AEC DISTRIBUTION FOR PART 50 DOCKET MATERIAL
(TEMPORARY FORM)

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Northern States Power Company Minneapolis, Minn L. O. Mayer	UNDTD	6-27-74	X			

TO:	ORIG	CC	OTHER	SENT AEC PDR XX SENT LOCAL PDR XX
J. F. O'Leary		40		

CLASS	UNCLASS	PROP INFO	INPUT	NO CYS REC'D	DOCKET NO:
	XXX			40	50-263

DESCRIPTION:

Ltr furn info re abnormal occurrence #AO 263/74-19 of 6-14-74 re crack in a restraining orifice assembly to coupling weld on the #11 reactor feedpump warmup line.....

ENCLOSURES:

ACKNOWLEDGED
DO NOT REMOVE

PLANT NAME:

FOR ACTION/INFORMATION 6-27-74 GMC

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

Rg

✓1 - LOCAL PDR MINNEAPOLIS, MINN		
✓1 - TIC (ABERNATHY)	(1)(2)(10)-NATIONAL LABS	1-PDR-SAN/LA/NY
✓1 - NSIC (BUCHANAN)	1-ASLBP(E/W Bldg, Rm 529)	1-BROOKHAVEN NAT LAB
1 - ASLB	1-W. PENNINGTON, Rm E-201 GT	1-G. ULRIKSON, ORNL
1 - P. R. DAVIS	1-B&M SWINEBROAD, Rm E-201 GT	1-AGMED (RUTH GUSSMAN) Rm B-127 GT
✓16 - ACRS SENT TO LIC ASST DIGGS 6-27-74	1-CONSULTANTS NEWMARK/BLUME/AGBABIAN	1-RD..MUELLER, Rm F-309 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

ABNORMAL OCCURRENCE REPORT TO THE AEC

Cracked Weld on Feedwater Pump Warmup Line Orifice

1. Report Number: AO 263/74-19

2A. Report Date: June 24, 1974

2B. Occurrence Date: June 14, 1974

3. Facility: Monticello Nuclear Generating Plant (DPR-22)
Monticello, Minnesota 55362

4. Identification of Occurrence:

This report concerns a crack in a restraining orifice assembly-to-coupling weld on the #11 reactor feedpump warmup line. This event is being reported as requested by Regulatory Operations personnel on June 21, 1974.

5. Conditions Prior to Occurrence:

Steady State Power - The plant was at 94% of rated power prior to the occurrence.

6. Description of Occurrence:

On June 14, 1974, water was discovered leaking from the #11 reactor feedpump warmup line. The line was inspected following removal of the insulation and the leak was found to be coming from a 3/16" circumferential crack in one of the warmup line restricting orifice-to-coupling welds (on the high pressure side of the orifice). A plant shutdown was begun immediately and the reactor was placed in a hot standby condition to allow isolation of the feedwater lines and repair of the crack.

7. Designation of Apparent Cause of Occurrence:

Installation/Construction: Inspection revealed that the orifice assembly-to coupling gap (see Figure 1) was less than that specified by the ANSI B.31.1 code. Based on the measurements taken, it is felt that stresses induced due to thermal expansion of the orifice assembly caused the weld to crack.

(over)

8. Analysis of Occurrence:

This occurrence had no effect on the public health and safety. The crack in the weld resulted in a leak of approximately 0.2 gpm from the primary system. The water was collected and processed via the normal turbine building radioactive waste drain system. Even in the event of complete weld failure, the plant could have been shutdown immediately and the line isolated without any significant consequences.

9. Corrective Action:

The orifice assembly-to-coupling weld was ground out. The orifice assembly was rewelded to the coupling leaving a 1/16" gap as outlined in ANSI B.31.1. The repair weld was dye penetrant tested and found to be acceptable. All other orifice assembly-to-coupling welds on both reactor feedpump warmup lines were visually inspected and found to be acceptable.

10. Failure Data:

Coupling Material:	Carbon Steel ASTM A-106R2
Orifice Material:	Stainless Steel ASTM A-276 Type 347
Manufacturer:	The restricting orifice with couplings were supplied by DeLavel Turbine, Inc., as a complete assembly.

L O Mayer | DMM

L O Mayer, PE
Director of Nuclear Support Services

LOM/kn

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

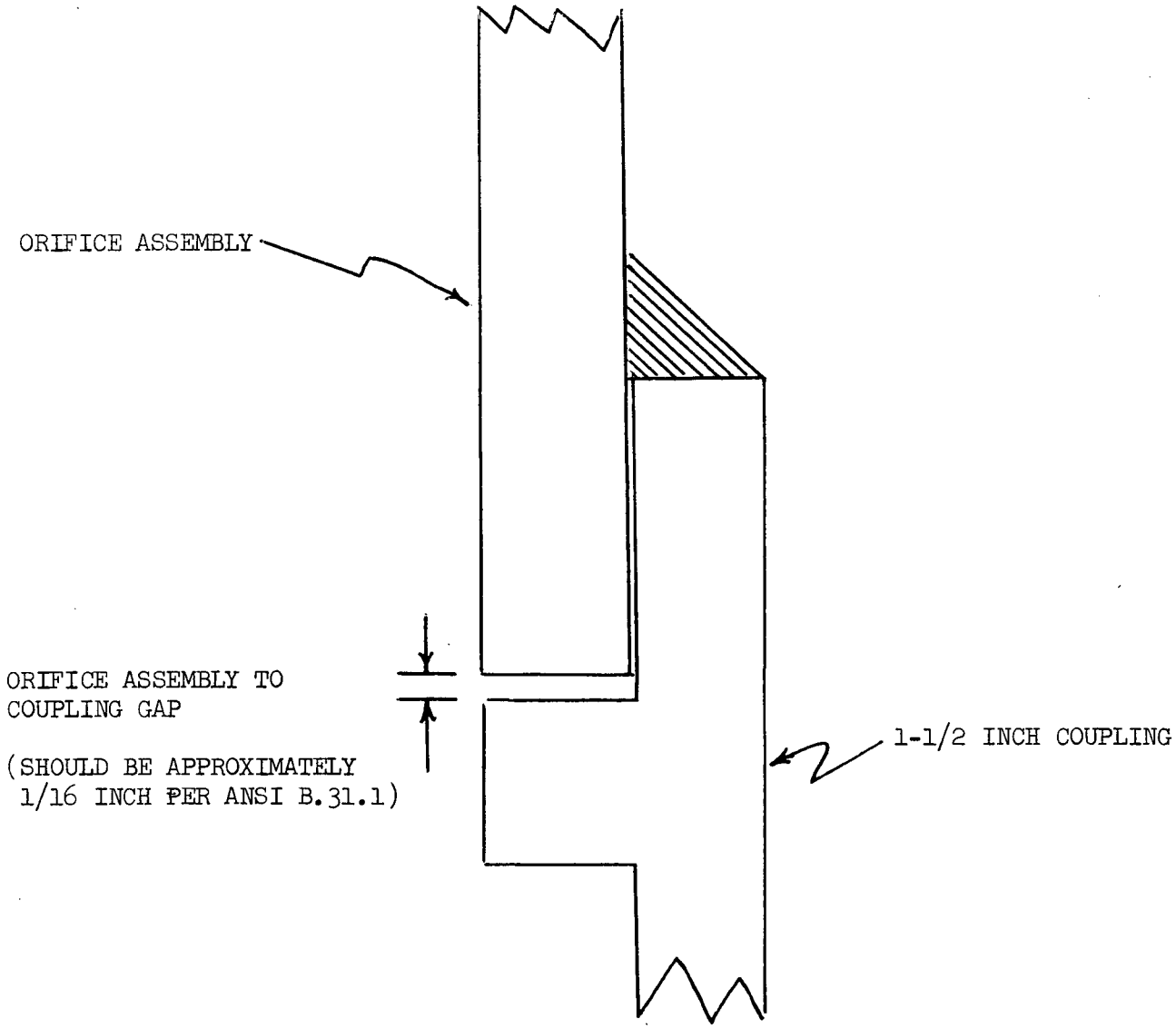
ORIFICE ASSEMBLY
ORIFICE ASSEMBLY TO
COUPLING GAP
(SHOULD BE APPROXIMATELY
1/16 INCH PER ANSI B.31.1)
1-1/2 INCH COUPLING

FIGURE 1