PSE&G

Public Service Electric and Gas Company P.O. Box 236 Hancocks Bridge, New Jersey 08038

Hope Creek Operations

OCT 11 1995

U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Dear Sir:

HOPE CREEK GENERATING STATION
DOCKET NO. 50-354
UNIT NO. 1
LICENSEE EVENT REPORT 95-009-01

This Supplemental Licensee Event Report is being submitted pursuant to the requirements of 10CFR50(a)(2)(i)(B). This supplement corrects and updates information concerning Corrective Actions and Previous Occurrences.

Sincerely,

M. E. Reddemann
General Manager -
Hope Creek Operations

RAR/tcp

Attachment
SORC Meeting 95-097
c Distribution

190099

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NRC FORM 366 (4-95) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104
EXPIRES 04/30/98

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS MANDATORY INFORMATION COLLECTION REQUEST: 50.0 HRS. REPORTED LESSONS LEARNED ARE INCORPORATED INTO THE LICENSING PROCESS AND FED BACK TO INDUSTRY. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (T-6 F33), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
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TITLE (4)

Condition Prohibited by the Plant Technical Specifications: Noncompliance with the Surveillance Requirements of Technical Specification 4.6.3.5.b, Explosive Squib Valve Testing and Replacement

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
06	13	95	95	-- 009 --	01	10	11	95		05000
									FACILITY NAME	DOCKET NUMBER
										05000

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)					
POWER LEVEL (10)	100	20.2201(b)	20.2203(a)(2)(v)	X	50.73(a)(2)(i)(B)		50.73(a)(2)(viii)
		20.2203(a)(1)	20.2203(a)(3)(i)		50.73(a)(2)(ii)		50.73(a)(2)(x)
		20.2203(a)(2)(i)	20.2203(a)(3)(ii)		50.73(a)(2)(iii)		73.71
		20.2203(a)(2)(ii)	20.2203(a)(4)		50.73(a)(2)(iv)		OTHER
		20.2203(a)(2)(iii)	50.36(c)(1)		50.73(a)(2)(v)		Specify in Abstract below or in NRC Form 366A
		20.2203(a)(2)(iv)	50.36(c)(2)		50.73(a)(2)(vii)		

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Include Area Code)
Tom Kirwin, Outage Manager	(609) 339-3115

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)			EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
	YES (If yes, complete EXPECTED SUBMISSION DATE).	X NO				

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On July 13, 1995, LER 95-009-00 was submitted in accordance with 10CFR50.73 to document an event regarding a condition prohibited by Technical Specifications. This supplement to that LER is being submitted to correct the Previous Occurrences section and to correct and update Corrective Actions. Technical Specification 4.6.3.5.b requires the firing of one Traversing In-core Probe (TIP) system explosive squib valve every 18 months. The records indicated that the last squib surveillance was performed during refuel outage 3 in 1991. In addition, all five squib valve explosive charges were found to be past their manufacturer's expiration date. The Senior Nuclear Shift Supervisor was notified that the TIP system shear valves were inoperable. All TIP containment penetrations were immediately isolated in accordance with the action requirements of Technical Specification 3.6.3. The root cause of this event is personnel error in that the proper information was not entered into the workorder system. Corrective actions include completing the 18 month surveillance, replacing the explosive charges in all five shear valves, correcting the recurring task database, and conducting a review of other Technical Specification surveillance test procedures and the work order database.

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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

PLANT AND SYSTEM IDENTIFICATION

General Electric - Boiling Water Reactor (BWR/4)
Traversing In-core Probe System Explosive Squib Valve, EIIS Identifier: IG

IDENTIFICATION OF OCCURRENCE

TITLE: Condition Prohibited by the Plant Technical Specifications: Non-compliance with the Surveillance Requirements of Technical Specification 4.6.3.5.b, Explosive Squib Valve Replacement

Discovery Date: June 13, 1995
Event Occurrence: June 1994
Event Time: N/A

CONDITIONS PRIOR TO OCCURRENCE

Plant in OPERATIONAL CONDITION 1 (Power Operations)
Reactor Power 100% of Rated, 1080 Mwe

DESCRIPTION OF OCCURRENCE

In preparation for the upcoming refuel outage 6, Outage Planning was performing a review of work orders to determine which activities required pre-staged tagouts for maintenance. Technical Specification (TS) 4.6.3.5.b requires the firing of one squib every 18 months. This type of activity would normally have a tagout pre-staged for the replacement of the fired squib. The planner who was conducting the review could not find the work order for the planned tagout of the Traversing In-core Probe (TIP) system explosive squib valve replacement. This prompted the planner to conduct a review of the previous work order history for the squib firing and replacements. The records indicated that the last squib surveillance was performed during refuel outage 3 in 1991. In addition, all five squib valve explosive charges were found to be past their manufacturers expiration date. The Senior Nuclear Shift Supervisor (SNSS - SRO licensed) was notified that all the TIP system shear valves were inoperable. All TIP containment penetrations were immediately isolated in accordance with the action requirements of TS 3.6.3.

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ANALYSIS OF OCCURRENCE

The traversing in-core probe system utilizes a double valve arrangement outside containment to provide for containment isolation in the event of an accident. The inboard ball valve receives an auto signal to close in the event of an accident. The auto isolation signal also provides a retract signal to the TIP probe if it is in use at the time of the isolation signal. In the event the tip probe does not retract, preventing the inboard ball valve from closing, the outboard TIP shear valve is manually actuated to isolate the penetration. One shear valve is required to be tested every 18 months with all five valves tested in 90 months. Additionally, technical specification 4.6.3.5.b states that no explosive charge will remain in service beyond its shelf or operating life.

An investigation into this event determined that the wrong test frequency had been entered into the work order computer for this surveillance test (ST) requirement. The person who initially entered the data specified 90 months as the overdue date for the ST, and included a statement in the second page of the work order description that one valve was to be tested every 18 months. When this individual resigned in 1991, the responsibility for scheduling the testing shifted to another individual in the outage scheduling group. The new person scheduled the work orders on the indicated overdue date of 90 months on the work order. He did not review the entire work order description nor was he aware of the 18 month frequency to test one of the five valves.

The shelf life and operating life limitation of the surveillance was also not properly coded into the computer. The procedure for testing the individual valves did have a check of the explosive charge expiration dates and required replacement of the charge if the shelf life would expire during the next 18 month cycle. As the work orders were not issued for the previous two refuel outages, no other means existed to identify the charges as being past their expiration date.

A review of previous events revealed two previous occurrences of missed TS surveillances due to errors in the work order data base. The corrective actions for those events did not effectively prevent a recurrence of this type of event. The previous corrective actions involved reviews that were narrowly focused on the identified deficiency in the previous events. An additional missed surveillance event has been identified and was reported in LER 354/95-013-00. Based on this occurrence, and the additional event that has been identified, a more comprehensive review plan has been developed.

ANALYSIS OF OCCURRENCE

During the preparation of the initial submittal of this LER, there was a miscommunication between the LER Coordinator and a planner/scheduler. As a result of this miscommunication, a corrective action (correction of work order database) was erroneously reported as being completed. Additionally, at the time that this LER was originally submitted, it was expected that the remaining three explosive charges would be test-fired by 7/22/95. Since that time it has been determined that this action is not necessary based on two successful firings of squib valves and the fact that all five of the squib valves are from the same lot. This provides reasonable assurance that the intended safety function provided by the remaining squibs would have occurred if demanded.

APPARENT CAUSE OF OCCURRENCE

The root cause of this event is personnel error. The initial entry of the surveillance frequency requirements was incorrect. Additionally, no task was entered to ensure explosive charges would be replaced prior to exceeding their shelf or operating life.

The root cause of reporting the incorrect status of a corrective action in the original submittal of this LER is a miscommunication between the LER Coordinator and a planner/scheduler and the lack of validation of commitment status.

PREVIOUS OCCURRENCES

There have been 24 previous events reported due to missed technical specification surveillances (see LERs 86-008, 86-036, 86-049, 87-038, 87-041, 87-050, 88-002, 88-004, 88-009, 88-026, 88-032, 89-006, 89-013, 89-015, 89-018, 89-024, 90-011, 90-019, 90-027, 90-030, 93-001, 93-002, 94-010, and 95-003). LER 95-003 addressed a similar circumstance in that the applicable operational condition was incorrectly coded into the computer. LER 89-006 also addressed a similar circumstance where 26 separate surveillances frequencies were coded incorrectly in the work order computer. One of the corrective actions, to verify all computer surveillance test frequencies were in compliance with the technical specification specified frequencies, was not effective in preventing this event. Therefore, a comprehensive effort to assure the integrity of surveillance test control will be conducted and is described in the Corrective Action section.

Subsequent to the issuance of the original LER, LERs 95-013, 95-017, and 95-018 were issued to report missed Technical Specification surveillances.

SAFETY SIGNIFICANCE

An engineering evaluation of this event has concluded that this event posed minimal safety significance. The explosive valves are only needed in the event a traversing in-core probe fails to retract upon receipt of a containment isolation signal. The TIP system was operated for approximately 140 hours during the 13 month period that the stated explosive charge operating life was exceeded. During this period no TIP system withdrawal failures were identified. To date, two of the five expired explosive charges have been successfully fired indicating that they would have functioned if required. These two are representative of the group of five since all are from the same manufacturer's lot.

CORRECTIVE ACTIONS

The TIP system 18 month surveillance was satisfactorily completed.

The explosive charges in all five TIP shear valves have been replaced.

A new recurring workorder has been created to ensure that all explosive cartridges are replaced prior to expiration of their operating life and that the proper 18 month surveillance for firing the explosive cartridges is completed.

Two representative squib valves' explosive charges have been test fired satisfactorily.

An audit of the computer data base has been conducted to ensure no similar errors exist. This audit verified that the work order summary description and frequency requirements matched.

Expectations for validation of stated completed actions have been emphasized to personnel that generate LER's.

A review of Licensee Event Reports was conducted to determine if similar events of missed surveillance test requirements have occurred. This review identified a total of 24 previous occurrences of missed surveillance tests. Two of these occurrences were caused by improper coding of recurring tasks.

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CORRECTIVE ACTIONS

A comprehensive review (Technical Specification Surveillance Improvement Program) will be performed and will include the following:

Technical Specification surveillance test procedures will be reviewed to ensure that the tests are performed in the correct operating condition,

The workorder database will be reviewed to ensure the correct coding of test frequency and procedure references,

The Technical Specification matrix will be reviewed to verify its completeness and accuracy.

This review will be completed by December 31, 1996.