



NOV 27 2002
LR-N02-0402

U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Gentlemen:

LER 354/2002-007-00
HOPE CREEK GENERATING STATION
FACILITY OPERATING LICENSE NO. NPF-57
DOCKET NO. 50-354

This Licensee Event Report entitled "Core Spray Discharge Line Alarms Inoperable" 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 that reads "D. F. Garchow".

D. F. Garchow
Vice President - Operations

Attachment

/PRD

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

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 |
|--|-------------------------------------|--------------------------|

4. TITLE
Core Spray Discharge Line Alarms Inoperable

| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 09 | 30 | 2002 | 2002 | 007 | 00 | 11 | 27 | 2002 | | 05000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <tr> <td>9. OPERATING MODE</td> <td>1</td> <td colspan="9">11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)</td> </tr> <tr> <td>10. POWER LEVEL</td> <td>90</td> <td>20.2201(b)</td> <td></td> <td>20.2203(a)(3)(ii)</td> <td></td> <td>50.73(a)(2)(ii)(B)</td> <td></td> <td>50.73(a)(2)(ix)(A)</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>20.2201(d)</td> <td></td> <td>20.2203(a)(4)</td> <td></td> <td>50.73(a)(2)(iii)</td> <td></td> <td>50.73(a)(2)(x)</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>20.2203(a)(1)</td> <td></td> <td>50.36(c)(1)(i)(A)</td> <td></td> <td>50.73(a)(2)(iv)(A)</td> <td></td> <td>73.71(a)(4)</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>20.2203(a)(2)(i)</td> <td></td> <td>50.36(c)(1)(ii)(A)</td> <td></td> <td>50.73(a)(2)(v)(A)</td> <td></td> <td>73.71(a)(5)</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>20.2203(a)(2)(ii)</td> <td></td> <td>50.36(c)(2)</td> <td></td> <td>50.73(a)(2)(v)(B)</td> <td></td> <td rowspan="5">OTHER Specify in Abstract below or in NRC Form 366A</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>20.2203(a)(2)(iii)</td> <td></td> <td>50.46(a)(3)(ii)</td> <td></td> <td>50.73(a)(2)(v)(C)</td> <td></td> </tr> <tr> <td></td> <td></td> <td>20.2203(a)(2)(iv)</td> <td></td> <td>50.73(a)(2)(i)(A)</td> <td></td> <td>50.73(a)(2)(v)(D)</td> <td></td> </tr> <tr> <td></td> <td></td> <td>20.2203(a)(2)(v)</td> <td>X</td> <td>50.73(a)(2)(i)(B)</td> <td></td> <td>50.73(a)(2)(vii)</td> <td></td> </tr> <tr> <td></td> <td></td> <td>20.2203(a)(2)(vi)</td> <td></td> <td>50.73(a)(2)(i)(C)</td> <td></td> <td>50.73(a)(2)(viii)(A)</td> <td></td> </tr> <tr> <td></td> <td></td> <td>20.2203(a)(3)(i)</td> <td></td> <td>50.73(a)(2)(ii)(A)</td> <td></td> <td>50.73(a)(2)(viii)(B)</td> <td></td> <td></td> <td></td> <td></td> </tr> </table> | | | | | | | | | | | 9. OPERATING MODE | 1 | 11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply) | | | | | | | | | 10. POWER LEVEL | 90 | 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 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) | | | | |
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| | | 20.2203(a)(1) | | 50.36(c)(1)(i)(A) | | 50.73(a)(2)(iv)(A) | | 73.71(a)(4) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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12. LICENSEE CONTACT FOR THIS LER

| | |
|--|---|
| NAME Paul Duke, Licensing Engineer | TELEPHONE NUMBER (Include Area Code) 856-339-1466 |
|--|---|

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 |
|-------|--------|-----------|---------------|--------------------|-------|--------|-----------|---------------|--------------------|
| | | | | | | | | | |

| 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)

Hope Creek operated in a condition prohibited by Technical Specifications (TSs) 3.5.1 and 3.4.3.2 due to a closed instrument root valve for the B core spray loop pressure transmitter. Based on a review of plant records, PSEG Nuclear concluded the pressure transmitter was isolated from September 6 through September 30, 2002. The apparent cause for this event was less than adequate instructions for restoration and system lineup verification contained in the procedure for core spray pump inservice testing. There were no safety consequences associated with this event. The isolated transmitter provides an alarm only function, not assumed in any event for dependence on operator action. The closed valve was reopened and the B core spray loop was restored to OPERABLE status. Lessons learned from this event will be communicated to control technicians. The procedure for core spray pump inservice testing will be revised. Similar procedures will be reviewed and revised as necessary.

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

| FACILITY NAME (1) | DOCKET NUMBER (2) | LER NUMBER (6) | | | PAGE (3) |
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| Hope Creek Generating Station | 05000354 | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | 2 OF 4 |
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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)
Core Spray System {BM}*

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

IDENTIFICATION OF OCCURRENCE

Event Date: September 30, 2002
Discovery Date: September 30, 2002

CONDITIONS PRIOR TO OCCURRENCE

The plant was in OPERATIONAL CONDITION 1 (POWER OPERATION) at the time of discovery. No other structures, systems or components were inoperable at the start of this event that contributed to the event.

DESCRIPTION OF OCCURRENCE

On September 30, 2002, PSEG Nuclear determined that the instrument root valve for the B core spray loop pressure transmitter {BM/PT} was closed. The transmitter provides input to a core spray system discharge line "keep filled" alarm and to a high/low pressure interface valve leakage pressure monitor. The B core spray loop was declared inoperable. The valve was opened and the B core spray loop was restored to OPERABLE status. Based on a review of plant records, PSEG Nuclear concluded the pressure transmitter had been isolated since September 6, 2002.

Technical Specification (TS) 3.5.1 Action f states that the discharge line "keep filled" alarm instrumentation associated with a core spray subsystem may be in an inoperable status for up to 6 hours for required surveillance testing, provided that the "keep filled" alarm instrumentation associated with at least one low pressure coolant injection (LPCI) or core spray subsystem serviced by the affected "keep filled" system remains OPERABLE. Otherwise, Action f requires the affected subsystem to be vented to verify it is filled with water.

TS 3.4.3.2 Action d permits a high/low pressure interface valve leakage pressure monitor to be inoperable for up to 7 days. If the monitor cannot be restored to OPERABLE status within 7 days, the pressure in the affected line must be verified to be less than the alarm setpoint at least once per 12 hours.

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DESCRIPTION OF OCCURRENCE (continued)

Since this condition existed for longer than the time permitted by TSs 3.5.1 and 3.4.3.2, it is reportable as a condition prohibited by plant Technical Specifications in accordance with 10 CFR 50.73(a)(2)(i)(B).

CAUSE OF OCCURRENCE

The apparent cause for this event was less than adequate instructions for restoration and system lineup verification contained in the procedure for core spray pump inservice testing. The procedure instructions are vague and the procedure does not contain a requirement for independent verification of valve position following removal of test equipment installed in parallel with the B core spray loop pressure transmitter. In addition, there was a failure to follow existing standards for control of component configuration.

PREVIOUS OCCURRENCES

A review of reportable events in the last two years identified three events involving conditions prohibited by Technical Specifications due to mispositioned components. LER 354/01-004 reported that reactor building pressure failed to meet acceptance criteria during the reactor building integrity functional test due to the reactor building differential pressure controllers being set incorrectly during a maintenance or surveillance testing activity. LER 354/00-009 reported the inoperability of the Filtration, Recirculation, and Ventilation System Recirculation Subsystem caused by an improperly secured manual damper. LER 354/02-001 reported the inoperability of a residual heat removal pump due to a closed minimum flow manual maintenance valve. The corrective actions taken were specific to the events and systems involved and could not have prevented this event.

SAFETY CONSEQUENCES AND IMPLICATIONS

There were no safety consequences associated with this event. The isolated transmitter provides an alarm only function, not assumed in any event for dependence on operator action. OPERABILITY of the B core spray loop was confirmed when the closed instrument root valve was reopened. During the period the transmitter was isolated, B LPCI discharge pressure transmitter was OPERABLE. The B core spray subsystem and the B LPCI subsystem are served by the same fill network.

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

CORRECTIVE ACTIONS

1. The instrument root valve was reopened and the B core spray loop was restored to OPERABLE status.

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

CORRECTIVE ACTIONS (continued)

2. Lessons learned from this event will be communicated to control technicians.
3. The procedure for core spray pump inservice testing will be revised. Similar procedures will be reviewed and revised as necessary.

COMMITMENTS

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