U.S. NUCLEAR REGULATORY COMMISSION

REGION I

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Report No:	50-272/99-07, 50-311/99-07
Licensee:	PSEG Nuclear LLC.
Facility:	Salem Nuclear Generating Station, Units 1 & 2
Location:	P.O. Box 236 Hancocks Bridge, NJ 08038
Dates:	July 12 - August 29, 1999
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SUMMARY OF FINDINGS

Salem Generating Station, Units 1 & 2
NRC Inspection Report 50-272 & 311/99-07

The report covered a seven-week period of resident inspection using the guidance contained in NRC Inspection Manual Chapter 2515*. Additionally, it includes two announced baseline inspections conducted by region-based inspectors.

Inspection findings were assessed according to potential risk significance and were assigned colors of *green, white, yellow, or red.* The inspection resulted in only *green* findings, which were indicative of issues that, while not necessarily desirable, represented little risk to safety. *White* findings would have indicated issues with some increased risk to safety and which may have required additional NRC inspections. *Yellow* findings would have indicated more serious issues with higher potential risk to safety and would have required the NRC to take additional actions. *Red* findings would have represented an unacceptable loss of margin to safety and would have resulted in the NRC taking significant actions that could have included ordering the plant to shut down. The findings, considered in total with other inspection findings and performance indicators, will be used to determine overall plant performance.

Cornerstone: Initiating Events

- Green. During the implementation of design change package 1EE-0436, some fire wrap was inappropriately removed such that UFSAR-described cable separation criteria were not met. The risk significance of this issue was low because only one train of safe shutdown equipment was affected. This issue represented a non-cited violation of 10 CFR 50, Appendix B Criterion III. (Section 1R05)

- Green. Unit 2 operators were slow in reducing the oxygen concentration in the waste gas decay tank to levels below those potentially explosive and exceeded the time limit required by technical specification 3.11.2.5. The risk associated with this event was minimal because all fire protection equipment remained available. This incident represented a non-cited violation of the technical specification. (Section 1R24)

Cornerstone: Barrier Integrity

- Green. A pressure/vacuum relief system containment isolation valve (2VC5) failed to stroke within the required time, and control room operators isolated the affected containment penetration (two valves in line) in accordance with technical specification (TS) 3.6.3. However, several hours later operators reopened the valves in the affected containment penetration to reduce containment building pressure despite the continued inoperability of the 2VC5 valve. This action was a non-cited violation of the noted TS action statement. The risk associated with this issue was minimal based on the short duration that the valve was open and the operability of the second valve in the penetration. (Section 1R03.1)

Cornerstone: Occupational Radiation Safety

- Green. PSEG operators inadvertently vented radioactive gas into the Unit 2 auxiliary building. The plant vent and auxiliary building air radiation monitors detected increased radiation levels, which remained well below technical specification limits. Errors by control room and field operators, including failure to follow procedures, contributed to the incident. The procedural non-compliances represented a non-cited violation. (Section 2OS2.1)

Cornerstone: Public Radiation Safety

- Green. The carbon adsorber (activated charcoal) in the auxiliary building ventilation exhaust system was operated at an air flow in excess of the specified maximum. Operators declared the adsorber inoperable until engineering department personnel assessed the potential impact of this occurrence, which was later determined to be negligible. This issue had low safety significance since the excessive flow rate did not affect the adsorber's ability to filter radioiodine. Insufficient attention to detail by a control room operator had resulted in this incident, which represented a non-cited violation of technical specification 6.8.1. (Section 1R22)

Cornerstone: Physical Protection

- Green. Security personnel did not properly search a hand-carried package prior to granting it unrestricted access to the site protected area (PA). Specifically, guards permitted a plant worker to bypass the x-ray machine and carry a large bag of moving blankets into the PA without a search of the bag's contents. Later examination of the bag's contents yielded no contraband, and this incident represented a non-cited violation. (Section 3PP1)

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Report Details

SUMMARY OF PLANT STATUS

Unit 1 began the period at 100% power. On August 14, 1999, control room operators commenced a power level coastdown due to end-of-life reactor fuel depletion. On August 20, control room operators initiated a manual main turbine generator runback to 47% power due to an unexpected trip of the 11 steam generator feed pump. Operators returned the unit to near full power operation on August 22 and continued with the coastdown until the end of the period.

Unit 2 began the period at 100% power. On August 21, 1999, control room operators reduced power to approximately 45% for scheduled main turbine valve testing. Operators returned the unit to full power operation on August 22, where it remained until the end of the period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R03 Emergent Work

.1 Unit 2 Containment Isolation Valve

a. Inspection Scope

The inspectors observed PSEG's response to an emergent work activity associated with the Unit 2 pressure/vacuum relief system outboard containment isolation valve (2VC5). This air-operated butterfly-type valve failed to stroke closed within the required time during a routine test at 12:40 a.m. on August 17, 1999. The inspectors also reviewed PSEG's compliance with applicable technical specifications while following up on this issue.

b. Observations and Findings

Upon the initial determination that the 2VC5 valve failed to stroke within the required two seconds, control room operators appropriately declared the valve inoperable and carried out the action statement requirements of technical specification (TS) 3.6.3. Specifically, the operators completed action b. of the TS by closing and deactivating 2VC6 (the pressure/vacuum system inboard isolation valve) within four hours. Maintenance technicians and engineering personnel promptly began troubleshooting efforts to resolve this issue since isolation of the containment penetration prevented operators from being able to vent the containment building as needed to remain below the maximum allowed building internal pressure of 0.3 psig (specified by TS 3.6.1.4).

Later, when PSEG judged that the 2VC5 valve would not be restored to an operable condition before containment building pressure reached a pressure of 0.3 psig, operators reopened 2VC5 and 2VC6 under administrative control for approximately 1.5 hours to relieve pressure (3:34 p.m. to 4:58 p.m.). At 6:37 p.m. maintenance technicians successfully completed repairs to the 2VC5 and achieved satisfactory stroke time test

results. The slow valve operation was attributed to foreign material discovered in the active elements of the valve's air actuator. PSEG appropriately recorded the 2VC5 failure in their corrective action program and properly assessed the condition as a maintenance rule system functional failure, needing a root cause assessment

The inspectors determined that opening the penetration while 2VC5 remained inoperable and in the action statement was in violation of TS action statement b. Control room operators acted on PSEG management's interpretation of an asterisk (*) associated with the TS 3.6.3 limiting condition for operation (LCO), which states in part that "normally closed (containment isolation) valves may be opened on an intermittent basis under administrative control." However, the inspectors concluded that this note applies only to OPERABLE valves since the asterisk appears in the statement of the LCO, not in the TS action statement.

PSEG management used the TS 3.6.3 basis description in the Westinghouse Improved Standard TS (NUREG-1431) as a partial justification for their interpretation. While the NUREG-1431 description would permit this activity, the inspectors noted that the analogous asterisk note in the improved Westinghouse TS is included under the action statement section. Similar permission for opening a penetration exists in the applicable Hope Creek action statement. The inspector agreed that the action of temporarily opening a penetration while in the action statement was an acceptable action in some instances, but that literal interpretation of the Salem TS did not permit this action.

The inspectors consulted an NRC senior risk analyst to establish the risk significance of this issue (i.e., opening the pressure/vacuum relief penetration under administrative control). This evaluation, which assessed the probability of a large break loss of coolant accident when 2VC5 and 2VC6 valves were open, and concluded that the risk associated with this activity was low (licensee response band - Green), based on the short duration and the continued operability of the second valve in the line. Additionally, PSEG entered this TS compliance issue into their corrective action program as notification #20003919, with the intent of changing TS 3.6.3 to include the asterisk note in the action statement section. Therefore, the violation of TS 3.6.3 is being treated as a non-cited violation consistent with the Interim Enforcement Policy for pilot plants. **(NCV 50-311/99-07-01)**

.2 Unit 1 Containment Fan Cooler Units

a. Inspection Scope

The inspectors evaluated PSEG's resolution of an issue involving the unexpected backward rotation of the 13 and 14 containment fan coolers when idle, which potentially rendered the units inoperable.

b. Observations and Findings

There were no findings identified.

1R04 Equipment Alignment

.1 Unit 1 Component Cooling Water System

a. Inspection Scope

The inspectors performed a detailed walkdown of the Unit 1 component cooling water (CCW) system to verify that the system was in its proper configuration to support normal and emergency operation. CCW is a risk-important system which provides cooling water to numerous other safety-related systems and components.

b. Observations and Findings

Overall, the inspectors determined that the system was aligned properly with no major deficiencies which would prevent its successful operation. The inspectors did identify several minor issues which PSEG either corrected immediately or placed in their corrective action program for subsequent evaluation and resolution. For example, several CCW system valves had potassium chromate (a toxic corrosion inhibitor) residue on them with no deficiency tags applied. Two hoses were connected to system drain valves which had no caution tags to ensure that they remained closed. Temporary scaffolding near the 11 CCW pump did not receive a seismic qualification review as required by PSEG's scaffolding program described in procedure NC.NA-AP.ZZ-0023. This latter failure to follow a required procedure constitutes a violation of minor significance and is not subject to formal enforcement action.

.2 Unit 2 High Head Safety Injection System

a. Inspection Scope

The inspectors completed a partial walkdown of the Unit 2 high head safety injection system to verify that the system was properly aligned to support normal and emergency operation.

b. Observations and Findings

There were no findings identified.

1R05 Fire Protection

a. Inspection Scope

The inspectors followed up on a July 19, 1999, incident involving the removal of FS-195 fire wrap material from a Unit 1 electrical cable raceway, which resulted in a non-compliance with the electrical separation criteria Section 8.1.4.2.4 of the Salem Updated Final Safety Analysis Report (UFSAR).

b. Observations and Findings

PSEG personnel exhibited poor work coordination between the maintenance and engineering staffs during the implementation of design change package (DCP) 1EE-0436, which resulted in a failure to comply with UFSAR-described cable separation criteria. Specifically, maintenance workers removed FS-195 fire wrap material from channel B safety-related (SR) cable trays in the auxiliary building without first ensuring that there was adequate electrical separation from close proximity non-SR (NSR) cables. The UFSAR requires that SR cables must have a minimum 18-inch vertical and 12-inch horizontal separation from NSR cables. PSEG engineering personnel discovered this issue after maintenance technicians removed the fire wrap, and directed that the cables be immediately re-wrapped to correct the deficiency. The inspectors concluded that the failure to comply with the UFSAR cable separation criteria was a violation of 10 CFR 50 Appendix B Criterion III (Design Control).

This issue was determined to be a "Green" finding with low safety significance, since an electrical fault in the NSR cables would affect only the SR channel B cables. The Salem design only requires two channels to achieve post-fire safe shutdown. Redundant A and C channels would have been available for safe shutdown during a design basis event while the B channels were unprotected. As such, this issue is being treated as a non-cited violation in accordance with the interim enforcement policy for pilot plants. PSEG entered the issue into their corrective action program as notification #20001052. **(NCV 50-272/99-07-02)**

1R09 Inservice Testing

a. Inspection Scope

The inspectors observed routine inservice testing of the service water inlet check valves to the 2B emergency diesel generator and selected key valves in the Unit 2 component cooling water (CCW) system. The inspectors compared the associated test result data with technical specification 4.0.5 and American Society of Mechanical Engineers Boiler and Pressure Vessel Code Section XI criteria. Regarding the CCW system testing, the inspectors also confirmed that valve remote position indication was performed every two years.

b. Observations and Findings

There were no findings identified.

1R10 Large Containment Valve Leak Rate and Status Verification

a. Inspection Scope

The inspectors observed leak rate testing of the Unit 2 containment building air lock required by technical specification 4.6.1.3.a. Additionally, the inspectors reviewed data collected from other recent surveillance tests performed on all four airlocks located in the

Unit 1 and 2 containment buildings. Lastly, performance monitoring of the Unit 1 and 2 purge/vacuum relief valves was examined to verify that PSEG tracked the total amount of time that these valves were opened in a calendar year.

b. Observations and Findings

There were no findings identified.

1R11 Licensed Operator Requalification

a. Inspection Scope

The inspectors reviewed the Licensed Operator Requalification Program for reactor operators (ROs) and senior reactor operators (SROs) to verify that PSEG was ensuring safe power plant operation through training that complies with NUREG-1021, *"Operator Licensing Examination Standards for Power Reactors"* and 10 CFR 55. The inspectors also witnessed operator testing and reviewed written tests to verify PSEG's effectiveness in evaluating operators and in revising the training program based on operator performance. In addition, the inspectors observed the use of procedures and reviewed training records and operator attendance to verify compliance with license conditions in accordance with 10 CFR 55.53.

b. Observations and Findings

The inspector identified an issue regarding the appropriateness of guidance in the residual heat removal (RHR) system operating procedure regarding RHR flow limits for mid-loop operation vs. shutdown cooling operations. While observing an operator perform (JPM) (job performance measure) 0050050101, *"Swap Operation RHR Loops,"* the inspector noted that the evaluator initially failed the operator for not following procedures. The operator did not return the RHR flow to 1800-3000 gpm as specified by the S2-OP-SO.RHR-0001(Q), *"Initiating RHR."* Instead, the operator set the flow to 3200 gpm, the condition of the loop which was removed from service. The initial conditions for the JPM were shutdown cooling operations. Also, PSEG noted that, to date, four other operators had failed the same JPM for the same reason. Based on this, the inspector questioned the accuracy of the JPM acceptance criteria and the related operating procedure.

Subsequent engineering evaluations showed that the upper limit of 3000 gpm was necessary only for reactor coolant system mid loop operation of the RHR system and the limit was not necessary for protection of the loop components. The evaluation further showed that the design flow of the pump (4500 gpm) could be used as the upper limit of flow and not adversely affect any other components in the system for shutdown cooling operation. The applicable operating procedure was not clear in distinguishing mid loop operation versus the shutdown cooling mode of operation. PSEG initiated action to review and enhance, if needed, all procedures related to the RHR system, including the applicable training materials for JPMs and simulator use, and feedback for all operators.

Evaluation of the issue's risk determined that the finding had minimal risk significance, due to the nature of operator training on the simulator and the negligible probability of adversely affecting reactor operations.

1R12 Maintenance Rule Implementation

a. Inspection Scope

The inspectors assessed PSEG's maintenance rule (M-rule) implementation for the station air and control air systems following a series of station air compressor (SAC) trips. The inspectors also reviewed PSEG's actions following an unexpected trip of the gas turbine generator (GTG) on August 14, 1999. As part of this latter effort, the inspectors examined the current reliability and unavailability data for the GTG, and reviewed the minutes from a 1998 expert panel meeting at which PSEG raised the system's unavailability performance criteria.

b. Observations and Findings

Station Air/Control Air System

PSEG personnel were slow to initiate corrective actions following the noted SAC trips. Specifically, during the week of July 19, 1999, there were multiple SAC trips which resulted in automatic starts of emergency control air compressors (ECAC). However, no notifications (corrective action inputs) were written to document these events so that engineering personnel could assess them for system functional failures. In accordance with PSEG procedure SE.MR.SA.02, *"System Function Level Maintenance Rule Scoping and Risk Reference,"* one functional failure description for the station air system is "any SAC failure which results in an automatic ECAC start." The cognizant system engineer later identified this deficiency and initiated the necessary notifications. Additionally, the Salem M-rule coordinator initiated a notification (#20003713) to document that the unplanned ECAC starts had not been properly documented for system reliability evaluation.

Gas Turbine Generator

Until prompted by the inspectors, PSEG failed to initiate a notification in accordance with their corrective action program for the August 4, 1999, trip of the GTG. Specifically, the day after the GTG trip, the inspectors learned that PSEG technicians completed repairs to the unit and that the GTG had been successfully re-tested. The inspectors questioned Salem operators and work management center personnel regarding the status of the notification describing the trip and discovered that none had been generated. In accordance with procedure NC.WM-AP.ZZ-0000(Q), *"Notification Process,"* equipment problems require timely and accurate reporting (into the corrective action program) in part to allow engineers to perform accurate reliability and unavailability assessments for systems in the scope of the maintenance rule. After the inspectors raised this concern, PSEG operators initiated notification #20002427.

The inspectors determined that the cognizant system engineer properly assessed the GTG trip as a preventable system functional failure which caused the unit's reliability performance criterion to be exceeded. The engineer initiated a timely notification identifying that this performance criterion had not been met.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed operability evaluation (OE) 97-017A ,*"Appendix R Lighting and Ventilation Issues,"* which affected both Salem units. Applicable design and licensing basis information was examined and OE compensatory measures were assessed. The inspectors verified that PSEG operations personnel periodically reviewed the OE in part to expedite its resolution.

b. Observations and Findings

There were no findings identified.

1R19 Post-Maintenance Testing

a. Inspection Scope

The inspectors observed post maintenance testing of the 24 containment fan cooler unit and the 1B emergency diesel generator following planned online maintenance activities. Additionally, the inspectors compared the resultant test data with established acceptance criteria, and reviewed the scope of the testing to ensure that all components affected by maintenance were appropriately tested.

b. Observations and Findings

There were no findings identified.

1R22 Surveillance Testing

.1 Auxiliary Building Ventilation System

a. Inspection Scope

The inspectors reviewed the circumstances surrounding the improper performance of surveillance test procedure S2.OP-ST.ABV-0001(Q), *"Plant Systems - Auxiliary Building Ventilation"* on August 6, 1999. The adequacy of PSEG's followup actions was also assessed.

b. Observations and Findings

Control room operator error resulted in operation of the auxiliary building ventilation exhaust system carbon adsorber (activated charcoal) in excess of its design flow rate. Specifically, the operator did not properly complete step 5.2.5 of the above noted test procedure in that he selected "22 HEPA plus charcoal filter" to the normal areas of the auxiliary building instead of "22 HEPA plus charcoal filter" to emergency areas. This failure to properly implement the test procedure was a violation of technical specification (TS) 6.8.1.a. PSEG properly entered this issue into their corrective action program as notification #20002369.

Once the operators identified the error, they stopped the test and correctly entered TS action statement 3.7.7.b for an inoperable carbon adsorber. PSEG engineering personnel subsequently performed an analysis which concluded that the excessive flow rate did not affect the adsorber's ability to filter radioiodine. The inspectors reviewed this analysis and determined that PSEG had adequately supported their conclusion. The inspectors evaluated the risk significance of this event using the Public Radiation Safety significance determination process. This analysis concluded that the finding was within the licensee response band (Green), based on the carbon adsorber being capable of performing its function. As such, this violation is being treated as a non-cited violation consistent with the Interim Enforcement Policy for pilot plants. **(NCV 50-311/99-07-03)**

.2 Routine Surveillance Observations

a. Inspection Scope

The inspectors observed TS-required surveillance testing of the 1B and 2B emergency diesel generators and the 21 residual heat removal pump. Activities observed included pre-job briefings, equipment checks by equipment operators and system engineers, and actual operation of the systems. The inspectors compared recorded test results with TS surveillance acceptance criteria.

b. Observations and Findings

There were no findings identified.

1R23 Temporary Plant Modifications

a. Inspection Scope

The inspectors examined the following three temporary modification packages prepared during the report period to determine if these changes, when implemented, would negatively impact the safety functions of any plant equipment:

- 13 reactor coolant loop hot leg temperature RTD removal from control circuit
- Containment building external cooling using raw water and temporary pump
- Operation of CFCU's in high speed with service water flow control valve fully open

The inspectors reviewed the associated 10 CFR 50.59 applicability reviews and safety evaluations and interviewed the engineering personnel responsible for preparing the modifications.

b. Observations and Findings

There were no findings identified.

1R24 Event Follow-up

(Closed) LER 50-311/99-005-00: failure to meet technical specification (TS) action statement requirements for high oxygen concentration in the waste gas holdup system. On May 4, 1999, Unit 2 operators failed to reduce waste gas decay tank (WGDT) oxygen concentration within the time limit required by TS 3.11.2.5. PSEG personnel adequately assessed the causes of the event, and developed appropriate corrective actions to address WGDT oxygen intrusion and the untimely reduction of the resultant oxygen concentration. Although a potentially explosive gas mixture existed, no safety consequences resulted from this event. Because this event did not impair or degrade any fire protection features, the inspectors determined that it screened out of the fire protection risk significance determination methodology. This violation of TS 3.11.2.5 is being treated as a non-cited violation, consistent with the Interim Enforcement Policy for pilot plants. This violation is in PSEG's corrective action program under notification #990504273 and #990510198. **(NCV 50-311/99-07-04)**

Cornerstone: Emergency Preparedness [EP]

1EP1 Drill, Exercise, and Actual Events

a. Inspection Scope

The inspectors observed two operations crews during licensed operator requalification training to evaluate the adequacy of PSEG's emergency plan implementation with regard to classification of events, notifications to offsite agencies, and formulation of protective action recommendations. The inspectors reviewed corrective action program documentation to ensure that PSEG identified and resolved problems related to performance in this area.

b. Observations and Findings

The inspectors noted one minor deficiency during the training that was not detected by PSEG evaluators. During one scenario the primary communicator provided an incorrect emergency action level number to offsite agencies, partly due to the number being unclear on the initial contact message form. The inspectors raised the issue at the post-scenario critique and discussed the causes and potential consequences of the error with the responsible operating crew.

2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety [OS]

2OS1 Access Control

a. Inspection Scope

The inspectors reviewed the access control program by examining the controls PSEG established for exposure significant areas, including postings, markings, dosimetry, surveys, and alarm set points. Areas in both Salem units were evaluated.

b. Observations and Findings

There were no findings identified.

2OS2 ALARA Planning and Controls

.1 Waste Gas in Auxiliary Building

a. Inspection Scope

The inspectors followed up on an August 12, 1999 event involving the inadvertent discharge of radioactive gas from the 23 waste gas decay tank (WGDT) to the Unit 2 auxiliary building. At the time of the event, operators were preparing to sluice ion exchanger resin to the Unit 2 spent resin storage tank (SRST).

b. Observations and Findings

Errors by control room and field operators resulted in the inadvertent emptying of the SRST. This led to venting of the 23 WGDT, which maintains cover gas on the SRST, to the auxiliary building via the floor drains. The plant vent and auxiliary building air radiation monitors detected increased radiation levels, but remained well below technical specification (TS) limits. The unplanned release of radioactive gas was terminated when an operator closed the SRST drain valve.

Procedure S2.OP-SO.CVC-0018(Q), *"21 Evaporator Distillate Ion Exchanger - Resin Removal,"* directs operators to drain the SRST in preparation for resin sluicing, but only to a minimum level of 10 - 20% full. In this case field operators failed to comply with this requirement and emptied the tank. Additionally, control room operators did not adhere to the alarm response procedure for "SRST low level" (10%) or "23 WGDT low pressure" (10 psig). Further, the inspectors noted from a review of control room narrative logs that operators were aware of increasing radiation levels at 10:30 a.m. on August 12, 1999, but did not enter abnormal operating procedure S2.OP-AB.RAD-0001, *"Abnormal Radiation,"* until 11:15 a.m., delaying the offsite dose assessment for the event. These failures to follow required procedures were violations of TS 6.8.1.a, and were entered into PSEG's corrective action program as notification #20002930.

The inspectors employed the Occupational Radiation Safety significance determination process to establish the risk significance of this event. Since there was no ALARA concern, there was no unintended exposure, there was no substantial potential for overexposure, and there was no compromise of PSEG's ability to assess dose consequences, the inspectors concluded that this issue was within the licensee response band (Green). As such, this violation is being treated as a non-cited violation consistent with the Interim Enforcement Policy for pilot plants. **(NCV 50-311/99-07-05)**

.2 Refueling Outage Work

a. Inspection Scope

The inspectors reviewed work performance during the Unit 2 refueling outage (2R10) completed in May 1999. Selected jobs which exceeded their exposure estimates were examined relative to: work integration; coordination between working groups; shielding and other engineering controls to minimize exposures; accuracy of person-hour and effective dose rate estimates; post-job reviews; and ALARA exposure control reports. The inspectors also examined PSEG audits and self-assessments of the ALARA program.

b. Observations and Findings

There were no findings identified.

2OS3 Radiation Monitoring Instrumentation

a. Inspection Scope

The inspectors reviewed and verified the calibration and maintenance records of survey instruments, personnel contamination monitors, and whole body counters. Records of calibration source traceability to the National Institute of Standards and Technology primary standards were also reviewed and verified.

b. Observations and Findings

There were no findings identified.

3. SAFEGUARDS

Cornerstone: Physical Protection [PP]

3PP1 Protected Area Access Control

a. Inspection Scope

On August 18, 1999, the inspectors observed an inappropriate package search by security personnel at the protected area access point.

b. Observations and Findings

Security personnel failed to properly search a hand-carried package prior to granting it unrestricted access to the site protected area. Specifically, guards directed a plant worker to carry a large bag of moving blankets through the personnel portal monitor (metal and explosive detector) and bypass the x-ray machine. The guards then permitted the individual to carry the bag into the protected area without searching the bag's contents. The inspectors questioned the guards about why they did not examine the contents of the bag. One of these individuals defended his actions by stating that the personnel portal monitors would have detected any potential contraband located inside the bag.

The inspectors contacted security department management and relayed their concerns regarding their observations. Management personnel promptly tracked down the individual carrying the bag of blankets and thoroughly and appropriately searched its contents. The inspectors verified that no contraband was discovered. Security management also confirmed that in fact the security guards failed to properly search the bag, and misunderstood the ability of the personnel portal monitors to detect potential contraband. The inspectors concluded that this was a violation of technical specification 6.8.1.d in that guards failed to properly implement section 4.2.1.4 of PSEG's site security plan. PSEG entered this issue into their corrective action program as notification #20003319.

The inspectors assessed the significance of this issue in accordance with the Physical Protection significance determination process. The inspectors determined that there was some potential risk of radiological sabotage associated with this incident, though the failure of the guards to conduct a proper search was not predictable nor easily exploitable. Additionally, the inspectors verified that there were few such events recorded in the last 12 months. Therefore, this finding was assessed as being within the licensee response band (Green) based on the absence of any actual contraband. As such, this violation is being treated as a non-cited violation in accordance with the Interim Enforcement Policy for pilot plants. **(NCV 50-272 & 311/99-07-06)**

4. OTHER ACTIVITIES [OA]

4OA5 Management Meetings

.1 Exit Meeting Summary

On September 8, 1999, the inspectors presented their overall findings to members of PSEG management led by Dave Garchow, Vice President-Technical Support. PSEG management acknowledged the findings presented and did not contest any of the inspectors' conclusions. However, Mr. Garchow expressed concern with regard to the non-cited violation described in Section 1R03 of this report. Specifically, he explained that he and others in his organization believed that Salem technical specification 3.6.3 was unclear and needed to be revised. As such, he was uncertain as to what PSEG operators would do differently if faced with identical circumstances before the noted

revision was completed. The inspectors noted that NRC procedures provide notices of enforcement discretion (NOEDs) for such instances when the TS (wording) does not enable the appropriate action to support the safe operation of the reactor plant.

In addition, the region-based inspectors presented their findings to PSEG management in separate inspection debriefs.

PSEG management also stated that none of the information reviewed by the inspectors during the report period was considered proprietary.

ITEMS OPENED AND CLOSED

Opened/Closed

50-311/99-07-01	NCV	Failure to comply with technical specification 3.6.3 action b. (Section 1R03)
50-272/99-07-02	NCV	Failure to properly control the removal of electrical cable fire wrap material. (Section 1R05)
50-311/99-07-03	NCV	Inadequately performed surveillance procedure. (Section 1R22)
50-311/99-07-04	NCV	Failure to comply with technical specification 3.11.2.5 with required time period. (Section 4OA3)
50-311/99-07-05	NCV	Inadvertent discharge from the 23 waste gas decay tank to the auxiliary building. (Section 4OA3)
50-272 & 311/99-07-06	NCV	Failure to conduct package search in accordance with site security plan. (Section PP1)

Closed

50-311/99-005-00	LER	Failure to comply with technical specification 3.11.2.5 with required time period. (Section 4OA3)

LIST OF ACRONYMS USED

ALARA	As Low As Reasonably Achievable
CCW	Component Cooling Water
CFCU	Containment Fan Cooler Unit
CFR	Code of Federal Regulations
DCP	Design Change Package
ECAC	Emergency Control Air Compressor
GTG	Gas Turbine Generator
HEPA	High Efficiency Particulate Air (Filter)
JPM	Job Performance Measure
LCO	Limiting Condition for Operation
LER	Licensee Event Report
M-Rule	Maintenance Rule
NCV	Non-Cited Violation
NOED	Notice of Enforcement Discretion
NRC	Nuclear Regulatory Commission
NSR	Non-Safety Related
OE	Operability Evaluation
PA	Protected Area
PSEG	Public Service Enterprise Group - Nuclear LLC
psig	pounds per square inch gauge
RHR	Residual Heat Removal
RO	Reactor Operator
RTD	Resistance Temperature Detector
SAC	Station Air Compressor
SR	Safety Related
SRO	Senior Reactor Operator
SRST	Spent Resin Storage Tank
TS	Technical Specification
UFSAR	Updated Final Safety Analysis Report
WGDT	Waste Gas Decay Tank