



**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 SEQUOYAH NUCLEAR PLANT  
UNITS 1 AND 2 (REPORT 05000327/2012006 AND 05000328/2012006)**

Dear Mr. Shea:

On August 16, 2012, the NRC completed its mid-of-cycle performance review of Sequoyah Nuclear Plant Units 1 and 2. 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 Sequoyah Units 1 and 2 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.

During the first quarter 2012, Sequoyah Unit 1 was within the Regulatory Response Column of the NRC's Reactor Oversight Process (ROP) Action Matrix because the Unplanned Scrams per 7000 Critical Hours performance indicator provided a White input in the 3<sup>rd</sup> quarter of 2011. This PI had returned to Green status in the 4<sup>th</sup> quarter 2011; however, in addition to ROP baseline inspections, a supplemental inspection in accordance with Inspection Procedure 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area" was required. The NRC completed this inspection in March 2012, which resulted in Unit 1 returning to the Licensee Response Column in the second quarter 2012 as documented in an NRC Assessment Followup letter dated March 29, 2012.

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. The inspections listed during the last nine months of the inspection plan are tentative and may be revised at the mid-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-public available correspondence.

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J. Shea

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In addition to the baseline inspections at your facility, we also plan on conducting infrequently performed inspections which include: IP 50001, (Unit 2) Steam Generator Replacement Inspection; 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. Additionally, consistent with the Agency's actions related to Fukushima, the NRC will perform TI 2515/187, "Inspection Of Near-Term Task Force Recommendation 2.3 - Flooding Walkdowns", and TI 2515/188, "Inspection Of Near-Term Task Force Recommendation 2.3 - Seismic Walkdowns".

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,

*/RA/*

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

Docket Nos. 50-327, 50-328  
License Nos. DPR-77, DPR-79

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

cc w/encl: (See page 3)

J. Shea

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cc w/encl:  
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## Sequoyah

## Inspection / Activity Plan

09/01/2012 - 12/31/2013

Unit Number	Planned Dates Start End	Inspection Activity	Title	No. of Staff on Site
1, 2	09/10/2012 09/14/2012	<b>OL RQ</b>	<b>- REQUAL INSPECTION</b>	2
		IP 7111111B	Licensed Operator Requalification Program	
1, 2	10/01/2012 10/05/2012	<b>PSB1EP</b>	<b>- EMERGENCY PREPAREDNESS EXERCISE</b>	4
		IP 71111401	Exercise Evaluation	
1, 2	10/01/2012 10/05/2012	IP 71111404	Emergency Action Level and Emergency Plan Changes	
1, 2	10/01/2012 10/05/2012	IP 711151	Performance Indicator Verification	
2	10/15/2012 10/19/2012	<b>EB3 SGR</b>	<b>- UNIT 2 SG REPLACEMENT</b>	3
2	10/22/2012 10/26/2012	IP 50001	Steam Generator Replacement Inspection	
2	11/19/2012 11/23/2012	IP 50001	Steam Generator Replacement Inspection	
2	11/26/2012 11/30/2012	IP 50001	Steam Generator Replacement Inspection	
2	12/03/2012 12/07/2012	IP 50001	Steam Generator Replacement Inspection	
2	12/10/2012 12/14/2012	IP 50001	Steam Generator Replacement Inspection	
2	12/24/2012 12/28/2012	IP 50001	Steam Generator Replacement Inspection	
1, 2	10/22/2012 10/26/2012	<b>PSB1-RP</b>	<b>- OCCUPATIONAL RP BASELINE WK1</b>	4
1, 2	10/22/2012 10/26/2012	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	10/22/2012 10/26/2012	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	10/22/2012 10/26/2012	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	10/22/2012 10/26/2012	IP 71124.04	Occupational Dose Assessment	
1, 2	10/22/2012 10/26/2012	IP 71124.05	Radiation Monitoring Instrumentation	
1, 2	10/22/2012 10/26/2012	IP 71151	Performance Indicator Verification	
1	10/29/2012 11/02/2012	<b>EB3 ISI</b>	<b>- UNIT 2 INSERVICE INSPECTION</b>	1
		IP 7111108P	Inservice Inspection Activities - PWR	
1, 2	11/05/2012 11/09/2012	<b>PSB1-RP</b>	<b>- OCCUPATIONAL RP BASELINE WK2</b>	4
1, 2	11/05/2012 11/09/2012	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	11/05/2012 11/09/2012	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	11/05/2012 11/09/2012	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	11/05/2012 11/09/2012	IP 71124.04	Occupational Dose Assessment	
1, 2	11/05/2012 11/09/2012	IP 71124.05	Radiation Monitoring Instrumentation	
1, 2	11/05/2012 11/09/2012	IP 71151	Performance Indicator Verification	
1	12/03/2012 12/07/2012	<b>OL EXAM</b>	<b>- INITIAL EXAM WEEK 1</b>	3
		V23340	SEQUOYAH/DECEMBER 2012 EXAM AT POWER FACILITIES	
1, 2	02/11/2013 02/15/2013	<b>TI-182</b>	<b>- TI-182 BURIED PIPING/TANK - PHASE 1</b>	1
		IP 2515/182	Review of the Implementation of the Industry Initiative to Control Degradation of Underground Piping	

This report does not include INFO and OUTAGE activities.

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

Enclosure

## Sequoyah

## Inspection / Activity Plan

09/01/2012 - 12/31/2013

Unit Number	Planned Dates Start End	Inspection Activity	Title	No. of Staff on Site
1	04/22/2013 04/26/2013	<b>OL EXAM - INITIAL EXAM PREP</b> V23408	SEQUOYAH/MAY 2013 INITIAL EXAM AT POWER FACILITIES	3
1	05/13/2013 05/17/2013	<b>OL EXAM - INITIAL EXAM - WEEK 1</b> V23408	SEQUOYAH/MAY 2013 INITIAL EXAM AT POWER FACILITIES	3
1,2	06/03/2013 06/07/2013	<b>PSB1-RP - RP PUBLIC RAD SAFETY BASELINE</b> IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	3
1,2	06/03/2013 06/07/2013	IP 71124.07	Radiological Environmental Monitoring Program	
1,2	06/03/2013 06/07/2013	IP 71151	Performance Indicator Verification	
1,2	06/10/2013 06/14/2013	<b>PI&amp;R</b> IP 71152B	<b>- PROBLEM IDENTIFICATION AND RESOLUTION</b> Problem Identification and Resolution	5
1,2	06/24/2013 06/28/2013	IP 71152B	Problem Identification and Resolution	
1,2	06/17/2013 06/21/2013	<b>CDBI</b> IP 711121	<b>- COMPONENT DESIGN BASIS INSPECTION</b> Component Design Bases Inspection	10
1,2	07/08/2013 07/12/2013	IP 711121	Component Design Bases Inspection	
1,2	07/22/2013 07/26/2013	IP 711121	Component Design Bases Inspection	
1,2	08/05/2013 08/09/2013	IP 711121	Component Design Bases Inspection	
1,2	09/30/2013 10/04/2013	<b>EP</b> IP 7111402	<b>- EMERGENCY PREPAREDNESS INSPECTION</b> Alert and Notification System Testing	1
1,2	09/30/2013 10/04/2013	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1,2	09/30/2013 10/04/2013	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1,2	09/30/2013 10/04/2013	IP 71151	Performance Indicator Verification	
1	10/21/2013 10/25/2013	<b>ISI</b> IP 7111108P	<b>- UNIT 1 INSERVICE INSPECTION</b> Inservice Inspection Activities - PWR	1
1,2	11/04/2013 11/08/2013	<b>PSB1-RP</b> IP 71124.01	<b>- RAD HAZARD ANALYSIS AND TRANSPORTATION</b> Radiological Hazard Assessment and Exposure Controls	2
1,2	11/04/2013 11/08/2013	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
1,2	11/04/2013 11/08/2013	IP 71151	Performance Indicator Verification	

## Comments:

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

Enclosure