PSEG

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

Hope Creek Generating Station

March 31, 1994

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 94-001-00

This Licensee Event Report is being submitted pursuant to the requirements of 10CFR 50.73(a)(2)(iv) and 50.73(a)(2)(v)(B).

Sincerely,

R.J. Hovey
General Manager -
Hope Creek Operations

WHS/

Attachment
SORC Mtg. 94-19
C Distribution

IE22
1/1

LICENSEE EVENT REPORT

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
HOPE CREEK GENERATING STATION	0 5 0 0 0 3 5 4	1 OF 3

TITLE (4): Engineered Safety System Actuation - Isolation and Loss of Shutdown Cooling due to personnel error.

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	NUMBER	REV	MONTH	DAY	YEAR	FACILITY NAME(S)	DOCKET NUMBER(S)
0 3	0 5	9 4	9 4	- 0 0 1 -	0 0	0 3	2 3	9 4		

OPERATING (9) MODE: 4

POWER LEVEL %: 0 0 0

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR: (CHECK ONE OR MORE BELOW) (11)

20.402(b)	20.405(c)	xx 50.73(a)(2)(iv)	73.71(b)
20.405(a)(1)(i)	50.36(c)(1)	xx 50.73(a)(2)(v)	73.71(c)
20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text)
20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
Bill Schell, Technical Staff Engineer - Technical	6 0 9 3 3 9 3 4 9 5

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS?	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS?
D				no					

SUPPLEMENTAL REPORT EXPECTED? (14) YES [ ] NO [x] DATE EXPECTED (15) MONTH DAY YEAR

ABSTRACT (16)

On Saturday, March 5, 1992, a data chart recorder was being installed to support performance of an Operations Department 18 month surveillance test of the Primary Containment Isolation System PCIS/ Nuclear Steam Supply Shutoff Systems (NSSSS). During installation of the recorder, in accordance with the procedure, an inadvertent initiation of the "A" Channel NSSSS occurred resulting in a loss of shutdown cooling and a loss of reactor water cleanup. The Instrument and Controls technician (I&C tech - non licensed) installing the recorder was directed to remove the test equipment. The isolation signal was reset, shutdown cooling and reactor water cleanup were placed back in service. The total duration of the loss of shutdown cooling was approximately two minutes. All valve isolations that occurred were expected for current plant conditions. The root cause of this event is personnel error in that the technician interrupted the circuit to install test jacks without prior notification to the SNSS/NSS or his immediate supervisor for concurrence. Corrective actions will include a review of this event with all technicians emphasizing the necessity of understanding the potential consequences of intended actions and the expectation that all monitoring equipment (recorders, etc.) be installed in a non-intrusive manner, unless discussed and agreed with the supervisor and the shift. Additionally, the lead technician involved has been counseled on this event. The surveillance procedure will be revised to incorporate lessons learned and additional test jacks installed as appropriate.

PLANT AND SYSTEM IDENTIFICATION

General Electric - Boiling Water Reactor (BWR/4)
N clear Steam Supply Shutoff System (SM) EEIS Identifier JE
Residual Heat Removal System - Shutdown Cooling Mode (BC) EEIS Identifier BO

IDENTIFICATION OF OCCURRENCE

TITLE (4): Engineered Safety System Actuation - Isolation and Loss of Shutdown Cooling due to personnel errors.
Event Date: 3/05/94
Event Time: 2048
This LER was initiated by Incident Report No. 94-039

CONDITIONS PRIOR TO OCCURRENCE

Plant in OPERATIONAL CONDITION 4 (COLD SHUTDOWN)
Reactor Power 0% of rated.

DESCRIPTION OF OCCURRENCE

On Saturday, March 5, 1992, a data chart recorder was being installed to support performance of an Operations Department 18 month Surveillance test of the Primary Containment Isolation System PCIS/ Nuclear Steam Supply Shutoff Systems (NSSSS). During installation of the recorder, in accordance with the procedure, an inadvertent initiation of the "A" Channel NSSSS occurred resulting in a loss of shutdown cooling and a loss of reactor water cleanup. The Instrument and Controls technician (I&C tech - non licensed) installing the recorder was then directed to remove the test equipment. The isolation signal was reset, shutdown cooling and reactor water cleanup were placed back in service. The total duration of the loss of shutdown cooling was approximately two minutes. All valve isolations were expected for current plant conditions.

ANALYSIS OF OCCURRENCE

As part of the prerequisites section, the operations surveillance procedure being implemented directed I&C personnel to install a data chart recorder on twenty test points. Sixteen of the twenty test points required by the procedure were equipped with banana jacks. The technician believed that the banana jack installation was an appropriate option for secure installation of the test leads. While loosening a terminal screw to install a banana jack on one of the four test points missing the jacks, the technician inadvertantly opened the circuit causing the isolation to occur.

The operations surveillance procedure being used did not contain cautions for the operator or the technician performing the work regarding the sensitivity of this circuit and its potential effects on shutdown cooling.

APPARENT CAUSE OF OCCURRENCE

The root cause of this event is a personnel error. Prior to interrupting the circuit to install the banana jacks, the technician should have contacted the SNSS/NSS or his immediate supervisor for concurrence.

Contributing factors included the the lack of adequate precautions within the procedure and lack of installed test hook-up points on four of the twenty test points.

PREVIOUS OCCURRENCES

One previous occurrence of a similar type event has been reported (see LER 92-001-00) which was an ESF actuation caused by incorrect placement of leads in a test meter.

SAFETY SIGNIFICANCE

This incident posed minimal safety significance as shutdown cooling was returned back to service in approximately two minutes.

CORRECTIVE ACTIONS

1. The lead technician has been counseled on the event.

2. This event is being reviewed with all technicians emphasizing:

   a. the necessity of understanding the potential consequences of intended actions.

   b. the expectation that all monitoring equipment (recorders, etc.) be installed in a non-intrusive manner, unless discussed and agreed with the supervisor and shift.

3. The recorder test points identified in the associated procedure will be reviewed for installation of banana test jacks not currently installed.

4. The associated procedure has been reviewed and will be revised to include appropriate precautions.

Sincerely,

R.J. Hovey
General Manager -
Hope Creek Operations

WHS/
SORC Mtg. 94-019
Recommended approval: Yes