



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PA 19406-1415

March 4, 2009

Mr. Thomas Joyce  
President and Chief Nuclear Officer  
PSEG Nuclear LLC - N09  
P. O. Box 236  
Hancocks Bridge, NJ 08038

**SUBJECT: ANNUAL ASSESSMENT LETTER – SALEM NUCLEAR GENERATING STATION,  
UNITS 1 AND 2 (05000272/2009001 AND 05000311/2009001)**

Dear Mr. Joyce:

On February 11, 2009, the NRC staff completed its performance review of Salem Nuclear Generating Station (Salem), Unit Nos. 1 and 2. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results for the period from January 1 through December 31, 2008. The purpose of this letter is to inform you of our assessment of your safety performance during this period and our plans for future inspections at your facility.

This performance review and enclosed inspection plan do not include security information. A separate letter designated and marked as "Official Use Only--Security Information" will include the security cornerstone review and resultant inspection plan.

Overall, Salem Unit Nos. 1 and 2 operated in a manner that preserved public health and safety and fully met all cornerstone objectives. Plant performance for the most recent quarter, as well as for the first three quarters of the assessment cycle, was within the Licensee Response column of the NRC's Action Matrix, based on all inspection findings being classified as having very low safety significance (Green) and all PIs indicating performance at a level requiring no additional NRC oversight (Green). Therefore, we plan to conduct reactor oversight process (ROP) baseline inspections at your facility.

The NRC has identified a substantive cross-cutting issue in the area of human performance with a cross-cutting theme in the aspect of documentation and procedure adequacy (H.2(c))<sup>1</sup>. During this assessment period, there were seven inspection findings associated with multiple reactor safety cornerstones that were attributed to the adequacy of documents and procedures. These inspection findings involved documents and procedures that did not incorporate appropriate design basis information, lessons learned from available operating experience, or steps needed to ensure successful completion.

During the 2007 assessment period (ML080610006)<sup>2</sup>, the NRC had identified a cross-cutting theme associated with documents and procedure adequacy. At that time, the staff determined that a substantive cross-cutting issue did not exist, because you recognized that the

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<sup>1</sup> This is a descriptor that correlates to this cross-cutting aspect in Inspection Manual Chapter 0305, "Operating Reactor Assessment Program."

<sup>2</sup> Designation in parentheses refers to an ADAMS ascension number. Documents referenced in this letter are publicly available using the ascension number in ADAMS.

cross-cutting theme affected multiple areas, and you took or scheduled appropriate corrective actions. However, during the 2008 assessment period, we are concerned that the actions you have taken have not yet proven effective in substantially mitigating this cross-cutting theme, as indicated by an increase in the number of findings with the same causal factor. Furthermore, four of the seven findings involved recent procedure reviews or revisions during which procedural adequacy issues were not identified and corrected.

We will monitor your progress in this area through the baseline inspection program, including completion of a problem identification and resolution inspection sample to review your progress in this area, in accordance with Inspection Procedure 71152, "Identification and Resolution of Problems." The NRC will clear this substantive cross-cutting issue when PSEG has demonstrated sustainable performance improvement as evidenced by effective implementation of an appropriate corrective action plan that results in no safety significant inspection findings and a notable reduction in the overall number of inspection findings with the same causal factor.

The enclosed inspection plan details the inspections, less those related to physical protection scheduled through June 30, 2010. The inspection plan is provided to allow for the resolution of any scheduling conflicts and personnel availability issues well in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections in the last nine months of the inspection plan are tentative and may be revised at the mid-cycle review.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made 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).

If circumstances arise which cause us to change this inspection plan, we will contact you to discuss the change as soon as possible. Please contact Mr. Arthur Burritt of my staff at 610-337-5069 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA

David C. Lew, Director  
Division of Reactor Projects

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

Enclosure: Salem Nuclear Generating Station Inspection/Activity Plan

cc w/encl:

W. Levis, President and Chief Operating Officer, PSEG Power  
R. Braun, Site Vice President  
P. Davison, Director of Nuclear Oversight  
E. Johnson, Director of Finance  
G. Gellrich, Salem Plant Manager

J. Keenan, General Solicitor, PSEG  
M. Wetterhahn, Esquire, Winston and Strawn, LLP  
L. Peterson, Chief of Police and Emergency Management Coordinator  
P. Baldauf, Assistant Director, NJ Radiation Protection Programs  
P. Mulligan, Chief, NJ Bureau of Nuclear Engineering, DEP  
H. Otto, Ph.D., Administrator, DE Interagency Programs, DNREC Div of Water Resources  
Consumer Advocate, Office of Consumer Advocate, Commonwealth of Pennsylvania  
N. Cohen, Coordinator - Unplug Salem Campaign  
E. Zobian, Coordinator - Jersey Shore Anti Nuclear Alliance  
A. Muller, Executive Director, Green Delaware  
Institute of Nuclear Power Operations (INPO)

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**/RA/**  
David C. Lew, Director  
Division of Reactor Projects

**Distribution:** See next page.

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**SUNSI Review Complete: LC (Reviewer's Initials)**

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**Salem**  
**Inspection / Activity Plan**  
**01/01/2009 - 06/30/2010**

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			<b>71121 - OCC RAD SAFETY</b>		<b>1</b>
1,2	01/12/2009	01/16/2009	IP 7112101	Access Control to Radiologically Significant Areas	
1,2	01/12/2009	01/16/2009	IP 7112102	ALARA Planning and Controls	
1,2	01/12/2009	01/16/2009	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment	
			<b>TRI FIRE - TRIENNIAL FIRE PROTECTION INSPECTION</b>		<b>4</b>
1,2	01/26/2009	01/30/2009	IP 7111105T	Fire Protection [Triennial]	
1,2	02/09/2009	02/13/2009	IP 7111105T	Fire Protection [Triennial]	
			<b>TI 173 - GROUNDWATER TI</b>		<b>1</b>
1,2	03/09/2009	03/13/2009	IP 2515/173	Review of the Implementation of the Industry Ground Water Protection Voluntary Initiative	
			<b>EP PROGR - EP PROGRAM INSPECTION</b>		<b>1</b>
1,2	03/15/2009	03/20/2009	IP 7111402	Alert and Notification System Testing	
1,2	03/15/2009	03/20/2009	IP 7111403	Emergency Response Organization Augmentation Testing	
1,2	03/15/2009	03/20/2009	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1,2	03/15/2009	03/20/2009	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1,2	03/15/2009	03/20/2009	IP 71151	Performance Indicator Verification	
			<b>71121 - OCC RAD SAFETY</b>		<b>1</b>
1,2	05/18/2009	05/22/2009	IP 7112101	Access Control to Radiologically Significant Areas	
1,2	05/18/2009	05/22/2009	IP 7112102	ALARA Planning and Controls	
1,2	05/18/2009	05/22/2009	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment	
			<b>71152B - PI&amp;R BIENNIAL TEAM</b>		<b>4</b>
1,2	06/22/2009	06/26/2009	IP 71152B	Identification and Resolution of Problems	
1,2	07/06/2009	07/10/2009	IP 71152B	Identification and Resolution of Problems	
			<b>7111111B - BIENNIAL REQUAL INSP WITH P/F RESULTS</b>		<b>3</b>
1,2	07/27/2009	07/31/2009	IP 7111111B	Licensed Operator Requalification Program	
			<b>7112203 - PUB RAD SAFETY - REMP</b>		<b>1</b>
1,2	09/14/2009	09/18/2009	IP 7112203	Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control Program	
			<b>71121 - OCC RAD SAFETY</b>		<b>1</b>
2	10/19/2009	10/23/2009	IP 7112101	Access Control to Radiologically Significant Areas	
2	10/19/2009	10/23/2009	IP 7112102	ALARA Planning and Controls	
2	10/19/2009	10/23/2009	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment	
1,2	10/19/2009	10/23/2009	IP 71151	Performance Indicator Verification	
			<b>TI-172 - U2 TI-172 RCS DISSIMILAR METAL WELDS</b>		<b>1</b>
2	10/19/2009	10/30/2009	IP 2515/172	Reactor Coolant System Dissimilar Metal Butt Welds	
			<b>7111108P - U2 INSERVICE INSPECTION</b>		<b>1</b>
2	10/19/2009	10/30/2009	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.

**Salem**  
**Inspection / Activity Plan**  
**01/01/2009 - 06/30/2010**

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			<b>7112202 - PUB RAD SAFETY - RADWASTE</b>		<b>1</b>
1,2	12/07/2009	12/18/2009	IP 7112202	Radioactive Material Processing and Transportation	
			<b>7112201 - PUB RAD SAFETY - RETS</b>		<b>1</b>
1,2	01/04/2010	01/08/2010	IP 7112201	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems	
			<b>MODS - PERMANENT PLANT MODIFICATIONS</b>		<b>3</b>
1,2	02/08/2010	02/12/2010	IP 7111117T	Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications	
1,2	02/22/2010	02/26/2010	IP 7111117T	Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications	
			<b>2/15EXAM - OPERATOR LICENSING INITIAL EXAM</b>		<b>5</b>
1	04/12/2010	04/16/2010	U01764	FY10 - SALEM UNITS 1&2 INITIAL OPERATOR LICENSING EXAM	
1	05/10/2010	05/14/2010	U01764	FY10 - SALEM UNITS 1&2 INITIAL OPERATOR LICENSING EXAM	
			<b>71121 - OCC RAD SAFETY</b>		<b>1</b>
1	04/12/2010	04/16/2010	IP 7112101	Access Control to Radiologically Significant Areas	
1	04/12/2010	04/16/2010	IP 7112102-7112102R	ALARA - Required	
1	04/12/2010	04/16/2010	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment	
			<b>TI-172 - U1 TI-172 RCS DISSIMILAR METAL WELDS</b>		<b>1</b>
1	04/12/2010	04/16/2010	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>7111108P - U1 INSERVICE INSPECTION</b>		<b>1</b>
1	04/12/2010	04/23/2010	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>EP EX - EP EXERCISE EVALUATION</b>		<b>1</b>
1,2	05/17/2010	05/21/2010	IP 7111401	Exercise Evaluation	
1,2	05/17/2010	05/21/2010	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1,2	05/17/2010	05/21/2010	IP 71151-EP01	Drill/Exercise Performance	
1,2	05/17/2010	05/21/2010	IP 71151-EP02	ERO Drill Participation	
1,2	05/17/2010	05/21/2010	IP 71151-EP03	Alert & Notification System	

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