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LR-N05-0434

AUG 1 8 2005

U. S. Nuclear Regulatory Commission
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Washington, DC 20555

LER 354/05-007-00
HOPE CREEK GENERATING STATION
FACILITY OPERATING LICENSE NO. NPF-57
DOCKET NO. 50-354

This Licensee Event Report entitled, " 'B' Control Room Emergency Filtration (CREF) Train Inoperable Greater Than Allowed By Technical Specifications," is being submitted pursuant to the requirement of 10CFR50.73(a)(2)(i)(B).

Sincerely,

Michael J. Massaro
Plant Manager - Hope Creek

Attachment

BJT

C Distribution
LER File 3.7

IE22

NRC FORM 366 (6-2004) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 06/30/2007

Estimated burden per response to comply with this mandatory 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 and FOIA/Privacy Service Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@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 an 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 information collection.

LICENSEE EVENT REPORT (LER)

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

1. FACILITY NAME	2. DOCKET NUMBER	3. PAGE
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4. TITLE

'B' Control Room Emergency Filtration (CREF) Train Inoperable Greater Than Allowed By Technical Specifications

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
06	19	2005	2005	- 007 -	00	08	18	2005	FACILITY NAME	DOCKET NUMBER

9. OPERATING MODE

1

10. POWER LEVEL

99

11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR§: *(Check all that apply)*

- ☐ 20.2201(b)
- ☐ 20.2201(d)
- ☐ 20.2203(a)(1)
- ☐ 20.2203(a)(2)(i)
- ☐ 20.2203(a)(2)(ii)
- ☐ 20.2203(a)(2)(iii)
- ☐ 20.2203(a)(2)(iv)
- ☐ 20.2203(a)(2)(v)
- ☐ 20.2203(a)(2)(vi)
- ☐ 20.2203(a)(3)(i)
- ☐ 20.2203(a)(3)(ii)
- ☐ 20.2203(a)(4)
- ☐ 50.36(c)(1)(i)(A)
- ☐ 50.36(c)(1)(ii)(A)
- ☐ 50.36(c)(2)
- ☐ 50.46(a)(3)(ii)
- ☐ 50.73(a)(2)(i)(A)
- ☒ 50.73(a)(2)(i)(B)
- ☐ 50.73(a)(2)(i)(C)
- ☐ 50.73(a)(2)(ii)(A)
- ☐ 50.73(a)(2)(ii)(B)
- ☐ 50.73(a)(2)(iii)
- ☐ 50.73(a)(2)(iv)(A)
- ☐ 50.73(a)(2)(v)(A)
- ☐ 50.73(a)(2)(v)(B)
- ☐ 50.73(a)(2)(v)(C)
- ☐ 50.73(a)(2)(v)(D)
- ☐ 50.73(a)(2)(vii)
- ☐ 50.73(a)(2)(viii)(A)
- ☐ 50.73(a)(2)(viii)(B)
- ☐ 50.73(a)(2)(ix)(A)
- ☐ 50.73(a)(2)(x)
- ☐ 73.71(a)(4)
- ☐ 73.71(a)(5)
- ☐ OTHER

Specify in Abstract below or in NRC Form 366A

12. LICENSEE CONTACT FOR THIS LER

FACILITY NAME	TELEPHONE NUMBER (Include Area Code)
Brian Thomas, Licensing Engineer	856-339-2022

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
A	VI	TC	W120	N					

14. SUPPLEMENTAL REPORT EXPECTED

☐ YES *(If yes, complete 15. EXPECTED SUBMISSION DATE)* ☒ NO

15. EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR

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

On June 19, 2005, maintenance personnel identified that the fan flow controller for the 'B' control room emergency filtration (CREF) train was found with a reset setting different than required by the instrument calibration data (ICD) record. The reset was found at 1.0 X 10 rep/min when it should have been set at 10 X 10 rep/min. Upon identification of the incorrect controller setting, the 'B' CREF train was declared inoperable on June 19, 2005 at 1747 hours until the controller was adjusted to the proper settings on June 20, 2005 at 1505 hours. The CREF train is required to run following a loss of coolant accident (LOCA) or a LOCA in conjunction with a loss of offsite power (LOP). Testing determined that with the June 19, 2005 as-found settings, the 'B' CREF train was not capable of clearing the low fan flow trip setting in the event of a LOP/LOCA. Based on a review of work history for the 'B' CREF train fan controller, the controller switch was most likely mis-positioned by the maintenance technician following testing of the 'B' CREF train in January 2005. Therefore, the 'B' CREF train was inoperable for longer than the 7-day allowed outage time for a single CREF train inoperable as required by Technical Specification (TS) 3.7.2. During the period of time the 'B' CREF train was assumed to be inoperable, the 'A' CREF train had experienced periods of inoperability. With both trains of CREF inoperable for greater than one hour the requirement of TS 3.0.3 was also exceeded.

The cause of the incorrect 'B' CREF train fan controller setting was due to human error. The 'B' CREF controller was restored to the proper settings and returned to operable on June 20, 2005.

This event is being reported in accordance with 10CFR50.73(a)(2)(i)(B), as "a condition which was prohibited by technical specifications."

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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)

Control Room Emergency Filtration {VI}*

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

IDENTIFICATION OF OCCURRENCE

Event Date: January 2005
Discovery Date: June 19, 2005

CONDITIONS PRIOR TO OCCURRENCE

Hope Creek was in operational condition 1 with reactor power at approximately 99% on June 19, 2005. During the period of time the 'B' CREF train was assumed to be inoperable, the 'A' CREF train had experienced periods of inoperability period.

DESCRIPTION OF OCCURRENCE

On June 19, 2005, maintenance personnel identified that the fan flow controller for the 'B' control room emergency filtration (CREF) {VI} train was found with a reset setting different than required by the instrument calibration data (ICD) record. The reset was found at 1.0 X 10 rep/min when it should have been set at 10 X 10 rep/min. Upon identification of the incorrect controller setting, the 'B' CREF train was declared inoperable on June 19, 2005 at 1747 hours until the controller was adjusted to the proper settings on June 20, 2005 at 1505 hours. The CREF train is required to run following a loss of coolant accident (LOCA) or a LOCA in conjunction with a loss of offsite power (LOP). Testing determined that with the June 19, 2005 as-found settings, the 'B' CREF train was not capable of clearing the low fan flow trip setting in the event of a LOP/LOCA.

Based on a review of work history for the 'B' CREF train fan controller, the controller switch was most likely mis-positioned by the maintenance technician following testing of the 'B' CREF train in January 2005. Therefore, the 'B' CREF train was inoperable for longer than the 7-day allowed outage time for a single CREF train inoperable as required by Technical Specification (TS) 3.7.2. During the period of time the 'B' CREF train was assumed to be inoperable, the 'A' CREF train had experienced periods of inoperability. With both trains of CREF inoperable for greater than one hour the requirement of TS 3.0.3 was also exceeded.

This event is being reported in accordance with 10CFR50.73(a)(2)(i)(B), as "a condition which was prohibited by technical specifications."

CAUSE OF OCCURRENCE

The cause of the incorrect 'B' CREF train fan controller setting was due to human error. Based on a review of work history for the 'B' CREF train fan controller, the controller switch was most likely mis-positioned by the maintenance technician following testing of the 'B' CREF train in January 2005.

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PREVIOUS OCCURRENCES

A review of LERs at Hope Creek for the previous two years was performed. This review identified the following LERs associated with CREF train inoperability: 354/03-002-00, 354/04-002-00, 354/04-003-01, 354/04-005-00 and 354/05-004-00. Although these LERs were against the CREF system, the reportable occurrences were not associated with improper controller settings. Corrective actions for these LERs were specific to the events and would not have prevented the current event from occurring.

SAFETY CONSEQUENCES AND IMPLICATIONS

During the period of time the 'B' CREF train was assumed to be inoperable, the 'A' CREF train had experienced periods of inoperability. No plant events occurred during the period of time that the 'B' CREF was assumed inoperable that required the actuation of the CREF system. Although the 'B' CREF train would not have been capable of clearing the low fan flow trip during a LOP/LOCA, the train was capable of being started manually.

In accordance with the design basis dose analysis for a LOCA event, control room operator radiological doses as evaluated in the analysis would not be exceeded if the control room envelope (CRE) is initially isolated and a CREF train is started within the first 30 minutes of the LOCA to pressurize the CRE. With the as-found fan controller settings, the 'B' CREF train would have isolated the control room envelope, the fan would have tripped on low flow, but the operators were capable of re-starting the CREF train within 30 minutes from the control room.

A review of this event determined that a Safety System Functional Failure (SSFF) has not occurred as defined in Nuclear Energy Institute (NEI) 99-02. Since the 'B' CREF train was capable of mitigating the consequences of a design basis accident in accordance with the design basis dose analysis, this event did not impact the ability to mitigate the consequences of an accident.

CORRECTIVE ACTION

1. The 'B' CREF controller was restored to the proper settings and returned to operable on June 20, 2005.
2. A departmental communication of the mis-positioning event was conducted with appropriate maintenance personnel in June following the identification of the incorrect as-found switch setting. An additional communication briefing for this event will be conducted with appropriate maintenance personnel to discuss the follow-up testing of the 'B' CREF train and the impact on operability of the system. This action is being tracked in PSEG's corrective action program.

COMMITMENTS

This LER contains no commitments.