



September 20, 2002

10 CFR Part 50  
Section 50.73

US Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

MONTICELLO NUCLEAR GENERATING PLANT  
Docket No. 50-263 License No. DPR-22

**LER 2002-005**  
**Entered Unplanned LCO for Both CRV Trains Inoperable Due to**  
**Pressure Switch Drift**

A Licensee Event Report for this occurrence is attached. This report contains no new NRC commitments.

Contact Ron Baumer at (763) 295-1357 if you require further information.

Jeffrey S. Forbes  
Site Vice President  
Monticello Nuclear Generating Plant

Enclosure

c: Regional Administrator - III NRC  
NRR Project Manager, NRC  
Sr. Resident Inspector, NRC  
Minnesota Department of Commerce

IE 22

|  |   |  |                          |
|--|---|--|--------------------------|
| <b>NRC FORM 366</b><br>(7-2001)  | <b>U.S. NUCLEAR REGULATORY COMMISSION</b> | <b>APPROVED BY OMB NO. 3150-0104</b><br><small>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 estimates 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.</small> | <b>EXPIRES 7-31-2004</b> |
| <b>LICENSEE EVENT REPORT (LER)</b><br><small>(See reverse for required number of digits/characters for each block)</small> |   |  |                          |

|  |                                     |                          |
|--|-------------------------------------|--------------------------|
| <b>1. FACILITY NAME</b><br>Monticello Nuclear Generating Plant | <b>2. DOCKET NUMBER</b><br>05000263 | <b>3. PAGE</b><br>1 OF 4 |
|--|-------------------------------------|--------------------------|

**4. TITLE**  
 Entered Unplanned LCO for Both CRV Trains Inoperable Due to Pressure Switch Drift

| 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 |
| 07            | 22  | 2002 | 2002          | - 005             | - 00   | 09             | 20  | 2002 | FACILITY NAME                | DOCKET NUMBER |
|               |     |      |               |                   |        |                |     |      |                              | 05000         |
|               |     |      |               |                   |        |                |     |      |                              | 05000         |

|                          |     |  |  |                      |  |                     |  |  |  |  |
|--------------------------|-----|--|--|----------------------|--|---------------------|--|--|--|--|
| <b>9. OPERATING MODE</b> | N   | <b>11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)</b> |  |                      |  |                     |  |  |  |  |
| <b>10. POWER LEVEL</b>   | 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<br>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)    |  | X 50.73(a)(2)(v)(D) |  |  |  |  |
|                          |     | 20.2203(a)(2)(v)   |  | 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**

|                           |   |
|---------------------------|---|
| <b>NAME</b><br>Ron Baumer | <b>TELEPHONE NUMBER (Include Area Code)</b><br>763-296-1357 |
|---------------------------|---|

**13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT**

| CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO EPIX | CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO EPIX |
|-------|--------|-----------|--------------|--------------------|-------|--------|-----------|--------------|--------------------|
| X     | VI     | Switch    | UTE          | Y                  |       |        |           |              |                    |

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

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

While performing an Emergency Service Water (ESW) Valve and Pump Test with the B-division Control Room Ventilation (CRV) Inoperable as required per procedure, the A-division CRV compressor tripped on low cooling water flow. The A-division CRV was declared inoperable, and the station entered Technical Specification (T.S.) 3.17.A.3, which contained an action statement to restore one CRV train to operable within 24 hours. The B-division CRV was returned to an operable status at 1701. Both divisions of CRV were inoperable for 31 minutes. The cause of the event was excessive drift of the differential pressure switch (DPS), DPS-4029A. When DPS-4029A drifted high, the A-division CRV compressor tripped on low service water flow and could not be restarted. The A-division switch was recalibrated and the A-division CRV was restored to an operable status in approximately 24 hours.

**LICENSEE EVENT REPORT (LER)**

| FACILITY NAME (1)                   | DOCKET (2) | LER NUMBER (6) |                   |                 | PAGE (3) |
|-------------------------------------|------------|----------------|-------------------|-----------------|----------|
| Monticello Nuclear Generating Plant | 05000263   | YEAR           | SEQUENTIAL NUMBER | REVISION NUMBER | 2 OF 4   |
|                                     |            | 2002           | - 005             | - 00            |          |

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

**Description**

On July 22, 2002 Monticello Nuclear Generating plant was operating at 100% power and in the process of performing the ESW Valve and Pump Test on the 14 ESW pump. This test required bypassing the temperature control valve<sup>1</sup> on the B-division CRV<sup>2</sup>, making the B-division CRV inoperable. During the test, the A-division CRV compressor<sup>3</sup> tripped on low cooling water flow. The A-division CRV was declared inoperable at 1630. At this time both CRV divisions were inoperable. T.S. 3.17.A.3.a requires entering an action statement to restore one CRV division to operable status within 24 hours. The B-division CRV was returned to an operable status at 1701, resulting in both divisions being inoperable for 31 minutes. After restoring B-division CRV, the station exited the 24-hour action statement and entered a 30-day action statement for the A-division CRV per T.S. 3.17.A.2.a.

Troubleshooting was performed on A-division CRV and personnel determined that the setpoint of the differential pressure switch<sup>4</sup> DPS-4029A had drifted to approximately 24 psi (the desired setpoint is 13 psi). The differential pressure switch (DPS-4029A) measures Service Water dP to ensure there is adequate cooling water flow through the condenser for V-EAC-14A. The switch trips the compressor if adequate cooling water flow cannot be maintained. When DPS-4029A drifted high, V-EAC-14A tripped on low service water flow and could not be restarted. The switch was adjusted into acceptable tolerances and no other problems were noted. Following recalibration of DPS-4029A, the A-division CRV was declared operable. The A-division CRV was inoperable for approximately 24 hours.

**Event Analysis**

**Analysis of Reportability**

The event is reportable under 10 CFR 50.73(a)(2)(v) (D), because both trains of a system designed to control the consequences of an accident were unavailable.

The event is a safety system functional failure.

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<sup>1</sup> EIIS Component ID - TCV  
<sup>2</sup> EIIS System Code VI  
<sup>3</sup> EIIS Component ID - CMP  
<sup>4</sup> EIIS Component ID - PDIS

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**Safety Significance**

The safety significance of the event is considered low. Cooling to the control room was only lost for approximately 31 minutes. Significant room heat up was not encountered. The highest Control Room temperature recorded 2030-A (HOURLY CONTROL ROOM LOGS AND WATT HOUR METER READINGS) for 7/22/02 was 77 degrees Fahrenheit. The peak temperature was not recorded, but the comments section states that 78 degrees F was exceeded while attempts were being made to restore cooling. The time period above 78 degrees F was short.

The PRA group reviewed the event and concluded the event was of low safety significance. The basis of this conclusion was: the threat of a chemical or radiological air contamination issue affecting control room habitability was very small, significant radiological habitability issues for the main control room would only occur following some core damage scenarios and therefore Core Damage Frequency (CDF) was unaffected by this event, and the potential increase in Large Early Release Frequency (LERF) was limited due to the short duration of the loss of Emergency Filtration capability (approximately 31 minutes).

**Cause**

The cause of the event was excessive drift of the differential pressure switch, DPS-4029A. The station reviewed the calibration history for DPS-4029B and found no history of calibration drift.

**Corrective Actions**

A new model switch will be installed in accordance with the station process and 10CFR50.59, due to a previous occurrence of setpoint drift of DPS-4029A (discussion below in previous events section). The existing model switch is obsolete and no longer available.

As an interim action, the existing switch will be recalibrated at six-month intervals, instead of the normal interval of two years.

**Failed Component Identification**

DPS-4029A  
 Manufacturer: UTE - UNITED TECHNOLOGIES  
 Model: J21KD MODEL 150  
 Range: 0 to 40 PSID  
 Type: Differential Pressure Switch

### LICENSEE EVENT REPORT (LER)

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|                                     |            | YEAR           | SEQUENTIAL NUMBER | REVISION NUMBER |          |
| Monticello Nuclear Generating Plant | 05000263   | 2002           | - 005             | - 00            | 4 OF 4   |

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

#### Previous Similar Events

On 06/22/01 a condition report was written for DPS-4029A out of tolerance. Station investigation found the primary cause of the out of tolerance to be setpoint drift of the switch. No trend of excessive drift was identified. In addition, a contributing cause of the out of tolerance was that micro switch terminal screws were loose. The switch was calibrated and the terminal screws were tightened.