



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

March 3, 2010

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 (05000272/2010001 AND 05000311/2010001)

Dear Mr. Joyce:

On February 9, 2010, 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, 2009. 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.

In our Annual Assessment Letter, dated March 4, 2009 (ML090620756)<sup>1</sup>, we advised you of a substantive cross-cutting issue in the area of human performance with a cross-cutting aspect of documentation and procedure adequacy (H.2(c))<sup>2</sup>. We defined the exit criteria for clearing the substantive cross-cutting issue as demonstrated sustainable improved performance evidenced by effective implementation of a corrective action plan that resulted in no safety significant inspection findings and a notable reduction in the overall number of inspection findings with the same causal factor. In our mid-cycle assessment letter, dated September 1, 2009 (ML09244030)<sup>1</sup>, we concluded that you had not met these criteria. Specifically, we determined that many of the corrective actions that resulted from your cause analyses were not completed at the time of our review. As such, at that time, we maintained this substantive cross-cutting issue open.

<sup>1</sup> Designation in parenthesis refers to an ADAMS accession number. Documents referenced in this letter are publicly available using the accession number in ADAMS.

<sup>2</sup> This is a descriptor that correlates to this cross-cutting aspect in Inspection Manual Chapter 0310, "Components within the cross-cutting areas."

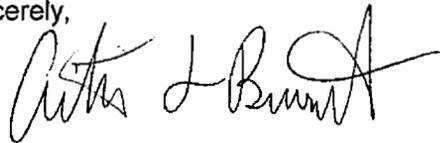
During this assessment period, we have determined that you have made substantial progress in implementation of an appropriate corrective action plan to address the substantive cross-cutting issue in documentation and procedure adequacy. In 2009 all inspection findings identified at Salem were Green, and there were two findings with a documentation and procedure adequacy cross-cutting aspect. As such we considered it a significant reduction when compared to the seven findings identified with this cross-cutting aspect in 2008. Therefore, based on the exit criteria, we have concluded that PSEG has demonstrated sustainable improved performance in this cross-cutting aspect, and we have closed this substantive cross-cutting issue.

The enclosed inspection plan details the inspections, less those related to physical protection scheduled through June 30, 2011. In addition to the baseline inspections, we plan to conduct inspections related to license renewal and pre-operational testing and operation of an independent spent fuel storage facility. 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 me at 610-337-5069 with any questions you may have regarding this letter or the inspection plan.

Sincerely,



Arthur L. Burritt, Chief  
Reactor Projects Branch 3  
Division of Reactor Projects

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

cc w/encl: Distribution via ListServe  
Salem Nuclear Generating Station Inspection/Activity Plan

During this assessment period, we have determined that you have made substantial progress in implementation of an appropriate corrective action plan to address the substantive cross-cutting issue in documentation and procedure adequacy. In 2009 all inspection findings identified at Salem were Green, and there were two findings with a documentation and procedure adequacy cross-cutting aspect. As such we considered it a significant reduction when compared to the seven findings identified with this cross-cutting aspect in 2008. Therefore, based on the exit criteria, we have concluded that PSEG has demonstrated sustainable improved performance in this cross-cutting aspect, and we have closed this substantive cross-cutting issue.

The enclosed inspection plan details the inspections, less those related to physical protection scheduled through June 30, 2011. In addition to the baseline inspections, we plan to conduct inspections related to license renewal and pre-operational testing and operation of an independent spent fuel storage facility. 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 me at 610-337-5069 with any questions you may have regarding this letter or the inspection plan.

Sincerely,  
 /RA/  
 Arthur L. Burritt, Director  
 Division of Reactor Projects  
 Projects Branch 3

Distribution w/encl:  
 S. Collins, RA  
 M. Dapas, DRA  
 D. Lew, DRP  
 J. Clifford, DRP  
 A. Burritt, DRP  
 L. Cline, DRP  
 A. Turilin, DRP

R. Moore, DRP  
 DRS Directors  
 DRS Branch Chiefs (6)  
 D. Silk, DRS  
 N. McNamara, SLO  
 D. Tiff, SLO  
 D. Screnci, PAO  
 N. Sheehan, PAO

R. Barkley, ORA  
 John Thompson, NRR  
 D. Schroeder, DRP, SRI  
 H. Balian, DRP, RI  
 L. Trocine, RI OEDO  
 RidsNrrPMSalem Resource  
 RidsNrrDirslpabrRes@nrc.gov  
 ROPreportsRes@nrc.gov

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

**ML100620808**

DOCUMENT NAME S:\ROP-10 EOC REVIEW\BRANCH 3\LETTERS\2009 EOC - SALEM ASSESSMENT LETTERREV4.DOC

After declaring this document "An Official Agency Record" it will be released to the Public.

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	RI/DRP	RI/DRP	RI/DRP
NAME	WSchroeder/ALB for	LCline/ LC	ABurritt/ ALB
DATE	02/24/10	02/24/10	03/02 /10

OFFICIAL RECORD COPY

**Salem**  
**Inspection / Activity Plan**  
**01/01/2010 - 06/30/2011**

Unit Number	Planned Dates Start	Planned Dates End	Inspection Activity	Title	No. of Staff on Site
			<b>71124 - RETS</b>		<b>1</b>
1,2	01/04/2010	01/08/2010	IP 71124.05	Radiation Monitoring Instrumentation	
1,2	01/04/2010	01/08/2010	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
			<b>5/10EXAM - OPERATOR LICENSING INITIAL EXAM</b>		<b>4</b>
1	04/06/2010	04/09/2010	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>MODS - PERMANENT PLANT MODIFICATIONS</b>		<b>4</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>50001 - U2 SG SHIPMENT FOR BURIAL</b>		<b>1</b>
2	02/23/2010	02/25/2010	IP 50001	Steam Generator Replacement Inspection	
			<b>71121 - HP</b>		<b>1</b>
1	04/12/2010	04/16/2010	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	04/12/2010	04/16/2010	IP 71124.02	Occupational ALARA Planning and Controls	
1	04/12/2010	04/16/2010	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
			<b>7111108P - U1 INSERVICE INSPECTION</b>		<b>1</b>
1	04/12/2010	04/23/2010	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>TI-172 - U1 TI 2515/172 DISSIMILAR METAL WELDS</b>		<b>1</b>
1	04/12/2010	04/23/2010	IP 2515/172	Reactor Coolant System Dissimilar Metal Butt Welds	
			<b>EP EX - EP EXERCISE EVALUATION</b>		<b>4</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	
			<b>71002 - LICENSE RENEWAL INSPECTION</b>		<b>4</b>
1,2	06/07/2010	06/11/2010	IP 71002	License Renewal Inspection	
1,2	06/21/2010	06/25/2010	IP 71002	License Renewal Inspection	
			<b>71124 - HP</b>		<b>1</b>
1,2	07/19/2010	07/23/2010	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1,2	07/19/2010	07/23/2010	IP 71124.02	Occupational ALARA Planning and Controls	
1,2	07/19/2010	07/23/2010	IP 71124.04	Occupational Dose Assessment	
			<b>TI-177 - MANAGING GAS ACCUMULATION IN ECCS</b>		<b>3</b>
1,2	08/02/2010	08/06/2010	IP 2515/177	Managing Gas Accumulation In Emergency Core Cooling, Decay Heat Removal & Containment Spray System	

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

**Salem**  
**Inspection / Activity Plan**  
**01/01/2010 - 06/30/2011**

Unit Number	Planned Dates Start	Planned Dates End	Inspection Activity	Title	No. of Staff on Site
			<b>ISFSI - ISFSI - DRY RUN AND INITIAL LOADING</b>		<b>1</b>
1,2	08/09/2010	08/20/2010	IP 60854	Preoperational Testing Of An ISFSI	
1,2	08/09/2010	08/20/2010	IP 60854.1	Preoperational Testing of Independent Spent Fuel Storage Facility Installation at Operating Plants	
1,2	08/09/2010	08/20/2010	IP 60855	Operation Of An ISFSI	
1,2	08/09/2010	08/20/2010	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
			<b>71124 - HP &amp; ISFSI</b>		<b>1</b>
1,2	09/27/2010	10/01/2010	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
1,2	09/27/2010	10/01/2010	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1,2	09/27/2010	10/01/2010	IP 71124.05	Radiation Monitoring Instrumentation	
1,2	09/27/2010	10/01/2010	IP 71151-OR01	Occupational Exposure Control Effectiveness	
1,2	09/27/2010	10/01/2010	IP 71151-PR01	RETS/ODCM Radiological Effluent	
			<b>711107T - TRIENNIAL HEAT SINK</b>		<b>1</b>
1,2	12/06/2010	12/10/2010	IP 7111107T	Heat Sink Performance	
			<b>71124 - HP INSPECTION</b>		<b>1</b>
1,2	01/03/2011	01/07/2011	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1,2	01/03/2011	01/07/2011	IP 71124.02	Occupational ALARA Planning and Controls	
1,2	01/03/2011	01/07/2011	IP 71124.04	Occupational Dose Assessment	
			<b>7111121 - CDBI</b>		<b>6</b>
1,2	01/24/2011	01/28/2011	IP 7111121	Component Design Bases Inspection	
1,2	02/07/2011	02/11/2011	IP 7111121	Component Design Bases Inspection	
1,2	02/14/2011	02/18/2011	IP 7111121	Component Design Bases Inspection	
			<b>EP PROGR - EP PROGRAM INSPECTION</b>		<b>1</b>
1,2	03/14/2011	03/18/2011	IP 7111402	Alert and Notification System Evaluation	
1,2	03/14/2011	03/18/2011	IP 7111403	Emergency Response Organization Staffing and Augmentation System	
1,2	03/14/2011	03/18/2011	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1,2	03/14/2011	03/18/2011	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1,2	03/14/2011	03/18/2011	IP 71151-EP01	Drill/Exercise Performance	
1,2	03/14/2011	03/18/2011	IP 71151-EP02	ERO Drill Participation	
1,2	03/14/2011	03/18/2011	IP 71151-EP03	Alert & Notification System	
			<b>2515/172 - TI 2515/172 RCS DM WELDS</b>		<b>1</b>
2	04/11/2011	04/22/2011	IP 2515/172	Reactor Coolant System Dissimilar Metal Butt Welds	
			<b>7111108P - U2 INSERVICE INSPECTION</b>		<b>1</b>
2	04/11/2011	04/22/2011	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>71124 - HP</b>		<b>1</b>
2	04/18/2011	04/22/2011	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	

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

Salem  
Inspection / Activity Plan  
01/01/2010 - 06/30/2011

Unit Number	Planned Dates Start	Planned Dates End	Inspection Activity	Title	No. of Staff on Site
			<b>71124 - HP</b>		<b>1</b>
2	04/18/2011	04/22/2011	IP 71124.02	Occupational ALARA Planning and Controls	
2	04/18/2011	04/22/2011	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
			<b>71152 - PI&amp;R</b>		<b>4</b>
1,2	06/27/2011	07/01/2011	IP 71152B	Identification and Resolution of Problems	

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