January 25, 2007

EA-06-205

Mr. William Levis
Senior Vice President and Chief Nuclear Officer
PSEG Nuclear LLC - N09
P. O. Box 236
Hancocks Bridge, NJ 08038

SUBJECT: SALEM GENERATING STATION - NOTICE OF VIOLATION (NRC Investigation Report No. 1-2005-026)

Dear Mr. Levis:

This letter refers to an investigation conducted by the Nuclear Regulatory Commission (NRC) Office of Investigations (OI), Region I, between May 27, 2005, and June 28, 2006. The purpose of the investigation was to determine whether three nuclear equipment operators (NEO) provided complete and accurate information to a control room supervisor (CRS) concerning a service water accumulator (SWA) pressure condition on July 3, 2003. Your staff previously investigated this issue during December 2004. The NRC staff became aware of this issue while reviewing records at your site during May 2005, and the OI investigation was then initiated.

The NRC determined that on July 3, 2003, a control room supervisor directed an NEO to increase pressure in the 12 SWA. This NEO requested a “second” NEO to act as independent verifier for the actions required to increase the 12 SWA pressure. The “first” NEO took action to increase the SWA pressure and restore the system valve alignment to normal by closing the nitrogen gas charging valve after increasing the pressure. Then, both NEOs left the area. After leaving the area, the two NEOs were joined by a “third” NEO, who, at the time, was responding to a control room request to determine the cause of a Unit 1 SWA trouble alarm per the alarm response procedure. All three NEOs proceeded to the SWA area where they found the nitrogen charging valve open for the 12 SWA. This was contrary to the expected position, which was thought to have been closed by the “first” NEO after completing the pressure increase task. With the charging valve open, nitrogen continued to pressurize the 12 SWA and resulted in the alarm condition in the control room. The “second” NEO fully closed the nitrogen charging valve and then vented the 12 SWA to restore pressure to within the normal range. The “third” NEO communicated with the control room and reported that the maximum pressure for the 12 SWA was 157 psig. When pressure in the 12 SWA had been restored to the normal range and the control room overhead alarm had cleared, the NEOs exited the area and went to the control room to explain what had occurred. The “third” NEO reported to the CRS that the nitrogen gas charging valve was not fully closed which led to the alarming condition. None of the NEOs documented their observations in a corrective actions report, nor did the control room supervisor. Control room operators documented in the control room log the maximum pressure reported by the NEOs that responded to the alarming condition.

Based on information gathered during the OI investigation, the NRC determined that the information provided to the control room, including the discussion with the CRS, was inaccurate or incomplete in that the “third” NEO provided inaccurate information to the control room operators about the 12 SWA pressure, which the “first” NEO knew to be incorrect. The “third” NEO also provided incomplete information to the CRS about the cause of the event, which both the “first” and “second” NEOs knew to be incomplete. At the time, neither the “first” nor “second” NEOs attempted to correct the information provided to the control room by the “third” NEO. Based on interviews and a review of information gathered by your staff on this condition, the NRC concluded that the pressure in the 12 SWA was between 159 and 161 psig, which was greater than the reported 157 psig and exceeded the technical specification (TS) limiting condition for operation (LCO) entry criteria specified in Alarm Response Procedure S1.OP-AR.ZZ-0002(Q). The NRC also concluded that the information provided to the control room supervisor, while partially accurate, failed to include important information that the misaligned valve was due to operator error by the “first” NEO while restoring the system to a normal alignment as well as a failure by the “second” NEO to perform the requested second verification. OI determined that the initial valve misalignment event was not willful. OI also determined that the inaccurate and incomplete information reported to the control room was deliberate for all three NEOs since all three knew the reported information to be incorrect and incomplete at the time and since none attempted to correct the report.

The NRC concluded that the inaccurate and incomplete information led to violations of NRC requirements. First, the control room operators logged an incorrect pressure value for the 12 SWA and, as a result, failed to enter an associated TS LCO action statement, both of which are considered minor records violations. Relative to the TS LCO action statement, the NRC determined that no violation occurred since the 12 SWA high pressure condition existed for about 20 minutes, which was allowable by the TS. Second, the NRC concluded that a violation of the 10 CFR Part 50, Appendix B, Criterion XVI, “Corrective Actions,” and the licensee’s corrective action program procedure also occurred since neither the NEOs nor the CRS documented this event as a condition adverse to quality.

The NRC also determined that the NEOs failed to reveal the cause of the valve misalignment event and ensure that the condition adverse to quality was entered in the licensee’s corrective action program by documenting the condition in a notification report. In addition, the NRC determined that the CRS should have reasonably concluded that the event was caused by valve misalignment and, therefore, should have entered the condition adverse to quality in the licensee’s corrective action program by documenting the condition in a notification report. This determination was made by the NRC because the CRS knew that an NEO had been dispatched to the 12 SWA to raise pressure prior to the alarm condition occurring, and was subsequently informed by the NEOs that the gas charging valve was found not fully closed. The NRC did not determine that the CRS’s actions were willful. However, since neither the NEOs nor the CRS documented the condition adverse to quality, the NRC concluded this was a violation of 10 CFR Part 50, Appendix B, Criterion XVI, “Corrective Action,” as well as the licensee’s corrective action program implementing procedures.

The NRC considered that the severity level (SL) of the violation most closely fits SL IV under the NRC Enforcement Policy although NRC considered escalating the severity to SL III because the violation was, in part, deliberate. However, because the NEOs were neither

licensed operators nor supervisors at the time of the event and because the underlying significance of the violation was low since the service water system TS requirements were met, the NRC determined that SL escalation was not warranted.

The NRC also considered issuing a non-cited violation (NCV) for this issue because your staff initiated an investigation immediately after discovery of the issue and took significant remedial action commensurate with the circumstances in order to create a deterrent effect within the organization relative to reporting inaccurate or incomplete information. Some of these actions included suspension and issuance of written reprimands to the individuals involved. However, because (1) your staff did not become aware of this event until 2 years after its occurrence, (2) your staff did not inform the NRC of the occurrence when it was finally identified, (3) the incident was not isolated in that it involved deliberate acts by three NEOs, and (4) the human performance issues were not addressed by your corrective action program when they occurred; the NRC concluded that the violation will be cited as described in the enclosed Notice of Violation (Notice).

You are required to respond to this letter and the enclosed Notice and should follow the instructions specified in the Notice when preparing your response. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

Please note that final NRC documents, such as the OI report described above, may be made available to the public under the Freedom of Information Act (FOIA) subject to redaction of information appropriate under FOIA. Requests made under the FOIA should be made in accordance with 10 CFR 9.23, “Requests for Records.”

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC’s document system (ADAMS) accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction.

Sincerely,

/RA/

David C. Lew, Director
Division of Reactor Projects

Docket No. 50-272
License No. DPR-70

Enclosure: Notice of Violation

cc w/encl:
T. Joyce, Site Vice President - Salem
D. Winchester, Vice President Nuclear Assessments
W. F. Sperry, Director Business Support
C. J. Fricker, Salem Plant Manager
J. J. Keenan, General Solicitor, PSEG
M. Wetterhahn, Esquire, Winston and Strawn, LLP
L. A. Peterson, Chief of Police and Emergency Management Coordinator
P. Baldauf, Assistant Director, Radiation Protection and Release Prevention, State of New Jersey
K. Tosch, Chief, Bureau of Nuclear Engineering, NJ Dept. of Environmental Protection
H. Otto, Ph.D., Administrator, Interagency Programs, DNREC Division of Water Resources, State of Delaware
Consumer Advocate, Office of Consumer Advocate, Commonwealth of Pennsylvania
N. Cohen, Coordinator - Unplug Salem Campaign
W. Costanzo, Technical Advisor - Jersey Shore Nuclear Watch
E. Zobian, Coordinator - Jersey Shore Anti Nuclear Alliance

DISTRIBUTION w/encl:

ADAMS (PARS)
SECY
CA
OEMAIL
OEWEB
L. Reyes, EDO
W. Kane, DEDR
B. Sosa, OEDO
C. Carpenter, OE
S. Merchant, OE
L. Sreenivas, OE
L. Trocine, OE
L. Lopez, OE
O. Samuel, OE
L. Chandler, OGC
B. Jones, OGC
M. Elwood, OGC
J. Schlueter, FSME
J. Dyer, NRR
M. Weber, NRR
B. Boger, NRR
Enforcement Coordinators RII, RIII, RIV
E. Hayden, OPA
H. Bell, OIG
G. Caputo, OI
L. Tremper, OC
D. Screnci/N. Sheehan, RI
S. Collins, RA
M. Dapas, DRA
D. Lew, DRP
J. Clifford, DRP
M. Gray, DRP
D. Holody, ORA
K. Farrar, RI
R. Summers, RI
C. O'Daniell, RI
R1DRP_Mail
Region I OE Files (with concurrences)

SUNSI Review Complete: mxg3 (Reviewer's Initials)

DOCUMENT NAME:C:\FileNet\ML070250332.wpd
After declaring this document "An Official Agency Record" it ~~will~~/**will not** 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/ORA		RI/ORA		RI/RC		RI/OI	
NAME	MGray		RSummers		DHolody		KFarrar		EWilson	
DATE	11/17/06		11/17/06		11/20/06		11/17/06		11/17/06	

OFFICE	HQ/OGC		HQ/OE		RI/DRP					
NAME	MBupp NLO		CCarpenter (DSolorio for)		DLew					
DATE	12/21/06		12/21/06		01/25/07					

OFFICIAL RECORD COPY

*see previous concurrence page

NOTICE OF VIOLATION

Public Service Enterprise Group
Salem Generating Station Unit 1

Docket No. 50-272
License No. DPR-70
EA-06-205

During an NRC investigation completed by the NRC Office of Investigations on June 28, 2006, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

> 10 CFR 50.9(a) requires, in part, that information required by license conditions to be maintained by the licensee shall be complete and accurate in all material respects.
>
> 10 CFR Part 50, Appendix B, Criterion XVI, “Corrective Action,” requires, in part, that measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected.
>
> Public Service Enterprise Group (PSEG) Procedure NC.WM-AP.ZZ-0000(Q), "Notification Process," Revision 6, dated June 24, 2003, Section 3.1, required PSEG personnel to identify and document a condition adverse to quality in the corrective action program by using a notification. Section 7.2 of this procedure defined a condition adverse to quality, in part, as a condition that has the potential to affect a safety-related function of systems, structures, or components.
>
> Contrary to the above, on July 3, 2003, PSEG personnel did not promptly identify a condition adverse to quality that had the potential to affect a safety-related function of the service water system when a system valve alignment error led to the 12 service water accumulator pressure exceeding limits specified in Technical Specification 3.6.1.1. Specifically, a gas charging valve was inadvertently left open (misaligned) after a work task causing the accumulator pressure to exceed the technical specification limits for the system. The failure to identify the condition adverse to quality was (1) a result of the nuclear equipment operators, who identified the valve misalignment, providing incomplete and inaccurate information to control room personnel regarding the accumulator maximum pressure and the cause of the valve misalignment and (2) a failure by the control room supervisor to recognize the condition adverse to quality based on personal knowledge of the work task and the information provided by the equipment operators, even though some incomplete or inaccurate information was described. Neither the equipment operators nor the control room supervisor ensured that this condition adverse to quality was promptly identified and corrected by documenting the condition using a notification report.
>
> This is a Severity Level IV violation (Supplement 1).

Pursuant to the provisions of 10 CFR 2.201, Public Service Enterprise Group is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555, with a copy to the Regional Administrator, Region I, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation; EA-06-205"

and should include for each violation: (1) the reason for the violation or, if contested, the basis for disputing the violation or severity level; (2) the corrective steps that have been taken and the results achieved; (3) the corrective steps that will be taken to avoid further violations; and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

Because your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS) accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html, to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

In accordance with 10 CFR 19.11, you may be required to post this Notice within 2 working days.

Dated this 25th day of January 2007.