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FROM: Northern States Power Company Minneapolis, Minn. 55401 L. O. Mayer		DATE OF DOC: 12-28-72	DATE REC'D 1-2-73	LTR X	MEMO	RPT	OTHER
TO: Mr. Giambusso		ORIG 1	CC	OTHER	SENT AEC PDR <u>X</u> SENT LOCAL PDR <u>X</u>		
CLASS: <u>U</u> PROP INFO		INPUT	NO CYS REC'D 40		DOCKET NO: 50-263		
DESCRIPTION: Ltr furnishing report of Main Steam Isolation Valve Performance.....W/Attachment-Table I & II. NOTE: *PLEASE CIRCULATE-INSUFFICIENT COPIES RECEIVED FOR FULL DISTRIBUTION PLANT NAMES: Monticello			ENCLOSURES: Do Not Remove ACKNOWLEDGED				

FOR ACTION/INFORMATION 1-2-73 AB

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<u>OGC, ROOM P-506A</u>	SCHROEDER	GRIMES	F & M	BROWN	E
<u>MUNTZING/STAFF CASE</u>	MACCARY*	GAMMILL	SMILEY	G. WILLIAMS	E
GIAMBUSSO	LANGE(2)	KASTNER	NUSSBAUMER	E. GOULBOURNE	L
<u>BOYD-L(BWR)</u>	PAWLICKI	BALLARD		A/T IND	
DEYOUNG-L(PWR)	SHAO	SPANGLER	LIC ASST.	BRATTMAN	
<u>SKOVHOLT-L</u>	KNUTH*		SERVICE L	SALTZMAN	
P. COLLINS	STELLO	ENVIRO	MASON L		
	MOORE	MULLER	WILSON L	PLANS	
REG OPR	HOUSTON	DICKER	MAIGRET L	MCDONALD	
<u>FILE & REGION (2)</u>	TEDESCO*	KNIGHTON	SMITH L	DUBE	
MORRIS	LONG	YOUNGBLOOD	GEARIN L		
<u>STELLE</u>	LAINAS	PROJ LEADER	DIGGS L	INFO	
	BENAROYA		TEETS L	C. MILES	
		REGAN	LEE L		

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<u>1-LOCAL PDR Minneapolis, Minn</u>		
<u>1-DTIE(ABERNATHY)</u>	(1)(5)(9)-NATIONAL LAB'S	1-PDR-SAN/LA/NY
<u>1-NSIC(BUCHANAN)</u>	1-R. CARROLL-OC, GT-B227	1-GERALD LELLOUCHE
1-ASLB-YORE/SAYRE	1-R. CATLIN, E-256-GT	BROOKHAVEN NAT. LAB
WOODWARD/H. ST.	1-CONSULANT'S	1-AGMED(WALTER KOESTER,
<u>16-CYS ACRS HOLDING</u>	NEWMARK/BLUME/AGABIAN	Rm C-427, GT)
Sent to Lic Asst.		1-RD...MULLER...F-309GT
R. Diggs on 1-2-73		

NSP**NORTHERN STATES POWER COMPANY**

MINNEAPOLIS, MINNESOTA 55401

December 28, 1972

Mr. A Giambusso
 Deputy Director for Reactor Projects
 Directorate of Licensing
 United States Atomic Energy Commission
 Washington, D C 20545



Dear Mr. Giambusso:

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

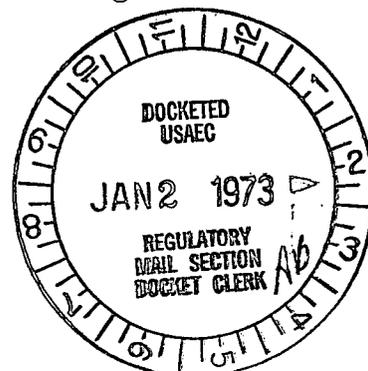
Report of Main Steam Isolation Valve Performance

This report is submitted in accordance with paragraph 6.6.E.3.e of Appendix A, Technical Specifications of the Provisional Operating License for the Monticello Nuclear Generating Plant, which requires that a report on main steam line isolation valve (MSIV) leakage be submitted within 18 months of initial commercial service. This Technical Specification paragraph was established to evaluate MSIV performance at Monticello and to review improvements which other facilities may have found necessary to assure MSIV leak tightness.

The comprehensive MSIV surveillance testing program outlined in the Monticello Technical Specifications has been fully complied with. All testing discrepancies have been subjected to thorough investigation by the plant technical staff and review by the Operations and Safety Audit Committees. All significant discrepancies have been reported to AEC-DL.

Table I lists the MSIV surveillance tests conducted at Monticello, their frequency, number of times conducted since date of initial commercial service, and the number of times that testing discrepancies arose. Table II is a summary of the unsatisfactory MSIV surveillance tests listing date, nature of discrepancy, date of report to AEC-DL, and the final resolution of each problem. Regarding MSIV performance, the following general observations can be made:

- a. An MSIV has never failed to close during testing

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- b. Of the three instances of improper closing time, the only one of consequence was caused by external oil piping leakage
- c. All significant MSIV problems discovered to date were found during the first six months of commercial operation

We believe that the corrective action outlined briefly in Table II, and reported in detail in individual occurrence reports, has solved all significant MSIV problems experienced. It has been our stated intent to repeat individual MSIV leakage tests at the first scheduled outage of sufficient length (7 days or more) to accommodate them. This additional testing will confirm the effectiveness of repairs made earlier this year and will be performed no later than the refueling outage scheduled for March, 1973.

We believe that the MSIV leakage report submittal date of 18 months from the start of commercial service was intended to include testing normally done during the first refueling outage. For this reason and to provide additional opportunity to obtain information on MSIV leakage experience from other plants, we intend to submit a supplemental report 60 days following the end of the spring outage.

Yours very truly,



L O Mayer, P.E.
Director of Nuclear Support Services

LOM/DMM/br

cc: B H Grier

Attachments

TABLE I

Main Steam Isolation Valve Surveillance Testing
Requirements and Summary of Results (7/1/71 - 12/28/72)

Surveillance Test	Frequency	No. of Valve Tests Performed	No. of Test Discrepancies
Test of simulated automatic closure (TS 4.7.D.1.a)	Each operating cycle	Scheduled for March, 1973 outage	-
Trip test and measurement of closure times (TS 4.7.D.1.c (2))	Quarterly	72	3
Partial closure and reopening MSIV exercise (TS 4.7.D.2)	Weekly	480	0
MSIV Local Leak Rate Test (TS 4.7.A.2.e)	Each operating cycle	8 To be repeated during first scheduled outage exceeding 7 days	4

TABLE II

Summary of Main Steam Isolation Valve Problems

Date	Discrepancy	Date of Report to AEC-DL	Resolution of Discrepancy																
8/26/71	MSIV 2-86C closure time found to be too short during routine quarterly surveillance test (2.0 sec measured, 3.0 sec min allowed)	9/9/71	Adjustment of oil dashpot flow control valve																
11/13/71	MSIV 2-86C closure time found to be too short (1.2 sec measured, 3.0 sec min allowed) and MSIV 2-80B closure time found excessive (20.0 sec measured, 5.0 sec max allowed)	11/26/71	Repaired leak in MSIV 2-86C oil dashpot cylinder external piping. Replaced spool piece in MSIV 2-80B main air valve																
11/17/71	During operational primary hydrostatic test MSIV 2-86A leakage found in excess of 11.5 SCFH limit (measured leakage in excess of 70 gpm of water).	11/26/71	Poppet guide wear area overlaid with stellite. Main seat and poppet lapped and truing cut made on guide land. Leakage reduced to 9.4 SCFH																
11/26/71	<p>Subsequent to 11/17/71 event all MSIV's leak tested. MSIV 2-80D, 2-86B, and 2-86D also found to exhibit excessive leakage. Test results were:</p> <table border="1" data-bbox="411 1159 987 1284"> <thead> <tr> <th>Valve</th> <th>Leak Rate (SCFH @ 25 psig)</th> </tr> </thead> <tbody> <tr> <td>2-80D</td> <td>154</td> </tr> <tr> <td>2-86B</td> <td>150</td> </tr> <tr> <td>2-86D</td> <td>83</td> </tr> </tbody> </table>	Valve	Leak Rate (SCFH @ 25 psig)	2-80D	154	2-86B	150	2-86D	83	2/18/72	<p>MSIV 2-80D main seat lapped to remove chip. Pilot valve and seat of MSIV 2-86B and 2-86D lapped to remove scratches. Leakage following repair was:</p> <table border="1" data-bbox="1619 1255 2149 1380"> <thead> <tr> <th>Valve</th> <th>Leak Rate (SCFH @ 25 psig)</th> </tr> </thead> <tbody> <tr> <td>2-80D</td> <td><0.2</td> </tr> <tr> <td>2-86B</td> <td>3.9</td> </tr> <tr> <td>2-86D</td> <td><0.2</td> </tr> </tbody> </table>	Valve	Leak Rate (SCFH @ 25 psig)	2-80D	<0.2	2-86B	3.9	2-86D	<0.2
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