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U. S. Nuclear Regulatory Commission
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LER 354/2003-005-00
HOPE CREEK GENERATING STATION
FACILITY OPERATING LICENSE NO. NPF-57
DOCKET NO. 50-354

This Licensee Event Report entitled "Hope Creek "B" Emergency Diesel Generator Inoperable Beyond Technical Specification Allowed Outage Time" is being submitted pursuant to the requirements of 10CFR50.73(a)(2)(i)(B). The attached LER contains no commitments.

Sincerely,

A handwritten signature in black ink, appearing to read "Lon H. Waldinger", written over the word "Sincerely,".

Lon H. Waldinger
Director Operations

Attachment

/MGM

C Distribution
 LER File 3.7

IE22

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 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 Hope Creek Generating Station	2. DOCKET NUMBER 05000354	3. PAGE 1 OF 4
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4. TITLE
Hope Creek "B" Emergency Diesel Generator Inoperable Beyond Technical Specification Allowed Outage Time

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
02	24	2003	2003	- 005 - 00		07	02	2003		05000
									FACILITY NAME	DOCKET NUMBER
										05000

9. OPERATING MODE	10. POWER LEVEL	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)			
1	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
		20.2203(a)(2)(iii)	50.46(a)(3)(ii)	50.73(a)(2)(v)(C)	Specify in Abstract below or in NRC Form 366A
		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 Michael Mosier, Licensing Engineer	TELEPHONE NUMBER (Include Area Code) 856-339-5434
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13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

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

14. SUPPLEMENTAL REPORT EXPECTED

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

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

On February 24, 2003, during fuel rack lubrication on "B" Hope Creek Emergency Diesel Generator Engine (EDG) the number two fuel injection pump rack was found stuck and the unit declared inoperable at 02:20. Immediate corrective action was to replace fuel pump on number two cylinder. The "B" EDG was returned to an operable status at 21:17 on February 25, 2003. Subsequent to this an investigation was conducted into the timeliness of identification of the failed fuel injector. The conclusion based upon the failure mechanism was that the diesel was inoperable from the time the diesel was taken out of service for the monthly surveillance test, which occurred at 16:37 on February 22, 2003. Technical Specification 3.8.1.1 Action b states that the "A" or "B" EDG must be returned to an operable condition within 72 hours. The apparent cause associated with being in a condition not allowed by TS 3.8.1.1 Action b was personnel error. This event is reportable in accordance with 10CFR50.73(a)(2)(i)(B) as any event, which was prohibited by the plant's Technical Specifications.

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

PLANT AND SYSTEM IDENTIFICATION

General Electric – Boiling Water Reactor (BWR/4)
Emergency Onsite Power Supply System – EISS Identifier {EK}*

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

IDENTIFICATION OF OCCURRENCE

Event Date: February 24, 2003
Discovery Date: May 8, 2003

CONDITIONS PRIOR TO OCCURRENCE

The plant was in OPERATIONAL CONDITION 1 (POWER OPERATION) at the time of the event.

DESCRIPTION OF OCCURRENCE

On February 24, 2003, during fuel rack lubrication on "B" Hope Creek Emergency Diesel Generator Engine {EK} using procedure HC.OP-DL.ZZ-0006 (Q), step 1.2, the number two fuel injection pump rack was found stuck. The fuel pump was replaced on the number two cylinder and the diesel returned to an operable condition on February 25, 2003. A post mortem analysis of the injector failure was performed. The results of the analysis show that this could have only been caused by internal debris. The monthly surveillance had been performed on that diesel the previous day. The injectors are checked as part of that surveillance after the run has occurred. The nature of the failure is such that it is highly unlikely for the injector to have spontaneously failed and bound up without the diesel having been run or the injector manually operated. Based upon this, on May 8, 2003, it was concluded that the injector had failed at the completion of the previous monthly surveillance run. The non-licensed operator who performed the post run fuel rack injector check indicated that the injector test was performed in accordance with the procedure and performed satisfactorily. The forensic evidence does not support this. The operator was familiar with the task and properly demonstrated the technique as part of the interview. It is possible that the equipment operator became spatially disoriented and believed that he had checked all of the injectors and in reality had missed one. Based on the above it was determined that the "B" EDG was out of service from February 22, 2003 at 16:37 hours until February 25 at 21:17 hours. This exceeded the 72 hours required by TS 3.8.1.1 Action b to return the EDG to an operable condition.

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

DESCRIPTION OF OCCURRENCE (continued)

Shift managers rolled out this evaluation as a lessons learned to all shift personnel, emphasizing the need for attention to detail and the use of STAR (Stop, Think, Act, Review) when performing multiple actions within a single procedural step.

CAUSE OF OCCURRENCE

The apparent cause associated with being in a condition not allowed by TS 3.8.1.1 Action b was personnel error.

PREVIOUS OCCURRENCES

A review of LERs at Salem and Hope Creek generating stations dating back to 2001 has determined that no other reportable events similar to this have occurred.

SAFETY CONSEQUENCES AND IMPLICATIONS

Although the "B" EDG was inoperable for greater than the 72 hours allowed by the action statement in Hope Creek Technical Specification 3.8.1.1, there was no impact to the ability to either safely shutdown the plant or respond to a design basis accident. In the event that a design basis accident occurred during the time the "B" EDG was inoperable, the two sources of offsite power to the safety related busses remained operable. In the event of an accident, the required mitigation equipment would have been supplied power from the offsite power source and therefore the entire complement of accident mitigation equipment remained available. The Class 1E AC power system at Hope Creek is divided into four independent power supply channels, A, B, C, and D. Each of these four channels supplies loads in its own load group. All the Class 1E loads are assigned to these channels so that any combination of three out of four load groups has the capability to supply the minimum required safety loads to safely shut down the unit and mitigate the consequences of an accident. Each Class 1E 4.16-kV bus is provided with a normal and an alternate offsite power supply feeder and one EDG feeder. The remaining OPERABLE EDGs (A, C, and D) are able to mitigate the consequences of a DBA in conjunction with a loss of offsite power (LOOP) condition. Based on the above, there was no impact to the health and safety of the public.

A review of this condition determined that a Safety System Functional Failure (SSFF) as defined in Nuclear Energy Institute (NEI) 99-02, Regulatory Assessment Performance Indicator Guideline has not occurred.

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

CORRECTIVE ACTIONS:

1. Immediate corrective action was to replace fuel pump on number two cylinder.
2. Individual involved has been counseled in accordance with Company policies.
3. Operations personnel have reviewed the fuel rack check and lubrication task and have identified the Human Performance Error traps present in each activity. Error reduction techniques will be implemented to reduce the potential for the creation of an error likely situation during future performance of these tasks.
4. This event will be added to the Operating Experience Database to be used in future pre-job briefs.

COMMITMENTS

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