PSEG

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Nuclear Business Unit

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

Gentlemen:

LICENSEE EVENT REPORT 354/00-005-00
HOPE CREEK GENERATING STATION
FACILITY OPERATING LICENSE NO. NPF-57
DOCKET NO. 50-354

This Licensee Event Report entitled "Reactor Water Cleanup Isolation Following a Standby Liquid Control Signal" is being submitted in accordance with the requirements of 10CFR50.73(a)(2)(iv) as an event or condition that resulted in a manual or automatic actuation of any Engineered Safety Feature.

Sincerely,

Mark Bezilla
Vice President - Operations

Attachment

/CEM
C: Distribution:
LER File

IE22

NRC FORM 366 U.S. NUCLEAR REGULATORY COMMISSION
(6-1998)

LICENSEE EVENT REPORT (LER)

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

APPROVED BY OMB NO. 3150-0104 EXPIRES 06/30/2001
Estimated burden per response to comply with this mandatory information collection request: 50 hrs. Reported lessons learned are incorporated into the licensing process and fed back to industry. Forward comments regarding burden estimate to the 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. If an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Hope Creek Generating Station	05000354	1 of 3

TITLE (4)

Reactor Water Cleanup Isolation Following a Standby Liquid Control Initiation Signal

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
										05000
05	07	00	00	-- 005 --	00	06	05	00	FACILITY NAME	DOCKET NUMBER 05000

OPERATING MODE (9)	5
POWER LEVEL (10)	0

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)

	20.2201(b)		20.2203(a)(2)(v)		50.73(a)(2)(i)		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)	X	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)
Charlie Manges, Senior Engineer - Licensing	856-339-3234

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

SUPPLEMENTAL REPORT EXPECTED (14)			EXPECTED	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 May 7, 2000, a reactor water cleanup system (RWCU) isolation occurred due to an inadvertent standby liquid control (SLC) initiation signal during surveillance testing. A maintenance technician was performing two surveillance tests (STs) in parallel for the Redundant Reactivity Control System (RRCS). Also, a SLC surveillance test was still in the restoration process. The simultaneous performance of these three tests resulted in the initiation logic being completed for the RRCS system to provide an initiation signal to the SLC system and isolate the RWCU system. Injection of SLC to the vessel did not occur due to the alignment of the SLC system valves in support of its surveillance testing. The apparent cause of the event was procedures that did not include adequate precautions and prerequisites. Contributing causes included the SLC flow test remaining in the restoration phase for an extended period of time and an error in judgment by the maintenance technician. Corrective actions taken included counseling of the technician. Actions to be taken include roll-out of the event to Maintenance personnel and procedure revisions to ensure that adequate precautions and prerequisites are included. This event is being reported pursuant to 10CFR50.73(a)(2)(iv) as an event or condition that resulted in the actuation of an Engineered Safety Feature (ESF).

PLANT AND SYSTEM IDENTIFICATION

General Electric - Boiling Water Reactor (BWR/4)

Reactor Water Cleanup System - EIIS Identifier {CE/--}*

Standby Liquid Control System - EIIS Identifier {BR/--}*

Standby Liquid Control System Valves - EIIS Identifier {BR/INV}*

Redundant Reactivity Control System - EIIS Identifier {JE/--}*

Average Power Range Monitoring System - EIIS Identifier {IG/--}*

* Energy Industry Identification System (EIIS) codes and component function identifier codes appear as {SS/CC}

CONDITIONS PRIOR TO OCCURRENCE

When the event occurred, the plant was in Operational Condition 5 (Refueling) with core reload activities recently initiated and with all control rods fully inserted. A standby liquid control (SLC) system flow test surveillance was in the restoration process. The flow test surveillance requires inserting jumpers that provide the average power range monitor (APRM) signal to the redundant reactivity control system (RRCS) logic. The jumpers were not removed at the time the event occurred. No other structures, systems, or components were inoperable at the time of the occurrence that contributed to the event.

DESCRIPTION OF OCCURRENCE

On May 7, 2000 at 2243 hours, a reactor water cleanup system (RWCU) isolation occurred due to an inadvertent SLC initiation signal during surveillance testing. Injection of SLC to the vessel did not occur due to the alignment of the SLC system valves in support of its surveillance testing. A maintenance technician was performing two surveillance tests in parallel for the Redundant Reactivity Control System (RRCS). Each procedure tested one of the RRCS logic trains. Also, a SLC surveillance test was still in the restoration process (the jumpers on the APRM signal to the RRCS logic had not yet been removed). The simultaneous performance of these three tests resulted in the initiation logic being completed for the RRCS system to initiate the SLC system and isolate the RWCU system. Operations secured the SLC pumps approximately 45 seconds after initiation. This event is being reported pursuant to 10CFR50.73(a)(2)(iv) as an event or condition that resulted in the actuation of an Engineered Safety Feature (ESF).

APPARENT CAUSE OF OCCURRENCE

The apparent cause of the event was procedures that did not include adequate precautions and prerequisites. Specifically, the procedures did not verify the absence of other activities that could affect the RRCS logic (e.g., the APRM jumpers installed). A contributing cause of the event was the SLC flow test remaining in the restoration phase for an extended period of time. A second contributing cause was performing two procedures in parallel on redundant trains of the same system due to an error in judgment by the maintenance technician.

SAFETY SIGNIFICANCE AND IMPLICATIONS

There were no actual safety consequences associated with this condition. The reactor was shut down with all control rods fully inserted. This event did not affect the health and safety of the public.

PREVIOUS OCCURRENCES

A review of LERs for Hope Creek for the past two years identified no instances of SLC initiation/RWCU isolation. One instance of SLC inoperability due to an incorrectly performed IST test was identified in LER 354/98-07. A review of LERs for Hope Creek and Salem for the past two years identified several instances of human error by Maintenance personnel. LER 272/98-13 reported operation with Technical Specification (TS) required equipment out of service due to inadequate procedural adherence. LER 272/98-14 reported a TS non-compliance as a result of inattention to detail in performing a calibration. LER 354/99-07 identified a license condition violation due to procedure inadequate use and compliance skills. Although these previous occurrences were caused by personnel error, the corrective actions taken for those LERs would not have been expected to prevent this event.

CORRECTIVE ACTIONS

1. The technician who performed the procedures in parallel was counseled regarding his actions.
2. Maintenance Department roll-outs will address parallel performance of surveillance tests and will address this event as operating experience.
3. The RRCS logic test procedures will be revised to ensure that adequate precautions and prerequisites are included.

COMMITMENTS

The corrective action cited in this LER are voluntary enhancements and do not constitute commitments.