

Exelon Generation Company, LLC
Dresden Nuclear Power Station
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10 CFR 50.73

August 30, 2004

SVPLTR: #04-0058

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

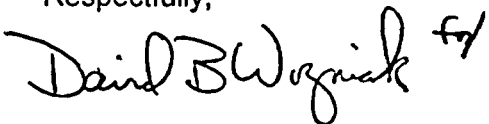
Dresden Nuclear Power Station, Units 2 and 3
Facility Operating License Nos. DRP-19 and DRP-25
NRC Docket Nos. 50-237 and 50-249

Subject: Licensee Event Report 2004-005-00, "Units 2 and 3 Inoperable Turbine
Condenser Vacuum - Low Switches"

Enclosed is Licensee Event Report 2004-005-00, "Units 2 and 3 Inoperable Turbine Condenser Vacuum - Low Switches," for Dresden Nuclear Power Station. This event is being reported in accordance with 10 CFR 50.73(a)(2)(i)(B), "Any operation or condition which was prohibited by the plant's Technical Specifications."

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

Respectfully,



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



| | | | | | | | | | | | | | | |
|---|--------|-----------|---------------------------------------|---|--------|--|-----------|------------------------------|---|---|-----|------|--|--|
| NRC FORM 366 (7-2001) | | | U.S. NUCLEAR REGULATORY COMMISSION | | | APPROVED BY OBM NO. 3150-0104 EXP 7-31-2004 | | | | | | | | |
| LICENSEE EVENT REPORT (LER) | | | | | | | | | Estimated burden per response to comply with this mandatory information 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 Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by Internet e-mail to bjs1@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 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 information collection. | | | | | |
| 1. FACILITY NAME Dresden Nuclear Power Station Unit 2 | | | | | | 2. DOCKET NUMBER 05000237 | | | 3. PAGE 1 of 4 | | | | | |
| 4. TITLE Units 2 and 3 Inoperable Turbine Condenser Vacuum - Low Switches | | | | | | | | | | | | | | |
| 5. EVENT DATE | | | 6. LER NUMBER | | | 7. REPORT DATE | | | 8. OTHER FACILITIES INVOLVED | | | | | |
| MO | DAY | YEAR | YEAR | SEQUENTIAL NUMBER | REV NO | MO | DAY | YEAR | FACILITY NAME | DOCKET NUMBER | | | | |
| 05 | 16 | 2004 | 2004 | 005 | 00 | 08 | 30 | 2004 | Dresden Unit 3 | 05000249 | | | | |
| | | | | | | | | | FACILITY NAME | DOCKET NUMBER | | | | |
| | | | | | | | | | N/A | N/A | | | | |
| 9. OPERATING MODE | | 1 | | 11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply) | | | | | | | | | | |
| 10. POWER LEVEL | | 100 | | 20.2201(b) | | 20.2203(a)(3)(ii) | | 50.73(a)(2)(ii)(B) | | 50.73(a)(2)(ix)(A) | | | | |
| | | | | 20.2201(d) | | 20.2203(a)(4) | | 50.73(a)(2)(iii) | | 50.73(a)(2)(x) | | | | |
| | | | | 20.2203(a)(1) | | 50.36(c)(1)(i)(A) | | 50.73(a)(2)(iv)(A) | | 73.71(a)(4) | | | | |
| | | | | 20.2203(a)(2)(i) | | 50.36(c)(1)(ii)(A) | | 50.73(a)(2)(v)(A) | | 73.71(a)(5) | | | | |
| | | | | 20.2203(a)(2)(ii) | | 50.36(c)(2) | | 50.73(a)(2)(v)(B) | | OTHER Specify in Abstract below or in NRC Form 366A | | | | |
| | | | | 20.2203(a)(2)(iii) | | 50.46(a)(3)(ii) | | 50.73(a)(2)(v)(C) | | | | | | |
| | | | | 20.2203(a)(2)(iv) | | 50.73(a)(2)(i)(A) | | 50.73(a)(2)(v)(D) | | | | | | |
| | | | | 20.2203(a)(2)(v) | | X 50.73(a)(2)(i)(B) | | 50.73(a)(2)(vii) | | | | | | |
| | | | | 20.2203(a)(2)(vi) | | 50.73(a)(2)(i)(C) | | 50.73(a)(2)(viii)(A) | | | | | | |
| | | | | 20.2203(a)(3)(i) | | 50.73(a)(2)(ii)(A) | | 50.73(a)(2)(viii)(B) | | | | | | |
| 12. LICENSEE CONTACT FOR THIS LER | | | | | | | | | | | | | | |
| NAME George Papanic Jr. | | | | | | TELEPHONE NUMBER (Include Area Code) (815) 416-2815 | | | | | | | | |
| 13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT | | | | | | | | | | | | | | |
| CAUSE | SYSTEM | COMPONENT | MANU-FACTURER | REPORTABLE TO EPIX | CAUSE | SYSTEM | COMPONENT | MANU-FACTURER | REPORTABLE TO EPIX | | | | | |
| | | | | | | | | | | | | | | |
| 14. SUPPLEMENTAL REPORT EXPECTED | | | | | | | | 15. EXPECTED SUBMISSION DATE | | MONTH | DAY | YEAR | | |
| YES (If yes, complete EXPECTED SUBMISSION DATE) | | | | X NO | | | | | | | | | | |

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

On May 16, 2004, with Unit 2 at approximately 100 percent power in Mode 1, the 2A Turbine Condenser Vacuum - Low switch for the Reactor Protection System became inoperable due to the collection of water in its vacuum sensing line. The inoperable switch was not immediately detected and the condition existed for a period of time that exceeded the Completion Times associated with Required Actions of Technical Specification 3.3.1.1, "Reactor Protection System (RPS) Instrumentation."

The root cause of the event was that previous efforts to correct the vacuum sensing line errors were too narrowly focused and did not inspect/repair all internal and external sensing lines to all turbine hoods. Temporary vent valves have been installed on Turbine Condenser Vacuum - Low switches 2A, 2C, 3A and 3C to continuously purge and clear condensation from the line. The corrective action to prevent recurrence is to perform internal and external condenser walk downs to determine Turbine Condenser Vacuum - Low switch sensing line slope and repair or modify as necessary.

LICENSEE EVENT REPORT (LER)

| 1. FACILITY NAME | 2. DOCKET NUMBER | 6. LER NUMBER | | | 3. PAGE |
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| Dresden Nuclear Power Station Unit 2 | 05000237 | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | 3 of 4 |
| | | 2004 | 005 | 00 | |

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

On July 1, 2004, an NRC Resident Inspector questioned the historical reportability of the Turbine Condenser Vacuum - Low switches. Dresden initiated an evaluation that identified that the Turbine Condenser Vacuum - Low switches had been historically inoperable for periods of time that exceeded the TS Allowed Outage Time. Engineering identified the most recent occurrence on each unit and that this situation had occurred at least 4 times in the past 2 years. These events were not reported in accordance with the requirements of 10 CFR 50.73.

Additionally, the evaluation also concluded that the failure to report the Turbine Condenser Vacuum - Low switch events was due to the inability of operations personnel to recognize that the Turbine Condenser Vacuum - Low switch was degraded past the point of being operable due to the lack of adequate acceptance criteria in shift logs and operating procedures.

D. Safety Analysis:

The safety significance of the event is minimal. Each Dresden unit has four channels of the Turbine Condenser Vacuum - Low Function that are arranged in a one-out-of-two trip logic to ensure that no single instrument failure will preclude a scram from this Function on a valid signal. The evaluation of past inoperabilities of the Turbine Condenser Vacuum - Low switches did not identify any exceedance of main condenser vacuum trip setpoint limits and no cases were identified when two Turbine Condenser Vacuum - Low switches were inoperable on the same unit at the same time due to condensation in the sensing lines. Therefore, the consequences of this event had minimal impact on the health and safety of the public and reactor safety.

E. Corrective Actions:

Temporary vent valves were installed on Turbine Condenser Vacuum - Low switches 2A, 2C, 3A and 3C to continuously purge and clear condensation from the line.

Internal and external condenser walk downs for Units 2 and 3, will be performed during the next refueling outage on each unit, to determine Turbine Condenser Vacuum - Low switch sensing line slope and potential changes to the penetration at the condenser wall. The Turbine Condenser Vacuum - Low switch sensing lines will be repaired or modified as necessary.

Operations personnel will be provided with enhanced guidance to verify the operability of the Turbine Condenser Vacuum - Low switches by September 1, 2004.

The operating procedures related to condenser waterbox flow reversal will be revised to provide condenser vacuum monitoring guidance by September 1, 2004.

Operator round logs will be revised to include appropriate acceptance criteria for the Turbine Condenser Vacuum - Low switches by September 1, 2004.

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| | | 2004 | 005 | 00 | |

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

F. Previous Occurrences:

A review of Dresden Nuclear Power Station Licensee Event Reports (LERs) and operating experience over the previous six years identified the following similar occurrence associated with a failed Turbine Condenser Vacuum - Low switch.

- LER 98-006-00, "RPS Condenser Vacuum Switch Potentially Inoperable Due To Improper Instrument Sensing Line Slope," dated July 15, 1998. The LER discussed an event in which a Turbine Condenser Vacuum - Low switch was determined to be inoperable due to water collecting in the sensing line. The corrective action to correct the slope of the 3C Turbine Condenser Vacuum - Low switch sensing line was not successful in preventing this event.

G. Component Failure Data:

N.A.