

January 3, 1999

Mr. Harold W. Keiser
President and Chief Nuclear Officer
PSEG Nuclear LLC
Post Office Box 236
Hancocks Bridge, NJ 08038

**SUBJECT: MID-CYCLE PERFORMANCE REVIEW AND INSPECTION PLAN -
HOPE CREEK NUCLEAR PLANT**

Dear Mr. Keiser:

On December 13, 1999, the NRC staff reviewed the plant performance of the Hope Creek Nuclear Plant during June 1 - November 30, 1999, as reflected in the performance indicators and inspection results, in order to integrate performance information and to plan for inspection activities at your facility through July 31, 2000. The purpose of this letter is to inform you of our plans for future inspections at your facility so that you will have an opportunity to prepare for these inspections and to inform us of any planned inspections which may conflict with your plant activities.

Our review of performance at Hope Creek noted that all performance indicators (PIs) and inspection areas were green (licensee response band). Therefore, we plan to perform only baseline inspections at Hope Creek over the next seven months. The Salem emergency preparedness (EP) program, a program common to Hope Creek, did have a white inspection finding (increased regulatory response band). The performance issue in the EP area related to untimely declaration of emergency events and was described in NRC Inspection Reports 05000272 & 0500031/99009 and 05000354/99007, both dated December 28, 1999. In addition, up until October 1999, there were two Hope Creek PIs which exceeded the white threshold (i.e., *Protected Area Security Equipment Performance Index* and *Safety System Unavailability, RCIC*), but these PIs were based on performance concerns which had been previously addressed.

This letter advises you of our planned inspection effort resulting from the Hope Creek mid-cycle performance review. Enclosure 1 lists the scheduled inspections that are planned through July 31, 2000. The inspection plan is provided to minimize the resource impact on your staff, and to allow for scheduling conflicts and personnel availability to be resolved in advance of inspectors arriving onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The last few months of the inspection plan are tentative and will be addressed at the end-of-cycle performance review in April 2000, which we expect to issue to you in May 2000.

Mr. Harold W. Keiser

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In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be placed in the NRC Public Document Room (PDR). 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 Glenn Meyer at 610/337-5211 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

Original Signed by:

Glenn W. Meyer, Chief
Projects Branch No. 3
Division of Reactor Projects

Docket No. 05000354
License No. NPF-57

Enclosures: 1. Hope Creek Nuclear Plant Scheduled Inspections (January 1 - July 31, 2000)
2. Plant Issue Matrix

cc w/encls:

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Mr. Harold W. Keiser

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HOPE CREEK
Inspection / Activity Plan
01/01/2000 - 07/31/2000

Units	Inspection Activity	Title	No. of Staff on Site	No. assigned to Procedure	Planned Dates Start	End	Inspection Type
	RES 15 - RESIDENT PROCEDURES		2				
1	IP 71111.03	Emergent Work (I,M)		2	01/10/2000	02/26/2000	Other Routine
1	IP 71111.04	Equipment Alignment (I,M,B)		2	01/10/2000	02/26/2000	Other Routine
1	IP 71111.09	Inservice Testing of Pumps and Valves (M)		2	01/10/2000	02/26/2000	Other Routine
1	IP 71111.12	Maintenance Rule Implementation (I,M,B)		2	01/10/2000	02/26/2000	Other Routine
1	IP 71111.13	Maintenance Work Prioritization and Control (I,M,B)		2	01/10/2000	02/26/2000	Other Routine
1	IP 71111.14	Nonroutine Plant Evolutions (I,M,B)		2	01/10/2000	02/26/2000	Other Routine
1	IP 71111.15	Operability Evaluations (M)		2	01/10/2000	02/26/2000	Other Routine
1	IP 71111.16	Operator Workarounds (M)		2	01/10/2000	02/26/2000	Other Routine
1	IP 71111.19	Post Maintenance Testing (M)		2	01/10/2000	02/26/2000	Other Routine
1	IP 71111.22	Surveillance Testing (M,B)		2	01/10/2000	02/26/2000	Other Routine
1	IP 71111.23	Temporary Plant Modifications		2	01/10/2000	02/26/2000	Other Routine
1	IP 71150	Plant Status		2	01/10/2000	02/26/2000	Other Routine
1	IP 71151	Performance Indicator Verification		2	01/10/2000	02/26/2000	Other Routine
	71121 - PI-OCCUPATIONAL EXPOSURE		1				
1	IP 71121.01	Access Control to Radiologically Significant Areas		1	02/07/2000	02/11/2000	Other Routine
1	IP 71121.03	Radiation Monitoring Instrumentation		1	02/07/2000	02/11/2000	Other Routine
	71111.07 - HEAT SINK INSPECTION		1				
1	IP 71111.07	Heat Sink Performance (I,M)		1	02/28/2000	03/02/2000	Other Routine
	71111.12 - DRS MAINT. RULE INSP.(MRI)		1				
1	IP 71111.12	Maintenance Rule Implementation (I,M,B)		1	03/06/2000	03/10/2000	Other Routine
	71330 - BASELINE SECURITY		2				
1	IP 71130.03	Response to Contingency Events		2	03/20/2000	03/24/2000	Other Routine
	71114.01 - EP EXERCISE EVALUATION - PILOT PROGRAM		9				
1	IP 71114.01	Drill and Exercise Inspection		9	04/10/2000	04/14/2000	Other Routine
	71121 - OCCUPATIONAL RADIATION SAFETY		1				
1	IP 71121.01	Access Control to Radiologically Significant Areas		1	04/17/2000	04/21/2000	Other Routine
1	IP 71121.02	ALARA Planning and Controls		1	04/17/2000	04/21/2000	Other Routine
1	IP 71121.03	Radiation Monitoring Instrumentation		1	04/17/2000	04/21/2000	Other Routine
	5/29 EXM - OPER LIC INIT EXAM		3				
1	U01238	HOPE CREEK INITIAL EXAM		3	05/01/2000	05/05/2000	Not Applicable
1	U01238	HOPE CREEK INITIAL EXAM		3	05/29/2000	06/02/2000	Not Applicable
	71111.08 - ISI		1				
1	IP 71111.08	Inservice Inspection Activities (I,B)		1	05/01/2000	05/05/2000	Other Routine

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

HOPE CREEK

Inspection / Activity Plan
01/01/2000 - 07/31/2000

Units	Inspection Activity	Title	No. of Staff on Site	No. assigned to Procedure	Planned Dates Start	Planned Dates End	Inspection Type
	71111.21	- SSFI & MODS	7				
1	IP 71111.17	Permanent Plant Modifications (M,B)		7	07/10/2000	07/14/2000	Other Routine
1	IP 71111.21	Safety System Design and Performance Capability (M)		7	07/10/2000	07/14/2000	Other Routine
1	IP 71111.17	Permanent Plant Modifications (M,B)		7	07/24/2000	07/28/2000	Other Routine
1	IP 71111.21	Safety System Design and Performance Capability (M)		7	07/24/2000	07/28/2000	Other Routine

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

United States Nuclear Regulatory Commission Revised Oversight Process PLANT ISSUE MATRIX

By Cornerstone

Region 1
HOPE CREEK

Date	Source	ID	Type	Cornerstone	Significance Determination	Item Title Item Description/Significance
11/28/1999	1999007	NRC	FIN	Other	N/A	<p>THE INSPECTORS IDENTIFIED TWO ERRORS IN THE REPORTED DATA FOR THE REACTOR COOLANT SYSTEM</p> <p>The inspectors identified two errors in the reported data for the Reactor Coolant System Specific Activity PI. PSEG reported the maximum activity for July 1999 conservatively high due to a data acquisition error. In addition, PSEG used an incorrect value for the TS limit in calculating the PI. PSEG documented these errors in their corrective action process and corrected the TS limit error in their October 1999 PI data submittal.</p> <p>The errors were not significant and the PI remained green.</p>
11/23/1999	1999008	Licensee	FIN	Other	N/A	<p>CONCERNS NOTED WITH INEFFECTIVE CORRECTIVE ACTIONS FOR HUMAN PERFORMANCE ERRORS</p> <p>No significant findings identified; however, there was some concern regarding the # of human performance errors (HPEs) that occurred in all departments over the past 2 years. PSEG & NRC determined that ineffective corrective actions (CAs) regarding HPEs were attributable to some narrowly focused root cause analyses or to poor correlation of causes with CAs. Since improvement plans were being developed, it was too early to assess the resolution to these problems. Follow up action is warranted.</p>
08/29/1999	1999005-01	NRC	NCV	Mitigating Systems	Green	<p>DEGRADED FIRE PROTECTION BARRIER IN THE 117' ELEVATION CABLE SPREADING ROOM</p> <p>NRC inspectors identified a long-standing degraded fire protection barrier in the 117' elevation cable spreading room (CSR). The inspectors identified an open 4 inch floor drain valve that provided a vent path and would have degraded the effectiveness of the automatic CO2 fire suppression system. The NRC staff used the significance determination process (SDP) and determined that this longstanding problem had a minimal impact on safety due to the alternative safe shutdown and additional firefighting capabilities which existed, a conservative assumption for medium degradation of the automatic CO2 suppression system, and the low likelihood of a fire in the CSR. This issue was treated as a non-cited violation.</p> <p>This problem was characterized as a "green" finding due to its very low safety significance.</p>
08/29/1999	1999005-02	NRC	NCV	Mitigating Systems	Green	<p>FAILURE TO IMPLEMENT APPROPRIATE FIRE PROTECTION IMPAIRMENT COMPENSATORY ACTIONS</p> <p>NRC inspectors identified improper fire protection compensatory actions for a degraded condition in the 117' elevation cable spreading room (CSR). PSEG had implemented an hourly firewatch for a degraded fire protection alarm in the 117' elevation CSR, but the Hope Creek fire protection procedures specified a continuous fire watch. This issue was characterized as a "green" finding as it had minimal impact on safety due to the frequency of the existing fire watch and the low likelihood of a fire in the CSR.</p>
08/29/1999	1999005-04	Licensee	NCV	Mitigating Systems	Green	<p>LICENSE CONDITION VIOLATION - CLASS-1E BATTERY CHARGING OPERATION</p> <p>Technicians did not provide adequate fuse protection and isolation for a non-safety-related single cell battery charger installed on the safety-related batteries. This self-identified violation was reported in LER 99-007-00 and was treated as a non-cited violation.</p> <p>This issue was characterized as a "green" finding as the issue had minimal impact on safety as determined by the SDP because the batteries were able to properly perform their safety function.</p>

United States Nuclear Regulatory Commission Revised Oversight Process PLANT ISSUE MATRIX

By Cornerstone

Region 1
HOPE CREEK

Date	Source	ID	Type	Cornerstone	Significance Determination	Item Title Item Description/Significance
06/14/1999	1999004	NRC	FIN	Mitigating Systems	Green	<p>POOR RISK MANAGEMENT DURING STATION SERVICE WATER (SSW) LOOP OUTAGE</p> <p>The inspectors identified poor risk management administration during a risk significant B station service water (SSW) loop outage. PSEG appropriately determined that the B SSW loop outage was in Hope Creek's highest risk significant category (red) for out-of-service equipment. However, PSEG did not address this higher risk condition properly, in that schedulers did not develop administrative controls and operators did not plan any contingency actions or implement any controls regarding possible adverse equipment actions. There were no actual consequences in that the loop outage was completed as planned.</p> <p>This event was classified as a green finding due to the lack of actual consequences and the short duration of the evolution.</p>
11/28/1999	1999007-01	NRC	NCV	Barrier Integrity	Green	<p>INADEQUATE ACCEPTANCE CRITERIA FOR THE CLOSING TIME FOR THE INBOARD MAIN STEAM LINE I</p> <p>NRC inspectors identified inadequate acceptance criteria for the closing time for the inboard main steam line isolation valves (MSIVs). PSEG had performed a design change and lowered the primary containment instrument gas compressor start set point. The design change calculated a more restrictive MSIV closing time during test conditions to ensure that the MSIVs could close within technical specification (TS) requirements. However, the stroke time test acceptance criteria was not updated. This issue was a non-cited violation. (Section 1R22)</p> <p>The safety significance of this issue was low because the actual closing times were within the new calculated value.</p>
11/28/1999	1999007-02	Licensee	NCV	Barrier Integrity	Green	<p>OPERATORS FAILED TO ADEQUATELY PERFORM PRIMARY CONTAINMENT INTEGRITY VERIFICATIONS</p> <p>Operators identified that they failed to adequately perform primary containment integrity verifications for 11 valves during several monthly verifications within the last year. This was a non-cited violation of TS 4.6.1.1.b (Section 40A.4.4)</p> <p>The NRC staff determined that this deficiency had low safety significance based on the valves being closed when properly verified later and other administrative systems confirming the valves' closed positions during the period of improper verifications.</p>
08/29/1999	1999005-03	Licensee	NCV	Barrier Integrity	Green	<p>LICENSE CONDITION VIOLATION - OPERATION AT REDUCED FEEDWATER INLET TEMPERATURE</p> <p>Control room operators failed to appropriately identify abnormal lineups in the primary containment instrument gas (PCIG) and feedwater heating systems after a reactor recirculation runback. The operators' failure to promptly correct these abnormal lineups placed the plant outside of its licensing basis. In the case of the feedwater heating system abnormal lineup, the plant was returned to 100% power with feedwater inlet temperature at a reduced temperature. The reduced feedwater inlet temperature affected the core thermal performance and placed additional strain on the fuel barrier during the recovery to full power. Reactor engineers did not effectively monitor the plant recovery and contributed to the error in operation with reduced feedwater inlet temperature. The NRC inspectors noted that operation at reduced feedwater temperature is prohibited to protect the fuel barrier integrity. In the case of the abnormal PCIG lineup, operators were indirectly alerted to this lineup by a different alarm 45 minutes after the fact. The abnormal PCIG lineup was then promptly corrected by the operators.</p> <p>This event was characterized as a "green" issue; an NRC risk analyst conducted an assessment of the risk associated with the abnormal PCIG lineup and concluded that the overall plant risk was minimal. The problem related to the fuel barrier had a minimal impact on safety as determined by the SDP because no immediate or long-term degradation of the fuel barrier occurred.</p>

United States Nuclear Regulatory Commission Revised Oversight Process PLANT ISSUE MATRIX

By Cornerstone

Region 1
 HOPE CREEK

Date	Source	ID	Type	Cornerstone	Significance Determination	Item Title Item Description/Significance
08/29/1999	1999005	NRC	FIN	Miscellaneous	N/A	<p>INSPECTORS IDENTIFIED SEVERAL ERRORS IN HISTORICAL PI DATA AND ONE ERROR IN RECENT DAT</p> <p>The inspectors identified several errors in historical data and one error in recent data (since the start of the pilot program and NRC PI submittal) for the Safety System Unavailability, Residual Heat Removal System performance indicator (PI). The NRC inspectors determined that the RHR unavailability remained green (less than 2%) and changed to about 1.3% from 0.8%. The historical errors were carried forward from an old PSEG performance indicator database and were submitted to the NRC on a "best faith effort." The one error in recent data was a failure to include a support system unavailability, specifically station service water, into the RHR unavailability. PSEG initiated Notification 20003722 to correct the RHR unavailability PI, verify all previous NRC PI submittals, and improve the verification processes and validity of future PIs.</p> <p>The Significance Determination Process does not apply to this finding.</p>
07/11/1999	1999004	NRC	FIN	Miscellaneous	N/A	<p>HISTORICAL DATA FOR THE SAFETY SYSTEM UNAVAILABILITY REPORTING ERROR</p> <p>The inspectors identified a reporting error in historical data for the safety system unavailability, heat removal system performance indicator (PI). The error related to an inaccurate estimate of the time the system was required to be available in 1997. The error caused a small increase in this white PI and did not result in the yellow threshold being exceeded. PSEG corrected the error in the next PI submittal.</p> <p>The Significance Determination Process does not apply to this item.</p>

United States Nuclear Regulatory Commission Revised Oversight Process PLANT ISSUE MATRIX

By Cornerstone

Legend

Type Codes:

AV	Apparent Violation
FIN	Finding
NCV	Non-Cited Violation
URI	Unresolved Item
VIO	Violation

ID Codes:

NRC	NRC
Self	Self-Revealed
Licensee	Licensee

AVs are apparent violations of NRC Requirements that are being considered for escalated enforcement action in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Action" (Enforcement Policy), NUREG-1600. However, the NRC has not reached its final enforcement decision on the issues identified by the AVs and the PIM entries may be modified when the final decisions are made.

URIs are unresolved items about which more information is required to determine whether the issue in question is an acceptable item, a deviation, a nonconformance, or a violation. A URI may also be a potential violation that is not likely to be considered for escalated enforcement action. However, the NRC has not reached its final conclusions on the issues, and the PIM entries may be modified when the final conclusions are made.