




**Commonwealth Edison**  
Dresden Nuclear Power Station  
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Telephone 815/942-2920

December 28, 1993

GFSLTR 93-0175

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

Licensee Event Report 93-025, Docket 50237 is being submitted as required by Technical Specification 6.6, NUREG 1022 and 10 CFR 50.73(A)(2)(1)(B).

  
Gary F. Spedl  
Station Manager  
Dresden Station

GFS/cfq

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><b>Dresden Nuclear Power Station, Unit 2</b>  |   |  |                |                     |                 |        |           |                                      |                     | Docket Number (2)<br><b>0 5 0 0 0 2 3 7</b> |                               |                       |   | Page (3)<br><b>1 of 0 4</b>                   |   |  |  |
| Title (4)<br><b>DOS 500-8, DOS 500-9, and DOS 500-10 Half-Scram Surveillances Not Performed in a Timely Manner Due to Incorrect Station Tech Spec Interpretation</b> |   |  |                |                     |                 |        |           |                                      |                     |   |                               |                       |   |   |   |  |  |
| 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)                            |                               |                       |   |   |   |  |  |
| 1  | 1   | 2   9  | 9   3          | 0 2 5               | 0 0             | 1      | 2         | 2   7                                | N/A                 |   |                               |                       |   |   |   |  |  |
| OPERATING MODE (9)   |   | THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11) |                |                     |                 |        |           |                                      |                     |   |                               |                       |   |   |   |  |  |
| POWER LEVEL (10)   |   | 0  |                | 1                   |                 | 5      |           | 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)(ii)                             |                               | 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<br><b>Steve Lawson, Operating Engineer</b>  |   |  |                |                     |                 |        |           | TELEPHONE NUMBER<br><b>Ext. 2785</b> |                     |   |                               |                       |   |   |   |  |  |
|  |   |  |                |                     |                 |        |           | AREA CODE<br><b>8 1 5</b>            |                     |   |                               |                       |   |   |   |  |  |
| 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 |   |                               |                       |   |   |   |  |  |
|  |   |  |                |                     |                 |        |           |                                      |                     |   |                               |                       |   |   |   |  |  |
| SUPPLEMENTAL REPORT EXPECTED (14)  |   |  |                |                     |                 |        |           | Expected Submission Date (15)        |                     | Month                                       | Day                           | Year                  |   |   |   |  |  |
| X  | Yes (If yes, complete EXPECTED SUBMISSION DATE) |  |                |                     |                 |        |           | NO                                   |                     | 0   | 2                             | 0                     | 3 | 9   | 4 |  |  |

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

During Unit 2 Reactor Startup on November 29, 1993, Reactor Mode was changed from "Startup" to "Run". Technical Specification Surveillance (DOS 500-8, Main Steam Line Isolation Valve Closure Scram Circuit Functional Test; DOS 500-9, Turbine Control Valve Fast Closure (Load Reject) Scram Circuit Functional Test; DOS 500-10, Turbine Stop Valve Closure Scram Circuit Functional Test) were not performed until the Startup came to a hold point at about 400 Mwe. This is consistent with past practice; however, on December 1, 1993, Operation's raised a question for interpretation regarding the timeliness of these surveillance's. A review indicated that the surveillance's should have been performed within the Technical Specification Limiting Condition for Operation. As a result this LER is being submitted under the requirements of 10 CFR 50.73(a)(2)(i)(B). Additional reviews continue regarding procedural guidance and the results will be discussed in a supplement to this LER which will be submitted by February 3, 1994.

|  |  |                |    |                   |      |                 |  |          |    |     |  |
|--|--|----------------|----|-------------------|------|-----------------|--|----------|----|-----|--|
| FACILITY NAME (1)<br><br>Dresden Nuclear Power Station | DOCKET NUMBER (2)<br><br>0 5 0 0 0 2 3 7 | LER NUMBER (6) |    |                   |      |                 |  | Page (3) |    |     |  |
|  |  | Year           |    | Sequential Number |      | Revision Number |  |          |    |     |  |
|  |  | 9 3            | -- | 0 2               | 5 -- | 0 0             |  | 0 2      | OF | 0 4 |  |

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

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:

DOS 500-8, DOS 500-9, and DOS 500-10 Half-Scram Surveillances Not Performed in a Timely Manner Due to Incorrect Station Tech Spec Interpretation

A. CONDITIONS PRIOR TO EVENT:

Unit: 2                                      Event Date: 11/29/93                                      Event Time: 1819  
 Reactor Mode: N                                      Mode Name: Run                                      Power Level: 15%  
 Reactor Coolant System (RCS) Pressure: 930 psig

B. DESCRIPTION OF EVENT:

During Unit 2 Reactor Startup on November 29, 1993, Operating changed reactor modes from "Startup" to "Run" by placing the mode switch to "Run" at 1819 hours. The Shift Engineer, aware that certain surveillance's were required during startup, continued the startup, per normal practice, until the reactor reached a stable condition of about 400 Mwe at which point the startup was placed on hold to allow for a fuel precondition "soak" period. At this time Dresden Operating Surveillance (DOS) 500-8, Main Steam Line Isolation Valve Closure Scram Circuit Functional Test, (completed on 12/1/93 at 0950), DOS 500-9, Turbine Control Valve Fast Closure (load Reject) Scram Circuit Functional Test (completed on 12/2/93 at 0040 hours), and DOS 500-10, Turbine Stop Valve Closure Scram Circuit Functional Test (completed on 12/1/93 at 1030) were performed. This is consistent with Dresden's past operating practices.

On December 1, 1993, the Operation's Department questioned if the past practice was appropriate given the long time frame from the "Run" mode until the precondition "soak" period for this start up. After a thorough review by Operations, the Regulatory Assurance Department and the Nuclear Licensing Administration (NLA) of the Dresden Technical Specifications and the BWR Standard Technical Specifications (NUREG 0123), it was determined that when the reactor changed power levels (i.e., 600 psig and 45% power) the surveillance's had to be completed in a time frame consistent with the applicable Limiting Condition of Operation (LCO). BWR Standard Technical Specifications allow a 24 hour period to complete surveillances. The Dresden Technical Specifications do not provide for this 24 hour period. Therefore, the applicable LCO should have been entered. The Dresden Technical Specification LCO Table 3.1.1 requires the MSIV, Main Turbine Control Valve and Main Turbine Stop Valve Closure Scram functions to be operable in applicable modes or above certain power thresholds or both. If these conditions can not be met then all operable control rods must be inserted within 4 hours or turbine load must be reduced with a subsequent closing of Main Steam Isolation Valves (MSIV's) within 5 hours. This interpretation is a change in past practice and due to this review it has been determined that the event was reportable in accordance with 10 CFR 50.73.

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| FACILITY NAME (1)<br><br>Dresden Nuclear Power Station | DOCKET NUMBER (2)<br><br>0   5   0   0   0   2   3   7 | LER NUMBER (6) |    |                   |    |       |       | Page (3)        |       |  |  |  |
|  |  | Year           |    | Sequential Number |    |       |       | Revision Number |       |  |  |  |
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TEXT Energy Industry Identification System (EIS) codes are identified in the text as [XX]

**C. APPARENT CAUSE OF EVENT:**

This report is being submitted in accordance with 10 CFR 50.73(a)(2)(i)(B) which requires that within 30 days after the discovery of the event, the licensee shall report any operation or condition prohibited by the plant's Technical Specifications.

The root cause of the event has been determined to be management deficiency. No administrative controls or guidance existed to direct the operators to take the correct action, consequently Operation's personnel relied on past practices.

These surveillance's became due during the short outage and also exceeded their "critical" surveillance dates during that period. The past practice was to not perform the surveillance until a condition was reached that allowed the surveillance to be completed. However, because the Dresden Technical Specification's do not provide the 24 hour allowance given in the Standardized Technical Specification's, the appropriate Dresden Limiting Condition of Operation (LCO) should have been entered until the surveillance was completed. Had this occurred, the long time frame from entering the required plant condition would not have exceeded the Technical Specification LCO.

This event was reviewed for potential human performance error. Though acceptance of past practice was a contributing factor to why the Technical Specification violation occurred, it was the questioning attitude of Operations that identified the deficiency.

Additional reviews are being performed regarding procedural adherence and although DAP 11-02, Surveillance and Periodic Task Scheduling Program, provides some guidance, it is not clear at this time if all situations are addressed, such as during outages. A supplement to this LER, following further review of procedural guidance will be submitted by February 3, 1994.

**D. SAFETY ANALYSIS OF EVENT:**

The Safety Significance of this event is considered minimal. The surveillances were successfully performed in a timely manner. It is also considered to be consistent with the philosophy of assuring the plant is in a stable condition prior to performing a surveillance that may increase the risk of an unstable condition.

During the short outage work was performed on the MSIVs to correct for excessive LLRTs. As a result of this investigation, a review was performed of the adequacy of the surveillances that were performed for the work that was done on the MSIVs. During the work performed on the MSIV's, independent verification was used while lifting and landing leads for the limit switches. The MSIVs were functionally tested, including activation of the limits and verification of proper light indication. Since the work on the MSIV's did not affect the integrity of the MSIV limit switches and the Turbine Stop and Control Valves were unaffected, there is reason to believe that their function was not disturbed. Furthermore, limit switch functional tests were successfully performed following maintenance.

**E. CORRECTIVE ACTIONS:**

Immediate corrective action was to assure the surveillance's were completed in a timely manner following discovery of the discrepancy.

|  |  |                |   |                   |   |   |   |                 |   |   |   |   |    |   |   |
|--|--|----------------|---|-------------------|---|---|---|-----------------|---|---|---|---|----|---|---|
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|  |  | Year           |   | Sequential Number |   |   |   | Revision Number |   |   |   |   |    |   |   |
|  |  | 9              | 3 | --                | 0 | 2 | 5 | --              | 0 | 0 | 0 | 4 | OF | 0 | 4 |

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Additional corrective actions are:

1. This event will be reviewed by all licensed operators to help ensure consistency in Technical Specification interpretation.
2. A review of applicable guidance to Operations, such as the Startup Checklist, Startup procedures, and Startup On-Site Review procedures will be performed to assure future compliance. This policy will be addressed in the supplemental report.
3. As a result of the review of the Post Maintenance Testing performed on the MSIVs following the repairs, the practice concerning limit switch functional testing was judged to be an area for improvement. The current method involves independently verified lifted and landed leads as a method to ensure functional integrity of the circuit.

While this method has always been deemed acceptable, the maintenance activities may potentially affect the system logic performance, and therefore a scram functional test would be a more appropriate Post Maintenance Test.

The Maintenance and Work Control Departments will incorporate enhancements to Post Maintenance Testing (PMT) which will include scram functional testing as PMT's when maintenance is performed on these valves that affect the RPS limit switches.

4. The System Engineering Department will review this event by applicable personnel to assure awareness of this event and any potentially similar event conditions.
5. A review of DAP 11-02, Surveillance and Periodic Task Scheduling Program will be performed to ensure future compliance and will be addressed in the supplemental report.

F. PREVIOUS OCCURRENCES:

| <u>LER/Docket Numbers</u> | <u>Title</u>  |
|---------------------------|---|
| 50237/87-027              | Missed Surveillance on Unit 2 RPS Relays<br><br>Reactor Protection System (RPS) motor generator set relays had not been calibrated by the critical completion date. |

G. COMPONENT FAILURE DATA:

None