

AEC DISTRIBUTION FOR PART 50 DOCKET MATERIAL  
(TEMPORARY FORM)

CONTROL NO: 1145

FILE: INCIDENT REPORT

FROM: Northern States Power Co. Minneapolis, Minn. 55401 L.O. Mayer		DATE OF DOC 1-30-75	DATE REC'D 2-1-75	LTR XXX	TWX	RPT	OTHER
TO: Mr. A. Giambusso		ORIG 1 signed	CC 39	OTHER	SENT AEC PDR XX SENT LOCAL PDR XX		
CLASS	UNCLASS XXX	PROP INFO	INPUT	NO CYS REC'D 40	DOCKET NO: 50-263		

DESCRIPTION: Ltr trans the following:

ENCLOSURES: Licensee Event on 1-20-75 re crack indications in recirculation bypass piping.....(AO-3)

ACKNOWLEDGED

Do Not Remove

PLANT NAME: Monticello Plant

FOR ACTION/INFORMATION

DHL 2-3-75

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INTERNAL DISTRIBUTION

<u>REG FILE</u>	<u>TECH REVIEW</u>	<u>DENTON</u>	<u>LIC. ASST.</u>	<u>A/T IND</u>
✓ AEC PDR	✓ SCHROEDER	GRIMES	✓ DIGGS (S)	BRAITMAN
✓ CGC, ROOM P-506-A	✓ MACCARRY	GAMMILL	GEARIN (S)	SALTZMAN
✓ GOSSICK /STAFF	✓ KNIGHT	✓ KASTNER	GOULBOURNE (S)	B. HURT
✓ CASE	✓ PAWLICKI	BALLARD	KREUTZER (E)	
GIAMBUSO	✓ SHAO	SPANGLER	LEE (S)	<u>PLANS</u>
BOYD	✓ STELLO		MAIGRET (S)	MCDONALD
MOORE (S) (BWR)	✓ HOUSTON	<u>ENVIRO</u>	REED (E)	CHAPMAN
DEYOUNG (S) (PWR)	✓ NOVAK	MULLER	SERVICE (S)	DUBE w/input
SKOVHOLT (S)	✓ ROSS	DICKER	SHEPPARD (S)	E. COUPE
GOLLER (S)	✓ IPPOLITO	KNIGHTON	SLATER (E)	✓ R. Hartfield (2)
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REG OPR.	✓ LAINAS	PROJECT LDR	WILLIAMS (E)	
✓ FILE & REGION	✓ BENAROYA		WILSON (S)	
✓ T.R. WILSON	✓ STEELE	✓ HARLESS	INGRAM (S)	
	✓ VOLIMER			

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1-NEWTON ANDERSON		RM B-127 G.T.
✓ 5-ACRS SENT TO LIC. ASST.		1-J. RUNKLES, RM E-201
R. Diggs 2-3-75		G.T.

# NSP

Regulatory Docket File

NORTHERN STATES POWER COMPANY

MINNEAPOLIS, MINNESOTA 55401

January 30, 1975

Mr A Giambusso, Director  
Division of Reactor Licensing  
U S Nuclear Regulatory Commission  
Washington, DC 20555

Dear Mr Giambusso:

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

Licensee Event Report to the NRC  
Crack Indications in Recirculation Bypass Piping

Attached are the Licensee Event Report and a supplementary report for this occurrence.

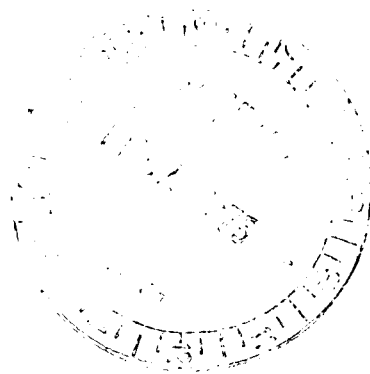
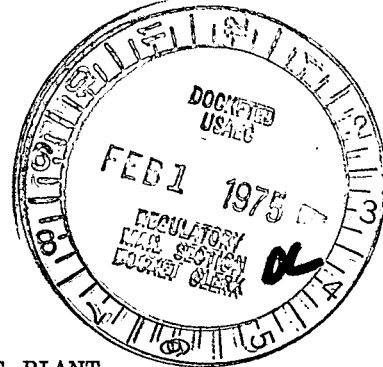
Yours very truly,



L O Mayer, PE  
Manager of Nuclear Support Services

LOM/DMM/ak

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



1145

SUPPLEMENT TO LICENSEE EVENT REPORT TO THE NRC

Crack Indications in Recirculation Bypass Piping

Supplemental Information:

1. Report Number: AO 263/75-03
- 2a. Report Date: January 30, 1975
3. Facility: Monticello Nuclear Generating Plant  
Monticello, Minnesota 55362
4. Identification of Occurrence:

This report concerns the detection of crack-like indications in the Reactor Recirculation System 4-inch diameter bypass lines during the inservice inspection.

5. Conditions Prior to Occurrence:

Refueling Shutdown - A refueling outage was in progress at the time of the occurrence.

6. Description of Occurrence:

On January 20, 1975, during the inservice inspection of the reactor coolant system, linear indications were detected by ultrasonic examination in two welds in loop A and one weld in loop B of the reactor recirculation system 4-inch diameter bypass lines. Radiographic examination of these three welds definitely verified the presence of a linear indication in one of these welds. The radiograph showed the indication to be located in the weld heat-affected zone.

After a thorough review and study of all of the ultrasonic recordings and comparing inspection results obtained in November, 1974, with the present results, a fourth weld became a suspect. This weld was located in loop A. Although the amplitude of the ultrasonic signal for this weld was relatively low, the signal pattern was similar to the three welds that were rejected; therefore, this weld was also rejected (see attached Figure).

7. Designation of Apparent Cause of Occurrence:

The cause is unknown. It appears to be a generic problem similar to problems experienced at other BWR facilities. Identical inspections performed in November, 1974, revealed no unacceptable indications in these same welds. Indications which were detected in the November inspection were of a magnitude and nature such that they were indiscernible from the weld root I.D.

# LICENSEE EVENT REPORT

Regulatory Docket File

CONTROL BLOCK: 1 2 3 4 5 6

[PLEASE PRINT ALL REQUIRED INFORMATION]

Issued w/lt Dated 1-30-75

LICENSEE NAME: 01 M N M N P 1 14  
 LICENSE NUMBER: 0 0 - 0 0 0 0 0 - 0 0 25  
 LICENSE TYPE: 4 1 1 1 1 30  
 EVENT TYPE: 0 1 31 32

CON'T: 01 57 58  
 CATEGORY: P 0  
 REPORT TYPE: T 59  
 REPORT SOURCE: L 60  
 DOCKET NUMBER: 0 5 0 - 0 2 6 3 68  
 EVENT DATE: 0 1 2 0 7 5 74  
 REPORT DATE: 0 1 3 0 7 5 80

## EVENT DESCRIPTION

02 During inservice inspection linear indications were detected by ultrasonic  
 03 examination (two welds Loop A, one weld Loop B) of reactor recirculation 4-inch  
 04 bypass lines. Radiographs of the 3 welds verified one indication (in heat affected  
 05 zone). No previous occurrence. Pipe to be replaced prior to startup. (AO 75-03)  
 06

SYSTEM CODE: 07 C B 9 10  
 CAUSE CODE: C 11  
 COMPONENT CODE: P I P E X X 17  
 PRIME COMPONENT SUPPLIER: N 43  
 COMPONENT MANUFACTURER: G 2 5 5 44 47  
 VIOLATION: N 48

## CAUSE DESCRIPTION

08 Cause unknown. Laboratory analysis of removed piping to be performed. Piping to  
 09 be reinspected during fall 1975 refueling outage.  
 10

FACILITY STATUS: 11 H 9  
 % POWER: 0 0 0 10 12 13  
 OTHER STATUS: NA 44  
 METHOD OF DISCOVERY: D 45  
 DISCOVERY DESCRIPTION: NA 46  
 FORM OF ACTIVITY RELEASED: 12 Z 9  
 CONTENT OF RELEASE: Z 10  
 AMOUNT OF ACTIVITY: NA 44  
 LOCATION OF RELEASE: NA 45

## PERSONNEL EXPOSURES

13 NUMBER: 0 0 0 7 8 9  
 TYPE: Z 11  
 DESCRIPTION: NA 12 13

## PERSONNEL INJURIES

14 NUMBER: 0 0 0 7 8 9  
 DESCRIPTION: NA 11 12

## OFFSITE CONSEQUENCES

15 NA 7 8 9

## LOSS OR DAMAGE TO FACILITY

16 TYPE: Z 7 8 9  
 DESCRIPTION: NA 10

## PUBLICITY

17 Press Release - Monticello pipe cracks, 1-22-75 7 8 9

## ADDITIONAL FACTORS

18 After comparison of ultrasonic records from November inspection, a fourth weld was  
 19 conservatively rejected and removed. 7 8 9

NAME: Phil Krumpas

PHONE: 612-330-6737

8. Analysis of Occurrence:

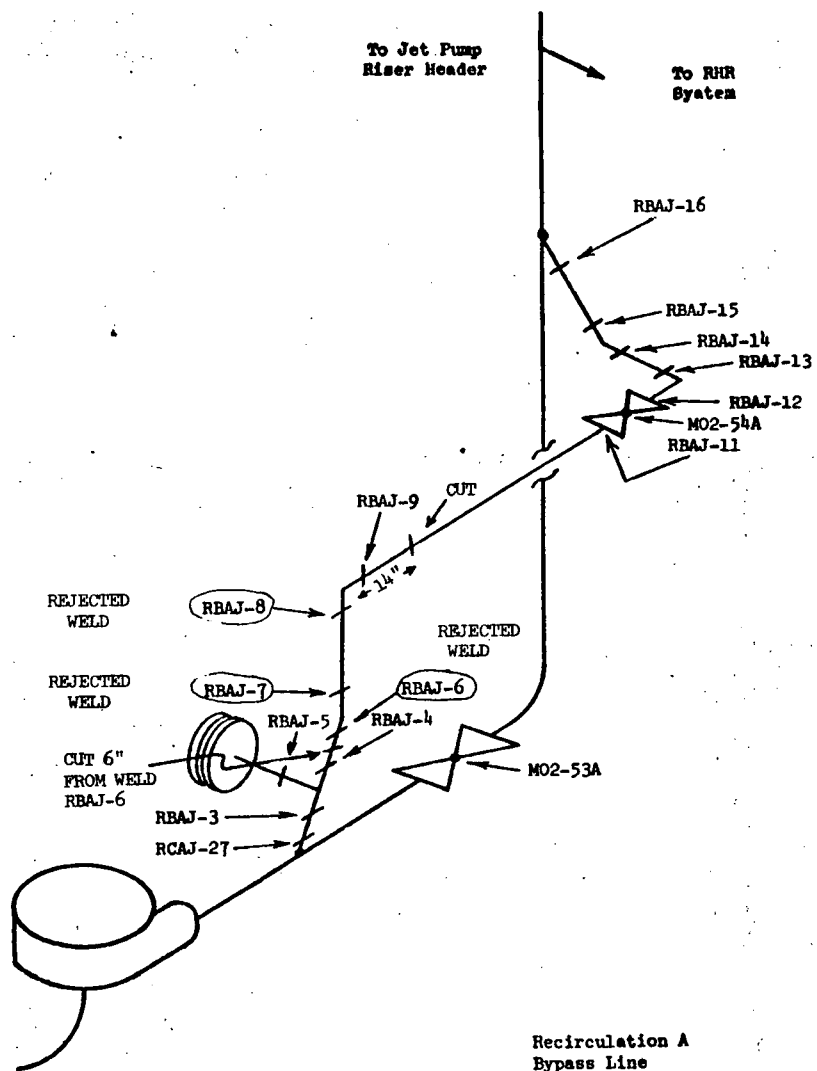
This occurrence had no effect on the public health and safety. Assuming these linear indications are cracks, and assuming they would have propagated through the pipe wall, the resultant water leaks would have been detected by the drywell sump monitoring system. In the unlikely event of a gross failure of a four-inch bypass loop, the resultant break would be well within the capability of the ECCS System.

9. Corrective Action:

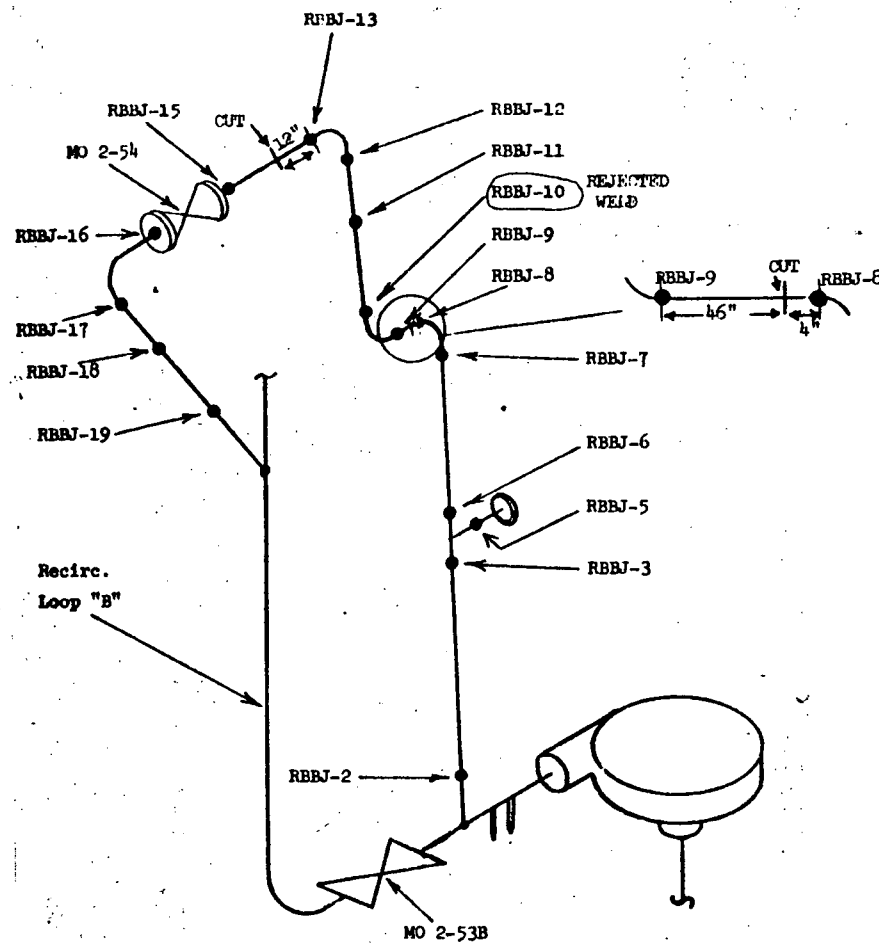
Segments of both pipe loops which contain the four rejected welds are being removed and replaced. This piping (schedule 80, type 304 stainless steel) will be sent to a laboratory for metallurgical examination.

10. Failure Date:

Not applicable.



Recirculation A  
Bypass Line  
Modified Isometric U  
Ref. FSK 382-1



Recirculation B  
Isometric "N"  
Ref. Dwg. PSK-383-2  
Ref. G. E. ISO. 13A