



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

March 2, 2016

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

**SUBJECT: ANNUAL ASSESSMENT LETTER FOR SEQUOYAH NUCLEAR PLANT UNITS 1  
AND 2, NRC INSPECTION REPORT 05000327/2015006, 05000328/2015006**

Dear Mr. Shea:

On February 11, 2016, the NRC completed its end-of-cycle performance review of the 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 January 1, 2015, through December 31, 2015. 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 Sequoyah Unit 1 during the most recent quarter was within the Regulatory Response Column of the NRC's Reactor Oversight Process (ROP) Action Matrix due to one White performance indicator for unplanned scrams which crossed the green-to-white threshold in the third quarter of 2015. All inspection findings had very low (i.e., green) safety significance, and all other performance indicators for Unit 1 were within the nominal, expected range (i.e., green) during this assessment period. Therefore, in addition to the ROP baseline inspections, the NRC plans to conduct a supplemental inspection in accordance with Inspection Procedure 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area". The NRC requests that your staff provide notification of your readiness for the NRC to conduct the inspection.

The NRC determined that overall, Sequoyah Plant Unit 2 operated in a manner that preserved public health and safety and met all cornerstone objectives. The NRC determined the performance at the Sequoyah Nuclear Plant Unit 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.

The enclosed inspection plan lists the inspections scheduled through December 31, 2017. 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. In addition to the routine ROP baseline inspections at your facility, we also plan on conducting infrequently performed inspections which include: Inspection Procedure (IP) 92702, "Followup on Corrective Actions for Violations and Deviations," and an initial operator license examination. 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 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." This Order 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." This Order 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 was completed for Sequoyah Units 1 and 2, and the information gathered will aid staff in development of the Safety Evaluation for the site. After the NRC staff receives the Final Compliance letter for the site, the Final Safety Evaluation will be issued. Then, the NRC staff will confirm through inspections the full implementation of the orders mentioned above by performing TI 191, "Inspection of the Implementation of Mitigation Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communication/Staffing/Multi-Unit Dose Assessment Plans."

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," 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 Alan Blamey at (404) 997-4415 with any questions you have regarding this letter.

Sincerely,

**/RA/**

Mark Franke, Acting Division Director  
Division of Reactor Projects

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

Enclosure: Sequoyah Inspection/Activity Plan  
(03/01/2016 – 12/31/2017)

cc: Distribution via ListServ

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PUBLICLY AVAILABLE    NON-PUBLICLY AVAILABLE    SENSITIVE    NON-SENSITIVE  
ADAMS:  Yes   ACCESSION NUMBER: ML16062A262    SUNSI REVIEW COMPLETE    FORM 665 ATTACHED

OFFICE	RII:DRP	RII:DRP	RII:DRP		
SIGNATURE	CRK1	AJB3	MEF1		
NAME	C. Kontz	A. Blamey	M. Frankie		
DATE	2/24/2016	2/29/2016	3/1/2016		
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME:

J. Shea

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Letter to Joseph W. Shea from Mark Franke dated March 2, 2016

SUBJECT: ANNUAL ASSESSMENT LETTER FOR SEQUOYAH NUCLEAR PLANT UNITS 1  
AND 2, NRC INSPECTION REPORT 05000327/2015006, 05000328/2015006

DISTRIBUTION:

D. Gamberoni, RII

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**Sequoyah**  
**Inspection / Activity Plan**  
**03/01/2016 - 12/31/2017**

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			<b>OL EXAM - INITIAL LICENSE EXAM</b>		<b>3</b>
1	03/07/2016	03/18/2016	V23466	SEQUOYAH MARCH 2016 INITIAL EXAM AT POWER FACILITIES	
			<b>92702 - 92702 FOLLOW-UP INSPECTION</b>		<b>1</b>
1, 2	03/14/2016	03/30/2016	IP 92702	Followup On Corrective Actions For Violations And Deviations	
			<b>CDBI - COMPONENT DESIGN BASES INSPECTION</b>		<b>7</b>
1, 2	04/25/2016	04/29/2016	IP 7111121	Component Design Bases Inspection	
1, 2	05/09/2016	05/13/2016	IP 7111121	Component Design Bases Inspection	
1, 2	05/23/2016	05/27/2016	IP 7111121	Component Design Bases Inspection	
1, 2	06/13/2016	06/17/2016	IP 7111121	Component Design Bases Inspection	
			<b>EP - EP EXERCISE INSPECTION</b>		<b>7</b>
1, 2	09/12/2016	09/16/2016	IP 7111401	Exercise Evaluation	
1, 2	09/12/2016	09/16/2016	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1, 2	09/12/2016	09/16/2016	IP 7111408	Exercise Evaluation – Scenario Review	
1, 2	09/12/2016	09/16/2016	IP 71151	Performance Indicator Verification	
			<b>OL RQ - REQUAL INSP</b>		<b>2</b>
1, 2	10/03/2016	10/07/2016	IP 7111111B	Licensed Operator Requalification Program	
			<b>RP - RP OCCUPATIONAL INSPECTION WEEK 1</b>		<b>2</b>
1, 2	10/31/2016	11/04/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	10/31/2016	11/04/2016	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	10/31/2016	11/04/2016	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	10/31/2016	11/04/2016	IP 71124.04	Occupational Dose Assessment	
1, 2	10/31/2016	11/04/2016	IP 71124.05	Radiation Monitoring Instrumentation	
1, 2	10/31/2016	11/04/2016	IP 71151	Performance Indicator Verification	
			<b>ISI - UNIT 1 IN-SERVICE INSPECTION</b>		<b>1</b>
1	11/07/2016	11/11/2016	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>RP - RP OCCUPATIONAL INSPECTION WEEK 2</b>		<b>3</b>
1, 2	11/14/2016	11/18/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	11/14/2016	11/18/2016	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	11/14/2016	11/18/2016	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	11/14/2016	11/18/2016	IP 71124.04	Occupational Dose Assessment	
1, 2	11/14/2016	11/18/2016	IP 71124.05	Radiation Monitoring Instrumentation	
1, 2	11/14/2016	11/18/2016	IP 71151	Performance Indicator Verification	

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

Enclosure

**Sequoyah**  
**Inspection / Activity Plan**  
**03/01/2016 - 12/31/2017**

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			<b>SGISI - UNIT 1 SG IN-SERVICE INSPECTION</b>		<b>1</b>
1	11/14/2016	11/18/2016	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>TFPI - TRIENNIEL FIRE PROTECTION INSPECTION</b>		<b>5</b>
1, 2	03/20/2017	03/24/2017	IP 7111105T	Fire Protection [Triennial]	
1, 2	04/03/2017	04/07/2017	IP 7111105T	Fire Protection [Triennial]	
			<b>ISI - UNIT 2 IN-SERVICE INSPECTION</b>		<b>1</b>
2	05/01/2017	05/05/2017	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>RP - RAD HAZARDS</b>		<b>1</b>
1, 2	05/01/2017	05/05/2017	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
			<b>PI&amp;R - PROBLEM IDENTIFICATION AND RESOLUTION</b>		<b>5</b>
1, 2	06/05/2017	06/09/2017	IP 71152B	Problem Identification and Resolution	
1, 2	06/19/2017	06/23/2017	IP 71152B	Problem Identification and Resolution	
			<b>RP - RP PUBLIC RADIATION SAFETY</b>		<b>3</b>
1, 2	07/10/2017	07/14/2017	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
1, 2	07/10/2017	07/14/2017	IP 71124.07	Radiological Environmental Monitoring Program	
1, 2	07/10/2017	07/14/2017	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
1, 2	07/10/2017	07/14/2017	IP 71151	Performance Indicator Verification	
			<b>EP - EP PROGRAM INSPECTION</b>		<b>3</b>
1, 2	09/11/2017	09/15/2017	IP 7111402	Alert and Notification System Testing	
1, 2	09/11/2017	09/15/2017	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1, 2	09/11/2017	09/15/2017	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1, 2	09/11/2017	09/15/2017	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1, 2	09/11/2017	09/15/2017	IP 71151	Performance Indicator Verification	
			<b>OL EXAM - INITIAL LICENSE EXAM PREP</b>		<b>3</b>
1	10/30/2017	11/03/2017	V23503	SEQUOYAH DECEMBER 2017 INITIAL EXAM AT POWER FACILITIES	
			<b>OL EXAM - INITIAL LICENSE EXAM</b>		<b>3</b>
1	12/04/2017	12/15/2017	V23503	SEQUOYAH DECEMBER 2017 INITIAL EXAM AT POWER FACILITIES	

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