

LICENSEE EVENT REPORT (LER)

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

TITLE (4) "A" Reactor Water Cleanup (RWCU) Pump Seal Failure and PWCU Isolation-Equipment Failure.

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)
09	08	88	88	023	001	00	06	88			0 5 0 0 0
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THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §. (Check one or more of the following) (11)

OPERATING MODE (9)	20.402(b)	20.408(a)	80.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)	20.408(a)(1)(ii)	80.38(a)(1)	80.73(a)(2)(v)	73.71(c)
	20.408(a)(1)(iii)	80.38(a)(2)	80.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 306A)
	20.408(a)(1)(iv)	80.73(a)(2)(ii)	80.73(a)(2)(vii)(A)	
	20.408(a)(1)(v)	80.73(a)(2)(iii)	80.73(a)(2)(vii)(B)	
	20.408(a)(1)(vi)	80.73(a)(2)(iv)	80.73(a)(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12)

NAME: A. Merrell Lead Engineer - Technical TELEPHONE NO. SER: 610 19 3 1319 1-15 12319

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	
B	C	E	S	C	L	X	9	9	9	N

SUPPLEMENTAL REPORT EXPECTED (14)

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

EXPECTED SUBMISSION DATE (15)

MONTH	DAY	YEAR

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

The Plant was in OPERATIONAL CONDITION 1 (Power Operation) at 100% power generating 1086 MWe on September 8, 1988 at 1535 hours when the "A" RWCU filter demineralizer train was restored to service following a system outage for valve repacking. At 1713 hours, an "A" train RWCU pump high seal cavity temperature alarm was received in the control room. Local inspection determined that steam was leaking from the pump seal. At 1715 hours, the RWCU system isolated on a high pump room differential temperature signal. An investigation determined that the "A" RWCU pump seal had failed. The "A" pump was isolated and the "B" RWCU pump was placed in service at 1810 hours. The failed pump seal was replaced on September 9, 1988. The root cause of this occurrence was equipment failure. A program to design, manufacture and test a new pump seal is under development by a utility consortium to reduce the seal failure rate to an acceptable level.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	LER NUMBER (6)			PAGE (3)		
	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
	0500035488	023	0002	OF	0	3

TEXT IF MORE SPACE IS REQUIRED, USE ADDITIONAL NRC Form 366A (17)

PLANT AND SYSTEM IDENTIFICATION

General Electric - Boiling Water Reactor (BWR/4)
 Reactor Water Cleanup (RWCU) (EIIIS Designator:CE)

IDENTIFICATION OF OCCURRENCE

"A" Reactor Water Cleanup (RWCU) Pump Seal Failure and RWCU Isolation - Equipment Failure

Event Date: September 8, 1988
 Event Time 1715 Hours
 This LER was initiated by Incident Report No. 88-135

CONDITIONS PRIOR TO OCCURRENCE

The Plant was in OPERATIONAL CONDITION 1 (Power Operation) at 100% power generating 1086 MWe.

DESCRIPTION OF OCCURRENCE

On September 8, 1988 at 1535 hours, the "A" RWCU filter demineralizer train was restored to service following a system outage for valve repacking. At 1713 hours, an "A" train RWCU pump high seal cavity temperature alarm was received in the control room. Local inspection determined that steam was leaking from the pump seal. At 1715 hours, the RWCU system isolated on a high pump room differential temperature signal. An investigation determined that the "A" RWCU pump seal had failed. The "A" pump was isolated and the "B" RWCU pump was placed in service at 1810 hours. The failed pump seal was replaced on September 9, 1988.

APPARENT CAUSE OF OCCURRENCE

The root cause of this occurrence was equipment failure.

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 8 - 0 2 3 - 0 0 0 3	LER NUMBER (8)		PAGE (3) OF 0 3
		YEAR	REVISION NUMBER	
		SEQUENTIAL NUMBER	REVISION NUMBER	

TEXT (if more space is required, use additional NRC Form 3054 (1/77))

ANALYSIS OF OCCURRENCE

Eight (8) RWCU pump seals have been replaced during the past 18 months. A high seal failure rate has also occurred at other BWRs. A consortium with several other utilities was formed during 1988 to design, manufacture and test a new RWCU pump seal. A contract to perform this work is now under review by the consortium, of which PSE&G is a member.

PREVIOUS OCCURRENCES

Previous occurrences are discussed above.

SAFETY ASSESSMENT

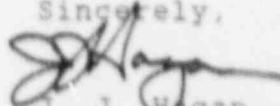
The plant was operated in accordance with the Technical Specifications during the course of this event and therefore the health and safety of the public were not compromised.

REPORTABILITY

This report is being submitted pursuant to the requirements of 10CFR50.73(a)(2)(iv).

CORRECTIVE ACTIONS

1. The failed RWCU pump seal was replaced the day following this event.
2. As described above, a new pump seal design is under development.

Sincerely,

 J. J. Hagan
 General Manager -
 Hope Creek Operations

AM:

SORC Mtg. 88-135



PSEG

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

Nuclear Department

October 6, 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 88-023-00

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

Sincerely,

J. J. Kagan
General Manager -
Hope Creek Operations

AM:

Attachment
SORC Mtg. 88-135

C Distribution

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