EXAM AT POWER FACILITIES	3
1	10/21/2013 10/25/2013	<b>OL EXAM</b> V23395	<b>- INITIAL EXAM WEEK 2</b> WATTS BAR/JUNE 2013 INITIAL EXAM AT POWER FACILITIES	3
1	10/28/2013 11/01/2013	<b>EP</b> IP 7111401	<b>- EMERGENCY PREPAREDNESS EXERCISE</b> Exercise Evaluation	1
1	10/28/2013 11/01/2013	IP 71151	Performance Indicator Verification	

## Comments:

This report does not include INPO and OUTAGE activities.  
This report shows only on-site and announced inspection procedures.