



Northern States Power Company

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September 23, 1992

Report Required by  
10 CFR Part 50, Section 50.73

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

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

Failure to Include Manual Valves in Section XI  
Testing Caused by Misinterpretation of ASME Requirements

The Licensee Event Report for this occurrence is attached. Please contact us if you require further information.

Thomas M. Parker  
Manager  
Nuclear Support Services

c: Regional Administrator - III NRC  
Sr Resident Inspector, NRC  
NRR Project Manager, NRC  
State of Minnesota,  
Attn: Kris Sanda

Attachment

280007

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PDR ADDCK 05000263  
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## LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 600 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-30), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0174), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

Monticello Nuclear Generating Plant

DOCKET NUMBER (2)

0 5 0 0 0 2 6 3 1 OF 0 4

PAGE (3)

TITLE (4)

Failure to Include Manual Valves in Section XI Testing  
Caused by Misinterpretation of ASME<sup>®</sup> Requirements

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 NAMES

DOCKET NUMBER(S)

0

8

2

4

9

2

9

2

0

1

2

0

0

0

0

0

0

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4

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0

OPERATING  
MODE (9)

N

20

402(b)

20

406(a)

60

38(a)(1)

60

73(a)(2)(iv)

73

71(b)

20

406(a)(1)(i)

60

73(a)(2)(i)

73

71(c)

20

406(a)(1)(ii)

60

73(a)(2)(ii)

73

71(d)

POWER  
LEVEL  
(10)

1

0

0

20

406(a)(1)(iii)

60

38(a)(2)

60

73(a)(2)(vii)

73

71(e)

20

406(a)(1)(iv)

60

73(a)(2)(viii)

73

71(f)

20

406(a)(1)(v)

60

73(a)(2)(ix)

73

71(g)

OTHER (Specify in Abstract  
below and in Test NRC Form  
366A)

20

406(a)(1)(vi)

60

73(a)(2)(x)

73

71(h)

20

406(a)(1)(vii)

60

73(a)(2)(xi)

73

71(i)

20

406(a)(1)(viii)

60

73(a)(2)(xii)

73

71(j)

20

406(a)(1)(ix)

60

73(a)(2)(xiii)

73

71(k)

LICENSEE CONTACT FOR THIS LER (12)

NAME

Jim Freborg, System Engineer

TELEPHONE NUMBER

AREA CODE

6 1 2 2 9 5 - 1 3 7 5

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC

SUPPLEMENTAL REPORT EXPECTED (14)

EXPECTED  
SUBMISSION  
DATE (15)

MONTH DAY YEAR

YES (If yes, complete EXPECTED SUBMISSION DATE)

XX NO

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

On August 24, 1992, six Residual Heat Removal Service Water valves, two Emergency Service Water valves, and two Emergency Diesel Generator Emergency Service Water valves were identified by an NRC inspection team as appearing to meet the criteria to be included in the ASME Section XI Testing Program. An evaluation by plant engineering confirmed that the valves met the Section XI criteria. The cause was misinterpretation of the ASME Section XI Code concerning manual valves. The valves were immediately exercised, procedures have been revised to require quarterly exercising of the valves and a review of all systems included in the Section XI program to identify manual valves used to mitigate a design or licensing bases event has been completed. The identified valves will be added to the ASME Section XI Program.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 500 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (F-301) U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20545, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104) OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

DOCKET NUMBER (2)

LER NUMBER (6)

PAGE (3)

Monticello Nuclear Generating Plant

0 5 0 0 0 2 6 3 9 2 — 0 1 2 — 0 0 0 2 OF 0 4

TEXT (If more space is required, use additional NRC Form 366A's) (7)

DESCRIPTION

On August 24, 1992, with the plant operating at 100% of rated thermal power, an NRC inspection team identified six manual valves (EIS Component: V) in the Residual Heat Removal Service Water (EIS System: BI) system, two manual valves in the Emergency Service Water (EIS System: BI) system and two manual valves in the Emergency Diesel Generator Emergency Service Water (EIS System: BI) system which appeared to meet the requirements for ASME Section XI testing but were not included in the ASME Section XI program. Subsequent evaluation by plant engineering staff confirmed that the valves meet the criteria to be included in the Section XI Testing Program. The valves identified in the Residual Heat Removal Service Water system were RHRSW-21-1 (#11 Residual Heat Removal Service Water Pump Motor Cooling Outlet), RHRSW-21-2 (#12 Residual Heat Removal Service Water Pump Motor Cooling Outlet), RHRSW-21-3 (#13 Residual Heat Removal Service Water Pump Motor Cooling Outlet), RHRSW-21-4 (#14 Residual Heat Removal Service Water Pump Motor Cooling Outlet), RHRSW-3-1 (#11 and #13 Residual Heat Removal Service Water Pump Strainer Bypass), and RHRSW-3-2 (#12 and #14 Residual Heat Removal Service Water Pump Strainer Bypass). The valves identified in the Emergency Diesel Generator Emergency Service Water system were ESW-3-1 (#11 Emergency Diesel Generator Emergency Service Water Pump Strainer Bypass) and ESW-3-2 (#12 Emergency Diesel Generator Emergency Service Water Pump Strainer Bypass). The valves identified in the Emergency Service Water system were ESW-19 (#14 Emergency Service Water Pump Strainer Bypass) and ESW-20 (#13 Emergency Service Water Pump Strainer Bypass).

The Residual Heat Removal Service Water motor cooler valves are normally closed and are opened by operations personnel during pump operations. These valves would be required to operate during an event to insure operability of the Residual Heat Removal Service Water pumps (EIS Component: P). The valves are exercised each quarter during Residual Heat Removal Service Water pump surveillance testing.

The Emergency Service Water, Emergency Diesel Generator Emergency Service Water, and Residual Heat Removal Service Water strainer bypass valves would need to be opened to insure adequate flow if the strainers (EIS Component: STR) were to become clogged. On August 24, 1992, these valves were exercised to demonstrate that they meet Section XI requirements.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.6 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (F-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20545, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)	PAGE (3)
		YEAR   SEQUENTIAL NUMBER   REVISION NUMBER	
Monticello Nuclear Generating Plant	0   5   0   0   0   2   6   3	9   2   —   0   1   2   —   0   0	0   3   OF   0   4

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

Technical Specification 4.15.B states, in part, "Inservice Testing of Quality Group A, B, and C pumps and valves shall be performed in accordance with the requirements for ASME Code Class 1, 2, and 3 pumps and valves, respectively, contained in Section XI of the ASME Boiler and Pressure Vessel Code". Article IWV-1000 of the ASME Code states, "...valves... which are required to perform a specific function in shutting down a reactor to cold shutdown condition in mitigating the consequences of an accident...", are within the scope of the Section XI testing program. The valves associated with this event should have been included in the ASME Section XI testing program and tested in accordance with Inservice Testing requirements. This is a condition prohibited by Technical Specifications and is reportable by 10 CFR 50.72(a)(2)(i).

CAUSE

The cause of this event was a misinterpretation of Article IWV-1000 regarding inclusion of manual valves in the ASME Section XI program. It was believed that manual valves were not required to be in the testing program. This was not a cognitive error by the engineering group assigned to the Section XI program. There were no unusual characteristics of the work location and this was not contrary to an approved procedure.

ANALYSIS

The four Residual Heat Removal Service Water motor Cooler Outlet valves had been operated each quarter when the Residual Heat Removal Service Water pump surveillance was performed. All the remaining valves were exercised immediately and shown to be operable. Since the valves were demonstrated to be operable there were no consequences to the health and safety of the public from this event.

CORRECTIVE ACTION

The following actions have been completed:

1. All the identified Residual Heat Removal Service Water, Emergency Service Water and Emergency Diesel Generator Emergency Service Water valves have been exercised to verify they meet Section XI requirements.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 500 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LETTER (5)				PAGE (3)			
		YEAR	TOTAL NUMBER	REVISION NUMBER					
Monticello Nuclear Generating Plant	0500026392		2	00	04	OF	04		

TEXT (If more space is required, use additional NRC Form 366A's) (7)

2. Emergency Service Water, Emergency Diesel Generator Emergency Service Water, and Residual Heat Removal Service Water ASME Section XI surveillance procedures have been revised to include testing of the two Emergency Service Water valves, the two Emergency Diesel Generator Emergency Service Water valves and the six Residual Heat Removal Service Water valves.
3. A review of all systems contained in the ASME Section XI program has been completed to identify any manual valves which are used to mitigate the consequences of a design or license bases accident.

The following actions will be completed:

1. The identified Emergency Service Water, Emergency Diesel Generator Emergency Service Water and Residual Heat Removal Service Water valves will be added to the ASME Section XI testing program.

ADDITIONAL INFORMATION

Failed Components Identification:

None

Previous Similar Events:

Licensee Event Report 92-010 identified valves in abnormal procedures which had not been identified as performing a function to mitigate the consequences of a license basis event and should have been evaluated for inclusion in the ASME Section XI Testing Program. The corrective actions for that event (review of all abnormal procedures and revision of administrative controls associated with abnormal procedure development) are still in progress, but would not have identified the valves associated with this event because of the misinterpretation that existed concerning the need to include manual valves in the program.