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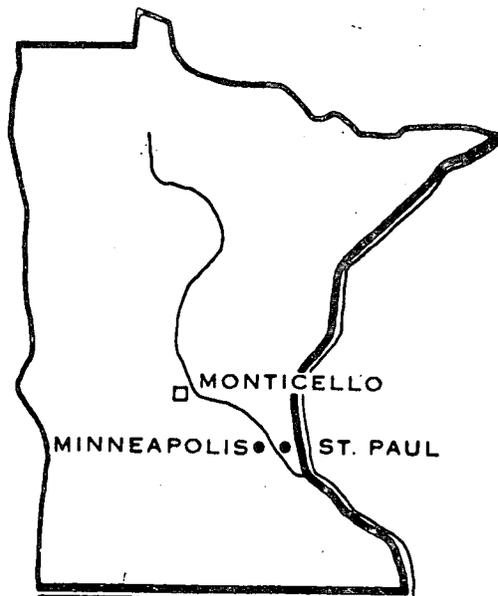
MONTICELLO NUCLEAR GENERATING PLANT

Monticello, Minnesota

UNIT 1

RETURN TO REACTOR DOCKET
FILES

RETURN TO REACTOR DOCKET
FILES



50-263
LW dtd 1-15-79
7901180191

INSERVICE INSPECTION-EXAMINATION SUMMARY
MONTICELLO NUCLEAR GENERATING PLANT - UNIT 1
OCTOBER 9 TO NOVEMBER 8, 1978

REFUELING OUTAGE NO. 6
INSPECTION PERIOD 3

N O R T H E R N S T A T E S P O W E R C O M P A N Y

MINNEAPOLIS, MINNESOTA

RPT AND:
790118 0196

NORTHERN STATES POWER COMPANY
MONTICELLO NUCLEAR GENERATING PLANT - UNIT 1

RETURN TO REACTOR DOCKET
FILES

INSERVICE INSPECTION-EXAMINATION SUMMARY
MONTICELLO NUCLEAR GENERATING PLANT - UNIT 1
OCTOBER 9 TO NOVEMBER 8, 1978

REFUELING OUTAGE NO. 6
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50-263
IN 79-01-15
7901180191
RPT AND:
7901180196

RETURN TO REACTOR DOCKET
FILES

November 9, 1978

Commercial Service
Date: June 30, 1971

Prepared by: D. B. Hansen, Engineer

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Material & Special Processes

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NORTHERN STATES POWER COMPANY
MONTICELLO NUCLEAR GENERATING PLANT - UNIT 1
INSERVICE INSPECTION-EXAMINATION SUMMARY

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INSERVICE INSPECTION-EXAMINATION SUMMARY
MONTICELLO NUCLEAR GENERATING PLANT - UNIT 1
October 9 to November 8, 1978

1.0 INTRODUCTION

This report is a summary of the Monticello Nuclear Generating Plant's sixth inservice inspection. This was the first inservice inspection conducted in inspection period three. The examinations were performed during the sixth refueling outage from October 9 to November 8, 1978. The Monticello Nuclear Generating Plant began commercial operation on June 30, 1971.

The examinations were performed on pressure retaining components and their supports of the reactor coolant and associated auxiliary systems classified as ASME Class 1. In addition, baseline examinations were performed on the main steam equalizer header, added during the outage, and on the main steam and supply to steam seal system modified by the addition.

Northern States Power Company contracted Lambert, McGill, Thomas, Inc. to perform the examinations. Hartford Steam Boiler Inspection and Insurance Company, representing ANI, provided the Authorized Inspection.

2.0 SUMMARY OF RESULTS

The evaluation of all the results from the examinations indicates that the integrity of these systems has been maintained. There were no indications of degradation to these systems.

3.0 DISCUSSION OF EXAMINATION PLAN

3.1 INSPECTION BOUNDARY

The examination plan focused on the pressure retaining components and their supports of the reactor coolant systems, portions of the emergency core coolant systems, and portions of the reactor coolant associated systems that are classified as ASME Class 1. In addition, baseline examinations were performed on the main steam equalizer header, added to the main steamline on the ASME Class 2 side during the outage. A portion of the main steam and supply to steam seal systems were modified for the header addition, and the new welds in these lines were examined to establish a baseline.

The examination plan was based on the examination requirements of the ASME Boiler and Pressure Vessel Code Section XI, 1974 Edition through and including the Summer 1975 Addenda, and complied with Monticello's Technical

Specification, Section TS4.6.1. The examination plan is in accordance with the program submitted to the United States Nuclear Regulatory Commission on March 15, 1978 entitled, "ASME Code Section XI Inservice Inspection and Testing Program and Information Required for NRC Review of Requests for Relief from ASME Code Section XI Requirements".

The components examined, the examination method(s), and the examination report numbers are identified in the tables of the attached appendices as follows:

Appendix A - ASME CLASS 1 - EXAMINATION

Appendix B - ASME CLASS 2 - EXAMINATION (Only baseline examinations were performed during this outage)

3.2 EXAMINATION PROCEDURES

A listing of the procedures used for the examinations is shown in Table III of Appendix C. The ultrasonic examination procedure for pipe welds complied with the requirements of Appendix III of ASME Section XI that was issued in the Winter 1975 Addenda. All the other examination procedures complied with the requirements of the 1974 Edition through and including the Summer 1975 Addenda of ASME Section XI.

3.3 EXAMINATION METHODS

Ultrasonic examination techniques were used to perform volumetric requirements. The ultrasonic test system consisted of an ultrasonic digital analog tester, and a two channel strip chart recorder. One channel of the recorder was calibrated to reflect the ultrasonic screen height (amplitude) and the second channel was calibrated to reflect the metal path (range) to the reflector. This approach gives a permanent record of the examination. A remote ultrasonic system was used on a portion of the welds inside the drywell. This system consisted of a master ultrasonic tester, (Nortec 131D), a strip chart recorder, and a magnetic tape recorder located outside the drywell connected to a slave module inside the drywell.

Surface examinations were performed by liquid penetrant or magnetic particle techniques. The liquid penetrant examinations were performed using the color contrast-solvent removable method, Magnetic Particle examinations were performed using a yoke and dry magnetic powder.

All visual examinations were aided when necessary with artificial lighting and verified for adequacy with an 18% neutral gray card with a 1/32 inch black line. Both hot and cold hanger load settings were visually verified (when applicable) and recorded on the report along with the piping system temperature.

3.4 EVALUATION

Any indications disclosed in the examinations were evaluated by the examiner at that time, in accordance with the rules of the procedure and ASME Section XI.

The ultrasonic examiner was aided in his evaluation by a calibration performed on a standard reference before each day's examination and checked before and after each individual examination and at intervals not exceeding four (4) hours.

There were no signs of degradation to the systems scheduled for examination. The only anomalies detected were: loose bolts on hangers CDAK-12, CDAK-24, and CDAK-37 located on CRD Scram Header A; evidence of leakage on restraint RRDK-6 located on Recirculation Riser "D"; one loose and one missing bolt on hanger RBAK-10 located on Recirculation Bypass A; and a missing bolt and skewed clamp on hanger RBBK-14 located on Recirculation Bypass B.

All anomalies were corrected. The loose bolts on the hangers were tightened and the missing bolts were replaced. The leakage on restraint RRDK-6 was due to a leaking valve. The valve was repaired and the restraint was cleaned. The missing bolt on hanger RBBK-14 was replaced and that straightened the skewed clamp, the cold setting was then readjusted. All anomalies were re-examined with the same method that located them.

3.5 PERSONNEL

All personnel involved in the performance or evaluation of examinations are listed along with their title, organization, and ASNT Level of certification in Table I of Appendix C.

Qualification records for examination personnel are maintained on file by Northern States Power Company.

3.6 EQUIPMENT AND MATERIALS

All equipment and expendable materials used in the examination are listed by either serial number or type along with the respective calibration date or batch number in Table IV of Appendix C.

The ultrasonic calibration standards used in the examination are listed in Table II of Appendix C. These standards are owned and maintained by NSP at the plant site.

3.7 EXAMINATION REPORTS AND DOCUMENTATION

All examination reports and documentation are maintained on file by Northern States Power Company. Table I of Appendices A and B identifies the examination report number(s) for each

item examined. Many of the items identify more than one examination report because of the different types of examination performed on the item.

Table I of Appendix A and B summarizes all the examinations that have been performed to date and identifies the amount that will be examined in the future to complete the ten year examination requirement. For retrieval purposes the prefix of the inspection report number corresponds with the year that the inspection was performed.

Table II of Appendix A and B compares the baseline examination results with the results obtained during this examination. Table III of Appendix A and B identifies the isometric drawings that were used for the examinations. The personnel, ultrasonic calibration blocks, procedures, equipment and materials that were used for the inspection are identified in the tables of Appendix C. Appendix D contains the Form NIS-1, entitled "Owners' Data Report for Inservice Inspections".

APPENDIX A

ASME CLASS 1 - EXAMINATION

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE Sl.1
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MAJOR ITEM: REACTOR VESSEL

SUB ITEM	EXAM CATE-GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B1.1	B-A	<u>LONGITUDINAL AND CIRCUM-FERENTIAL WELDS IN CORE REGION</u> LONGITUDINAL WELDS VLAA-1 VLAA-2 VLBA-1 VLBA-2 CIRCUMFERENTIAL WELDS VCBA-2	-	-	-	-RELIEF NO. 15-	
B1.2	B-B	<u>LONGITUDINAL AND CIRCUM-FERENTIAL WELDS IN SHELL (OTHER THAN THOSE OF CATEGORY B-A AND B-C) AND MERIDIONAL AND CIRCUMFERENTIAL SEAM WELDS IN BOTTOM HEAD AND CLOSURE HEAD (OTHER THAN THOSE OF CATEGORY B-C)</u> <u>SHELL</u> <u>LONGITUDINAL WELDS</u> VLAA-1 VLAA-2 VLCB-1 VLCB-2 VLBA-1 VLBA-2	-	-	-	-RELIEF NO. 15- -RELIEF NO. 16- -RELIEF NO. 16-	TOP 15" OF WELD NOT IN CORE REGION

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MAJOR ITEM: REACTOR VESSEL

SUB ITEM	EXAM CATE-GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.	
B1.2	B-B	(CONT'D)						
		VLDB-1	ONE TWO THREE	10% - 25%	18% - -	VLDB-1 (TOP 24")	74-136	
		VLDB-2	ONE TWO THREE	- 10% -	- 43% -	VLDB-2 (TOP 57")	75B-87,88,109	
		<u>CIRCUMFERENTIAL WELDS</u>						
		VCBB-1	-	-	-	-RELIEF NO. 15-		
		VCBB-3	-	-	-	-RELIEF NO. 15-		
		VCBB-4	-	-	-	-RELIEF NO. 16-		
		<u>CLOSURE HEAD</u>						
		<u>MERIONAL WELDS</u>						
		HMCB-1	ONE TWO THREE	10% - -	21% 100% -	HMCB-1 (1.5') HMCB-1 (7.0')	74-30 75B-30,72,75	
		HMCB-2	ONE TWO THREE	10% - -	21% - -	HMCB-2 (1.5')	74-81	
		HMCB-3	ONE TWO THREE	- 10% -	- 100% -	HMCB-3 (7.0')	75B-31,71,78	
		HMCB-4	ONE TWO THREE	- - 100%	- - -			

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B1.2	B-B	(CONT'D)					
		HMCB-5	ONE	-	-	HMCB-5 (7.0')	75B-32,70,77
			TWO	10%	100%		
			THREE	-	-		
		HMCB-6	ONE	-	-		
			TWO	-	-		
			THREE	100%	-		
		CIRCUMFERENTIAL WELD HCCB-2	ONE	-	-	HCCB-2 (25')	75B-68,74,76
			TWO	5%	100%		
			THREE	-	-		
		<u>BOTTOM HEAD</u>					
		MERIONAL WELDS					
		HMAB-1	-	-	-	-RELIEF NO. 16-	
		HMAB-2	-	-	-	-	
		HMAB-3	-	-	-	-	
		HMAB-4	-	-	-	-	
		HMAB-5	-	-	-	-	
		HMAB-6	-	-	-	-	
		HMAB-7	-	-	-	-	
		HMAB-8	-	-	-	-	
		MERIONAL WELDS THRU DOLLAR PLATE ASSEMBLY					
		HMAB-9	-	-	-	-RELIEF NO. 16-	
		HMAB-10	-	-	-	-	

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B1.2	B-B	(CONT'D) CIRCUMFERENTIAL WELD - DOLLAR PLATE HCAB-1	ONE TWO THREE	- - 5%	5% - -	2.2', 0-18°	74-67
B1.3	B-C	<u>VESSEL-TO-FLANGE AND HEAD-TO-FLANGE CIRCUM- FERENTIAL WELDS</u> VESSEL TO FLANGE VCBC-5 HEAD TO FLANGE HCCC-1	ONE TWO THREE ONE TWO THREE	33% 34% 33% 33% 34% 33%	40% 36% - 37% 81% -	STUD HOLE, 64-14 & STUD HOLE, 12-22 STUD HOLE, 21-36 & STUD HOLE, 36-43 STUD HOLE, 64-13 & STUD HOLE, 13-22 STUD HOLE, 22-1 & STUD HOLE, 36-43	73-126 74-146 75B-16 77-159 73-47 74-18 75B-29,73,79 77-92,93
B1.4	B-D	<u>PRIMARY NOZZLE-TO- VESSEL WELDS AND NOZZLE INSIDE RADIUSED SECTION</u> -CLOSURE HEAD- HEAD VENT (N7) HEAD SPRAY (N6A) HEAD SPARE (N6B) -BOTTOM HEAD- STANDBY LIQUID CONTROL (N10)	ONE ONE THREE -	100% 100% 100% -	100% 100% - -	HVAD-1 RHDD-1 -RELIEF NO. 15-	73-049,050 73-051,054 75A-10B (PARTIAL)

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Bl.4	B-D	(CONT'D)						
		-VESSEL SHELL-						
		MAIN STEAM A (N3A)	ONE	100%	100%	MSAD-1	74-77,78	
		MAIN STEAM B (N3B)	THREE	100%	-			
		MAIN STEAM C (N3C)	TWO	100%	100%	MSCD-1	75B-89,90,105,111	
		MAIN STEAM D (N3D)	THREE	100%	-			
		FEEDWATER A (N4A)	ONE	100%	100%	FWAD-1	74-91,92	
		FEEDWATER B (N4B)	TWO	100%	100%	FWBD-1	75B-122	
		FEEDWATER C (N4C)	TWO	100%	100%	FWCD-1	75B-91,92,93,110	
		FEEDWATER D (N4D)	THREE	100%	-			
		<u>AUGMENTED EXAMS</u>						
		(75B) (77)						
							FWAD-1	123 222,221
							FWBD-1	122 217,218
							FWCD-1	121 214,215,216
					FWDD-1	120 219,220		
		CORE SPRAY B (N5B)	TWO	100%	100%	CSBD-1	75A-85,109	
		CORE SPRAY A (N5A)	THREE	100%	-			
		CONTROL ROD DRIVE HYDRAULIC RETURN (N9)	ONE TWO	100% 100%	100% 100%	CRAD-1 CRAD-1	74-79,80 77-223 (IR)	
		RECIRCULATION OUTLET A (N1A)	ONE	100%	100%	RCAD-1	73-69,70	
		RECIRCULATION OUTLET B (N1B)	ONE THREE	100% 100%	100% -	RCBD-1	74-69,74	

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B1.4	B-D	(CONT'D) RECIRCULATION INLET NOZZLES INLET A (N2A) INLET D (N2D) INLET J (N2J) INLET C (N2C) INLET E (N2E) INLET G (N2G) INLET B (N2B) INLET F (N2F) INLET H (N2H) INLET K (N2K) JETPUMP INSTRUMENTATION NOZZLES NOZZLE A (N8A) NOZZLE B (N8B)	ONE ONE ONE TWO TWO TWO THREE THREE THREE THREE	100% 100% 100% 100% 100% 100% 100% 100% 100% 100%	100% 100% 100% 100% 100% 100% 100% 100% 100% 100%	RRAD-1 RRDD-1 RRJD-1 RRCD-1 RRED-1 RRGD-1 RRBD-1 RRFD-1 RRHD-1 RRKD-1	74-76,109 73-71,76 73-80,81 75A-98,110 77-205,207 75A-99,107,123 78-88,94,99,103 78-90,97,98,101 78-89,96,100,106 78-91,95,102,107
B1.5	B-E	<u>VESSEL PENETRATIONS,</u> <u>INCLUDING CONTROL ROD</u> <u>DRIVE AND INSTRUMENTA-</u> <u>TION PENETRATIONS</u> CONTROL ROD DRIVE PENETRATIONS (TOTAL 121)	-	-	-	*-RELIEF NO. 17-	*INSPECTED BY PLANT PERSONNEL DURING EACH REACTOR VESSEL LEAKAGE TEST

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MAJOR ITEM: REACTOR VESSEL

SUB ITEM	EXAM CATEGORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
Bl.5	B-E	(CONT'D)					
		INSTRUMENTATION PENETRATIONS (TOTAL 4)	ONE	-			
			TWO	-	-		
			THREE	25%	-		
		REACTOR VESSEL BOTTOM HEAD DRAIN (N15)	-	-	-	-RELIEF NO. 17-	
		REACTOR VESSEL CLOSURE HEAD FLANGE LEAKAGE SENSORS (N-13) (N-14)	-	-	-	-RELIEF NO. 18-	
Bl.6	B-F	<u>NOZZLE TO SAFE END WELDS</u>					
		-CLOSURE HEAD-					
		HEAD VENT (N7)	ONE	100%	100%	HVAF-2	73-053,057
		HEAD SPRAY (N6A)	ONE	100%	100%	RHDF-2	73-052,056
		HEAD SPARE (N6B)	THREE	100%			73-055 (INCOMPLETE)
		-BOTTOM HEAD-					
		STANDBY LIQUID CONTROL (N10)	THREE	100%	-		*BEST EFFORT -RELIEF NO. 19-
-VESSEL SHELL-							
		CORE SPRAY A (N5A)	TWO	100%	100%	CSAF-2	77-299,128
		CORE SPRAY B (N5B)	TWO	100%	100%	CSBF-2	75A-104/77-137,139

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SUB ITEM	EXAM CATE-GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B1.6	B-F	(CONT'D)					
		CONTROL ROD HYDRAULIC RETURN (N9)	TWO TWO THREE	100% - 100%	100% 100% -	CRAF-2 BASELINE (CAPPED)	74-90,93 77-224
		RECIRCULATION OUTLET A (N1A)	ONE	100%	100%	RCAF-2	73-72,78
		RECIRCULATION OUTLET B (N1B)	ONE THREE	100% 100%	100% -	RCBF-2	74-71,73
		RECIRCULATION INLET					
		INLET A (N2A)	ONE	100%	100%	RRAF-2	74-89,116
		INLET D (N2D)	ONE	100%	100%	RRDF-2	73-75,77
		INLET J (N2J)	ONE	100%	100%	RRJF-2	73-74,82
		INLET C (N2C)	TWO	100%	100%	RRCF-2	75A-102/75B-105
		INLET E (N2E)	TWO	100%	100%	RREF-2	77-204,209
		INLET G (N2G)	TWO	100%	100%	RRGF-2	75A-103/75B-112
		INLET B (N2B)	THREE	100%	100%	RRBF-2*	78-75,123
		INLET F (N2F)	THREE	100%	100%	RRFF-2*	78-79,121
		INLET H (N2H)	THREE	100%	100%	RRHF-2*	78-78,122
		INLET K (N2K)	THREE	100%	100%	RRKF-2*	78-76,124
		JET PUMP INSTRUMENTATION					
		(N8A)	ONE	100%	100%	JPAF-2	74-84,88
		(N8B)	THREE	100%	-		

*NOTE: THE ENTIRE
SAFE END WAS UT EXAM-
INED IN 1978; INCLUD-
ING THE SAFE END TO
PIPE WELD.

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SUB ITEM	EXAM CATEGORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
Bl.9	B-G-1	<u>LIGAMENTS BETWEEN THREADED STUD HOLES</u>	ONE	33%	37%	AT STUDS HOLES: 1 THRU 13 (AND) 12 THRU 22 21 THRU 35 (AND) 36 THRU 43	73-48,125 74-66 75B-15 77-160
			TWO	33%	36%		
			THREE	34%	-		
Bl.10	B-G-1	<u>CLOSURE WASHERS</u>	ONE	33%	100%	WASHER PAIRS: 1 THRU 64 1 THRU 64	73-61,67/74-62 77-82
			TWO	33%	100%		
			THREE	34%	-		
Bl.11	B-G-2	<u>PRESSURE-RETAINING BOLTING*</u> HEAD VENT (N7) HEAD SPARY (N6A) HEAD SPARE (N6B)	ONE	8	100%	*ALL BOLTING SCHEDULED FOR PERIOD THREE	(FLANGE BROKEN WHEN CLOSURE HEAD REMOVED) 74-142 74-142
			TWO	8	100%		
			THREE	8	100%		
Bl.12	B-H	<u>INTEGRALLY WELDED VESSEL SUPPORTS</u> SUPPORT SKIRT HCAH-2 VESSEL STABILIZER LUGS	ONE	3.3%	5%	HCAH-2 (5'8")	74-65
			TWO	-	-		
			THREE	6.7%	-		
Bl.13	B-I-1	<u>CLOSURE HEAD CLADDING</u> (6-36 ² IN)	ONE	33%	33%	2-36 IN ² PATCHES 2-36 IN ² PATCHES ALL HEAD CLAD- VISUAL	73-INVESSEL RPT 74-RPV INTERNALS RPT 77-RPV INTERIOR RPT -RELIEF NO. 20-
			ONE	-	33%		
			TWO	33%	100%		
			THREE	33%	-		

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Bl.14	B-I-1	<u>VESSEL CLADDING</u> (6-36 ² IN)	ONE	33%	33%	2-36 IN ² PATCHES 2-36 IN ² PATCHES (SEE RPT FOR AREA)	73-INVESSEL RPT
			ONE	-	33%		74-RPV INTERNALS RPT
			TWO	33%	33%		77-RPV INTERIOR RPT
			THREE	33%	-		
Bl.15	B-N-1	<u>VESSEL INTERIOR</u>	ONE	-	-	SPACE ABOVE AND BELOW THE REACTOR CORE THAT IS MADE ACCESSIBLE FOR EXAMINATION BY THE REMOVAL OF COMPONENTS DURING NORMAL REFUELING OUTAGE	73-INVESSEL RPT
			ONE	-	-		74-RPV INTERNALS RPT
			TWO	-	-		77-RPV INTERIOR RPT
			THREE	-	-		
Bl.16	B-N-2	<u>INTERIOR ATTACHMENTS AND CORE SUPPORT STRUCTURES</u>	ONE	-	-	ATTACHMENTS AND CORE SUPPORT STRUCTURES	73-INVESSEL RPT
			ONE	-	-		74-INTERNALS RPT
			TWO	-	-		77-RPV INTERIOR RPT
			THREE	100%	-		
Bl.17	B-N-3	<u>CORE SUPPORT STRUCTURES</u>	-	-	-	NOT APPLICABLE	-
Bl.18	B-0	<u>CONTROL ROD DRIVE HOUSINGS</u> (24 PERIPHERAL HOUSING WELDS)	ONE	10%	*	<u>CRD NO.*</u>	
						02-23	73-085
						10-43	73-086
						22-27	73-108
						22-31	73-109
						26-27	73-110
						14-27	73-121
						38-23	74-102
						14-15	74-103
						34-11	74,108

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY

MAJOR ITEM: REACTOR VESSEL

SUB ITEM	EXAM CATEGORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B1.18	B-O	(CONT'D)	TWO	-		38-19 34-33 38-35 18-39 14-19 22-19	75A-91 75A-92 75A-93 75A-94 75A-95 75A-96
B1.19	B-P	<u>EXEMPTED COMPONENTS</u> CLOSURE FLANGE SENSORS VFAE-1 VABE-1	THREE	3	-	-HYDROSTATICALLY PRESSURE TESTED TO IWA-5000 AND IWB-5000 AT END OF TEN YEAR PERIOD PLUS SYSTEM LEAKAGE EXAM EACH SCHEDULED RE- FUELING OUTAGE- NOTE RELIEF 18	-PLANT PERSONNEL-

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY

MAJOR ITEM: PRESSURIZERS

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B2.0	-	<u>PRESSURIZER</u>	-	-	-	-NOT APPLICABLE-	

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY

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MAJOR ITEM: HEAT EXCHANGER/SIM. GEN.

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B3.0	-	<u>HEAT EXCHANGERS AND STEAM GENERATORS</u>	-	-	-	-NOT APPLICABLE-	

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY

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MAJOR ITEM: PIPING PRESSURE BOUNDARY

SUB ITEM	EXAM CATE-GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B4.5	B-J	(CONT'D)					
		MAIN STEAM B (18")	ONE	5	5	MSBJ-40,31,33	73-1,20,21
			TWO	2	2	MSBJ-25,9	74-49,52
			THREE	3	-	MSBJ-4,12	77-76,70,68
		(6")	ONE	2	2	MSBJ-15,21	74-8,11
			TWO	-	-		
			THREE	-	-		
		MAIN STEAM C (18")	ONE	6	9	MSCJ-41,31,33,	73-4,17,19,105,23,22
						13,36,38	
			TWO	2	2	MSCJ-25,12,33	74,41,42,51
			THREE	3	-	MSCJ-3,2	75B-94,95
		(6")	ONE	2	2	MSCJ-21,16	74-2,4
			TWO	-	-		
			THREE	-	-		
		MAIN STEAM D (18")	ONE	5	5	MSDJ-45,38,36	73-3,22,23
						MSDJ-12,30	74-31,37
			TWO	2	2	MSDJ-9,11	77-77,69
			THREE	2	-		
		(6")	ONE	2	3	MSDJ-28,21,17	74-3,5,12
			TWO	1	1	MSDJ-23	77-80
			THREE	1	-		
FEEDWATER A (10")	ONE	1	1	FVAJ-16	74-101		
	TWO	1	1	FVAJ-11	77-95		
	THREE	1	-				

NORTHERN STATES POWER CO.
 MONTICELLO NUCLEAR GENERATING PLANT
 INSERVICE INSPECTION-EXAMINATION SUMMARY

MAJOR ITEM: PIPING PRESSURE BOUNDARY

SUB ITEM	EXAM CATEGORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B4.5	B-J	(CONT'D)					
		FEEDWATER B (10")	ONE	-	-		
			TWO	2	3	FWBJ-2	77-154,208
			THREE	1	-	FWBJ-9,12	77-84,96
		FEEDWATER A (14")	ONE	4	5	FWAJ-35,27,25,30	73-13,26,27,30
			TWO	2	1	FWAJ-24	74-28
			THREE	1	-	FWAJ-19	77-180
		FEEDWATER C (10")	ONE	-	-		
			TWO	2	2	FWCJ-2,3	75B-96,97
			THREE	1	-		
		FEEDWATER D (10")	ONE	1	1	FWDJ-16	74-27
			TWO	1	1	FWDJ-18	77-97
			THREE	1	-		
		FEEDWATER D (14")	ONE	5	5	FWDJ-35,25,26,30,24	73-14,24,25,33,89
			TWO	1	1	FWDJ-24,25,26	74-24A,25,26
	THREE	1	-	FWDJ-22	77-181		
				<u>*INCLUDES</u>	<u>DOES NOT INCLUDE B4.1</u>		
				<u>AUGMENTED</u>			
				CSAJ-16,17	73-98,99		
				CSAJ-11,12	73-96,97		
				CSAJ-26 (2)	73-106/74-82		

**NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY**

MAJOR ITEM: PIPING PRESSURE BOUNDARY

SUB ITEM	EXAM CATE-GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.	
B4.5	B-J	(CONT'D)	TWO	6	8	CSAJ-2A (3)	(75A) (75B) (77) 73 11 129,200	
						CSAJ-3 (3)	72 19,82 138	
						CSAJ-4 (3)	69 20 124	
						CSAJ-5 (3)	64 21 164	
						CSAJ-8 (3)	66 22 123	
						CSAJ-9 (3)	75 23 125	
			THREE	1	-	CSAJ-16 (3)	18 26 165	
						CSAJ-17 (3)	71 27 134	
			ONE	4	4	*INCLUDES AUGMENTED		DOES NOT INCLUDE B4.1
						CSBJ-11	73-94	
						CSBJ-13	73-92	
						CSBJ-14	73-93	
TWO	5	7	CSBJ-23	73-107				
			CSBJ-2A (3)	(75A) (75B) (77) 67,104 001 140,37				
			CSBJ-3 (3)	65 3,84 141				
			CSBJ-4 (3)	77 004 121				
			CSBJ-5 (3)	83 17 166				
			CSBJ-8 (3)	84 005 122				
THREE	1	-	CSBJ-13 (3)	82 8,83 146				
			CSBJ-14 (3)	78 009 147				
			PSAJ-19,3,4,2A	73-12,43,130,44				
ONE	4	4	PSAJ-2A,4	74-13,14, (REPEAT)				
TWO	1	1	PSAJ-1	77-54				
THREE	1	1	PSAJ-15	78-54				
		HIGH PRESSURE COOLANT INJECTION -STEAM-						

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY

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MAJOR ITEM: PIPING PRESSURE BOUNDARY

SUB ITEM	EXAM. CATEGORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B4.5	B-J	(CONT'D)					
		REACTOR WATER* CLEAN UP	ONE TWO THREE	- 3 2	- 7 2	*INCLUDES AUGMENTED CWAJ-2,1,2A CWAJ-17,1,2A,3 CWAJ-4,5	75A-57,58,97,59 77-83,59,56,61,36,44 78-71,70
		CONTROL ROD				*	*CRD LINE REROUTED AND CAPPED
		HYDRAULIC RETURN	ONE TWO	- *	- 11	CRAJ-10,11 CRAJ-30,32,33,34 CRAJ-4,5,8 CRAJ-12,13	75A,101,100 75A,52,53,54,55 75B-99,100,101 75B,102,103
		RESIDUAL HEAT REMOVAL REW 10 (18")	ONE TWO THREE	1 7 2	1 7 -	RHAJ-7 (2) RHAJ-9,10,15,1 RHAJ-2,3,6	73-62/74-115 77-151,152,153,168 77-169,170,172
		RESIDUAL HEAT REMOVAL TW 20 (16")	ONE TWO THREE	1 3 2	2 3 -	RHBJ-21,22 RHBJ-31,28 RHBJ-19	73-58,59 75A-47,125 77-161
		TW 20 (18")	ONE TWO THREE	- 2 -	- 2 -	RHBJ-1,3	77-173,174

**NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY**

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MAJOR ITEM: PIPING PRESSURE BOUNDARY

SUB ITEM	EXAM CATE-GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.	
B4.5	B-J	(CONT'D)						
		RESIDUAL HEAT REMOVAL TW 30 (16")	ONE	8	8	RHCJ-18,26,28 RHCJ-29,32,34 RHCJ-21,22,32	74-95,98,99 74-100,104,105,112,113 75A-46,90,127	
			TWO	-	-			
			THREE	2	-			
			TW 30 (18")*	ONE	-	-	*INCLUDES AUGMENTED	
				TWO	2	4	RHCJ-3,1/1,3	75A-86,87/77-182,183
				THREE	-	-		
			RESIDUAL HEAT REMOVAL TW 36 (4")	ONE	1	1	RHDJ-3	73-068
				TWO	4	4	RHDJ-4,5,6,7	75A-51,50,49,48
				THREE	2	-		
			REACTOR CORE INJECTION COOLANT STEAM (3")	ONE	-	-		
				TWO	2	2	RSAJ-1,2	77-62,63
				THREE	2	2	RSAJ-11,12	78-86,86E,87,87E
			RECIRCULATION A REW 13 A-28"	ONE	1	1	RCAJ-3	73-073,79
				TWO	1	1	RCAJ-17	75B-033,59
				THREE	2	2	RCAJ-5,15	78-73,77
			REW 26-4"	ONE	-	-		
				TWO	-	-		
				THREE	1	-		
			RECIRCULATION B REW 13 B-28"	ONE	1	1	RCBJ-3	74-68,72
				TWO	2	1	RCBJ-28	75B-65
		THREE	2	1	RCBJ-5	78-72		

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY

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MAJOR ITEM: PIPING PRESSURE BOUNDARY

SUB ITEM	EXAM CATE-GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B4.5	B-J	(CONT'D)					
		RISER J REW 17-12"	ONE	1	1	RRJJ-3	73-74,83
			TWO	3	3	RRJJ-4,5,7	75B-50,51,52
			THREE	-	-		
		RISER K REW 18-12"	ONE	1	1	RRKJ-7 (2)	73-46/74-114
			TWO	-	-		
			THREE	1	1	RRKJ-3	78-124
		RISER A REW 23-12"	ONE	1	1	RRAJ-3	74-117
			TWO	3	3	RRAJ-4,5,7	75B-53,54,55
			THREE	-	-		
		RISER B REW 22-12"	ONE	-	-		
			TWO	-	-		
			THREE	1	1	RRBJ-3	78-123
		RISER C REW 21-12"	ONE	-	-		
			TWO	4	4	RRCJ-4,5,7 (2)	75A-42,43,(40,41)
			THREE	-	-	RRCJ-3	75B-98,107
		RISER D REW 20-12"	ONE	1	1	RRDJ-3	73-75,84
			TWO	3	3	RRDJ-4,5,7	75B-58,57,56
			THREE	-	-		
		RISER E REW 19-12"	ONE	-	-		
			TWO	4	4	RREJ-3,4	77-203,202
			THREE	-	-	RREJ-5,7	77-201,162
		HEAD SPARE (N6B)	ONE	-	-		
			TWO	-	-		
	THREE	1	-				

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY

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MAJOR ITEM: PIPING PRESSURE BOUNDARY

SUB ITEM	EXAM CATEGORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B4.5	B-J	(CONT'D)					
		HEAD VENT (N7)	ONE TWO THREE	- - 1	- - -		
		JET PUMP					
		INSTRUMENT NOZZLES					
		4" N 8A	ONE	2	2	JPAJ-3	74-83,85
		4" N 8B	TWO THREE	- -	- -	JPBJ-3	74-86,87
		REACTOR VESSEL BOTTOM HEAD DRAIN	ONE TWO THREE	- - 3	- - -		
		MAIN STEAM CONDENSATE LEAK OFF	ONE TWO THREE	- - 1	- - 1	CLAJ-10	78-110
		CRD SCRAM HEADER	*			*NOT REQUIRED IN PERIOD ONE OR TWO	
		CRD 26A-8" DB	THREE	1	-		
		CRD 26B-8" DB	THREE	1	-		
		CRD 13A-4" DB	THREE	1	-		
		CRD 13B-4" DB	THREE	1	-		
		CRD 15A-4" DB	THREE	1	-		
		CRD 15B-4" DB	THREE	1	-		
		CRD 14A-6" DB	THREE	1	-		
		CRD 14B-6" DB	THREE	1	-		
		SCRAM DISCHARGE VOLUMN TANK	*				
		CRD 18-12" DB	THREE	1	-	-RELIEF NO. 21-	

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY

MAJOR ITEM: PIPING PRESSURE BOUNDARY

SUB ITEM	EXAM CATE-GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B4.6	B-J	<u>BRANCH PIPE CONNECTIONS EXCEEDING SIX INCH DIAMETER</u>					
		RECIRCULATION A (28")	ONE	1	1	RCAJ-7	74-126
		RECIRCULATION B	-	-	-		
		MAIN STEAM B (18")	TWO	1	1	MSBJ-22	77-71,150,39
		<u>RECIRCULATION MANIFOLD</u>					
		<u>A</u> RISER F (RMAJ-3)	THREE	1	-		
		RISER G (RMAJ-5)	-	-	-		
		RISER J (RMAJ-12)	-	-	-		
		RISER K (RMAJ-14)	-	-	-		
		<u>B</u> RISER A (RMBJ-14)	-	-	-		
		RISER B (RMBJ-12)	TWO	1	1	RMBJ-12	75B-63
RISER D (RMBJ-5)	-	-	-				
RISER E (RMBJ-3)	TWO	1	1	RMBJ-3	77-210,185		
B4.7	B-J	<u>BRANCH PIPE CONNECTION WELDS SIX INCH DIAMETER AND SMALLER</u>					
		MAIN STEAM A (6")	ONE	3	3	MSAJ-15,19,26	74-44-45-48
			TWO	1	1	MSAJ-21	77-79,186
			THREE	1	-		
		MAIN STEAM B 6"	ONE	2	2	MSBJ-16,20	74-46,47
			TWO	-	-		
	THREE	-	-				

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY

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MAJOR ITEM: PIPING PRESSURE BOUNDARY

SUB ITEM	EXAM CATEGORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.		
B4.7	B-J	(CONT'D)							
		MAIN STEAM C (6")	ONE TWO THREE	2 - 1	2 - -	MSCJ-15,20	74-1,40		
		MAIN STEAM D (6")	ONE TWO THREE	4 - -	4 - -	MSDJ-22,16,20,27	74-6,32,34,35		
		RECIRCULATION A *	ONE TWO THREE	- 2 -	- 2 -	*INCLUDES AUGMENTED RBAJ-17 RCAJ-26	77-16,191,37 77-17,192,37		
		RECIRCULATION B *	ONE TWO THREE	- 3 -	- 3 -	RBBJ-1 RBBJ-20 RCBJ-7	77-47,190,34 77-33,47,189,34 77-38		
		CRD SCRAM HEADER CRD 18-12" DB	ONE TWO THREE	- - 1	- - 1	SDAJ-5	78-25		
		B4.8	B-J	<u>SOCKET WELDS</u>					
				MAIN STEAM A	ONE TWO THREE	1 - -	1 - -	MSAJ-35	73-035
				MAIN STEAM B	ONE TWO THREE	1 - -	1 - -	MSBJ-32	73-036

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY

MAJOR ITEM: PIPING PRESSURE BOUNDARY

SUB ITEM	EXAM CATEGORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.	
B4.8	B-J	(CONT'D)						
		MAIN STEAM C	ONE TWO THREE	1 - -	1 - -	MSCJ-32	73-037	
		MAIN STEAM D	ONE TWO THREE	1 - -	1 - -	MSDJ-37	73-038	
		REACTOR WATER CLEAN UP	ONE TWO THREE	- 1 -	- 1 -	CWAJ-7	77-41,44	
		DRAIN LINE (N15)	ONE TWO THREE	- 1 -	- 1 -	HDAJ-47	77-45,35	
		STANDBY LIQUID CONTROL N10	ONE TWO	- *	- 15	*108 SOCKET WELDS EXAMINED PERIOD 2	75B-113 *SBCJ-54 THRU-69, (CLASS 1) SBCJ-53 (CLASS 2) SBCJ-47 THRU 50 SBCJ-4A THRU 44 SBCJ-1 THRU 4A SBBJ-1 THRU 20 SBAJ-1 THRU 20	
			THREE	3	-	1978 IDENTIFICATION CHANGED FROM "SBCJ" TO "CPAJ"		
		RECIRCULATION A	-	-	-	-RELIEF NO. 22-		
		RECIRCULATION B (DRAIN TO CRW)	-	-	-	-RELIEF NO. 22-		

NORTHERN STATES POWER CO.
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MAJOR ITEM: PIPING PRESSURE BOUNDARY

SUB ITEM	EXAM CATEGORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B4.8	B-J	(CONT'D)					
		RECIRCULATION:					
		MANIFOLD A	ONE	-	-		
		BYPASS OF MO2-65A	TWO	2	2	VBAJ-13,14	77-195
			THREE	2	2	VBAJ-3,12	78-40
		MANIFOLD B	ONE	-	-		
		BYPASS OF MO2-65B	TWO	2	2	VBBJ-4,14	77-195
			THREE	2	-		
		CRD SCRAM					
		HEADER DISCHARGE					
		CRD 16A-2" DB	ONE	-	-		
			TWO	-	-		
			THREE	1	1	CDAJ-45	78-24
		CRD 16B-2" DB	ONE	-	-		
			TWO	-	-		
	THREE	3	3	CDBJ-45,66,68	78-60,27,28		
CRD 18-2" DB	ONE	-	-				
	TWO	-	-				
	THREE	1	1	SDDJ-8	78-26		
		INSTRUMENT LINES					
		-N11A- VIAJ-3	-	-	-		
		-N11B- VIBJ-3	-	-	-		
		-N12A- VICJ-3	-	-	-		
		-N12B- VIDJ-3	-	-	-		
B4.9	B-K-1	<u>INTEGRALLY WELDED</u>					
		<u>SUPPORTS</u>					
		MAIN STEAM A	ONE	-	-		
			TWO	1	1	MSAK-31	77-49
		THREE	-	-			

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY

MAJOR ITEM: PIPING PRESSURE BOUNDARY

SUB ITEM	EXAM CATEGORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B4.9	B-K-1	(CONT'D)					
		MAIN STEAM B	ONE TWO THREE	- - -	- - -		
		MAIN STEAM C	ONE TWO THREE	- - 1	- - -		
		MAIN STEAM D	ONE TWO THREE	- - 1	- - -		
		FEEDWATER A (10")	ONE TWO THREE	1 - -	1 - -	FWAK-13	74-53
		FEEDWATER B (10")	ONE TWO THREE	- - -	- - -		
		FEEDWATER C (10")	ONE TWO THREE	- - -	- - -		
		FEEDWATER D (10")	ONE TWO THREE	1 - -	1 - -	FWDK-13	74-59
		FEEDWATER A (14")	ONE TWO THREE	1 - -	1 - -	FWAK-29	73-32
		FEEDWATER D (14")	ONE TWO THREE	- - -	- - -		

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MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION—EXAMINATION SUMMARY

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MAJOR ITEM: PIPING PRESSURE BOUNDARY

SUB ITEM	EXAM CATE-GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B4.9	B-K-1	(CONT'D)					
		HIGH PRESSURE COOLANT INJECTION	ONE TWO THREE	- - 1	- - 1	PSAK-7	78-23,37,74
		REACTOR WATER CLEAN UP	ONE TWO THREE	- - 1	- - 1	CWAK-14	78-41,43,69
		RESIDUAL HEAT REMOVAL TW 36	ONE TWO THREE	- - -	- - -		
		REACTOR CORE INJECTION COLLANT -STEAM-	ONE TWO THREE	- - -	- - -		
		RESIDUAL HEAT REMOVAL REW 10	ONE TWO THREE	- - 1	- - -		
		RESIDUAL HEAT REMOVAL TW 20	ONE TWO THREE	1 - -	1 - -	RHBK-23 (2)	73-060/74-27
		RESIDUAL HEAT REMOVAL TW 30	ONE TWO THREE	1 - -	1 - -	RHCK-24	74-128
		RECIRCULATION A (28")	ONE TWO THREE	- 1 2	- 1 1	RCAK-33 RCAK-16	77-90 78-58,68,80
		RECIRCULATION B (28")	ONE TWO THREE	- 1 2	- 1 -	RCBK-32	77-199

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MONTICELLO NUCLEAR GENERATING PLANT
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MAJOR ITEM: PIPING PRESSURE BOUNDARY

SUB ITEM	EXAM CATE-GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B4.9	B-K-1	(CONT'D) RECIRCULATION: MANIFOLD A & B	ONE TWO THREE	- 1 2	- 1 -	RMBK-6A	77-193,194
B4.10	B-K-2	<u>SUPPORT COMPONENTS</u>					
		MAIN STEAM A	ONE TWO THREE	3 - -	3 - -	MSAK-13,25,30	74-17,23,50
		MAIN STEAM B	ONE TWO THREE	2 - 2	2 - 1	MSBK-14,17 MSBK-14	74-22,19 78-44
		MAIN STEAM C	ONE TWO THREE	2 - -	2 - -	MSCK-17,14	74-39,38
		MAIN STEAM D	ONE TWO THREE	2 1 1	2 1 -	MSDK-31,14 MSDK-15	74-21,36 77-50
		FEEDWATER A (10")	ONE TWO THREE	3 - -	3 - -	FWAK-14,15,17	74-54,55,56
		FEEDWATER A (14")	ONE TWO THREE	2 - 1	2 - -	FWAK-26,31 (2)	73-40,31/74-24
		FEEDWATER D (10")	ONE TWO THREE	3 - 1	3 1 -	FWDK-17,15,14 FWDK-17	74-57,58,60 77-98

**NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY**

MAJOR ITEM: PIPING PRESSURE BOUNDARY

SUB ITEM	EXAM CATE-GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B4.10	B-K-2	(CONT'D)					
		FEEDWATER D (14")	ONE TWO THREE	2 - -	2 - -	FWDK-31,27	73-34,41
		CORE SPRAY A	ONE TWO THREE	2 - -	2 - -	CSAK-7,15	74-133,134
		CORE SPRAY B	ONE TWO THREE	- 1 1	- 1 -	CSBK-15	77-136
		REACTOR WATER CLEAN UP	ONE TWO THREE	- 1 1	- 1 -	CWAK-11	77-196
		RESIDUAL HEAT REMOVAL REW 10	ONE TWO THREE	- 2 2	- 2 -	RHAK-13,14	77-155
		RESIDUAL HEAT REMOVAL TW 20	ONE TWO THREE	- 1 2	- 1 2	RHBK-9 RHBK-10,12	77-197 78-31,32
		RESIDUAL HEAT REMOVAL TW 30	ONE TWO THREE	- - 2	- - -		
		REACTOR CORE INJECTION COOLANT - STEAM	ONE TWO THREE	- 1 1	- 1 1	RSAK-9 RSAK-13	77-48 78-33

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
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MAJOR ITEM: PIPING PRESSURE BOUNDARY

SUB ITEM	EXAM CATEGORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B4.10	B-K-2	(CONT'D)					
		RECIRCULATION A (28")	ONE	-	-		
			TWO	3	3	RCAK-6,31,34	77-090,199
			THREE	7	2	RCAK-12,14	78-57,56
		RECIRCULATION B (28")	ONE	-	-		
			TWO	3	3	RCBK-27,30,33	77-089
			THREE	7	2	RCBK-8,10	78-51,52
		RECIRCULATION BY-PASS (A&B)	ONE	-	-		
			TWO	-	-		
			THREE	2	2	RBAK-10	78-45
						RBBK-14	78-46
		RECIRCULATION MANIFOLD A	ONE	-	-		
			TWO	2	2	RMAK-11,13A	77-88
			THREE	4	2	RMAK-4A	78-59
						VBAK-6A	78-30
		MANIFOLD B	ONE	-	-		
			TWO	-	-		
			THREE	6	2	RMBK-13A,13B	78-65,66
		RECIRCULATION A (12")					
		RISER F	TWO	1	1	RRFK-6	77-43
		G	THREE	1	1	RRGK-6	78-36
		H	TWO	1	1	RRHK-6	77-43
		J	THREE	1	1	RRJK-6	78-35
		K	TWO	1	1	RRKK-6	77-43
		RECIRCULATION B (12")					
		RISER A	TWO	1	1	RRAK-6	77-42
		B	TWO	1	1	RRBK-6	77-42
		C	THREE	1	1	RRCK-6	78-34

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MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY**

TABLE S1.4
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MAJOR ITEM: PIPING PRESSURE BOUNDARY

SUB ITEM	EXAM CATEGORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B4.10	B-K-2	(CONT'D)					
		RECIRCULATION B(12")					
		RISER D	THREE	1	1	RRDK-6	78-38
		E	TWO	1	1	RRAK-6	77-42
		<u>CRD SCRAM HEADER</u>	*				<u>*ONLY PERIOD 3 REQ.</u>
		HEADER A					
		CRD 26A-8" DB	THREE	1	1	CDAK-6	78-67
		CRD 13A-4" DB	THREE	1	1	CDAK-12	78-48,48R
		CRD 14A-6" DB	THREE	1	1	CDAK-24	78-49,49R
		CRD 15A-4" DB	THREE	1	1	CDAK-37	78-47,47R
		HEADER B	*				
		CRD 26B-8" DB	THREE	1	-		
		CRD 13B-4" DB	THREE	1	-		
		CRD 14B-6" DB	THREE	1	-		
CRD 15B-4" DB	THREE	1	-				
B4.11	B-P	<u>EXEMPTED COMPONENTS</u>				ONE INCH AND LESS PRIMARY SYSTEM LINES THAT ARE EXEMPTED BY IWB-1220 (b)	-PLANT PERSONNEL- IWA-5000 AND IWB-5000
		VENT LINE	--	--	--	V15-1" ED	
		INSTRUMENT LINES A				1" DC	
		B				1" DC	
		C				1" DC	
		D				1" DC	
CRD SYSTEM	--	--	--	1" LINES FROM CRD HYDRAULIC UNITS AND RECIRC RISERS			
RECIRCULATION STANDBY LIQUID CONTROL	--	--	--	1" LINES FROM N10			

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
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MAJOR ITEM: PIPING PRESSURE BOUNDARY

SUB ITEM	EXAM CATEGORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B4.11	B-P	(CONT'D) RELIEF REQUEST LINES	—	—	—	LINES EXEMPTED FROM EXAMINATION BY RELIEF REQUEST AND EXCLUSION CRITERIA	
B4.12	B-G-2	<u>PRESSURE RETAINING BOLTING</u> MAIN STEAM A MAIN STEAM B MAIN STEAM C MAIN STEAM D RESIDUAL HEAT REMOVAL TW 36 RECIRCULATION A REW 26-4"	ONE TWO THREE ONE TWO THREE ONE TWO THREE ONE TWO THREE ONE TWO THREE	— — 4 — — 1 — — 1 — — 4 — — 2 — — 1	3 4 4 — — 1 — — 1 — — 4 — — 2 — — —	MSAJ-18,20,24 MSAJ-18,20,24,27 MSAJ-18,22,24,27 MSBJ-15 MSBJ-19 MSCJ-19 MSDJ-19,23,25,28 RHDJ-7,3	74-123,124,125 77-49 (4) (REPEATED) 78-62 77-49 78-63 77-55 77-50 77-65

NORTHERN STATES POWER CO.
 MONTICELLO NUCLEAR GENERATING PLANT
 INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S1.4
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 MAJOR ITEM: PIPING PRESSURE BOUNDARY

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B4.12	B-G-2	(CONT'D) RECIRCULATION B REW 27-4" RECIRCULATION A BY-PASS, REW 24-4" RECIRCULATION B BY-PASS, REW 25-4"	ONE TWO THREE	- - 1	- - -	RBAJ-5 RBAJ-5	74-129 78-50
			ONE TWO THREE	- - 1	- - 1	RBBJ-5	74-130

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MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S1.5

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MAJOR ITEM: PUMP PRESSURE BOUNDARY

SUB ITEM	EXAM CATE-GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B5.1 AND B5.3	B-G-1	<u>PRESSURE RETAINING BOLTS AND STUDS, INPLACE</u>					
		RECIRCULATION FLANGE BOLTS PUMP A	ONE	16	16	BOLTS, 1-16	74-139
			TWO	10	10	BOLTS, 1-10	77-115
			THREE	6	-		
		PUMP B	ONE	16	16	BOLTS, 1-16	74-138
			TWO	9	9	BOLTS, 1-9	75B-114
			THREE	7	-	BOLTS, 1-10	77-116
B5.2	B-G-1	<u>PRESSURE RETAINING BOLTS AND STUDS WHEN REMOVED</u>				(NOTE B5.7)	
		RECIRCULATION FLANGE BOLTS PUMP A	THREE	16	-		
B5.4	B-K-1	<u>INTEGRALLY WELDED SUPPORTS</u>	-	-	-	*	*INCLUDED UNDER TABLE S4.1
B5.5	B-K-2	<u>SUPPORT COMPONENTS</u>	-	-	-	*	*INCLUDED UNDER TABLE S4.1
B5.6	B-L-1	<u>PUMP CASING WELDS</u>	-	-	-	-NONE-	
B5.7	B-L-2	<u>PUMP CASINGS</u>				(NOTE B5.2)	
		RECIRCULATION PUMP A	THREE	1	-		

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION—EXAMINATION SUMMARY

TABLE S1.5
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MAJOR ITEM: PUMP PRESSURE BOUNDARY

SUB ITEM	EXAM CATEGORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B5.8	B-P	<u>EXEMPTED COMPONENTS</u>	-	-	-	*	*INCLUDED IN SYSTEMS LISTED IN B4.11 OF TABLE S4.1
B5.9	B-G-2	<u>PRESSURE RETAINING BOLTING</u>					
		RECIRCULATION GLAND BOLTS					
		PUMP A	ONE	10	10	BOLTS, 1-10 (2)	74-118,135,137 REPL'D
			TWO	10	10	BOLTS, 1-10	77-118
			THREE	10	-		
		PUMP B	ONE	10	10	BOLTS, 1-10 (2)	74-106,107 REPL'D
			TWO	10	10	BOLTS, 1-10	77-118
			THREE	10	-		

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S1.6

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MAJOR ITEM: VALVE PRESSURE BOUNDARY

SUB ITEM	EXAM CATEGORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B6.1 AND B6.3	B-G-1	<u>PRESSURE RETAINING BOLTS AND STUDS, IN PLACE</u>					RELIEF NO. 24
		RECIRCULATION A MO2-53A	ONE TWO THREE	- 12 12	- 12 -	BOLTS, 1-12	77-112 (NOTE B6.2)
		MO2-43A	ONE TWO THREE	- 12 12	- 12 -	BOLTS, 1-12	77-111
		RECIRCULATION B MO2-53B	ONE TWO THREE	- 12 12	- 12 -	BOLTS, 1-12	77-114
		MO2-43B	ONE TWO THREE	- 12 12	- 12 -	BOLTS, 1-12	77-113
B6.2 AND B6.3	B-G-1	<u>PRESSURE RETAINING BOLTS AND STUDS, WHEN REMOVED</u>					
		RECIRCULATION A * MO2-53A VALVE IS OPTIONAL- NOTE B6.7 SUPPLEMENT UNDER SECTION 3.4.2	THREE	24	-		(NOTE B6.7)
B6.4	B-K-1	<u>INTEGRALLY WELDED SUPPORTS</u>	-	-	-	*	*INCLUDED UNDER TABLE S4.1
B6.5	B-K-2	<u>SUPPORT COMPONENTS</u>	-	-	-	*	*INCLUDED UNDER TABLE S4.1

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
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MAJOR ITEM: VALVE PRESSURE BOUNDARY

SUB ITEM	EXAM CATE-GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B6.6	B-M-1	<u>VALVE BODY WELDS</u>	-	-	-	-NONE-	
B6.7	B-M-2	<u>VALVE BODIES *</u>				*	
		<p>MAIN STEAM LINES</p> <p>A PS 1-18" ED AO 2-80 A AO 2-86 A</p> <p>B PS 2-18" ED AO 2-80 B AO 2-86 B</p> <p>C PS 3-18" ED AO 2-80 C AO 2-86 C</p> <p>D PS 4-18" ED AO 2-80 D AO 2-86 D</p> <p>MAIN STEAM LINES *RELIEF VALVES</p> <p>A PS 1-6" ED RV 2-71 A RV 2-71 E</p> <p>B PS 2-6" ED RV 2-71 B RV 2-70 G</p> <p>C PS 3-6" ED RV 2-71 C RV 2-71 H</p>	THREE	1	-		<p>*THE INTERNALS OF ONE VALVE OF EACH SYSTEM REQUIRED-OPTIONAL VALVE SELECTION-NOTE SUPPLEMENT B6.7 UNDER SECTION 3.4.2</p> <p>*VALVE LOCATIONS, AMOUNT, AND LOCATION CHANGES AT PLANT'S OPTION</p>
			THREE	1	-		

NORTHERN STATES POWER CO.
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MAJOR ITEM: VALVE PRESSURE BOUNDARY

SUB ITEM	EXAM CATEGORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B6.7	B-M-2	(CONT'D) D PS 4-6" ED RV 2-71 D RV 2-71 F FEEDWATER LINES A FW2B-14" ED FW-97-2 FW-94-2 B FW 2A-14" ED FW-97-1 FW-94-1 A FW2B-14" ED FW-98-2 B FW2A-14" ED FW-98-1 CORE SPRAY LINES A TW 7-8" EF AO14-13B B TW11-8-EF AO14-13 A A TW7-8" EF POS-1758 MO-1754 B TW11-8" EF POS-1757 MO-1753	THREE	1	-		

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
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MAJOR ITEM: VALVE PRESSURE BOUNDARY

SUB ITEM	EXAM CATE-GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B6.7	B-M-2	(CONT'D)					
		H PCI-STEAM PS18-8" ED MO-2034 MO-2035	THREE	1	-		
		RHR LINES REW 10-18" ED MO-2029 MO-2030 POS-2028	THREE	1	-		
		TW 20-16" DB AO10-46B	THREE	1	-		
		TW 30-16" DB AO10-46A					
		TW 20-16" DB POS-2019 MO-2015	THREE	1	-		
		TW 30-16" DB POS-2018 MO-2014					
		RECIRCULATION MANIFOLD REW 32-22" MO2-65 A MO2-65 B	THREE	1	-		
		RECIRCULATION A REW 13A-28" MO2-53 A MO2-43 A	THREE	1	-		

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MAJOR ITEM: VALVE PRESSURE BOUNDARY

SUB ITEM	EXAM CATEGORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B6.7	B-M-2	(CONT'D) B REW 13B-28" MO2-53 B MO2-43 B					
B6.8	B-P	<u>EXEMPTED COMPONENTS</u>	--	--		*	*INCLUDED IN SYSTEMS LISTED IN B4.11 OF TABLE S4.1
B6.9	B-G-2	<u>PRESSURE RETAINING BOLTING</u> MAIN STEAM A PS 1-18" ED A02-80 A A02-86 A MAIN STEAM B PS2-18" ED A02-80 B A02-86 B MAIN STEAM C PS3-18" ED A02-86 C A02-80C MAIN STEAM D PS4-18" ED A02-80 D A02-86 D		*			*REQUIRED AMOUNT INDICATED REFLECTS ALL BOLTING FOR EACH RESPECTIVE VALVE SCHEDULED
			ONE THREE	1 1	1 1	A02-80 A A02-86 A	73-119 78-125
			TWO THREE	1 1	1 1	A02-80 B A02-86 B	77-49 78-126
			TWO THREE	1 1	1 -	A02-86 C	77-87
			TWO THREE	1 1	1 -	A02-80D	77-50

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY

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MAJOR ITEM: VALVE PRESSURE BOUNDARY

SUB ITEM	EXAM CATEGORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B6.9	B-G-2	(CONT'D)					
		RELIEF VALVE LOCATIONS SUBJECT TO CHANGE					
		MAIN STEAM -RELIEF VALVES-					
		MAIN STEAM A					
		RV2-71 E	ONE	1	1	RV2-71 E (2)	73-129/77-177R
		RV2-71A	THREE	1	1	RV2-71 A	78-62 (REPEAT)
		MAIN STEAM B					
		RV2-71 B	ONE	1	1	RV2-71 B	73-115 (REPEAT)
		RV2-71 G	THREE	1	2	RV2-71B, RV2-71G	78-63
		MAIN STEAM C					
		RV2-71 C	ONE	1	1	RV2-71C	73-113,114
		RV2-71 H	THREE	1	-		
		MAIN STEAM D					
		RV2-71 F	ONE	1	1	RV2-71 F	73-112,116
		RV2-71 D	THREE	1	-		(REPEAT)
		FEEDWATER A					
		FW-98-2	ONE	1	1	FW-98-2	73-104
		FW-97-2	ONE	1	1	FW-97-2	73-118
		FW-94-2	THREE	1	1	FW-94-2	78-64
		FEEDWATER B					
		FW-94-1	TWO	1	1	FW-94-1	77-85
		FW-97-1	TWO	1	1	FW-97-1	73-102/77-85
		FW-98-1	THREE	1	1	FW-98-1	78-61 (REPEAT)
		HPCI - STEAM					
		MO-2034	TWO	1	1	MO-2034	77-107
		MO-2035	THREE	1	-		

NORTHERN STATES POWER CO.
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SUB ITEM	EXAM CATEGORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B6.9	B-G-2	(CONT'D)					
		CORE SPRAY A					
		MO-1754	TWO	1	1	MO-1754	77-109
		AO14-13 B	TWO	1	1	AO14-13 B	77-109
		POS-1758	THREE	1	-		
		CORE SPRAY B					
		MO-1753	TWO	1	1	MO-1753	77-108
		AO14-13 A	THREE	1	-		
		POS-1757	THREE	1	-		
		REACTOR WATER CLEAN UP					
		MO-2398	TWO	1	1	MO-2398	77-91
		RC-1	TWO	1	1	RC-1	77-91
		MO-2397	THREE	1	-		
		RESIDUAL HEAT REMOVAL					
		REW10-18" ED					
		POS-2028	TWO	1	1	POS-2028	77-106
		MO-2030	TWO	1	1	MO-2030	77-157
		MO-2029	THREE	1	-		
		TW20-16" DB					
		POS-2019	TWO	1	1	POS-2019	77-105
		AO10-46 B	TWO	1	1	AO10-46B	77-105
		MO-2015	THREE	1	-		
		TW30-16" DB					
		MO-2014	TWO	1	1	MO-2014	77-104
		POS-2018	TWO	1	1	POS-2018	77-104
		AO10-46 A	THREE	1	-		
		TW36-4" ED					
		RHR-21	TWO	1	1	RHR-21	77-100
		MO-2027	THREE	1	-		

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MAJOR ITEM: VALVE PRESSURE BOUNDARY

SUB ITEM	EXAM CATE-GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM.	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B6.9	B-G-2	(CONT'D)					
		REACTOR CORE INJECTION COOLANT -STEAM-					
		MO-2076	TWO	1	1	MO-2076	77-101
		MO-2075	THREE	1	-		
		RECIRCULATION A BYPASS REW 24-4"					
		MO2-54 A	TWO	1	1	MO2-54 A	77-52
			THREE	-	-		
		RECIRCULATION B BYPASS REW 25-4"					
		MO2-54 B	THREE	1	1	MO2-54 B	78-42
		RECIRCULATION MANIFOLD A REW 32-22"					
		MO2-65 A	TWO	1	1	MO2-65 A	77-102
		MO2-66 A	THREE	1	1	MO2-66 A	78-39
		B REW 32-22"					
		MO2-66 B	TWO	1	1	MO2-66 B	77-103
		MO2-65 B	THREE	1	-		
		BOTTOM HEAD DRAIN REW 31-2" ED					
		XDV-4	THREE	1	-		
		STANDBY LIQUID CONTROL CH2-1 1/2 DC					
		XP-6	-	-	-		
		XP-7	THREE	1	-		
		XP-8	-	-	-		

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY

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MAJOR ITEM: VALVE PRESSURE BOUNDARY

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B6.9	B-G-2	(CONT'D) MAIN STEAM DRAIN PS15-3" ED MO-2374 MO-2373 RECIRCULATION A DRAIN REW 28-2" RECIRCULATION B DRAIN REW 29-2" CRD SCRAM HEADER DRAIN LINE CRD18-2" DB	TWO THREE - - -	1 1 - -	1 - - -	MO-2374 -RELIEF NO. 22- -RELIEF NO. 22-	77-86 XR-6-1 XR-7-1 XR-6-2 XR-7-2

NORTHERN STATES POWER COMPANY
MONTICELLO NUCLEAR GENERATING PLANT
BASELINE COMPARISON

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	1978 ISI INDICATIONS	EXAMINATION LIMITATIONS
<u>B1.4 PRIMARY NOZZLE TO VESSEL WELDS AND INSIDE RADIUSED SECTION</u>							
RECIRCULATION INLET NOZZLES							
N2B RRB-1	FIG.4	UT	N2B	78-88,94 99,103	NONE	NONE	*
N2F RRF-1	FIG.4	UT	N2F	78-90,97 98,101	NONE	NONE	*
N2H RRH-1	FIG.4	UT	N2H	78-89,96 100,106	NONE	NONE	*
N2K RRK-1	FIG.4	UT	N2K	78-91,95 102,107	NONE	NONE	*NOTE: S-1 LIMITED BY INSULATION FROM 2: to 4: AND 8: to 10: ON INNER RADIUS EXAM ONLY.
<u>B1.6 NOZZLE TO SAFE END WELDS</u>							
RECIRCULATION INLET							
N2B RRB-2	13D	PT UT	34 34	78-75 78-123	-- NONE	NONE S-2, ID GEO 70%	NOTE: THE ENTIRE SAFE END WAS UT EXAMINED; INCLUDING THE SAFE END TO PIPE WELD, ON THE 4 RECIRC INLETS.
N2F RRF-2	13C	PT UT	52 52	78-79 78-121	-- NONE	NONE NONE	
N2H RRH-2	13C	PT UT	46 46	78-78 78-122	-- NONE	NONE S-1, ID GEO 57% S-2, ID GEO 100%	
N2K RRK-2	13C	PT UT	40 40	78-76 78-124	-- NONE	NONE S-1, ID GEO 60% & ID SPOT 90% S-2, ID GEO 85%	

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	1978 ISI INDICATIONS	EXAMINATION LIMITATIONS
<u>B4.1 SAFE END TO PIPING AND SAFE END IN BRANCH PIPING WELDS</u>							
HPCI-STEAM PSAF-2B	7	PT UT	PSAF-2B PSAF-2B	78-29 78-55	-- S-1, WELD PREP 65%	NONE NONE NONE	
PSAF-2C	7	PT UT	PSAF-2C PSAF-2C	78-29 78-53	-- S-1, 60%	S-1, ID GEO 60%	
<u>B4.5 CIRCUMFERENTIAL AND LONGITUDINAL WELDS</u>							
HPCI-STEAM PSAJ-15	7	UT	5S	78-54	NONE	NONE	NO S-1, PEN. SIDE
RWCU CWAJ-4	9	UT	16A	78-71	NONE	NONE	
CWAJ-5	9	UT	16B	78-70	NONE	S-1, ID MISMATCH 50%	S-1,8: to 12: ELBOW I.R. NO S-2, VALVE SIDE
RCIC : RSAJ-11	12	UT	11	78-86, 86E	NONE	S-1, ID GEO 120%	S-2,11: to 1: ELBOW I.R.
RSAJ-12	12	UT	11A	78-87, 87E	WELD CROWN OD GEO	S-1, ID GEO 140%	S-1,11: to 1: ELBOW I.R.
RECIRCULATION A RCAJ-5	13A	UT	13	78-73	NONE	NONE	S-2,3: to 9: INSULATION
RCAJ-15	13A	UT	11	78-77	NONE	NONE	NO S-2, VALVE SIDE
RECIRCULATION B RCBJ-5	13B	UT	23	78-72	NONE	S-1, ID GEO 60% S-2, ID GEO 60%	

NORTHERN STATES POWER COMPANY
MONTICELLO NUCLEAR GENERATING PLANT
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COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	1978 ISI INDICATIONS	EXAMINATION LIMITATIONS
B4.5 (CONT'D)							
RECIRCULATION BY-PASS							
A RBAJ-2	13AA	UT	RBAJ-2	78-105	NONE	NONE	NO S-1, WELDOLET SIDE
RBAJ-16	13AA	UT	RBAJ-16	78-109	NONE	NONE	NO S-2, WELDOLET SIDE
B RBBJ-2	13BB	UT	RBBJ-2	78-104	NONE	NONE	NO S-1, WELDOLET SIDE
RBBJ-19	13BB	UT	RBBJ-19	78-108	NONE	NONE	NO S-2, WELDOLET SIDE
RECIRCULATION MANIFOLD							
RMBJ-2	13D	UT	1S	78-92	ID GED 40-80% DAC	NONE	
RMAJ-15	13C	UT	1	78-81	NONE	NONE	NO S-1, VALVE SIDE
RMAJ-16	13C	UT	2	78-93	NONE	NONE	NO S-2, VALVE SIDE
RECIRCULATION RISERS							
B RRBJ-3	13D	UT	7S	78-123	NONE	S-1, ID THREADS 63%	
						S-2, ID THREADS 100%	
F RRFJ-3	13C	UT	15S	78-121	NONE	S-1, ID THREADS 56%	
						S-2, ID THREADS 100% & WELD CROWN 70%	
H RRHJ-3	13C	UT	12S	78-122	NONE	S-1, ID THREADS 60% & WELD CROWN 58%	
						S-2, ID THREADS 130% & ID GED 100%	

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BASELINE COMPARISON

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	1978 ISI INDICATIONS	EXAMINATION LIMITATIONS
<u>B4.5 (CONT'D)</u>							
RECIRCULATION RISERS (CONT'D) K RRKJ-3	13C	UT	9S	78-124	NONE	S-1, ID THREADS 81% & MISMATCH 67% S-2; ID THREADS 70% & ID GEO 70%	
MAIN STEAM CONDENSATE LEAK OFF CLAJ-10	23	UT	--	78-110	--	NONE	NO S-2, VALVE SIDE
<u>B4.7 BRANCH PIPE</u> <u>CONNECTION WELDS SIX INCH</u> <u>DIAMETER AND SMALLER</u>							
CRD SCRAM HDR SDAJ-5	24C	MT	--	78-25	--	NONE	
<u>B4.8 SOCKET WELDS</u>							
2" BY-PASS OF M02-65A VBAJ-3	25	PT	--	78-40	--	NONE	
VBAJ-12	25	PT	--	78-40	--	NONE	
CRD SCRAM HDR DISCHARGES							
CDAJ-45	24C	MT	--	78-24	--	NONE	
CDBJ-45	24C	MT	--	78-60	--	NONE	
CDBJ-66	24C	MT	--	78-27	--	NONE	
CDBJ-68	24C	MT	--	78-28	--	NONE	
CDDJ-8	24C	MT	--	78-26	--	NONE	

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 BASELINE COMPARISON

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	1978 ISI INDICATIONS	EXAMINATION LIMITATIONS
<u>B4.9 INTEGRALLY WELDED SUPPORTS</u>							
HPCI - STEAM PSAK-7	7	MT-UT	--	78-23, 37, 74	--	NONE	
RWCU CWAK-14	9	MT-UT	--	78-41, 43, 69	--	NONE	
RECIRCULATION A RCAK-16	13A	MT-UT	--	78-58, 68, 80	--	NONE	
<u>B4.10 SUPPORT COMPONENTS</u>							
MAIN STEAM B							
MSBK-14	2	VT	--	78-44	--	NONE	
RHR B							
RHBK-10	11B	VT	--	78-32	--	NONE	
RHBK-12	11B	VT	--	78-32	--	NONE	
RCIC - STEAM RSAK-13	12	VT	--	78-33	--	NONE	
RECIRCULATION A							
RCAK-12	13A	VT	--	78-57	--	NONE	
RCAK-14	13A	VT	--	78-56	--	NONE	
RECIRCULATION B							
RCBK-8	13B	VT	--	78-51	--	NONE	
RCBK-10	13B	VT	--	78-52	--	NONE	
RECIRCULATION BY-PASS							
A RBAK-10	13AA	VT	--	78-45	--	1 MISSING BOLT 1 LOOSE BOLT, NOT CARRYING LOAD	REPAIRED BY PLANT, WRA No. 78-1982.
B RBBK-14	13BB	VT	--	78-46	--	1 BOLT MISSING, CLAMP SKEWED	REPAIRED BY PLANT, WRA No. 78-1982 and 78-2168.

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COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	1978 ISI INDICATIONS	EXAMINATION LIMITATIONS
<u>B4.10 (CONT'D)</u>							
RECIRCULATION MANIFOLD							
RMAK-4A	13C	VT	--	78-59	--	NONE	
VBAK-6A	25	VT	--	78-30	--	NONE	
RMBK-13A	13D	VT	--	78-65	--	NONE	
RMBK-13B	13D	VT	--	78-66	--	NONE	
RECIRCULATION RISERS							
G RRGK-6	13C	VT	--	78-36	--	NONE	
J RRJK-6	13C	VT	--	78-35	--	NONE	
C RRCK-6	13D	VT	--	78-34	--	NONE	
D RRDK-6	13D	VT	--	78-38	--	EVIDENCE OF LEAKAGE FROM VALVE	VALVE REPAIRED AND HANGER CLEANED, WRA NO. 78-2209
CRD SCRAM HDR A							
CDAK-6	24A	VT	--	78-67	--	NONE	
CDAK-12	24A	VT	--	78-48, 48R	--	LOOSE CLEVIS BOLT	REPAIRED & RE-EXAMINED, WRA NO. 78-2017
CDAK-24	24A	VT	--	78-49, 49R	--	LOOSE BOLTS	REPAIRED & REEXAMINED, WRA NO. 78-2017
CDAK-37	24A	VT	--	78-47, 47R	--	LOOSE CLEVIS BOLT	REPAIRED & REEXAMINED, WRA NO. 78-2017
<u>B4.12 PRESSURE RETAINING BOLTING</u>							
MAIN STEAM A							
FLANGE @ MSAJ-18	1	VT	--	78-62	--	NONE	
FLANGE @ MSAJ-22	1	VT	--	78-62	--	NONE	
FLANGE @ MSAJ-24	1	VT	--	78-62	--	NONE	
FLANGE @ MSAJ-27	1	VT	--	78-62	--	NONE	

NORTHERN STATES POWER COMPANY
 MONTICELLO NUCLEAR GENERATING PLANT
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COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
B4.12 (CONT'D)							
MAIN STEAM B FLANGE @ MSBJ-19	1	VT	--	78-63	--	NONE	
RECIRCULATION BY-PASS A FLANGE @ RBAJ-5	13AA	VT	--	78-50	--	NONE	
<u>B6.9 PRESSURE RETAINING BOILING</u>							
MAIN STEAM A A02-86A	1	VT	--	78-125	--	NONE	
MAIN STEAM B A02-86B	2	VT	--	78-126	--	NONE	
MAIN STEAM A RV2-71A	1	VT	--	78-62	--	NONE	
MAIN STEAM B RV2-71B	2	VT	--	78-63	--	NONE	
RV2-71G	2	VT	--	78-63	--	NONE	
FEEDWATER A FW-94-2	5A	VT	--	78-64	--	NONE	
FEEDWATER B FW-98-1	5B	VT	--	78-61	--	NONE	
RECIRCULATION BY-PASS B MO2-54B	13BB	VT	--	78-42	--	NONE	
RECIRCULATION MANIFOLD MO2-66A	25	VT	--	78-39	--	NONE	

NORTHERN STATES POWER COMPANY
MONTICELLO NUCLEAR GENERATING PLANT
CLASS 1 SYSTEMS - ISOMETRIC SUMMARY

TABLE III
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COMPONENT SYSTEM	LOOP	LINE SIZE	NSP ISO	NAVCO DWG	LINE NUMBERS	ULTRASONIC CALIBRATION STDS.	
						NSP#	HEAT#
MAINSTEAM	A	18"	1	A-6407	PS1-18-ED	8	122491
MAINSTEAM	B	18"	2	A-6408	PS2-18-ED	8	122491
MAINSTEAM	C	18"	3	A-6409	PS3-18-ED	8	122491
MAINSTEAM	D	18"	4	A-6410	PS4-18-ED (6")	8 6	122491 401N-1726
FEEDWATER A	B	10"	5A	A-6427	FW2B-10-ED	28	N35898
FEEDWATER B	B	10"	5A	A-6427	FW2B-10-ED	28	N35898
FEEDWATER A	B	14"	5A	A-6427	FW2B-14-ED	23	7137
FEEDWATER C	A	10"	5B	A-6426	FW2A-10-ED	28	N35898
FEEDWATER D	A	10"	5B	A-6426	FW2A-10-ED	28	N35898
FEEDWATER D	A	14"	5B	A-6426	FW2A-14-ED	23	7137
CORE SPRAY	A	8"	6A	A-6400	TW7-8-EF	5	N53114
CORE SPRAY	B	8"	6B	A-6405	TW11-8-EF	11 5 11	15885 N53114 15885
HIGH PRESSURE COOLANT INJECTION-STEAM	-	8"	7	A-6416	PS18-8-ED	5 21	N53114 L20632
REACTOR WATER CLEAN UP	-	4"	9	A-6433	REW3-4-EF	4 12-2	L42009 7-73280
CONTROL ROD DRIVE RETURN (CAPPED, F-'77)	-	3"	10	A-6432	CRD7-3-EF	15 18 19	03052 01598 T08300
RESIDUAL HEAT REMOVAL	A	18"	11A	A-6423	REW10-18-ED	8 25	122491 27DH136

NORTHERN STATES POWER COMPANY
MONTICELLO NUCLEAR GENERATING PLANT
CLASS 1 SYSTEMS - ISOMETRIC SUMMARY

TABLE III
PAGE 2 OF 6

COMPONENT OR SYSTEM	LOOP	LINE SIZE	NSP ISO	NAVCO DWG	LINE NUMBERS	ULTRASONIC CALIBRATION STDS.	
						NSP#	HEAT#
RESIDUAL HEAT REMOVAL	B	16"	11B	A-6348	TW20-16-DB (18")	10	N36809
						24	27DHL36
						25	27DHL36
RESIDUAL HEAT REMOVAL	C	16"	11C	A-6411	TW30-16-DB (18")	10	N36809
						24	27DHL36
						25	27DHL36
RESIDUAL HEAT REMOVAL	D	4"	11D	A-6350	TW36-4-ED	4	L42009
REACTOR CORE INJECTION COOLANT - STEAM	-	3"	12	A-6417	PS17-3-ED	1	L44580
RECIRCULATION	A	28"	13A	FSK-382-1	REW13A-28	27	10093
RECIRCULATION BYPASS	A	4"	13AA	FSK-382-1	REW24-4	12-2	7-73280
RECIRCULATION	B	28"	13B	FSK-383-2	REW13B-28	27	10093
RECIRCULATION BYPASS	B	4"	13BB	FSK-383-2	REW25-4	12-2	7-73280
RECIRCULATION MANIFOLD	A	22"	13C	FSK-384-1	REW32-22	26	10093
RECIRCULATION MANIFOLD	B	22"	13D	FSK-384-1	REW32-22	26	10093
RECIRCULATION RISERS	A		13C	FSK-384-1		22	658905
RISER F		12"			REW14-12		
RISER G		12"			REW15-12		
RISER H		12"			REW16-12		
RISER J		12"			REW17-12		
RISER K		12"			REW18-12		
RECIRDULATION RISERS	B		13D	FSK-384-1		22	658905
RISER A		12"			REW23-12		
RISER B		12"			REW22-12		
RISER C		12"			REW21-12		

NORTHERN STATES POWER COMPANY
MONTICELLO NUCLEAR GENERATING PLANT
CLASS 1 SYSTEMS - ISOMETRIC SUMMARY

TABLE III
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COMPONENT OR SYSTEM	LOOP	LINE SIZE	NSP ISO	NAVCO DWG	LINE NUMBERS	ULTRASONIC CALIBRATION STDS.	
						NSP#	HEAT#
RECIRCULATION RISERS	B (CONT'D)		13D	FSK-384-1			
RISER D		12"			REW20-12		
RISER E		12"			REW19-12		
HEAD SPARE	-	6 X 4"	14	NX-8290-72	N6B	3	1.5" Block
HEAD VENT	-	4"	15	NX-8290-71	N7	3	1.5" Block
JET PUMP INSTRUMENTATION	A	4"	16	NX-8290-69	(N8A)	-	
	B	4"	16	NX-8290-67	(N8B)	-	
STANDBY LIQUID CONTROL	-	2" X 1-1/2"	17	NX-8290-65	(N10)	17	A-4272
			22	FSK-785	CH2-1 1/2-EF	-	
INSTRUMENT NOZZLES	A	3" X 1-1/2"	18	NX-8290-62	(N11A)	17	A-4272
	B	3" X 1-1/2"	18	NX-8290-62	(N11B)		
INSTRUMENT NOZZLES TO FEEDWATER	A	3" X 1-1/2"	19	NX-8290-62	(N12A)	17	A-4272
	B	3" X 1-1/2"	19	NX-8290-62	(N12B)		
BOTTOM HEAD DRAIN	-	2"	21	FSK-821	REW31-2-ED	16	L25269
				NX-8290-71			
MAIN STEAM CONDENSATE LEAKOFF	-	3"	23	A-6416	PS15-3-EB	1	L44580
		2"	--	FSK-786			
CONTROL ROD DRIVE SCRAM HEADER	A	8"	24A	A-6451	CRD26A-8DB	5	N53114
		6"	24A		CRD14A-6DB	6	401N-1726
		4"	24A		CRD13A-4DB	4	L42009
		4"	24A		CRD15A-4DB	4	L42009
CONTROL ROD DRIVE SCRAM HEADER	B	8"	24B	A-6451	CRD26B-8DB	5	N53114
		6"	24B		CRD14B-6DB	6	401N-1726
		4"	24B		CRD13B-4DB	4	L42009
		4"	24B		CRD15B-4DB	4	L42009

NORTHERN STATES POWER COMPANY
 MONTICELLO NUCLEAR GENERATING PLANT
 CLASS 1 SYSTEMS - ISOMETRIC SUMMARY

TABLE III
 PAGE 4 OF 6

COMPONENT OR SYSTEM	LOOP	LINE SIZE	NSP ISO	NAVCO DWG	LINE NUMBERS	ULTRASONIC CALIBRATION STDS.	
						<u>NSP#</u>	<u>HEAT#</u>
CONTROL ROD DRIVE HEADER DISCHARGES							
A (AND) B		2"	24C	FSK-771	CRD16A-2DB	-	SOCKET
		2"	24C		CRD16B-2DB	-	WELDS
VOLUME TANK		12"	24C		CRD18-12DB	29	L24489
		2"	24C		CRD18-2"DB	-	-
VALVE BYPASS LINES:							
BYPASS FOR M02-65A	A	2"	25	FSK-3841	VB5-2DC	-	SOCKET WELDS
BYPASS FOR M02-65B	B	2"	25		VB6-2DC	-	SOCKET WELDS

NORTHERN STATES POWER COMPANY
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CLASS 1 SYSTEMS - ISOMETRIC SUMMARY

TABLE III
PAGE 5 OF 6

COMPONENT OR SYSTEM	NSP ISO	GENERAL THICKNESS	ULTRASONIC CALIBRATION STDS.	
			<u>NSP#</u>	<u>HEAT#</u>
CONTROL ROD DRIVE LOCATIONS & HOUSING WELDS (TYPICAL)	FIG-1	6.0"	-	-
CIRCUMFERENTIAL AND LONGITUDINAL VESSEL WELDS	FIG-2	5-5/16" + CLAD	RPV#1	C2220/1
VESSEL STUD AND LIGAMENT LOCATION	FIG-3	STUDS - 6"X51-7/8" LIGAMENTS - 10-5/8" WIDE & 25-9/16" LONG FROM FLANGE FACE TO FLANGE WELD	14 RPV#1	15045 C2220/1
REACTOR VESSEL NOZZLE LOCATION AND IDENTIFICATION	FIG-4		RPV#1 30	C2220/1 C5571
REACTOR VESSEL HEAD WELDS	FIG-5	AT TDC PLATE - 2-11/16" (MIN) AT FLANGE WELD - 3-1/2" to 3-3/4" (MIN) (3/16" NOMINAL CLAD OVERLAY)	RPV#1	C2220/1
CIRCUMFERENTIAL SEAM WELDS - REACTOR VESSEL	FIG-6	5-5/16" + CLAD AT FLANGE WELD - 5-7/8"	RPV#1	C2220/1
BOTTOM HEAD NOZZLE LOCATIONS	FIG-7		-	-

NORTHERN STATES POWER COMPANY
 MONTICELLO NUCLEAR GENERATING PLANT
 CLASS 1 SYSTEMS - ISOMETRIC SUMMARY

TABLE III
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NOZZLES	SAFE END WALL THICKNESS (IN)		SAFE END O.D.		MATERIAL		P-NO.
	NOZZLE END	PIPE END	NOZZLE END	PIPE END	NOZZLE	SAFE END	
N1 A&B	1-9/16	1.235	28-7/8	28.4	A508 CL.2	SA240/TP304	P-8
N2A THRU K	7/8	.668	15-13/32	12.840	A508 CL.2	SA336/CLF8	P-8
N3A THRU D	1.050	.891	18.1	18.1	A508 CL.2	SA516/GR70	P-1
N4A THRU D	5/8	.585	12.0	10.84	A508 CL.2	A508/CL 1	P-12B
N5 A&B	7/8	.491	10.815	8.690	A508 CL.2	SB116/INCONEL	P-43
N6 A&B	1-7/16	N.A.	9.00	N.A.	A508 CL.2	SA182/F304	P-8
N7	1-1/4	N.A.	6-3/8	N.A.	A508 CL.2	SA182/F304	P-8
N8 A&B	7/8	.2575	5.576	4.56	A508 CL.2	SA336/CLF8	P-8
N9	.438	N.A.	4.500	N.A.	A508 CL.2	316L	P-8
N10	.875	S-WELD	3.689	S-WELD	SB116 INCONEL	SA336/CLF8	P-8
N11 A&B; &	.53	S-WELD	3.00	S-WELD	SB116 INCONEL	SA336/CLF8	P-8
N12 A&B	.53	S-WELD	3.00	S-WELD	SB116 INCONEL	SA336/CLFB	P-8
N13 & N14	S-WELD TO RPV FLANGE						
N15	NOT ACCESSABLE						

APPENDIX B

ASME CLASS 2 - EXAMINATION

NORTH...N STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S2.1

PAGE 1 OF 1

MAJOR ITEM: PRESSURE VESSELS

SUB ITEM	EXAM CATEGORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C1.1	C-A	<u>CIRCUMFERENTIAL BUTT WELDS</u>	-	-	-		THREE ARE NO ITEMS INVOLVED IN CLASS 2 SYSTEMS REQUIRED FOR SCHEDULING TO 1WC-2600 UNDER PRESSURE VESSELS
C1.2	C-B	<u>NOZZLE TO VESSEL WELDS</u>	-	-	-		
C1.3	C-C	<u>INTEGRALLY WELDED SUPPORTS</u>	-	-	-		
C1.4	C-D	<u>PRESSURE RETAINING BOLTING</u>	-	-	-		

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S2.2.1
PAGE 1 OF 3

MAJOR ITEM: PIPING-CIRCUMFERENTIAL BUTT WELDS

SUB ITEM	EXAM CATEGORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C2.1	C-G	<u>CIRCUMFERENTIAL BUTT WELDS</u>					
		HIGH PRESSURE COOLANT INJECTION-WATER SIDE TW3-12" ED	THREE	1	-		
		HIGH PRESSURE COOLANT INJECTION-STEAM SIDE PS18-8" ED	THREE	1	-		
		PS18-6" ED	-	-	-		
		-STEAM DISCHARGE					
		RS2-18" HE	-	-	-		
		RS2-16" HE	THREE	1	-		
		RS2-20" HE	-	-	-		
		CORE SPRAY A					
		TW7-8" ED	-	-	-		
		TW7-10" GE	THREE	1	-		
		CORE SPRAY B					
TW11-8" ED	-	-	-				
TW11-10" GE	-	-	-				
CONTAINMENT DURGE							
CP1-18" HE	-	-	-				
CP2-18" HE	-	-	-				
RHR SERVICE WATER							
SW9-8" GE	THREE	2	-				
C2.1	C-F	<u>CIRCUMFERENTIAL BUTT WELDS</u>					
		MAIN STEAM A PS1-18" ED	THREE	-	4*	*1978 BASELINE MSAJ-R54A,R54B	78-119,6
			THREE	1	-	MSAJ-R54C,R54D	78-8,114

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY

MAJOR ITEM: PIPING-CIRCUMFERENTIAL BUTT WELDS

SUB ITEM	EXAM CATEGORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C2.1	C-F	(CONT'D)					
		MAIN STEAM B PS2-18" ED	THREE THREE	- 1	2* -	*1978 BASELINE MSBJ-R52A,R52B	78-117,117R,116
		MAIN STEAM C PS3-18" ED	THREE	-	2*	MSCJ-R52A,R52B	78-113,115
		MAIN STEAM D PS4-18" ED	THREE	-	2*	MSDJ-R54A,R54B	78-111,112
		MAIN STEAM EQUALIZER PS30-18" EDB	THREE	-	21	1978 BASELINE MSEJ-1,2 MSEJ-3,4 MSEJ-7,8 MSEJ-10,11 MSEJ-12,13 MSEJ-14,15 MSEJ-16,17 MSEJ-18,19 MSEJ-20,21 MSEJ-22,25,26	78-4,118 78-1,2 78-7,82 78-12,10 78-13,11 78-85,85R,9 78-16,15 78-18,83 78-17,20 78-84,5,3
			THREE	2	-		
		10" DRIP LEG	THREE	-	2	MSEJ-5,6	78-22,21
		SUPPLY TO STEAM SEAL SYSTEM					
		PS11-6" ED	THREE	-	3*	SSAJ-R1,R2,R3	78-14,19,120
		PS12-6" ED	THREE	1	-		
		PS13-6" ED	-	-	-		
		PS14-6" ED	-	-	-		

NORTHERN STATES POWER CO.
 MONTICELLO NUCLEAR GENERATING PLANT
 INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S2.2.1

PAGE 3 OF 3

MAJOR ITEM: PIPING-CIRCUMFERENTIAL BUTT WELDS

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C2.1	C-F	(CONT'D) SUPPLY TO STEAM SEAL SYSTEM PS10-5" PS7-10" ED PS7-8" ED HIGH PRESSURE COOLANT INJECTION-WATER SIDE TW3-12" ED FEEDWATER A FW2A-14" ED FEEDWATER B FW2B-14" ED REACTOR WATER FROM SKIMMER SYSTEM REW11-8" HE	 THREE THREE - - THREE - THREE	 2 1 - - 1 - 2	 - - - - - -		

**NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY**

TABLE S2.2.2

PAGE 1 OF 1

MAJOR ITEM: PIPING-CIRCUMFERENTIAL BUTT WELDS

SUB ITEM	EXAM. CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C2.2	C-G	<u>LONGITUDINAL WELD</u>	-	-	-	-	THERE ARE NO ITEMS IN CLASS 2 SYSTEMS
C2.2	C-F	<u>JOINTS IN FITTINGS</u>					

**NORTH CAROLINA STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY**

TABLE S2.2.3

PAGE 1 OF 1

MAJOR ITEM: PIPING-BRANCH WELDS

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C2.3	C-G	<u>BRANCH PIPE TO PIPE</u>	-	-	-	-	THERE ARE NO ITEMS IN CLASS 2 SYSTEMS
C2.3	C-F	<u>WELD JOINTS</u> <u>(SWEEPOLETS)</u>					

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S2.2.4

PAGE 1 OF 1

MAJOR ITEM: PIPING-PRESSURE RETAINING BOLTING

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C2.4	C-D	PRESSURE RETAINING BOLTING	-	-	-	-	THERE ARE NO ITEMS IN CLASS 2 SYSTEMS REQUIRED FOR SCHEDULING

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S2.2.5

PAGE 1 OF 2

MAJOR ITEM: PIPING-INTEGRALLY WELDED SUPPORTS

SUB ITEM	EXAM- CATE- GORY.	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C2.5	C-E-1	<u>INTEGRALLY WELDED SUPPORTS</u> MAIN STEAM A PS1-18" ED MAIN STEAM B PS2-18" ED MAIN STEAM C PS3-18" ED MAIN STEAM D PS4-18" ED HIGH PRESSURE COOLANT INJECTION-WATER SIDE TW3-12" ED HIGH PRESSURE COOLANT INJECTION-STEAM SIDE PS18-8" ED HIGH PRESSURE COLLANT INJECTION -STEAM DISCHARGE- RS2-16" HE CORE SPRAY A TW7-8" GE TW7-10" GE CORE SPRAY B TW11-8" GE TW11-10" GE	 THREE - - - - THREE - - THREE - THREE - -	 1 - - - 1 - 1 - - 1 - -	 - - - - - - - - - - - - - -		

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S2.2.5
PAGE 2 OF 2

MAJOR ITEM: PIPING-INTEGRALLY WELDED SUPPORTS

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER:	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C2.5	C-E-1	(CONT'D) REACTOR WATER FROM SKIMMER SYSTEM REW11-8" HE RESIDUAL HEAT REMOVAL SERVICE WATER SW9-8" GE	THREE	2	-		
			-	-	-		

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S2.2.6

PAGE 1 OF 2

MAJOR ITEM: PIPING-SUPPORT COMPONENTS

SUB ITEM	EXAM CATE-GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C2.6	C-E-2	<u>SUPPORT COMPONENTS</u>					
		MAIN STEAM A PS1-18" ED	THREE	1	-		
		MAIN STEAM B PS2-18" ED	-	-	-		
		MAIN STEAM C PS3-18" ED	-	-	-		
		MAIN STEAM D PS4-18" ED	THREE	1	-		
		MAIN STEAM EQUALIZER PS30-18" EDB	THREE	1	-		
		SUPPLY TO STEAM SEAL SYSTEM					
		PS11-6" ED	THREE	1	-		
		PS13-6" ED	-	-	-		
		PS14-6" ED	-	-	-		
		PS7-10" ED	THREE	2	-		
		PS7-8" ED	-	-	-		
		HIGH PRESSURE COOLANT INJECTION-WATER SIDE					
		TW3-12" ED	THREE	3	-		
		HIGH PRESSURE COOLANT INJECTION-STEAM SIDE					
		PS18-8" ED	THREE	4	-		
		HIGH PRESSURE COOLANT INJECTION-STEAM DISCHARGE					
		RS2-16" HE	THREE	2	-		

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S2.2.6
PAGE 2 OF 2
MAJOR ITEM: PIPING-SUPPORT COMPONENTS

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C2.6	C-E-2	(CONT'D) CORE SPRAY A TW7-10" GE TW7-8" ED CORE SPRAY B TW11-10" GE TW11-8" ED REACTOR WATER FROM SKIMMER SYSTEM REW11-8" HE CONTAINMENT PURGE (A) CP1-18" HE CONTAINMENT PURGE (B) CP2-18" HE RHR SERVICE WATER SW9-8" GE	 THREE - - THREE THREE THREE - THREE	 1 - - 1 1 - 4	 - - - - - -		

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S2.3
PAGE 1 OF 1

MAJOR ITEM: PUMPS

SUB ITEM	EXAM CATEGORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C3.1	C-G	<u>PUMPS</u>	-	-	-		THERE ARE NO ITEMS WITH SEAMED CASINGS
C3.1	C-F	<u>PUMP CASING WELDS</u>	-	-	-		
C3.2	C-D	<u>PRESSURE RETAINING BOLTING</u>					
		HIGH PRESSURE COOLANT INJECTION PUMP TURBINE	THREE	20 2(MIN)	- -	(V) (UT)	
C3.3	C-E-1	<u>INTEGRALLY WELDED SUPPORTS</u>	-	-	-		
C3.4	C-E-2	<u>SUPPORT COMPONENTS</u>	-	-	-		SUPPORTS UNDER S2.2.6

NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S2.4
PAGE 1 OF 1

MAJOR ITEM: VALVES

SUB ITEM	EXAM CATE-GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C4.1	C-G	<u>VALVES</u>	-	-	-		THERE ARE NO ITEMS WITH SEAMED CASINGS
C4.1	AND C-F	<u>VALVE BODY WELDS</u>	-	-	-		
C4.2	C-D	<u>PRESSURE RETAINING BOLTING</u>					
		MAIN STEAM					
		STOP VALVE A	THREE	100%	-	(V)	
		PS1-18" ED	-	-	-	(UT)	
		STOP VALVE B	-	-	-	(V)	
		PS2-18" ED	THREE	10%	-	(UT)	
		STOP VALVE C	-	-	-	(V)	
		PS3-18" ED	-	-	-	(UT)	
		STOP VALVE D	-	-	-	(V)	
		PS4-18" ED	-	-	-	(UT)	
		BYPASS CONTROL VALVES					
		PS7-8" ED					
		NO. 11	THREE	100%	-	(V)	
		NO. 12	THREE	100%	-	(UT)	
C4.3	C-E-1	<u>INTEGRALLY WELDED SUPPORTS</u>	-	-	-		SUPPORTS UNDER S2.2.5
C4.4	C-E-2	<u>SUPPORT COMPONENTS</u>	-	-	-		SUPPORTS UNDER S2.2.5

NORTHERN STATES POWER COMPANY
MONTICELLO NUCLEAR GENERATING PLANT
BASELINE COMPARISON

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	1978 ISI INDICATIONS	EXAMINATION LIMITATIONS
<u>C2.1</u>							
<u>C-F CIRCUMFERENTIAL BUTT WELDS</u>							
MAIN STEAM A						<u>1978 BASELINE</u>	
MSAJ-R54A	26	UT	--	78-119	--	NONE	
MSAJ-R54B	26	UT	--	78-6	--	NONE	S-2,3&4,2:to 6:TEE
MSAJ-R54C	26	UT	--	78-8	--	S-1,OD GEO 105%	
MSAJ-R54D	26	UT	--	78-114	--	S-2,ID GEO 50%	S-1,3&4,2:to 6:TEE
						NONE	
MAIN STEAM B							
MSBJ-R52A	27	UT	--	78-117, 117R	--	S-2,OD GEO 280%	S-2, 4: to 6: TEE
MSBJ-R52B	27	UT	--	78-116	--	S-1,OD GEO 220%	S-1, 4: to 6: TEE
MAIN STEAM C							
MSCJ-R52A	28	UT	--	78-113	--	S-1,ID GEO 55%	
MSCJ-R52B	28	UT	--	78-115	--	S-2,ID GEO 70%	S-2, 4: to 6: TEE
						S-1,ID GEO 100%	
						& OD GEO 100%	S-1, 4: to 6: TEE
MAIN STEAM D							
MSDJ-R54A	29	UT	--	78-111	--	S-2,OD GEO 60%	S-2, 4: to 6: TEE
MSDJ-R54B	29	UT	--	78-112	--	S-1,OD GEO 110%	S-1, 4: to 6: TEE
						S-2,ID GEO 50%	
MAIN STEAM EQUALIZER HDR						<u>1978 BASELINE</u>	
MSEJ-1	26	UT	--	78-4	--	S-1,OD GEO 55%	S-1,3,4; 2:to 5: & 7:to 10: TEE
MSEJ-2	26	UT	--	78-118	--	S-1,OD GEO 95%	
MSEJ-3	26	UT	--	78-1	--	S-2,ID GEO 51%	
MSEJ-4	26	UT	--	78-2	--	S-2,OD GEO 110%	
MSEJ-7	26	UT	--	78-7	--	S-1,ID MISMATCH 145%	
						S-2,OD GEO 200%	

NORTHERN STATES POWER COMPANY
MONTICELLO NUCLEAR GENERATING PLANT
BASELINE COMPARISON

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
<u>C2.1-C-F (CONT'D)</u>							
MAIN STEAM							
EQUALIZER HDR (CONT'D)							
MSEJ-8	26	UT	--	78-82	--	S-2, ID GEO 55% & OD GEO 75%	
MSEJ-10	26	UT	--	78-12	--	S-2, OD GEO 90%	S-2,3,4; 10: to 11: ELBOW
MSEJ-11	27	UT	--	78-10	--	NONE	S-1,3,4; 10: to 11: TEE
MSEJ-12	27	UT	--	78-13	--	NONE	S-1,3,4; 10: to 11: & 4: to 5: TEE
MSEJ-13	27	UT	--	78-11	--	NONE	S-1,3,4; 4: to 5: ELBOW
MSEJ-14	27	UT	--	78-85, 85R	--	NONE	S-2,3,4; 2: to 4: & 8: to 10: TEE
MSEJ-15	27	UT	--	78-9	--	NONE	S-1,3,4; 10: to 11: TEE
MSEJ-16	28	UT	--	78-16	--	NONE	S-1,3,4; 10: to 11: TEE
MSEJ-17	28	UT	--	78-15	--	NONE	S-1,3,4; 2: to 4: & 8: to 10: TEE
MSEJ-18	28	UT	--	78-18	--	S-1, OD GEO 20% AVERAGE, 180% SPOT	
MSEJ-19	28	UT	--	78-83	--	S-1, OD GEO 62% S-2; OD GEO 64%	S-2; 2: to 4: & 8: to 10: TEE
MSEJ-20	28	UT	--	78-17	--	NONE	S-2,3,4; 10: to 11: TEE
MSEJ-21	29	UT	--	78-20	--	NONE	S-1,3,4; 10: to 11: ELBOW
MSEJ-22	29	UT	--	78-84	--	S-2 ID GEO 100% & OD GEO 65%	

NORTHERN STATES POWER COMPANY
 MONTICELLO NUCLEAR GENERATING PLANT
 BASELINE COMPARISON

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
<u>C2.1-C-F (CONT'D)</u>							
MAIN STEAM							
EQUALIZER HDR (CONT'D)							
MSEJ-25	29	UT	--	78-5	--	S-2, ID MISMATCH 115%	S-1,3,4; 2: to 4: & 8: to 10: TEE
MSEJ-26	29	UT	--	78-3	--	S-2,OD GEO 60%	
DRIPLEG							
MSEJ-5	26	UT	--	78-22	--	<u>1978 BASELINE</u> NONE	No S-1, TEE SIDE
MSEJ-6	26	UT	--	78-21	--	S-1, ID GEO 85% S-2, ID GEO 100%	
SUPPLY TO STEAM SEAL SYSTEM							
SSAJ-R1	30	UT	--	78-14	--	<u>1978 BASELINE</u> NONE	No S-2, WELDOLET SIDE
SSAJ-R2	30	UT	--	78-19	--	NONE	No S-1, WELDOLET SIDE
SSAJ-R3	30	UT	--	78-120	--	NONE	

NORTHERN STATES POWER COMPANY
MONTICELLO UNIT 1
CLASS 2 - ISOMETRIC SUMMARY

TABLE III
PAGE 1 of 2

ISO ISI NO.	SYSTEM OR COMPONENT	NAVCO DWG. NO.	LINE NUMBER	SCHEDULE OR THICKNESS	CALIBRATION STANDARD	MATERIAL
26	MAIN STEAM A	A-6407	PS1-18"ED	SCH.80 .937	NSP-8	A-106B
27	MAIN STEAM B	A-6408	PS2-18"ED	SCH.80 .937	NSP-8	A-106B
28	MAIN STEAM C	A-6409	PS3-18"ED	SCH.80 .937	NSP-8	A-106B
29	MAIN STEAM D	A-6410	PS4-18"ED	SCH.80 .937	NSP-8	A-106B
30	SUPPLY TO STEAM SEAL SYSTEM A-6345		PS11-6"ED	SCH.80 .432	NSP-6	A-106B
			PS12-6"ED	SCH.80 .432	NSP-6	A-106B
			PS13-6"ED	SCH.80 .432	NSP-6	A-106B
			PS14-6"ED	SCH.80 .432	NSP-6	A-106B
			PS10-5"ED	SCH.80 .375	NSP-	A-106B
			PS7-10"ED	SCH.80 .593	NSP-28	A-106B
			PS7-8"ED	SCH.100 .593	NSP-21	A-106B
31	HIGH PRESSURE COOLANT INJECTION (WATER SIDE)	A-6414	TW3-12"ED (TO FW2B)	SCH.80 .687	NSP-29	A-106B
			TW3-12"ED (TO MO-2068)	SCH.100 .843	NSP	A-106B
32	HIGH PRESSURE COOLANT INJECTION (STEAM SIDE)	A-6416	PS18-8"ED	SCH.80 .500	NSP-5	A-106B
			PS18-6"ED	SCH.80 .432	NSP-6	A-106B
33	HIGH PRESSURE COOLANT INJECTION (STEAM DISCHARGE)	A-6349	RS2-16"HE	SCH.(STD) .375	NSP-	A-106B
			RS2-18"HE	SCH.(STD) .375	NSP-	A-106B
			RS2-20"HE	SCH.(STD) .375	NSP-	A-106B
34	CORE SPRAY A	A-6400	TW7-8"ED	SCH.80 .500	NSP-5	A-106B
			TW7-10"GF	SCH.40 .365	NSP-	A-106B

NORTHERN STATES POWER COMPANY
MONTICELLO UNIT 1
CLASS 2 - ISOMETRIC SUMMARY

TABLE III
PAGE 2 of 2

ISO ISI NO.	SYSTEM OR COMPONENT	NAVCO DWG. NO.	LINE NUMBER	SCHEDULE OR THICKNESS	CALIBRATION STANDARD	MATERIAL
35	CORE SPRAY B	A-6405	TW11-8"ED TW11-10"GE	SCH.80 .500 SCH.40 .365	NSP-5 NSP-	A-106B A-106B
36	REACTOR WATER FROM SKIMMER SYSTEM	A-6441	REW11-8"HE	SCH.40 .322	NSP-	A-106B
37	FEEDWATER A (TO) 10 INCH LINES C (AND) D	A-6426	FW2A-14"ED	SCH.100 .937	NSP-23	A-106B
	FEEDWATER B (TO) 10 INCH LINES A (AND) B	A-6427	FW2B-14"ED	SCH.100 .937	NSP-23	A-106B
38A	CONTAINMENT PURGE LINE A	--	CP1-18"HE	SCH.(STD) .375	NSP-	A-106B
38B	CONTAINMENT PURGE LINE B	--	CP2-18"HE	SCH.(STD) .375	NSP-	A-106B
39	RHR SERVICE WATER	A-6422	SW9-8"GE	SCH.(STD) .322	NSP-	A-106B

APPENDIX C

TABLE I - PERSONNEL LISTING

TABLE II - ULTRASONIC CALIBRATION BLOCKS

TABLE III - PROCEDURE LISTING

TABLE IV - EQUIPMENT AND MATERIALS

NORTHERN STATES POWER COMPANY
 MONTECELLO NUCLEAR GENERATING PLANT - UNIT 1
 PERSONNEL LISTING

APPENDIX - C
 TABLE 1
 PAGE 1 of 1

EXAMINER	TITLE	ORGANIZATION	ASNT LEVEL			
			UT	PT	MT	VT
R.D. BURLINGAME	TECHNICIAN	LMT(3)	II	--	--	--
D. HENRY	TECHNICIAN	LMT	I	--	--	--
J.E. HILL	SUPERVISOR	LMT	II	II	II	II(2a,b)
J.W. HILL	TECHNICIAN	LMT	I	--	--	--
T.G. LAMBERT	SUPERVISOR	LMT	III	III	III	III(2b)
K.M. KING	TECHNICIAN	LMT	II	--	--	--
J. FLECK	TECHNICIAN	LMT	I	II	--	II(2b)
E.L. LAKE	TECHNICIAN	LMT	I	I(1)		
T.L. ALCOTT	TECHNICIAN	LMT	I(1)	--	--	--
B.K. GRAHAM	TECHNICIAN	LMT	I	--	--	--
D.B. HANSEN	ENGINEER	NSP				
P.J. KRUMPOS	SUPERINTENDENT MATERIALS AND SPECIAL PROCESSES SECTION	NSP				
C. LINSTROM	AI	HARTFORD STEAM BOILER INSPECTION AND INSURANCE COMPANY				

FOOTNOTES:

- (1) LEVEL I TRAINEE
- (2a) CERTIFIED BY NORTHERN STATES POWER COMPANY TO PERFORM VISUAL DETERMINATION OF STRUCTURAL INTEGRITY FOR HANGER ASSEMBLIES IN ACCORDANCE WITH PROCEDURE NSP-VT-2.
- (2b) INSPECTION EXPERIENCE AND NDE QUALIFICATIONS WAS JUDGED TO BE ADEQUATE TO PERFORM VISUAL EXAMINATIONS IN ACCORDANCE WITH PROCEDURE NSP-VT-1.
- (3) ORGANIZATION: LAMBERT, MACGILL, THOMAS, INCORPORATED (LMT)

NORTHERN STATES POWER COMPANY
MONTICELLO NUCLEAR GENERATING PLANT - UNIT 1
ULTRASONIC CALIBRATION BLOCKS - CLASS 1 AND CLASS 2

TABLE II
PAGE 1 OF 1

NSP NUMBER	SIZE & DIA.	PIPE SCHEDULE & THICKNESS	MATERIAL	SERIAL OR HEAT NUMBER	CALIBRATION REPORTS	DATE
1	3"	80	A106B	L44580	JH-4 JH-8 JH-9	10-23-78 10-31-78 11- 1-78
4	4"	80	A106B	L42009	MK-1	10-18-78
5	8"	80	A106B	N53114	RB-5 RB-7	10-17-78 10-17-78
6	6"	80	A106B	401N-1726	JH-3 JH-12	10-13-78 11- 6-78
8	18"	80	A106B	122491	JH-1 JH-2 JH-10 JH-11 RB-1 RB-2 RB-3 MK-4 MK-6	10-12-78 10-13-78 11- 2-78 11- 6-78 10-11-78 10-12-78 10-12-78 10-21-78 11- 2-78
11	8"	80	304	15885	RB-6	10-17-78
12-2	4"	80	304	7-73280	RB-8	10-18-78
22	12"	80	304	658905	JH-5 JH-6	10-24-78 10-25-78
26	22"	80	304	10093	RB-10	10-23-78
27	28"	80	304	10093	RB-9 MK-2 MK-3	10-19-78 10-18-78 10-19-78
28	10"	80	A106B	N35898	RB-4	10-13-78
30	RPV	5-5/16 + CLAD	A533B	C5571	JH-7 RB-15 MK-5	10-28-78 10-27-78 10-28-78
RPV#1	RPV	5-5/16 + CLAD	A533B	C2220/1	RB-11 RB-12 RB-13 RB-14 TL-I	10-25-78 10-26-78 10-26-78 10-27-78 10-26-78

NORTHERN STATES POWER COMPANY
 MONTICELLO NUCLEAR GENERATING PLANT - UNIT 1
 PROCEDURE LISTING

APPENDIX C
 TABLE III
 PAGE 1 OF 1

PROCEDURE NUMBER AND REVISION	FIELD CHANGE	PROCEDURE TITLE	PLANT APPROVAL DATE	FIELD CHANGE REMARKS	CHANGE DESCRIPTION
NSP-VT-1, REV. 1	NONE	VISUAL EXAMINATION	10-10-78	NONE	
NSP-VT-2, REV. 1	NONE	VISUAL EXAMINATION OF ASSEMBLED HANGER ASSEMBLIES	10-10-78	NONE	
NSP-MT-1, REV. 1	NONE	MAGNETIC PARTICLE EXAMINATION, YOKE METHOD	9-12-77	NONE	
NSP-PT-1, REV. 1	NONE	LIQUID PENETRANT EXAMINATION	9-12-77	NONE	
NSP-UT-1, REV. 0	NONE	ULTRASONIC EXAMINATION OF PIPE WELDS	9-12-77	NONE	
NSP-UT-2, REV. 0	NONE	AUTOMATIC DATA RECORDING	9-12-77	NONE	
NSP-UT-3, REV. 0	NONE	ULTRASONIC EXAMINATION OF FERRITIC VESSELS WITH WALL THICKNESS 2.5" AND GREATER	9-12-77	NONE	
NSP-UT-5, REV.0	NONE	ULTRASONIC EXAMINATION OF REACTOR VESSEL NOZZLE FORGING INNER RADII	10- 7-77	NONE	
UT-22, REV. A	1	ULTRASONIC EXAMINATION OF NUCLEAR COOLANT SYSTEM PIPING USING REMOTE INSTRUMENTATION	10-17-78	--	FIELD CHANGE WAS ADDED TO USE NSP'S CALIBRATION, REPORT SHEETS, AND SCANNING DIRECTION IDENTIFICATIONS AND TO HAVE DEVIATIONS FROM SURFACE REQUIREMENTS REPORTED TO THE NSP SUPERVISOR.

MATERIAL OR EQUIPMENT	TYPE OR SERIAL NUMBER	CALIBRATION DATE OR BATCH NUMBER	REMARKS
<u>ULTRASONIC:</u>			
NORTEC 131D	S/N-128	CAL. 9-11-78	
NORTEC 131D (REMOTE)	S/N-128/146	CAL. 9-12-78	
NORTEC 130D	S/N-130-063D	CAL. 9- 6-78	
NORTEC 130	S/N-130-77G	CAL. 9-8-78	
NORTEC 131D	S/N-131D-111	CAL. 10-16-78	
<u>RECORDERS:</u>			
GULTON TR722J	S/N-71147	CAL. 10- 6-78	
SANBORN 320	S/N-1835	CAL. 6-20-78	
TEAC 2300S	S/N-30	CAL. 6-21-78	
<u>TEMPERATURE GAUGES:</u>			
PTC SURFACE THERMOMETERS	S/N-118 S/N-120	CAL. 8-10-78 CAL. 8-10-78	CERTIFIED BY MANUFACTURER
ANNOR CONTACT PYROMETER	4000A-600 ^o	CAL. 10-13-78	
<u>MAGNETIC PARTICLE:</u>			
PARKER PROBE	S/N-2855	CAL. 10-14-78	ON SITE QUALIFICATION
<u>ROMPAS BLOCKS:</u>			
304 S.S.	S/N-5	*CERT. 9-13-76	*BY ORLAS MACHINE SHOP
4140 C.S.	S/N-17	*CERT. 9-13-76	
<u>MATERIALS:</u>			
ULTRASONIC COUPLANT	LMT-GEL ULTRA-GEL II ULTRA-GEL II	BATCH NO. 8782 BATCH NO. 1377 BATCH NO. 4477	
PENETRANT MAGNAFLUX SPOTCHECK	PENETRANT DEVELOPER DEVELOPER CLEANER	BATCH NO. 5F086 BATCH NO. 5E066 BATCH NO. 7H118 BATCH NO. 5G004	TYPE: SKL-HF/SKL-S TYPE: SKD-NF TYPE: SKD-NF TYPE: SKC-NF

MATERIAL OR EQUIPMENT	TYPE OR SERIAL NUMBER	CALIBRATION DATE OR BATCH NUMBER	REMARKS
<u>ULTRASONIC TRANSDUCERS:</u>		<u>SIZE</u>	<u>FREQUENCY</u>
AEROTECH	015457	.5" x 1"	1.0 MHZ
AEROTECH	A18	.5" x 1"	2.25 MHZ
AEROTECH	L22501	1.5" DIA.	1.0 MHZ
AEROTECH	LC-2	.25" DIA.	5.0 MHZ
BRANSON	LH6343	.5" x .5"	2.25 MHZ
AUTO INDUSTRIES	38669	.5" DIA.	1.0 MHZ
HARISONIC	LC1	.5" x 1"	2.25 MHZ
HARISONIC	P8120	.5" x .5"	2.25 MHZ
HARISONIC	P979	.75" DIA.	1.0 MHZ
HARISONIC	N951	1.2" DIA.	1.0 MHZ
HARISONIC	Q603	.25" DIA.	5.0 MHZ
HARISONIC	Q748	.375" x .375"	3.5 MHZ
HARISONIC	Q943	.5" x .25" DUAL	1.5 MHZ
HARISONIC	Q1032	.5" x .5" DUAL	1.5 MHZ
HARISONIC	P927	1.5" DIA.	1.0 MHZ
HARISONIC	Q412	1" x 1"	1.0 MHZ
HARISONIC	P1104	.25" x .25"	5.0 MHZ

APPENDIX D

FORM NIS-1

OWNERS' DATA REPORT FOR INSERVICE INSPECTION

FORM NIS-1 OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

(As Required by the Provisions of the ASME Code Rules)

- 1.) Owner Northern States Power Company
 Address 414 Nicollet Mall, Minneapolis, Minnesota
- 2.) Plant Monticello Nuclear Generating Plant
 Address Monticello, Minnesota
- 3.) Plant Unit 1 4.) Owner (Certificate of Authorization) ---
- 5.) Commercial Service Date 6-30-71 6.) National Board Number for Unit ---
- 7.) Components Inspected

<u>Component or Appurtenance</u>	<u>Manufacturer or Installer</u>	<u>Manufacturer or Installer Serial No.</u>	<u>State or Province No.</u>	<u>National Board No.</u>
<u>B1.0 REACTOR VESSEL</u>	CB&I	B-4697		
<u>B1.4 PRIMARY NOZZLE TO VESSEL WELD AND INNER RADIUS</u>				
NOZZLE N2B RRBD-1	CB&I	---	---	---
NOZZLE N2F RRFD-1	CB&I	---	---	---
NOZZLE N2H RRHD-1	CB&I	---	---	---
NOZZLE N2K RRKD-1	CB&I	---	---	---
<u>B1.6 NOZZLE TO SAFE END WELDS</u>				
NOZZLE N2B RRBF-2	CB&I	---	---	---
NOZZLE N2F RRFF-2	CB&I	---	---	---
NOZZLE N2H RRHF-2	CB&I	---	---	---
NOZZLE N2K RRKF-2	CB&I	---	---	---
<u>B4.0 PIPING PRESSURE BOUNDARY</u>				
<u>B4.1 SAFE END TO PIPING AND SAFE END IN BRANCH PIPING WELDS</u>				
<u>HIGH PRESSURE COOLANT INJECTION-STEAM</u>				
8" PSAF-2B		---	---	---
PSAF-2C		---	---	---

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B4.5 CIRCUMFERENTIAL AND LONGITUDINAL PIPE WELDS				
HIGH PRESSURE COOLANT INJECTION-STEAM				
8" PSAJ-15	BECHTEL	---	---	---
REACTOR WATER CLEANUP				
4" CWAJ-4	BECHTEL	---	---	---
CWAJ-5	BECHTEL	---	---	---
REACTOR CORE INJECTION COOLANT				
3" RSAJ-11	BECHTEL	---	---	---
RSAJ-12	BECHTEL	---	---	---
RECIRCULATION A				
28" RCAJ-5	BECHTEL	---	---	---
RCAJ-15	BECHTEL	---	---	---
RECIRCULATION B				
28" RCBJ-5	BECHTEL	---	---	---
RECIRCULATION BY-PASS A				
4" RBAJ-2	CHERNE	---	---	---
RBAJ-16	CHERNE	---	---	---
RECIRCULATION BYPASS B				
4" RBBJ-2	CHERNE	---	---	---
RBBJ-19	CHERNE	---	---	---
RECIRCULATION MANIFOLD				
22" RMBJ-2	BECHTEL	---	---	---
RMAJ-15	BECHTEL	---	---	---
RMAJ-16	BECHTEL	---	---	---

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B4.5 CONT'D

RECIRCULATION RISERS

12" RRBJ-3	BECHTEL	---	---	---
RRFJ-3	BECHTEL	---	---	---
RRHJ-3	BECHTEL	---	---	---
RRKJ-3	BECHTEL	---	---	---

MAIN STEAM CONDENSATE LEAK OFF

3" CLAJ-10	BECHTEL	---	---	---
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B4.7 BRANCH CONNECTION WELDS SIX IN. DIAMETER AND SMALLER

CRD SCRAM HEADER

2" SDAJ-5	BECHTEL	---	---	---
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B4.8 SOCKET WELDS

RECIRCULATION MANIFOLD MO2-65A BY-PASS

2" VBAJ-3	BECHTEL	---	---	---
VBAJ-12	BECHTEL	---	---	---

CRD SCRAM HEADER DISCHARGES

2" CDAJ-45	BECHTEL	---	---	---
CDBJ-45	BECHTEL	---	---	---
CDBJ-66	BECHTEL	---	---	---
CDBJ-68	BECHTEL	---	---	---
SDDJ-8	BECHTEL	---	---	---

B4.9 INTEGRALLY WELDED SUPPORTS

HIGH PRESSURE COOLANT INJECTION-STEAM

8" PSAK-7	BECHTEL	---	---	---
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REACTOR WATER CLEANUP

4" CWAK-14	BECHTEL	---	---	---
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<u>B4.9 CON'T</u>				
<u>RECIRCULATION A</u>				
28" RCAF-16	BECHTEL	---	---	---
<u>B4.10 SUPPORT COMPONENTS</u>				
<u>MAIN STEAM B</u>				
18" MSBK-14	BECHTEL	---	---	---
<u>RESIDUAL HEAT REMOVAL B</u>				
16" RHBK-10	BECHTEL	---	---	---
RHBK-12	BECHTEL	---	---	---
<u>REACTOR CORE INJECTION COOLANT-STEAM</u>				
3" RSAK-13	BECHTEL	---	---	---
<u>RECIRCULATION A</u>				
28" RCAF-12	BECHTEL	---	---	---
RCAF-14	BECHTEL	---	---	---
<u>RECIRCULATION B</u>				
28" RCBK-8	BECHTEL	---	---	---
RCBK-10	BECHTEL	---	---	---
<u>RECIRCULATION BY-PASS A</u>				
4" RBAK-10	BECHTEL	---	---	---
<u>RECIRCULATION BY-PASS B</u>				
4" RBBK-14	BECHTEL	---	---	---

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