

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Hope Creek Generating Station DOCKET NUMBER (2) 0 5 0 0 0 3 5 4 PAGE (3) 1 OF 0 4

TITLE (4) Primary Containment Isolation Resulting From a Procedural Inadequacy

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 NAMES		DOCKET NUMBER(S)										
0	4	1	7	8	6	8	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §. (Check one or more of the following) (11)

OPERATING MODE (9) 5	20.402(b)	20.406(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10) 01010	20.406(a)(1)(i)	50.36(e)(1)	50.73(a)(2)(v)	73.71(e)
	20.406(a)(1)(ii)	50.36(e)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
	20.406(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
	20.406(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
	20.406(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12)

NAME: Karer M. Head - Technical Staff Engineer TELEPHONE NUMBER: AREA CODE 6 0 9 3 3 9 - 5 2 3 9

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) YES (If yes, complete EXPECTED SUBMISSION DATE) X NO

EXPECTED SUBMISSION DATE (15) MONTH DAY YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single space typewritten lines) (16)

On April 17, 1986 at 1630 a Primary Containment Isolation signal was received which resulted in the isolation of the Reactor Building Ventilation System and the start of "D" Filtration Recirculation Ventilation System Fan and the "D" Service Water Pump. The systems were returned to normal operating condition approximately thirty minutes later. The root cause was a procedural inadequacy which resulted in a circuit memory "set" allowing a second signal to cause the isolation. A channel calibration procedure had been performed and it failed to direct the personnel to reset the trip memory status. When a second related procedure was begun, the signal it generated, which was expected, made up the other half of the logic and the isolation occurred. Corrective actions include revising the procedures involved to include steps to verify logic status prior to and after completing testing. Other I&C procedures are also being reviewed for similar omissions. These actions should help to prevent future unwarranted isolations.

TEA2
1/1

8605200376 860514
PDR ADOCK 05000354
S PDR

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) Hope Creek Generating Station	DOCKET NUMBER (2) 0 5 0 0 0 3 5 4 8 6	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		8 6	- 0 0 6	- 0 0	0 2	OF 0 4

TEXT (if more space is required, use additional NRC Form 358A's) (17)

PLANT AND SYSTEM IDENTIFICATION:

General Electric - Boiling Water Reactor

Primary Containment Isolation System-Energy Identification System (EIIS) Code-JM

IDENTIFICATION OF OCCURRENCE:

Event Date: 04/17/86

Event Time: 16:30

This report was initiated by Incident Report 86-040

CONDITIONS PRIOR TO OCCURRENCE:

Operational Condition 5 - Refueling

BACKGROUND

Primary Containment Isolation Circuitry is armed and activated when plant conditions produce alarms in a predetermined configuration. The receipt of one trip input can cause the memory circuit to seal-in a "set" state thereby arming the isolation signal. This trip arms the appropriate annunciator window in the Control Room but after the trip signal is cleared the window also clears. The clearing of the annunciator window, however, does not cancel the memory set. If this memory set is not manually cleared, the receipt of another alarm signal to that train can cause an isolation. Station Administrative Procedures, however, require that after surveillance testing all equipment be returned to its original condition. In this instance, the reset of all activated circuits would be required to avoid an isolation signal.

DESCRIPTION OF THE EVENT

As initial fuel loading progressed, I&C personnel were given permission to start IC-CC.BB-034(Q), Channel Calibration, Division 4, Channel B2, C71-N650D, High Drywell Pressure, at 1612 on April 17, 1986. The permission to start testing was granted after the annunciator panels were surveyed for alarm indications which might affect the testing. At 1630, a Primary Containment Isolation System Channel "D" Isolation was received initiating the start of "D" Service Water Pump, the isolation of the Reactor Building Ventilation System (RBVS) and the start of "D" Filtration Recirculation Ventilation System (FRVS) Fan. Systems were returned to normal approximately thirty minutes later after the cause was identified.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) Hope Creek Generating Station	DOCKET NUMBER (2) 0 5 0 0 0 3 5 4	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8 6	- 0 0 6	- 0 0	0 3	OF	0 4

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

APPARENT CAUSE OF THE OCCURRENCE

The root cause of this event was procedure error. Two procedures were involved in causing the isolation signal, although the incident occurred during the performance of the second procedure IC-CC.BB-034(Q). Procedure IC-CC.BB-007(Q), Channel Calibration Nuclear Boiler - Division 4, Channel B21-N691D, Reactor Vessel Level Trips 1, 2 had been performed earlier and the logic had been tripped and set such that another signal from the appropriate channel would cause an isolation. Prior to beginning IC-CC.BB-034(Q), I&C personnel conferred with the Control Room to gain permission to commence testing. Permission was granted based upon a survey of the annunciator panels and "trip" condition of the appropriate trip units for conflicting conditions. As procedure IC-CC.BB-034(Q) progressed, the logic tripped as expected. The isolation of the RBVS and the start of the FRVS fan and the service water pump that ensued, however, was not planned nor desired. As discovered later neither I&C procedure contained a statement to check the memory circuit seal-in "set" in the Bailey Cabinet prior to performing the calibration and a step to reset the logic after completing the test. This was a procedural inadequacy since at a minimum the Surveillance Testing Program requires all equipment be returned to its original condition after testing. The combination of the omission of steps from IC-CC.BB-007(Q) and IC-CC.BB-034(Q) resulted in the isolation signal and the lack of indication in the Control Room hindered the detection and possible prevention of the incident.

CORRECTIVE ACTIONS

Several actions were initiated as a result of this incident. At the time of the isolation, the cause was immediately investigated and all equipment was returned to normal operating conditions within thirty minutes. Secondly, procedures IC-CC.BB-007(Q) and IC-CC.BB-034(Q) are in the process of being revised to include steps to verify logic status prior to performing and after completing any test. Other channel calibration and functional procedures are also being reviewed for similar omissions. The implementation of these actions will help to prevent unwarranted isolations.

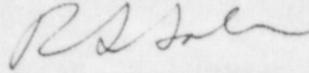
This incident posed no impact to the public health and safety and is being reported in accordance with 10CFR50.73(a)(2)(iv).

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) Hop Creek Generating Station	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		0 5 0 0 0 3 5 4 8 6 - 0 0 6 - 0 0 0 4 OF 0 4				

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

Sincerely,



R. S. Salvesen
General Manager
Hope Creek Operations

KMH:bar
SORC Mtg 86-108
86-111



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

Hope Creek Generating Station

May 14, 1986

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 86-006

This Licensee Event Report is being submitted pursuant to the requirements 10CFR50.73(a)(2)(i).

Sincerely yours,

A handwritten signature in dark ink, appearing to read "R. S. Salvesen".

R. S. Salvesen
General Manager
Hope Creek Operations

KMH:bar

SORC Mtg. 86-108
Attachment

C Distribution



DE22
1/1