



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

August 31, 2016

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 SEQUOYAH NUCLEAR PLANT UNITS
1 AND 2, NRC INSPECTION REPORT 05000327/2016005, 05000328/2016005**

Dear Mr. Shea:

On August 10, 2016, the NRC completed its mid-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 July 1, 2015, through June 30, 2016. 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. The NRC conducted a supplemental inspection using inspection procedure 95001 for Unit 1 after the end of the assessment period. The results of this inspection and any follow-up assessment will be communicated in separate correspondence.

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 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.

Although plant performance was within the Regulatory Response Column for Unit 1 and Licensee Response Column for Unit 2, the NRC has not yet finalized the significance of AV 05000327, 328/2016002-01: Isolation of Fire Suppression System to a Significant Portion of the Plant Site. The final safety significance determination may affect the NRC's assessment of plant performance and the enclosed inspection plan.

The enclosed inspection plan lists the inspections scheduled through June 30, 2018. 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 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," and Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation." The NRC conducted audits of licensee efforts towards compliance with these Orders, and the information gathered will aid staff in development of the ultimate Safety Evaluation for the site. After the NRC staff receives the Final Compliance letter for the site, the Safety Evaluation will be issued. Then, the NRC staff will confirm through inspections the full implementation of the orders mentioned above by performing Temporary Instruction 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 Staff Requirements Memorandum – SECY 16-0009, "Recommendations Resulting from the Integrated Prioritization and Re-Baselining of Agency Activities," the Commission approved the NRC staff recommendation to discontinue the formal mid-cycle assessment process beginning in calendar year 2017. This will be the final mid-cycle assessment letter. The staff will continue to conduct quarterly assessment meetings and communicate changes in the assessment of licensee performance in accordance with the guidance in Inspection Manual Chapter 0305, "Operating Reactor Assessment Program."

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/

Joel Munday Division Director
Division of Reactor Projects

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

Enclosure: Sequoyah Inspection/Activity Plan
(09/01/2016 – 06/30/2018)

cc: Distribution via ListSer

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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	RII:DRP				
SIGNATURE	CRK1	AJB3	JTM				
NAME	C. Kontz	A. Blamey	J. Munday				
DATE	8/5/2016	8/31/2016	8/31/2016	9/ /2016	9/ /2016	9/ /2016	9/ /2016
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: S:\DRP NEW\RPB7\PERIODIC ASSESSMENTS & REPORTS\IEOC & MID-CYCLE\2016\ADMIN WORKING FOLDER\LETTERS\SEQUOYAH 2016 MID CYCLE LETTER.DOCX

Sequoyah
Inspection / Activity Plan
09/01/2016 - 06/30/2018

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			EP - EP EXERCISE INSPECTION		5
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	
			OL RQ - REQUAL INSP		2
1, 2	10/03/2016	10/07/2016	IP 7111111B	Licensed Operator Requalification Program	
			RP - RP OCCUPATIONAL INSPECTION WEEK 1		2
1, 2	11/06/2016	11/10/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	11/06/2016	11/10/2016	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	11/06/2016	11/10/2016	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	11/06/2016	11/10/2016	IP 71124.04	Occupational Dose Assessment	
1, 2	11/06/2016	11/10/2016	IP 71124.05	Radiation Monitoring Instrumentation	
1, 2	11/06/2016	11/10/2016	IP 71151	Performance Indicator Verification	
			ISI - UNIT 1 IN-SERVICE INSPECTION		1
1	11/07/2016	11/11/2016	IP 7111108P	Inservice Inspection Activities - PWR	
			RP - RP OCCUPATIONAL INSPECTION WEEK 2		3
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	
			SGISI - UNIT 1 SG IN-SERVICE INSPECTION		1
1	11/14/2016	11/18/2016	IP 7111108P	Inservice Inspection Activities - PWR	
			TI-191 - MITIGATING STRATEGIES		4
1, 2	03/06/2017	03/10/2017	IP 2515/191	Inspection of Licensee's Responses to Order EA-12-049, EA-12-051 & EP Info Request March 12, 2012	
			TFPI - TRIENNIAL FIRE PROTECTION INSPECTION		5
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]	
			ISI - UNIT 2 IN-SERVICE INSPECTION		1
2	05/01/2017	05/05/2017	IP 7111108P	Inservice Inspection Activities - PWR	

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

Sequoyah
Inspection / Activity Plan
09/01/2016 - 06/30/2018

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	Start	End			
			RP - RAD HAZARDS		1
1, 2	05/01/2017	05/05/2017	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
			PI&R - PROBLEM IDENTIFICATION AND RESOLUTION		5
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	
			RP - RP PUBLIC RADIATION SAFETY		3
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	
			EP - EP PROGRAM INSPECTION		3
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	
			OL EXAM - INITIAL LICENSE EXAM PREP		3
1	10/30/2017	11/03/2017	V23503	SEQUOYAH DECEMBER 2017 INITIAL EXAM AT POWER FACILITIES	
			OL EXAM - INITIAL LICENSE EXAM		3
1	12/04/2017	12/15/2017	V23503	SEQUOYAH DECEMBER 2017 INITIAL EXAM AT POWER FACILITIES	
			ISI - UNIT 1 IN-SERVICE INSPECTION		1
1	05/14/2018	05/18/2018	IP 7111108P	Inservice Inspection Activities - PWR	
			SGISI - UNIT 1 SG IN-SERVICE INSPECTION		1
1	05/21/2018	05/25/2018	IP 7111108P	Inservice Inspection Activities - PWR	
			MODS - PLANT MODIFICATIONS INSPECTION		3
1, 2	06/11/2018	06/15/2018	IP 7111117T	Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications	
1, 2	06/25/2018	06/29/2018	IP 7111117T	Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications	

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