



**Commonwealth Edison**  
Dresden Nuclear Power Station  
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September 13, 1993

GFSLTR 93-0066

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

License Event Report 93-018, Docket 050249 is being submitted as required by Technical Specification 6.6, NUREG 1022 and 10 CFR 50.73(a)(2)(i)(B).

Gary F. Spedl  
Station Manager  
Dresden Station

GFS:slb

Enclosure

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

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LICENSEE EVENT REPORT (LER)

Form Rev 2.0

|  |  |  |  |                                      |  |  |  |                      |  |  |  |
|--|--|--|--|--------------------------------------|--|--|--|----------------------|--|--|--|
| Facility Name (1)<br>Dresden Nuclear Power Station, Unit |  |  |  | Docket Number (2)<br>0 5 0 0 0 2 4 9 |  |  |  | Page (3)<br>1 of 0 3 |  |  |  |
|--|--|--|--|--------------------------------------|--|--|--|----------------------|--|--|--|

Title (4)  
High Pressure Coolant Injection Outside of FSAR Design Requirements Due to Disabled Turbine Trip

| 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              | 8   | 1 6 9 3 | 9 3            | 0 1 8             | 0 0             | 0     | 9               | 1 0 9 3 | N/A            |                               |  |  |  |
|                |     |         |                |                   |                 |       |                 |         |                | N/A                           |  |  |  |

OPERATING MODE (9)  N THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIRMENTS OF 10CFR (Check one or more of the following) (11)

| POWER LEVEL (10) | 1 0 0 |  |                 | 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)      | Other (Specify in Abstract below and in Text) |
|                  |       |  |                 | 20.405(a)(1)(iii) | X 50.73(a)(2)(i) | 50.73(a)(2)(viii) (A) |   |
|                  |       |  |                 | 20.405(a)(1)(iv)  | 50.73(a)(2)(iii) | 50.73(a)(2)(viii)(B)  |   |
|                  |       |  | 20.405(a)(1)(v) | 50.73(a)(2)(iii)  | 50.73(a)(2)(x)   |                       |   |

LICENSE CONTACT FOR THIS LER (12)

| NAME  | TELEPHONE NUMBER |       |         |                 |
|---|------------------|-------|---------|-----------------|
|   | AREA CODE        |       |         |                 |
| Tracy Theesfeld, Operations Staff/ Mark Churilla, System Engineering Department | 8 1 5            | 9 4 2 | 2 9 2 0 | Ext. 3572/ 2788 |

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

| CAUSE | SYSTEM | COMPONENT | MANUFAC-TURER | REPORTABLE TO NPRDS | CAUSE | SYSTEM | COMPONENT | MANUFAC-TURER | REPORTABLE TO NPRDS |
|-------|--------|-----------|---------------|---------------------|-------|--------|-----------|---------------|---------------------|
|       |        |           |               |                     |       |        |           |               |                     |

SUPPLEMENTAL REPORT EXPECTED (14)

|   |   |    |                               |       |     |      |
|---|---|----|-------------------------------|-------|-----|------|
| Yes (If yes, complete EXPECTED SUBMISSION DATE) | X | NO | Expected Submission Date (15) | Month | Day | Year |
|---|---|----|-------------------------------|-------|-----|------|

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

On August 16, 1993 at 2310 hours, with Unit 3 at 100% rated core thermal power, the High Pressure Coolant Injection (HPCI) High Reactor Water Level Trip (+48 inches) was disabled. Previously, during the performance of Dresden Instrument surveillance (DIS) 0500-03, Reactor Level Emergency Core Cooling System (ECCS) Switch Calibration, level switch (LS) 3-263-72B contacts 7-8, Reactor Low Level ECCS Initiation (-59 inches), tripped outside of Technical Specification (TS) limits. LS 3-263-72B was placed in the downscale position to provide a half channel trip condition. The placement of the switch in the downscale position disabled the HPCI High Reactor Water Level Trip. The applicable TS sections were reviewed and it was concluded that the HPCI system would remain operable. A caution card was placed on 3-2340-1, HPCI Flow Controller, to alert the Nuclear Station Operator (NSO) of the disabled trip. However, a subsequent review determined that the HPCI system was outside of Final Safety Analysis Report (FSAR) design requirements. The HPCI system was immediately declared inoperable and a seven day Limiting Condition for Operation (LCO) was entered. The HPCI High Reactor Water Level Trip was restored and the LCO was terminated on August 17, 1993. The Safety Significance of this event is minimal since steps were taken to insure manual tripping of the turbine and all other ECCS required by T.S. 3.5.C.2.a were operable during the time HPCI was Inoperable. Previous occurrences resulting in the disabling of the HPCI High Reactor Water Level Trip have been during planned LCOs and therefore not reported.



|  |  |                |   |                   |   |     |                 |          |     |  |  |
|--|--|----------------|---|-------------------|---|-----|-----------------|----------|-----|--|--|
| FACILITY NAME (1)<br><br>Dresden Nuclear Power Station | DOCKET NUMBER (2)<br><br>0 5 0 0 0 2 4 9 | LER NUMBER (6) |   |                   |   |     |                 | Page (3) |     |  |  |
|  |  | Year           |   | Sequential Number |   |     | Revision Number |          |     |  |  |
|  |  | 9 3            | - | 0 1 8             | - | 0 0 | 0 3             | OF       | 0 3 |  |  |

TEXT Energy Industry Identification System (EIS) codes are identified in the text as [XX]

In this event contacts 7-8 on LS 3-263-72B were found to be outside of TS limits. The LS was tripped in the downscale position in order to meet the TS requirements for Reactor Low Water Level. The method chosen to trip the switches inhibited the HPCI High Reactor Water Level Turbine Trip. The HPCI High Reactor Water Level Trip is comprised of two contacts in series which energizes the turbine trip solenoid valve. Inhibiting one contact will prevent the automatic tripping of the turbine on high level. In order, to insure the turbine was tripped on high level a Caution Card was placed on 3-2340-1, HPCI Flow Controller, alerting the NSO of the degraded trip logic.

The HPCI system was still considered operable since the turbine trip contacts were not listed on TS Table 3.2.2 or in the TS Instrument Operability Reference Manual. However, the HPCI system was later found to be outside of FSAR design requirements and was declared inoperable and a seven day LCO entered. The high level trip was restored and the system was declared operable on August 17, 1993. Previous events involving the inhibiting of Turbine Trip have been during planned LCOs and therefore not reported.

**D. SAFETY ANALYSIS OF EVENT:**

The HPCI system is designed to automatically cycle between Reactor Low Level (-59 inches) and Reactor High Level (+48 inches).

In this event the Turbine would not trip automatically once LS 3-263-72B was failed in the downscale position. However, a Caution Card was placed on 3-2340-1, HPCI Flow Controller, alerting the NSO of the degraded condition. Therefore, since manual action could of been taken to trip the HPCI Turbine on high level and the Isolation Condenser and Automatic Depressurization systems were operable throughout this event, the safety significance is minimal.

**E. CORRECTIVE ACTIONS:**

The Instrument Maintenance Department (IMD) will implement the necessary revisions to incorporate steps into DIS 0500-03 or new procedure to install jumpers on degraded Level Switches by 8/1/94 (249-180-93-01801).

The Regulatory Assurance Department will revise the TS Instrument Operability Manual to incorporate guidance regarding the HPCI High Reactor Water Level Trip by 1/1/94 (249-180-93-01802).

The Operations Department will review this event with all Licensed Personnel during continuing training by the end of training cycle 8 (249-180-93-01803).

**F. PREVIOUS OCCURRENCES:**

LER/Docket Numbers                      Title

None

**G. COMPONENT FAILURE DATA:**

Manufacturer                              Nomenclature                              Model Number                              Mfg. Part Number

Not Applicable