



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

August 31, 2007

Mr. Thomas Joyce  
Senior Vice President  
PSEG Nuclear LLC - N09  
P.O. Box 236  
Hancocks Bridge, NJ 08038

SUBJECT: MID-CYCLE PERFORMANCE REVIEW AND INSPECTION PLAN -  
SALEM NUCLEAR GENERATING STATION, UNIT NOS. 1 AND 2

Dear Mr. Joyce:

On August 14, 2007, the NRC staff completed its performance review of Salem Nuclear Generating Station for the first half of the calendar year 2007 assessment cycle. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results over the previous twelve months. 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.

Plant performance for the most recent quarter of 2007 at Salem Units 1 and 2 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. We also plan to conduct an inspection of the Unit 2 steam generator replacement scheduled for the Spring 2008 refueling outage.

The NRC has identified a substantive cross-cutting issue in the area of human performance with a cross-cutting theme in the aspect of procedural compliance (H.4(b))<sup>1</sup>. During this assessment period there were six inspection findings associated with multiple reactor safety cornerstones that were attributable to procedural compliance. The inspection findings involved maintenance on safety-related equipment, fitness-for-duty sample processing, and operator response to degraded equipment.

We understand that PSEG has recognized the cross-cutting theme in procedure compliance and implemented site-wide corrective actions focused on providing clear expectations, employee training, standards reinforcement by management observations, and personal accountability. Nonetheless, we are concerned that actions taken to date have not yet proven effective in substantially mitigating the cross-cutting theme as evidenced by the number of procedure compliance issues that continue to be identified. Specifically, there has been an increase in

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

the number of findings with the common theme of procedural compliance from four during the 2006 annual assessment to six in our current assessment. Therefore, the staff has concluded that a substantive cross-cutting issue in human performance does exist at this time.

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 during the fourth quarter of 2007, 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 security, scheduled through December 31, 2008. 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 end-of-cycle review.

The NRC is currently evaluating the scope and frequency of all the baseline inspection procedures. If the results of the evaluation, or any other circumstances, cause us to change the inspection plan, we will contact you to discuss the change as soon as possible. Please contact Arthur Burritt at 610-337-5069 with any questions you may have regarding this letter or the inspection plan.

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).

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 Nuclear Officer  
K. Chambliss, Vice President, Nuclear Oversight  
R. Braun, Vice President Salem

T. Joyce

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G. Gellrich, Salem Plant Manager

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P. Baldauf, Assistant Director, NJ Radiation Protection Programs

P. Mulligan, Acting-Manager, NJ Bureau of Nuclear Engineering

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  
Institute of Nuclear Power Operations (INPO)

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 David C. Lew, Director  
 Division of Reactor Projects

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Enclosure: Salem Nuclear Generating Station Inspection/ Activity Plan

cc w/encl:  
 W. Levis, President and Chief Nuclear Officer  
 K. Chambliss, Vice President, Nuclear Oversight  
 R. Braun, Vice President Salem

**Distribution:** see next page

**SUNSI REVIEW COMPLETE: ALB (Reviewer's Initials)**

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Letter to Thomas Joyce from David C. Lew dated August 31, 2007

Distribution w/encl:

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**Salem**  
**Inspection / Activity Plan**  
**07/01/2007 - 12/31/2008**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start	Planned Dates End	Inspection Type
	<b>711111B - L.O. REQUAL. PROG. + P/F REVIEW</b>		<b>4</b>			
1,2	IP 711111B	Licensed Operator Requalification Program		07/29/2007	08/03/2007	Baseline Inspections
1,2	IP 711111B	Licensed Operator Requalification Program		08/27/2007	08/31/2007	Baseline Inspections
	<b>MODS - MODS AND 50.59</b>		<b>3</b>			
1,2	IP 7111102	Evaluation of Changes, Tests, or Experiments		07/16/2007	07/20/2007	Baseline Inspections
1,2	IP 711117B	Permanent Plant Modifications		07/16/2007	07/20/2007	Baseline Inspections
	<b>71121 - OCC RAD SAFETY</b>		<b>1</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		08/27/2007	08/31/2007	Baseline Inspections
1,2	IP 7112102	ALARA Planning and Controls		08/27/2007	08/31/2007	Baseline Inspections
1,2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		08/27/2007	08/31/2007	Baseline Inspections
1,2	IP 71151	Performance Indicator Verification		08/27/2007	08/31/2007	Baseline Inspections
	<b>7112203 - PUB RAD SAFETY - REMP</b>		<b>1</b>			
1,2	IP 7112203	Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control P		09/17/2007	09/21/2007	Baseline Inspections
	<b>S/G - U2 S/G REPLACEMENT</b>		<b>2</b>			
2	IP 50001	Steam Generator Replacement Inspection		11/13/2007	12/21/2007	Other Routine
	<b>7112202 - PUB RAD SAFETY - RADWASTE</b>		<b>1</b>			
1,2	IP 7112202	Radioactive Material Processing and Transportation		12/03/2007	12/14/2007	Baseline Inspections
1,2	IP 71151-PR01	RETS/ODCM Radiological Effluent		12/03/2007	12/14/2007	Baseline Inspections
	<b>7112201 - PUB RAD SAFETY - RETS</b>		<b>1</b>			
1,2	IP 7112201	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems		01/07/2008	01/11/2008	Baseline Inspections
	<b>7111121 - CDBI</b>		<b>7</b>			
1,2	IP 7111121	Component Design Bases Inspection		01/14/2008	01/18/2008	Baseline Inspections
1,2	IP 7111121	Component Design Bases Inspection		01/28/2008	02/01/2008	Baseline Inspections
1,2	IP 7111121	Component Design Bases Inspection		02/04/2008	02/08/2008	Baseline Inspections
	<b>S/G - S/G REPLACEMENT - SALEM UNIT 2</b>		<b>2</b>			
2	IP 50001	Steam Generator Replacement Inspection		01/07/2008	05/06/2008	Other Routine
	<b>7111108P - U2 INSERVICE INSPECTION</b>		<b>1</b>			
2	IP 7111108P	Inservice Inspection Activities - PWR		03/10/2008	03/21/2008	Baseline Inspections
	<b>71121 - OCC RAD SAFETY</b>		<b>1</b>			
2	IP 50001	Steam Generator Replacement Inspection		04/07/2008	04/11/2008	Other Routine
1,2	IP 7112101	Access Control to Radiologically Significant Areas		04/07/2008	04/11/2008	Baseline Inspections
1,2	IP 7112102	ALARA Planning and Controls		04/07/2008	04/11/2008	Baseline Inspections
2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		04/07/2008	04/11/2008	Baseline Inspections
2	IP 50001	Steam Generator Replacement Inspection		04/21/2008	04/25/2008	Other Routine
1,2	IP 7112101	Access Control to Radiologically Significant Areas		04/21/2008	04/25/2008	Baseline Inspections

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

**Salem**  
**Inspection / Activity Plan**  
**07/01/2007 - 12/31/2008**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start	Planned Dates End	Inspection Type
	<b>71121</b>	<b>- OCC RAD SAFETY</b>	<b>1</b>			
1,2	IP 7112102	ALARA Planning and Controls		04/21/2008	04/25/2008	Baseline Inspections
1,2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		04/21/2008	04/25/2008	Baseline Inspections
	<b>08/25EXM</b>	<b>- INITIAL OPERATOR LICENSING EXAM</b>	<b>4</b>			
1	U01686	FY08 - SALEM 1 & 2 INITIAL OPERATOR EXAM		07/21/2008	07/25/2008	Not Applicable
1	U01686	FY08 - SALEM 1 & 2 INITIAL OPERATOR EXAM		08/25/2008	08/29/2008	Not Applicable
	<b>EP</b>	<b>- EP EXERCISE EVALUATION</b>	<b>4</b>			
1,2	IP 7111401	Exercise Evaluation		05/19/2008	05/23/2008	Baseline Inspections
1,2	IP 7111404	Emergency Action Level and Emergency Plan Changes		05/19/2008	05/23/2008	Baseline Inspections
1,2	IP 71151-EP01	Drill/Exercise Performance		05/19/2008	05/23/2008	Baseline Inspections
1,2	IP 71151-EP02	ERO Drill Participation		05/19/2008	05/23/2008	Baseline Inspections
1,2	IP 71151-EP03	Alert & Notification System		05/19/2008	05/23/2008	Baseline Inspections
	<b>7111107B</b>	<b>- HEAT SINK</b>	<b>1</b>			
1,2	IP 7111107B	Heat Sink Performance		06/09/2008	06/13/2008	Baseline Inspections
	<b>71121</b>	<b>- OCC RAD SAFETY</b>	<b>1</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		09/15/2008	09/19/2008	Baseline Inspections
1,2	IP 7112102	ALARA Planning and Controls		09/15/2008	09/19/2008	Baseline Inspections
1,2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		09/15/2008	09/19/2008	Baseline Inspections
1,2	IP 71151-OR01	Occupational Exposure Control Effectiveness		09/15/2008	09/19/2008	Baseline Inspections
1,2	IP 71151-PR01	RETS/ODCM Radiological Effluent		09/15/2008	09/19/2008	Baseline Inspections
	<b>71121</b>	<b>- OCC RDA SAFETY</b>	<b>1</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		10/20/2008	10/24/2008	Baseline Inspections
1,2	IP 7112102	ALARA Planning and Controls		10/20/2008	10/24/2008	Baseline Inspections
1,2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		10/20/2008	10/24/2008	Baseline Inspections
	<b>7111108</b>	<b>- U1 INSERVICE INSPECTION</b>	<b>1</b>			
1	IP 7111108P	Inservice Inspection Activities - PWR		10/20/2008	10/31/2008	Baseline Inspections