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

LER 354 / 2002- 002 - 00
HOPE CREEK GENERATING STATION
FACILITY OPERATING LICENSE NPF- 57
DOCKET NO. 50-354

Gentlemen:

This Licensee Event Report entitled "Secondary Containment Breach due to Open 1 Inch Vent Line" is being submitted pursuant to the requirements of 10CFR50.73(a)(2)(i)(B). The attached LER contains no commitments.

Sincerely,

D. F. Garchow
Vice President - Operations

Attachment

/KMB

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NRC FORM 366 (7-2001)

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104 EXPIRES 7-31-2004

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

LICENSEE EVENT REPORT (LER)

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

HOPE CREEK GENERATING STATION	05000354	1 OF 4

SECONDARY CONTAINMENT BREACH DUE TO OPEN 1 INCH VENT LINE

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MO	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO	MO	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
04	05	02	2002	– 002	– 00	06	27	02	FACILITY NAME	DOCKET NUMBER

9. OPERATING MODE	1
10. POWER LEVEL	100

	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)		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)		

12. LICENSEE CONTACT FOR THIS LER

NAME	TELEPHONE NUMBER (Include Area Code)
Kennard M. Buddenbohn, Licensing Engineer	(856) 339-5653

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

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX

14. SUPPLEMENTAL REPORT EXPECTED				15. EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR
	YES (If yes, complete EXPECTED SUBMISSION DATE)	X	NO				

On April 30, 2002 Hope Creek operators discovered a Secondary Containment breach of 1 inch piping on a Service Water Emergency Makeup line. The breach was caused by the simultaneous open condition of a tagged open Service Water header vent valve in the Auxiliary Building and the opening of Service Water piping in the Reactor Building for planned repair. This simultaneous open condition provided a pathway for air to travel from the Auxiliary Building (atmospheric pressure) to the Reactor Building. The Reactor Building is maintained at a slight negative pressure. This condition existed from April 5 until discovery on April 30. The apparent cause of this event is the failure to identify the impact of proposed maintenance on the Secondary Containment boundary and failure to identify Technical Specifications associated with planned work.

Corrective actions include:

a. Restoration of Secondary Containment integrity upon discovery.
b. Improvements to guidance on corrective maintenance work order review, tagging, and Technical Specification review for applicability.

There is no safety significance to this event. Margins demonstrated during surveillance testing of Reactor Building integrity show Secondary Containment remained capable of performing its safety function.

This condition is being reported in accordance with the requirements of 10CFR50.73(a)(2)(i)(B) as "Any operation or condition which was prohibited by the plant's Technical Specifications "

PLANT AND SYSTEM IDENTIFICATION

General Electric – Boiling Water Reactor (BWR/4)

Reactor Building (Secondary Containment) {NG/-}*
Station Service Water {BI/-}*

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

CONDITIONS PRIOR TO OCCURRENCE

The plant was in OPERATIONAL CONDITION 1 (POWER OPERATION). A selected section of the Service Water system was cleared and tagged per Work Clearance Document (WCD) 4048286 to perform corrective maintenance on a Service Water Emergency Makeup line.

DESCRIPTION OF OCCURRENCE

On April 30, 2002, at approximately 0311, an in-field Hope Creek licensed Senior Reactor Operator discovered a breach of Secondary Containment {NG/-} by 1 inch piping on a Service Water Emergency Makeup line {BI/-}. Repairs were in progress on the open and inoperable Emergency Service Water Makeup Low Pressure Drain valve, H1EA –1EASV-2237 {BI / FSV} (EA2237). Control Room operators entered the Technical Specification Action Statement for Technical Specification 3.6.5.1, Secondary Containment Integrity. Subsequently, the red blocking tag on Emergency Service Water Makeup header vent valve, H1EA -1-EA-V577 {BI / VTV} (EA577) was released and EA577 was closed on April 30, 2002 at approximately 0335, eliminating the Secondary Containment breach.

WCD 4048286 had been an active tagout since April 1 to support repairs to EA2237. The tagout resulted in EA577 being tagged open in the Auxiliary Building. Valve EA2237 was opened to perform an inspection on April 5. On April 30, while performing rounds, an operator observed a red blocking tag hanging from EA577. The operator realized that this was part of the tagout to support corrective maintenance on EA2237 and understood its proximity to the Secondary Containment integrity penetration area. Further investigation revealed EA2237 had been cut out of the system and that this resulted in a breach in the Secondary Containment boundary.

FACILITY NAME (1)	DOCKET (2) NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
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TEXT *(If more space is required, use additional copies of NRC Form 366A)* **(17)**

CAUSE OF OCCURRENCE

The cause of the Secondary Containment breach is attributed to:
1. Personnel involved with safety tagging creation, approval, and review did not recognize the impact of tagging and proposed maintenance on the Secondary Containment boundary.
2. The corrective maintenance work order planned by the Work It Now (WIN) Team did not identify the Technical Specifications (T/S) associated with the maintenance evolution.

PRIOR SIMILAR OCCURRENCES

A review of reportable events at Salem and Hope Creek generating stations identified one reportable event due to a breach of Containment Closure at Salem Generating Station.

LER 311/96-015-00 reported an event during the refuel outage in which a Containment breach occurred with the unit in OPERATIONAL MODE 6 with refueling operations in progress. A Service Water valve had been removed from Service Water piping creating a pathway from the Containment atmosphere to outside atmosphere. The pathway existed through an open vent valve and drain valves inside Containment and the open piping outside Containment. The apparent causes of the event were attributed to:
1. Inadequate implementation of outage scheduling and risk management requirements.
2. Inadequate review of work in progress as required by Containment Closure procedures.

Corrective actions included re-establishing Containment Closure, procedure revisions, and implementation of controls related to the authorization and scheduling of work. The corrective actions associated with LER 311/96-015-00 were specific to the outage and shutdown condition at Salem and would not have prevented this event at Hope Creek from occurring.

SAFETY CONSEQUENCES AND IMPLICATIONS

The safety significance of this event is minimal. The in- service Reactor Building Ventilation System (RBVS) maintained a negative pressure in the Reactor Building during the event. In the event of an accident during the timeframe of the 1 inch Secondary Containment breach, the Filtration Recirculation and Ventilation System (FRVS) would have been capable of drawing down the Secondary Containment to limits specified in T/S 4.6.5.1.c surveillance requirements. This is based on the significant margins demonstrated during the Reactor Building Integrity Functional test, HC.OP-ST.GU-0002 (Q) conducted in October 2001 under Order 50020061.

The extent of condition is limited to the breach of the Secondary Containment physical boundary during corrective maintenance on EA2237. Other Containment penetrations were not breached. A review of this event determined that a Safety System Functional Failure (SSFF) as defined in Nuclear Energy Institute (NEI) 99-02, Regulatory Assessment Performance Indicator Guideline, did not occur.

CORRECTIVE ACTIONS

1. T/S 3.6.5.1 for Secondary Containment integrity was entered at the time of discovery on April 30. Secondary Containment was restored promptly by releasing the red blocking tag on EA577 (Auxiliary Building), closing, and capping the penetration.
2. Information concerning Secondary Containment penetrations has been added to the information page in the component data module for components listed on the Hope Creek Secondary Containment Penetration Matrix, Exhibit 6 of Operability Assessment and Equipment Control Program, SH.OP-AP.ZZ-0108 (Q).
3. Guidance will be provided to Hope Creek Operations personnel on the methods of reviewing tag outs prior to approval to facilitate a comprehensive review. Guidance was provided to Hope Creek Operations on review of component data prior to printing a WCD tagging worksheet.
4. Secondary Containment Integrity Verification Monthly Surveillance HC.OP.ST.ZZ-0003 will be revised to verify with Work Control that no system breaches affecting Secondary Containment are in progress at all times, not just during a refueling or extended outage.

COMMITMENTS

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