



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

March 1, 2017

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 (REPORT 05000327/2016006 AND 05000328/2016006)**

Dear Mr. Shea:

The NRC has completed its end-of-cycle performance assessment of Sequoyah Nuclear Plant Units 1 and 2 and reviewed performance indicators (PIs), inspection results, and enforcement actions from January 1, 2016 through December 31, 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 concluded that overall performance at your facility preserved public health and safety.

The Unplanned Scrams per 7000 Critical Hours PI exceeded the Green-to-White threshold value in the third quarter of 2015. On July 15, 2016, the NRC completed a review of your corrective actions for the White PI using Inspection Procedure 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area." The NRC's inspection is documented in inspection report (IR) 05000327/2016008 which is publically available in the Agencywide Document Access and Management System using accession number ML16244A370.

On November 10, 2016, as a result of our quarterly review of plant performance, which was completed on October 20, 2016, the NRC updated its assessment of Sequoyah Nuclear Plant Unit 1. The NRC's evaluation consisted of a review of performance indicators (PIs) and inspection results. The NRC's review of Sequoyah Nuclear Plant Unit 1's performance identified that the Unplanned Scrams per 7000 Critical Hours PI returned to Green in the third quarter of 2016. Therefore, all the findings and performance indicators that input into the Action Matrix are Green. Accordingly, per the guidance in Inspection Manual Chapter (IMC) 0305, "Operating Reactor Assessment Program," Sequoyah Nuclear Plant Unit 1 transitioned to the Licensee Response Column (Column 1) of the NRC's Action matrix, effective October 1, 2016.

The NRC determined the performance at Sequoyah Nuclear Plant Units 1 and 2 during the most recent quarter was within the Licensee Response Column, the highest performance category of the NRC's Reactor Oversight Process (ROP) Action Matrix, because all inspection findings had very low safety significance (i.e., Green), and all PIs were within the 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, 2018. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the last twelve months of the inspection plan are tentative and may be revised. 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 the plan for security-related inspections, which will be sent via separate, non-publicly available correspondence.

The NRC will perform Temporary Instruction (TI) 2515/191, "Inspection of the Implementation of Mitigation Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communication/Staffing/Multi-Unit Dose Assessment Plans," beginning March 6, 2017. Additionally, the NRC will perform TI 2515/192, "Inspection of the Licensee's Interim Compensatory Measures Associated with the Open Phase Condition Design Vulnerabilities in Electrical Power Systems," in the first quarter of 2017.

In accordance with Title 10 of the *Code of Federal Regulations* (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 Alan Blamey at 404-997-4415 with any questions you have regarding this letter.

Sincerely,

/RA/

Joel T. Munday, Director
Division of Reactor Projects

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

Enclosure:
Sequoyah Inspection/Activity Plan
(03/01/2017-12/31/2018)

cc Distribution via ListServ

J. Shea

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UNITS 1 AND 2 (REPORT 05000327/2016006 AND 05000328/2016006)
March 1, 2017

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Sequoyah
Inspection / Activity Plan
03/01/2017 - 12/31/2018

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			TI192 - TI192 INSPECTION		2
1, 2	01/01/2017	03/31/2017	IP 2515/192	Inspection of the Licensee's Interim Compensatory Measures Associated with the Open Phase Condition	
			TFPI - TRIENNIAL FIRE PROTECTION INSPECTION		8
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]	
			TI-191 - MITIGATING STRATEGIES		3
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	
			ISI - UNIT 2 IN-SERVICE INSPECTION		1
2	05/01/2017	05/05/2017	IP 7111108P	Inservice Inspection Activities - PWR	
			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	
			EQI - DESIGN BASES ASSURANCE INSPECTION (PROGR		4
1, 2	10/30/2017	11/03/2017	IP 7111121N	Component Design Bases Inspection (Programs)	
1, 2	11/13/2017	11/17/2017	IP 7111121N	Component Design Bases Inspection (Programs)	
1, 2	12/04/2017	12/08/2017	IP 7111121N	Component Design Bases Inspection (Programs)	
			OL EXAM - INITIAL LICENSE EXAM		3
1	12/04/2017	12/15/2017	V23503	SEQUOYAH DECEMBER 2017 INITIAL EXAM AT POWER FACILITIES	

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

Enclosure

Sequoyah
Inspection / Activity Plan
03/01/2017 - 12/31/2018

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			ISI - UNIT 1 IN-SERVICE INSPECTION		1
1	04/16/2018	04/20/2018	IP 7111108P	Inservice Inspection Activities - PWR	
			MODS - PLANT MODIFICATIONS INSPECTION		3
1, 2	06/04/2018	06/08/2018	IP 7111117T	Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications	
			HS - TRIENNIAL HEAT SINK PERFORMANCE		1
1, 2	07/16/2018	07/20/2018	IP 7111107T	Heat Sink Performance	
			EP - EP EXERCISE		8
1, 2	09/17/2018	09/21/2018	IP 7111401	Exercise Evaluation	
1, 2	09/17/2018	09/21/2018	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1, 2	09/17/2018	09/21/2018	IP 71151-EP01	Drill/Exercise Performance	
1, 2	09/17/2018	09/21/2018	IP 71151-EP02	ERO Readiness	
1, 2	09/17/2018	09/21/2018	IP 71151-EP03	Alert & Notification System Reliability	
			OL RQ - REQUAL INSPECTION		2
1, 2	10/08/2018	10/12/2018	IP 7111111B	Licensed Operator Requalification Program	
			ISI - UNIT 2 IN-SERVICE INSPECTION		1
2	10/29/2018	11/02/2018	IP 7111108P	Inservice Inspection Activities - PWR	
			RP - RP OCCUPATIONAL - WEEK 1		3
1, 2	10/29/2018	11/02/2018	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	10/29/2018	11/02/2018	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	10/29/2018	11/02/2018	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	10/29/2018	11/02/2018	IP 71124.04	Occupational Dose Assessment	
1, 2	10/29/2018	11/02/2018	IP 71124.05	Radiation Monitoring Instrumentation	
1, 2	10/29/2018	11/02/2018	IP 71151-OR01	Occupational Exposure Control Effectiveness	
1, 2	10/29/2018	11/02/2018	IP 71151-PR01	RETS/ODCM Radiological Effluent Occurrences	
			SGISI - UNIT 2 SG IN-SERVICE INSPECTION		1
2	11/05/2018	11/09/2018	IP 7111108P	Inservice Inspection Activities - PWR	
			RP - RP OCCUPATIONAL - WEEK 2		2
1, 2	11/26/2018	11/30/2018	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	11/26/2018	11/30/2018	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	11/26/2018	11/30/2018	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	11/26/2018	11/30/2018	IP 71124.04	Occupational Dose Assessment	
1, 2	11/26/2018	11/30/2018	IP 71124.05	Radiation Monitoring Instrumentation	
1, 2	11/26/2018	11/30/2018	IP 71151-OR01	Occupational Exposure Control Effectiveness	

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Sequoyah
Inspection / Activity Plan
03/01/2017 - 12/31/2018

Unit Number	Planned Dates Start End		Inspection Activity	Title	No. of Staff on Site
RP - RP OCCUPATIONAL - WEEK 2					2
1, 2	11/26/2018	11/30/2018	IP 71151-PR01	RETS/ODCM Radiological Effluent Occurrences	

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