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MONTICELLO NUCLEAR
G PLANT

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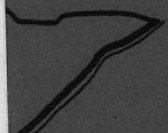

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INSERVICE INSPECTION - EXAMINATION SUMMARY

MONTICELLO NUCLEAR GENERATING PLANT-UNIT I

FEBRUARY 10, 1984 to January 12, 1985

REFUELING OUTAGE NO. 10

INSPECTION PERIOD 1

INTERVAL 2

NORTHERN STATES POWER COMPANY

MINNEAPOLIS. MINNESOTA

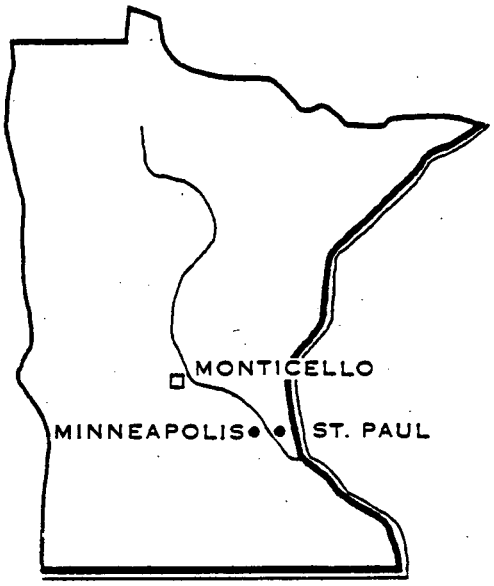
Commerical Service Date: June 30, 1971

Report Date: March 27, 1985

MONTICELLO NUCLEAR GENERATING PLANT

Monticello, Minnesota

UNIT 1



INSERVICE INSPECTION - EXAMINATION SUMMARY

MONTICELLO NUCLEAR GENERATING PLANT-UNIT I

FEBRUARY 10, 1984 to January 12, 1985

REFUELING OUTAGE NO. 10

INSPECTION PERIOD 1

INTERVAL 2

NORTHERN STATES POWER COMPANY

MINNEAPOLIS, MINNESOTA

Commerical Service Date:
June 30, 1971

Report Date:
March 27, 1985

NORTHERN STATES POWER COMPANY

MONTICELLO NUCLEAR GENERATION PLANT - UNIT 1

INSERVICE INSPECTION-EXAMINATION SUMMARY

MONTICELLO NUCLEAR GENERATING PLANT - UNIT 1

FEBRUARY 10, 1984 to JANUARY 12, 1985

REFUELING OUTAGE NO. 10

INSPECTION PERIOD 1

INTERVAL 2

Report Date:
March 27, 1985

Prepared by: J. Schanen

Reviewed by: L. C. Dahlman

L.C. Dahlman,
Materials & Special
Processes Specialist

Commerical Service Date:
June 30, 1971

Approved by: Gregory T. Krause

G.T. Krause
Superintendent
Materials & Special
Processes

INSERVICE INSPECTION - EXAMINATION SUMMARY
MONTICELLO NUCLEAR GENERATING PLANT - UNIT 1
- INDEX -

Appendix B ASME Class II Examinations

Inservice Inspection - Examination Summary Tables:

Table S1.2 - Vessel Welds
Table S2.2 - Nozzle Welds
Table S3.2 - Support Members
Table S4.2 - Pressure Retaining Bolting>2"
Table S5.2 - Piping Pressure Boundary
Table S6.2 - Pump Casings and Valve Bodies
Table S7.2 - Pressure Retaining Components

Appendix C

Table I - Personnel Listing
Table II - Ultrasonic Calibration Blocks
Table III - Procedure Listing
Table IV - Equipment and Materials

Appendix D

Form NIS-1, Owner's Data Report for Inservice Inspections

INSERVICE INSPECTION - EXAMINATION SUMMARY
MONTICELLO NUCLEAR GENERATING PLANT - UNIT 1
FEBRUARY 10, 1984 to JANUARY 12, 1985

1.0 INTRODUCTION

This report is a summary of the Monticello Nuclear Generating Plant's Eleventh Inservice Inspection. This was the second inservice inspection to be conducted in inspection period one of the plant's second ten year interval. The examinations were performed during the tenth refueling outage from February 10, 1984 to January 12, 1985. The Monticello Nuclear Generating Plant began commerical 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 I and ASME Class II.

2.0 INSPECTION SUMMARY

The evaluation of the results from the inservice examinations revealed several intergranular stress corrosion cracks in the weld heat affected zone of welds in the Residual Heat Removal and Jet Pump Instrumentation systems. Additional cracking on the Feedwater Sparger Flow Nozzles, attributed to thermal fatique was revealed during the visual examination of the reactor vessel interior. All items identified as containing cracks were subsequently replaced.

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 core coolant systems, portions of the emergency core coolant systems, and portions of the reactor coolant associated systems that are classified as ASME Class I and ASME Class II.

The examination plan was based on the examination requirements of the ASME Boiler and Pressure Vessel Code Section XI, 1977 Edition through and including the Summer, 1978 Addenda, and complied with Monticello's Technical Specification, Section TS4.15. The examination plan is in accordance with the program submitted to the United States Nuclear Regulatory Commission on March 27, 1981 titled, "ASME Code Section XI, Inservice Inspection and Testing Program".

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 were issued in the Summer, 1978 Addenda. All other examination procedures complied with the requirements of the 1977 Edition through and including the Summer, 1978 Addenda of ASME Section XI.

3.3 Examination Methods

Ultrasonic examination methods and techniques were used to perform volumetric examinations. 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 to the extent possible.

Liquid penetrant and magnetic particle examination methods were used to perform the surface examinations. The liquid penetrant examinations were performed using color contrast-solvent removable materials. Magnetic particle examinations were performed using a yoke and dry 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. Cold hanger load settings were visually verified (when applicable) and recorded on the report along with the piping system temperature.

3.4 Equipment and Materials

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

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

3.5 Personnel

Northern States Power Company contracted General Electric Company to perform the reactor vessel visual examinations; and Lambert, MacGill, Thomas, Inc. to perform the balance of plant examinations. Hartford Steam Boiler Inspection and Insurance Company, representing ANI, provided the Authorized Inspection.

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

All ultrasonic Level II examiners performing examinations in accordance with NSP-UT-16 Rev. 0 on stainless steel piping were EPRI qualified in the detection of IGSCC. Level I examiners were required to demonstrate scanning and detection proficiency on site.

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

3.6 Evaluation

Any indications disclosed in the examinations were evaluated by the examiner at the 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. In addition, the ultrasonic data was recorded on strip charts, which were made part of the inspection report and permitted further evaluation.

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 number because of the different types of examinations performed on the individual item.

Table I of Appendices A and B summarizes all the examinations that have been performed to date and identifies the amount that will be performed to complete the Ten Year Examination requirements. For retrieval purposes, the prefix of the inspection report number corresponds with the year that the inspection was performed. The examination report numbers for this outage are prefixed with "84".

Table II of Appendices A and B compares the baseline examination results with the results obtained during the examinations. Table III of Appendices 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 inspections are identified in the tables of Appendix C. Appendix D contains the Form NIS-1, titled "Owners' Data Report for Inservice Inspections."

3.8 Summary of Results

The following is a list of all anomalies detected:

System	Item I D	Exam Method	Type & No. of Indications
Core Spray "A"	A014-13B	VT	loose nut
	CSAK-35	VT	loose nut
	CSAK-31	VT	loose bolts
Core Spray "B"	CSP270-7	UT	1 spot indication
	TWH-69	VT	loose bolt
	TWH-70	VT	loose bolt
	TWH-113	VT	loose bolt
HPCI Steam	PSAF-2C	PT	Arc strike
RHR	RHBF-20	UT	1 spot Ind.,3 linear Ind.
	RHCF-20	UT	2 spot Ind.,2 linear Ind.
	RHBJ-21	UT	2 linear Ind.
	RHCJ-21	UT	Multiple spot indications
	TWH-7	VT	loose bolt
	TWH-73	VT	loose bolt
	TWH-102	VT	loose nut
Rx Support Skirt	HCAH-2	MT	9 linears
Jet Pump Instrumentation Canister "B"	W#1	UT	Multiple axial indications
Head Vent	HVAK-21	VT	loose nut, bent rod hanger
Feedwater System	Spargers	VT	Crack Ind. on N4C & N4D
RHR Service Water	SWAK-25	VT	loose nut
	SWAK-26	VT	loose nuts
	SWAK-34	VT	loose nut

3.8 (con't)

All anomalies with the exception HVAK-21 were corrected. The bent rod hangar on HVAK-21 was evaluated and accepted as is. All loose nuts and bolts were tightened. The PT arc strike and MT linear indications were removed by surface blending with a hand grinder. All items containing UT indications except CSP 270-7 were replaced. CSP 270-7 was subsequently radiographed and the UT indication appeared to be a machining mark on the I.D. surface. This weld will be inspected in future outages. The feedwater spargers were also replaced after several crack indications were noted on two of the flow nozzles.

4.0 Visual Examination of the Reactor Vessel Internals

A visual examination was performed on portions of the rector vessel internal components utilizing an underwater TV camera, fiberscope, and a video recording system. The examinations were performed in accordance with Northern States Power Company's Procedure No. NSP-VT-4.0, Revision 0.

The examination procedure delineated the scope of the program and contained a separate appendix for each area to be examined. Each of the appendices contained a check-off list the examiners used during the examinations to identify areas examined and, abnormal conditions if found.

The examination program focused on the Core Spray Sparger System, Feedwater Sparger System, and the Shroud Support Welds. Examination areas for these systems included the following:

Core Spray:	Tee junction box at 90° and 270°; piping and welds; piping brackets and reclad area; sparger piping, nozzles, and brackets, and shroud penetrations.
Feedwater:	Inner radius of vessel nozzles at 45°, 135°, 225° and 315°, sparger piping and welds, end brackets and bolting, reclad areas, end pin and keeper box, and the individual flow nozzles on each sparger.
Shroud Support Welds:	Shroud support to shroud support, shroud support to shroud, and shroud support to bottom head welds.

General Electric Company was contracted to supply personnel to perform the examinations. There were two certified Level II Visual Examiners. One examiner was on the service platform and the other was on the refueling bridge. In addition a Northern States Power Company Level II was at the recording station. A video recording system was used to permanently document the abnormal conditions found during the examination, and to record system calibrations.

No abnormal conditions were noted on the Core Spray Sparger System and the shroud support welds.

Abnormal conditions found on the Feedwater Sparger System consisted of the following:

Sparger N4C;	Crack like indications on the 5th spray nozzle, left side of the tee box.
Sparger N4D;	Crack like indications on the 6th, 7th, and 8th spray nozzles, left side of the tee box.

These crack like indications were confirmed to be cracks by direct visual examination after lowering the reactor vessel water level, and by liquid penetrant examination after the spargers were removed from the reactor vessel.

All examinations reports and documentation are included with the balance of plant records and are maintained on file by Northern States Power Company.

5.0 Augmented Examinations

Additional ultrasonic examinations, not in the examination plan for period 1, were performed to determine if Intergranular Stress Corrosion Cracking (IGSCC) existed in the 304 stainless steel and dissimilar metal welds not to be replaced during the 1984 outage. The systems examined were Jet Pump Instrumentation, Stand-by Liquid Control, Residual Heat Removal, High Pressure Coolant Injection, Head Vent and Core Spray.

These examinations determined the presence of IGSCC in the "B" and "C" loops of the RHR system and "B" Jet Pump Instrumentation. These welds along with "A" Jet Pump Instrumentation were subsequently scheduled for replacement during the outage. Although IGSCC was not found in the Standby Liquid Control safe end, the unloading of the reactor core for piping replacement provided an opportune time to replace this safe end.

6.0 Piping Replacement

In conjunction with the refueling outage, piping was replaced in the recirculation, Residual Heat Removal, Jet Pump Instrumentation, Reactor Water Clean-up and Stand-by liquid control systems. Additionally the Feedwater Spargers were also replaced.

Further information regarding piping replacement and baseline examinations can be found under separate cover entitled "Baseline Examination Summary".

APPENDIX A

ASME CLASS 1 EXAMINATIONS

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S1.1
PAGE 1 **OF** 1
MAJOR ITEM: REACTOR VESSEL 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.
B1.10	B-A	SHELL WELDS					
B1.11	B-A	CIRCUMFERENTIAL	ONE	10'	-		
			TWO	7'	-		
			THREE	9'	-		
B1.12	B-A	LONGITUDINAL	ONE	8' 9"	-		
			TWO	4'	-		
			THREE	12' 9"	-		
B1.20	B-A	HEAD WELDS					
B1.21	B-A	CIRCUMFERENTIAL					
		CLOSURE HEAD	ONE	8.5'	-		
			TWO	8'	-		
			THREE	8.5'	-		
		BOTTOM HEAD	ONE	3'	-		
			TWO	3'	-		
			THREE	3'	-		
B1.22	B-A	MERIDONAL	ONE	26'	-		
			TWO	21'	-		
			THREE	19'	-		
B1.30	B-A	SHELL TO FLANGE WELD	ONE	19'	-		
			TWO	19'	-		
			THREE	19'	-		
B1.40	B-A	HEAD TO FLANGE WELD	ONE	19'	-		
			TWO	19'	-		
			THREE	19'	-		
B1.50	B-A	REPAIR WELDS	-	-	-		

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S2.1
PAGE 1 **OF** 1
MAJOR ITEM: VESSELS & HEAT EXCHANGERS

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.
B2.10 & B2.20	B-B	PRESSURIZER VESSEL	-	-	-		
B2.30 & B2.40	B-B	STEAM GENERATORS	-	-	-		
B2.50 & B2.60	B-B	HEAT EXCHANGERS	-	-	-		

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S3.1
PAGE 1 **OF** 2
MAJOR ITEM: NOZZLE 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.
B3.10 & B3.20	B-D	NOZZLE-TO-VESSEL WELDS & NOZZLE INSIDE RADIUS SECTION					
		HEAD VENT	ONE	1	1	HVAD-1	84-140, 145, 147,
		HEAD SPARE	TWO	1	-		146, 155
			THREE	1	-		
		STANDBY LIQUID CONTROL	TWO	1	-		
		MAIN STEAM	ONE	1	-		
			TWO	1	-		
			THREE	2	-		
		FEEDWATER	ONE	1	-		
			TWO	2	-		
			THREE	1	-		
		CORE SPRAY	ONE	1	1	CSBD-1	84-187, 190, 191,
			THREE	1	-		158, 193
		CRD RETURN	ONE	1	1	CRAD-1	84-188, 189, 192, 168, 240
		RECIR OUTLET	ONE	1	1	RCAD-1	82-195, 255
			THREE	1	-		
		RECIR INLET	ONE	3	3	RRAD-1	82-170, 148
						RRDD-1	82-161, 171
						RRJD-1	82-160, 172
			TWO	3	-		
			THREE	4	-		
		JET PUMP INSTR	ONE	1	1	JPAD-1	84-194, 237, 238
			THREE	1	-		239, 241

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S3.1
PAGE 2 **OF** 2
MAJOR ITEM: NOZZLE 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.
B3.30 & B3.40	B-D	PRESSURIZER VESSEL	-	-	-		
B3.50 & B3.60	B-D	STEAM GENERATORS	-	-	-		
B3.70 & B3.80	B-D	HEAT EXCHANGERS	-	-	-		
B3.90 & B3.100							

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S4.1
PAGE 1 **OF** 1
MAJOR ITEM: PARTIAL PENETRATION 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.
B4.10	B-E	REACTOR VESSEL	-	-	-		
B4.11	B-E	PARTIAL PENT. WELDS	-	-	-		
B4.12	B-E	VESSEL NOZZLES	THREE	1	-		
B4.13	B-E	CRD PENETRATIONS	ONE	10	-		
			TWO	10	-		
			THREE	11	-		
B4.14	B-E	INSTR PENETRATIONS	THREE	1	-		
B4.20	B-E	PRESSURIZER	-	-	-		

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S5.1
PAGE 1 **OF** 3
MAJOR ITEM: DISSIMILAR METAL 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.
		REACTOR VESSEL					
B5.10	B-F	NOZZLE-TO-SAFE-END-WELDS					
		HEAD VENT	ONE	1	2	HVAF-2 HSBF-2	84-134, 135 84-137, 138(Aug)
		HEAD SPARE	TWO THREE	1 1	- -		
		STAND BY LIQUID CONTROL	TWO	1	1	CPAF-2	84-033, 061(Aug)
		CORE SPRAY	ONE THREE	1 1	1 -	CSBF-2	84-162,84-166
		CRD RETURN	ONE	1	-		
		RECIRC OUTLET	ONE	1	2	RCAF-2 RCBF-2 (Aug)	82-177, 196 82-257
			THREE	1	-		
		RECIRC INLET	ONE	3	10	RRAF-2 RRDF-2 RRJF-2 ----------AUGMENTED---------- RRBF-2 RRCF-2 RREF-2 RRFF-2 RRGF-2 RRHF-2 RRKF-2	82-70, 130 82-85, 151 82-84, 129 82-293 82-260 82-296 82-261 82-268 82-254 82-279
			TWO THREE	3 4	- -		
		JET PUMP INSTR	ONE THREE	1 1	1 -	JPBF-2	84-043,050

FORM 17-2582

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Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S5.1
PAGE 2 **OF** 3
MAJOR ITEM: DISSIMILAR METAL 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.
B5.10	B-F	(CONT'D)					
		INSTRUMENT LINES	ONE	1	4	VIAF-2 VIBF-2(Aug) VICF-2(Aug) VIDF-2(Aug)	84-070,075 84-071,074 84-161,164 84-163,165
			TWO	1	-		
			THREE	2	-		
B5.20	B-F	PRESSURIZER	-	-	-		
B5.30	B-F	STEAM GENERATORS	-	-	-		
B5.40	B-F	HEAT EXCHANGERS	-	-	-		
B5.50	B-F	SAFE END WELDS					
		CORE SPRAY	ONE	2	7	CSAF-14 CSAF-18 CSP-90-7(Aug) CSP-270-7(Aug) CSP-270-9(Aug) CSBF-12(Aug) CSBF-16(Aug)	84-096,103 84-094,098 84-220,259 84-182,184 84-156,213 84-093,102 84-101,105
			THREE	2	-		
		HPCI STEAM	ONE	-	2	PSAF-2B(Aug) PSAF-2C(Aug)	84-109,113 84-110,114
			TWO	1	-		
		RHR (REW10)	ONE	-	1	RHAF-4 (Aug)	82-274
			TWO	1	-		

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S5.1
PAGE 3 **OF** 3
MAJOR ITEM: DISSIMILAR METAL 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.
B5.10	B-F	(CONT'D)					
		RHR (TW20)	ONE	-	3	RHBF-4 (Aug)	82-241,273
						RHBF-20 (Aug)	82-242, 262
						RHBF-24(Aug)	82-245, 272
					2	RHBF-20(Aug)	84-085, 089
						RHBF-24(Aug)	84-082
			TWO	1	-		
			THREE	2	-		
		RHR (TW30)	ONE	-	3	RHCF-4 (Aug)	82-265, 269
						RHCF-20 (Aug)	82-246, 264
						RHCF-23(Aug)	82-247, 263
					2	RHCF-20(Aug)	84-079, 087
						RHCF-23(Aug)	84-080
			TWO	2	-		
			THREE	1	-		
		RWCU	ONE	1	1	CWAF-2	82-27, 28

FORM 17-2882

LCD110482R05

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S6.1
PAGE 1 **OF** 3
MAJOR ITEM: PRESSURE RETAINING BOLTING > 2"

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.
B6.10	B-G-1	CLOSURE HEAD NUTS	ONE	22	-		
			TWO	21	-		
			THREE	21	-		
B6,20	B-G-1	CLOSURE STUDS, IN PLACE	-	-	-		
B6.30	B-G-1	CLOSURE STUDS, WHEN REMOVED	ONE	22	-		
			TWO	21	-		
			THREE	21	-		
B6.40	B-G-1	LIGAMENTS BETWEEN STUD HOLES	ONE	22	-		
			TWO	21	-		
			THREE	21	-		
B6.50	B-G-1	CLOSURE WASHERS AND BUSHINGS					
		WASHERS	ONE	22 Prs	-		
			TWO	21 Prs	-		
			THREE	21 Prs	-		
		BUSHINGS	ONE	22	-		
			TWO	21	-		
			THREE	21	-		
B6.60	B-G-1	PRESSURIZER	-	-	-		
B6.90	B-G-1	STEAM GENERATORS	-	-	-		
B6.120	B-G-1	HEAT EXCHANGERS	-	-	-		
		PIPING	-	-	-		
		PUMPS	-	-	-		

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S6.1
PAGE 2 **OF** 3
MAJOR ITEM PRESSURE RETAINING BOLTING > 2"

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.
B6.180	B-G-1	BOLTS & STUDS, IN PLACE					
		RECIRC PUMP A	ONE	5	5	Bolts, 1 thru 5	82-193 (VT only)
		FLANGE BOLTS	TWO	5	-		
			THREE	6	-		
		RECIRC PUMP B	ONE	5	5	Bolts, 1 thru 5	82-174, 194
		FLANGE BOLTS	TWO	5	-		
			THREE	6	-		
B6.190	B-G-1	BOLTS & STUDS, WHEN REMOVED					
		RECIRC PUMP A & B	-	-	-		
		FLANGE BOLTS	-	-	-		
B6.200	B-G-1	BOLTING					
		RECIRC PUMP A	ONE	5	5	Bolts, 1 thru 5	82-173
		FLANGE BOLTS	TWO	5	-		
			THREE	6	-		
		RECIRC PUMP B	ONE	5	5	Bolts, 1 thru 5	82-192 (VT only)
		FLANGE BOLTS	TWO	5	-		
			THREE	6	-		
		VALVES					
B6.210	B-G-1	BOLTS & STUDS, IN PLACE					
		RECIRC A	ONE	8	8	M02-53A	82-180
			TWO	8	-		
			THREE	8	-		
		RECIRC A	ONE	8	8	M02-43A	82-182
			TWO	8	-		
			THREE	8	-		

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S6.1
PAGE 3 **OF** 3
MAJOR ITEM: PRESSURE RETAINING BOLTING > 2"

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.
B6.210	B-G-1	(CONT'D)					
		RECIRC B	ONE	8	8	M02-52B	82-179
			TWO	8	-		
			THREE	8	-		
		RECIRC B	ONE	8	8	M02-43B	82-181
			TWO	8	-		
			THREE	8	-		
B6.220	B-G-1	BOLTS, & STUDS, WHEN REMOVED					
		RECIRC A & B	-	-	-		
B6.230	B-G-1	BOLTING					
		RECIRC A	ONE	8	8	M02-53A	82-180
			TWO	8	-		
			THREE	8	-		
		RECIRC A	ONE	8	8	M02-43A	82-182
			TWO	8	-		
			THREE	8	-		
		RECIRC B	ONE	8	8	M02-53B	82-179
			TWO	8	-		
			THREE	8	-		
		RECIRC B	ONE	8	8	M02-43B	82-181
			TWO	8	-		
			THREE	8	-		

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S7.1
PAGE 1 **OF** 5
MAJOR ITEM: PRESSURE RETAINING BOLTING <2"

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.
		REACTOR VESSEL					
B7.10	B-G-2	BOLTS, STUDS, AND NUTS					
		HEAD VENT	ONE	8	-		
		HEAD SPRAY	TWO	8	-		
		HEAD SPARE	THREE	8	-		
		CONTROL ROD HOUSINGS	ONE	41	-		
			TWO	40	-		
			THREE	40	-		
B7.20	B-G-2	PRESSURIZER	-	-	-		
B7.30	B-G-2	STEAM GENERATORS	-	-	-		
B7.40	B-G-2	HEAT EXCHANGERS	-	-	-		
		PIPING					
B7.50	B-G-2	BOLTS, STUDS, AND NUTS					
		MAIN STEAM A	ONE	1	-		
			THREE	3	-		
		MAIN STEAM B	TWO	1	-		
		MAIN STEAM C	ONE	1	-		
		MAIN STEAM D	ONE	1	-		
			TWO	1	-		
			THREE	2	-		
		RHR TW36	TWO	2	-		
		RECIRC A	ONE	1	1	Bolts @ RCAJ-20	82-357

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)
NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION–EXAMINATION SUMMARY

TABLE S7.1
PAGE 2 **OF** 5
MAJOR ITEM: PRESSURE RETAINING BOLTING <2"

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.
B7.50	B-G-2	(CONT'D)					
		RECIRC B	THREE	1	-		
		RECIRC BYPASS A	TWO	1	-		
		RECIRC BYPASS B	TWO	1	-		
		HEAD VENT LINE	ONE	1	-		
		PUMPS					
B7.60	B-G-2	BOLTS, STUDS, AND NUTS					
		RECIRC PUMP A GLAND BOLTS	ONE	3	-		
			TWO	3	-		
			THREE	4	-		
		RECIRC PUMP B GLAND BOLTS	ONE	3	-		
			TWO	3	-		
			THREE	4	-		
		VALVES					
B7.70	B-G-2	BOLTS, STUDS, AND NUTS					
		MAIN STEAM A	ONE	2	-		
			TWO	-	-		
			THREE	2	-		
		MAIN STEAM B	ONE	-	-		
			TWO	2	-		
			THREE	2	-		

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S7.1
PAGE 3 **OF** 5
MAJOR ITEM PRESSURE RETAINING BOLTING <2"

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.
B7.70	B-G-2	(CONT'D)					
		MAIN STEAM C	ONE	2	-		
			TWO	-	-		
			THREE	2	-		
		MAIN STEAM D	ONE	-	-		
			TWO	2	-		
			THREE	2	-		
		FEEDWATER A	ONE	1	-		
			TWO	1	-		
			THREE	1	-		
		FEEDWATER B	ONE	1	-		
			TWO	1	-		
			THREE	1	-		
		CORE SPRAY A	ONE	2	2	POS-1758 A014-13B	84-108 84-107
			TWO	1	-		
			THREE	-	-		
		CORE SPRAY B	ONE	1	1	MO-1753	84-172
			TWO	-	-		
			THREE	2	-		
		HPCI STEAM	ONE	1	1	MO-2035	84-128
			TWO	1	-		
		RWCU	ONE	1	1	MO-2398	84-183
			TWO	1	-		
			THREE	1	-		
		RHR REW10	ONE	1	1	MO-2029	84-216
			TWO	2	-		
			THREE	-	-		

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S7.1
PAGE 4 **OF** 5
MAJOR ITEM: PRESSURE RETAINING BOLTING <2"

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.
B7.70	B-G-2	(CONT'D)					
		RHR TW20	ONE	1	-		
			TWO	2	-		
			THREE	-	-		
		RHR TW30	ONE	1	1	MO-2014	84-169
			TWO	1	-		
			THREE	1	-		
		RHR TW36	ONE	1	1	MO-2026	84-173
			TWO	2	-		
			THREE	-	-		
		RCIC STEAM	TWO	1	-		
			THREE	1	-		
		RECIRC BYPASS A	THREE	1	-		
		RECIRC BYPASS B	THREE	1	-		
		RECIRC MANIFOLD	ONE	2	2	M02-65A	82-178
						M02-66A	82-185
			THREE	2	-		
		HEAD VENT LINE	TWO	1	-		
			THREE	2	-		
		BOTTOM HEAD DRAIN	THREE	1	-		
		STANDBY LIQUID CONTROL	ONE	1	1	XP-8	84-215
			TWO	1	-		
			THREE	1	-		
		MAIN STEAM DRAIN	ONE	1	-		
			TWO	1	-		

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S7.1
PAGE 5 **OF** 5
MAJOR ITEM PRESSURE RETAINING BOLTING < 2"

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.
B7.70	B-G-2	(CONT'D)					
		CRD SCRAM HEADER DRAIN LINE	ONE	1	-		
		RECIRC A DRAIN	ONE	2	2	XR-6-1 XR-7-1	82-87 82-88
		RECIRC B DRAIN	TWO	2	-		

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S8.1
PAGE 1 **OF** 1
MAJOR ITEM: VESSEL 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.
		REACTOR VESSEL					
B8.10	B-H	INTEGRALLY WELDED ATTACHMENTS					
		SUPPORT SKIRT	ONE TWO THREE	17 18 18	17% - -	8½" 120" - 180"	84-257, 257R
		STABILIZER LUGS	-	-	-		
B8.20	B-H	PRESSURIZER	-	-	-		
B8.30	B-H	STEAM GENERATORS	-	-	-		
B8.40	B-H	HEAT EXCHANGERS	-	-	-		

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S9.1
PAGE 1 **OF** 14
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.
B9.10	B-J	NOMINAL PIPE SIZE, 4 IN. AND GREATER	-	-	-		
B9.11 & B9.12	B-J	CIRCUMFERNTIAL AND *LONGITUDINAL WELDS					
		MAIN STEAM A					
		PS1-18"	ONE	3	-		
			TWO	-	-		
			THREE	3	-		
		PS1-6"	ONE	1	2	MSAJ-16, 20 (Baseline)	82-311, 312
			TWO	-	-		
			THREE	1	-		
		MAIN STEAM B					
		PS2-18"	ONE	-	-		
			TWO	4	-		
			THREE	3	-		
		PS2-6"	ONE	-	2	MSBJ-15. 21 (Baseline)	82-313, 314
			TWO	1	-		
			THREE	-	-		
		MAIN STEAM C					
		PS3-18"	ONE	2	-		
			TWO	2	-		
			THREE	3	-		
		PS3-6"	ONE	1	2	MSCJ-16, 21 (Baseline)	82-315, 318
			TWO	-	-		
			THREE	-	-		

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)
NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION–EXAMINATION SUMMARY

TABLE S9.1
PAGE 2 **OF** 14
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.
B9.11 & B9.12	B-J	(CONT'D)					
		MAIN STEAM D					
		PS4-18"	ONE	2	-		
			TWO	1	-		
			THREE	3	-		
		PS4-6"	ONE	1	2	MSFJ-17, 21 (Baseline)	82-317, 316
			TWO	-	-		
			THREE	1	-		
		FEEDWATER A	ONE	2	-		
			TWO	-	-		
			THREE	1	-		
			ONE	-	-		
			TWO	2	-		
			THREE	1	-		
		FEEDWATER B	ONE	-	-		
			TWO	2	-		
			THREE	1	-		
		FEEDWATER C	ONE	1	-		
			TWO	-	-		
			THREE	1	-		
		FEEDWATER D	ONE	2	-		
			TWO	-	-		
			THREE	1	-		
			ONE	2	-		
			TWO	1	-		
			THREE	-	-		

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)
NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION–EXAMINATION SUMMARY

TABLE S9.1
PAGE 3 **OF** 14
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.
B9.11 & B9.12	B-J	(CONT'D)					
		CORE SPRAY A	ONE	1	3	CSAJ-19	84-179, 180
						CSAJ-16(Aug.)	84-095, 104
						CSAJ-17(Aug.)	84-079, 106
			TWO	2	-		
			THREE	1	-		
		CORE SPRAY B	ONE	2	4	CSBJ-21	84-170, 175
						CSBJ-22	84-171, 174
						CSBJ-13(Aug.)	84-092, 099
						CSBJ-14(Aug.)	84-091, 100
			TWO	-	-		
			THREE	2	-		
		HPCI-STEAM	ONE	-	-		
			TWO	2	-		
			THREE	2	-		
		RWCU LINE	ONE	-	1	CWAJ-2A	82-320
			TWO	2	-		
			THREE	2	-		
		RHR REW10	ONE	3	6	RHAJ-1, 2, 3	82-252, 253, 275
						RHAJ-25	84-195, 243
						RHAJ-26	84-178, 245
						RHAJ-27	84-242, 244
			TWO	-	-		
			THREE	2	-		
		RHR TW20-16"	ONE	2	6	RHBJ-28, 29	82-31, 53, 32, 52
						RHBJ-1 (Aug)	82-277
						RHBJ-3 (Aug)	82-276
						RHBJ-21(Aug)	84-084, 090
						RHBJ-22(Aug)	84-083
			TWO	2	-		

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)
NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION–EXAMINATION SUMMARY

TABLE S9.1
PAGE 4 **OF** 14
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.
B9.11 & B9.12	B-J	(CONT'D)					
		RHR TW20-16"	THREE	1	-		
		RHR TW20-18"	ONE	-	2	RHBJ-21 (Aug)	82-243
						RHBJ-22 (Aug)	82-244
			TWO	-	-		
			THREE	1	-		
		RHR TW30-16"	ONE	2	4	RHCJ-7, 8	82-33, 55, 34, 54
						RHCJ-21 (Aug)	82-248, 84-086,088
						RHCJ-22 (Aug)	82-249, 84-083
			TWO	2	-		
			THREE	1	-		
		RHR TW30-18"	ONE	-	2	RHCJ-1 (Aug)	82-250
						RHCJ-3 (Aug)	82-251
			TWO	1	-		
			THREE	-	-		
		RHR TW36	ONE	-	1	RHDJ-2(Aug)	84-136, 139
			TWO	3	-		
			THREE	3	-		
		RECIRC A	ONE	1	17	RCAJ-13	82-071, 074
						----------AUGMENTED----------	
						RCAJ-3	82-225
						RCAJ-4	82-120
						RCAJ-5	82-099
						RCAJ-6	82-121
						RCAJ-9	82-226
						RCAJ-11	82-227
						RCAJ-15	82-080
						RCAJ-17	82-228
						RCAJ-20	82-357
						RCAJ-21	82-081

Form 9-0033,Rev.0 (M&SP 5.2)
NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION–EXAMINATION SUMMARY

TABLE S9.1
PAGE 5 **OF** 14
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.
B9.11 & B9.12	B-J	(CONT'D)					
		RECIRC A				RCAJ-23	82-147
						RCAJ-24	82-229
						RCAJ-28	82-230
						RCAJ-30	82-082
						RCAJ-32	82-083
						RCAJ-35	82-256
			TWO	2	-		
			THREE	2	-		
		RECIRC B	ONE	2	16	RCBJ-11, 13	82-069,095,065,094
						----------AUGMENTED----------	
						RCBJ-3	82-258
						RCBJ-4	82-231
						RCBJ-5	82-096
						RCBJ-6	82-232
						RCBJ-9	82-231
						RCBJ-15	82-233
						RCBJ-18	82-234
						RCBJ-19	82-098
						RCBJ-21	82-146
						RCBJ-22	82-235
						RCBJ-26	82-236
						RCBJ-28	82-097
						RCBJ-31	82-237
						RCBJ-34	82-240
			TWO	-	-		
			THREE	2	-		
		RECIRC BYPASS A	ONE	2	6	RBAJ-M12, M13	82-078,302,079,301
						----------AUGMENTED----------	
						RBAJ-2	82-288
						RBAJ-M3	82-289
						RBAJ-M15	82-287
						RBAJ-M16	82-286

Form 9-0033,Rev.0 (M&SP 5.2)
NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION–EXAMINATION SUMMARY

TABLE S9.1
PAGE 6 **OF** 14
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.
B9.1I & B9.12	B-J	(CONT'D)					
		RECIRC BYPASS A	TWO	-	-		
			THREE	1	-		
		RECIRC BYPASS B	ONE	2	6	RBBJ-M7, M8	82-076,213,077,186
						----------AUGMENTED----------	
						RBBJ-2	82-282
						RBBJ-M3	82-283
						RBBJ-M18	82-285
						RBBJ-19	82-284
			TWO	2	-		
			THREE	-	-		
		RECIRC MANIFOLD	ONE	2	21	RMAJ-2, 9	82-30,72,72A,72B,67,73
						----------AUGMENTED----------	
						RMAJ-3	82-214
						RMAJ-5	82-218
						RMAJ-7	82-217
						RMAJ-8	82-270
						RMAJ-10	82-113
						RMAJ-14	82-122
						RMAJ-15	82-216
						RMAJ-16	82-215
						RMBJ-2	82-131
						RMBJ-3	82-219
						RMBJ-5	82-220
						RMBJ-7	82-132
						RMBJ-8	82-271
						RMBJ-9	82-221
						RMBJ-10	82-133
						RMBJ-12	82-222
						RMBJ-14	82-358
						RMBJ-15	82-216
						RMBJ-16	82-224
			TWO	2	-		
			THREE	1	-		

Form 9-0033,Rev.0 (M&SP 5.2)
NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION–EXAMINATION SUMMARY

TABLE S9.1
PAGE 7 **OF** 14
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.
B9.11 & B9.12	B-J	(CONT'D)					
		RECIRC RISERS					
		RISER F	ONE	-	4	----------AUGMENTED----------	
						RRFJ-3	82-238
						RRFJ-4	82-209
						RRFJ-5	82-119
						RRFJ-7	82-190
			TWO	-	-		
			THREE	2	-		
		RISER G					
			ONE	-	4	----------AUGMENTED----------	
						RRGJ-3	82-267
						RRGJ-4	82-207
						RRGJ-5	82-208
						RRGJ-7	82-280
			TWO	-	-		
			THREE	-	-		
		RISER H	ONE	1	4	RRHJ-7	82-187, 062, 062R
						----------AUGMENTED----------	
						RRHJ-3	82-333
						RRHJ-4	82-205
						RRHJ-6	82-206
			TWO	2	-		
			THREE	-	-		
		RISER J					
			ONE	-	4	----------AUGMENTED----------	
						RRJJ-3	82-266
						RRJJ-4	82-118
						RRJJ-5	82-204
						RRJJ-7	82-188
			TWO	-	-		
			THREE	-	-		

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S9.1
PAGE 8 **OF** 14
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.
B9.11 & B9.12	B-J	(CONT'D)					
		RISER K				----------AUGMENTED----------	
			ONE	-	4	RRKJ-3	82-278
						RRKJ-4	82-203
						RRKJ-5	82-117
						RRKJ-7	82-189
			TWO	-	-		
			THREE	2	-		
		RISER A				----------AUGMENTED----------	
			ONE	-	4	RRAJ-3	82-295
						RRAJ-4	82-114
						RRAJ-5	82-197
						RRAJ-7	82-191
			TWO	-	-		
			THREE	-	-		
		RISER B				----------AUGMENTED----------	
			ONE	-	4	RRBJ-3	82-239
						RRBJ-4	82-202
						RRBJ-5	82-115
						RRBJ-7	82-212
			TWO	-	-		
			THREE	2	-		
		RISER C				----------AUGMENTED----------	
			ONE	-	4	RRCJ-3	82-259
						RRCJ-4	82-116
						RRCJ-5	82-201
						RRCJ-7	82-297
			TWO	-	-		
			THREE	-	-		

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S9.1
PAGE 9 **OF** 14
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.
B9.11 & B9.12	B-J	(CONT'D)					
		RISER D				----------AUGMENTED----------	
			ONE	-	4	RRDJ-3	82-198
						RRDJ-4	82-199
						RRDJ-5	82-200
						RRDJ-7	82-150
			TWO	-	-		
			THREE	-	-		
		RISER E				----------AUGMENTED----------	
			ONE	-	4	RREJ-3	82-294
						RREJ-4	82-211
						RREJ-5	82-210
						RREJ-7	82-149
			TWO	-	-		
			THREE	-	-		
		HEAD VENT	ONE	1	-		
		JET PUMP INSTR	ONE	-	1	JPBJ-3 (Aug)	84-042, 051
			TWO	-	-		
			THREE	1	-		
		JET PUMP INSTR.(CANISTER)	-	-	3	Weld #1 (Aug)	84-041, 052
						Weld #2 (Aug)	84-040, 053
						Weld #3 (Aug)	84-039
		INSTRUMENT LINES FROM N11A & N11B	ONE	1	1	VIAJ-19	84-200, 214
			TWO	-	-		
			THREE	1	-		
		CRD SCRAM HDR 8"	ONE	1	-		
			TWO	1	-		
			THREE	-	-		

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S9.1
PAGE 10 **OF** 14
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.
B9.11 & B9.12	B-J	(CONT'D)					
		CRD SCRAM HDR 6"	ONE	-	-		
			TWO	2	-		
			THREE	3	-		
		A LOOP	ONE	-	3	BASELINE EXAMS CDAJ-24, 18, 27	82-327, 328, 006
		B LOOP	ONE	-	3	CDBJ-21, 20, 15	82-005, 334, 335
		CRD SCRAM HDR 4"	ONE	2	-		
			TWO	2	-		
			THREE	3	-		
		A LOOP	ONE	-	11	BASELINE EXAMS CDAJ-1, 8, 10, 11, 12, 13, 15, 16, 36, 42, 43	82-353,349,350,351, 001,556,355,354, 020,352,348,003
		B LOOP	ONE	-	9	CDBJ-1, 6, 7, 8, 9, 10, 28, 34, 37	82-347,343,344,002, 341,340,342,346, 345,004
		SCRAM DISCHARGE VOLUME TANK	ONE	-	-		
			TWO	-	-		
			THREE	1	-		
		A LOOP	ONE	-	2	BASELINE EXAMS CDAJ-54, 55	82-024, 023
		B LOOP	ONE	-	2	CDBJ-45, 46	82-022, 021

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)
NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION–EXAMINATION SUMMARY

TABLE S9.1
PAGE 11 **OF** 14
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.
		CRD SCRAM HEADER 12"				BASELINE EXAMS	
		A LOOP	ONE	-	11	CDAJ-17, 28, 29, 45, 33, 46, 49, 50, 51, 52, 53	82-323,012,016, 010,015,324,325, 326,008,007,013, 337
		B LOOP	ONE	-	-	CDBJ-11, 12, 22, 23, 39, 40, 43, 44	82-014,332,011,018, 009, 017, 331, 330, 336, 339
B9.20	B-J	NOMINAL PIPE SIZE LESS THAN 4 IN.					
B9.21 & B9.22	B-J	CIRCUMFERENTIAL AND *LONGITUDINAL WELDS					
		RCIC-STEAM	ONE	2	2	RSAJ-4 RSAJ-5	84-197 84-196
			TWO	-	-		
			THREE	2	-		
		STANDBY LIQUID CONTROL	ONE	-	3	CPAJ-3A (Aug) CPAJ-4 (Aug) CPAJ-6 (Aug)	84-035, 062 84-034, 063 84-036, 064
			TWO	1	-		
			THREE	-	-		
		MAIN STEAM CONDENSATE LEAKOFF	ONE	2	-		
			TWO	-	-		
			THREE	1	-		
B9.30	B-J	BRANCH CONNECTION WELDS					

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)
NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION–EXAMINATION SUMMARY

TABLE S9.1
PAGE 12 **OF** 14
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.
B9.31	B-J	NOMINAL PIPE SIZE GREATER THAN 2 IN.					
		MAIN STEAM A	ONE	1	2	MSAJ-15, 19 (Baseline)	82-303, 304
			TWO	-	-		
			THREE	1	-		
		MAIN STEAM B	ONE	-	2	MSBJ-16, 20 (Baseline)	82-305, 306
			TWO	1	-		
			THREE	-	-		
		MAIN STEAM C	ONE	1	2	MSCJ-15, 20 (Baseline)	82-308, 307
			TWO	-	-		
			THREE	-	-		
		MAIN STEAM D	ONE	1	2	MSDJ-16, 20	82-310, 309
			TWO	-	-		
			THREE	1	-		
		RWCU	ONE	1	1	CWAJ-1	82-321
		RECIRC A	-	-	-		
		RECIRC B	THREE	1	-		
		RECIRC BYPASS A	TWO	2	-		
		RECIRC BYPASS B	TWO	1	-		
			THREE	1	-		
		RECIRC MANIFOLD	ONE	1	1	RMAJ-12	82-29, 123
			TWO	1	-		

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S9.1
PAGE 13 **OF** 14
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.
B9.32	B-J	NOMINAL PIPE SIZE 2 IN. AND LESS					
		MAIN STEAM B	THREE	1	-		
		RWCU	-	-	-		
		MAIN STEAM CONDENSATE LEAKOFF	ONE	1	-		
			THREE	1	-		
		CRD SCRAM HDR	-	-	-		
		RECIRC DRAIN A & B	TWO	1	-		
B9.40	B-J	SOCKET WELDS					
		HEAT VENT	ONE	4	4	50 51 58 59	84-143 84-142 84-141 84-144
			TWO	5	-		
			THREE	5	-		
		INSTRUMENT LINES	ONE	3	3	VIAJ-1 VIAJ-2 VIAJ-3	84-202 84-201 84-069
			TWO	3	-		
			THREE	3	-		
		BOTTOM HEAD DRAIN	ONE	3	-		
			TWO	3	-		
			THREE	4	-		

FORM 17-2882

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S9.1
PAGE 14 **OF** 14
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.
B9.40	B-J	(CONT'D)					
		STANDBY LIQUID CONTROL	ONE	1	1	CPAJ-22	84-032
			TWO	1	-		
			THREE	2	-		
		MAIN STEAM CONDENSATE LEAKOFF					
			ONE	3	-		
			TWO	3	-		
			THREE	3	-		
		CRD SCRAM HDR DISCHARGES	ONE	3	-		
			TWO	3	-		
			THREE	3	-		
		CRD SCRAM HEADER DRAIN	ONE	-	-		
			TWO	1	-		
			THREE	1	-		
		RECIRC MANIFOLD BYPASS OF M02-65A AND M02-65B	ONE	4	4	VBBJ-8, 9, 10, 11	82-93, 90, 92, 91
			TWO	-	-		
			THREE	3	-		
		RECIRC A & B DRAIN	ONE	2	2	6A, 7A	82-162, 89
			TWO	2	-		
			THREE	3	-		

FORM 17-2882

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S10.1
PAGE 1 **OF** 2

MAJOR ITEM: SUPPORT MEMBERS

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.
B10.10	B-K-1	INTEGRALLY WELDED ATTACHMENTS AND B11.10 COMPONENT SUPPORTS					
		MAIN STEAM A	ONE	1	-		
			TWO	-	-		
			THREE	1	-		
		MAIN STEAM B	ONE	-	-		
			TWO	2	-		
			THREE	-	-		
		MAIN STEAM C	ONE	-	-		
			TWO	1	-		
			THREE	1	-		
		MAIN STEAM D	ONE	-	-		
			TWO	1	-		
			THREE	1	-		
		FEEDWATER A & B	ONE	-	-		
			TWO	2	-		
			THREE	1	-		
		FEEDWATER A	ONE	1	-		
			TWO	-	-		
			THREE	-	-		
		FEEDWATER C & D	ONE	1	-		
			TWO	2	-		
			THREE	-	-		
		FEEDWATER D	ONE	1	-		
			TWO	-	-		
			THREE	-	-		

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S10.1
PAGE 2 **OF** 2
MAJOR ITEM: SUPPORT MEMBERS

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.
B10.10	B-K-1	(CONT'D)					
		RWCU	ONE	-	-		
			TWO	-	-		
			THREE	1	-		
		RHR TW36	ONE	-	-		
			TWO	1	-		
			THREE	-	-		
		RECIRC A	ONE	3	3	RCAK-16, 18 RCAK-33	82-42, 63, 41, 64 82-40, 40R, 176
			TWO	2	-		
			THREE	3	-		
		RECIRC B	ONE	2	2	RCBK-10A, 14	82-36, 66, 35, 68
			TWO	2	-		
			THREE	4	-		
		RECIRC MANIFOLD	ONE	4	4	RMAK-13, 13B RMAK-17A, 17B	82-47, 163, 49, 361 82-154, 175, 157, 164
			TWO	3	-		
			THREE	3	-		
		SCRAM DISCHARGE	ONE	1	-		
			TWO	-	-		
			THREE	-	-		
B10.20	B-K-1	PUMPS	-	-	-		
B10.30	B-K-1	VALVES	-	-	-		

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S11.1
PAGE 1 **OF** 5
MAJOR ITEM: COMPONENT 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.
B11.10	B-K-2	COMPONENT SUPPORTS					
		MAIN STEAM A	ONE	2	-		
			TWO	-	-		
			THREE	2	-		
		MAIN STEAM B	ONE	-	-		
			TWO	2	-		
			THREE	-	-		
		MAIN STEAM C	ONE	2	-		
			TWO	-	-		
			THREE	-	-		
		MAIN STEAM D	ONE	1	-		
			TWO	2	-		
			THREE	1	-		
		FEEDWATER A	ONE	2	-		
			TWO	-	-		
			THREE	1	-		
		FEEDWATER A	ONE	1	-		
			TWO	-	-		
			THREE	2	-		
		FEEDWATER D	ONE	1	-		
			TWO	-	-		
			THREE	2	-		
		FEEDWATER D	ONE	1	-		
			TWO	1	-		
			THREE	1	-		
		CORE SPRAY A	ONE	1	-	CSAK-15	84-111
			TWO	1	-		
			THREE	-	-		

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

MAJOR ITEM: COMPONENT 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.
B11.10	B-K-2	(CONT'D)					
		CORE SPRAY B	ONE	1	1	CSBK-6	84-112
			TWO	-	-		
			THREE	1	-		
		HPCI-STEAM	ONE	-	-		
			TWO	-	-		
			THREE	1	-		
		RWCU	ONE	-	-		
			TWO	-	-		
			THREE	2	-		
		RHR REW10	ONE	-	-		
			TWO	4	-		
			THREE	2	-		
		RHR TW20	ONE	-	-		
			TWO	2	-		
			THREE	4	-		
		RHR TW30	ONE	2	2	RHCK-10	84-261
						RHCK-9	84-260
			TWO	3	-		
			THREE	-	-		
		RHR TW36	ONE	-	-		
			TWO	1	-		
			THREE	-	-		
		RCIC-STEAM	ONE	1	1	RSAK-6	84-217
			TWO	1	-		
			THREE	1	-		

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S11.1
PAGE 3 **OF** 5
MAJOR ITEM: COMPONENT 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.
B11.10	B-K-2	(CONT'D)					
		RECIRC A	ONE	4	4	RCAK-6, 34 PHA-5 PSSA-5	82-043, 039 82-44 82-48
			TWO	4	-		
			THREE	4	-		
		RECIRC B	ONE	4	4	RCBK-10, 12 PHB-6 PSSB-5	82-37, 37R, 38 82-360, 360R 82-359
			TWO	4	-		
			THREE	4	-		
		RECIRC BYPASS A & B	ONE	1	1	RBBK-14	82-75
			TWO	-	-		
			THREE	1	-		
		RECIRC MANIFOLD A & B	ONE	4	4	RMAK-11, 13A, 17 RMBK-17	82-45, 46, 159 82-158
			TWO	3	-		
			THREE	3	-		
		RECIRC RISERS MANIFOLD A & B	ONE	3	3	RRJK-6 RRKK-6 RRDK-6	82-50, 50R 82-51 82-155
			TWO	3	-		
			THREE	4	-		
		HEAD VENT LINE	ONE	1	1	HVAK-21	84-218
			TWO	-	-		
			THREE	1	-		
		BOTTOM HEAD DRAIN	ONE	3	-		
			TWO	2	-		
			THREE	-	-		

Form 9-0033,Rev.0 (M&SP 5.2)
NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION–EXAMINATION SUMMARY

TABLE S11.1
PAGE 4 **OF** 5
MAJOR ITEM: COMPONENT 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.
B11.10	B-K-2	(CONT'D)					
		STANDBY LIQUID CONTROL	ONE	1	1	CPAK-20	84-219
			TWO	1	-		
			THREE	-	-		
		CRD SCRAM HEADER A	ONE	4	-		
			TWO	5	-		
			THREE	5	-		
		CRD SCRAM HEADER B	ONE	5	-		
			TWO	5	-		
			THREE	5	-		
		CRD SCRAM HEADER DISCHARGES A & B	ONE	4	-		
			TWO	7	-		
			THREE	7	-		
		CRD SCRAM HEADER DRAIN	ONE	1	-		
			TWO	-	-		
			THREE	-	-		
		SCRAM DISCHARGE VOLUME TANK	ONE	1	-		
			TWO	-	-		
			THREE	-	-		
		RECIRC VALVE BYPASS A&B	ONE	1	1	VBBK-6A	82-156
			TWO	1	-		
			THREE	-	-		
B11.20	B-K-2	PUMPS					
		COMPONENT SUPPORTS	-	-	-		

FORM 17-2682

LCD110482R11

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S11.1
PAGE 5 **OF** 5
MAJOR ITEM: COMPONENT 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.
B11.30	B-K-2	VALVES					
		COMPONENT SUPPORTS	-	-	-		

FORM 17-2582

LCD110482R11

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S12.1
PAGE 1 **OF** 1
MAJOR ITEM: PUMP CASING & VALVE BODIES

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.
		PUMPS					
B12.10	B-L-1	PUMP CASING WELDS	-	-	-		
B12.20	B-L-1	PUMP CASING					
		RECIRC PUMPS A & B	-	-	-		
		VALVES					
B12.10	B-L-1	VALVE BODY WELDS	-	-	-		
B12.20	B-L-1	VALVES BODY, EXCEEDING 4 IN. NOMINAL PIPE SIZE					
		ATWOOD MORRILL GLOBE VALVES	THREE	-	-		
		TARGET ROCK RELIEF VALVES	THREE	-	-		
		ANCHOR CHECK VALVES	THREE	-	-		
		ATWOOD MORRILL CHECK VALVE	THREE	-	-		
		ROCKWELL CHECK VALVE	THREE	-	-		
		ANCHOR GATE VALVE	THREE	-	-		
		CRANE CHAPMAN GATE VALVE	-	-	-		

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S13.1
PAGE 1 **OF** 1
MAJOR ITEM: REACTOR VESSEL INTERIOR

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.
		REACTOR VESSEL					
B13.10	B-N-1	VESSEL INTERIOR	ONE	*	*	Appendix H Core Spray Appendix I Feedwater *Inspected areas above and below the reactor core that is made accessible for examination by the removal of components during normal refueling.	84-149 84-148
			TWO	-	-		
			THREE	-	-		
B13.20 & B13.30	B-N-1	INTERIOR ATTACHMENTS & CORE SUPPORT STRUCTURES	ONE	*	*	Appendix J Shroud Supports *Inspected visually accessible attachments and supports	84-150
			TWO	-	-		
			THREE	-	-		
		REACTOR VESSEL (PWR)					
B13.30	B-N-1	CORE SUPPORT STRUCTURES	-	-	-		

FORM 17-2582

LCD110482R13

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S14.1
PAGE 1 **OF** 1
MAJOR ITEM: CONTROL ROD HOUSING 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.
		REACTOR VESSEL					
B14.10	B-O	WELDS IN CRD HOUSING	ONE	1	-		
			TWO	1	-		
			THREE	1	-		

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S15.1
PAGE 1 **OF** 1
MAJOR ITEM: PRESSURE RETAINING 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.
B15.10	B-P	REACTOR VESSEL	-	-	-		
B15.50	B-P	PIPING	-	-	-		
B15.60	B-P	PUMPS	-	-	-		
B15.70	B-P	VALVES	-	-	-		
B15.11	B-P	REACTOR VESSEL	-	-	-		
B15.51	B-P	PIPING	-	-	-		
B15.61	B-P	PUMPS	-	-	-		
B15.71	B-P	VALVES	-	-	-		
B15.20	B-P	PRESSURIZER	-	-	-		
B15.30	B-P	STEAM GENERATORS	-	-	-		
B15.40	B-P	HEAT EXCHANGERS	-	-	-		

Form 9-0035,Rev.0 (M&SP 5.2)
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
REACTOR VESSEL							
B3.10 NOZZLE TO VESSEL WELDS							
Heat Vent (N7)	15	UT	HVAD-1	84-140	Low Level ID Clad Roll	None	None
				84-147		None	No S-2 Config.
				84-145		S-1, 360°	No S-2 Config.
Core Spray (N5B)	6B	UT	CSBD-1	84-191	S-1 IDGEO	None	No S-2, Nozzle
				84-190	S-2 IDGEO	None	No S-2, Nozzle
				84-187		S-1,IDGeo,30%	No S-2, Nozzle
CRD Return (N9)	10	UT	CRAD-1	84-192	S-1,Spot, 50%	None	None
				84-189		S-1,IDGeo,45%	No S-2 Config.
				84-198		None	No S-2 Config.
Jet Pump Instrument Nozzle (N8A)	16	UT	JPAD-1	84-194	None	None	None
				84-238		None	S1-4 Limited 5:00 to 7:00 Insulation
				84-237		None	S1-4 Limited 5:00 to 7:00 Insulation

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
B3.20 NOZZLE INSIDE RADIUS SECTION							
Head Vent (N7)	15	UT	HVAD-1	84-146	Low Level ID Clad Roll	S-1 Bore Geo >100% 360°	None
				84-155		S-1 CW Bore Geo 100% 360° S-2 CCW Bore Geo 50% 360°	None
Core Spray (N5B)	6B	UT	CSBD-1	84-193	S-1,IDGeo	S-1 Bore Geo 100% 360°	S-1 Limited 3:00,9:00,12:00 Insulation
				84-158	S-2,IDGeo	S-1 Bore Geo 25% 360° S-2 Bore Geo 25% 360° S-3 Bore Geo 100% 360°	None
CRD Return (N9)	10	UT	CRAD-1	84-168	S-1 Spot 50%	S-3,Bore Geo 35% Int. S-4 Bore Geo 35% Int.	S1-4 Limited 9:00 Insulation
				84-240		S-3 ID Geo Int. 50% S-4 ID Geo Int. 30%	None
Jet Pump Instrument Nozzle (N8A)	16	UT	JPAD-1	84-241	None	S-1 IDGeo Int. 360° 30%	Scans Limited 4:30 to 7:30 Insulation
				84-239		S-3 ID.Geo. Int. 360° 50% S-4 ID.Geo. Int. 360° 50%	None

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
B3.90 & B3.100 Nozzle Inside Radius							
Feedwater Nozzle"A"	5A	UT	N4A	84-160	None	S-3 Bore Geo >100% - 360°	None
Feedwater Nozzle"A"	5A	UT	N4A			S-4 Bore Geo >100% - 360°	
				84-167		S-3,4 Bore Geo 35% 360° Intr.	None
Feedwater Nozzle"B"	5A	UT	N4B	84-151	S-1 Clad Noise	S-3,4 Bore Geo >100% 360°	S-1 Limited 2:00 to 4:00 & 8:00 to 10:00 due to Insulation
				84-153	S-2 Spot Ind.	S-3,4 Bore Geo <100% 360°	None
Feedwater Nozzle"C"	5B	UT	N4C	84-157	Spot Ind. 4:00,6:00, 9:00	S-3,4 Bore Geo >100% 360°	S-1 Limited 2:00 to 4:00 Insulation
				84-159		S-3,4 Bore Geo >100% 360°Intr	Scans limited at 9:00 for 1" due to the thermocouple
Feedwater Nozzle"D"	5B	UT	N4D	84-152	None	S-3,4 Bore Geo >100% 360°Intr	S-1 Limited 2:00 to 4:00 8:00 to 10:00 due to Insulation
				84-154		S-3,4 Bore Geo <100% 360°Intr	None

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
B5.10 NOZZLE TO SAFE END WELDS							
Head Vent(N7)	15	UT	HVAF-2	84-134	S-1,IDGeo 70%	S-1,IDGeo 10% 360°	No S-2, Flange
		PT		84-135	None	None	None
Head Spare	14	UT	HSBF-2	84-138	S-1,Geo 70%	S-2,ID Geo 40% Int.	No S-1, 1S & 2S Flange
		PT		84-137	None	None	None
Core Spray(N5B)	6B	UT	CSBF-2	84-236	None	None	None
		PT		84-181	None	None	None
CRD Return(N9)	10	UT	CRAF-2	84-166	None	S-1,IDGeo 40% S-3,ODGeo 30% S-1S,ODGeo 25% S-2S,ODGeo 25% S-3S,IDGeo 30% S-4S,IDGeo 30%	No S-2,Config.
		PT		84-162	None	None	None
Stand By Liquid Control	17	UT	CPAF-2	84-061	S-1,IDGeo 60%	S-1,IDGeo 25% 360° S-2,IDGeo 20% 360°	None
		PT		84-033	None	None	None
Jet Pump Instrumentation B (NFB)	16	UT	JPBF-2	84-050	S-2,Geo, 50%	S-2,ID Geo 25% S-3,ID Geo 15% CCW.5:00to6:00 ID Geo 15% CCW.5:00to8:00 ID Geo 30% Entire Length.	No S-5S & S-7S, Config.
		PT		84-043	None	None	None

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
Instrumentation Lines 'A' (N11A)	18	UT	VIAF-2	84-075	S-1,Geo 25%	S-1,ID Geo 15% S-1,OD Geo 25% S-2,ID Geo 20% S-2,OD Geo 25%	None
		PT		84-070	None	None	None
'B' (N11B)	18A	UT	VIBF-2	84-074	S-1,Geo 20%	S-1,ID Geo 30% S-2,ID Geo 20% S-2,OD Geo 25%	None
		PT		84-071	None	None	None
"A" (N12A)	19	UT	VICF-2	84-164	S-1,ODGeo 25% S-2,ODGeo 30%	None	None
		PT		84-161	None	None	None
"B" (N12B)	19	UT	VIDF-2	84-165	None	None	None
		PT		84-163	None	None	None
B5.50 Safe-end Welds							
Core Spray 'A' (TW7-8"EF)	6A	UT	CSP-90-7	84-220	S-1,IDGeo 50% ODGeo 60% S-2,IDGeo 55%	None	None
		PT		84-259	None	None	None
		UT	CSAF-14	84-096	S-1&2,Geo	S-1,IDGeo, 20% - 360° S-3,ODGeo 20% spot S-4,ODGeo 20%	S-2 B.E.,elbow inside radius
		PT		84-103	None	None	None

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
Core Spray "A"		UT	CSAF-18	84-094	S-1&2,Geo	S-1,ID,ODGeo 35% - 360° S-2,ID.ODGeo 35% - 360° S-3,ODGeo. < 20% - 360°	S-2 B.E. elbow inside Radius
		PT		84-098	None	None	None
Core Spray "B" (TW11-8"EF)	6B	UT	CSP-270-7	84-184	S-1,IDGeo 90% OD,Geo 30% S-2,ID Geo 70%	S-1,ID,ODGeo 25% - 360° S-2,ID,ODGeo 20% - 360° S-3,4,1s,2s Spot ID @3:00	None
		PT		84-182	None	None	None
		UT	CSP-270-9	84-213	S-1,IDGeo 60% S-2,IDGeo 105%	None	None
		PT		84-156	None	None	None
		UT	CSBF-12	84-093	S-1,S-2 Geo	S-1,IDGeo 20% 9:00 to 12:00 S-2,ODGeo 20% - 360° S-3,ODGeo 30% S-4s,ODGeo 20% - 360°	S-1 B.E. Elbow Inside Radius
		PT		84-102	None	None	None

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
Core Spray "B" cont'd		UT	CSBF-16	84-105	S-1,S-2 Geo	S-1,ID/ODGeo 25/35%-360° S-2,ID/ODGeo 25/35%-360° S-3,ID/ODGeo 20/30%-360° S-4,ODGeo 20-30% @10:00 S-1s,ODGeo 20-25%-360° S-2s,ID/ODGeo 20/30%-360° S-3s,ODGeo 25-35%-360° S-4s,ODGeo 25-35%-360°	None
		PT		84-101	None	None	None
HPCI STEAM (PS 18-8"EF)	7	UT	PSAF-2B	84-113	None	S-1,OD Geo.35% S-2,ID Geo.35% S-2,OD Geo.40% S-3,ID Geo.25% S-3,OD Geo.35% S-4,ID Geo.25% S-4,OD Geo.35% S-1s,OD Geo.30% S-2s,OD Geo.3D% S-3s,ID Geo.25% S-3s,OD Geo.35% S-4s,ID Geo.25% S-4s,OD Geo.35%	None
		PT		84-109	None	None	None

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
HDCI Steam cont'd	7	UT	PSAF-2C	84-114	S-1,ID, Geo.60%	S-1,ID Geo.100% S-1,OD Geo.100% S-2,OD Geo.35% S-3,OD Geo.25% S-4,ID Geo.25% S-4,OD Geo.25% S-1s,OD Geo.30% 9:00 to 12:00 S-2s,OD Geo.35% S-3s,OD Geo.35% S-4s,OD Geo.30%	None
		PT		84-110	None	Arc Strike at 7:00	None
		PT		84-110R		None Arc Strike Buffed Out	None
Residual Heat Removal (REW20-16"EF)	11B	UT	RHBF-20	84-089	S-1,ID Geo.45%	S-2,ID Geo 30% S-3,OD Geo 15% 12:00 S-2s,Spot,15% 10:00 S-3s, OD Geo 20% 9:00 S-4s, 3 Linears 20% 11:00	None
		PT		84-085	None	None	None
	11B	PT	RHBF-24	84-082	None	None	None
(REW30-16"DC)	11C	UT	RHCF-20	84-087	S-1,ID/OD Geo.25%	S-1,ID/OD Geo 30% - 360° S-2,Spot At 12:00 & 3:00 25%	None

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
(REW30-16"DC)					S-2,ID/OD Geo 60%	S-3,Spot At 12:00 20% S-4,Linear at 6:00 20% S-2s Linear at 4:00-12:00 20%	
		PT		84-079	None	None	None
		PT	RHCF-23	84-080	None	None	None
B7.70 Bolts,Studs,and Nuts (Valve)							
Core Spray "A"	6A	VT	POS-1758	84-108	None	None	None
		VT	A014-13B	84-107	None	Loose Nut	None
				84-107R		None, tightened Nut	
Core Spray "B"	6B	VT	MO-1753	84-172	None	None	None
High Pressure Coolant Injection - Steam	7	VT	MO-2035	84-128	None	None	None
Reactor Water Clean-Up	9	VT	MO2398	84-183	None	None	None
Residual Heat Removal							
(REW10)	11A	VT	MO2029	84-216	None	None	None
(REW30)	11C	VT	MO2014	84-169	None	None	None
(TW-36)	11D	VT	MO2026	84-173	N/A	None	None
Standby Liquid Control	22	VT	XP-8	84-215	N/A	None	None

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
B8.10 Integrally Welded Attachments							
Rx Support Skirt	Fig S	MT	HCAH-2	84-257	N/A	9 Linears between 170° - 180°	None
120° - 180°				84-257R		None,Linears Removed	
B9.11 & B9.12 Circumfenertial & Longitudinal Welds							
Core Spray "A" (TW7-8"ED)	6A	UT	CSAJ-19	84-180	NONE	S-2,ID Geo. 25% - 360°	No S-1 due to location of penetration
(TW7-8"EF)		MT		84-179	N/A	None	Exam limited on upstream side of weld due to penetration
		UT	CSAJ-16	84-095	S-2,GEO	S-2,OD Geo. 20% - 360° S-3,OD Geo. 20% - 360° S-3s,OD Geo. 25% - 360° S-4s,OD Geo. 20% - 360°	No.S-1,S-1s, S-2s Config. (Valve)
		PT		84-104	N/A	None	None

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
Core Spray cont'd		UT	CSAJ-17	84-106	S-1,Geo.	S-1,OD Geo. 25-35%-360° S-4,OD Geo. 20-25%,@4:00 S-1s,OD Geo. 25-35%-360° S-2s,OD Geo. 25-35%-360°	No S-2,S-3s, S-4s,Config. (Valve)
		PT		84-097	N/A	None	None
Core Spray "B" (TW11-8"ED)	6B	UT	CSBJ-21	84-170	NONE	S-1,S-2,ID OD Geo.50% intermittent S-3,ID Geo. 30% - 12:00 S-4,OD Geo. 30% - 4:30	None
		MT		84-175	N/A	None	None
		UT	CSBJ-22	84-171	NONE	S-2,ID,OD Geo 50% intermittent S-4,ID,OD Geo 20% intermittent	No S-1 due to Config.(valve)
		MT		84-174	N/A	None	None
(TW11-8"EF)		UT	CSBJ-13	84-092	None	OD Geo. 20% @9:00	No S-1,S-1s, S-2s,Config. (Valve)
		PT		84-099	None	None	None

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
(TW11-8"EF)		UT	CSBJ-14	84-091	S-1,Geo.	S-1,OD Geo. 30% - 360° S-4,OD Geo. 20% - 4:00 S-1s,OD Geo. 40% - 360° S-2s,OD Geo. 30% - 360°	No S-2,S-3s, S-4s,Config. (Valve)
		PT		84-100	None	None	None
Residual Heat Removal (RE10-18"ED)	11A	UT	RHAJ-25	84-243	MISMATCH	None	None
		MT		84-195	N/A	None	None
	11A	UT	RHAJ-26	84-245	MISMATCH	S-1,ID/OD Geo 130%/60%-360° S-2,ID/OD Geo. 100%/25%-360°	None
		MT		84-178	N/A	None	None
		UT	RHAJ-27	84-244	N/A	None	No S-2 due to penetration S-3,S-4 limited because of penetration
		MT		84-242	N/A	None	None
(TW20-16"DB)	11B	UT	RHBJ-21	84-090	None	S-2 Linear 20% @11:00 S-3,ID.Geo. 15% @10:00 S-4s Linear 15% @11:00	No S-1,S-1s, S-2s due to Config.

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
(TW20-16"DB)		PT		84-084	None	None	None
		PT	RHBJ-22	84-083	None	None	as welded conditio
(TW30-16"DB)	11C	UT	RHCJ-21	84-088	None	S-2,Spot Ind. 15% @11:00 ID Geo.15%-360° S-3 & 4,Spot,Ind 15% @ 9:00 ID.Geo 15%-360° S-3sSpot Ind. 20% 11:00 ID Geo.15%-360° S-4s,Multiple Spot Indications 15%-12:00to3:00 ID Geo.10%-360°	No S-1,S-1s, S-2s due to Config.
		PT		84-086	None	None	None
		PT	RHCJ-22	84-081	None	None	As welded conditio
RHR (TW36-4"ED)	11D	UT	RHDJ-2	84-139	None	S-2,ID Geo.40% 360° Inter.	No S-1 due to flange
		PT		84-136	None	None	None
Jet Pump Instrumentation"B"	16	UT	JPBJ-3	84-051	ID,OD,Geo. 75%	S-2,3,4 ID/OD Geo. 20%/30%-360° S-9,10,11,12 ID/OD Geo. 15%/25%-360°	No S-1 due to config.
		PT		84-042	None	None	None

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
Jet Pump Instrumentation *NOTE: Not Specifically Listed Under Class 1 or Class 2	16	UT	Weld #1	84-052	N/A	S-1,2,ID Geo. 25%-360°Inter. S-3,S-4 Linear Axial indicat. 25%-360° Inter. S-4s Linear . Indic.25% @11:00	
		PT		84-041	N/A	None	None
		UT	Weld #2	84-053	N/A	S-2,OD.Geo. 20% @8:00	None
		PT		84-040	N/A	None	None
		PT	Weld #3	84-039	N/A	None	None
Instrumentation Lines(N11A)	18	UT	VIAJ-19	84-214	N/A	S-1,3,4,1s, 2s,3s,4s,OD Geo 20%-360° Inter.	No Scan on weld crown due to roughness S-2 limited to 1" due to Config.
		PT		84-200	N/A	None	None
B9.21 & B9.22 Circumferential and Longitudinal Welds							
Reactor Core Injection Coolant-Steam (PS17-3"ED)	12	MT	RSAJ-4	84-197	NONE	None	None
		MT	RSAJ-5	84-196	NONE	None	None
B9.40 Socket Welds							
Head Vent (V15-2"ED)	15	MT	50	84-143	N/A	None	None
		MT	51	84-142	N/A	None	None
		MT	58	84-141	N/A	None	None
		MT	59	84-144	N/A	None	None

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
Instrumentation Lines	18	PT	VIAJ-3	84-069	None	None	None
		PT	VIAJ-2	84-201	None	None	None
		PT	VIAJ-1	84-202	None	None	None
Standby Liquid Control (CH2-1½"EF)	22	PT	CPAJ-22	84-032	None	None	None
B11.10 Component Supports							
Core Spray"A" (TW7-8"EF)	6A	VT	CSAK-15	84-111	None	None	None
Core Spray"B" (TW11-8"EF)	6B	VT	CSBK-6	84-112	None	None	None
Residual Heat Removal (TW30-16"DB)	11C	VT	RHCK-9	84-260	None	None	None
		VT	RHCK-10	84-261	None	None	None
Reactor Core Injection Coolant-Steam (PS17-3"ED)	12	VT	RSAK-6	84-217	N/A	None	None
Head Vent (V15-2"ED)	15	VT	HVAK-21	84-218	N/A	Loose Nut	Hangar Drawing Not Available
				84-218R		Loose nut tightened, bent hangar rod, NOTE:Bent hangar rod was evaluated and accepted as is.	
Standby Liquid Control (CH2-1½")	22	VT	CPAK-20	84-219	None	None	Hangar drawing not available

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
B13.10 Vessel Interior							
Core Spray System		VT	Appendix H	84-149	None	None	None
Feedwater System		VT	Appendix I	84-148	None	N4C&N4D crack indications on sparger nozzles	None
B13.2 Vessel Interior Attachments							
Shroud Support welds		VT	Appendix J	84-150	None	None	None

APPENDIX B

ASME CLASS 2 EXAMINATIONS

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S1.2
PAGE 1 **OF** 1
MAJOR ITEM: VESSEL 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.
C1.10	C-A	SHELL CIRCUMFERENTIAL WELDS					
		RHR HEAT EXCHANGERS	-	(3)	-	-	MULTIPLE VESSELS
		E-200A	ONE	1	1	W-1	84-037, 177
			TWO	1	-	-	-
		E-200B	THREE	1	-	-	-
C1.20	C-A	HEAD CIRCUMFERENTIAL WELDS					
		RHR HEAT EXCHANGERS		(1)			
		E-200A	-	-	-	-	-
		E-200B	TWO	1	-	-	-
C1.30	C-A	TUBE SHEET TO SHELL WELDS	-	-	-	-	-

FORM 17-2582

JFS031885WMH01-LT

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S2.2
PAGE 1 **OF** 1
MAJOR ITEM: NOZZLE 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.
C2.10	C-B	NOZZLES IN VESSELS 1/2 IN. OR LESS IN NOMINAL THICKNESS	-	-	-	-	-
C2.20	C-B	NOZZLES IN VESSELS OVER 1/2 IN. IN NOMINAL THICKNESS					
		RHR HEAT EXCHANGERS					
		E-200A	ONE	1	1	W-7	84-027, 84-176
			TWO	1	-	-	
			TWO	1	-	-	
		E-200B	THREE	1	-	-	

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S3.2
PAGE 1 **OF** 9
MAJOR ITEM: SUPPORT MEMBERS

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.
C3.10	C-C	INTEGRALLY WELDED SUPPORT ATTACHMENTS	-	-			
		RHR HEAT EXCHANGERS		(3)			
		E-200A	ONE	1	2	Support"A"&"B"	84-044
			TWO	1			
		E-200B	THREE	1			
C3.20	C-C	COMPONENT SUPPORTS					
		RHR HEAT EXGHANGERS					
		E-200A	ONE	2	2	Support"A"&"B"	84-044
			TWO	1			
		E-200B	TWO	1			
			THREE	2			
C3.40	C-C	SUPPORTS-MECHANICAL AND HYDRAULIC	-	-			
		PIPING	-	-			
C3.40	C-C	*INTEGRALLY WELDED SUPPORT ATTACHMENTS					*INCLUDES THE CORRESPONDING C3.50 (VT-3) & C3.60 (VT-4) EXAMINATIONS WHERE APPLICABLE
		MAIN STEAM A	ONE	1			
			TWO	-			
			THREE	-			
		MAIN STEAM B	ONE	-			
			TWO	1			
			THREE	-			
		MAIN STEAM C	ONE	-			
			TWO	1			
			THREE	-			

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)
NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION–EXAMINATION SUMMARY

TABLE S3.2
PAGE 2 **OF** 9
MAJOR ITEM: SUPPORT MEMBERS

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.
C3.40	C-C	(CONTINUED)					
		MAIN STEAM D	ONE	-			
			TWO	-			
			THREE	1			
		SUPPLY TO STEAM SEAL SYSTEM	ONE	-			
			TWO	-			
			THREE	1			
		HPCI WATER DISCHARGE	ONE	1	1	CIAK-31	82-101
			TWO	1			
			THREE	-			
		HPCI STEAM	ONE	-			
			TWO	1			
			THREE	1			
		HPCI STEAM DISCHARGE	ONE	-			
			TWO	2			
			THREE	-			
		CORE SPRAY A DISCHARGE	ONE	1	1	CSAK-35	84-067, 067R
			TWO	1			
			THREE	-			
		CORE SPRAY B DISCHARGE	ONE	-			
			TWO	-			
			THREE	2			
		REACTOR WATER FROM SKIMMER SYSTEM	ONE	1			
			TWO	1			
			THREE	1			

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S3.2
PAGE 3 **OF** 9
MAJOR ITEM: SUPPORT MEMBERS

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.
C3.40	C-C	(CONTINUED)					
		RHR SERVICE WATER	ONE	1	1	SWAK-42	82-292, 109, 109R
			TWO	-			
			THREE	-			
		RHR SUCTION A	ONE	-			
			TWO	2			
			THREE	-			
		RHR DISCHARGE A	ONE	-			
			TWO	1			
			THREE	-			
		RHR SUCTION B	ONE	-			
			TWO	-			
			THREE	2			
		RHR DISCHARGE B TW19-10"GE	ONE	-			
			TWO	1			
			THREE	-			
		TW20-16"GE	ONE	-			
			TWO	-			
			THREE	1			
		CONTAINMENT SPRAY A & B	ONE	1			
			TWO	1			
			THREE	2			

Form 9-0033,Rev.0 (M&SP 5.2)
NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION–EXAMINATION SUMMARY

TABLE S3.2
PAGE 4 **OF** 9
MAJOR ITEM: SUPPORT MEMBERS

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.
C3.50	C-C	*COMPONENT SUPPORTS					*INCLUDES THE CORRESPONDING C3.60 (VT-4) EXAMINATIONS WHERE APPLICABLE
		MAIN STEAM A	ONE	2			
			TWO	2			
			THREE	2			
		MAIN STEAM B	ONE	2			
			TWO	2			
			THREE	2			
		MAIN STEAM C	ONE	2			
			TWO	2			
			THREE	2			
		MAIN STEAM D	ONE	2			
			TWO	2			
			THREE	2			
		SUPPLY TO STEAM SEAL SYSTEM					
		PS11-6"ED	ONE	2			
			TWO	2			
		PS14-6"ED	THREE	3			
		PS7-10"ED	ONE	3			
			TWO	3			
			THREE	3			
		PS7-8"ED	THREE	2			
		MAIN STEAM EQUALIZER HDR	ONE	-			
			TWO	2			
			THREE	1			

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S3.2
PAGE 5 **OF** 9
MAJOR ITEM: SUPPORT MEMBERS

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.
C3.50	C-C	(CONTINUED)					
		HPCI WATER DISCHARGE	ONE	6	7	TWH-38, CIAK-59 SR-69, SS-35 CIAK-26,27A,28	82-106, 82-086 84-011 84-019,012,013
			TWO	6			
			THREE	5			
		HPCI WATER SUCTION	ONE	-			
			TWO	2			
			THREE	2			
		HPCI STEAM	ONE	3	3	TDAK-23, 25, 26	82-108, 107, 103
			TWO	5			
			THREE	5			
		HPCI STEAM DISCHARGE	ONE	2			
			TWO	4			
			THREE	-			
		CORE SPRAY A SUCTION	ONE	2	2	TWH-53,54	84-006, 010
			TWO	2			
			THREE	1			
		CORE SPRAY A DISCHARGE	ONE	5	4	TWH-81,82 CSAK-31,32A	84-009, 008 84-066, 066R, 068
			TWO	6			
			THREE	5			
		CORE SPRAY B SUCTION	ONE	1	1	TWH-55	84-018
			TWO	-			
			THREE	3			
		CORE SPRAY B DISCHARGE	ONE	3	3	TWH-69,70,113	84-058, 058R, 016 016R, 015, 015R
			TWO	4			
			THREE	5			

Form 9-0033,Rev.0 (M&SP 5.2)
NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION–EXAMINATION SUMMARY

TABLE S3.2
PAGE 6 **OF** 9
MAJOR ITEM: SUPPORT MEMBERS

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.
C3.50	C-C	(CONTINUED)					
		REACTOR WATER FROM SKIMMER SYSTEM	ONE	2			
			TWO	-			
			THREE	4			
		RCIC WATER SUCTION	ONE	1	1	TW-25	84-014
			TWO	1			
			THREE	-			
		RCIC STEAM DISCHARGE	ONE	2	3	SS-38A&B,RSH-13	82-102,102R,104,105
			TWO	2			
			THREE	2			
		RHR SERVICE WATER	ONE	5	5	SWAK-25,26,31 34,43	84-235,235R,024, 024R,017,023,023R 043
			TWO	5			
			THREE	6			
		RHR SUCTION A REW10-18"HE	ONE	2	2	SS-21,TWH-7	84-133,131,131R
			TWO	2			
			THREE	-			
		TW14B-20"HE	ONE	2	2	TWH-6,SS-24	84-031,029
			TWO	1			
			THREE	-			
		TW28-20"HE	ONE	-			
			TWO	-			
			THREE	3			

Form 9-0033,Rev.0 (M&SP 5.2)
NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION—EXAMINATION SUMMARY

TABLE S3.2
PAGE 7 **OF** 9
MAJOR ITEM: SUPPORT MEMBERS

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.
C3.50	C-C	(CONTINUED)					
		RHR DISCHARGE A TW29-10"GE	ONE TWO THREE	1 1 2	1	TWH-61	84-030
		TW30-14"GE	ONE TWO THREE	3 3 2	3	TWH-63,SS-25, TWH-73	84-028,132,076, 076R
		TW30-16"GE	ONE TWO THREE	- 1 -			
		TW30-16"DE	ONE TWO THREE	- 1 -			
		RHR SUCTION B REW10-18"HE	ONE TWO THREE	- - 4			
		TW14A-20"HE	ONE TWO THREE	2 - 2	2	TWH-16, TWH-58	82-291, 82-290
		TW27-20"HE	ONE TWO THREE	- 2 1			

Form 9-0033,Rev.0 (M&SP 5.2)
NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION–EXAMINATION SUMMARY

TABLE S3.2
PAGE 8 **OF** 9
MAJOR ITEM: SUPPORT MEMBERS

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.
C3.50	C-C	(CONTINUED)					
		RHR DISCHARGE B					
		TW29-10"GE	ONE	-			
			TWO	-			
			THREE	2			
		TW19-14"GE	ONE	-			
			TWO	1			
			THREE	-			
		TW20-14"GE	ONE	3	3	TWH-100,101,102	84-057,055,056
			TWO	2			
			THREE	4			
		TW22-14"GE	ONE	1	2	TWH-168,SR-23	84-054,059
			TWO	-			
			THREE	-			
		CONTAINMENT SPRAY A & B					
		TW23-12"GE	ONE	2	2	SS-30, TWH-140	82-145, 140, 140R
			TWO	1			
		TW23-10"GE	THREE	3			
		TW33-12"GE	ONE	2	2	TWH-74, TWH-75	82-144, 82-143
			TWO	1			
		TW33-10"GE	THREE	4			
C3.60	C-C	*SUPPORTS - MECHANICAL AND HYDRAULIC	-	-			*INCLUDED UNDER C3.40 & C3.50
		PUMPS					

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S3.2
PAGE 9 **OF** 9
MAJOR ITEM: SUPPORT MEMBERS

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.
C3.70	C-C	*INTEGRALLY WELDED SUPPORT ATTACHMENTS					*INCLUDES THE CORRESPONDING C3.80 (VT-3) EXAMINATIONS
		RHR PUMPS (P-202D)	TWO THREE TWO ONE	1 1 1 1	1	Support "D"	84-065, 073
		CORE SPRAY PUMPS (14-1B)	THREE ONE	1 1	1	Support "B"	84-001, 007
C3.80	C-C	COMPONENT SUPPORTS					
		HPCI TURBINE & PUMPS	ONE TWO THREE	3 3 5	1	Support "A"	82-110
		RCIC TURBINE & PUMP	ONE TWO THREE	1 1 2			
C3.90	C-C	SUPPORTS - MECHANICAL AND HYDRAULIC	-	-			
		VALVES					
C3.100	C-C	INTEGRALLY WELDED SUPPORT ATTACHMENTS	-	-			*INCLUDED UNDER C3.40, C3.50, & C3.60
C3.110	C-C	COMPONENT SUPPORTS	-	-			
C3.120	C-C	SUPPORTS - MECHANICAL AND HYDRAULIC	-	-			

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S4.2
PAGE 1 **OF** 1
MAJOR ITEM: PRESSURE RETAINING BOLTING > 2"

SUB ITEM	EXAM CATE-GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REO'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C4.10	C-D	BOLTS AND STUDS	-	-			
		PIPING					
C4.20	C-D	BOLTS AND STUDS	-	-			
		PUMPS					
C4.30	C-D	BOLTS AND STUDS	-	-			
		VALVES					
C4.40	C-D	BOLTS AND STUDS	-	-			

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S5.2
PAGE 1 **OF** 7
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.
C5.10	C-F	PIPING WELDS 1/2 in. OR LESS NOMINAL WALL THICKNESS					RELIEF NO. 15
C5.11 & C5.12	C-F	CIRCUMFERENTIAL AND *LONGITUDINAL WELDS					*2.5T MIN. FROM EACH SCHEDULED CIRC WELD INTER-SECTION WILL BE EXAMINED
		('75 CATEGORY C-F)					
		SUPPLY TO STEAM SEAL SYSTEM					
		PS10-5"	ONE	3			
			THREE	2			
		PS11-6"ED	ONE	1			
		PS12-6"ED	-	-			
		PS13-6"ED	-	-			
		PS14-6"ED	THREE	1			
		RHR SUCTION A & B					
		REW10-18"HE	ONE	2	2	32, 403	82-184, 82-183
			TWO	2			
			THREE	2			
		TW14B-20"HE	ONE	1	1	355	82-365
		TW14A-20"HE	-	-			
		TW16-14"HE	TWO	1			
		TW18-14"HE	-	-			
		TW15-14"HE	-	-			
		TW17-18"HE	THREE	1			

FORM 17-2682

LCD120682R05

Form 9-0033,Rev.0 (M&SP 5.2)
NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION–EXAMINATION SUMMARY

TABLE S5.2
PAGE 2 **OF** 7
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.
C5.11 & C5.12	C-F	(CONTINUED)					
		RHR DISCHARGE A & B					
		TW29-10"GE	TWO	2			
			TWO	1			
		TW19-10"GE	THREE	2			
		TW29-14"GE	ONE	1	1	16	84-047
		TW19-14"GE	TWO	2			
		TW30-14"GE	ONE	2	2	369, 370	84-049, 84-048
			TWO	3			
		TW20-14"GE	TWO	2			
			THREE	2			
		TW30-16"GE	TWO	1			
		TW20-16"GE	ONE	1	1	25	84-077
		TW22-14"GE	ONE	1	1	348	84-078
		('75 CATEGORY C-G)					
		HPCI WATER SUCTION					
		TW1-14"HE	TWO	2			
		C16-14"HE	THREE	1			
		HPCI STEAM					
		PS18-8"ED	TWO	2			
			THREE	2			
		HPCI STEAM DISCH					
		RS2-16"HE	TWO	2			
			THREE	1			

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)
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.
C5.11 & C5.12	C-F	(CONTINUED)					
		RS2-18"HE	THREE	1			
		RS2-20"HE	-	-			
		CORE SPRAY A & B SUCTION					
		TW6-12"HE	ONE	2	2	18, 532	84-004,005
		TW10-12"HE	THREE	2			
		CORE SPRAY A & B DISCHARGE					
		TW7-10"GE	ONE	2	2	1, 4	84-003,002
			TWO	1			
		TW11-10"GE	THREE	2			
		TW7-8"ED	ONE	1	1	CSAJ-32	84-072
		TW11-8"ED	-	-			
		TW8-8"GE	-	-			
		TW12-8"GE	THREE	1			
		REACTOR WATER FROM SKIMMER SYSTEM					
		REW11-8"HE	ONE	1			
			TWO	2			
			THREE	1			
		RCIC WATER SUCTION					
		TW5-6"HE	ONE	1	1	14	82-100
			TWO	1			
		C17-6"HE	THREE	1			

Form 9-0033,Rev.0 (M&SP 5.2)
NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION–EXAMINATION SUMMARY

TABLE S5.2
PAGE 4 **OF** 7
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.
C5.11 & C5.12	C-F	(CONTINUED)					
		RCIC STEAM DISCHARGE					
		RS3-8"HE	ONE	1			
			TWO	2			
			THREE	1			
		RHR SERVICE WATER					
		SW9-8"GE	ONE	2	2	SWAJ-39,40	84-186,185
			TWO	2			
			THREE	2			
		RHR SUCTION A & B					
		TW28-20"HE	ONE	1	1	3	84-046
		TW27-20"HE	TWO	1			
		CONTAINMENT SPRAY A & B					
		TW23-12"GE	ONE	1	1	22	82-142
		TW33-12"GE	TWO	1			
			THREE	1			
		TW23-10"GE	ONE	1	1	28	82-141
		TW33-10"GE	THREE	1			
	C-F	FEEDWATER TO RWCU TO HPCI	ONE		6	AUGMENTED	
						W-1	84-115, 121
						W-2	84-116, 122
						W-3	84-117, 123
						W-4	84-120, 126
						W-12	84-118, 124
						W-12A	84-119, 125

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S5.2
PAGE 5 **OF** 7
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.
C5.11 & C5.12	C-F	CONTROL ROD DRIVE TO REACTOR WATER CLEAN-UP	ONE		5	AUGMENTED W-7 W-11 W-12 W-13 W-14	 84-247, 253 84-246, 258 84-250, 256 84-249, 254 84-248, 255
C5.20	C-F	PIPING WELDS OVER 1/2 in. NOMINAL WALL THICKNESS					
C5.21 & C.22	C-F	CIRCUMFERENTIAL AND *LONGITUDINAL WELDS					*2.5TMIN FROM EACH SCHEDULED CIRC WELD INTER-SECTION WILL BE EXAMINED
		('75 CATEGORY C-F)					
		MAIN STEAM A,B,C,&D					
		PS1-18"ED	ONE	1			
		PS2-18"ED	TWO	1			
		PS3-18"ED	TWO	1			
		PS4-18"ED	THREE	1			
		SUPPLY TO STEAM SEAL SYSTEM					
		PS7-8"ED	ONE	2	2	SSAJ-35; SSAJ-37	82-142,111; 82-153,112
		PS7-10"ED	TWO	3			
			THREE	2			

FORM 17-2682

LCD120682R05

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.
C5.21 & C.22	C-F	(CONTINUED)					
		MAIN STEAM EQUALIZER HDR					
		PS30-18"EDB	ONE	2			
			TWO	1			
			THREE	2			
		10"DRIPLEG	-	-			
		FEEDWATER A & B					
		FW2A-14"ED	ONE	1	1	FWDJ-38	82-025, 026
		FW2B-14"ED	-	-			
		RHR DISCHARGE A & B					
		TW3O-16"DB	-	-			
		TW2O-16"DB	TWO	1			
		('75 CATEGORY C-G)					
		HPCI WATER DISCHARGE					
		TW3-12"ED	ONE	1	3	CIAJ-62,29,30	84-129,130,22, 25,21,26
			ONE	2			
			TWO	3			
			THREE	1			
C5.30	C-F	PIPE BRANCH CONNECTIONS					
C5.31 & C5.32	C-F	CIRCUMFERENTIAL AND *LONGITUDINAL WELDS					*2.5T MIN FROM EACH SCHEDULED CIRC WELD INTER-SECTION WILL BE EXAMINED
		('75 CATEGORY C-F)					

Form 9-0033,Rev.0 (M&SP 5.2)
NORTHERN STATES POWER CO.
MONTICELLO NUCLEAR GENERATING PLANT
INSERVICE INSPECTION–EXAMINATION SUMMARY

TABLE S5.2
PAGE 7 **OF** 7
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.
C5.31 & C5.32	CF	(CONTINUED)					
		SUPPLY TO STEAM SEAL SYSTEM					MULTIPLE STREAMS
		PS11-6"ED	-	-			
		PS12-6"ED	-	-			
		PS13-6"ED	THREE	1			
		PS14-6"ED	-	-			
		RHR SUCTION A & B					MULTIPLE STREAMS
		TW16-14"HE	TWO	1			
		TW18-14"HE	-	-			
		TW15-14"HE	-	-			
		TW17-14"HE	-	-			
		RHR DISCHARGE B					MULTIPLE STREAMS
		TW22-14"GE	-	-			
		(CATEGORY C-G)					
		REACTOR WATER FROM SKIMMER SYSTEM					SINGLE STREAMS
		REW11-8"HE	TWO	1			
		RHR SUCTION A & B					
		TW28-20"HE	ONE	1	1	820	84-045
		TW27-20"HE	-	-			

FORM 17-2682

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S6.2
PAGE 1 **OF** 1
MAJOR ITEM: PUMP CASINGS AND VALVE BODIES

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.
C6.10	C-G	PUMP CASING WELDS	-	-			
C6.20	C-G	VALVE BODY WELDS	-	-			

FORM 17-2582

Form 9-0033,Rev.0 (M&SP 5.2)

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

TABLE S7.2
PAGE 1 **OF** 1
MAJOR ITEM: PRESSURE RETAINING 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.
C7.10	C-H	PRESSURE VESSELS	-	-			*SYSTEM PRESSURE TEST PERFORMED BY PLANT EACH INSPECTION PERIOD
C7.20	C-H	PIPING	-	-			
C7.30	C-H	PUMPS	-	-			
C7.40	C-H	VALVES	-	-			
C7.11	C-H	PRESSURE VESSELS	-	-			*SYSTEM HYDRO-STATIC TEST PERFORMED BY PLANT EACH INSPECTION INTERVAL
C7.21	C-H	PIPING	-	-			
C7.31	C-H	PUMPS	-	-			
C7.41	C-H	VALVES	-	-			

FORM 17-2582

Form 9-0035,Rev.0 (M&SP 5.2)
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
C1.10 Shell Circumferentia Welds							
RHR Heat Exchangers (E-200A)	50	UT	W-1	84-177	N/A	None	No S-2 due to configuration scans limited for 15" @0° due to reinforncing pad, scans limited @approx 200° due to 1" branch connection
		MT		84-037	N/A	None	None
C2.20 Nozzle in Vessels over ½" in thickness							
RHR Heat Exchangers (E-200A,Nozzle N3,Inlet)	50	UT	W-7	84-176	N/A	S-1 IDGeo > 100%	Used 70° Angle to reach root of weld No S-2 due to configuration, S-1,3,4, B.E. due to config.
		MT		84-027	N/A	None	None
C3.10 Integrally Welded Support Attachments							
RHR Heat Exchangers (E-200A)	50	MT	Support"A"	84-038	N/A	None	None
		MT	Support"B"	84-038	N/A	None	None

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
C3.20 Component Supports							
RHR Heat Exchangers (E-200A)	50	VT	Support"A"	84-044	N/A	None	None
		VT	Support"B"	84-044	N/A	None	None
C3.40 Integrally welded Support Attachments							
Core Spray"A" (TW7-10"GE)	34A	MT	CSAK-35	84-060	N/A	None	None
		VT		84-067	N/A	Loose Nut	
		VT		84-067R		None, Loose nut tightened	None
C3.50 Component Supports							
HPCI Water Discharge (TW3-12"ED)	31	VT	SR-69	84-011	N/A	None	None
		VT	SS-35	84-011	N/A	None	None
		VT	CIAK-26	84-019	N/A	None	None
		VT	CIAK-27A	84-012	N/A	None	None
		VT	CIAK-28	84-013	N/A	None	None
Core Spray"A" Suction (TW6-12"HE)	34	VT	TWH-53	84-006	N/A	None	Hangar drawing not available
		VT	TWH-54	84-010	N/A	None	None

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
C3.50 Component Supports							
Core Spray"A"Discharge (TW7-10"GE)	34	VT	TWH-81	84-009	N/A	None	None
		VT	TWH-82	84-008	N/A	None	None
(TW9-8"ED)	34A	VT	CSAK-31	84-066	N/A	Loose Bolts	None
		VT		84-066R		None,Bolts Repaired	None
		VT	CSAK-32A	84-068	N/A	None	Hangar drawing not available
Core Spray"B"Suction (TW10-12"HE)	35	VT	TWH-55	84-018	N/A	None	None
Core Spray"B"Discharge (TW11-10"GE)	35	VT	TWH-69	84-058	N/A	Loose Bolt	None
		VT		84-058R		None,Loose Bolt Repaired	None
		VT	TWH-70	84-016	N/A	Loose Bolt	None
		VT		84-016R		None,Loose Bolt Repaired	None
		VT	TWH-113	84-015	N/A	Loose Bolt	None
		VT		84-015R		None,Loose Bolt Repaired	None
RCIC Water Suction (TW5-6"HE)	38	VT	TW-25	84-014	N/A	None	None

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
C3.50(cont.)							
RHR Service Water (SW9-8"GE)	39	VT	SWAK-25	84-235	N/A	Loose Nut	Hangar drawing not available
		VT		84-235R		None,Loose Nut tightened	Hangar drawing not available
		VT	SWAK-26	84-024	N/A	Loose Nuts	None
		VT		84-024R		None,Loose Nuts Tightened	None
		VT	SWAK-31	84-017	NONE	None	None
		VT	SWAK-34	84-023	NONE	Loose Nut	None
		VT		84-23R		None, Nut Tightened	None
		VT	SWAK-43	84-043	N/A	None	None
RHR"A"Suction (REW10-18"HE)	40	VT	SS-21	84-133	N/A	None	None
		VT	TWH-7	84-131	N/A	Loose Bolt	None
		VT		84-131R		None,Loose Bolt Tightened	None
(TW14B-20"HE)		VT	TWH-6	84-031	N/A	None	None
		VT	SS-24	84-029	N/A	None	None

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
C3.50(Cont)							
RHR"A"Discharge (TW29-10"GE)	41	VT	TWH-61	84-030	N/A	None	None
(TW30-14"GE)		VT	TWH-63	84-028	N/A	None	None
		VT	SS-25	84-132	N/A	None	None
		VT	TWH-73	84-076	N/A	Loose Bolt	None
		VT		84-076R		None,Loose Bolt Repaired	None
RHR"B"Discharge (TW20-14"GE)	43	VT	TWH-100	84-057	N/A	None	None
		VT	TWH-101	84-055	N/A	None	None
		VT	TWH-102	84-056	N/A	Loose Nut	None
		VT		84-056R		None,loose nut Tightened	None
(TW22-14"GE)		VT	TWH-168	84-054	N/A	None	None
		VT	SR-23	84-059	N/A	None	None
C3.70 Internally Welded Support Attachments							
RHR Pumps (P202D)	48	MT	Support D	84-073	N/A	None	None
		VT		84-065	N/A	None	None

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
C3.70 Internally Welded Support Attachments							
Core Spray Pumps (14-1B)	49	MT	Support B	84-001	N/A	None	None
		VT		84-007	N/A	None	None
C5.11 & C5.12 Circumferent & Longitudinal e ds ess than ½" wall thickness	1						
RHR"A"&"B"Discharge (TW29-14"GE)	41	MT	16	84-047	N/A	None	None
(TW30-14"GE)		MT	369	84-049	N/A	None	None
		MT	370	84-048	N/A	None	None
(TW20-16"GE)	43	MT	25	84-077	N/A	None	None
(TW22-14"GE)		MT	348	84-078	N/A	None	None
Core Spray"A"Suction (TW6-12"GE)	34	MT	18	84-004	N/A	None	None
		MT	532	84-005	N/A	None	None
Core Spray"A"Discharge (TW7-10"GE)	34	MT	1	84-003	N/A	None	None
		MT	4	84-002	N/A	None	None
(TW7-8"ED)	34A	MT	CSAJ-32	84-072	N/A	None	None
RHR Service Water (SW9-8"GE)	39	MT	SWAJ-39	84-186	N/A	None	None
		MT	SWAJ-40	84-185	N/A	None	None

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
C5.11 & C5.12(con.t)							
RHR "A" Suction (TW28-20"HE)	40	MT	3	84-046	N/A	None	None
Feedwater to RWCU to HPCI	37	UT	W-1	84-115	NONE	None	None
		MT		84-121	NONE	None	None
		UT	W-2	84-116	NONE	S-1 IDGeo.100% 360° Inter.	S-2 limited 11:00 to 1:00 due to inside radius of tee
		MT		84-122	NONE	None	None
		UT	W-3	84-117	S-1 ID,OD Geo 30%, 360°	S-2 IDGeo.75% 360° Inter.	S-1 limited 11:00 to 1:00 & 5:00 to 7:00 due to inside radius of tee
		MT		84-123	NONE	None	None
		UT	W-4	84-120	S-1 ID,Geo 80° 360 Inter.	S-1 ODGeo 30% 360° Inter.	S-1 limited 11:00 to 1:00 due to inside radius of tee
		MT		84-126	NONE	None	None
		UT	W-12	84-118	S-1 OD GEO 9:00 to 10:00 80% S-2 ID,OD Geo 6:00 to 12:00 40%	S-1 ODGeo.75% 360° Int.	S-2 limited to 1 node due to adjacent weld

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
C5.11 & C5.12(cont)							
		MT		84-124	NONE	None	None
		UT	W-12A	84-119	NONE	None	No S-2 due to config.S-1 limited to 1 node due to adjacent weld
		MT		84-125	NONE	None	None
Control Rod Drive to Reactor Water Clean Up		UT	W-7	84-247	NONE	S-1 ID,ODGeo. 20% S-2 ID,ODGeo. 20%	S-1 limited 10:00 to 12:00 due to inner radius of elbow
		PT		84-253	NONE	None	None
		UT	W-11	84-246	NONE	S-1 ODGeo.120% 360° Inter.	No Scan 2,3s,4s due to tee config.
		PT		84-258	NONE	None	None
		UT	W-12	84-250	NONE	S-1 IDGeo.100% 360° S-2 ID,ODGeo 20% 360° Inter.	None
		PT		84-256	NONE	None	None
		UT	W-13	84-249	NONE	S-1 IDGeo 100% @12:00 S-2 ID,ODGeo. 20% 360° Inter.	No S-1 from 4:30 to 7:30 due to config. of tee

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
C5.11 & C5.12(cont)		PT		84-254	NONE	None	None
		UT	W-14	84-248	NONE	S-1,ID,ODGeo 20% 360°Inter. S-2 ID,ODGeo 20% 360°Inter.	S-2 limited from 10:00 to 2:00 due to inside radius of elbow
		PT		84-255	NONE	None	None
C5.21 & C5.22 Circumferential & Longitudinal Welds Over 1/2" Wall Thickness							
HPCI Water Discharge (TW3-12"ED)	31	UT	CIAJ-62	84-130	N/A	S-1,ODGeo. 50% 360° Inter.	None
		MT		84-129	N/A	None	None
		UT	CIAJ-29	84-025	N/A	None	No S-2 due to config. of valve
		MT		84-022	N/A	None	None
		UT	CIAJ-30	84-026	N/A	None	No S-1 due to config.of valve
		MT		84-021	N/A	None	None

Form 9-0035,Rev.0 (M&SP 5.2)
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
C5.31 & C5.32 Branch Connections							
RHR"A" Suction (TW28-20"HE)	40	MT	820	84-045	N/A	None	None

APPENDIX C

TABLE I - PERSONNEL LISTING

TABLE II - ULTRASONIC CALIBRATION BLOCKS

TABLE III - PROCEDURE LISTING

TABLE IV - EQUIPMENT AND MATERIALS

NORTHERN STATES POWER COMPANY

APPENDIX C
TABLE I
PAGE 1 of 2

PERSONNEL LISTING

EXAMINER	TITLE	ORGANIZATION	ASNT LEVEL UT	PT	MT	VT	RT
G.R. ADAMS	SUPERVISOR	LMT(2)	III	III	III	III(1c)	-
R.G. AUER	TECHNICIAN	LMT	II	II	II	II(1c)	-
W.D. CARLIN	TECHNICIAN	LMT	I	II	-	II(1b)	-
J.D. ELLIOTT	TECHNICIAN	LMT	II	II	II	II(1b)	-
S.R.FETHERSTON	TECHNICIAN	LMT	I	-	I	-	-
D.A. HALL	TECHNICIAN	LMT	II	-	-	II(1c)	-
K.L. HALL	TECHNICIAN	LMT	I	-	-	-	-
R.A.KELLERHALL	SUPERVISOR	LMT	III	III	III	III(1a,c)	-
T. KIMBALL	TECHNICIAN	LMT	II	II	II	II(1b,c)	-
Q. LOREDO	TECHNICIAN	LMT	I	-	-	-	-
R.W. PECHACEK	TECHNICIAN	LMT	II	II	II	II(1a,b)	-
K.E. SCRIVNER	TECHNICIAN	LMT	I	-	-	-	-
R.A. SEALS	TECHNICIAN	LMT	II	II	II	II(1a,c)	-
E.L. THOMAS	SUPERVISOR	LMT	III	III	III	III(1a,c)	-
R.J. WATKINS	TECHNICIAN	LMT	-	II	-	II(1b)	-
A.S. WHEALDON	TECHNICIAN	LMT	II	II	II	II(1b)	-
K.S. ANDERSON	TECHNICIAN	G.E.(3)	-	-	-	II	-
E.C. TAILLET	SUPERVISOR	G.E.	-	-	-	II	-
L.C. DAHLMANN	MATERIALS AND SPECIAL PROCESS SPECIALIST	NSP	II	III	III	II(1a,b)	
J.F. SCHANEN	MATERIALS AND SPECIAL PROCESS SPECIALIST	NSP	II	II	II	II(1b)	-

PERSONNEL LISTING

EXAMINER	TITLE	ORGANIZATION	ASNT LEVEL UT	PT	MT	VT	ET	RT
R. HUGHES	ANII	HARTFORD STEAM BOILER INSPECTION INSURANCE COMPANY						

FOOTNOTES:

(1a) Certified by NSP to perform visual determination of structural integrity for hangar assemblies in accordance with NSP-VT2.0.

(1b) Inspection experience and NDE qualifications were determined to be adequate to perform visual examinations in accordance with NSP-VT1.0.

(1c) Personnel certified in accordance with contractor's Quality Assurance Program.

(2) Organization: Lambert, MacGill, Thomas, Inc. (LMT)
515 Aldo Avenue
Santa Clara, CA 95054

(3) Organization: General Electric Company (GE)
5353 Gamble Drive
Minneapolis, MN 55416

NORTHERN STATES POWER COMPANY

MONTICELLO
ULTRASONIC CALIBRATION BLOCKS

APPENDIX C
TABLE II

NSP No.	SIZE & DIA.	PIPE SCHEDULE & THICKNESS		MATERIAL	SERIAL OR HEAT NUMBER	CALIBRATION REPORTS	DATE
RPV-1		5 5/16"	+Clad	A533 BC.L1	C2220/1	RGA-001 RGA-002 RGA-003 TK-015 TK-016 TK-017	4-14-84 4-19-84 4-16-84 3-20-84 3-20-84 3-19-84
RPV-3		3.66"	+Clad	SA533 BC.L.1	C9220	RAS-003 RAS-004 RAS-006	3-2-84 3-1-84 3-2-84
4	4"	80	.337"	A106B	L42009	RAS-001	2-28-84
5	8"	80	.500"	A106B	N53114	TK-014 RAS-012	3-13-84 3-16-84
8	18"	80	.937"	A106B	122491	RGA-004	4-26-84
11	8"	80	.500"	304 S/S	15885	DAH-004 DAH-005 DAH-006 DAH-007 DAH-009 TK-005 TK-006 ELT-001	4-9-84 4-8-84 4-12-84 4-10-84 4-16-84 2-25-84 2-27-84 2-24-84

NORTHERN STATES POWER COMPANY

MONTICELLO

ULTRASONIC CALIBRATION BLOCKS

APPENDIX C

TABLE II

NSP No.	SIZE & DIA.	PIPE SCHEDULE & THICKNESS		MATERIAL	SERIAL OR HEAT NUMBER	CALIBRATION REPORTS	DATE
15	3"	80	.300"	304 S/S	03052	DAH-014	5-2-84
17	2"	80	.218"	A312	A4272	DAH-003	2-18-84
18	3"	160	.438"	A312	01598	TK-012	3-8-84
19	3"	160	.438"	A016B	T08300	DAH-013	5-3-84
24	16"	80	.843"	304 S/S	27DH136	TK-004	2-23-84
29	12"	80	.687"	A106B	L24489	RAS-002	2-29-84
30		5 5/16"	+CLAD	A533B	C5571	DAH-011 DAH-012 TK-009 TK--010 TK-013 RAS-005 RAS-007 RAS-008 RAS-009 RAS-010 RAS-014	4-18-84 4-18-84 3-3-84 3-5-84 3-8-84 3-1-84 3-5-84 3-6-84 3-7-84 3-21-84 3-21-84

NORTHERN STATES POWER COMPANY

MONTICELLO
ULTRASONIC CALIBRATION BLOCKS

APPENDIX C
TABLE II

NSP No.	SIZE & DIA.	PIPE SCHEDULE & THICKNESS		MATERIAL	SERIAL OR HEAT NUMBER	CALIBRATION REPORTS	DATE
36	10" & 13.43"	80	.491" & .875"	B166 Inconel	BGM	DAH-010	4-17-84
37	24"	-	.500"	A234 GR.WPB	L00543	RAS-015	3-29-84
43	12"	100	.844"	A106B	L81058	DAH-001	2-15-84
45	9"	-	1.6195"	A182 GRF S/S	CMB	TK-008	3-2-84
46	6.375"	-	1.2745"	A182 GRF S/S	CMB	TK-007	2-29-84
47	3"	-	.530"	A336 C1F8S/S	CMB	TK-003 TK-018 ELT-002	2-20-84 4-14-84 3-8-84
48	3.75"	-	.875"	A336 C1F8S/S	CMB	DAH-002	2-18-84
49	4.5"	-	.275"	A336 C1F8 S/S	CMB	TK-002	2-17-84

NORTHERN STATES POWER COMPANY

MONTICELLO

ULTRASONIC CALIBRATION BLOCKS

APPENDIX C

TABLE II

NSP No.	SIZE & DIA.	PIPE SCHEDULE & THICKNESS	MATERIAL	SERIAL OR HEAT NUMBER	CALIBRATION REPORTS	DATE
50	5.6"	- .875"	A336 C1F8S/S	CMB	TK-001	2-16-84
51	4'	- .875"	A515 GR70	89886-21	RAS-016	3-28-84
54	12"	- .640"	A530 GRLF-2	722248	DAH-008 RAS-013	4-16-84 3-17-84

NORTHERN STATES POWER COMPANY

MONTICELLO
PROCEDURE LISTING

APPENDIX C
TABLE III

PROCEDURE NUMBER AND REVISION	FIELD CHANGE	PROCEDURE TITLE	PLANT APPROVAL DATE	FIELD CHANGE REMARKS	CHANGE DESCRIPTION
NSP-MT-1 Rev.3	NONE	MAGNETIC PARTICLE EXAMINATION	8-26-82	NONE	
NSP-PT-1 Rev. 3	FC 1 FC 2	LIQUID PENETRANT EXAMINATION	3-6-84 5-21-84		F.C.#1 Change rounded indication reporting requirements, INCREASE DWELL AND DEVELOPMENT TIME. F.C.#2 Re-instate original procedure.
NSP-UT-1 Rev.2	None	ULTRASONIC EXAMINATION OF PIPE WELDS	8-26-82	NONE	
NSP-UT-2 Rev.2	NONE	AUTOMATIC DATA RECORDING	8-26-82	NONE	
NSP-UT-3 Rev.2	NONE	ULTRASONIC EXAMINATION OF FERRITIC VESSELS	2-28-84	NONE	
NSP-UT-4 Rev. 2	NONE	ULTRASONIC EXAMINATION OF STUDS, BOLTS & NUTS	8-26-82	NONE	
NSP-UT-5 Rev. 3	NONE	ULTRASONIC EXAMINATION OF REACTOR VESSEL NOZZLE FORGING INNER RADII.	8-26-82	NONE	

NORTHERN STATES POWER COMPANY

MONTICELLO
PROCEDURE LISTING

APPENDIX C
TABLE III

PROCEDURE NUMBER AND REVISION	FIELD CHANGE	PROCEDURE TITLE	PLANT APPROVAL DATE	FIELD CHANGE REMARKS	CHANGE DESCRIPTION
NSP-UT-6 Rev. 3	NONE	ULTRASONIC EXAMINATION OF REACTOR VESSEL NOZZLE BORE.	8-26-82	NONE	
NSP-UT-16 Rev.0	NONE	ULTRASONIC EXAMINATION FOR INTERGRANULAR STRESS CORROSION CRACKING (1GSCC)	2-17-84	NONE	
NSP-UT-16 Rev.1	NONE	ULTRASONIC EXAMINATION FOR INTERGRANULAR STRESS CORROSION CRACKING (1GSCC)	3-2-84	NONE	
NSP-VT-1.0 Rev.0	NONE	VISUAL EXAMINATION	8-26-82	NONE	
NSP-VT-2.0 Rev.0	NONE	VISUAL EXAMINATINON OF HANGER ASSEMBLIES	9-2-82	NONE	
NSP-VT-3.0 Rev.0	NONE	VISUAL EXAMINATION OF PUMP AND VALVE INTERNAL PRESSURE BOUNDARY SURFACES	8-30-82	NONE	
NSP-VT-4.0 Rev.0	NONE	VISUAL EXAMINATION OF MONTICELLO REACTOR VESSEL INTERIOR	8-30-82	NONE	

NORTHERN STATES POWER COMPANY
MONTICELLO
EQUIPMENT AND MATERIALS

APPENDIX C
TABLE IV

MATERIAL OR EQUIPMENT	TYPE OR SERIAL NUMBER	CALIBRATION DATE OR BATCH NUMBER	REMARKS
ULTRASONIC SCOPES			
NORTEC 131D	S/N 111	12/10/83	OFFSITE 3/10/84
NORTEC 131D	S/N 126	3/13/84	OFFSITE 6/13/84
NORTEC 131D	S/N 129	2/24/84	OFFSITE 4/24/84
NORTEC 131D	S/N 129	4/25/84	OFFISTE 7/25/84
NORTEC 131D	S/N 129	10/18/84	
NORTEC 131D	S/N 167	2/27/84	OFFSITE 5/21/84
NORTEC 131D	S/N 167	5/22/84	OFFSITE 8/21/84
NORTEC 131D	S/N 167	8/23/84	OFFSITE 11/23/84
NORTEC 131D	S/N 269	3/12/84	OFFSITE 6/11/84
NORTEC 131D	S/N 269	6/12/84	OFFSITE 9/12/84
NORTEC 131D	S/N 287	12/29/83	OFFSITE 3/29/84
NORTEC 131D	S/N 287	6/27/84	OFFSITE 9/27/84
NORTEC 131D	S/N 287	10/2/84	OFFSITE 1/2/85
NORTEC 131D	S/N 291	12/21/83	OFFSITE 3/21/83
NORTEC 131D	S/N 311	1/27/84	OFFSITE 4/27/84
NORTEC 131D	S/N 311	10/31/84	
NORTEC 131D	S/N 322	1/26/84	OFFSITE 4/24/84
NORTEC 131D	S/N 322	4/25/84	OFFSITE 5/25/84
NORTEC 131D	S/N 322	6/26/84	OFFSITE 9/26/84
NORTEC 131D	S/N 371	2/27/84	OFFSITE 5/27/84
NORTEC 131D	S/N 410	3/28/84	OFFSITE 6/28/84
NORTEC 131D	S/N 410	9/19/84	OFFSITE 12/19/84
NORTEC 131D	S/N 409	5/21/84	OFFSITE 8/21/84
NORTEC 131D	S/N 417	6/12/84	OFFSITE 9/12/84
NORTEC 131D	S/N 530-B	2/1/84	OFFSITE 4/24/84
NORTEC 131D	S/N 530-B	4/25/84	OFFSITE 7/25/84
ULTRASONIC SCOPES			
SLAVE	S/N 1	3/1/84	
SLAVE	S/N 1	6/5/84	
SLAVE	S/N 2	8/20/84	
SLAVE	S/N 12	12/28/83	
SLAVE	S/N 13	1/12/84	
SLAVE	S/N 14	2/23/84	
SLAVE	S/N 14	6/5/84	

MATERIAL OR EQUIPMENT	TYPE OR SERIAL NUMBER	CALIBRATION DATE OR BATCH NUMBER	REMARKS
RECORDERS			
GOULD BRUSH 220	S/N 3018	2/7/84	OFFSITE 8/7/84
GOULD BRUSH 220	S/N 8188-252	3/30/84	OFFSITE 9/30/84
GOULD BRUSH 220	S/N 08343	12/6/83	OFFSITE 6/6/84
GOULD BRUSH 220	S/N 08343	6/7/84	OFFSITE 12/7/84
GOULD BRUSH 220	S/N 15452	12/1/83	OFFSITE 6/1/84
GOULD BRUSH 220	S/N 18687	2/3/84	OFFSITE 8/3/84
GOULD BRUSH 220	S/N 18687	8/7/84	
GOULD BRUSH 220	S/N 18940	1/5/84	OFFSITE 6/21/84
GOULD BRUSH 220	S/N 18940	6/22/84	OFFSITE 12/22/84
GOULD BRUSH 220	S/N 19016	3/5/84	OFFSITE 8/29/84
GOULD BRUSH 220	S/N 19016	8/30/84	
GOULD BRUSH 220	S/N 19023	3/5/84	OFFSITE 9/5/84
GOULD BRUSH 220	S/N 19023	9/6/84	
TEMPERATURE GAUGES			
PTC Surface Thermometers 0° to 300°F	S/N 555	Cal:10/21/83	CERTIFIED BY MANUFACTURER
	S/N 559	Cal:10/21/83	" "
	S/N 563	Cal:10/21/83	" "
	S/N 566	Cal:11/15/83	" "
	S/N 569	Cal:11/15/83	" "
	S/N 570	Cal:11/15/83	" "
	S/N 572	Cal:11/15/83	" "
	S/N 574	Cal:11/15/83	" "
	S/N 582	Cal:11/15/83	" "
	S/N 583	Cal:11/15/83	" "
	S/N 584	Cal:11/15/83	" "
	S/N 585	Cal:11/15/83	" "
	S/N 586	Cal:11/15/83	" "
	S/N 587	Cal:11/15/83	" "
	S/N 590	Cal:3/09/84	" "
	S/N 591	Cal:3/09/84	" "
	S/N 592	Cal:3/09/84	" "
	S/N 597	Cal:3/09/84	" "
	S/N 598	Cal:3/09/84	" "
	S/N 599	Cal:3/09/84	" "
	S/N 605	Cal:3/09/84	" "
	S/N 608	Cal:3/09/84	" "
	S/N 612	Cal:5/11/84	" "

MATERIAL OR EQUIPMENT	TYPE OR SERIAL NUMBER	CALIBRATION DATE OR BATCH NUMBER	REMARKS
Temperature Gauges (Continued)			
	S/N 613	Cal:5/11/84	Certified By
	S/N 614	Cal:5/11/84	Manufacturer
	S/N 616	Cal:5/11/84	" "
	S/N 617	Cal:5/11/84	" "
	S/N 618	Cal:5/11/84	" "
	S/N 619	Cal:5/11/84	" "
	S/N 621	Cal:5/11/84	" "
	S/N 625	Cal:5/11/84	" "
	S/N 631	Cal:7/19/84	" "
	S/N 632	Cal:7/19/84	" "
	S/N 633	Cal:7/19/84	" "
	S/N 634	Cal:7/19/84	" "
	S/N 635	Cal:7/19/84	" "
	S/N 636	Cal:7/19/84	" "
	S/N 637	Cal:7/19/84	" "
	S/N 630	Cal:7/19/84	" "
	S/N 655	Cal:7/19/84	" "
MAGNETIC PARTICLE			
Y-6 Yoke	S/N LMT-003	2/8/84	On Site
	S/N KBM-3	7/20/84	Qualification
ROMPAS BLOCKS:			
4140 C/S	S/N 403	7/6/82	Earle M. Jorgenson
4140 C/S	S/N LMT-012	9/8/77	Orla's Machine Shop
304 S/S	S/N LMT-008	9/8/77	Orla's Machine Shop
304 S/S	S/N 021	1/3/79	Orla's Machine Shop
304 S/S	S/N 3	9/13/76	Orla's Machine Shop
304 S/S	S/N LMT-026	4/28/81	Dimac Machine Co.
304 S/S	S/N 4	7/6/82	Orla's Machine Shop
304 S/S	S/N 310	8/19/83	JR Design & Mfg.
IIW BLOCK:			
A36	S/N LMT 002	5/22/80	Dimac Machine Co.
THICKNESS CALIBRATION STEP B BLOCK:			
c/s	S/N LMT-001	7/22/80	Dimac Machine Co.

MATERIAL OR EQUIPMENT	TYPE OR SERIAL NUMBER	CALIBRATION DATE OR BATCH NUMBER	REMARKS
MATERIALS:			
ULTRASONIC COUPLANT	LMT GEL	Batch # 61384 12484 1110812	
PENETRANT MATERIALS SPOTCHECK	PENETRANT	5F086 83M015 83M051 83M072	SKL-HF/SKL-S
DUBL-CHEK		40D-806 54A-531 329-D54	BY-Lux K017-Hi-Temp
SPOTCHECK	DEVELOPER	5F102 81K118 82G057 83L094 84C057	SKD-NF SKD-NF/ZP-9B
DUBL-CHEK		215C6 223-D71	D-100 D-350 Hi-Temp
SPOTCHECK	CLEANER/REMOVER	5G006 82G049 82G079 82L031 83A002 84B008 83C028 83M043 83M064 84D051	SKC-NF SKC-NF/ZC-7B
DUBL-CHECK		33-K4 329-D56	DR-60 K017-Hi-Temp

MATERIAL OR EQUIPMENT	TYPE OR SERIAL NUMBER	CALIBRATION DATE OR BATCH NUMBER	REMARKS
ULTRASONIC TRANSDUCERS:			
		SIZE	FREQUENCY
AEROTECH	B17348	.5" DIA.	2.25 MHz
AEROTECH	C29610	.5" DIA.	2.25 MHz
AEROTECH	F26143	.5" DIA.	2.25 MHz
AEROTECH	G22167	.5" DIA.	2.25 MHz
AEROTECH	G22168	.5" DIA.	2.25 MHz
AEROTECH	54018	.375" DIA.	3.5 MHz
AEROTECH	54017	.375" DIA.	3.5 MHz
AEROTECH	016575	1.0" DIA.	2.25 MHz
AEROTECH	A30160	.5" DIA.	2.25 MHz
AEROTECH	E13044	.5" DIA.	2.25 MHz
AEROTECH	H10142	.5" DIA.	1.5 MHz
AEROTECH	54010	.375" DIA.	3.5 MHz
AEROTECH	012674	.5"x.5" DIA.	2.25 MHz
AEROTECH	H21033	.5" DIA.	2.25 MHz
HARISONICS	T10224	.5"x.5" DIA.	2.25 MHz
HARISONICS	P360V	.5" DIA.	2.25 MHz
HARISONICS	W1815	.25"X.25"DIA.	5.0 MHz
HARISONICS	W2123	.25" DIA.	5.0 MHz
HARISONICS	T3206	.25" DIA.	5.0 MHz
HARISONICS	R2147	.5"x.5" DIA.	2.25 MHz
HARISONICS	T7463	.5"x.5" DIA.	2.25 MHz
HARISONICS	W6207	.5"x.5" DIA.	2.25 MHz
HARISONICS	V11055	.5"x.5" DIA.	2.25 MHz
HARISONICS	S2285	.5" DIA.	1.5 MHz
HARISONICS	R1150	.25" DIA.	2.25 MHz
HARISONICS	S2286	.5" DIA.	1.5 MHz
HARISONICS	V10704	1.0"x1.0"DIA.	2.25 MHz
HARISONICS	V10705	1.0"x1.0"DIA.	2.25 MHz
HARISONICS	W2149	1.5" DIA.	1.0 MHz
HARISONICS	S5139	1.0" DIA.	2.25 MHz
HARISONICS	T8312	.25" DIA.	5.0 MHz
HARISONICS	8301	.25" DIA.	2.25 MHz
HARISONICS	V12038	.25" DIA.	2.25 MHz
HARISONICS	8402	.375" x .375" DIA.	5.0 MHz
HARISONICS	R30131	.375" x .375" DIA.	3.5 MHz
HARISONICS	W8561	.375" x .375" DIA.	2.25 MHz
HARISONICS	Y2880	.25"x.25"DIA.	2.25 MHz

MATERIAL OR EQUIPMENT	TYPE OR SERIAL NUMBER	CALIBRATION DATE OR BATCH NUMBER	REMARKS
ULTRASONIC TRANSDUC	S	Size	Frequency
HARISONICS	V11111	.5"x.5" DIA.	1.0 MHz
HARISONICS	V10600	.25" DIA.	5.0 MHz
HARISONICS	Y3410	.5"x.5" DIA.	2.25 MHz
HARISONICS	P928	1.0" DIA.	1.0 MHz
HARISONICS	P927	1.5" DIA.	1.0 MHz
HARISONICS	R3162	.5"x.5" DIA.	2.25 MHz
HARISONICS	R5239	.5"x1.0"DIA.	2.25 MHz
KRAUTKRAMER	56526	12MM x 6MM	2.0 MHz
KRAUTKRAMER	54576	12MM x 6MM	4.0 MHz
NORTEC	978	.75" DIA.	2.25 MHz
NORTEC	979	.75" DIA.	2.25 MHz
PANAMETRICS	11908	.25" DIA.	2.25 MHz

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2.) Plant: MONTICELLO NUCLEAR GENERATING PLANT

Address: MONTICELLO, MINNESOTA 55362

3.) Plant Unit: 1 4.) Owner (Certificate of Authorization): --

5.) Commercial Service Date: 6-30-71 6.) National Board No. for Unit: --

7.) Components Inspected:

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
ASME CLASS I NOZZLE WELDS				
B3.10 Nozzle-To-Vessel Welds & B3.20 Nozzle Inside Radius Section				
Reactor Vessel Head Vent HVAD-1	CB&I	------	------	-------
Core Spray CSBD-1	CB&I	------	------	-------
CRD Return CRAD-1	CB&I	------	------	-------
Jet Pump Instrumentation JPAD-1	CB&I	------	------	-------

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B3.90 & B3.100 Nozzle Inside Radius				
Feedwater Nozzle N4A, N4B, N4C, N4D	CB&I	------	------	------
B5.10 Nozzle To Safe End Welds				
Head Vent HVAF-2	CB&I	------	------	------
Head Spray HSBF-2	CB&I	------	------	------
Core Spray CSBF-2	CB&I	------	------	------

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CRD Return CRAF-2	CB&I	------	------	------
Standby Liquid Control CPAF-2	CB&I	------	------	------
Jet Pump Instrumentation"B" JPBF-2	CB&I	------	------	------
Instrumentation Lines (N11A) VIAF-2 (N11B) VIBF-2 (N12A) VICF-2 (N12B) VIDF-2	CB&I	------	------	------
B5.50 Safe End Welds				
Core Spray"A" TW 7-8" EF CSP-90-7 CSAF-14 CSAF-18	Newport News/Bechtel		------	------

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Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
Core Spray B (TW 11-8"EF) CSP-270-7 CSP-270-9 CSBF-12 CSBF-16	Newport News/Bechtel	------	------	------
HPCI Steam (PS18-8"EF) PSAF-2B PSAF-2C	Bechtel	------	------	------
Residual Heat Removal (REW 20-16"EF) (REW 30-16"DC) RHBF-20 RHBF-24 RHCF-20 RHCF-23	Bechtel	------	------	------

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Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
PRESSUE RETAINING BOLTING B7.70 BOLTS, STUDS & NUTS				
Core Spray "A" Valves POS-1758 A014-13B	Bechtel	------	-------	------
Core Spray "B" Valves MO-1753	Bechtel	------	------	------
High Pressure Coolant Injection-Steam Valve MO 2035	Bechtel	------	-------	-------
Reactor Water Cleanup Valve MO 2398	Bechtel	------	-------	------

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Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
Residual Heat Removal Valves MO 2029 MO 2014 MO 2026	Bechtel	------	------	------
Standby Liquid Control Valve XP-8	Bechtel	------	------	-------
B8.10 Integrally Welds Attachments				
Reactor Vessel Support Skirt HCAH-2(120°-180°)	CB&I	------	------	------

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Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
B9.11 & B9.12 Circumferential & Longitudinal Welds				
Core Spray "A" CSAJ-19 CSAJ-16 CSAJ-17	Bechtel	------	------	------
Core Spray "B" CSBJ-21 CSBJ-22 CSBJ-13 CSBJ-14	Bechtel	------	------	------
Residual Heat Removal"A" RHAJ-25 RHAJ-26 RHAJ-27	Bechtel	------	------	------

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Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
Residual Heat Removal"B" RHBJ-21 RHBJ-22	Bechtel	------	------	------
Residual Heat Removal "C" RHCJ-21 RHCJ-22	Bechtel	------	------	------
Residual Heat Removal "D" RHDJ-2	Bechtel	------	------	------
Jet Pump Instrumentation "B" JPBJ-3	Bechtel	------	------	------

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Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
Jet Pump Instrumentation Cannister "B" Weld #1 Weld #2 Weld #3	Lamco	------	------	------
Instrumentation Lines N11A VIAJ-19 B9.21 & B9.22 Circumferential & Longitudinal Welds	Bechtel	------	------	------
Reactor Core Injection Coolant-Steam RSAJ-4 RSAJ-5	Bechtel	------	------	------

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Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
B9.40 Socket Welds				
Head Vent Welds 50 51 58 59	Bechtel	------	------	------
Instrumentation Lines VIAJ-1 VIAJ-2 VIAJ-3	Bechtel	------	------	------
Standby Liquid Control CPAJ-22	Bechtel	------	------	------
B11.10 Component Supports				
Core Spray "A" CSAK-15	Bechtel	------	------	------
Core Spray "B" CSBK-6	Bechtel	------	------	------
Residual Heat Removal RHCK-9 RHCK-10	Bechtel	------	------	------

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Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
Reactor Core Injection Coolant RSAK-6	Bechtel	------	-------	------
Heat Vent HVAK-21	Bechtel	------	------	------
Standby Liquid Control CPAK-20	Bechtel	------	------	------
B13.10 Vessel Interior				
Core Spray Sparger System	GE	------	------	------
Feedwater Sparger System	GE	------	------	------
B13.2 Vessel Interior Attachments				
14 Shroud Support Welds	GE	------	------	------

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Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
ASME CLASS II				
C1.10 Shell Circumferential Welds				
RHR Heat Exchange (E-200A)	Bechtel	------	------	------
C2.20 Nozzles in Vessels over ½" thick				
RHR Heat Exchange (E-200A)	Bechtel	------	------	-------
C3.10 Integrally Welded Support Attachments				
RHR Heat Exchanger (E-200A) Support "A" & "B"	Bechtel	------	------	-------

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Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
C3.20 Component Supports				
RHR Heat Exchangers (E-200A) Support "A" & "B"	Bechtel	------	-------	------
C3.40 Integrally Welded Support Attachments				
Core Spray "A" CSAK-35	Bechtel	------	-------	------
C3.50 Component Supports				
High Pressure Coolant Injection Water Discharge SR-69 SS-35 CIAK-26 CIAK-27A CIAK-28	Bechtel	------	-------	-------

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Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
C3.50(cont)				
Core Spray "A" Suction TWH-53 TWH-54	Bechtel	------	------	-------
Core Spray "A" Discharge TWH-81 TWH-82 CSAK-31 CSAK-32A	Bechtel	------	------	------
Core Spray "B" Suction TWH-55	Bechtel	------	------	-------
Core Spray "B" Discharge TWH-69 TWH-70 TWH-113	Bechtel	------	------	-------

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Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
C3.50(cont)				
RCIC Water Suction TW-25	Bechtel	------	------	------
RHR Service Water SWAK-25 SWAK-26 SWAK-31 SWAK-34 SWAK-43	Bechtel	------	------	------
RHR "A" Suction SS-21 TWH-7 TWH-6 SS-24	Bechtel	------	------	------

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Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
C3.50(cont.)				
RHR"A" Discharge TWH-61 TWH-63 SS-25 TWH-73	Bechtel	------	------	------
RHR"B"Discharge TWH-100 TWH-101 TWH-102 TWH-168 SR-23	Bechtel	------	------	------
C3.70 Internally Welded Support Attachments				
RHR Pumps(P202D) Support "D"	Bechtel	------	-------	------
Core Spray Pumps (14-1B) Support "B"	Bechtel	------	------	------

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Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
C5.11&C5.12 Circumferential & Longitudinal Welds less than ½" Wall thickness				
RHR"A"&"B" Discharge 16 369 270 25 348	Bechtel	------	------	------
Core Spray"A" Suction 18 532	Bechtel	------	------	------
Core Spray"A" Discharge 1 4 CSAJ-32	Bechtel	------	------	------
RHR Service Water SWAJ-39 SWAJ-40	Bechtel	------	------	------

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Address: MONTICELLO, MINNESOTA 55362

3.) Plant Unit: 1 4.) Owner (Certificate of Authorization): --

5.) Commercial Service Date: 6-30-71 6.) National Board No. for Unit: --

7.) Components Inspected:

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
C5.11 & C5.12(cont.)				
RHR"A"Suction 3	Bechtel	------	------	------
Feedwater to Reactor Water Clean-up to High Pressure Coolant Injection W-1 W-2 W-3 W-4 W-12 W-12A	Bechtel	------	------	------
Control Rod Drive to Reactor Water Clean-up W-7 W-11 W-12 W-13 W-14	Bechtel	------	------	------

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 55401

2.) Plant: MONTICELLO NUCLEAR GENERATING PLANT

Address: MONTICELLO, MINNESOTA 55362

3.) Plant Unit: 1 4.) Owner (Certificate of Authorization): --

5.) Commercial Service Date: 6-30-71 6.) National Board No. for Unit: --

7.) Components Inspected:

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
C5.21 & C5.22 Circumferential & Longitudinal Welds over ½" Wall Thickness				
High Pressure Coolant Injection Water Discharge CIAJ-62 CIAJ-29 CIAJ-30	Bechtel	------	------	------
C5.31 & C5.32 Branch Connections				
RHR"A"Suction 820	Bechtel	------	------	------

FORM NIS-1(back)

8.) Examination Dates: 2/10/84 to 1/12/85

9.) Inspection Interval 6/30/81 to 6/30/91

10.) Abstract of Examinations

This was the second Inservice Inspection conducted in Inpsection Period One of the Plant's second ten year interval. The examinations were performed on approximately 1/3 of the required examinations scheduled for inspection period one. The examinations were performed on pressure retaining components and supports of the reactor coolant and associated auxilliary systems classified as ASME Class I and II. Vessel interior visual examinations were performed on the core spray sparger system, feedwater sparger system and the shroud supports.

11.) Abstract of Conditions Noted

The following is a list of all anomalies detected.

System	Item I.D.	Exam Method	Type&number of Indications
Core Spray"A"	A014-13B	VT	loose nut
	CSAK-35	VT	loose nut
	CSAK-31	VT	loose bolts
Core Spray"B"	CSP 270-7	UT	1 spot Indication
	TWH-69	VT	loose bolt
	TWH-70	VT	loose bolt
	TWH-113	VT	loose bolt
HPCI Steam	PSAF-2C	PT	Arc strike
RHR	RHBF-20	UT	1 spot Ind.,3 linear Ind.
	RHCF-20	UT	2 spot Ind.,2 linear Ind.
	RHBJ-21	UT	2 linear Ind.
	RHCJ-21	UT	multiple spot indications
	TWH-7	VT	loose bolt
	TWH-73	VT	loose bolt
	TWH-102	VT	loose bolt
Rx Support Skirt	HCAH-2	MT	9 linears
Jet Pump Instrumentation Canister"B"	W#1	UT	Multiple Axial indications
Head Vent	HVAK-21	VT	loose nut,bent rod hangar
Feedwater System	Spargers	VT	Crack indications on N4C & N4D
RHR Service Water	SWAK-25	VT	loose nut
	SWAK-26	VT	loose nuts
	SWAK-34	VT	loose nut

12.) Abstract of Corrective Measures Recommended and Taken

All anomalies with the exception of HVAK-21 were corrected. The bent rod hangar on HVAK-21 was evaluated and accepted as is. All loose nuts and bolts were tightened. The PT arc strike and MT linear indications were removed by surface blending with a hand grinder. All items containing UT indications except CSP 270-7 were replaced. CSP 270-7 was subsequently radiographed and the UT indication appeared to be a machining mark on the I.D. surface. This weld will be monitored in future outages. The feedwater spargers were also replaced after several crack indications were noted on two of the flow nozzles.

We certify that the statements made in this report are correct and the examinations and corrective measures taken conform to the rules of the ASME Code, Section XI.

Date March 27 19 85 Signed Northern States Power By J F Sclanen
Owner

Certificate of Authorization No. (if applicable) N/A Expiration Date N/A

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of MINNESOTA and employed by HSB I+I CO. of HARTFORD, CT have inspected the components described in this Owner's Data Report during the period 2-10-84 to 1-12-85, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners' Data Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owners' Data report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date March 27 19 85

R. A. Hughes
Inspector's Signature

Commissions NB 9904 MN 85-34
National Board, State, Province & No
