AEC DISTRIBUTION FOR PART 50 DOCKET MATERIAL
(TEMPORARY FORM)

CONTROL NO: 6224

FILE:

FROM:	DATE OF DOC	DATE REC'D	LTR	MEMO	RPT	OTHER
Northern States Power Company Minneapolis, Minn. 55401 L. O. Mayer	8-10-73	8-15-73	x			

TO:	ORIG	CC	OTHER	SENT AEC PDR	SENT LOCAL PDR
J. F. O'Leary	1 signed			x	x

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

DESCRIPTION:

Ltr reporting abnormal occurrence on 8-1-73, regarding slow closure of a Main Steam Isolation Valve.....

ENCLOSURES:

ACKNOWLEDGED
DO NOT REMOVE

PLANT NAME: Monticello

FOR ACTION/INFORMATION 8-15-73 LB

BUTLER(L)	SCHWENCER(L)	✓ZIEMANN(L)	REGAN(E)
W/ Copies	W/ Copies	W/ 7 Copies	W/ Copies
CLARK(L)	STOLZ(L)	DICKER(E)	
W/ Copies	W/ Copies	W/ Copies	W/ Copies
GOLLER(L)	VASSALLO(L)	KNIGHTON(E)	
W/ Copies	W/ Copies	W/ Copies	W/ Copies
KNIEL(L)	SCHEMEL(L)	YOUNGBLOOD(E)	
W/ Copies	W/ Copies	W/ Copies	W/ Copies

INTERNAL DISTRIBUTION

REG FILE	TECH REVIEW	DENTON	LIC ASST	A/T IND
✓AEC PDR	✓HENDRIE	GRIMES	BROWN (E)	BRAITMAN
✓OGC, ROOM P-506A	SCHROEDER	GAMMILL	✓DIGGS (L)	SALTZMAN
✓MUNTZING/STAFF	✓MACCARY	KASTNER	GEARIN (L)	
✓CASE	✓KNIGHT	BALLARD	GOULBOURNE (L)	PLANS
✓GIAMBUSSO	✓PAWLICKI	SPANGLER	LEE (L)	MCDONALD
BOYD	✓SHAO		MAIGRET (L)	DUBE
MOORE (L)(BWR)	✓STELLO	ENVIRO	SERVICE (L)	
DEYOUNG(L)(PWR)	✓HOUSTON	MULLER	SHEPPARD (E)	INFO
✓SKOVHOLT (L)	✓NOVAK	DICKER	SMITH (L)	C. MILES
P. COLLINS	✓ROSS	KNIGHTON	TEETS (L)	✓B. KING (reg Opr E/W Bldg)(OOE)
	✓IPPOLITO	YOUNGBLOOD	WADE (E)	
REG OPR	✓TEDESCO	REGAN	WILLIAMS (E)	
✓FILE & REGION(3)	✓LONG	PROJECT LDR	WILSON (L)	
✓MORRIS	✓LAINAS			
✓STEELE	✓BENAROYA	HARLESS		
	✓VOLLMER			

EXTERNAL DISTRIBUTION

✓1 - LOCAL PDR Minneapolis, Minn.
✓1 - DTIE(ABERNATHY)
✓1 - NSIC(BUCHANAN)
1 - ASLB(YORE/SAYRE/ WOODARD/"H" ST.
✓16 - CYS ACRS ~~HOLDING~~ SENT TO LIC ASST. R. DIGGS 8-15-73

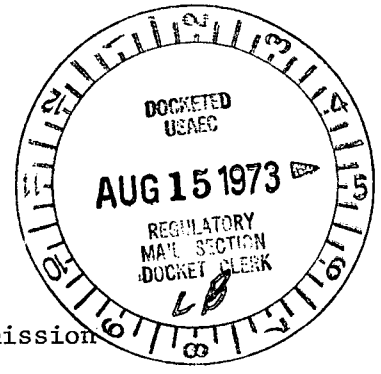
(1)(2)(9)-NATIONAL LAB'S
1-R.Schoonmaker,OC,GT,D-323
1-R. CATLIN, E-256-GT
1-CONSULTANT'S NEWMARK/BLUME/AGBABIAN
1-GERALD ULRIKSON...ORNL

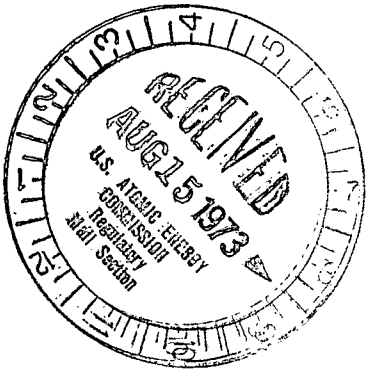
1-PDR-SAN/LA/NY
1-GERALD LELLOUCHE BROOKHAVEN NAT. LAB
1-AGMED(WALTER KOESTER RM-C-427-GT
1-RD..MULLER..F-309 GT

NSP Regulatory File Cy.

NORTHERN STATES POWER COMPANY

MINNEAPOLIS, MINNESOTA 55401





August 10, 1973

Mr. J F O'Leary, Director
Directorate of Licensing
United States Atomic Energy Commission
Washington, D C 20545

Dear Mr. O'Leary:

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

Slow Closure of a Main Steam Isolation Valve

A condition occurred at the Monticello Nuclear Generating Plant which we are reporting to your office in accordance with Section 6.7.B.1, Abnormal Occurrence Reports, of the Technical Specifications, of Provisional Operating License DPR-22.

On August 1, 1973, during routine surveillance testing, MSIV 2-80A closed in 6 seconds. This closure was in excess of the allowable Technical Specification of 3-5 seconds closure. An investigation revealed that the valve was being slowed the last 10% of stroke due to frictional resistance between the spring support yoke and the yoke rods. It was noted that the pair of rollers attached to the top of the yoke were not riding on the yoke rods, thus allowing metal to metal contact predominantly during the last portion of the valve closure stroke. Corrective maintenance included readjusting the rollers to obtain clearance between the yoke and the yoke rods, burnishing the galled areas on the yoke rods, and lubricating the contact areas between the rollers and yoke rods.

During subsequent timing tests the valve operated smoothly and without interference, however, after several exercises the valve was noted to be closing in less than 3 seconds. The dashpot oil level was found to be low and the flow restrictor assembly air bound. The dashpot was filled and vented, allowing the MSIV to be satisfactorily tested at 4 seconds closure. The inboard "A" MSIV oil dashpot is particularly difficult to fill and vent since the valve is canted from the vertical plane in such

6224

a manner as to place the dashpot assembly at the low point. Successive exercises were necessary to adequately fill and vent the dashpot assembly. As an inspection of the oil level in the dashpot assemblies of the MSIV's indicated no significant oil loss other than that of MSIV 2-80A, it is believed that the dashpot assembly for MSIV 2-80A was not completely filled after maintenance performed during the recent refueling outage. To further ensure an adequate amount of oil, a small reservoir was added to the dashpot external piping on all the inboard MSIV's.

This occurrence did not affect safe operation since the redundant outboard valve, MSIV 2-86A, had a timed closure of 4.2 seconds. Additionally, a safety margin is inherent in the Technical Specification since the bases states in part: "In order to assure that the doses that may result from a steam line break do not exceed the 10CFR100 guidelines, it is necessary that no fuel rod perforation resulting from the accident occur prior to closure of the main steam line isolation valves. Analysis suggested that fuel rod cladding perforations would be avoided for main steam valve closure times, including instrument delay as long as 10.5 seconds. However, for added margin the Technical Specifications require a valve closure of not greater than 5 seconds."

Mr. L O Mayer's letter to Mr. J F O'Leary dated June 28, 1973, and his letter to Mr. A Giambusso dated June 22, 1973, have identified test and exercise failures of the MSIV's at the Monticello Nuclear Generating Plant. In addition, Mr. L O Mayer's letter to Mr. D J Skovholt dated June 27, 1973, has outlined our continued engineering and surveillance efforts to improve the Main Steam Isolation Valve reliability. This was the first incident of slow valve closing due to mechanical interference. Previous problems with low dashpot oil levels were attributed to oil leakage, however, in this instance there was no evidence of oil leakage. In view of this current problem, a procedural corrective measure is most appropriate. The MSIV maintenance procedure will be revised to provide assurance of proper alignment of the yoke and yoke rods as well as to ensure complete filling of the dashpot and flow restrictor assembly. It is felt that these corrective measures in conjunction with past and continuing efforts will serve to assure valve operability.

Yours very truly,

L. O. Mayer

L O Mayer, PE
Director of Nuclear Support Services

LOM/br

cc: B H Grier
G Charnoff
Minnesota Pollution Control Agency
Attn: Ken Dzugan