



MAY 14 2012

LR-N12-0149

10CFR50.73

United States Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-001

Hope Creek Generating Station Unit 1
Facility Operating License No. NPF-57
Docket No. 50-354

Subject: Licensee Event Report 2012-002

In accordance with 10 CFR 50.73(a)(2)(v)(D), PSEG Nuclear LLC is submitting
Licensee Event Report (LER) Number 2012-002

Should you have any questions concerning this letter, please contact Mr. Paul Bonnett
at (856) 339-1923.

No regulatory commitments are contained in the LER.

Sincerely,

A handwritten signature in black ink that reads "David P. Lewis".

David P. Lewis
Plant Manager
Hope Creek Generating Station

Attachment: Licensee Event Report 2012-002

JE22
MRR

cc: Mr. W. Dean, Regional Administrator – Region 1
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Mr. J. Hughey, Project Manager
U.S. Nuclear Regulatory Commission
One White Flint North
Mail Stop O8 B1A
11555 Rockville Pike
Rockville, MD 20852

USNRC Senior Resident Inspector – Hope Creek (X24)

P. Mulligan, Manager
Bureau of Nuclear Engineering\
New Jersey Department of Environmental Protection
PO Box 420
Trenton, NJ 08625

Hope Creek Commitment Tracking Coordinator (H02)

LICENSEE EVENT REPORT (LER)

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

Estimated burden per response to comply with this mandatory collection request: 80 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 F53), 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.

1. FACILITY NAME Hope Creek Generating Station	2. DOCKET NUMBER 05000354	3. PAGE 1 OF 3
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4. TITLE
High Pressure Coolant Injection System Inoperable

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
03	14	2012	2012	- 002 -	000	05	14	2012	N/A	
									FACILITY NAME	DOCKET NUMBER
									N/A	

9. OPERATING MODE 1	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR§: <i>(Check all that apply)</i>																																				
10. POWER LEVEL 100	<table style="width:100%; border: none;"> <tr> <td><input type="checkbox"/> 20.2201(b)</td> <td><input type="checkbox"/> 20.2203(a)(3)(i)</td> <td><input type="checkbox"/> 50.73(a)(2)(i)(C)</td> <td><input type="checkbox"/> 50.73(a)(2)(vii)</td> </tr> <tr> <td><input type="checkbox"/> 20.2201(d)</td> <td><input type="checkbox"/> 20.2203(a)(3)(ii)</td> <td><input type="checkbox"/> 50.73(a)(2)(ii)(A)</td> <td><input type="checkbox"/> 50.73(a)(2)(viii)(A)</td> </tr> <tr> <td><input type="checkbox"/> 20.2203(a)(1)</td> <td><input type="checkbox"/> 20.2203(a)(4)</td> <td><input type="checkbox"/> 50.73(a)(2)(ii)(B)</td> <td><input type="checkbox"/> 50.73(a)(2)(viii)(B)</td> </tr> <tr> <td><input type="checkbox"/> 20.2203(a)(2)(i)</td> <td><input type="checkbox"/> 50.36(c)(1)(i)(A)</td> <td><input type="checkbox"/> 50.73(a)(2)(iii)</td> <td><input type="checkbox"/> 50.73(a)(2)(ix)(A)</td> </tr> <tr> <td><input type="checkbox"/> 20.2203(a)(2)(ii)</td> <td><input type="checkbox"/> 50.36(c)(1)(ii)(A)</td> <td><input type="checkbox"/> 50.73(a)(2)(iv)(A)</td> <td><input type="checkbox"/> 50.73(a)(2)(x)</td> </tr> <tr> <td><input type="checkbox"/> 20.2203(a)(2)(iii)</td> <td><input type="checkbox"/> 50.36(c)(2)</td> <td><input type="checkbox"/> 50.73(a)(2)(v)(A)</td> <td><input type="checkbox"/> 73.71(a)(4)</td> </tr> <tr> <td><input type="checkbox"/> 20.2203(a)(2)(iv)</td> <td><input type="checkbox"/> 50.46(a)(3)(ii)</td> <td><input type="checkbox"/> 50.73(a)(2)(v)(B)</td> <td><input type="checkbox"/> 73.71(a)(5)</td> </tr> <tr> <td><input type="checkbox"/> 20.2203(a)(2)(v)</td> <td><input type="checkbox"/> 50.73(a)(2)(i)(A)</td> <td><input type="checkbox"/> 50.73(a)(2)(v)(C)</td> <td><input type="checkbox"/> OTHER</td> </tr> <tr> <td><input type="checkbox"/> 20.2203(a)(2)(vi)</td> <td><input type="checkbox"/> 50.73(a)(2)(i)(B)</td> <td><input checked="" type="checkbox"/> 50.73(a)(2)(v)(D)</td> <td></td> </tr> </table> <p style="text-align: right; font-size: small;">Specify in Abstract below or in NRC Form 366A</p>	<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)	<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)	<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)	<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 73.71(a)(4)	<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.71(a)(5)	<input type="checkbox"/> 20.2203(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> OTHER	<input type="checkbox"/> 20.2203(a)(2)(vi)	<input type="checkbox"/> 50.73(a)(2)(i)(B)	<input checked="" type="checkbox"/> 50.73(a)(2)(v)(D)	
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12. LICENSEE CONTACT FOR THIS LER

FACILITY NAME Paul Bonnett, Sr. Compliance Engineer	TELEPHONE NUMBER (Include Area Code) 856-339-1923
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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
X	BJ	FQT		N					

14. SUPPLEMENTAL REPORT EXPECTED <input checked="" type="checkbox"/> YES <i>(If yes, complete 15. EXPECTED SUBMISSION DATE)</i> <input type="checkbox"/> NO	15. EXPECTED SUBMISSION DATE	<u>MONTH</u> 08	<u>DAY</u> 14	<u>YEAR</u> 2012
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ABSTRACT *(Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)*

On March 14, 2012, the High Pressure Coolant Injection (HPCI) system was declared INOPERABLE when the turbine governor control valve failed to respond as operators expected during a planned maintenance evolution. The system was aligned for obtaining an oil sample and the reactor operator (RO) started the auxiliary oil pump (AOP). The control valve moved to mid position, but did not immediately return to the closed position as expected. When the AOP was secured, the control valve went fully closed.

The cause of the event was an unexpected response of the HPCI turbine governor control valve. As part of the troubleshooting the EGR was replaced and sent to the manufacturer for failure analysis. This LER is being submitted because the as found condition of the EGR will not be confirmed until the manufacturer's failure analysis is complete and reviewed.

This condition is reportable under 10 CFR 50.73(a)(2)(v)(D) for a condition that would have prevented fulfillment of a safety function.

CONTINUATION SHEET

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
Hope Creek Generating Station	05000354	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 3
		2012	- 002	- 000	

NARRATIVE

PLANT AND SYSTEM IDENTIFICATION

General Electric – Boiling Water Reactor (BWR/4)
High Pressure Coolant Injection (BJ) – EIS Identifier {BJ/T}*

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

IDENTIFICATION OF OCCURRENCE

Event Date: March 14, 2012
Discovery Date: March 14, 2012

CONDITIONS PRIOR TO OCCURRENCE

Hope Creek was in Operational Condition 1 at 100 percent rated thermal power (RTP). No structures, systems, or components were INOPERABLE at the start of this event or contributed to the event.

DESCRIPTION OF OCCURRENCE

On March 14, 2012, at 8:34 p.m., the High Pressure Coolant Injection (HPCI) system {EIS: BJ/T} was declared INOPERABLE when the turbine governor control valve failed to respond as expected during a planned maintenance evolution for oil sampling. The approved procedure for obtaining the oil sample required the HPCI flow controller to be placed in MANUAL in order to run the auxiliary oil pump (AOP). The reactor operator (RO) set the flow controller output demand signal at zero percent and started the AOP. The governor control valve responded by traveling open to mid position but did not return to the full closed position as seen in previous samples. The valve position indicated that the valve was 26 percent open, which was verified by local observation. The RO verified that the controller output demand was set to zero and the flow controller was in MANUAL. When the RO secured the AOP, the turbine governor control valve went fully closed as expected.

Engineering's initial review of the response concurred that the turbine governor control valve did not respond as expected. With the unexpected system response confirmed, the shift manager declared HPCI INOPERABLE and made an eight-hour notification (event No. 47745) to the NRC via the Emergency Notification System (ENS). All other emergency core cooling systems and the reactor core injection cooling (RCIC) system remained OPERABLE and were protected to ensure no work was performed on them until after the HPCI system was restored. There were no automatic or manually initiated safety system responses.

Troubleshooting performed on the turbine governor control valve showed that the relay linkage between the valve and the Woodward EGR (Electronic Governor - Remote Actuator) was free to move and did not bind. The initial inspection of the EGR showed that the internal plunger was not bound and was able to move by hand. Some corrosion on the internal plunger was noted. The EGR and remote servo were replaced. Replacement of control components required dynamic tuning of the system. These activities were completed at 08:00 on 3/17/2012, at which time the HPCI system was restored to an OPERABLE condition.

CONTINUATION SHEET

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
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NARRATIVE

CAUSE OF EVENT

The cause of the event was an unexpected response of the HPCI turbine governor control valve that is most likely due to a potential internal malfunction of the EGR. The cause will be determined once the manufacturer's failure analysis results are received and reviewed. A supplemental report will be submitted once the failure analysis has been review and the causal evaluation has been approved.

SAFETY CONSEQUENCES AND IMPLICATIONS

HPCI was declared inoperable. Based on the HPCI system being inoperable, a Safety System Functional Failure (SSFF) occurred as defined in Nuclear Energy Institute (NEI) 99-02.

PREVIOUS OCCURRENCES

A review of Licensee Event Reports for the past three years at Hope Creek was performed to determine if a similar event had occurred. No similar events were noted.

CORRECTIVE ACTIONS

1. The EGR and remote servo was replaced.
2. The EGR and remote servo was sent to Woodward for failure analysis and refurbishment.
3. An apparent cause evaluation is being conducted.

COMMITMENTS

This LER contains no regulatory commitments.