PSEG Nuclear LLC
P.O. Box 236, Hancocks Bridge, New Jersey 08038-0236

JUL 06 2001

PSEG Nuclear LLC

LRN-01-0203

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

Gentlemen:

LER 354/2001-001-00
HOPE CREEK GENERATING STATION
FACILITY OPERATING LICENSE NO. NPF-57
DOCKET NO. 50-354

Gentlemen:

This Licensee Event Report entitled "Plant Shutdown due to Main Steam Isolation Valve Sealing System Inoperability" is being submitted pursuant to the requirements of 10CFR50.73(a)(2)(i)(A) and 10CFR50.73(a)(2)(i)(B). The attached LER contains no commitments.

Sincerely,

D. F. Garchow
Vice President - Operations

Attachment

/PRD

C Distribution
LER File 3.7

IE22

NRC FORM 366 (1-2001) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104 EXPIRES 6-30-2001

Estimated burden per response to comply with this mandatory information collection request: 50 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to bjs1@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202 (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose 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.

LICENSEE EVENT REPORT (LER)

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

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

TITLE (4)
Plant Shutdown due to Main Steam Isolation Valve Sealing System Inoperability

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MO	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO	MO	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
05	08	2001	2001	– 01	– 00	07	06	2001		05000
									FACILITY NAME	DOCKET NUMBER
										05000

OPERATING MODE (9)	1
POWER LEVEL (10)	100

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply) (11)

20.2201(b)	20.2203(a)(3)(ii)	50.73(a)(2)(ii)(B)	50.73(a)(2)(ix)(A)	
20.2201(d)	20.2203(a)(4)	50.73(a)(2)(iii)	50.73(a)(2)(x)	
20.2203(a)(1)	50.36(c)(1)(i)(A)	50.73(a)(2)(iv)(A)	73.71(a)(4)	
20.2203(a)(2)(i)	50.36(c)(1)(ii)(A)	50.73(a)(2)(v)(A)	73.71(a)(5)	
20.2203(a)(2)(ii)	50.36(c)(2)	50.73(a)(2)(v)(B)	OTHER Specify in Abstract below or in NRC Form 366A	
20.2203(a)(2)(iii)	50.46(a)(3)(ii)	50.73(a)(2)(v)(C)		
20.2203(a)(2)(iv) X	50.73(a)(2)(i)(A)	50.73(a)(2)(v)(D)		
20.2203(a)(2)(v) X	50.73(a)(2)(i)(B)	50.73(a)(2)(vii)		
20.2203(a)(2)(vi)	50.73(a)(2)(i)(C)	50.73(a)(2)(viii)(A)		
20.2203(a)(3)(i)	50.73(a)(2)(ii)(A)	50.73(a)(2)(viii)(B)		

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Include Area Code)
Paul Duke, Licensing Engineer	856-339-1466

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

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX
X	EB	XPT	G080	N	X	BD	ISV	147E	Y

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 May 8, 2001, Technical Specification 3.0.3 was entered when both trains of the Main Steam Isolation Valve Sealing System (MSIVSS) were declared inoperable. The inboard ("A") MSIVSS was inoperable due to excessive leakage into the system through normally closed isolation valves. A failure of a Class-1E 4.16 kV bus potential transformer (PT) removed power from the "C" Emergency Diesel Generator (EDG) synchroscope. As a result, the "C" EDG could not be synchronized with the offsite power source in accordance with Surveillance Requirements. Since the "C" EDG is the standby electric power source for the "B" MSIVSS, both MSIVSS subsystems were considered inoperable. The PT failure had no effect on the "C" EDG's ability to automatically start and load in response to a loss of offsite power. The plant shutdown was completed at 1502 hours on May 8, 2001. This event is reportable as the completion of a plant shutdown required by Technical Specifications in accordance with 10 CFR 50.73(a)(2)(i)(A), and as a condition prohibited by Technical Specifications in accordance with 10 CFR 50.73(a)(2)(i)(B). The failure of the PT was due to a shorted primary winding. There were no actual safety consequences associated with this event. The "B" MSIVSS subsystem remained capable of performing its safety function. The failed PT and inboard MSIVSS header isolation valve were replaced.

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Hope Creek Generating Station	05000354	2001	-- 01 --	00	2 OF 3

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

PLANT AND SYSTEM IDENTIFICATION

General Electric – Boiling Water Reactor (BWR/4)
Main Steam Isolation Valve Sealing System {BD}*
4.16 kV Station Power {EB}*

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

IDENTIFICATION OF OCCURRENCE

Event Date: May 8, 2001
Discovery Date: May 8, 2001

CONDITIONS PRIOR TO OCCURRENCE

The plant was in OPERATIONAL CONDITION 1 (POWER OPERATION). At the start of this event, the inboard Main Steam Isolation Valve Sealing System was inoperable.

DESCRIPTION OF OCCURRENCE

On May 8, 2001 at approximately 1004 hours, the Hope Creek Generating Station initiated a unit shutdown to comply with the provisions of Technical Specification (TS) 3.0.3. TS 3.0.3 was entered at 0820 hours when both trains of the Main Steam Isolation Valve Sealing System (MSIVSS) were declared inoperable.

The inboard ("A") MSIVSS had been inoperable since May 4, 2001 due to excessive steam leakage into the system through normally closed isolation valves {BD/ISV}. TS 3.6.1.4 permits continued operation for up to 30 days with one MSIVSS subsystem inoperable.

On May 8, 2001 at 0508 hours, a failure of a "C" Class-1E 4.16 kV bus potential transformer (PT) {EB/XPT} tripped two of the four channels of Loss of Voltage relay protection {EB/27} for that bus. At 0820 hours, it was determined that the PT failure also affected the "C" Emergency Diesel Generator (EDG) synchroscope {EB/SYN}. The "C" EDG {EB/DG} was declared inoperable due to its inability to meet Surveillance Requirement (SR) 4.8.1.1.2.h.10 which requires verification of the diesel generator's capability to synchronize with the offsite power source while loaded with its emergency loads. With no power to the synchroscope, the "C" EDG could not be synchronized with the offsite power source. The PT failure had no effect on the "C" EDG's ability to automatically start and load in response to a loss of offsite power.

Since the "C" EDG is the standby electric power source for the outboard ("B") MSIVSS subsystem, both MSIVSS subsystems were considered inoperable and TS 3.0.3 was entered. The plant shutdown was completed at 1502 hours on May 8, 2001.

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Hope Creek Generating Station	05000354	2001	-- 01	-- 00	3 OF 3

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

DESCRIPTION OF OCCURRENCE (continued)

This event is reportable as the completion of a plant shutdown required by the plant Technical Specifications in accordance with 10 CFR 50.73(a)(2)(i)(A), and as a condition prohibited by plant Technical Specifications in accordance with 10 CFR 50.73(a)(2)(i)(B). A four hour notification was made to the NRC in accordance with 10 CFR 50.72(b)(2)(i) on May 8, 2001 at 1244.

APPARENT CAUSE OF OCCURRENCE

The apparent cause of this event was the random failure of one of two "C" Class-1E 4.16 kV bus potential transformers. There were no indications of a generic problem such as manufacturing defects, aging, voltage surges or environmental stresses. The failure of the transformer caused two of the four channels of Loss of Voltage relay protection for that bus to trip. Voltage to the "C" EDG synchroscope was also lost. The failure of the potential transformer is attributed to a shorted primary winding. This short caused the two primary side fuses to open isolating the fault from the bus. The potential transformer, type JVM, 4200/120 vac is manufactured by General Electric.

The inoperability of the "A" MSIVSS subsystem was due to excessive leakage from the main steam system through normally closed MSIVSS isolation valves.

SAFETY SIGNIFICANCE AND IMPLICATIONS

There were no actual safety consequences associated with this event. The "B" MSIVSS subsystem remained capable of performing its safety function following a loss of offsite power coincident with a design basis loss of coolant accident.

A review of this event determined that a Safety System Functional Failure (SSFF) as defined in NEI 99-02 did not occur.

PREVIOUS OCCURRENCES

A review of previously reported events identified no instances within the last two years involving conditions prohibited by Technical Specifications due to component failure.

CORRECTIVE ACTIONS

1. The failed potential transformer for the "C" Class-1E 4.16 kV bus was replaced.
2. The inboard MSIVSS header isolation valve (KP-HV-5829A) was replaced.

COMMITMENTS

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