Xcel Energy®

Monticello Nuclear Generating Plant
2807 W County Road 75
Monticello, MN 55362

December 22, 2010

L-MT-10-082
10 CFR 50.73

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

Monticello Nuclear Generating Plant
Docket No. 50-263
Renewed License No. DPR-22

LER 2010-004, Secondary Containment Briefly Inoperable Due to Simultaneous Opening of Airlock Doors

The Licensee Event Report (LER) for this occurrence is attached.

Summary of Commitments

This letter contains no new commitments and no revisions to existing commitments.

Timothy J. O'Connor
Site Vice President, Monticello Nuclear Generating Plant
Northern States Power - Minnesota

Enclosure

cc: Administrator, Region III, USNRC
Project Manager, Monticello, USNRC
Resident Inspector, Monticello, USNRC

NRC FORM 366 (10-2010) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104 EXPIRES: 10/31/2013

Estimated burden per response to comply with this mandatory collection request: 80 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 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects.resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0066), 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 information collection.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

1. FACILITY NAME	2. DOCKET NUMBER	3. PAGE
Monticello Nuclear Generating Plant	05000 263	1 OF 3

4. TITLE

Secondary Containment Briefly Inoperable Due to Simultaneous Opening of Airlock Doors

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
11	04	2010	2010 -	004	- 00	12	22	2010		05000
									FACILITY NAME	DOCKET NUMBER 05000

9. OPERATING MODE

1

10. POWER LEVEL

93%

11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: *(Check all that apply)*

☐ 20.2201(b)	☐ 20.2203(a)(3)(i)	☐ 50.73(a)(2)(i)(C)	☐ 50.73(a)(2)(vii)
☐ 20.2201(d)	☐ 20.2203(a)(3)(ii)	☐ 50.73(a)(2)(ii)(A)	☐ 50.73(a)(2)(viii)(A)
☐ 20.2203(a)(1)	☐ 20.2203(a)(4)	☐ 50.73(a)(2)(ii)(B)	☐ 50.73(a)(2)(viii)(B)
☐ 20.2203(a)(2)(i)	☐ 50.36(c)(1)(i)(A)	☐ 50.73(a)(2)(iii)	☐ 50.73(a)(2)(ix)(A)
☐ 20.2203(a)(2)(ii)	☐ 50.36(c)(1)(ii)(A)	☐ 50.73(a)(2)(iv)(A)	☐ 50.73(a)(2)(x)
☐ 20.2203(a)(2)(iii)	☐ 50.36(c)(2)	☐ 50.73(a)(2)(v)(A)	☐ 73.71(a)(4)
☐ 20.2203(a)(2)(iv)	☐ 50.46(a)(3)(ii)	☐ 50.73(a)(2)(v)(B)	☐ 73.71(a)(5)
☐ 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

12. LICENSEE CONTACT FOR THIS LER

NAME	TELEPHONE NUMBER (Include Area Code)
Steven K. Speight	763.271.7636

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
X	JM	IEL	Ingersoll Rand	N					

14. SUPPLEMENTAL REPORT EXPECTED	15. EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR
O YES (If yes, complete 15. EXPECTED SUBMISSION DATE). ⊙ NO				

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

On November 4, 2010, at approximately 1125, with the plant operating in Mode 1 at 93% power, DOOR-62 and DOOR-63 for Airlock 124 from Main Access were inadvertently opened simultaneously, breaching the Secondary Containment (SCT) boundary. This occurred when personnel attempted to enter the airlock from Secondary Containment before the outboard door fully closed. The local alarm sounded for approximately one to two seconds, and the plant employees noticed DOOR-62 was not fully closed. Plant personnel immediately closed the doors and notified the Control Room that SCT was momentarily breached (for approximately 5 seconds). While both doors were open simultaneously, Surveillance Requirement (SR) 3.6.4.1.3, verify one Secondary Containment access door in each access opening is closed every 31 days, was not met. Technical Specification (TS) Limiting Condition for Operation (LCO) 3.6.4.1 was declared not met and Condition A was entered at 1125. The required action, A.1, is to restore secondary containment to Operable status, which was completed at 1125 and TS LCO 3.6.4.1 was met. This is a different interlock type than the one reported under LER submittals 2010-002-00 and 2010-003-00.

EVENT DESCRIPTION

On November 4, 2010, at 11:25 hours, with the plant operating in Mode 1 at 93% power, DOOR-62 (DR) and DOOR-63 for Airlock (AL) 124 from Main Access were inadvertently opened simultaneously, breaching the Secondary Containment (SCT) boundary. This occurred when personnel attempted to enter the airlock from Secondary Containment before the outboard door fully closed. The local alarm sounded for approximately one to two seconds, and the plant employees noticed DOOR-62 was not fully closed. Plant personnel immediately closed the doors and notified the Control Room that SCT was momentarily breached (for approximately 5 seconds). While both doors were open simultaneously, Surveillance Requirement (SR) 3.6.4.1.3, verify one Secondary Containment access door in each access opening is closed every 31 days, was failed. Technical Specification (TS) Limiting Condition for Operation (LCO) 3.6.4.1 was declared not met and Condition A was entered at 1125. The required action, A.1, is to restore secondary containment to Operable status, which was completed at 1125, as the report from the worker was that the issue had occurred and restoration had already been acted on.

This was not a cognitive error and appears to be caused by an intermittent failure of the interlock's magnetic bond sensor (IEL).

EVENT ANALYSIS

The event is reportable to the NRC under 10 CFR 50.73(a)(2)(v)(C and D) – Event or Condition that could have Prevented Fulfillment of a Safety Function. The station reported the event to the NRC under 10 CFR 50.72 (b)(3)(v)(C and D) on November 4, 2010.

This event is considered a Safety System Functional Failure because for approximately five seconds there was an unplanned SCT TS LCO not met condition.

SAFETY SIGNIFICANCE

There were no nuclear, radiological or industrial safety significant consequences related to this event.

The Monticello risk assessment group reviewed the event for risk impact. Defeating the airlock feature for Secondary Containment has no direct or indirect impact on the frequency of core damage (CDF). For the period the airlock was inoperable, the conservative assumption was made that all core damage events will cause a large early release event. Additionally, a conservative time of 60 seconds, many times actual, was used for duration. The incremental large early release probability was calculated to be 1.34E-11, well below the risk significance threshold of 1E-7. Therefore, the conclusion is that the safety significance in terms of reactor safety and radiological release to the environment from this event is considered to be very low.

CAUSE

The apparent cause for Airlock 124 breach is intermittent failure of the magnetic bond sensor due to a lack of periodic maintenance. Discussions with the vendor verified this could be the case.

CORRECTIVE ACTION

The following actions were taken or are planned and will be tracked in the Monticello Corrective action program:

- The doors were closed (within approximately 5 seconds) and appropriate TS actions taken.
- An Apparent Cause Evaluation was conducted to determine the cause.
- Troubleshooting was performed and the equipment worked as required.
- A work order has been generated to replace the magnets and switches in the interlock to positively assure equipment reliability.
- Periodic maintenance items, such as replacing magnets in this type of interlock, will be developed as appropriate and placed into the Preventive Maintenance Program.

PREVIOUS SIMILAR EVENTS

Similar events occurred on June 3 and August 5, 2010 (LER 2010-002-00 and LER 2010-003-00). These two events occurred with a different type of airlock interlock.