



Northern States Power Company

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

April 3, 2000

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 2000-007

Procedural Adherence Error Results In Missed Periodic Fire Watch

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

Contact Doug Neve, Senior Licensing Engineer, at (763) 295-1353 if you require further information.

Byron Day
Plant Manager
Monticello Nuclear Generating Plant

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

Attachment

IE22

NRC FORM 366 (6-1998)		U.S. NUCLEAR REGULATORY COMMISSION			APPROVED BY OMB NO. 3150-0104 EXPIRES 06/30/2001 Estimated burden per response to comply with this mandatory information collection request: 50 hrs. Reported lessons learned are incorporated into the licensing process and fed back to the industry. Forward comments regarding burden estimate to the Records Management Branch(T-6 F33), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0104), Office of Management and Budget, Washington, DC 20503. If 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)										
<small>(See reverse for required number of digits/characters for each block)</small>										
FACILITY NAME (1) MONTICELLO NUCLEAR GENERATING PLANT				DOCKET NUMBER (2) 05000 - 263		PAGE (3) 1 OF 4				
TITLE (4) Procedural Adherence Error Results In Missed Periodic Fire Watch										
EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
03	03	00	00	-- 007 --	00	04	03	00		05000
OPERATING MODE (9)		N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)							
POWER LEVEL (10)		098	20.2201(b)			20.2203(a)(2)(v)		X	50.73(a)(2)(i)	
			20.2203(a)(1)			20.2203(a)(3)(I)			50.73(a)(2)(ii)	
			20.2203(a)(2)(i)			20.2203(a)(3)(ii)			50.73(a)(2)(iii)	
			20.2203(a)(2)(ii)			20.2203(a)(4)			50.73(a)(2)(iv)	
			20.2203(a)(2)(iii)			50.36(c)(1)			50.73(a)(2)(v)	
			20.2203(a)(2)(iv)			50.36(c)(2)			50.73(a)(2)(vii)	
									OTHER	
									Specify in Abstract below or in NRC Form 366A	
LICENSEE CONTACT FOR THIS LER (12)										
NAME Doug Neve						TELEPHONE NUMBER (Include Area Code) 763-295-1353				
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)										
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX
SUPPLEMENTAL REPORT EXPECTED (14)						EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE).				X	NO					

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

Breakers for three motor operated valves (MOVs) are normally maintained open to achieve the cable separation required by 10 CFR 50, Appendix R. When pumping the Suppression Pool (Torus) to Radwaste, the breaker for the Residual Heat Removal (RHR) System to Radwaste MOV, MO-2032 is closed to facilitate the evolution. This creates the potential for draining the Torus in the event of fire induced cable damage. Hourly fire patrols with operable fire detectors, or continuous fire watches, are established as a compensatory measure while the breaker is closed. Due to a lapse of procedural adherence, the fire watch patrols were not properly maintained and completed within the required frequency. Corrective actions are to counsel personnel on expectations concerning procedural adherence and to address the underlying and contributing causes in the corrective action program.

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

Description

On March 3, 2000 with the plant at 98% power, surveillance testing was performed on the High Pressure Coolant Injection (HPCI) System¹. The testing required that the Suppression Pool (Torus) level be lowered during HPCI operation by pumping to Radwaste using the Residual Heat Removal (RHR) System². The operating procedure for performing the draining evolution requires closing the breaker for the RHR System to radwaste motor operated valve³ (MOV), MO-2032, in order to allow valve operation. The breaker⁴ for this MOV is normally maintained open, due to spurious operation concerns identified in the 10 CFR 50, Appendix R safe shutdown analysis.

With the breaker for MO-2032 closed, there exists the potential for fire induced circuit damage to cause spurious valve operation and subsequent draining of the Torus. Therefore, the operating procedure for pumping the Torus to radwaste requires that roving hourly fire patrols be established as a compensatory measure. The following timeline provides the sequence of events:

Time 1115 HPCI declared inoperable to set up for surveillance testing.

Time 1358 Commenced HPCI testing.

Time 1410 Began hourly fire watch for required areas: Control Room, Cable Spreading Room and Torus Area. Closed breaker for MO-2032, commenced transfer from Torus to Radwaste.

Time 1439 Fire watch patrols performed for all appropriate areas.

Time 1449 Secured transfer from Torus to Radwaste. Due to continuing HPCI testing, further transfers were projected and the decision was made not to open the breaker for MO-2032 when the RHR to Radwaste valve line-up was secured.

Time 1614 Commenced transfer from the Torus to Radwaste.

Time 1655 Fire patrols performed for all appropriate areas.

Time 1706 Secured transfer lineup, opened breaker for MO-2032, secured fire watch patrols.

As the timeline indicates, a period of approximately two hours and 15 minutes elapsed between fire watch patrols.

¹ EIS System Code: BJ
² EIS System Code: BO
³ EIS Component Code: ISV
⁴ EIS Component Code: BKR

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Event Analysis

Analysis of Reportability

The RHR system operating procedure establishes the hourly fire watches as compensatory measures in order to comply with Technical Specification 3.13.G, "Penetration Fire Barriers." The fire watch requirements of the procedure were not met. The event is therefore being reported under 10 CFR 50.73 (A)(2)(i) as a condition prohibited by technical specifications.

The event does not represent a condition that alone could have prevented fulfillment of a safety function, since actions to restore the system were not affected by the missed fire watches. The event is therefore not reportable in accordance with 10 CFR 50.73(a)(2)(v).

Safety Significance

During the time that the fire patrols were required, three fire areas were affected as follows: The Torus area was inspected by the Radwaste Operator instructed to act as a fire watch. The Control Room was continuously manned. The Cable Spreading Room was not inspected by a fire watch for a period of approximately two hours and 15 minutes; however, the Shift Manager made a supervisory tour approximately 90 minutes after the second fire patrol. The applicable fire detection and suppression features were continuously operable for all three areas.

The missed fire patrol is of little safety significance, due to the low likelihood of a fire, the availability of fire detection and suppression systems, and the low likelihood of fire damage and subsequent spurious operation of two valves.

Cause

The fire patrol was not maintained when the RHR to radwaste MOV breaker was closed as required by the RHR System operating procedure. Therefore, the cause of this event was a cognitive error in procedural adherence on the part of a licensed operator. A contributing cause is that a fire watch logging form was not initiated as required by administrative procedures.

Corrective Actions

1. Personnel will be counseled on expectations concerning procedural adherence.
2. Operations personnel will review a summary of the event including causes and future prevention.
3. This event has been placed in the plant corrective action program to identify and correct contributing and underlying causal factors.

Failed Component Identification

Not applicable.

Similar Events

RE-88-001, "Fire Watch Interval Exceeded Due to Inadequate Controls," was issued as the result of not meeting Technical Specification fire watch requirements. One corrective action was to establish

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a fire watch log. Another corrective action to was assign the fire patrol watch to individual with no other primary responsibilities. It is noted that in the current event, a Control Room operator was assigned as the Cable Spreading Room fire patrol watch. The RE-88-001 event will be considered in developing the program improvements for this event (RE-00-007).

In reviewing similar events, an event in 1996 was identified in which a breaker for a valve in another system was closed and an appropriate fire watch was not established. That event was determined not to be reportable, since the reportability determination did not consider the hourly fire watch patrol to be literally required for compliance with technical specifications, since the closed breaker was not considered to be an inoperable fire barrier penetration per Specification 3.13. A subsequent action to resolve the source and adequacy of the compensatory measure did not resolve whether Technical Specification 3.13 was applicable.