



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION I
2100 RENAISSANCE BLVD., SUITE 100
KING OF PRUSSIA, PA 19406-2713

March 2, 2016

Mr. Robert Braun
President and Chief Nuclear Officer
PSEG Nuclear LLC – N09
P.O. Box 236
Hancocks Bridge, NJ 08038

**SUBJECT: ANNUAL ASSESSMENT LETTER FOR SALEM NUCLEAR GENERATING
STATION, UNIT NOS. 1 and 2 (REPORT 05000272/2015006 and
05000311/2015006)**

Dear Mr. Braun:

On February 9, 2016, the U.S. Nuclear Regulatory Commission (NRC) completed its end-of-cycle performance review of Salem Nuclear Generating Station, Unit Nos. 1 and 2 (Salem). 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 that overall, Salem Units 1 and 2 operated in a manner that preserved public health and safety and met all cornerstone objectives. Consistent with Inspection Manual Chapter 0305, "Operating Reactor Assessment Program," the NRC determined that the performance of Salem 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). Salem Unit 1 was in the Regulatory Response Column of the ROP Action Matrix until September 15, 2015, due to a White PI for "Unplanned Scrams per 7,000 Hours Critical." Salem Unit 1 transitioned to the Licensee Response Column on the issue date of the NRC Supplemental Inspection Report 05000272/2015009 and Assessment Follow-Up Letter (ADAMS Accession No. ML15258A467), dated September 15, 2015. That report documented a Supplemental Inspection conducted in accordance with Inspection Procedure (IP) 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area," for the White PI that was successfully completed on August 7, 2015. 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. In addition to baseline inspections, the NRC will conduct IP 71003, "Post-Approval Site Inspection For License Renewal," to verify the license conditions added as part of the renewed operating license, regulatory commitments, selected aging management programs (AMPs), and time-limited aging analyses (TLAAs) are implemented and/or completed in accordance with 10 CFR Part 54. As discussed below, the NRC will also 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." 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 Salem, and the information gathered will aid staff in development of the Final 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 2515-191, "Inspection of the Implementation of Mitigating Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communications/Staffing/Multi-Unit Dose Assessment Plans," early in 2017.

During the assessment period, the NRC issued one Severity Level IV traditional enforcement violation for impeding the regulatory process (untimely event notification). However, in accordance with NRC Inspection Manual Chapter 0305, Section 13.02.b, the NRC will not conduct IP 92702, "Follow-up on Traditional Enforcement Actions Including Violations, Deviations, Confirmatory Action Letters, Confirmatory Orders, and Alternative Dispute Resolution Confirmatory Orders," because the issue has already been reviewed through baseline inspection.

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).

R. Braun

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Please contact Fred Bower at (610) 337-5200 with any questions you have regarding this letter.

Sincerely,

/RA/

Michael L. Scott, Director
Division of Reactor Projects

Docket Nos. 50-272 and 50-311
License Nos. DPR 70 and DPR 75

Enclosure: Salem Inspection/Activity Plan

cc w/encl: Distribution via ListServ

Please contact Fred Bower at (610) 337-5200 with any questions you have regarding this letter.

Sincerely,

/RA/

Michael L. Scott, Director
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<input checked="" type="checkbox"/> SUNSI Review		<input checked="" type="checkbox"/> Non-Sensitive <input type="checkbox"/> Sensitive		<input checked="" type="checkbox"/> Publicly Available <input type="checkbox"/> Non-Publicly Available	
OFFICE	R1/DRP	R1/DRP	R1/DRP	R1/DRP	
NAME	PFinney/ MSD for per email	MDraxton/ MSD	FBower/ FLB	MScott/ MLS	
DATE	02/ 22 /16	02/23 /16	02/ 23 /16	02/ 25 /16	

OFFICIAL RECORD COPY

Salem
Inspection / Activity Plan
01/01/2016 - 12/31/2017

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
71124 - RADIATION PROTECTION					1
1, 2	03/07/2016	03/11/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	03/07/2016	03/11/2016	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	03/07/2016	03/11/2016	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	03/07/2016	03/11/2016	IP 71124.04	Occupational Dose Assessment	
1, 2	03/07/2016	03/11/2016	IP 71124.05	Radiation Monitoring Instrumentation	
EP - EP EXERCISE EVALUATION					4
1, 2	05/16/2016	05/20/2016	IP 7111401	Exercise Evaluation	
71124 - RADIATION PROTECTION					1
1	04/11/2016	04/15/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	04/11/2016	04/15/2016	IP 71124.02	Occupational ALARA Planning and Controls	
1	04/11/2016	04/15/2016	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	04/11/2016	04/15/2016	IP 71124.04	Occupational Dose Assessment	
1	04/11/2016	04/15/2016	IP 71124.05	Radiation Monitoring Instrumentation	
71003 - U1 LR COMMITMENTS - OUTAGE					1
1	04/18/2016	04/22/2016	IP 71003	Post-Approval Site Inspection for License Renewal	
ISI - U1 INSERVICE INSPECTION					1
1	04/18/2016	04/29/2016	IP 7111108P	Inservice Inspection Activities - PWR	
71124 - RADIATION PROTECTION					1
1, 2	05/16/2016	05/20/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	05/16/2016	05/20/2016	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	05/16/2016	05/20/2016	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	05/16/2016	05/20/2016	IP 71124.04	Occupational Dose Assessment	
1, 2	05/16/2016	05/20/2016	IP 71124.05	Radiation Monitoring Instrumentation	
71124 - ENVIRONMENTAL					1
1	06/06/2016	06/10/2016	IP 71124.07	Radiological Environmental Monitoring Program	
7111117T - MODS INSPECTION					4
1, 2	07/18/2016	07/22/2016	IP 7111117T	Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications	
1, 2	08/01/2016	08/05/2016	IP 7111117T	Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications	
EXM12/12 - SALEM INITIAL EXAMINATION					4
1	11/14/2016	11/18/2016	U01930	FY17-SALEM INITIAL OPERATOR LICENSING EXAM	
1	12/12/2016	12/23/2016	U01930	FY17-SALEM INITIAL OPERATOR LICENSING EXAM	

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

Salem
Inspection / Activity Plan
01/01/2016 - 12/31/2017

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
71124 - RADIATION PROTECTION					1
1, 2	08/22/2016	08/26/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	08/22/2016	08/26/2016	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	08/22/2016	08/26/2016	IP 71124.04	Occupational Dose Assessment	
1, 2	08/22/2016	08/26/2016	IP 71124.05	Radiation Monitoring Instrumentation	
711107T - TRIENNIAL HEAT SINK					1
1, 2	11/14/2016	11/18/2016	IP 7111107T	Heat Sink Performance	
71124 - RADIATION PROTECTION					1
1, 2	12/12/2016	12/16/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	12/12/2016	12/16/2016	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	12/12/2016	12/16/2016	IP 71124.04	Occupational Dose Assessment	
1, 2	12/12/2016	12/16/2016	IP 71151-OR01	Occupational Exposure Control Effectiveness	
1, 2	12/12/2016	12/16/2016	IP 71151-PR01	RETS/ODCM Radiological Effluent Occurrences	
TI-191 - FUKUSHIMA LESSONS-LEARNED					1
1, 2	02/20/2017	02/24/2017	IP 2515/191	Inspection of Licensee's Responses to Order EA-12-049, EA-12-051 & EP Info Request March 12, 2012	
71124 - RADIATION PROTECTION					1
1, 2	04/03/2017	04/07/2017	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	04/03/2017	04/07/2017	IP 71124.02	Occupational ALARA Planning and Controls	
2	04/03/2017	04/07/2017	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
2	04/03/2017	04/07/2017	IP 71124.04	Occupational Dose Assessment	
1, 2	04/03/2017	04/07/2017	IP 71124.05	Radiation Monitoring Instrumentation	
EP - EP PROGRAM INSPECTION					1
1, 2	05/15/2017	05/19/2017	IP 7111402	Alert and Notification System Testing	
1, 2	05/15/2017	05/19/2017	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1, 2	05/15/2017	05/19/2017	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1, 2	05/15/2017	05/19/2017	IP 71151	Performance Indicator Verification	
7111108P - U2 INSERVICE INSPECTION					1
2	04/24/2017	05/05/2017	IP 7111108P	Inservice Inspection Activities - PWR	
71124 - RADIATION PROTECTION					1
1, 2	05/01/2017	05/05/2017	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	05/01/2017	05/05/2017	IP 71124.02	Occupational ALARA Planning and Controls	
2	05/01/2017	05/05/2017	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	05/01/2017	05/05/2017	IP 71124.04	Occupational Dose Assessment	

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	Start	End			
			71124 - RADIATION PROTECTION		1
1, 2	05/01/2017	05/05/2017	IP 71124.05	Radiation Monitoring Instrumentation	
			71152B - PI&R BIENNIAL		2
1, 2	05/22/2017	05/26/2017	IP 71152B	Problem Identification and Resolution	
1, 2	06/05/2017	06/09/2017	IP 71152B	Problem Identification and Resolution	
			71124 - RADIOACTIVE EFFLUENTS		1
1, 2	06/12/2017	06/16/2017	IP 71124.05	Radiation Monitoring Instrumentation	
1, 2	06/12/2017	06/16/2017	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
			CDBI - COMPONENT DESIGN BASIS INSPECTION		6
1, 2	06/12/2017	06/16/2017	IP 7111121	Component Design Bases Inspection	
1, 2	06/26/2017	06/30/2017	IP 7111121	Component Design Bases Inspection	
1, 2	07/10/2017	07/14/2017	IP 7111121	Component Design Bases Inspection	
			711111B - SALEM REQUAL INSP WITH P/F RESULTS		2
1, 2	09/12/2017	09/16/2017	IP 711111B	Licensed Operator Requalification Program	
			1/22EXM - SALEM INITIAL EXAM		4
1	12/11/2017	12/15/2018	U01949	FY18-SALEM INITIAL OPERATOAR LICENSING EXAM	
			71124 - RADIATION PROTECTION		1
1, 2	08/21/2017	08/25/2017	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	08/21/2017	08/25/2017	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	08/21/2017	08/25/2017	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	08/21/2017	08/25/2017	IP 71124.04	Occupational Dose Assessment	
1, 2	08/21/2017	08/25/2017	IP 71124.05	Radiation Monitoring Instrumentation	
			71124.08 - RADWASTE		1
1, 2	10/16/2017	10/20/2017	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
			7111108P - U1 INSERVICE INSPECTION		1
1	10/23/2017	11/03/2017	IP 7111108P	Inservice Inspection Activities - PWR	
			71124 - 71124 PROGRAM SALEM 1 OUTAGE		1
1	10/23/2017	10/27/2017	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	10/23/2017	10/27/2017	IP 71124.02	Occupational ALARA Planning and Controls	
1	10/23/2017	10/27/2017	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	10/23/2017	10/27/2017	IP 71124.04	Occupational Dose Assessment	
1	10/23/2017	10/27/2017	IP 71124.05	Radiation Monitoring Instrumentation	

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Inspection / Activity Plan
01/01/2016 - 12/31/2017

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			71124 - RADIATION PROTECTION AND PI		1
1, 2	12/04/2017	12/08/2017	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	12/04/2017	12/08/2017	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	12/04/2017	12/08/2017	IP 71124.04	Occupational Dose Assessment	
1, 2	12/04/2017	12/08/2017	IP 71151-OR01	Occupational Exposure Control Effectiveness	
1, 2	12/04/2017	12/08/2017	IP 71151-PR01	RETS/ODCM Radiological Effluent Occurrences	

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