NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

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

TITLE (4) Primary Containment Leak Rate Determined In Excess of Allowable (La) During Local Leak Rate Test (LLRT) Due to Component Malfunction

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	0 9	8 8	8 7	0 4 9	0 1	0 9	0 7	8 8		0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
POWER LEVEL (10)	1 0 0	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
		20.405(a)(1)(i)	50.36(c)(1)	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, NRC Form 366A)
		20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		20.405(a)(1)(iv)	X 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
Rick Cowles - Technical - Lead Engineer	AREA CODE 6 0 9 3 3 9 - 3 4 9 5

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 fifteen single-space typewritten lines) (16)

On December 3, 1987 it was determined that reporting of test results from 10CFR50 Appendix J Type "C" Local Leak Rate Tests (LLRT) conducted on 4/9/87 was required because a primary containment penetration failed to meet Technical Specification leak rate criteria. Specifically, Tech Specs require an overall integrated leak rate of less than or equal to La (127,992 SCCM, as defined in Tech Specs and the FSAR) for all penetrations and all valves. On 4/9/87, primary containment penetration P-22 failed an LLRT with a leakage rate in excess of 100,000 SCCM. Combined with other previously identified leakage (approximately 30,000 SCCM), the primary containment overall leak rate was in excess of La. The Senior Nuclear Shift Supervisor was immediately informed by personnel performing the test, and the appropriate Tech Spec Limiting Conditions For Operation (LCO) were entered. This event was not previously reported because all required actions were immediately taken, and procedural guidance available to the SNSS did not indicate a need for reporting. However, on 12/3/87, the ISI and Licensing and Regulation departments determined that since La constitutes a design basis, the plant was operating outside design bases when the test determined leakage was in excess of La, and that reporting was required. The leaking valves were repaired and retested. Additionally, Station Administrative Procedure changes will be made to ensure such events are promptly reported in the future.

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NRC Form 366
(9-83)

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
	0 5 0 0 0 3 5 4	8 8	— 0 4 9	— 0 1	0 2 OF 0 5

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

PLANT AND SYSTEM IDENTIFICATION

General Electric - Boiling Water Reactor (BWR/4)
Containment Atmosphere Control System (EIIS Designation: VA)

IDENTIFICATION OF OCCURRENCE

Primary Containment Leak Rate Determined In Excess Of Allowable (La) During Local Leak Rate Test (LLRT) Due To Component Malfunction

Event Date: 04/09/87
Event Time: 1000
This LER was initiated by Incident Report No. 87-197

CONDITIONS PRIOR TO OCCURRENCE

Plant in OPERATIONAL CONDITION 1 (Power Operation), Reactor Power 100%, Unit Load 1085 MWe.

DESCRIPTION OF OCCURRENCE

On April 9, 1987 at 1000, Inservice Inspection (ISI) department personnel reported to the Senior Nuclear Shift Supervisor (SNSS) that primary containment penetration P-22 did not pass Type "C" LLRT testing per ISI procedure M9-ILP-03H. Technical Specification LCOs 3.6.1.8 and 3.6.3 were entered (requiring isolation of the penetration within 4 hours or placing the plant in hot shutdown within the next 12 hours). At 1630, the penetration was isolated utilizing manual valves and blank flanges, and the LCO was terminated. Work orders were initiated to repair leaking valves which had caused P-22 to fail the LLRT.

APPARENT CAUSE OF OCCURRENCE

1. Penetration P-22 failed the LLRT due to seat leakage and packing leaks on two valves associated with the penetration.

2. This incident was not reported until 12/3/87 because neither ISI personnel or the SNSS were aware that the allowable Type Type "C" leakage rate constituted a plant design basis. This lack of awareness was due primarily to insufficient administrative procedure guidance with respect to reportability of LLRT failures with leakage greater than La.

ANALYSIS OF OCCURRENCE

10CFR50, Appendix J requires that periodic Type "C" LLRTs be performed on various containment isolation valves to ensure continued primary containment integrity. Hope Creek's ISI department fulfills this requirement by periodically conducting LLRTs on those valves listed in Technical Specification Table 3.6.3-1. The acceptance criteria for the combined leakage rate for all penetrations and valves subject to Type "B" and "C" testing must be less than 0.60 La. (La is defined in 10CFR50 Appendix J as "the maximum allowable leakage rate as specified...in the Technical Specifications..for periodic tests...) The value for La at Hope Creek is 127,992 SCCM as defined in Tech Specs and the FSAR.

On April 9, 1987, ISI conducted an LLRT on primary containment penetration P-22, which encompasses three Containment Atmosphere Control system valves (HV-4956, HV-4978, and HV-4979). When the piping bounded by the above valves was pressurized IAW the test procedure, the technician performing the test was unable to maintain pressure within the piping, and leakage was determined to be in excess of 100,000 SCCM (instrument scale had pegged out). In combination with documented leakage on all other primary containment penetrations (approximately 30,000 SCCM), the overall integrated primary containment leak rate was in excess of La. As directed by the test procedure, the ISI supervisor immediately reported the results of this test to the SNSS, and Technical Specification LCOs 3.6.1.8 and 3.6.3 were entered. The penetration was immediately isolated by means of manual isolation valves, and blank flanges were later installed per action statement requirements. After isolation and blank flanging, the penetration was retested, with the results being satisfactory. At this time, the LCOs were terminated and work orders written to repair two leaking valves. Valve descriptions, manufacturer and model numbers are as follows:

GS-HV-4956, Matryx Co. Model # 45122SR80, 26" Drywell Purge Inlet Isolation Valve.

GS-HV-4978, Matryx Co. Model # 26051SR30, 6" Nitrogen Purge Isolation Valve.

ANALYSIS OF OCCURRENCE, CONT'D

This condition was not reported at the time of occurrence because procedural reporting guidance available to the SNSS did not indicate a need for either immediate notification per 10FR50.72 or a followup LER per 10CRF50.73. However, on 12/3/87, after a review of the test results by ISI management, and discussions with Licensing and Regulation department, it was determined that since La constitutes a design basis, reporting was required under the LER rule.

Following identification of the subject test results, ISI reviewed the results of all LLRTs since initial fuel load to ensure no other similar circumstances existed. No additional instances such as described in this report were discovered.

The potential safety implications of this event were the subject of a Safety Evaluation performed by the Nuclear Engineering Standards department (reference: H-1-GSXX-MSE-0739-0). Based on data obtained during the subject LLRT, the safety evaluation determined that in the event of a Design Basis Earthquake (DBE), it was "likely that (associated) ducting failure would have occurred ..." with the subject penetration leaking to the degree reported. Any subsequent discharge through the ducting would have been retained within the confines of the reactor building and processed by the reactor building ventilation system.

CORRECTIVE ACTIONS

1. Operations Department has reviewed this event with all licensed personnel, stressing the reporting requirements in the event of a failed LLRT.

2. ISI Department has reviewed this event with all ISI personnel to ensure proper notifications are immediately made in the event of a failed LLRT. ISI personnel will also be apprised of the reporting requirements.

3. Technical Department has revised SA-AP.ZZ-006, Incident Report and Reportable Occurrence Program, to include the requirement for reporting LLRT results in excess of 0.60 La.

4. The valves which caused the LLRT to fail were repaired, and LLRT was performed with satisfactory results on 9/30/87.

CORRECTIVE ACTIONS, CONT'D

5. A Safety evaluation of this event was performed to determine if any safety concerns existed prior to performing the LLRT on 4/9/87. The conclusions of this evaluation were discussed previously in this report.

Sincerely,

J. J. Hagan
General Manager -
Hope Creek Operations

RBC/
SORC Mtg. 87-183

PSE&G

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

Nuclear Department

September 7, 1988

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 87-049-01

This Licensee Event Report supplement is being submitted as a followup to the original report.

Sincerely,

J. J. Hagan
General Manager -
Hope Creek Operations

RBC/

Attachment
SORC Mtg. 87-183

C Distribution

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