

Commonwealth Edison Company
Dresden Generating Station
6500 North Dresden Road
Morris, IL 60450
Tel 815-942-2920



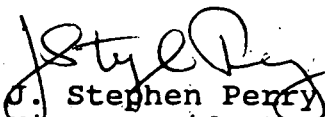
October 2, 1995

JSPLTR 95-0004

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

Licensee Event Report 95-013, Rev. 0, Docket 50-249 is being submitted pursuant to 10CFR50.73(a)(2)(i)(B), which states that any operation or condition prohibited by the plant's Technical Specification must be reported.

Sincerely,


J. Stephen Perry
Vice President
BWR Operations

JSP/RF:pt

Enclosure

cc: H. Miller, Regional Administrator, Region III
NRC Resident Inspector's Office
File/NRC
File/Numerical

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LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

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|---|--------------------------------------|---------------------------|
| FACILITY NAME (1) Dresden Nuclear Power Station, Unit 3 | DOCKET NUMBER (2) 05000249 | PAGE (3) 1 OF 4 |
|---|--------------------------------------|---------------------------|

TITLE (4)
Reactor Recirculation Pump Speed Mismatch Verification Not Performed Due to Defective Procedure

| 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 NAME | DOCKET NUMBER |
| 09 | 01 | 95 | 95 | -- 013 -- | 00 | 09 | 29 | 95 | Dresden Unit 2 | 05000237 |
| | | | | | | | | | FACILITY NAME | DOCKET NUMBER |

| | | | | | | | | | | | |
|--------------------------------|--|--|-----------------|-------------------|--|----------------|----------------------|--|--|--|--|
| OPERATING MODE (9) N | THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11) | | | | | | | | | | |
| POWER LEVEL (10) 000 | 20.2201(b) | | | 20.2203(a)(3)(i) | | | 50.73(a)(2)(iii) | | | 73.71(b) | |
| | 20.2203(a)(1) | | | 20.2203(a)(3)(ii) | | | 50.73(a)(2)(iv) | | | 73.71(c) | |
| | 20.2203(a)(2)(i) | | | 20.2203(a)(4) | | | 50.73(a)(2)(v) | | | OTHER | |
| | 20.2203(a)(2)(ii) | | | 50.36(c)(1) | | | 50.73(a)(2)(vii) | | | (Specify in Abstract below and in Text, NRC Form 366A) | |
| | 20.2203(a)(2)(iii) | | | 50.36(c)(2) | | | 50.73(a)(2)(viii)(A) | | | | |
| | 20.2203(a)(2)(iv) | | | X 50.73(a)(2)(i) | | | 50.73(a)(2)(viii)(B) | | | | |
| 20.2203(a)(2)(v) | | | 50.73(a)(2)(ii) | | | 50.73(a)(2)(x) | | | | | |

LICENSEE CONTACT FOR THIS LER (12)

| | |
|--|---|
| NAME Ralph M. Fenili, Operations Staff | TELEPHONE NUMBER (Include Area Code) Ext. 2917 (815) 942-2920 |
|--|---|

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 |
|-------|--------|-----------|--------------|---------------------|-------|--------|-----------|--------------|---------------------|
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| SUPPLEMENTAL REPORT EXPECTED (14) | | | | EXPECTED SUBMISSION DATE (15) | | MONTH | DAY | YEAR |
| YES (If yes, complete EXPECTED SUBMISSION DATE). | X | NO | | | | | | |

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

On September 1, 1995, with Unit 3 in the Refuel mode, Operations personnel discovered a discrepancy between Technical Specification requirements and actual Station procedural requirements. The Station was not performing a Recirculation Pump speed mismatch verification with the Units (Dresden 2 and 3) in the Shutdown or Refuel modes. The Technical Specifications require this verification whenever the Recirculation Pumps are running, regardless of the Unit's operating mode. The cause of the event was a defective procedure. Operating personnel immediately performed actions to comply with the Technical Specification surveillance requirements. The appropriate procedure changes were implemented.

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

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| FACILITY NAME (1) | | DOCKET NUMBER (2) | | LER NUMBER (6) | | | PAGE (3) |
| Dresden Nuclear Power Station, Unit 3 | | 05000249 | | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | 2 OF 4 |
| | | | | 95 | -- 013 -- | 00 | |

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

PLANT AND SYSTEM IDENTIFICATION:

General Electric - boiling water reactor - 2527 Mwt rated core thermal power. Energy Industry Identification System (EIIS) codes are identified in the text as [XX].

EVENT IDENTIFICATION:

Reactor Recirculation Pump Speed Mismatch Verification Not Performed Due to Defective Procedure

A. PLANT CONDITIONS PRIOR TO EVENT:

Unit: Event Date: September 1, 1995 Event Time: 09:30
 Reactor Mode: N Mode Name: Refuel Power Level: 0%
 Reactor Coolant System Pressure: 0 psig

B. DESCRIPTION OF EVENT:

On September 1, 1995, with Unit 3 in the Refuel Mode, during routine surveillances, the Unit 3 Nuclear Station Operator (NSO) discovered a discrepancy between Technical Specification requirements and actual Station procedural requirements. Technical Specification 3/4.6.H, Recirculation Pump Flow Limitations, requires a daily comparison of Recirculation Pump [AD] speeds for mismatch whenever both pumps are in operation. This surveillance requirement is met by performing Dresden Operating Surveillance (DOS) 0202-02, Jet Pump Operability and Degradation. The surveillance frequency and mode requirements for DOS 0202-02 are specified in Dresden procedure APPENDIX A, Unit 2(3) Operator's Daily Surveillance Log. APPENDIX A only requires completion of DOS 202-2 when the Unit is operating in the Startup or Run modes - in conflict with the Technical Specification 3/4.6.H requirement which requires a speed mismatch check whenever the Recirculation Pumps are in operation. A historical review determined that Dresden has never been fully in compliance with this Specification.

Operations Shift Management was immediately notified of the event. To comply with the Technical Specifications, Operations began verifying that Recirculation Pump speeds were within the Technical Specification requirements for Unit 3 (Unit 3 was shutdown with the recirculation system on, Unit 2 was defueled with the recirculation system secured). On September 8, 1995, a permanent procedure change to APPENDIX A was implemented to assure full compliance with the Technical Specification 3/4.6.H requirements.

C. CAUSE OF EVENT:

This report is submitted in accordance with Title 10 of the Code of Federal Regulation Part 50 Section 73 (A) (2) (i) (B), which states that any operation or condition prohibited by the plant's Technical Specifications must be reported.

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

The root cause of the event was a defective procedure, prepared utilizing old programs and standards. Current procedural change methodology performs greater emphasis on the coordination of requirements and commitments. Detailed history searches, along with other program enhancements, make the current procedure change methodology adequate to prevent recurrence. APPENDIX A, Unit 2(3) Operator's Daily Surveillance Log, did not require performing the Recirculation Pump speed mismatch surveillance while the unit was in the Shutdown or Refueling modes of operation. This is not in accordance with Technical Specification 3/4.6.H which requires this check whenever the Recirculation Pumps are in operation, regardless of operating mode.

D. SAFETY ANALYSIS:

The primary basis for maintaining recirculation pump speeds within close proximity is to ensure that the Low Pressure Coolant Injection (LPCI) [BO] loop selection logic is not compromised during a design basis Loss of Coolant Accident (LOCA). Although the Recirculation Pump speed mismatch verifications were limited to the Startup and Run modes, these are the only operating modes in which the design basis LOCA is credible.

The LPCI loop selection logic compares recirculation loop riser pressures on the two running recirculation loops to determine which loop is broken so that injection may be made into the intact loop. The plant design features and Technical Specification requirements ensure that large differences in pump speed do not mislead the loop select logic.

The Technical Specifications require that Recirculation Pump speeds be maintained within 15% of each other when the unit is operating below 80% power. A daily surveillance is required by Technical Specifications to ensure these speed limitations are met (when both pumps are operating).

Although Dresden was not performing the required surveillance with the Units in a shutdown condition, the recirculation speed mismatch circuitry remained active and was able to warn the operators if pump speeds differed by more than 7% (via alarm 902(3)-4 E-6, 2(3) A/B RECIRC PPS SPEED MISMATCH). At a 10% speed mismatch, the recirculation pumps are electronically prohibited from increasing or decreasing speed in a manner that would increase the magnitude of the speed difference.

With the Unit in shutdown, both recirculation pumps are given a "hard" minimum speed demand signal, which prevents pump operation in excess of 28% speed. This "hard" minimum speed is as a result of an interlock with Feedwater flow, preventing any increase from minimum pump speed until Feedwater flow achieves 20% of rated flow. A mechanical stop prevents the Recirculation Pumps from operating below 20% pump speed. These speed limitations significantly reduce the likelihood of operating outside the 15% mismatch requirement specified in the Technical Specification while in the shutdown condition. For these reasons, the safety significance of this event was minimal.

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

E. CORRECTIVE ACTIONS:

On September 1, 1995, upon discovery of the discrepancy between Technical Specifications and Station procedures, the NSO immediately notified the Unit Supervisor. The NSOs began verifying Recirculation Pump speeds on a daily basis to ensure the Technical Specification requirements were met.

On September 8, 1995, a permanent procedure change to APPENDIX A was implemented to fully comply with the Technical Specification 3/4.6.H requirements. This procedural change is sufficient to assure compliance for both, Units 2 and 3.

As a result of a previous event, a comprehensive review of the new upgraded Technical Specifications, their bases, operability evaluations, and operating procedures is in progress. This review will ensure compliance of lower-tier documents with the Technical Specifications. (NTS# 249-180-95-01301)

F. PREVIOUS OCCURRENCES:

No previous occurrences were identified.

G. COMPONENT FAILURE DATA:

No Component failure.