

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) MONTICELLO NUCLEAR GENERATING PLANT										DOCKET NUMBER (2) 0 5 0 0 0 2 6 3				PAGE (3) 1 OF 0 2	
TITLE (4) REACTOR TRIP FOLLOWING #12 RECIRCULATION PUMP TRIP															
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	7	2	9	8	5	0	1	3					0 5 0 0 0		
0	7	2	9	8	5	0	1	3					0 5 0 0 0		
OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)													
N		20.402(b)				20.408(c)				<input checked="" type="checkbox"/> 50.73(a)(2)(iv)				73.71(b)	
POWER LEVEL (10)		20.406(a)(1)(i)				50.36(e)(1)				50.73(a)(2)(v)				73.71(a)	
0 19 19		20.406(a)(1)(ii)				50.36(e)(2)				50.73(a)(2)(vii)				OTHER (Specify in Abstract below and in Text, NRC Form 366A)	
		20.406(a)(1)(iii)				50.73(a)(2)(i)				50.73(a)(2)(viii)(A)					
		20.406(a)(1)(iv)				50.73(a)(2)(ii)				50.73(a)(2)(viii)(B)					
		20.406(a)(1)(v)				50.73(a)(2)(iii)				50.73(a)(2)(ix)					
LICENSEE CONTACT FOR THIS LER (12)															
NAME Michael Keller, Sr. Production Engineer										TELEPHONE NUMBER 6 1 2 2 9 5 1 - 5 1 5 1					
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)															
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS						
SUPPLEMENTAL REPORT EXPECTED (14)										EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR	
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)										<input checked="" type="checkbox"/> NO					

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

While replacing brushes on #12 recirculation motor-generator exciter, a recirculation pump trip occurred. The resultant level swell caused a trip of both reactor feedwater pumps. This in turn led to a low water level scram. A reactor feedwater pump was restarted and water level stabilized. The brush holder and brush were repaired, making #12 recirculation motor-generator operable. Appropriate procedures will be revised to prevent recurrence.

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## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (8)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
MONTICELLO NUCLEAR GENERATING PLANT	0 5 0 0 0 2 6 3 8 5	—	0 1 3	—	0 0 0 2	OF	0 2

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

On the morning of July 29, 1985 with the plant operating normally at 100% power, arcing was detected on one of the recirculation motor-generator (88) exciter inboard collector (COL) ring brushes (35). After considering the alternatives available to correct the problem, the decision was made to replace the arcing brush with the machine operating.

Exciter current was reduced to such a point that the redundant non-arcing brush could carry the remaining exciter current and permit the arcing brush to be removed. What was not known at that point was that the non-arcing brush was not free in its brush holder, so it was not in contact with the collector ring and it could carry no current. The result of removing the arcing brush was an abrupt loss of field in #12 recirculation motor-generator. Loss of field resulted in tripping of the #12 recirculation motor-generator and its associated recirculation pump (P) and the loss of flow in the B recirculation loop. The resultant swell raised reactor water level above the reactor feedwater pump (P) trip setpoint, tripping both operating reactor feedwater pumps. Before operators could restart a reactor feedwater pump and regain level control, the reactor water level had fallen below the low level scram setpoint. After the reactor scram, reactor water level was stabilized using a reactor feedwater pump.

There were no system failures or malfunctions. This event did not result in any personnel injury, equipment damage, or release of radioactive material to the environment. This event posed no threat to the health and safety of the public. There have been no previous similar events.

The root cause of this event was inadequate procedures for recirculation motor-generator brush replacement. To prevent recurrence of this event, appropriate procedures will be revised to provide improved precautions and instructions.



Northern States Power Company

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Minneapolis, Minnesota 55401  
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August 28, 1985

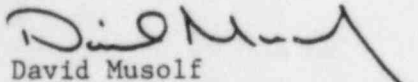
U S Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

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

REACTOR TRIP FOLLOWING #12  
RECIRCULATION PUMP TRIP

The License Event Report for this occurrence is attached.

This event was reported via Emergency Notification System per 10 CFR Part 72  
on July 29, 1985.



David Musolf  
Manager - Nuclear Support Services

DMM/MMV/jk

c: Regional Administrator-III, NRC  
NRR Project Manager, NRC  
Resident Inspector, NRC  
MPCA  
Attn: J W Ferman

Attachment

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