NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Monticello Nuclear Generating Plant	0 5 0 0 0 2 6 3	1 OF 0 2

TITLE (4)

HPCI Flow Controller Inoperability

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 1	0 7	8 6	8 6	—	0 0 2	—	0 0	0 2	0 6	8 6		0 5 0 0 0
												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)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)		20.405(a)(1)(i)	50.36(c)(1)	X 50.73(a)(2)(v)	73.71(c)
0 9 7		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
	AREA CODE
Tim Murray, Engineer II	6 1 2 — 2 9 5 - 5 1 5 1

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	
X	B J	F I C	G 0 8 0	Y							

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 fifteen single-space typewritten lines) (16)

During performance of the high pressure coolant injection (HPCI) system monthly surveillance test, it was discovered that the HPCI pump flow controller would not respond in the auto mode. The controller operated properly in the manual mode and the system was shutdown with the flow controller in manual. Investigation revealed that intermittent operation of switch contacts internal to the flow controller prohibited the controller from reading the flow setpoint in the auto mode. The contacts, which were slightly oxidized, were cleaned and the switch mechanism lubricated. The HPCI system surveillance test was then performed and the flow controller was verified to work properly. The RCIC flow controller's switch mechanisms, which are the same as HPCI's, were also cleaned and lubricated. Long-term corrective action will involve installation of permanent jumpers to bypass the switches completely.

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
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TEXT (If more space is required, use additional NRC Form 366A's) (17)

The plant was operating at 97% power. The routine high pressure coolant injection (HPCI) system monthly surveillance test was initiated by the shift supervisor at 0000 hours on 1-7-86. The system started as normal, with the pump flow indicator controller (FIC) in the auto mode and reached rated conditions within the technical specification limits. During the course of the test, it was found that the FIC would not respond to flow setpoint changes while in the auto mode. The system was shutdown with the FIC in manual. Since the FIC's automatic function failed during the test, it was assumed it would not respond to an automatic initiation signal and the HPCI system was declared inoperable. All other emergency core cooling systems and the reactor core isolation cooling (RCIC) system were tested and determined to be operable at the time.

Investigation revealed that the local/cascade switch on the FIC, a General Electric Model #540-017HALK2, was working intermittently, due to slight oxidation of the contacts. Since the switch is in the circuit which reads the internal setpoint in the auto mode, its intermittent operation prohibited the FIC from responding to flow setpoint adjustments. The switch mechanism was cleaned and lubricated. The HPCI system surveillance test was run again and the FIC was verified to be working properly. The elapsed time between discovery of the failure and when the HPCI system was returned to service was about 4 hours. No other similar events have occurred at Monticello. The RCIC flow controller's switches, which are the same as HPCI's, were also cleaned and lubricated. Long-term corrective action will involve installation of permanent jumpers to bypass the switches completely.

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February 6, 1986

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

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

HPCI Flow Controller Inoperability

The License Event Report for this occurrence is attached.

This event was reported via Emergency Notification System per 10 CFR Part 72 on January 7, 1986.

Monica Vik
for David Musolf
Manager - Nuclear Support Services

DMM/MMV/dab

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

Attachment

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