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U.S. Regulatory Commission
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Washington, DC 20555

LER 354/04-005-00
HOPE CREEK GENERATING STATION – UNIT 1
FACILITY OPERATING LICENSE NO. NPF-57
DOCKET NO. 50-354

This Licensee Event Report entitled "Control Room Emergency Filtration System Train Inoperable For Greater Than 7 Days, submitted pursuant to the requirements of 10CFR50.73(a)(2)(i)(B).

Sincerely,

A handwritten signature in black ink, appearing to read "James Hutton".

James Hutton
Plant Manager – Hope Creek

Attachment

RFY

C Distribution
LER File 3.7

IE22

LICENSEE EVENT REPORT (LER)

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

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 bis1@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 conduct or sponsor, and a person is not required to respond to the

1. FACILITY NAME Hope Creek Generating Station	2. DOCKET NUMBER 05000354	3. PAGE 1 OF 3
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4. TITLE
Control Room Emergency Filtration System Train Inoperable For Greater Than 7 Days

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
5	17	2004	2004	005	00	7	16	2004	FACILITY NAME	DOCKET NUMBER

9. OPERATING MODE 1	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)			
	20.2201(b)	20.2203(a)(3)(ii)	50.73(a)(2)(ii)(B)	50.73(a)(2)(ix)(A)
10. POWER LEVEL 100	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 R. Yewdall, Licensing Engineer	TELEPHONE NUMBER (include Area Code) 856-339-2469
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13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX
A	KM	CHU	C150	No					

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

16. ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

On May 20, 2004, a Technical Specification Action Statement (TSAS) was entered due to degraded performance of the BK400 chiller, a component of the Control Room Emergency Filtration system (CREF). The TSAS was exited later the same day following repair of the chiller. Prior to May 20, 2004, the BK400 chiller had been out of service between May 9 and May 15 for maintenance. A portion of the maintenance activity was the replacement of the guide vane pivot arm. While trouble shooting the problem on May 20, 2004, it was discovered that the chiller guide vane pivot arm was slipping on the drive shaft. Based on this information, the BK400 chiller was determined to not have been capable of performing its design function when it was returned to service on May 15, 2004. Therefore, the BK400 chiller was inoperable from May 9 to May 20 which exceeds the 7 day allowed outage time of TS 3.7.2 Action a.

The cause of the slippage was determined to be setscrews that were not fully engaged. The immediate corrective action was to "dimple" the shaft and tighten the setscrews.

This event is being reported in accordance with 10CFR50.73 (a) (2) (i) (B).

**LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION**

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Hope Creek Generating Station	05000354	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 3
		2004	- 005	- 00	

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

PLANT AND SYSTEM IDENTIFICATION

General Electric – Boiling Water Reactor (BWR/4)
Chilled Water System {KM}*
Control Room Emergency Filtration System {VI}

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

IDENTIFICATION OF OCCURRENCE

Event Date: May 17, 2004
Discovery Date: May 20, 2004

CONDITIONS PRIOR TO OCCURRENCE

Hope Creek was in Operating Condition 1 (Power Operation), at the time of discovery. No other required structures, systems or components were inoperable at the start of this event that contributed to the event.

DESCRIPTION OF OCCURRENCE

Hope Creek Technical Specification (TS) 3.7.2, requires two (2) independent Control Room Emergency Filtration (CREF) {VI} subsystems to be operable. Included in each subsystem is a chilled water system to maintain the control room envelope within specified environmental limits. The BK400 chiller is a support component of the B CREF train. With the chiller inoperable, the B CREF train is therefore inoperable. TS 3.7.2, Action a., requires that the inoperable subsystem be made operable within 7 days or be in at least HOT SHUTDOWN within the next 12 hours.

On May 20, 2004, at approximately 0715, a report was made to Hope Creek Operations that the BK400 chiller evaporator pressure was 61 PSIG. Procedurally, the chiller evaporator pressure is to be maintained between 35 and 50 PSIG. An investigation was performed and Technical Specification Action Statement (TSAS) 04-259 was entered declaring the B CREF train inoperable in accordance with Technical Specification (TS) 3.7.2 Action a. Corrective maintenance was performed and the system was returned to operable status at 1920, on May 20, 2004.

Prior to May 20, 2004, the BK400 chiller had been out of service between May 9 and May 15 for maintenance. A portion of the maintenance activity was the replacement of the guide vane pivot arm. While trouble shooting the problem on May 20, 2004, it was discovered that the chiller guide vane pivot arm was slipping on the drive shaft. Based on this information, the BK400 chiller was determined to not have been capable of performing its design function when it was returned to service on May 15, 2004. Therefore, the BK400 chiller was inoperable from May 9 to May 20 which exceeds the 7 day allowed outage time of TS 3.7.2 Action a. Therefore, May 17, 2004 was the date that exceeded the 7 day TSAS.

The event is being reported in accordance with 10CFR50.73(a)(2)(i)(B), Any operation or condition that was prohibited by the plant's Technical Specifications.

**LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION**

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Hope Creek Generating Station	05000354	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	3 OF 3
		2004 - 005 - 00			

CAUSE OF OCCURRENCE

The cause of occurrence was inadequate procedure guidance on pivot arm replacement.

During the maintenance outage which commenced on May 9, 2004, the pivot arm was replaced. The cause for the high evaporator pressure was determined to be the inability of the guide vane to properly modulate. This was due to the pivot arm set screws that were not engaged firmly enough to prevent slipping on the shaft. This in turn prevented the chiller from operating as designed. A contributing cause to the LCO being exceeded was an insufficient retest to ensure operability of the chiller.

PREVIOUS OCCURRENCES

A review of related TS noncompliance LERs was performed for the past 3 years. LER 354/03-002-00, entitled "Inoperability of Control Room Emergency Filter (CREF) subsystems due to Control Room (CR) envelope breach", dated January 12, 2003 was reviewed for applicability to operability of the BK400 chiller. That event was attributed to a ductwork access hatch opening and no correlation was found to a chiller equipment issue or operability assessments. Based on this review actions associated with that LER would not have prevented this occurrence. LER 354/04-002-00, entitled "Control Room Emergency Filtration System Train Inoperable For Greater 7 Days", involved the same CREF train. The failure mechanism related to that LER was a float which became disengaged from the float arm. Corrective actions related to that event would not have prevented the current event.

SAFETY CONSEQUENCES AND IMPLICATIONS

There were no safety consequences associated with this event since the "A" CREF train was operable during the period the "B" CREF was inoperable. Additionally, there were no design basis radiological releases during the period that the "B" CREF train was inoperable. Only one train of CREF is required to mitigate design basis radiological events that impact the control room envelope.

This event does not constitute a Safety System Functional Failure (SSFF) as defined in NEI 99-02.

CORRECTIVE ACTION

The corrective actions to address the identified problem are as follows:

1. The BK400 chiller was repaired and returned to operable status on May 20, 2004.
2. Maintenance procedure HC.MD-CM.GJ-001 will be revised to add guidance for dimpling the guide vane shaft to properly engage setscrews to prevent slipping.
3. Chiller guide vane maintenance plans will be revised to ensure retests demonstrate that the chillers are fully operable.

COMMITMENTS

The corrective actions cited in this LER do not constitute commitments.