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10 CFR 50.73

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April 3, 2006

SVPLTR # 06-0018

U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, DC 20555-0001

> Dresden Nuclear Power Station, Unit No. 2 Renewed Facility Operating License No. DRP-19 NRC Docket No. 50-237

Subject: Licensee Event Report 237/2006-001-00, "Unit 2 Isolation Condenser Declared Inoperable Due To Inadequate Backfilling Of Instrument Sensing Lines"

Enclosed is Licensee Event Report 237/2006-001-00, "Unit 2 Isolation Condenser Declared Inoperable Due To Inadequate Backfilling Of Instrument Sensing Lines," for Dresden Nuclear Power Station, Unit 2. This event is being reported in accordance with 10 CFR 50.73(a)(2)(v)(D), "Any event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to mitigate the consequences of an accident."

Should you have any questions concerning this report, please contact Mr. Pedro Salas, Regulatory Assurance Manager, at (815) 416-2800.

Respectfully,

B Worniak In/D. 3057

Danny G. Bost Site Vice President **Dresden Nuclear Power Station** 

Enclosure

cc: Regional Administrator – NRC Region III NRC Senior Resident Inspector - Dresden Nuclear Power Station

|  |  |                                 |   |   |                      |                                      |   | : NO. 3150-01   |                            |                                   | 6: 06/30/2007                         |                          |                       |               |
|--|--|---------------------------------|---|---|----------------------|--------------------------------------|---|---|----------------------------|-----------------------------------|---------------------------------------|--------------------------|-----------------------|---------------|
|  |  |                                 |   |   |                      |                                      |   | Estimated burden per response to comply with this maindatory 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 and FOIA/Privacy Service Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-C001, or by internet e-mail to infocollects@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 an 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 |                            |                                   |                                       |                          |                       |               |
|  |  |                                 |   |   |                      |                                      |   | and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and<br>Budget, Washington, DC 20503. If a means used to impose an information<br>collection does not display a currently valid OMB control number, the NRC may<br>not conduct or sponsor, and a person is not required to respond to, the<br>information collection.  |                            |                                   |                                       |                          |                       |               |
| 1. FACILITY NAMI:<br>Dresden Nuclear Power Station Unit 2  |  |                                 |   |   |                      |                                      | 2. DOCKET NUMBER 3. PAGE<br>05000237 1                |   |                            |                                   |                                       | 3                        |                       |               |
| 4. TITLE   |  | n Cond                          | oncor F   | oplared In  |                      |                                      | To lood   | loguat  | Rockfi                     | illing Of L                       | netrumont                             | Sonsing I                | inoc                  |               |
| Unit 2 Isolation Condenser Declared Inoperable Due To Inadequate Backfilling Of Instrument Sensing Lines 5. EVENT DATE 6. LER NUMBER 7. REPORT DATE 8. OTHER FACILITIES INVOLVED   |  |                                 |   |   |                      |                                      |   |   |                            |                                   |                                       |                          |                       |               |
| MONTH  | DAY  | YEAR                            | YEAR  | SEQUENTIAL<br>NUMBER  | J                    | MONTH                                | DAY   | YEAF  |                            | CILITY NAME                       |                                       |                          |                       | NUMBER<br>N/A |
| 02   | 01   | .2006                           | 2006  | - 001 -   | 00                   | 04                                   | 03  | 2000  |                            | Y NAME                            |                                       |                          |                       | NUMBER<br>N/A |
| 9. OPEF  | ATING  | MODE                            | 11.   | THIS REPO   | RTIS                 | SUBMITTI                             | ED PURS   |   | O THE R                    | EQUIREM                           | ENTS OF 10                            | CFR§: (Che               | eck all that          | apply)        |
| 1<br>10. POWER LEVEI.<br>098   |  |                                 | 20.2201(b)       20.2203(a)(i)         20.2201(d)       20.2203(a)(i)         20.2203(a)(1)       20.2203(a)(i)         20.2203(a)(2)(ii)       50.36(c)(1)(i)         20.2203(a)(2)(iii)       50.36(c)(2)         20.2203(a)(2)(iii)       50.36(c)(2)         20.2203(a)(2)(iv)       50.46(a)(3)(i)         20.2203(a)(2)(v)       50.73(a)(2)(v) |   |                      |                                      | )(3)(ii)<br>)(4)<br>)(i)(A)<br>)(ii)(A)<br>)<br>)(ii) | $ \begin{bmatrix} 50.73(a)(2)(i)(C) & 50.73(a)(2)(vii) \\ 50.73(a)(2)(ii)(A) & 50.73(a)(2)(viii) \\ 50.73(a)(2)(ii)(B) & 50.73(a)(2)(viii) \\ 50.73(a)(2)(iii) & 50.73(a)(2)(vi)(A) \\ 50.73(a)(2)(iv)(A) & 50.73(a)(2)(x)(A) \\ 50.73(a)(2)(v)(A) & 73.71(a)(4) \\ 50.73(a)(2)(v)(B) & 73.71(a)(5) \\ 50.73(a)(2)(v)(C) & OTHER \\ \end{bmatrix} $   |                            |                                   |                                       |                          | i)(A)<br>i)(B)<br>(A) |               |
|  | □       20.2203(a)(2)(v)       □       50.73(a)(2)(i)(A)       □       50.73(a)(2)(v)(C)       □       OTHER         □       20.2203(a)(2)(vi)       □       50.73(a)(2)(i)(B)       ⊠       50.73(a)(2)(v)(D)       Specify in Abstract below or in NRC Form 366A |                                 |   |   |                      |                                      |   |   |                            |                                   |                                       |                          |                       |               |
| C A OFFICE   |  |                                 | ·   |   | 1                    | 2. LICENS                            | SEE CON   | TACT F  | OR THIS                    | LER                               | 1751                                  |                          |                       |               |
|  | FACILITY NAME       TELEPHONE NUMBER (Include Area Code)         Dresden Nuclear Power Station – George Papanic Jr.       (815) 416-2815   |                                 |   |   |                      |                                      |   |   |                            |                                   |                                       |                          |                       |               |
| 13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT  |  |                                 |   |   |                      |                                      |   | REPORTABLE  |                            |                                   |                                       |                          |                       |               |
| CAUSE S'   |  | SYSTEM                          | COMPONENT FACTURER  |   | TO EPIX              |                                      | CAUSE   |   | SYSTEM                     | COMPONENT                         | FACTURE                               |                          | O EPIX                |               |
| NA   |  |                                 |   |   |                      |                                      |   |   |                            |                                   |                                       |                          |                       |               |
|  |  | e 15. EXPECTED SUBMISSION DATE) |   |   |                      |                                      | 15. EXPECT<br>SUBMISSIC<br>⊠ NO DATE                  |   | MISSION                    | MONTH                             | DA.Y                                  | YEAR                     |                       |               |
| ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)  |  |                                 |   |   |                      |                                      |   |   |                            |                                   |                                       |                          |                       |               |
| On February 1, 2006, at approximately 1943 hours (CST), with Unit 2 at approximately 98 percent power,<br>Dresden Nuclear Power Station technicians were performing a calibration of the Isolation Condenser<br>Steam/Condensate Line High Flow instrumentation when a technician observed an unexpected response<br>during the return to service of the Isolation Condenser Condensate Line High Flow Differential Pressure<br>Switch DPIS 2-1349B. The switch monitors flow in the Isolation Condenser Condensate Return line. The<br>calibration was stopped. The Isolation Condenser was declared inoperable and isolated. |  |                                 |   |   |                      |                                      |   |   |                            |                                   |                                       |                          |                       |               |
| Subsequent investigations determined that the observed unexpected response was the result of voids in the instrument sensing lines of the Isolation Condenser Steam/Condensate Line High Flow Differential Pressure Switch and that the instrumentation was operable with the voids present.<br>The apparent cause of the voids in the instrument sensing lines of the Isolation Condenser   |  |                                 |   |   |                      |                                      |   |   |                            |                                   |                                       |                          |                       |               |
| Stear<br>"Unit<br>the Is   | n/Cono<br>2 Isola<br>olatior   | densate<br>ation Co<br>n Conde  | e Line I<br>ondens<br>enser p   | e voids in<br>High Flow<br>er Fill and<br>Iping. A c<br>lines after | Diffe<br>Ven<br>orre | erential I<br>t," to ide<br>ctive ac | Pressur<br>entify th<br>tion wa                       | re Świ<br>nat the<br>s crea   | tch wa<br>sensir<br>ted to | s the fai<br>ng lines<br>revise P | lure of Pro<br>required b<br>rocedure | ocedure [<br>backfilling | after fil             | ling of       |
| NRC FORM   | 266 (6 20)   |                                 |   |   |                      |                                      |   |   |                            | <u> </u>                          |                                       |                          |                       | CLED PAPER    |

NRC FORM 366A. (1-2001)

U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

| FACILITY NAME (1)                   | DOCKET (2) | 1    | LER NUMBER (6        | PAGE (3)              |   |    |   |
|-------------------------------------|------------|------|----------------------|-----------------------|---|----|---|
|                                     |            | YEAR | SEQUENTIAL<br>NUMBER | REVISIO<br>N<br>NUMBE |   |    |   |
| Dresden Nuckar Power Station Unit 2 | 05000237   | 2006 | 001                  | 00                    | 2 | OF | 3 |

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

Dresden Nuclear Power Station (DNPS) Unit 2 is a General Electric Company Boiling Water Reactor with a licensed maximum power level of 2957 megawatts thermal. The Energy Industry Identification System codes used in the text are identified as [XX].

## A. Plant Conditions Prior to Event:

Unit: 02Event Date: 02-01-2006Reactor Mode: 1Mode Name: Power OperationPower Level: 098 percentReactor Coolant System Pressure: 1000 psigPower Level: 098 percent

B. <u>Description of Event</u>:

On February 1, 2006, at approximately 1943 hours (CST), with Unit 2 at approximately 98 percent power, Dresden Nuclear Power Station technicians were performing a calibration of the Isolation Condenser (IC) [BL] Steam/Condensate Line High Flow instrumentation when a technician observed an unexpected response during the return to service of the IC Condensate Line High Flow Differential Pressure Switch DPIS 2-1349B. The switch monitors flow in the IC Condensate Return line. The calibration was stopped. The IC was declared inoperable and isolated. Subsequent investigations determined that the observed unexpected response was the result of voids in the instrument sensing lines of the IC Steam/Condensate Line High Flow Differential Pressure Switch.

An ENS call was made on February 2, 2006, at 0043 hours (CST) for the above-described event. The assigned ENS event number was 42300.

The IC was returned to service and declared operable on February 2, 2006 at 1819 hours (CST).

This event is being reported in accordance with 10 CFR 50.73(a)(2)(v)(D), "Any event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to mitigate the consequences of an accident." The IC is a single train system and is credited in the loss of feedwater transient analysis.

## C. <u>Cause of Event</u>:

The apparent cause of the voids in the instrument sensing lines of the IC Steam/Condensate Line High Flow Differential Pressure Switch was the failure of Procedure DOP 1300-11, "Unit 2 Isolation Condenser Fill and Vent," to identify that the sensing lines required backfilling after filling of the IC piping.

A review of the activities performed on the Unit 2 IC Condensate Return Line identified an activity performed in the fall of 2005 that could have caused the voids in the sensing lines. The activity involved the refilling of the IC piping in accordance with DOP 1300-11 after the lines had been drained for testing. DOP 1300-11 required the back filling of the sensing lines associated with the IC Steam/Condensate Line High Flow Differential Pressure Switch prior to completing the refilling of the

NRC FORM 366A

(1-2001)

#### LICENSEE EVENT REPORT (LER)

| FACILITY NAME (1)                    | DOCKET (2) | 1    | LER NUMBER (        | PAGE (3)                |   |    |   |
|--------------------------------------|------------|------|---------------------|-------------------------|---|----|---|
|                                      |            | YEAR | SEQUENTIA<br>NUMBER | L REVISIO<br>N<br>NUMBE |   |    |   |
| Dresden Nuclear Power Station Unit 2 | 05000237   | 2006 | 001                 | 00                      | 3 | OF | 3 |

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

IC Condensate Return Line. The preferred method is to backfill the sensing lines after completion of the filling of the IC piping.

A review of the performance of the Unit 3 IC Steam/Condensate Line High Flow Differential Pressure Switches DPIS 3-1349A and DPIS 3-1349B indicate that the sensing lines are filled and operating normally.

## D. <u>Safety Analysis</u>:

The safety significance of the event is minimal. The IC during this event was in compliance with the requirements of Technical Specification 3.5.3, "IC System," and subsequent investigations determined that the IC Steam/Condensate Line High Flow instrumentation was operable with the voids present. Therefore, the consequences of this event had minimal impact on the health and safety of the public and reactor safety.

#### E. <u>Corrective Actions</u>:

Unit 2 Procedure DOP 1300-11 will be revised to require the backfilling of DPIS 2-1349A and DPIS 2-1349B sensing lines after filling of the Isolation Condenser piping.

Unit 3 Procedure DOP 1300-10, "Unit 3 Isolation Condenser Fill and Vent," will be revised to require the backfilling of DPIS 3-1349A and DPIS 3-1349B sensing lines after filling of the Isolation Condenser piping.

Unit 2 IC Condensate Line High Flow Differential Pressure Switches DPIS 2-1349A and DPIS 2-1349B sensing lines will be backfilled at the next Unit 2 forced outage of sufficient duration.

## F. <u>Previous Occurrences</u>:

A review of DNPS Licensee Event Reports (LERs) for the last three years did not identify any similar events.

# G. <u>Component Failure Data</u>:

NA