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

June 13, 2011

L-MT-11-031
10 CFR 50.73

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

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

LER 2010-002, Supplement 1, "Secondary Containment Briefly Degraded"

Supplement 1 to the Licensee Event Report (LER) for this occurrence is attached. The station performed additional analysis to determine that the safety function of the Secondary Containment system was maintained during the event.

Summary of Commitments

This letter contains no new commitments and no changes 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, MNGP, 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 Degraded

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
06	03	2010	2010	– 002 –	01	06	13	2011		05000
									FACILITY NAME	DOCKET NUMBER 05000

9. OPERATING MODE

Mode 1

10. POWER LEVEL

100%

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)
Leonard Sueper	612.330.6917

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

O YES (If yes, complete 15. EXPECTED SUBMISSION DATE). ⊙ NO

15. EXPECTED SUBMISSION DATE

MONTH	DAY	YEAR

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

At 1050, June 3, 2010, with the plant operating in Mode 1 at 100% power, DOOR-72 and DOOR-82 for airlock 413 (985' Pump Room) were inadvertently opened simultaneously, breaching the Secondary Containment (SCT) boundary. Personnel immediately identified the situation and closed both doors within four to five seconds (estimated) and Shift supervision was notified. With both doors open, the station's Technical Specification TS) surveillance requirement 3.6.4.1.3 states (verify one Secondary Containment access door in each access opening is closed) was failed. The TS LCO statement 3.6.4.1 was declared not met and Action A, (Restore secondary containment to Operable status) entered. The doors were verified closed. With SCT restored, TS 3.6.4.1 was met at 1110. The cause of the event was the design of the interlock between the doors in the 985' Pump Room does not prevent a simultaneous entry. Corrective actions taken: the doors were closed and the interlock mechanism was verified to operate per design.

Event Description

At 1050, June 3, 2010, with the plant operating in Mode 1 at 100% power, DOOR-72 and DOOR-82 for airlock [AL] 413 (985' Pump Room) were inadvertently opened simultaneously, breaching the Secondary Containment (SCT) [VF] boundary. Personnel immediately identified the situation and closed both doors [DR] within four to five seconds (estimated). Shift supervision was notified; with both doors open, the station's Technical Specification TS) surveillance requirement 3.6.4.1.3 states (verify one Secondary Containment access door in each access opening is closed) was failed. The TS LCO statement 3.6.4.1 was declared not met and Action A, (Restore secondary containment to Operable status) entered. The doors were verified closed. With SCT restored, TS 3.6.4.1 was met at 1110.

This event was not the result of a cognitive error. Plant employees (Radiation Protection and Laborers) were transferring material from the contaminated area step off pad to the 985' Pump Room. The two employees entered the airlock at the same time; one from within SCT and the other from the pump room. Neither door has a window, so neither employee could see the other operating the opposite door. Both door electromagnets are normally de-energized on this airlock; when a door opens, the opposite door electromagnet energizes to prevent the door from opening. When both doors opened simultaneously, each door moved away from the electromagnet before it could energize. The employees immediately shut the airlock doors and notified Operations supervision per plant procedures. Plant personnel tested the airlock; the interlock functioned as designed.

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. A subsequent Secondary Containment Capability Test performed on April 27, 2011 and evaluation, EC 18336, confirmed that the Standby Gas Treatment (SBGT) system remained capable of performing its safety function in the plant configuration that existed on June 30, 2010, including consideration for penetrations that were or may have been open at the time. It was determined that Secondary Containment does not lose safety function when both DOOR-72 and DOOR-83 are simultaneously opened, provided minimal other penetrations are open. The analysis demonstrates the initial flow into SCT during pressure equalization and subsequent inleakage from the HVAC supply duct does not cause SCT differential pressure to be less negative than that required by plant Technical Specifications. Also, SBGT flow would be less than the 4,000 cfm SCT design limit. On June 3, 2010, when both doors to the 985' Pump Room airlock were briefly, simultaneously opened, SCT remained sufficiently leak tight so Standby Gas Treatment could provide a filtered, elevated release of the SCT atmosphere. SCT could have performed its safety function of controlling the release of radioactive material, thus mitigating the consequences of an accident. Therefore, this event is not considered a Safety System Functional failure for the purposes of Reactor Oversight Process performance indicator reporting per the guidance in NEI 99-02. The station reported the event to the NRC under 10 CFR 50.72 (b)(3)(v)(C and C) on June 3, 2010.

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). No systems supporting critical safety functions, including support systems, are impacted due to the loss of secondary containment, and initiating event frequencies are not impacted. Large Early Release Frequency is not significantly impacted since CDF is not affected, and the duration of the secondary containment breach is very small. Based on the above, the safety significance is minor. An engineering evaluation determined that SCT would be able to perform its safety function with these doors open.

Cause

The cause of the event was the design of the interlock between the doors in the 985 foot Pump Room allows simultaneous entry under specific timing conditions (i.e., the doors are opened at exactly the same time – otherwise, the interlock prevents one door from opening if the other is open).

Corrective Action

The following actions were taken or are planned and will be tracked under AR01235877:

- The doors were closed and the interlock operating mechanism was verified to be operating properly.
- The station plans to install doors with windows on the vulnerable airlocks.

Failed Component Identification

None

Previous Similar Events

In February 2007 DOOR-72 and DOOR-82 were simultaneously opened (AR01078818). Actions taken were to shut the doors and verify the latch mechanism was working properly. Due to the low usage of the doors, it was determined that no modification of the interlocks would be performed.