

**AEC DISTRIBUTION FOR PART 50 DOCKET MATERIAL
(TEMPORARY FORM)**

CONTROL NO: 5593

FILE: _____

FROM: Northern States Power Company Minneapolis, Minnesota L. O. Mayer			DATE OF DOC UNDTD		DATE REC'D 6-20-74		LTR X	TWX	RPT	OTHER	
TO: J. F. O'Leary			ORIG		CC 40		OTHER		SENT AEC PDR <u>XXX</u> SENT LOCAL PDR <u>XXX</u>		
CLASS	UNCLASS	PROP INFO	INPUT		NO CYS REC'D 40		DOCKET NO: 50-263				
	XXX										

DESCRIPTION:

Ltr furn info re abnormal occurrence #AO 263/
74-14 of 6-8-74 re pressure switch setpoint
drift.....

ENCLOSURES:

**ACKNOWLEDGED
DO NOT REMOVE**

PLANT NAME: MONTICELLO

FOR ACTION/INFORMATION 6-21-74 GMC

BUTLER (L)	SCHWENCER (L)	✓ZIEMANN (L)	REGAN (E)
W/ CYS	W/ CYS	W/ 7CYS	W/ CYS
CLARK (L)	STOLZ (L)	DICKER (E)	
W/ CYS	W/ CYS	W/ CYS	W/ CYS
PARR (L)	VASSALLO (L)	KNIGHTON (E)	
W/ CYS	W/ CYS	W/ CYS	W/ CYS
KNIEL (L)	PURPLE (L)	YOUNGBLOOD (E)	
W/ CYS	W/ CYS	W/ CYS	W/ CYS

INTERNAL DISTRIBUTION

✓REG FILE	✓TECH REVIEW	DENTON	✓LIC ASST	A/T IND
✓AEC-PDR	✓HENDRIE	GRIMES	✓DIGGS (L)	BRAITMAN
✓OGC	✓SCHROEDER	GAMMILL	GEARIN (L)	SALTZMAN
✓MUNTZING/STAFF	✓MACCARY	KASTNER	GOULBOURNE (L)	B. HURT
✓CASE	✓KNIGHT	BALLARD	KREUTZER (E)	
GIAMBUSSO	✓PAWLICKI	SPANGLER	LEE (L)	PLANS
BOYD	✓SHAO		MAIGRET (L)	MCDONALD
MOORE (L)(LWR-2)	✓STELLO	✓ENVIRO	REED (E)	CHAPMAN
DEYOUNG (L)(LWR-1)	✓HOUSTON	MULLER	SERVICE (L)	DUBE w/input
SKOVHOLT (L)	✓NOVAK	DICKER	SHEPPARD (L)	E. COUPE
✓GOLLER (L)	✓ROSS	KNIGHTON	SLATER (E)	
P. COLLINS	✓IPPOLITO	YOUNGBLOOD	SMITH (L)	✓D. THOMPSON (2)
DENISE	✓TEDESCO	REGAN	TEETS (L)	✓KLECKER
✓REG OPR	✓LONG	PROJECT MGR	WILLIAMS (E)	✓EISENHUT
✓FILE & REGION (3)	✓LAINAS		WILSON (L)	
✓MORRIS	✓BENAROYA	✓HARLESS		
✓STEELE	✓VOLLMER			

EXTERNAL DISTRIBUTION

✓1 - LOCAL PDR MINNEAPOLIS, MINN	(1)(2)(10)-NATIONAL LABS	1-PDR-SAN/LA/NY
✓1 - TIC (ABERNATHY)	1-ASLBP(E/W Bldg, Rm 529)	1-BROOKHAVEN NAT LAB
✓1 - NSIC (BUCHANAN)	1-W. PENNINGTON, Rm E-201 GT	1-G. ULRIKSON, ORNL
1 - ASLB	1-B&M SWINEBROAD, Rm E-201 GT	1-AGMED (RUTH GUSSMAN)
1 - P. R. DAVIS	1-CONSULTANTS	Rm B-127 GT
✓16 - ACRS HOLDING SENT TO LIC ASST DIGGS	NEWARK/BLUME/AGBABIAN	1-RD..MUELLER, Rm F-309
6-21-74		GT

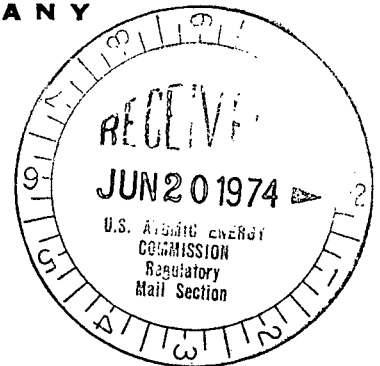
NSP

NORTHERN STATES POWER COMPANY

MINNEAPOLIS, MINNESOTA 55401

Mr. J F O'Leary, Director
Directorate of Licensing
Office of Regulation
U S Atomic Energy Commission
Washington, DC 20545

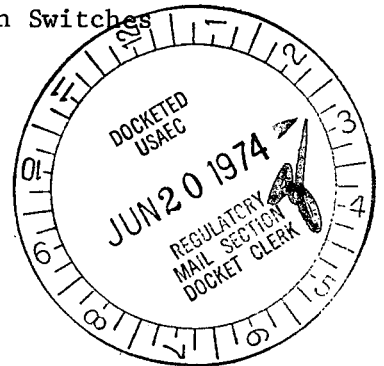
50-263



ABNORMAL OCCURRENCE REPORT TO THE AEC

Malfunction of HPCI Steam Supply Line Low Pressure Isolation Switches

1. Report Number: AO 263/74-14
- 2A. Report Date: June 18, 1974
- 2B. Occurrence Date: June 8, 1974
3. Facility: Monticello Nuclear Generating Plant (DPR-22)
Monticello, Minnesota 55362
4. Identification of Occurrence:



This report concerns a pressure switch setpoint drift which constitutes an Abnormal Occurrence and is reported in accordance with Section 6.7.B.1, Appendix A Technical Specifications, of Provisional Operating License DPR-22.

5. Conditions Prior to Occurrence:

Routine startup operation

6. Description of Occurrence:

On June 8, 1974, while a reactor startup was in progress, the High Pressure Coolant Injection (HPCI) steam line low pressure isolation instruments did not reset until a reactor pressure of approximately 167 psig was attained. Section 3.5.D of the Technical Specifications requires that the HPCI system be operable whenever reactor pressure is greater than 150 psig. As a result of the failure of the HPCI steam line low pressure isolation instrumentation to reset, the HPCI system was in an inoperable condition until a reactor pressure of 167 psig was reached.

7. Designation of Apparent Cause of Occurrence:

The pressure switches used in the HPCI steam line low pressure isolation application have a history of drift between subsequent calibrations. In addition, the deadband of the pressure switches is significant. It is concluded that excessive instrument drift and a large instrument deadband were the initiating causes of the abnormal occurrence.

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8. Analysis of Occurrence:

The pressure switch setpoint drift of approximately 17 psi did not present a significant safety hazard. The fully redundant Automatic Pressure Relief System and Reactor Core Isolation Cooling, Core Spray, and Low Pressure Coolant Injection were fully operable.

9. Corrective Action:

On June 10, 1974, the four HPCI steam line low pressure isolation switches were calibrated and functionally tested to demonstrate that the desired reset action occurs at ≤ 150 psig. As a temporary measure, the instrument calibration frequency has been increased from once per six months to once per quarter to reduce the setpoint drift accumulated between subsequent calibrations. Pressure switches having a smaller deadband and less drift potential are being investigated as a possible long term solution. In addition, a precautionary note has been inserted in the plant startup procedure to insure that reactor pressure is not increased beyond 150 psig until the ECCS operability requirements have been complied with.

10. Failure Data:

There have been four previous malfunctions involving similar pressure switches at Monticello. All of the previous malfunctions were attributed to conditions unrelated to this occurrence. It is believed that the corrective actions taken are adequate to prevent a recurrence.

Nameplate Data: Barksdale
Model BZT-M12SS

L O Mayer / DMM
L O Mayer, PE
Director of Nuclear Support Services

LOM/kni

cc: J G Keppler
G Charnoff
Minnesota Pollution Control Agency
Attn. E A Pryzina

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