Commonwealth Edison
Dresden Nuclear Power Station
R.R. #1
Morris, Illinois 60450
Telephone 815/942-2920

May 5, 1992

CWS LTR #92-243

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

Licensee Event Report #92-13, Docket #050237 is being submitted as required by Technical Specification 6.6, NUREG 1022 and 10 CFR 50.73(a)(2)(ii)(B).

Charles W. Schroeder
Station Manager

CWS:lrw

Enclosure

cc: A. Bert Davis, Regional Administrator, Region III
NRC Resident Inspector's Office
File/NRC
File/Numerical

(ZDVR/587)/6



IE22

LICENSEE EVENT REPORT (LER)

Form Rev 2.0

| Facility Name (1) | Docket Number (2) | Page (3) |
|---|---|---|
| Dresden Nuclear Power Station, Unit 2 | 0 5 0 0 0 2 3 7 | 1 of 0 3 |

Title (4) High Pressure Coolant Injection Supports Found Outside of FSAR Allowables Due to Unknown Cause

| Event Date (5) | | | LER Number (6) | | | Report Date (7) | | | Other Facilities Involved (8) | |
|---|---|---|---|---|---|---|---|---|---|---|
| Month | Day | Year | Year | Sequential Number | Revision Number | Month | Day | Year | Facility Names | Docket Number(s) |
| 0 4 | 1 1 | 9 2 | 9 2 | 0 1 3 | 0 0 | 0 5 | 0 1 | 9 2 | None | |

| OPERATING MODE (9) | N | THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11) | | | |
|---|---|---|---|---|---|
| POWER LEVEL (10) | 0 9 9 | ___ 20.402(b) | ___ 20.405(c) | ___ 50.73(a)(2)(iv) | ___ 73.71(b) |
| | | ___ 20.405(a)(1)(i) | ___ 50.36(c)(1) | ___ 50.73(a)(2)(v) | ___ 73.71(c) |
| | | ___ 20.405(a)(1)(ii) | ___ 50.36(c)(2) | ___ 50.73(a)(2)(vii) | X Other (Specify in Abstract below and in Text) |
| | | ___ 20.405(a)(1)(iii) | ___ 50.73(a)(2)(i) | ___ 50.73(a)(2)(viii)(A) | |
| | | ___ 20.405(a)(1)(iv) | ___ 50.73(a)(2)(ii) | ___ 50.73(a)(2)(viii)(B) | |
| | | ___ 20.405(a)(1)(v) | ___ 50.73(a)(2)(iii) | ___ 50.73(a)(2)(x) | |

LICENSEE CONTACT FOR THIS LER (12)

| Name | TELEPHONE NUMBER |
|---|---|
| | AREA CODE |
| Mark Churilla, Technical Staff System Engineer Ext. 2788 | 8 1 5 9 4 2 - 2 9 2 0 |

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

| CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NPRDS | CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NPRDS |
|---|---|---|---|---|---|---|---|---|---|
| X | B J | S P T | B 2 1 0 | Y | | | | | |
| | | | | | | | | | |

| SUPPLEMENTAL REPORT EXPECTED (14) | | Expected Submission Date (15) | Month | Day | Year |
|---|---|---|---|---|---|
| X Yes (If yes, complete EXPECTED SUBMISSION DATE) | ___ NO | | 1 2 | 0 1 | 9 2 |

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

On April 11, 1992 at 1540 hours, with Unit 2 at 99% rated core thermal power, three supports on the High Pressure Coolant Injection (HPCI) Gland Seal Condenser (GSC) subsystem were determined to be outside of Final Safety Analysis Report (FSAR) allowable limits. An Engineering Evaluation determined, however, that the HPCI system remained within operable limits. The cause of the support damage is unknown at this time; testing will be conducted during the next several HPCI Surveillances to collect system vibration data. In order to repair the supports the HPCI System was taken out of service and a seven day Limiting Condition for Operation (LCO) was entered on April 14, 1992. The supports were repaired and the seven day LCO terminated on April 16, 1992. The safety significance of this event is minimal in that functional operability of HPCI was unaffected. A previous event involving Unit 3 HPCI GSC cooling water line support damage was reported by LER 92-11/050249.

PLANT AND SYSTEM IDENTIFICATION:

General Electric - Boiling Water Reactor - 2527 MWt rated core thermal power

Nuclear Tracking System (NTS) tracking code numbers are identified in the text as (XXX-XXX-XX-XXXXX)

EVENT IDENTIFICATION:

High Pressure Coolant Injection [BJ] Supports Found Outside FSAR Allowables Due to Unknown Cause.

A. CONDITIONS PRIOR TO EVENT:

Unit: 2 Event Date: April 11, 1992 Event Time: 1540 Hours

Reactor Mode: N Mode Name: Run Power Level: 99%

Reactor Coolant System (RCS) Pressure: 1004 psig

B. DESCRIPTION OF EVENT:

On April 11, 1992 at 1540 hours, with Unit 2 at 99% rated core thermal power three supports on the High Pressure Coolant Injection (HPCI) Gland Seal Condenser (GSC) subsystem were determined to be outside of Final Safety Analysis Report (FSAR) allowable stress limits. The supports were discovered following a an event on Unit 3 involving GSC support damage. An Engineering Evaluation determined, however, that the HPCI system remained within operable limits. Work Requests 08463, 08489, and 08490 were written to repair supports M-1151D-54, M1151D-56, and M-1151D-62 respectively. The HPCI System was taken out of service on April 14, 1992 to complete the needed repairs. A seven day Limiting Condition for Operation was entered per Technical Specification (TS) 3.5. Following repairs the HPCI System was tested satisfactorily and the seven day LCO was terminated at 2110 hours on April 16, 1992.

C. APPARENT CAUSE OF EVENT:

This report is being submitted in accordance with 10CFR50.73(a)(2)(ii)(B), which requires the reporting of any condition that is outside the design basis of the plant.

The GSC system condenses steam for the turbine's gland seals. The condenser is supplied by either an Auxiliary Cooling Water (ACW) pump or a discharge supply off of the HPCI Booster Pump. An event involving Unit 3 GSC supports occurred on April 8, 1992. As part of the investigation into the Unit 3 event the Unit 2 GSC system was inspected. The inspection determined three supports were outside of the Final Safety Analysis Report (FSAR) allowables, but within operability limits. The three supports and the identified deficiencies are as follows:

| Support | Deficiency |
|---|---|
| M-1151D-54 | Spherical bearing was partially dislodged from the paddle |
| M-1151D-56 | Spherical bearing was partially dislodged from the paddle |
| M-1151D-62 | Anchor bolts in baseplate were loose. Pipe within support was eroded. |

A history review indicated that Unit 3 GSC system supports have had similar support problems. However, in this event there was support damage on the Booster Pump supply to the condenser. This indicates that line movement may occur during normal HPCI testing. In order to determine the cause of the line movements data will be collected during the next several HPCI Surveillances. A supplemental report will then be submitted.

D. SAFETY ANALYSIS OF EVENT:

On April 11, 1992 it was determined that three HPCI supports, on the GSC subsystem, were outside of FSAR allowables. The supports were determined to be within operability limits. In order to repair the supports the HPCI system was taken out of service on April 14, 1992. All the necessary Emergency Core Cooling systems were available per TS 3.5.C.2.a. during implementation of the repairs. The supports were repaired and the system tested operational on April 16, 1992. The safety significance is minimal in that degraded supports would not of prevented the HPCI from initiating. Therefore, since HPCI functional operability was not affected by the degraded supports and during the repairs the necessary safety systems were operable, the safety significance of this event is minimal.

E. CORRECTIVE ACTIONS:

Work Requests 08463, 08489, and 08490 were completed and the system tested satisfactorily.

In order to determine the cause of the support degradation, vibration monitoring will take place during the next several HPCI surveillances. A supplemental report will then be written (237-200-92-06802).

F. PREVIOUS OCCURENCES:

| LER/Docket Numbers | Title |
|---|---|
| 92-011 050249 | HPCI Surveillance Interval Exceeded Due to Turbine Oil Leakage |

During turbine overspeed testing, a turbine oil leak developed along with steam leaks causing the test to be postponed. Investigation into the problems determined that the oil leak was caused by sealant clogging the shaft vent path. The steam leaks were the result of insufficient cooling water to the GSC. Subsequently, when cooling water was restored to the GSC a water hammer occurred causing minor support damage.

G. COMPONENT FAILURE DATA:

N/A.

DAP FORM 2-8F
EVENT SUMMARY AND CAUSE CODES

DVR Number
12-2-92-068

| | | |
|---|---|---|
| [ ] Lost generation | [ ] Reactor trip | [ ] NRC violation, level____ |
| [ ] Cost > $25,000 | [ ] ESF actuation | [ ] GSEP event, class_____ |
| [ ] Hazard or Spill | [X] NRC reportable | [ ] Tech Spec LCO |
| [ ] Personnel injury | [X] LER | [X] Potential or future loss |
| | [ ] PSE | SALP functional area____ |

Maintenance/Surveillance

Component type | Failure mode | Department

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| X | | S | M | M | 4 | M | 6 | | M | M | M-1151D-54 Spherical bearing partially dislodged. |
| X | | S | M | M | 4 | M | 6 | | M | M | M-1151D-56 Spherical bearing partially dislodged. |
| X | | S | M | M | 4 | M | 6 | | M | M | M-1151D-62 Anchor bolts are loose. |

Licensed? L or blank | Level | Department | Type | Detail code

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| A | | | | | | | | | |
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Type | Detail code | Department

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Type | Detail code

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| C | | | | |

Type of deficiency | Detail code | Procedure type

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| D | | | | | |
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Type | Detail code | Department

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