



# PRAIRIE ISLAND NUCLEAR GENERATING PLANT

Red Wing, Minnesota

UNITS 1 AND 2



INSERVICE INSPECTION - EXAMINATION SUMMARY

SEPTEMBER 9, 1985 TO OCTOBER 21, 1985

REFUELING OUTAGE 9

INSPECTION PERIOD 3

FIRST INTERVAL

**NORTHERN STATES POWER COMPANY**  
MINNEAPOLIS, MINNESOTA

Report Date:  
January 14, 1985

Commercial Service Date:  
December 20, 1974

8602050282 860123  
PDR ADOCK 05000282  
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NORTHERN STATES POWER COMPANY

PRAIRIE ISLAND NUCLEAR GENERATING PLANT - UNIT II

INSERVICE INSPECTION - EXAMINATION SUMMARY

SEPTEMBER 9, 1985 TO OCTOBER 21, 1985

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INSPECTION PERIOD 3

FIRST INTERVAL

Report Date:  
January 14, 1985

Prepared by: L.C. Dahlman  
M&SP Specialist

Reviewed by: R.A. Kellerhall  
R.A. Kellerhall  
M&SP Specialist

Approved by: G.T. Krause  
FOR G.T. Krause  
Superintendent,  
Materials and Special  
Processes

Commercial Service Date:  
December 20, 1974

Inservice Inspection - Examination Summary  
PRAIRIE ISLAND NUCLEAR GENERATING PLANT - UNIT II  
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INSERVICE INSPECTION - EXAMINATION SUMMARY  
PRAIRIE ISLAND NUCLEAR GENERATING PLANT - UNIT 2  
SEPTEMBER 9, 1985 TO OCTOBER 21, 1985

1.0 INTRODUCTION

This report is a summary of the examinations performed during the ninth inservice inspection at the Prairie Island Nuclear Generating Plant - Unit 2. This was the last inservice inspection conducted for inspection period three of the 1st ten year interval. The examinations were performed during the plant's ninth refueling outage from September 9, 1985 thru October 21, 1985. Prairie Island - Unit 2 began commercial operation on December 20, 1974.

This report identifies the components examined, the examination methods used, the examination number, and summarizes the examination results of each of the following areas:

1. Pressure retaining components and supports of the reactor coolant and associated systems classified as ASME Class 1 and ASME Class 2.
2. Reactor pressure vessel examinations.
3. Bolting of seismic supports classified as ASME Class 1.

2.0 INSPECTION SUMMARY

The evaluation of the results from the inservice examinations indicated that the integrity of the systems has been maintained.

3.0 BALANCE OF PLANT

3.1 EXAMINATION PLAN

The examination plan focused on the pressure-retaining components and their supports of the reactor coolant and associated auxiliary systems classified as ASME Class 1, Class 2, and Seismic Bolting.

The examination plan was based on the examination requirements of the ASME Boiler and Pressure Vessel Code Section XI, 1974 Edition through and including the Summer 1975 Addenda, and complied with Prairie Island's Technical Specification, Section TS 4.2. The Examination is in accordance with the program submitted to the United States Nuclear Regulatory Commission on February 1, 1978 titled, "ASME Code Section XI Inservice Inspection and Testing Program and Information Required for NRC Review of Requests for Relief From ASME Code Section XI Requirements".



### 3.2 EXAMINATION METHODS

Ultrasonic examination methods and techniques were used to perform the volumetric examinations. The ultrasonic test systems consisted of an ultrasonic digital analog tester and a two channel strip chart recorder. One channel of the recorder was calibrated to reflect ultrasonic screen height (amplitude) and the second channel was calibrated to indicate metal path (range) to the reflector. This approach to the examination gives a permanent record to the extent possible.

Liquid penetrant or magnetic particle examination methods were used to perform the surface examinations. The liquid penetrant examinations were performed using color contrast-solvent removable materials.

All visual examinations were aided when necessary with artificial lighting and verified for accuracy with an 18% neutral gray card with a 1/32 inch black line.

### 3.3 EXAMINATION PROCEDURES

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

### 3.4 EQUIPMENT AND MATERIALS

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

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

### 3.5 PERSONNEL

Northern States Power Company contracted Lambert, MacGill and Thomas Inc. and Westinghouse to perform the 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 ASNT Level of Certification in Table I of Appendix D.

Certifications 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, 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 a 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 1 of Appendices A, B, and C identifies the examination report number(s) for each item examined. Many of the items identify more than one examination report because of the different types of examinations performed on the item.

Table I of Appendix A, B, and C summarizes all the examinations performed to date and completes the ten year examination requirements. For retrieval purposes, the prefix of the inspection report number corresponds with the year the inspection was performed. The examination report numbers for this outage are prefixed with "A85".

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

### 3.8 SUMMARY OF RESULTS

The only anomalies detected were three linear and one rounded PT indications on the O.D. surface of Reactor Coolant Pump No. 21, and loose ring girder bolts on steam Generator No. 21. The PT anomalies were accepted based on the acceptance standard of the 1980 Edition of ASME Section XI and found to be within the allowable limitations of table 1WB-3518-2; the loose bolts on steam Generator No. 21 ring girder were tightened.

#### 4.0 REACTOR PRESSURE VESSEL EXAMINATIONS

Westinghouse was contracted to perform the reactor pressure vessel volumetric examinations utilizing their remotely operated ultrasonic inspection tool. Examinations were performed in accordance with Section XI of the ASME code, 1974 Edition, through and including Summer 1975 Addenda; NRC Regulatory Guide 1.150, "Ultrasonic Testing of Reactor Vessel Welds During Preservice and Inservice Examinations", Revision 1, Appendix A, "Alternative Method"; and Prairie Island Technical Specification, Section TS 4.2.

Volumetric examination areas included the shell-to-flange weld; flange ligaments; vessel supports; circumferential seam and head welds; and the shell-to-nozzle welds, safe-end welds, and inner radius sections for the inlet nozzles and the safety injection nozzles.

Visual examination areas included the reactor vessel I.D. surface(s); core barrel; upper and lower internals; sections of vessel cladding; and other accessible areas upon removal of the core/support structures. These examinations completed the vessel inspection requirements for the first (1st) Interval as described in the aforementioned ASME Code Section. No reportable indications were observed during these examinations.

Copies of the procedures used, inspection program details, inspection and evaluation data, and personnel certifications are contained under a separate report prepared by Westinghouse. This report is maintained on file by Northern States Power Company.

APPENDIX A  
ASME CLASS I EXAMINATIONS

NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S1.1PAGE 1 OF 6MAJOR ITEM: REACTOR VESSEL

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B1.1	B-A	LONGITUDINAL AND CIRCUM- FERENTIAL WELDS IN CORE REGION					
		LONGITUDINAL WELDS	-	-	-	-NONE-	
		CIRCUMFERENTIAL WELDS	THREE	50%	100%	WELD NO. 3	85-W RPV REPORT
B1.2	B-B	LONGITUDINAL AND CIRCUMFERENTIAL WELDS IN SHELL (OTHER THAN THOSE OF CATEGORY B-A AND B-C) AND MERIDIONAL AND CIRCUMFERENTIAL SEAMWELDS IN BOTTOM HEAD AND CLOSURE HEAD (OTHER THAN THOSE AT CATEGORY B-C)					
		LONGITUDINAL WELDS	-	-	-	-NONE-	
		MERIDIONAL WELDS	-	-	-	-NONE-	
		CIRCUMFERENTIAL WELDS	THREE	5%	100%	WELD NO. 2	85-W RPV REPORT
				5%	7.2%	WELD NO. 4	85-W RPV REPORT
				5%	7.2%	WELD NO. 5	85-W RPV REPORT
B1.3	B-C	VESSEL TO FLANGE AND HEAD TO FLANGE CIRCUMFERENTIAL WELDS					
		VESSEL TO FLANGE WELD NO. 1	ONE	33%	33%	STUD HOLE: 12 TO 22 & 29 TO 35	77-W RPV REPORT
			TWO	30%	30%	9 TO 12 & 35 TO 46	81-W RPV REPORT
			THREE	36%	36%	REMAINDER OF STUD HOLES	85-W RPV REPORT
					100%	FROM VESSEL ID	85-W RPV REPORT



NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S1.1PAGE 2 OF 6

MAJOR ITEM: REACTOR VESSEL

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B1.3	B-C	(CONT'D)  HEAD TO FLANGE WELD NO. 6	ONE  TWO THREE	33%  33% 34%	33%  33% 34%	STUD HOLE: 1 THRU 16  16 THRU 34 34 THRU 48 THRU 1	77-W RPV REPORT & 77-74,73,75 81-141,143,144 85-017,018,019
B1.4	B-D	PRIMARY NOZZLE-TO-VESSEL WELDS AND NOZZLE INSIDE RADIUS SECTIONS  REACTOR CORE COOLANT NOZZLES  OUTLET NOZZLES  INLET NOZZLES  SAFETY INJECTION NOZZLES	ONE TWO THREE    THREE THREE	1 1 2    1 1	1 1 2    1 1	RCC-A-1 RCC-B-1 RCC-A-14 S.E. RCC-B-14.S.E.  W-8 W-11	77-W RPV REPORT 81-W RPV REPORT 85-W RPV REPORT 85-W RPV REPORT  85-W RPV REPORT 85-W RPV REPORT
B1.5	B-E	VESSEL PENETRATIONS, INCLUDING CONTROL ROD DRIVE AND INSTRUMENTATION PENETRATIONS  CONTROL ROD PENETRATIONS	ONE TWO THREE	3% 3% 4%	*3% *3% *4%		*EACH ITEM INSPECTED BY PLANT PERSONNEL DURING EACH REACTOR VESSEL LEAKAGE TEST

NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE SI.1PAGE 3 OF 6MAJOR ITEM: REACTOR VESSEL

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B1.5	B-E	(CONT'D)  INSTRUMENTATION PENETRATIONS	ONE TWO THREE	3% 3% 3%	*3% *3% *3%		*EACH ITEM INSPECTED BY PLANT PERSONNEL DURING EACH REACTOR VESSEL LEAKAGE TEST
		REACTOR VESSEL HEAD VENT	*-	1	*1	1-2RC-36 TO 2-RC-8-5	
B1.6	B-F	<u>NOZZLE TO SAFE END WELDS</u>  REACTOR CORE COOLANT NOZZLES					
		OUTLET NOZZLES	ONE	1	1	RCC-A-1 S.E.	77-W RPV REPORT & 77-020,112
			TWO	1	1	RCC-B-1 S.E.	81-W RPV REPORT & 81-21
		INLET NOZZLES	THREE	2	2	RCC-A-14 S.E. RCC-B-14 S.E.	83B-133 (PT ONLY) 85-W RPV REPORT 83B-134 (PT ONLY) 85-W RPV REPORT
		REACTOR VESSEL SAFETY INJECTION NOZZLES					
		NOZZLE A S.E.	ONE	1	1	NO. 1	77-W RPV REPORT & 77-023,113
		NOZZLE B S.E.	THREE	1	1	NO. 1	83B-047, 157
B1.8	B-G-1	<u>CLOSURE STUDS AND NUTS</u>	ONE	16	16	#1 THRU #16	77-W RPV REPORT & 77-106
			TWO	16	16	#1THRU #16 #17 THRU #32	78-84,99 (MT ONLY) 81-162,163,165,166

NORTHERN STATES POWER CO.

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## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE SI.1

PAGE 4 OF 6

MAJOR ITEM: REACTOR VESSEL

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
			THREE	16	16	#33 THRU #48 #33 THRU #43	83B-048, 061, 062 (STUDS ONLY) 84-038, 049 (NUTS)
B1.9	B-G-1	<u>LIGAMENTS BETWEEN THREADED STUD HOLES</u>	ONE	16	16	12-22 & 29-35	STUD HOLES: 77-W RPV REPORT
			TWO	14	14	9-11 & 36-46	81-W RPV REPORT
			THREE	18	18	REMAINDER OF STUD HOLES	85-W RPV REPORT
B1.10	B-G-1	<u>CLOSURE WASHERS AND BUSHINGS</u>					
		WASHERS	ONE	16	16	PAIRS, 1 THRU 16	77-W RPV REPORT
			TWO	16	16	PAIRS, 17 THRU 32	81-164
			THREE	16	16	PAIRS, 33 THRU 48	84-039
		BUSHINGS	-	-	-	-NONE-	
B1.11	B-G-2	<u>PRESSURE RETAINING BOLTING</u>	ONE	3	9	ALL 9 BOLTS	77-W RPV REPORT
			TWO	3	9	ALL 9 BOLTS	81-170
			THREE	3	9	ALL 9 BOLTS	84-064
B1.12	B-H	<u>INTEGRALLY WELDED VESSEL SUPPORTS</u>	THREE	2	2	WS1, WS2	85-W RPV REPORT
B1.13	B-I-1	<u>CLOSURE HEAD CLADDING</u>	ONE	2	2	HCP-1 & HCP-2	77-W RPV REPORT
			TWO	2	3	HCP-1, HCP-3 & HCP-4	81-155
			THREE	2	2	HCP-5 & HCP-6	84-063
B1.14	B-I-1	<u>VESSEL CLADDING</u>	ONE	2	2	VCP-1 & VCP-2	76-W INTERNALS RPT
			TWO	2	2	VCP-3 (2 PATCHES)	81-W RPV REPORT
			THREE	2	2	VCP@57 & VCP@90	85-W RPV REPORT

NORTHERN STATES POWER CO.

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## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S1.1PAGE 5 OF 6

MAJOR ITEM:

REACTOR VESSEL

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B1.15	B-N-1	<u>VESSEL INTERIOR</u>  UPPER INTERNALS AND LOWER INTERNALS	ONE TWO THREE	* * *	* * *	* * *	76-W INTERNALS RPT 80-W INTERNALS RPT 85-W RPV REPORT * <u>      </u> , REPRESENTATIVE REGIONS OF THOSE INTERIOR SURFACES AND INTERNALS MADE ACCESSIBLE BY THE REMOVAL OF COMPON- ENTS DURING NORMAL REFUELING OPERATION
B1.16	B-N-2	<u>INTERIOR ATTACHMENTS AND CORE SUPPORT STRUCTURES</u>	-	-	-	NOT APPLICABLE FOR PWR'S	
B1.17	B-N-3	<u>REMOVABLE CORE SUPPORT STRUCTURES</u>	THREE	*	*	*100% OF THE VISU- ALLY ACCESSIBLE ATTACHMENT WELDS AND VISUALLY ACCES- SIBLE SURFACES OF THE CORE SUPPORT STRUCTURE	85-W RPV REPORT

NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE SI.1PAGE 6 OF 6

MAJOR ITEM: REACTOR VESSEL

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B1.18	B-O	<u>CONTROL ROD DRIVE HOUSINGS</u>					
		PERIPHERAL CRD HOUSINGS	THREE	2	2	CR-37,35	85-014,015
B1.19	B-P	<u>EXEMPTED COMPONENTS</u>	-	*-	-	*ALL COMPONENTS EXEMPTED FROM VOLUMETRIC AND SURFACE EXAMINA- TION BY IWB-1200	*PERFORMED BY PLANT PERSONNEL IN ACCORD- ANCE WITH IWA-5000 DURING EACH SYSTEM LEAKAGE TEST AND EACH SYSTEM HYDRO- STATIC TEST REQUIRED BY IWB-5000



NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT <sup>2</sup>

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S1.2PAGE 1 OF 2MAJOR ITEM: PRESSURIZER

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.
B2.1	B-B	<u>LONGITUDINAL AND CIRCUMFERENTIAL WELDS</u>					
		LONGITUDINAL WELDS					
		WELD NO. 1	THREE	5%	9%	W-3 UP 12"	82-197,217,251
			THREE	5%	12%	W-4 DOWN 15"	82-197,217,251
		WELD NO. 2	ONE	5%	5%	BOTTOM TO TOP	76-45,67
			TWO	5%	8%	W-5 DOWN 11" (CW)	78-104,112,118
		CIRCUMFERENTIAL WELDS				FROM NAMEPLATE:	
		WELD NO. 3	ONE	1.7%	33%	+10' TO +18'	76-43,69
			TWO	1.7%	13%	+7'6" TO +10'8"	78-105,115,122
			THREE	1.8%	25%	-2' TO +4'	82-198,216,252
		WELD NO. 4	ONE	1.7%	33%	+8' TO 16'	76-44,66
			TWO	1.7%	6%	+8'4" TO +9'10"	78-103,114,119
			THREE	1.8%	25%	-1'10" TO +4'2"	82-196,208,253
		WELD NO. 5	ONE	1.7%	33%	+10' TO +18'	76-29,68
			TWO	1.7%	12%	+6'10" TO +9'9"	78-113,116,121
			THREE	1.8%	6.9%	0" TO 1'8"	82-195,209,254
B2.2	B-D	<u>NOZZLE TO VESSEL WELDS</u>	-	-	-	-NONE-	
B2.3	B-E	<u>HEATER PENETRATION</u>	*	25/10 YRS	*		*EACH ITEM INSPECTED BY PLANT PERSONNEL
B2.4	B-F	<u>NOZZLE TO SAFE END WELDS</u>	ONE	2	2	W-1A S.E.(8010A)	76-26,53
						W-1A S.E.(8010B)	76-61,52
			TWO	5	5	W-15 S.E.	78-31,100
						W-1A S.E.(RELIEF)	80-58,87,170
						W-22A S.E.(SPRAY)	80-57,85,168
						W-1A S.E.(8010A)	80-188,192,192R,192Ra
						W-1A S.E.(8010B)	80-189,191,191R
					2	W-1A S.E.(8010A)	81-6,6R,37,63
						W-1B S.E.(8010B)	81-23,23R,39,62

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## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S1.2

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MAJOR ITEM: PRESSURIZER

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.
B2.4	B-F	(CON'T)	THREE	2	2	W-1A S.E. W-22A S.E.	82-200,224,226 82-203,225,227
B2.5 B2.6 AND B2.7	B-G-1	PRESSURE-RETAINING BOLTS AND STUDS ( 2 IN. DIA.)	-	-	-	-NONE-	
						(CW) FROM NAMEPLATE:	
B2.8	B-H	INTEGRALLY WELDED VESSEL WELD SKIRT WELD	ONE TWO THREE	3.3% 3.3% 3.4%	3.3% 23% 27%	+8" TO -8" +6' TO +11'9" +10' TO +16' 5"	76-77 78-106,107,117 82-231
B2.9	B-I-2	VESSEL CLADDING	THREE	36 SQ. IN. PATCH	36 SQ. IN. PATCH		85-013
B2.10	B-P	EXEMPTED COMPONENTS					
		INSTRUMENT NOZZLE PENETRATIONS	*	-	-	NO. 5A THRU 5H	*EACH ITEM INSPECTED BY PLANT PERSONNEL
		SAMPLE NOZZLE PENETRATION	*	-	-	NO. 6	*EACH ITEM INSPECTED BY PLANT PERSONNEL
B2.11	B-G-2	PRESSURE RETAINING BOLTING					
		MANWAY BOLTS	ONE TWO  THREE	5 5  6	5 5  16	BOLTS 1 THRU 6 BOLTS 6 THRU 10 BOLTS 1 THRU 16 BOLTS 1 THRU 16	76-30 78-82 81-60 82-232

NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S1.4

PAGE 1 OF 19

MAJOR ITEM: PIPING PRESSURE BOUNDARY

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B4.1	B-F	SAFE END TO PIPING AND SAFE END IN BRANCH PIPING WELDS					
		REACTOR VESSEL					
		REACTOR CORE COOLANT SYSTEMS	ONE	1	1	W-1A, 29-2RC-1A	77-W RPV REPORT & 77-022,112
			TWO	1	1	RCC-B-1 S.E.	81-W RPV REPORT & 81-21
			THREE	2	2	RCC-A-14 S.E. RCC-B-14 S.E.	83B-155 (PT ONLY) 83B-156 (PT ONLY)
		SAFETY INJECTION SYSTEMS	ONE	1	1	W-2, 4-2RC-14A	77-W RPV REPORT & 77-024,113
			THREE	1	1	W-1	83B-047, 135
		STEAM GENERATOR NO. 21					
		REACTOR CORE COOLANT SYSTEM	TWO	1	1	RCC-A-5 S.E.	81-116,125
			THREE	1	1	RCC-A-4 S.E.	83B-143, 143R, 146
		STEAM GENERATOR NO. 22					
		REACTOR CORE COOLANT SYSTEM	ONE	1	1	W-5, 31-2RC-2B	76-136,139
			THREE	1	1	RCC-B-4 S.E.	83B-145, 151
		PRESSURIZER					
		SAFETY LINES	ONE	2	2	W-1, (8010A)	76-26,53
						W-1, (8010B)	76-61,52
			TWO	2	2	W-1, (8010A)	80-187, 192, 192R, 192Ra
						W-1, (8010B)	80-190,191,191R
					2	W-1, (8010A)	81-7,7R,38,61
						W-1, (8010B)	81-22,22R,40,64
		SURGE LINE	TWO	1	1	W-15 SE, 10-2RC-4	78-31,100

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## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S1.4

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MAJOR ITEM: PIPING PRESSURE BOUNDARY

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B4.1	B-F	(CONT'D)					
		RELIEF LINE	TWO	1	1	W-1B	80-58,88,169
			THREE	1	1	W-1	82-201,222
		SPRAY LINE	TWO	1	1	W-22B	80-56,56R,86,167
			THREE	1	1	W-22B	81-5,5R,24
						W-22	82-202,223
B4.2 B4.3 AND B4.4	B-G-1	PRESSURE REMAINING BOLTS AND STUDS ( 2 IN. DIA.)	-	-	-	-NONE-	
B4.5	B-J	CIRCUMFERENTIAL AND LONGITUDINAL PIPE WELDS					
		LONGITUDINAL WELDS	-	-	-	-NONE-	
		CIRCUMFERENTIAL WELDS					
		(1.5 IN. NOM.DIA. SYS.)					
		SEAL INJECTION A	ONE	-	-		
			TWO	1	1	W-4	78-12
			THREE	1	1	W-3	82-077
		SEAL INJECTION B	ONE	1	1	W-9	77-57
			TWO	-	-		
			THREE	1	1	W-4	84-061
		(2.0 IN. NOM. DIA. SYS.)					
		SEAL INJECTION A	ONE	3	3	W-21,22,24	77-18,19,20
			TWO	3	3	W-34,35,36	78-14,16,17
			THREE	4	4	W-8,52,53,54	82-076,230,229,228

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SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B4.5	B-J	(CONT'D)					
		SEAL INJECTION B	ONE	4	4	W-54,55,58,59	77-10,11,13,12
			TWO	5	5	W,29,33,34,36,37	80-91,90,89,92,93
			THREE	4	4	W-11,16,17,18	82-072,073,074,075
		CHARGING LINE	ONE	6	6	W-81,82A,80,83B,	77-9,8,7,6,5,4
		CVCS				83A,83	
			TWO	6	6	W-32,33,36	78-20,21,22
						W-37,38,39	80-96,97,98
			THREE	6	6	W-4,5,12,13,24,25	83B-009,008,007,006, 004,003
		LETDOWN LINE AND	ONE	1	1	W-22	77-27
		DRAIN LINE	TWO	2	2	W-6,7	80-94,95
			THREE	2	2	W-9,13	82-109,110
		AUXILIARY SPRAY	ONE	1	1	W-1	77-28
		TO PRESSURIZER	TWO	1	1	W-11	78-71
			THREE	2	2	W-12, 13	83B-115, 116
		RESIDUAL TEMPERATURE	ONE	1	1	W-20	77-42
		DETECTOR TAKE OFF-	TWO	1	1	W-6	80-177
		COLD LEG A	THREE	1	1	W-11	83B-014
		RESIDUAL TEMPERATURE	ONE	1	1	W-18	77-60
		DETECTOR TAKE OFF-	TWO	2	2	W-8,9	80-116,117
		COLD LEG B	THREE	1	1	W-13	83B-021
		RESIDUAL TEMPERATURE	ONE	1	1	W-24	77-58
		DETECTOR TAKE OFF-	TWO	1	1	W-29	80-178
		HOT LEG A	THREE	2	2	W-39, 40	83B-013, 012
		RESIDUAL TEMPERATURE	ONE	1	1	W-19	77-59
		DETECTOR TAKE OFF-	TWO	1	1	W-23	80-104
		HOT LEG B	THREE	2	2	W-37, 38	83B-020, 026



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SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B4.5	B-J	(CONT'D)					
		SAFETY INJECTION HIGH HEAD A	ONE TWO THREE	- 1 1	- 1 1	W-2 W-7	78-15 82-108
		SAFETY INJECTION HIGH HEAD B	ONE TWO THREE	1 - 1	1 - 1	W-7 W-2 W-2 (REPEAT)	77-43 82-262 83B-027
		DRAIN LINE ON CROSSOVER A	ONE TWO THREE	1 1 1	1 1 1	W-14 W-7 W-6	77-26 78-13 82-107
		REACTOR VESSEL SAFETY INJECTION LOW HEAD A	ONE TWO THREE	1 1 1	1 1 1	W-12 W-9 W-2	77-17 78-19 82-092
		REACTOR VESSEL SAFETY INJECTION LOW HEAD B	ONE TWO THREE	- 1 1	- 1 1	W-2 W-1	78-23 82-091
		(3.0 IN. NOM. DIA. SYS.)					
		SPRAY TO PRESSURIZER BRANCH A	ONE TWO THREE	3 3 4	3 3 4	W-5,7,8 W-20,24,25 W-16,17 W-9, 11	77-38,40,39 80-121,120,119 82-220,218 83B-138, 139
		SPRAY TO PRESSURIZER BRANCH B	ONE TWO THREE	2 3 2	2 3 2	W-18,19 W-3,4,5 W-2, 3	77-48,46 80-118,122,103 83B-136, 137
		RESIDUAL TEMPERATURE DETECTOR RETURN A	ONE TWO THREE	1 1 1	1 1 1	W-5 W-2 W-3	77-41 78-66 84-062

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B4.5	B-J	(CONT'D)					
		RESIDUAL TEMPERATURE	ONE	1	1	W-7	77-56
		DETECTOR RETURN B	TWO	1	1	W-6	78-85
			THREE	1	1	W-3	83B-029
		PRESSURIZER RELIEF	ONE	-	-		
		LINE A	TWO	-	-		
			THREE	1	1	W-5	82-221
		PRESSURIZER RELIEF	ONE	1	1	W-4	77-47
		LINE B	TWO	1	1	W-9	80-99
			THREE	1	1	W-10	83B-120
		<u>(4.0 IN. NOM. DIA. SYS.)</u>					
		SAFETY INJECTION	ONE	1	-	NONE OF THESE WELDS ARE ACCES- SIBLE; THEY ARE LOCATED WITHIN THE CONCRETE SHIELD WALL	
		LOW HEAD A	TWO	-	-		
			THREE	-	-		
		SAFETY INJECTION	ONE	-	-		
		LOW HEAD B	TWO	-	-		
			THREE	1	1	W-2	83B-120
		<u>(6.0 IN. NOM. DIA. SYS.)</u>					
		REACTOR VESSEL	ONE	-	-		
		SAFETY INJECTION	TWO	1	1	W-6	80-100
		LOW HEAD A	THREE	1	2	W-5, 4	83B-092, 091
		REACTOR VESSEL	ONE	1	1	W-9 (+W-8)	76-37 (+76-38)
		SAFETY INJECTION	TWO	-	-		
		LOW HEAD B	THREE	1	2	W-4, 3	83B-090, 093

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SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B4.5	B-J	(CONT'D)					
		SAFETY INJECTION HIGH HEAD A	ONE TWO THREE	- - 1	- - 1	W-2	83B-010
		SAFETY INJECTION HIGH HEAD B	ONE TWO THREE	1 - -	1 - -	W-1	76-143
		PRESSURIZER SAFETY LINE A	ONE TWO THREE	- 3 1	- 3 1	W-8/W-3,4 W-7	80-102/81-59,58 83B-088
		PRESSURIZER SAFETY LINE B	ONE TWO THREE	2 2 1	2 2 1	W-1,2 W-6,7 W-4	76-54,61 81-57,56 83B-089
		PLO-CAP A	ONE TWO THREE	- - 1	- - 1	W-1	83B-011
		PLO-CAP B	ONE TWO THREE	- 1 -	- 1 -	W-1	80-101
		(8.0 IN. NOM. DIA. SYS.)					
		RESIDUAL HEAT REMOVAL TAKE OFF A	ONE TWO THREE	2 3 3	2 3 3	W-11,12 W-5,6,8 W-2,3,4	77-33,32 78-90,94,92 82-078,079,082
		RESIDUAL HEAT REMOVAL TAKE OFF B	ONE  TWO THREE	3  2 3	8  2 3	W-25,27,28 (+W-8,10,11,12,26) W-12,14 W-5,6,7	76-74,58,56 (+76-70,71,72,73,58) 78-95,91 82-083,084,085

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B4.5	B-J	(CONT'D)					
		(10.0 IN. NOM. DIA. SYS.)					
		RESIDUAL HEAT REMOVAL	ONE	1	2	W-1 (+W-9)	76-9 (+76-7)
		RETURN B	TWO	1	1	W-7	78-102
			THREE	1	1	W-9	83B-019
		PRESSURIZER SURGE	ONE	1	4	W-12 (+W-11,13,14)	76-81 (+76-78,81,79)
		LINE B	TWO	1	1	W-14	78-101
			THREE	2	2	W-1, 2	83B-165, 166
		(12.0 IN. NOM. DIA. SYS.)					
		ACCUMULATOR DISCHARGE A	ONE	1	1	W-11	77-35
			TWO	1	1	W-7	80-35,36
			THREE	1	1	W-3	83B-173
		ACCUMULATOR DISCHARGE B	ONE	2	5	W-1,15 (+W-13,14 16)	76-146,18 (+76-20 21,19)
			TWO	1	1	W-13	80-34,37
			THREE	2	2	W-2, 3	83B-174, 175
		(27.5 IN. NOM. DIA. SYS.)					
		REACTOR CORE COOLANT	ONE	-	-		
		COLD LEG (INLET) A	TWO	-	-		
			THREE	1	1	RCC-A-11	83B-015, 017, 017R
		(29.0 IN. NOM. DIA. SYS.)					
		REACTOR CORE COOLANT	ONE	-	-		
		COLD LEG (INLET) B	TWO	1	1	RCC-B-12	81-87,94
			THREE	-	-		

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B4.5	B-J	(CONT'D)					
		REACTOR CORE COOLANT HOT LEG (OUTLET) A	ONE TWO THREE	1 - -	1 - -	W-3, 29-2RC-1A	77-044
		REACTOR CORE COOLANT HOT LEG (OUTLET) B	ONE TWO THREE	- - 1	- - 1	RCC-B-3	83B-147, 150
		(31.0 IN. NOM. DIA. SYS.)					
		REACTOR CORE COOLANT CROSSOVER A	ONE TWO THREE	- 2 -	- 2 -	RCC-A-7 RCC-A-7	81-115, 115R, 152 81-117, 124
		REACTOR CORE COOLANT CROSSOVER B	ONE TWO THREE	1 - 1	3 - 1	W-6 (+W-7,8) RCC-B-10	76-140 (+76-141, 142) 83B-016, 018
B4.6	B-J	BRANCH PIPE CONNECTION WELDS EXCEEDING SIX INCH DIAMETER					
		ACCUMULATOR DISCHARGE A	-	-	-		
		ACCUMULATOR DISCHARGE B	ONE	1	1	W-R	76-145, 137
		RESIDUAL HEAT REMOVAL TAKE OFF A	-	-	-		
		RESIDUAL HEAT REMOVAL TAKE OFF B	TWO	1	1	W-ROOT	81-113, 121, 126
		PRESSURIZER SURGE LINE B	THREE	1	1	W-R	83B-160, 167

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SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B4.7	B-J	BRANCH PIPE CONNECTION WELDS SIX INCH DIAMETER AND SMALLER  (6.0 IN. NOM. DIA. SYSTEMS)					
		PLO-CAP A	-	-	-		
		PLO-CAP B	-	-	-		
		SAFETY INJECTION HIGH HEAD A	-	-	-		
		SAFETY INJECTION HIGH HEAD B	ONE	1	1	W-R	76-138,144
		(3.0 IN NOM. DIA. SYSTEMS)					
		SPRAY TO PRESSURIZER BRANCH A	-	-	-		
		SPRAY TO PRESSURIZER BRANCH B	THREE	1	1	W-R	83B-149
		RESIDUAL TEMPERATURE DETECTOR RETURN A	-	-	-		
		RESIDUAL TEMPERATURE DETECTOR RETURN B	-	-	-		
		(2.0 IN. NOM. DIA. SYSTEMS)					
		RESIDUAL TEMPERATURE DETECTOR TAKE OFF COLD LEG A	-	-	-		

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SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B4.7	B-J	(CONT'D)					
		RESIDUAL TEMPERATURE DETECTOR TAKE OFF COLD LEG A	TWO	1	1	W-ROOT	81-89
		DRAIN LINE ON CROSSOVER A	-	-	-		
		DRAIN LINE ON CROSSOVER B	ONE	1	1	W-R	76-131
		CHARGING LINE CVCS	-	-	-		
		REACTOR VESSEL SAFETY INJECTION LOW HEAD A	-	-	-		
		REACTOR VESSEL SAFETY INJECTION LOW HEAD B	THREE	1	1	W-R	82-144
B4.8	B-J	<u>SOCKET WELDS</u>					
		<u>(2.0 IN. NOM. DIA. SYSTEMS)</u>					
		SEAL INJECTION A	ONE	-	-		
			TWO	1	1	SW-9	78-25
			THREE	1	1	W-10	82-099
		SEAL INJECTION B	ONE	1	1	SW-64	76-5
			TWO	-	-		
			THREE	1	1	W-12	82-097



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B4.8	B-J	(CONT'D)					
		CHARGING LINE B	ONE	1	1	SW-54 (+SW-57,87)	76-49 (+76-49,6)
			TWO	1	1	SW-27	78-28
			THREE	1	1	W-26	83B-098
		DRAIN LINE AND LETDOWN LINE B	ONE	1	1	SW-1 (+SW-24)	76-131 (+76-40)
			TWO	1	1	SW-10	80-158
			THREE	1	1	W-17	83B-101
		AUXILLIARY SPRAY	ONE	1	1	SW-4	76-42
			TWO	-	-		
			THREE	-	-		
		RESIDUAL TEMPERATURE DETECTOR TAKE OFF COLD LEG A	ONE	1	1	SW-13	77-117
			TWO	1	1	SW-4	78-27
			THREE	1	1	W-12	83B-059
		RESIDUAL TEMPERATURE DETECTOR TAKE OFF COLD LEG B	ONE	1	1	SW-15	77-120
			TWO	1	1	SW-4	78-26
			THREE	1	1	SW-14	84-050
		RESIDUAL TEMPERATURE DETECTOR TAKE OFF HOT LEG A	ONE	-	-		
			TWO	1	1	SW-31	80-154
			THREE	1	1	W-38	83B-038
		RESIDUAL TEMPERATURE DETECTOR TAKE OFF HOT LEG B	ONE	-	-		
			TWO	1	1	SW-29	80-157
			THREE	1	1	W-36	83B-039
		SAFETY INJECTION HIGH HEAD A	ONE	-	-		
			TWO	-	-		
			THREE	1	1	W-8	82-145

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B4.8	B-J	(CONT'D)					
		SAFETY INJECTION HIGH HEAD B	ONE TWO THREE	1 - -	1 - -	SW-8	77-110
		DRAIN LINE ON CROSSOVER A	ONE TWO THREE	1 - -	1 - -	SW-13	77-114
		REACTOR VESSEL SAFETY INJECTION LOW HEAD A	ONE TWO THREE	1 - -	1 - -	SW-13	77-111
		REACTOR VESSEL SAFETY INJECTION LOW HEAD B	ONE TWO THREE	- - 1	- - 1	W-6	82-143
B4.9	B-K-1	<u>INTEGRALLY WELDED SUPPORTS</u>					
		SEAL INJECTION A	TWO	1	1	H	78-18,30,39
		RESIDUAL TEMPERATURE DETECTOR TAKE OFF HOT LEG A	-	-	-		
		SAFETY INJECTION HIGH HEAD A	-	-	-		
		SPRAY TO PRESSURIZER BRANCH A	TWO	1	1	L	80-76,123,156
		BRANCH B	THREE	1	1	I	82-204,206,219

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B4.9	B-K-1	(CONT'D)					
		RESIDUAL HEAT REMOVAL TAKE OFF A	TWO	1	1	U	78-29,50,93
		ACCUMULATOR DISCHARGE A	-	-	-		
		SEAL INJECTION B	TWO	1	1	A	80-49,105,155
		CHARGING LINE CVCS	ONE	1	2	Z (+X)	76-109,106(+76-110-6)
			TWO	-	-		
			THREE	1	1	L	83B-005, 124, 125
		RESIDUAL TEMPERATURE DETECTOR TAKE OFF COLD LEG B	-	-	-		
		RESIDUAL HEAT REMOVAL TAKE OFF B	ONE	1	1	Q	76-60,59
		RESIDUAL HEAT REMOVAL RETURN B	THREE	1	1	D	82-123,140,255
		ACCUMULATOR DISCHARGE B	ONE	1	1	B1	76,39-3
		SAFETY INJECTION HIGH HEAD B	-	-	-		
		AUXILLIARY SPRAY CVCS	-	-	-		
		REACTOR VESSEL SAFETY INJECTION A	THREE	1	1	C	82-098,139,146

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B4.10	B-K-2	(CONT'D)					
4.10	B-K-2	SUPPORT COMPONENTS					
		SEAL INJECTION A	ONE	4	3	A1, N/G (HGR J ADDED, PER 2)	76-96/77-133
			TWO	5	6	F,I,J	78-38,40,65
			THREE	5	5	A,B,C L,M,N,O,P	80-148,147 82-114,116,117,113, 115
		DRAIN LINE ON CROSSOVER A	ONE	-	-		
			TWO	-	-		
			THREE	1	1	A	82-118
		RESIDUAL TEMPERATURE DETECTOR TAKE OFF COLD LEG A	ONE	1	1	A	76-97
			TWO	1	1	B1	80-144,144R
						B1	81-139,139R
			THREE	2	2	A1	83B-070
						B	83B-109
		RESIDUAL TEMPERATURE DETECTOR TAKE OFF HOT LEG A	ONE	2	2	C,D	77-144
			TWO	2	2	G,H	80-146
			THREE	3	3	C1, C2, E	83B-071, 073, 033
		SAFETY INJECTION HIGH HEAD A	ONE	1	1	C	77-131
			TWO	1	1	D	80-132
			THREE	1	1	A	82-257
						A (REPEAT)	83B-077
		RESIDUAL TEMPERATURE DETECTOR RETURN A	ONE	1	1	C	76-98
			TWO	1	1	B	78-41
			THREE	1	1	A	83B-072

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B4.10	B-K-2	(CONT'D)					
		SPRAY TO PRESSURIZER BRANCH A	ONE	4	4	J/M,N,O	76-107/77-151
			TWO	5	5	B,C,D,H	78-42,43,44,45
						V	80-135
		THREE		5	5	P	82-205
						P (REPEAT)	83B-164
						Q, R, S, U, V	83B-081, 082, 083, 075, 076
		SPRAY TO PRESSURIZER BRANCH B	ONE	3	3	G,H,F	76-107
			TWO	3	3	D,E,F1	80,129,130,131
			THREE	3	3	B,C,C1	82-163,162,161
		RESIDUAL HEAT REMOVAL TAKE OFF A	ONE	5	5	O,P,Q,S,T	76-41
			TWO	5	5	B.C.D.H,	78-46,47,48,49
						C,E	80-54,23
		THREE		6	6	I,J,L,M,	82-247,155,156,157
						R,V	82-121,154
		ACCUMULATOR DISCHARGE A	ONE	2	2	H,I	75-33
			TWO	3	3	D,E,G	80-25,50,51
			THREE	3	3	A,B,C	83B-079, 078, 080
		SEAL INJECTION B	ONE	4	4	O,P,N/Q	76-32/77-157
			TWO	4	4	D,E,K,M	80,53,52,47,46
			THREE	5	5	F,H,I,J	82-122,158,119,120
		CHARGING LINE CVCS				B	83B-159
			ONE	5	5	R,S,V,W,Y	76-51,85
			TWO	7	7	K,M,N,O	78-53,53,52,51
		THREE				O,Q,T,V	80-80,127,126,125
				8	8	B,B1,C,D	83B-158,163,102, 153,153R
						F,H,J,P	83B-154,154R,123, 114,114R,126

NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

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MAJOR ITEM: PIPING PRESSURE BOUNDARY

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B4.10	B-K-2	(CONT'D)					
		RESIDUAL TEMPERATURE	ONE	2	2	A,A1	77-156
		DETECTOR TAKE OFF	TWO	2	2	B,C/C	78-54,55/80-145
		COLD LEG B	THREE	2	2	C1,E	83B-074,074R,045,045R
		RESIDUAL TEMPERATURE	ONE	1	1	A2	77-134
		DETECTOR TAKE OFF	TWO	2	2	A1,A	80-73, 73R,72
		HOT LEG B	THREE	2	2	A1 C,D	81-140 83B-034,046
		DRAIN LINE AND	ONE	2	2	E/C	77-135/76-108
		LETDOWN LINE B	TWO	2	2	A,B	80-79,78
			THREE	2	2	A1,A2	82-244,245
		RESIDUAL TEMPERATURE	ONE	-	-		
		DETECTOR RETURN B	TWO	1	1	A	78-56
			THREE	-	-		
		RESIDUAL HEAT REMOVAL	ONE	5	5	H/L,M,N,O	76-63/77-145,149
		TAKE OFF B	TWO	5	5	A,B,C	78-57,57,58
			THREE	6	6	C,D,K F,G,I,J, P,P	80-65,64,133 82-149,150,147,148, 148R 82-137,138
		RESIDUAL HEAT REMOVAL	ONE	1	1	A	77-132
		RETURN B	TWO	1	1	B	78-59
			THREE	1	1	C	83B-069
		ACCUMULATOR DISCHARGE B	ONE	3	3	E,F,C	77-138
			TWO	3	3	B,B1/A	78-60/80-48
			THREE	4	4	A1,A2,D1,D2	83B-094,095,097,096
		SAFETY INJECTION	ONE	1	1	C	77-127
		HIGH HEAD B	TWO	-	-		
			THREE	1	1	A	83B-085

NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S1.4PAGE 17 OF 19MAJOR ITEM: PIPING PRESSURE BOUNDARY

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B4.10	B-K-2	(CONT'D)					
		AUXILLIARY SPRAY	ONE	1	1	A	76-46
		TO PRESSURIZER	TWO	1	1	B	78-61
			THREE	2	2	C,E	83B-128,127
		REACTOR VESSEL	ONE	1	1	A	77-128
		SAFETY INJECTION	TWO	-	-		
		LOW HEAD A	THREE	-	-		
		REACTOR VESSEL	ONE	-	-		
		SAFETY INJECTION	TWO	1	1	A	
		LOW HEAD B	THREE	-	-		
		PRESSURIZER RELIEF	ONE	-	-		
		LINE B	TWO	-	-		
			THREE	1	1	A	82-159
		REACTOR VESSEL	ONE	1	1	D	77-130
		SAFETY INJECTION	TWO	1	1	B	78-62
		LOW HEAD B (6 X 4")	THREE	2	2	A,C	82-249,141
		REACTOR VESSEL	ONE	1	1	D	77-129
		SAFETY INJECTION	TWO	1	1	A	80-75
		LOW HEAD A (6 X 4")	THREE	2	2	B,C	83B-152,103
		PRESSURIZER SAFETY	ONE	1	1	A1	77-152
		LINES A & B	TWO	1	1	A2	80-128
			THREE	-	-		
		PRESSURIZER SURGE B	ONE	3	3	K,J,I	76-48
			TWO	4	4	A,B/C,D	78-64,63/80-70,71
			THREE	5	5	E,F,G,H,H1	83B-043,043R,084, 084R,040,041,042



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## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S1.4

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MAJOR ITEM: PIPING PRESSURE BOUNDARY

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B4.10	B-K-2	(CONT'D)					
		REACTOR CORE COOLANT CROSSOVER A	ONE TWO THREE	- 1 1	- 1 2	A1 A2,A3	81-138 83B-162,107,107R
		REACTOR CORE COOLANT CROSSOVER B	ONE TWO THREE	1 - 1	1 - 2	B1 B2,B3	76-106 83B-161,106
B4.11	B-P	<u>EXEMPT AND NON-EXEMPT COMPONENTS</u>	-	*	-	*ALL COMPONENTS EXAMINED IN ACCORDANCE WITH IWA-5000 AND IWB-5000 DURING SYSTEM LEAKAGE TEST	PERFORMED BY PLANT PERSONNEL
		HYDROSTATICALLY PRESSURE TESTED TO IWA-500) AT END OF TEN YEAR INTERVAL PLUS SYSTEM LEAKAGE EXAM EACH SCHEDULED REFUELING OUTAGE					
		EXEMPT:					
		RESISTANCE TEMPERATURE DETECTOR TAKE OFF 1-2RC-7A					
		EXCESS LETDOWN LINE A 1-2RC-8 1-2VC-7 1-2VC-9					
		RESISTANCE TEMPERATURE DETECTOR TAKE OFF 1-2RC-7B					

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## INSERVICE INSPECTION-EXAMINATION SUMMARY

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MAJOR ITEM: PIPING PRESSURE BOUNDARY

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B4.11	B-P	(CON'T)  REACTOR VESSEL CLOSURE HEAD VENT 1-2RC-36  REACTOR VESSEL CLOSURE HEAD FLANGE 1-2RC-9A 1-2RC-9B					
B4.12	B-G-2	<u>PRESSURE RETAINING BOLTING</u>  (ONLY SYSTEMS APPLICABLE TO THIS ITEM ARE LISTED)					
		SEAL INJECTION A	ONE	4	4	BOLTS 1-4 @ W-2	76-76
			TWO	4	4	BOLTS 1-4 @ W-4	78-81
		RESISTANCE TEMPERATURE DETECTOR RETURN A	THREE	8	8	BOLTS 1-8 @ W-7	83B-037
		PRESSURIZER SAFETY LINE A	TWO	12	12	BOLTS 1-12 @ 2-8010A	80-135
		SEAL INJECTION B	TWO	4	4	BOLTS 1-4 @ W-2	80-172
			THREE	4	4	BOLTS 1-4 @ W-4	82-100
		RESISTANCE TEMPERATURE DETECTOR RETURN B	THREE	8	8	BOLTS 1-8	85-010
		PRESSURIZER SAFETY LINE B	ONE	12	12	BOLTS 1-12	76-17

NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S1.5

PAGE 1 OF 3

MAJOR ITEM: REACTOR CORE COOLANT PUMPS

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B5.1 AND B5.3	B-G-1	PRESSURE RETAINING BOLTS AND STUDS, IN PLACE ( 2 IN. DIA.)					
		FLANGE BOLTS					
		PUMP A	ONE	8	8	BOLTS 1 THRU 8	76-87
			TWO	8	8	BOLTS 9 THRU 16	78-67
			THREE	8	8	BOLTS 17 THRU 24	83B-213
		PUMP B	ONE	8	8	BOLTS 1 THRU 8	76-86
			TWO	8	8	BOLTS 9 THRU 16	78-68
			THREE	ITEM B5.2	8	BOLTS 17 THRU 24	83B-214
		SEAL HOUSE BOLTING					
		PUMP A	ONE	4	4	BOLTS 1 THRU 4	76-89
			TWO	4	4	BOLTS 5 THRU 8	78-69
			THREE	4	12	BOLTS 1 THRU 12	83B-200
B5.2 AND B5.3	B-G-1	PUMP B	ONE	4	4	BOLTS 1 THRU 4	76-88
			TWO	4	4	BOLTS 5 THRU 8	78-70
			THREE	4	12	BOLTS 1 THRU 12	83B-192
		PUMP A SEAL HOUSE BOLTING	TWO	12	12	BOLT 1 THRU 12	81-46,47/81A-4,7
			THREE	24	24	BOLT 1 THRU 24	83B-105, 186, 104
					24	BOLT 1 THRU 24	84-054,054R,055, 057, 058
		FLANGE BOLTING	TWO	24	24	BOLT 1 THRU 24	81A-1,2,3,5,6,6R

INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S1.5  
 PAGE 2 OF 3  
 MAJOR ITEM: REACTOR CORE COOLANT PUMPS

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.
B5.2 AND B5.3	B-G-1	(CON'T)  PUMP B FLANGE BOLTING SEAL HOUSE BOLTING	THREE THREE	24 12	* 24 24	BOLT 1 THRU 24  BOLT 1 THRU 24	*NOT DISASSEMBLED 83B-050,063,064, 051,065 84-016,017,020,021
B5.4	B-K-1	<u>INTEGRALLY WELDED SUPPORTS</u> PUMP A	TWO	3	3	SUPPORT A,B,C	RELIEF NO. 47 81-129,131,130
		PUMP B	TWO THREE	3 3	3 3	SUPPORT A,B,C SUPPORT A,B,C	81-132,134,137 85-005,006,007
B5.5	B-K-2	<u>SUPPORT COMPONENTS*</u>  PUMP A COLUMN AND LATERAL SUPPORTS	ONE TWO THREE	1 1 1	1 1 1	COLUMN 1 COLUMN 2 COLUMN 3	*COINCIDENT WITH SEISMIC BOLTING  77-67,163,158 80-181,107,174 83B-221, 84-041,046,052,053
		PUMP B COLUMN AND LATERAL SUPPORTS	ONE TWO THREE	1 1 1	1 1 1	COLUMN 1 COLUMN 2 COLUMN 3	77-64,162,161 80-181,107,108 83B-219,238 84-040,046,051
B5.6	B-L-1	<u>PUMP CASING WELDS</u>  PUMP A  PUMP B	THREE  THREE	1  1	*  1	  CASING WELD (PT)	*RELIEF No.63  *RELIEF NO.63 85-012

NORTHERN STATES POWER CO.

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## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S1.5

PAGE 3 OF 3

MAJOR ITEM: REACTOR CORE COOLANT PUMPS

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.
B5.7	B-L-2	<u>PUMP CASINGS</u>  PUMP A or B PUMP A	THREE TWO	1 1	* 1	PUMP CASING	*RELIEF NO. 63 81A-8
B5.8	B-P	<u>EXEMPTED COMPONENTS</u>	-	-	-	-NONE-	
B5.9	B-G-2	<u>PRESSURE RETAINING BOLTING ( 2 IN. DIA.)</u>	-	-	-	-NONE-	
-	-*	<u>PUMP FLYWHEELS</u>  PUMP A & B	ONE  TWO  THREE	2  2  2	2*  2  2	PUMP-21, FLYWHEEL PUMP-22, FLYWHEEL PUMP-21, FLYWHEEL PUMP-22, FLYWHEEL PUMP-21, FLYWHEEL PUMP-22, FLYWHEEL	76-113,117,116 76-93,82,92 80-141,142,143 80-124,139,140 83B-176,177,178 83B-179,180,181  *BOTH FLYWHEELS WERE REMOVED AS A RESULT OF MODIFICA- TION TO THE PUMP LUBRICATION SYSTEM THE BORE AND KEY- WAY'S WERE PT EXAM- INED & THE REMAIN- ING SURFACES WERE MT EXAMINED. U.T. WAS USED TO VOLUME- TRICALLY EXAMINE THE FLYWHEELS (NOTE TECH SPEC 4.2-1)

NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S1.6

PAGE 1 OF 4

MAJOR ITEM: VALVE PRESSURE BOUNDARY

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B6.1 B6.2 AND B6.3	B-G-1	PRESSURE RETAINING BOLTS AND STUDS ( 2 IN. DIA.)	-	-	-	-NONE-	
B6.4	B-K-1	INTEGRALLY WELDED SUPPORTS	-	-	-	-NONE-	
B6.5	B-K-2	SUPPORT COMPONENTS	-	*	-	*INCLUDE IN TABLE 1.4 UNDER B4.10	
B6.6	B-M-1	VALVE BODY WELDS	-	-	-	-NONE-	
B6.7	B-M-2	VALVE BODIES ( 4 IN. NOM. PIPE SIZE)					
		REACTOR VESSEL SAFETY INJECTION LOW HEAD A	THREE	1	1	2-8844A	85-1
		RESIDUAL HEAT REMOVAL TAKE OFF A	THREE	1	1	2-8701A	85-
		PRESSURIZER SAFETY LINE A	THREE	1	1		85-023
		RESIDUAL HEAT REMOVAL RETURN B	THREE	1	*		RELIEF NO.66
		ACCUMULATOR DISCHARGE A	THREE	1	1	2-8841A	84-013
B6.8	B-P	EXEMPTED COMPONENTS	*	100%	*	ITEMS INSPECTED DURING EACH LEAKAGE TEST	INSPECTED BY PLANT PERSONNEL

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NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S1.6

PAGE 2 OF 4

MAJOR ITEM: VALVE PRESSURE BOUNDARY

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B6.9	B-G-2	PRESSURE RETAINING BOLTING *					*NOTE SUPPLEMENT B6.9 AT 3.4.3
		ACCUMULATOR DISCHARGE LOOP A - 12"	ONE THREE	16 16	16 16	CHECK, 2-8841A CHECK, 2-8840A	76-12 82B-054
		ACCUMULATOR DISCHARGE LOOP B - 12"	TWO THREE	16 16	16 16	CHECK, 2-8841B CHECK, 2-8840B	80-82 84-070
		RESIDUAL HEAT REMOVAL RETURN B-10"	ONE	16	16	M.O. GATE, 2-8703	76-13
		RESIDUAL HEAT REMOVAL TAKE OFF A-8"	TWO THREE	16 16	16 16	M.O. GATE, 2-8701A M.O. GATE, 2-8702A	78-80 82-167
		RESIDUAL HEAT REMOVAL TAKE OFF B-8"	ONE ONE	16 16	16 16	M.O. GATE, 2-8701B M.O. GATE, 2-8702B	76-16 76-16
		SAFETY INJECTION HIGH HEAD A - 6"	TWO	12	12	CHECK, 2-8842A	80-166
		SAFETY INJECTION HIGH HEAD B - 6"	THREE	12	12	CHECK, 2-8842B	83B-058
		PRESSURIZER SPRAY LOOP A - 3"	THREE	8	8	GLOBE(2-PCV-431A)	83B-055
		LOOP B - 3"	ONE THREE	8 8	8 8	GLOBE(2-PCV-431B) GLOBE(2-PVC-431B)	76-28 82-166
		RESISTANCE TEMPERATURE DETECTOR RETURN LOOP A - 3"	TWO	12	12	GATE, 2-8001A	78-79
		RESISTANCE TEMPERATURE DETECTOR RETURN LOOP B - 3"	TWO	12	12	GATE, 2-8001B	78-78



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## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S1.6PAGE 3 OF 4

MAJOR ITEM: VALVE PRESSURE BOUNDARY

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B6.9	B-G-2	(CONT'D)					
		RESISTANCE TEMPERATURE DETECTOR TAKE OFF COLD LEG A - 2"	ONE TWO THREE	2 2 2	2 2 2	2T58, 2RC-1-6 2T58, 2RC-1-7 2T58, 2RC-1-8	76-95 80-152 83B-099
		RESISTANCE TEMPERATURE DETECTOR TAKE OFF COLD LEG B - 2"	TWO TWO THREE	2 2 2	2 2 2	2T58, 2RC-1-15 2T58, 2RC-1-16 2T58, 2RC-1-17	80-137 80-165 83B-056
		RESISTANCE TEMPERATURE DETECTOR TAKE OFF HOT LEG A - 2"	TWO TWO THREE	2 2 2	2 2 2	2T58, 2RC-1-12 2T58, 2RC-1-10 2T58, 2RC-1-11	80-150 80-151 83B-100
		RESISTANCE TEMPERATURE DETECTOR TAKE OFF HOT LEG B - 2"	ONE TWO THREE	2 2 2	2 2 2	2T58, 2RC-1-12 2T58, 2RC-1-13 2T58, 2RC-1-14	76-103 80-136 83B-053
		PRESSURIZER RELIEF LINES 3"	ONE ONE TWO THREE	12 6 6 12	12 6 6 12	M.O. GATE, 2-8000B GLOBE, 2PCV-431C GLOBE, 2PCV-430 M.O. GATE, 2-8000A M.O. GATE, 2-8000A	76-14 76-14 80-149 82-165 85-016
		REACTOR VESSEL SAFETY INJECTION LOW HEAD A - 6"	ONE TWO THREE	12 12 -	12 12 12	CHECK, 2-8843A CHECK, 2-8844A CHECK, 2-8844A	76-91 80-171 83B-086, 086R
		LOW HEAD B - 6"	ONE THREE	12 12	12 12	CHECK, 2-8843B CHECK, 2-8844B	76-36 83B-087
		AUXILIARY SPRAY CVCS - 2"	THREE	6	6	GLOBE 2-8143	83B-121

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## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S1.6PAGE 4 OF 4MAJOR ITEM: VALVE PRESSURE BOUNDARY

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
B6.0	B-G-2	(CONT'D)					
		DRAIN LINE	ONE	2	2	2T58, 2RC-1-3	76-11
		ON CROSSOVER B	THREE	2	2	2T58, 2RC-1-4	82-259, 259R
					2	2T58, 2RC-1-4	83B-057
						(REPEAT)	
		DRAIN LINE	ONE	2	2	2T58, 2RC-1-2	76-15
		ON CROSSOVER A - 2"	THREE	2	2	2T58, 2RC-1-1	82-258
					2	2T58, 2RC-1-1	83B-148
						(REPEAT)	
		LETDOWN LINE B - 2	ONE	8	8	A.O. GLOBE,	76-10
						2LCV-427	
			TWO	2	2	2T58, 2RC-1-5	80-81
			THREE	8	8	A.O. GLOBE,	82-164
						2LCV-428	
		CHARGING LINE B - 2"	TWO	6	6	A.O. GLOBE, 2-8142	78-24
		SEAL INJUNCTION A - 2"	ONE	2	2	2T58, 2VC-7-18	76-94
		SEAL INJUNCTION B - 2"	ONE	2	2	2T58, 2VC-7-19	76-84

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	W BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
<u>REACTOR</u>							
B1.3 VESSEL-TO-FLANGE -TO-HEAD WELD							
STUD HOLE 34 TO 48 TO 1	41	UT	W-1	85-019	NONE	NONE	NO SCAN AT LIFTING LUG
				85-018 85-017	NONE	S-2 CLAD ROLL NONE	NO. S-1 FLANGE NO. S-1 FLANGE
<u>B1.18 CONTROL ROD DRIVE HOUSINGS</u>							
PERIPHERAL CRD HOUSINGS	-	UT	CR-35	85-015	NONE	S-1, ID/OD GEO 20% S-2, ID/OD GEO 20%	NONE
			CR-37	85-014		S-1, ID GEO 50% S-1 OD GEO 25% S-1 ID GEO 20% S-2 ID GEO 50% S-2 OD GEO 25% S-2 ID GEO 20%	NONE

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	W BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
<u>PRESSURIZER</u>							
<u>B2.9 VESSEL CLADDING</u>							
UPPER HEAD MANWAY	-	VT	CLAD PATCH	85-013	NONE	NONE	NONE
<u>PIPING</u>							
<u>B4.12 PRESSURE RETAINING BOLTING</u>							
RTD RETURN B	17	VT	FLANGE @ W-7	85-010	NONE	MINOR RUST & SALT DEPOSITS	NONE
<u>REACTOR COOLANT PUMPS</u>							
<u>B5.5 INTEGRALLY WELDED SUPPORTS</u>							
REACTOR COOLANT PUMP 22	-	PT	SUPPORT A	85-005	NONE	5/16" ROUNDED - ACCP.	NONE
		PT	SUPPORT B	85-006	NONE	1/4" LINEAR - ACCP.	NONE
		PT	SUPPORT C	85-007	NONE	NONE	RIGHT SIDE LIMITED DUE TO INSULATION

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	W BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
B5.6 CASING WELD REACTOR COOLANT PUMP 22	-	PT	CASING WELD	85-012	NONE	3/8" & 1/4" LINEAR CODE ACCEPTABLE	LIMITED PAD 3 TO PAD 1 INSULATION
VALVES							
B6.7 VALVE BODIES SAFETY INJECTION, REACTOR VESSEL LOW HEAD	29	VT	2-8844A	85-011	NONE	NONE	NONE
RESIDUAL HEAT REMOVAL, TAKE OFF A	10C	VT	2-8701A	85-008	NONE	NONE	NONE
PRESSURIZER SAFETY	30	VT	2-8010A	85-023	NONE	NONE	NONE
B6.9 PRESSURE - RETAINING BOLTING							
PRESSURIZER RELIEF	27	VT	2-8000A	85-016	NONE	NONE	NONE

NORTHERN STATES POWER CO.  
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ISOMETRIC SUMMARY CLASS 1

TABLE III  
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NSP ISO NUMBER	REVISION	COMPONENT OR SYSTEM	LOOP	LINE SIZE	LINE NUMBER	UT - CAL. STANDARD
2-ISI-1	0	SFAL INJECTION (GENERAL VIEW)	A	1 1/2" Δ2"	-	-
2-ISI-1A	0		A	1 1/2"	1 1/2-2VC-21A	1
2-ISI-1B	0		A	2"	2-2VC-21A	3
2-ISI-1C	0		A	2"	2-2VC-21A	3
2-ISI-2	0	CROSSOVER DRAIN	A	2"	2-2RC-10A	3
2-ISI-3	0	RTD TAKEOFF COLD LEG	A	2"	2-2RC-11A	3
2-ISI-4	0	RTD TAKEOFF HOT LEG	A	2"	2-2RC-8A	3
2-ISI-5	0	SAFETY INJECTION HIGH HEAD	A	2"	2-2RC-7A	3
2-ISI-6	0	RTD RETURN	A	3"	2-2SI-35A	3
2-ISI-7	0	SPRAY TO PRESSURIZER (GENERAL VIEW)	A&B	3"	3-2RC-6A	4
2-ISI-7A	0		A	3"	-	-
2-ISI-7B	0		A	3"	3-2RC-5	4
2-ISI-7C	0		A	3"	3-2RC-5	4
2-ISI-7D	0		B	3"	3-2RC-5	4
2-ISI-8	0	SAFETY INJECTION HIGH HEAD	A	6"	6-2RC-13B	6
2-ISI-9	0	PLO-CAP	A	6"	6-2RC-13A	6
2-ISI-10	0	RHR TAKE OFF (GENERAL VIEW)	A	8"	-	-
2-ISI-10A	0			8"	8-2RC-15A	8
2-ISI-10B	0			8"	8-2RH-1A	8
2-ISI-10C	0			8"	8-2RH-1A	8
2-ISI-11	0	ACCUMULATOR DISCHARGE	A	12"	12-2RC-16A 12-2SI-27A	11 11

NORTHERN STATES POWER CO.  
PRAIRIE ISLAND UNIT 2  
ISOMETRIC SUMMARY

TABLE III  
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ISOMETRIC SUMMARY						
NSP ISO NUMBER	REVISION	COMPONENT OR SYSTEM	LOOP	LINE SIZE	LINE NUMBER	UT - CAL. STANDARD
2-ISI-12	0	SEAL INJECTION (GENERAL VIEW)	B	1½" & 2"	-	-
2-ISI-12A	0		B	2"	2-2VC-21B	3
2-ISI-12B	0		B	2"	2-2VC-21B	3
2-ISI-12C	0		B	1½"	1½-2VC-21B	1
2-ISI-13	0	CHARGING LINE (GENERAL VIEW)	B	2"	-	-
2-ISI-13A	0		B	2"	2-2RC-17	3
2-ISI-13B	0		B	2"	2-2VC-5	3
2-ISI-13C	0		B	2"	2-2VC-6	3
2-ISI-13D	0		B	2"	2-2VC-6	3
2-ISI-14	0	RTD TAKEOFF COLD LEG	B	2"	2-2RC-8B	3
2-ISI-15	0	RTD TAKEOFF HOT LEG	B	2"	2-2RC-7B	3
2-ISI-16	0	CROSSOVER DRAIN AND LETDOWN	B	2"	2-2RC-10B	3
					2-2RC-11B	3
					2-2RC-12	3
2-ISI-17	0	RTD RETURN	B	3"	3-2RC-6B	4
2-ISI-18	0	SAFETY INJECTION HIGH HEAD	B	6"	6-2RC-13D	6
2-ISI-19	0	PLO-CAP	B	6"	6-2RC-13C	6
2-ISI-20	0	RHR TAKEOFF (GENERAL VIEW)	B	8"	-	-
2-ISI-20A	0		B	8"	8-2RC-15B	8
2-ISI-20B	0		B	8"	8-2RH-1B	8
2-ISI-20C	0		B	8"	8-2RH-1B	8
2-ISI-21	0	RHR RETURN	B	10"	10-2SI-26	10
2-ISI-22	0	ACCUMULATOR DISCHARGE	B	12"	12-2RC-16B	11
					12-2SI-27B	11



NORTHERN STATES POWER CO.  
PRAIRIE ISLAND UNIT 2  
ISOMETRIC SUMMARY

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NSP ISO NUMBER	REVISION	COMPONENT OR SYSTEM	LOOP	LINE SIZE	LINE NUMBER	UT - CAL. STANDARD
2-ISI-23	0	SAFETY INJECTION HIGH HEAD	B	2"	2-2SI-35B	3
2-ISI-24	0	AUXILIARY SPRAY	-	2"	2-2RC-19 2-2VC-4	3 3
2-ISI-25	0	REACTOR VESSEL SAFETY INJECTION	A	2"	2-2SI-24A	3
2-ISI-26	0	REACTOR VESSEL SAFETY INJECTION	B	2"	2-2SI-24B	3
2-ISI-27	0	PRESSURIZER RELIEF	A&B	3"	3-2RC-21	4
2-ISI-28	0	REACTOR VESSEL SAFETY INJECTION	B B B	4" 6" 6"	4-2RC-14B 6-2RC-14B 6-2SI-25B	5 6 6
2-ISI-29	0	REACTOR VESSEL SAFETY INJECTION	A A A	4" 6" 6"	4-2RC-14A 6-2RC-14A 6-2SI-25A	5 6 6
2-ISI-30	0	PRESSURIZER SAFETY	A B	6" 6"	6-2RC-20A 6-2RC-20B	6 6
2-ISI-31	0	PRESSURIZER SURGE	B	10"	10-2RC-4	10
2-ISI-32	1	REACTOR COOLANT	A A A	29" 31" 27½"	29-2RC-1A 31-2RC-2A 27½-2RC-3A	15 15 15
2-ISI-33	1	REACTOR COOLANT	B B B	29" 31" 27½"	29-2RC-1B 31-2RC-2B 27½-2RC-3B	15 15 15
2-ISI-34	0	REGENERATIVE HEAT EXCHANGER	-	-	-	6
2-ISI-35	0	PRESSURIZER SAFETY AND RELIEF NOZZLES	-	-	-	-

NORTHERN STATES POWER CO.  
PRAIRIE ISLAND UNIT 2  
ISOMETRIC SUMMARY

TABLE III  
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NSP ISO NUMBER	REVISION	COMPONENT OR SYSTEM	LOOP	LINE SIZE	LINE NUMBER	UT - CAL. STANDARD
2-ISI-36	0	PRESSURIZER	-	-	-	25A/16
2-ISI-37	0	STEAM GENERATORS	A&B	-	-	25A
2-ISI-38	0	REACTOR VESSEL CONOSEAL BOLTING	-	-	-	-
2-ISI-39	0	REACTOR VESSEL STUDS, NUTS & WASHERS	-	-	-	STUDS-17
2-ISI-40	1	REACTOR VESSEL NOZZLES	-	-	-	-
2-ISI-41	0	REACTOR VESSEL HEAD WELD	-	-	-	25A
2-ISI-42	0	REACTOR VESSEL SHELL WELDS	-	-	-	-
2-ISI-43	0	RC PUMP SEAL HOUSING BOLTING	A&B	-	-	-
2-ISI-44	0	RC PUMP FLANGE BOLTING	A&B	-	-	-
2-ISI-45	0	RC PUMP FLYWHEEL	A&B	-	-	-
2-ISI-46 CL-1	0	EXCESS LETDOWN HEAT EXCHANGER	-	-	-	6
2-ISI-47 CL-1	0	REACTOR VESSEL CLOSURE HEAD CLAD PATCHES	-	-	-	-
2-ISI-48 CL-1	0	REACTOR VESSEL CLAD PATCH IDENTIFICATION	-	-	-	-

APPENDIX B  
ASME CLASS II EXAMINATIONS

NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT <sup>2</sup>

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S2.2.1

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MAJOR ITEM: PIPING-CIRCUMFERENTIAL BUTT WELD

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C2.1	C-G	<u>CIRCUMFERENTIAL BUTT WELDS</u>					
		MAIN STEAM A 32-2MS-1	-	-	-		
		MAIN STEAM B 32-2MS-2	-	-	-		
		MAIN STEAM A 30-2MS-1	TWO	1	1	MS-11	81-123
		MAIN STEAM B 30-2MS-2	THREE	1	1	MS-15	82-124,136
		MAIN STEAM A 31-2MS-1	TWO	1	1	MS-83	81-43,55
		MAIN STEAM B 31-2MS-2	ONE	1	1	MS-17	77-101,31
		MAIN STEAM A RELIEF HDR., 30-2MS-1	TWO	1	6	MS-16,17,18	81-52,83,4,54,85
		MAIN STEAM B RELIEF HDR., 30-2MS-2	TWO	1	1	MS-19,20,174	81-50,84,51,92,53,86
		MAIN STEAM A 6-2MS-1	ONE	1	1	MS-117	81-93
		MAIN STEAM B 6-2MS-2	ONE	1	1	MS-188	77-99,15
		MAIN STEAM A 6-2MS-1	-	-	-		
		MAIN STEAM B 6-2MS-2	-	-	-		
		MAIN STEAM A 6-2MS-1	-	-	-		
		MAIN STEAM B 6-2MS-2	ONE	1	1	MS-113	77-96,37

NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S2.2.1

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MAJOR ITEM: PIPING-CIRCUMFERENTIAL BUTT WELD

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C2.1	C-G	(CONT'D)					
		FEEDWATER A					
		16-2FW-13	ONE	1	1	FW-161	77-45,55
		16-2FW-12	TWO	2	2	FW-161	80-20,27,83,185
		16-2FW-11	-	-	-	FW-174	80-18,31,84,160
						FW-177	80-19,29,40,162
						FW-177	81-10,32,36,42,42R
						FW-177	82-081,081A,089,089A
							094
						FW-177	83B-022,025,035,001
							001R,198
						FW-177	84-002,002R,009,012
		FEEDWATER B					
		16-2FW-16	ONE	1	1	FW-116	77-97,3
		16-2FW-15	TWO	1	1	FW-133	80,21,38,41,161
						FW-133	81-11,33,35,41,41R
						FW-133	82-080,080R,088,088A,
							090,090A
						FW-133	83B-023,024,036,002,
							002R,002R1,199
						FW-133	84-001,001R,010,011
		FEEDWATER A					
		(8 in) 3-2AF-11	-	-	-		
		FEEDWATER B					
		(8 in) 3-2AF-12	-	-	-		
		REFUELING WATER STORAGE TANK DISCHARGE					
		14-2SI-1	TWO	1	1	W-58 (Pt only)	79-41
		14-2SI-1	THREE	1	1	W-49	82-040,040A
		12-2SI-3A	TWO	1	1	W-60	79-83
			THREE	-	3	W-59	83A-002, 060
						W-60	83A-001, 079
						W-61	83A-031, 059

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PRAIRIE ISLAND UNIT

## INSERVICE INSPECTION-EXAMINATION SUMMARY

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MAJOR ITEM: PIPING-CIRCUMFERENTIAL BUTT WELD

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C2.1	C-G	(CONT'D)					
		12-2SI-11	THREE	1	1	W-37	82-044,044A
				-	2	W-46	83A-017, 078
						W-47	83A-016, 056
		12-2SI-4	THREE	1	1	W-69W	82-005
		10-2SI-8	TWO	1	1	W-68W	79-84
		STREAM 1	THREE	1	1	W-75	82-016
		STREAM 2	TWO	2	2	W-88,289	79-77, 76
		CONTAINMENT SUMP B DISCHARGE LINES					
		14-2SI-33A	-	-	-		
		14-2SI-33B	-	-	-		
		12-2SI-34A	TWO	1	1	W-17	79-25
		12-2SI-34B	TWO	1	1	W-5	79-26
		12-2RH-6A	THREE	1	1	W-18	82-018,018A
		12-2RH-6B	-	-	-		
		SAFETY INJECTION PUMP NO. 21 SUCTION					
		6-2RH-10A					
		BRANCH 1	TWO	5	5	W-285,93,161,96,95	79-59,78,79,82,80
						96	
		BRANCH 2	THREE	1	1	W-108	82-037
		SAFETY INJECTION PUMP NO. 22 SUCTION					
		6-2RH-10B					
		BRANCH 1	TWO	2	2	W-286, 135	79-57, 81
		BRANCH 2	THREE	1	2	W-148, 157	82-038,062

NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S2.2.1

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MAJOR ITEM: PIPING-CIRCUMFERENTIAL BUTT WELD

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C2.1	C-G	(CONT'D) RESIDUAL HEAT REMOVAL DISCHARGE 8-2RH-9A 8-2RH-9A 8-2RH-9B  8-2RH-7A 8-2RH-7B  BORIC ACID SUPPLY TO SAFETY INJECTION 6-2SI-13A  6-2SI-13B  8-2SI-17 8-2SI-18	TWO THREE THREE TWO THREE TWO   TWO THREE  TWO THREE THREE	1 1 1 1 1 1   1 1  1 1 5	1 1 1 1 1 1   1 3 1  1 1 5	W-68 W-154 W-71 W-53 W-192 W-201   W-272R W-127 W-126, W-127 W-271  W-35 W-85 W-2, 26, 32, 34  W-27R W-34, 85 W-26 W-25, 24 W-23, 22 W-33, 32 W-31, 30 W-29W, 28 W-21, 20 W-19, 18 W-17X, 16 W-280, 292 W-279, 278	79-67 82-045 82-024 79-65 82-046 79-63   79-53 82-041, 041A 83B-254, 255 79-52  83A-077, 097 79-94 82-060, 060A, 061, 061A 051, 051A, 050, 050A 83A-070, 100 83A-076, 098, 071, 099 83A-072, 105 83A-073, 106, 091, 116 83A-090, 115, 087, 110 83A-069, 101, 074, 104 83A-075, 107, 089, 102 83A-088, 103, 086, 108 83A-085, 109, 034, 117 83A-033, 118, 029, 124 83A-035, 125, 036, 128 83A-037, 129, 038, 130 83A-044, 138, 053, 137



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MAJOR ITEM: PIPING-CIRCUMFERENTIAL BUTT WELD

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C2.1	C-G	(CONT'D)				W-12, 277	83A-045,136,046,132
						W-294,10	83A-050,133,047,134
						W-276, 275	83A-048,135,049,127
						W-7, 274	83A-051,126,052,123
						W-13, 273	83A-061,122,063,121
						W-4, 3	83A-064,120,065,119
		8-2SI-18				W-2, 1	83A-066,114,067,113
						W-83X, 290	83A-068,112,062,111
						W-82, 81	83A-095,131,094,139
						W-80, 79	83A-093,140,092,141
						W-78, 77	83A-028,155,027,156
						W-76, 75	83A-026,157,025,158
						W-353W, 74	83A-024,159,023,160
					5	W-73, 44	83A-022,161,021,162
						W-2, 3, 25	83B-236,237,249
						W-31, 32	83B-228,229
		12-2SI-11	THREE	1	1	W-40	82-068
				-	7	W-37, 38	83A-039,084,040,083
						W-39, 40	83A-043,081,042,080
						W-41, 44	83A-041,082,032,096
					1	W-45	83A-018,057
						W-40	83B-234
		RESIDUAL HEAT REMOVAL SUCTION					
		10-2SI-9A	TWO	1	1	W-212	79-54
		10-2SI-9B	TWO	1	1	W-143	79-55
		BORIC ACID SUPPLY					
		8-VC-71C	THREE	-	2	W-38, 39	83A-011,142,012,143

NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

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MAJOR ITEM: PIPING-CIRCUMFERENTIAL BUTT WEL

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C2.1	C-G	(CONT'D) 8-2SI-18	THREE	2	11	W-40, 271 W-272, 273 W-274, 275 W-276, 41 W-42, 43 W-45	83A-013,144,014,145 83A-015,146,008,147 83A-007,148,006,149 83A-010,150,005,151 83A-004,153,009,152 83A-003,154
		ACCUMULATOR DISCHARGE LINES					
		12-2SI-28A	-	-	-		
		12-2SI-28B	-	-	-		
		12-2SI-29A	-	-	-		
		12-2SI-29B	ONE	1	1	SI-316	77-49
C2.1	C-F	RESIDUAL HEAT REMOVAL DISCHARGE					
		10-2RH-11	ONE	1	1	RH-294	77-33
			TWO	1	1	W-176	79-30
			THREE	3	3	W-177,178,1411	82-006,003,127
		6-2RH-12	TWO	1	1	W-331	81-66
		6-2SI-10B	THREE	3	3	W-90,96,97	82-026,026A,025,256
		RESIDUAL HEAT REMOVAL SUCTION					
		12-2RH-5A	TWO	1	1	W-105	79-27
			THREE	1	1	119	82-052,052A
		12-2RH-5B	TWO	1	1	W-142	79-47,50
			THREE	2	2	W-139,153	82-035,035A,036,036A

NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S2.2.1PAGE 7 OF 7MAJOR ITEM PIPING-CIRCUMFERENTIAL BUTT WELD

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C2.1	C-F	(CONT'D)					
		8-2RH-4A	TWO	1	1	W-100	79-68
		8-2RH-4B	THREE	1	1	W-134	82-039
		10-2RH-3	ONE	2	2	RH-255, RH-256	77-50, 51
			TWO	2	2	W-225, 226	79-28, 29
			THREE	2	2	W-120, 123	82-002, 001
		8-2RH-5A	TWO	1	1	W-104	79-69
		8-2RH-5B	TWO	1	1	W-138	79-64
		REACTOR VESSEL SAFETY INJECTION					
		6-2SI-25A	ONE	1	1	S1-332	77-52
			TWO	1	1	W-349	81-65
			THREE	1	1	W-349	82-235
		6-2SI-25B	ONE	1	1	S1-26	77-46A

NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S2.2.5PAGE 1 OF 4MAJOR ITEM: PIPING-INTEGRALLY WELDED SUPPORT

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C2.5	C-E-1	<u>INTEGRALLY WELDED SUPPORTS</u>					
		MAIN STEAM A	TWO	2	2	F,H,A	81-16,48,48R,14,74, 74R,16
		30-2MS-1	THREE	2	2	D,I	83B-129,113,130,122
		MAIN STEAM B	ONE	1	1	I	77-147
		30-2MS-2	TWO	2	2	A,H	81-13,30,15,34
			THREE	2	2	B,G	82-214,184,102
		MAIN STEAM A	ONE	3	3	J,K,M,	77-154,140
		31-2MS-1	TWO	1	1	S	81-2,3
		MAIN STEAM B					
		31-2MS-2	THREE	2	2	J,K,	82-101,125,160,199
		MAIN STEAM A					
		30-2MS-1 (R-HDR)	THREE	1	1	P	83B-172,168
		MAIN STEAM B					
		30-2MS-2 (R-HDR)	-	-	-		
		MAIN STEAM A					
		6-2MS-1	-	-	-		
		MAIN STEAM B					
			ONE	1	1	P	77-103
		FEEDWATER A					
		16-2FW-13	ONE	1	1	K	77-105
		16-2FW-12	TWO	10	10	A	80-5,5R,32
						B,C	80-5,5R,32
						E,F	80-1,28,68,63
						H,I	80-67,61,66,59
						J,K,L	80-77,60,3,3R,44
							80-8,26
			THREE	3	3	A,K	81-19,67,67R,20,68
						F,I	82-103,135,104,134
						J	82-105,133

NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S2.2.5PAGE 2 OF 4MAJOR ITEM: PIPING-INTEGRALLY WELDED SUPPORT

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C2.5	C-E-1	(CONT'D)					
		FEEDWATER B					
		16-2FW-16	ONE	2	2	G,H	77-104,148
		16-2FW-15	TWO	8	8	A	80-16,16R
						B,C,D,E,F	80-9,10,42,74
						G,H	80-11,11R,12
						A,G	81-18,17
						C	82-106
		REFUELING WATER STORAGE	THREE	1	1		
		TANK DISCHARGE					
		12-2SI-4	TWO	1	1	C	79-42,34
		CONTAINMENT SUMP B					
		DISCHARGE LINES					
		12-2SI-33A	-	-	-		
		12-2SI-33B	-	-	-		
		SAFETY INJECTION					
		PUMP NO. 21 SUCTION					
		BRANCH 1					
		6-2RH-10A	ONE	1	1	B	77-119
		BRANCH 2					
		6-2RH-10A	ONE	1	1	G	77-119
		SAFETY INJECTION					
		PUMP NO. 22 SUCTION					
		BRANCH 1					
		6-2RH-10B	TWO	1	1	D	79-35,38,38R
		BRANCH 2					
		6-2RH-10B	TWO	1	1	E	82-019,021,021R
		RESIDUAL HEAT REMOVAL					
		SUCTION PUMP A					
		8-2RH-4A	TWO	1	1	A	79-19,44

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## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S2.2.5

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MAJOR ITEM: PIPING-INTEGRALLY WELDED SUPPORT

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C2.5	C-E-1	(CONT'D)					
		RESIDUAL HEAT REMOVAL DISCHARGE PUMP B 8-2RH-9B 6-2SI-10B	THREE THREE	1 3	1 3	M F,H,J H,J	84-028, 029 83B-243,242,210,209 84-022,027,023,026
		RESIDUAL HEAT REMOVAL DISCHARGE PUMP A 10-2RH-11	ONE THREE	1 3	1 3	L G,J,K/J	77-115 83B-259,208,184,184R, 153,182/84-024,025
		8-2RH-7A	THREE	1	1	B/B	83B-246/84-030,031
		RESIDUAL HEAT REMOVAL DISCHARGE PUMP B 6-2SI-10B	-	-	-	-NONE-	
		RESIDUAL HEAT REMOVAL SUCTION PUMP B 10-2RH-3	ONE TWO THREE	1 1 1	1 1 1	C E D	77-118 79-37,40,40R 83B-241, 257
		8-2RH-4B	TWO	1	1	J	79-36,39,39R
		REACTOR VESSEL SAFETY INJECTION A 6-2SI-25A	ONE TWO THREE	1 1 1	1 1 1	A B G	77-109 81-27,49,49R 83B-232,231,231R
		REACTOR VESSEL SAFETY INJECTION B 6-2SI-25B	ONE	1	1	A	77-108

NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S2.2.5

PAGE 4 OF 4

MAJOR ITEM: PIPING-INTEGRALLY WELDED SUPPORT

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.
		BORIC ACID SUPPLY TO SAFETY INJECTION					
		12-2SI-11	THREE	1	1	A	84-036, 037
		8-2SI-18	THREE	2	2	D, 0	84-032,033,034,035



NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT <sup>2</sup>

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S2.2.6

PAGE 1 OF 4

MAJOR ITEM: PIPING-NON WELDED SUPPORTS

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C2.6	C-E-2	SUPPORT COMPONENTS					
		MAIN STEAM A 31-2MS-1	THREE	1	1	L	85-020
		MAIN STEAM B 31-2MS-2	THREE	1	1	Q	82-207
		MAIN STEAM A 30-2MS-1	TWO	1	1	G	81-12,12R
		MAIN STEAM B 30-2MS-2	THREE	1	1	E	83B-108
		MAIN STEAM A RELIEF HDR., 30-2MS-1	ONE	1	1	O	77-140
		MAIN STEAM B RELIEF HDR., 30-2MS-2	TWO	1	1	O	81-1,1R
		FEEDWATER A 16-2FW-13	TWO THREE	2 1	2 1	D,G D	80-4,69 83B-112
		REFUELING WATER STORAGE TANK DISCHARGE 12-2SI-4	TWO	1	1	B	79-45
		RESIDUAL HEAT REMOVAL DISCHARGE 8-2RH-7B	THREE	1	1	B	82-065
		8-2RH-7A	THREE	1	1	A	82-064
		10-2RH-11	THREE	2	2	H,I	82-048,047
		10-2SI-8 BRANCH 1	THREE	1	1	D	82-014
		BRANCH 2	-	-	-		

NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S2.2.6

PAGE 2 OF 4

MAJOR ITEM: PIPING-NON WELDED SUPPORTS

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C2.6	C-E-2	(CONT'D)					
		SAFETY INJECTION PUMP NO. 21 SUCTION BRANCH 1 6-2RH-10A	-	-	-	-NONE-	
		BRANCH 2 6-2RH-10A	TWO THREE	1 1	1 1	E C	79-46 85-021
		SAFETY INJECTION PUMP NO. 22 SUCTION BRANCH 1 6-2RH-10B-	-	-	-NONE-		
		BRANCH 2 6-2RH-10B	TWO THREE	1 1	1 1	A B	79-33,33R 85-022
		RESIDUAL HEAT REMOVAL DISCHARGE PUMP A 6-2RH-12	ONE	1	1	M	77-136
		PUMP B 6-2S1-10B	THREE	1	1	I	82-063
		RESIDUAL HEAT REMOVAL SUCTION PUMP B 10-2RH-3	ONE TWO THREE	2 1 2	2 1 3	A,B F D,G,H	77-155 79-9 82-020,022,023
		PUMP A 8-2RH-4A	TWO	1	1	B	79-18
		PUMP B 8-2RH-4B	THREE	1	1	L	82-013
		12-2RH-5B	THREE	1	1	N	82-010
		12-2RH-5A	THREE	1	1	D	82-011

NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 3

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S2.2.6

PAGE 3 OF 4

MAJOR ITEM: PIPING-NON WELDED SUPPORTS

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C2.6	C-E-2	(CONT'D)					
		RESIDUAL HEAT REMOVAL DISCHARGE PUMP A 8-2RH-9A	THREE	2	2	C,D	83B-284,244
		PUMP B 8-2RH-9B	THREE	2	2	L/C	82-257/83B-247
		ACCUMULATOR DISCHARGE LINES					
		LINE A					
		12-2SI-28A	ONE	1	1	B	77-137
		12-2SI-29A	-	-	-		
		LINE B					
		12-2SI-28B	THREE	1	1	C	84-003
		12-2SI-29B	-	-	-		
		REFUELING WATER STORAGE TANK DISCHARGE					
		10-2SI-8	THREE	1	1	D	82-014
		BORIC ACID SUPPLY TO SAFETY INJECTION					
		6-2SI-13A	ONE	1	1	B	77-153
		6-2SI-13B	-	-	-		
		8-2SI-18	THREE	5	5	C,E,F I,N	82-059,055,056 82-057,058
		REACTOR VESSEL SAFETY INJECTION					
		LINE A					
		6-2SI-25A	ONE	1	1	H	77-150
		LINE B					
		6-2SI-25B	TWO	1	1	B	81-028

NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE S2.2.6PAGE 4 OF 4MAJOR ITEM: PIPING-NON WELDED SUPPORTS

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
C2.6	C-E-2	(CONT'D)  CONTAINMENT SUMP DISCHARGE LINES  LINE A LINE B	THREE THREE	1 1	1 1	D E	82-049 82-054

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	W BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
<u>PIPING</u>							
<u>C2.6 SUPPORT COMPONENTS</u>							
MAIN STEAM 'A' 31-2MS-1	46A	VT	L	85-020	NONE	NONE-HANGER REPLACED WITH 2-MSH-109	NONE
SAFETY INJECTION PUMP SUCTION PUMP 21	65	VT	C	85-021	NONE	RUST & SALT DEPOSITS	NONE
SAFETY INJECTION PUMP SUCTION PUMP 22	63	VT	B	85-022	NONE	NONE	LOAD INDICATOR PAINTED

NORTHERN STATES POWER CO.  
PRAIRIE ISLAND UNIT 2  
ISOMETRIC SUMMARY - CLASS 2

TABLE III  
PAGE 1 OF 3

NSP ISO NUMBER	REVISION	COMPONENT OR SYSTEM	LOOP	LINE SIZE	LINE NUMBER	UT - CAL. STANDARD
2-1SI-37	0	STEAM GENERATORS	A&B	-	-	26
2-1SI-46	0	MAIN STEAM (GENERAL VIEW)	A	-	-	-
2-1SI-46A	0		A	32"	32-2HS-1	NO. _____
2-1SI-46B	0		A	31"	31-2HS-1	24
				30"	30-2HS-1	23
				6"	6-2HS-1	7
2-1SI-47	0	MAIN STEAM (GENERAL VIEW)	B	-	-	-
2-1SI-47A	0		B	32"	32-2HS-2	NO. _____
2-1SI-47B	0		B	31"	31-2HS-2	24
				30"	30-2HS-2	23
				6"	6-2HS-2	7
2-1SI-48	0	FEEDWATER (GENERAL VIEW)	A	-	-	13/36
2-1SI-48A	0		A	16"	16-2FW-13	13
2-1SI-48B	0		A	16"	16-2FW-12	13
				16"	16-2FW-11	13
				8"	3-2AF-11	NO. _____
2-1SI-49	0	FEEDWATER (GENERAL VIEW)	B	-	-	13/36
2-1SI-49A	0		B	16"	16-2FW-16	13
2-1SI-49B	0		B	16"	16-2FW-15	13
				8"	3-2AF-12	NO. _____
2-1SI-50	1	RHR PUMP B SUCTION (WELDS)	B	10"	10-2RH-3	22
2-1SI-51	1	RHR PUMP B SUCTION (HANGERS)	B	8"	8-2RH-4B	29
			B	8"	8-2RH-5B	29
			B	12"	12-2RH-5B	32
			B	10"	10-2SI-9B	22
2-1SI-52	1	RHR PUMP A SUCTION (WELDS)	A	8"	8-2RH-4A	29
2-1SI-53	1	RHR PUMP A SUCTION (HANGERS)	A	8"	8-2RH-5A	29
			A	12"	12-2RH-5A	32
			A	10"	10-2SI-9A	22

NORTHERN STATES POWER CO.  
PRAIRIE ISLAND UNIT 2  
ISOMETRIC SUMMARY - CLASS 2

TABLE III  
PAGE 2 of 3

NSP ISO NUMBER	REVISION	COMPONENT OR SYSTEM	LOOP	LINE SIZE	LINE NUMBER	UT - CAL. STANDARD
2-ISI-54	1	RHR PUMP B DISCHARGE (WELDS)	B	8"	8-2RH-7B	29
2-ISI-55	0	RHR PUMP B DISCHARGE (HANGERS)	B	8"	8-2RH-9B	29
			B	6"	6-2SI-10B	27
2-ISI-56	1	RHR PUMP A DISCHARGE (WELDS)	A	8"	8-2RH-7A	29
2-ISI-57	0	RHR PUMP A DISCHARGE (HANGERS)	A	8"	8-2RH-9A	29
			A	10"	10-2RH-11	22
			A	6"	6-2RH-12	27
2-ISI-58	1	CONTAINMENT SUMP B DISCHARGE	B	12"	12-2RH-6B	32
			B	14"	14-2SI-33B	NO. _____
			B	12"	12-2SI-34B	NO. _____
2-ISI-59	1	CONTAINMENT SUMP B DISCHARGE	A	12"	12-2RH-6A	32
			A	14"	14-2SI-33A	NO. _____
			A	12"	12-2SI-34A	NO. _____
2-ISI-60	1	SAFETY INJECTION PUMPS SUCTION	A & B	6"	6-2SI-13A	28
					6-2SI-13B	28
2-ISI-61	1	BORIC ACID SUPPLY TO SAFETY INJECTION	-	12"	12-2SI-11	33
				8"	8-2SI-17	30
				8"	8-2SI-18	30
2-ISI-62	0	SAFETY INJECTION PUMP 22 SUCTION (WELDS)	B	6"	6-2RH-10B	27
2-ISI-63	0	SAFETY INJECTION PUMP 22 SUCTION (HANGERS)				
2-ISI-64	0	SAFETY INJECTION PUMP 21 SUCTION (WELDS)	A	6"	6-2RH-10A	27
2-ISI-65	0	SAFETY INJECTION PUMP 21 SUCTION (HANGERS)				
2-ISI-66	1	REFUELING WATER STORAGE (WELDS)	-	14"	14-2SI-1	NO. _____
		TANK DISCHARGE		12"	12-2SI-3A	33
2-ISI-67	0	REFUELING WATER STORAGE (HANGERS)		12"	12-2SI-3B	33
		TANK DISCHARGE		12"	12-2SI-4	33



NSP ISO NUMBER	REVISION	COMPONENT OR SYSTEM	LOOP	LINE SIZE	LINE NUMBER	UT - CAL. STANDARD
2-ISI-67	0	Continued		10" 12"	10-2SI-8 12-2SI-11	31 33
2-ISI-68	1	BORIC ACID TANK 21	#21			
2-ISI-69	1	RESIDUAL HEAT EXCHANGERS	#21 & #2	-	-	NO. _____
2-ISI-70	0	REACTOR VESSEL SAFETY INJECTION (WELDS)	B	6"	6-2SI-25B	6
2-ISI-71	0	REACTOR VESSEL SAFETY INJECTION (HANGERS)				
2-ISI-72	0	REACTOR VESSEL SAFETY INJECTION (WELDS)	A	6"	6-2SI-25A	6
2-ISI-73	0	REACTOR VESSEL SAFETY INJECTION (HANGERS)				
2-ISI-74	1	BORIC ACID SUPPLY (WELDS)	-	8"	8-2SI-18	30
2-ISI-75	1	ACCUMULATOR DISCHARGE	A	12"	12-2SI-28A	11
				12"	12-2SI-29A	11
			B	12"	12-2SI-28B	11
				12"	12-2SI-29B	11
2-ISI-76	1	ACCUMULATOR TANKS	#21 & 22	-	-	NO. _____

APPENDIX C

SEISMIC BOLTING EXAMINATIONS

NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE SB

PAGE 1 OF 8

MAJOR ITEM: SEISMIC BOLTING

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
N/A	N/A	STEAM GENERATORS					
		STEAM GENERATOR NO. 21					
		UPPER RING GIRDER (SNUBBER PINS)	ONE	2	2	SNUBBER 1	77-72
			TWO	2	2	SNUBBER 2	80-180
			THREE	4	4	SNUBBER 1 THRU 4	81-97
						SNUBBER 3 & 4	83B-119
		UPPER RING GIRDER (SNUBBER WALL BOLTS)	ONE	5	5	TOP ROW	77-143
			TWO	5	5	CENTER ROW	80-110
			THREE	5	15	ALL BOLTS	81-106
					5	BOTTOM ROW	83B-204
					5	BOTTOM ROW	84-004, 004R
		UPPER RING GIRDER (SNUBBER BOLTS)	ONE	8	8	TOP ROW ON GIRDER	77-143
			TWO	8	8	TOP ROW ON WALL	80-176
			THREE	16	32	ALL BOLTS	81-98
					16	BOTTOM ROWS	85-003
		UPPER RING GIRDER (RING CONNECT BOLTS)	ONE	10	10	RING CON. 2	77-159
			TWO	10	10	RING CON. 1	80-110
			THREE	20	40	PAD 1 THRU 4	81-119, 114, 114R
					40	PAD 1 THRU 4	85-001, 001R
		UPPER RING GIRDER (RING WALL BOLTS)	ONE	10	10	10 EXAMINED	77-159
			TWO	10	10	10 EXAMINED	80-110
			THREE	10	30	PAD 1 THRU 4 (REPEAT INSP.)	81-107, 108, 109, 110
					20	PAD 2 & 4	83B-202
		COLUMN PINS	ONE	2	2	BOT COL 1/ TOP COL 4	77-69, 70
			TWO	2	2	BOT & TOP COL 2 COLUMN 1 THRU 4 TOP & BOTTOM	80-182 81-135

NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE SB  
PAGE 2 OF 8  
MAJOR ITEM: SEISMIC BOLTING

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
N/A	N/A	(S.G. NO. 21 CONT'D)					
			THREE	3	3	TOP COL 1 BOT COL 3 & 4	84-067 84-068, 042
		BASE ANCHOR BOLTS	ONE TWO	8 8	8 8 32	BASE OF COLUMN 1 BASE OF COLUMN 2 BASE OF COLUMN 1 THRU 4	77-143 80-106 81-80
			THREE	16	16	BASE OF COL. 3&4	83B-028
		TOP COLUMN CONNECTING BOLTS	ONE TWO	4 4	4 4 16	TOP OF COLUMN 1 TOP OF COLUMN 2 TOP OF COLUMN 1 THRU 4	77-165 80-173 81-136, 149
			THREE	8	16	TOP OF COLUMN 1 THRU 4	83B-217
		UPPER RING GIRDER (SPRING HANGER)	THREE	2	2	SGH-2, SGH-4	81-111, 112
		SUPPORT PAD HELI-COIL SCREWS	ONE TWO	6 6	6 6 24	COLUMN 1 COLUMN 2 ALL HELICOIL SCREWS	77-62 80-183 81-122
			THREE	12	24	ALL HELICOIL SCREWS	82-111
		<u>STEAM GENERATOR NO. 22</u>					
		UPPER RING GIRDER (SNUBBER PINS)	ONE TWO	2 2	2 2 8	SNUBBER 1 SNUBBER 2 SNUBBER 1 THRU 4	77-71 80-180 81-96
			THREE	4	4	SNUBBER 3 & 4	83B-118

NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE SB

PAGE 3 OF 8

MAJOR ITEM: SEISMIC BOLTING

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
N/A	N/A	(S.G. NO. 22 CONT'D)					
		UPPER RING GIRDER (SNUBBER WALL BOLTS)	ONE	5	5	TOP ROW	77-142
			TWO	5	5	CENTER ROW	80-111
					15	ALL BOLTS	81-99
			THREE	5	5	BOTTOM ROW	84-005
		UPPER RING GIRDER (SNUBBER BOLTS)	ONE	8	8	TOP ROW ON GIRDER	77-142
			TWO	8	8	TOP ROW ON WALL	80-112
					32	ALL BOLTS	81-95
			THREE	16	16	BOTTOM ROW	85-004
		UPPER RING GIRDER (RING CONNECT BOLTS)	ONE	10	10	RING CON. 4	77-160
			TWO	10	10	RING CON. 1	80-111
					40	PAD 1 THRU 4	81-118,120
			THREE	20	40	PAD 1 THRU 4	85-002
		UPPER RING GIRDER (RING WALL BOLTS)	ONE	10	10	10 EXAMINED	77-160
			TWO	10	10	10 EXAMINED	80-111
					30	PAD 1 THRU 4	81-102,103,104,105
						(REPEAT INSP.)	
			THREE	10	20	PAD 2 & 4	83B-205
		BASE ANCHOR BOLTS	ONE	8	8	BASE OF COLUMN 1	77-160
			TWO	8	8	BASE OF COLUMN 2	80-106
					32	BASE OF COLUMN 1	81-79
						THRU 4	
			THREE	16	16	BASE OF COLUMN	83B-144
						3 & 4	
		UPPER RING GIRDER (SPRING HANGER)	THREE	2	2	SGH-2,SGH-4	81-100,101
		TOP COLUMN CONNECTING BOLTS	ONE	4	4	TOP OF COLUMN 1	77-165
			TWO	4	4	TOP OF COLUMN 2	80-113
					16	TOP OF COLUMN 1	81-137,148
						THRU 4	

NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE SB  
PAGE 4 OF 8  
MAJOR ITEM: SEISMIC BOLTING

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
N/A	N/A	(S.G. NO. 22 CONT'D)					
			THREE	8	16	TOP OF COLUMN 1 THRU 4	83B-218
		COLUMN PINS	THREE	4	4	TOP COL 3 & 4 BOT COL 3 & 4	84-065, 066 84-043, 044
		SUPPORT PAD	ONE	6	6	COLUMN 1	77-61
		HELI-COIL SCREWS	TWO	6	6	COLUMN 2	80-184
					24	ALL HELICOIL SCREWS	81-151
			THREE	12	24	ALL HELICOIL SCREWS	82-260
		<u>PRESSURIZER</u>					
		BASE ANCHOR BOLTS	ONE	8	8	1-8 BOLTS	77-146
			TWO	8	8	9-16 BOLTS	80-114
					24	ALL BOLTS	81-91
			THREE	8	8	17-24 BOLTS	83B-022
		<u>ACCUMULATOR A</u>					
		BASE ANCHOR BOLTS	ONE	8	8	1-8 BOLTS	77-141
			TWO	8	8	9-16 BOLTS	80-115
					24	ALL BOLTS	81-90
			THREE	8	8	17-24 BOLTS	83B-131
		<u>ACCUMULATOR B</u>					
		BASE ANCHOR BOLTS	ONE	8	8	1-8 BOLTS	77-141
			TWO	8	8	9-16 BOLTS	80-115
					24	ALL BOLTS	81-88
			THREE	8	8	17-24 BOLTS	83B-132

NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE SBPAGE 5 OF 8MAJOR ITEM: SEISMIC BOLTING

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
N/A	N/A	<u>REACTOR COOLANT PUMPS</u>					
		<u>PUMP NO. 21</u>					
		COLUMN PINS	ONE	2	2	COLUMN 1	77-67
			TWO	2	2	COLUMN 2	80-181
					6	COLUMN 1 THRU 3	81-135
			THREE	2	2	COLUMN 3	84-041, 048
		BASE ANCHOR BOLTS	ONE	8	8	BASE OF COLUMN 1	77-158
			TWO	8	8	BASE OF COLUMN 2	80-107
					24	BASE OF COLUMN 1	81-82
			THREE	8	8	THRU 3	
						BASE OF COLUMN 3	84-052
		COLUMN CONNECTING BOLTS	ONE	6	6	TOP OF COLUMN 1	77-163
			TWO	6	6	TOP OF COLUMN 2	80-174
					18	TOP OF COLUMN 1	81-154, 156
						THRU 3	
			THREE	6	6	TOP OF COLUMN 3	84-053
		TIE BACK BOLTS	ONE	1	1	PAD 1	77-77
			TWO	1	1	PAD 2	80-179
					3	PAD 1 THRU 3	81-150, 157, 160, 161
			THREE	1	1	PAD 3	82-093
		TIE BACK PINS	ONE	1	1	PAD 1	77-68
			TWO	1	1	PAD 2	80-186
					3	PAD 1 THRU 3	81-135
			THREE	1	1	PAD 3	84-047
		THROUGH ANCHOR BOLTS	ONE	2	2	PAD 1, SOUTH 2	77-161
			TWO	2	2	PAD 1, CENTER 2	80-175
					6	PAD 1, ALL BOLTS	81-157, 168
			THREE	2	6	PAD 1, ALL BOLTS	85-009



NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE SB

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MAJOR ITEM: SEISMIC BOLTING

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
N/A	N/A	REACTOR COOLANT PUMPS					
		PUMP NO. 21					
		COLUMN PINS	ONE	2	2	COLUMN 1	77-67
			TWO	2	2	COLUMN 2	80-181
					6	COLUMN 1 THRU 3	81-135
			THREE	2	2	COLUMN 3	84-041, 048
		BASE ANCHOR BOLTS	ONE	8	8	BASE OF COLUMN 1	77-158
			TWO	8	8	BASE OF COLUMN 2	80-107
					24	BASE OF COLUMN 1 THRU 3	81-82
			THREE	8	8	BASE OF COLUMN 3	84-052
		COLUMN CONNECTING BOLTS	ONE	6	6	TOP OF COLUMN 1	77-163
			TWO	6	6	TOP OF COLUMN 2	80-174
					18	TOP OF COLUMN 1 THRU 3	81-154, 156
			THREE	6	6	TOP OF COLUMN 3	84-053
		TIE BACK BOLTS	ONE	1	1	PAD 1	77-77
			TWO	1	1	PAD 2	80-179
					3	PAD 1 THRU 3	81-150, 157, 160, 161
			THREE	1	1	PAD 3	82-093
		TIE BACK PINS	ONE	1	1	PAD 1	77-68
			TWO	1	1	PAD 2	80-186
					3	PAD 1 THRU 3	81-135
			THREE	1	1	PAD 3	84-047
		THROUGH ANCHOR BOLTS	ONE	2	2	PAD 1, SOUTH 2	77-161
			TWO	2	2	PAD 1, CENTER 2	80-175
					6	PAD 1, ALL BOLTS	81-157, 168
			THREE	2	6	PAD 1, ALL BOLTS	85-009

NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE	SB
PAGE	7 OF 8
MAJOR ITEM: SEISMIC BOLTING	

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
		<u>PUMP NO. 21 (CONT'D)</u>					
		LATERAL SUPPORT AND WALL BOLTS	ONE TWO	4 3	4 3 10	PAD 2 PAD 3, TOP ROW PAD 2 & 3, ALL BOLTS	77-158 80-175 81-160,161
			THREE	3	3	PAD 3, BOTTOM ROW	83B-221
		<u>PUMP NO. 22</u>					
		COLUMN PINS	ONE TWO	2 2	2 2 6	COLUMN 1 COLUMN 2 COLUMN 1 THRU 3	77-64 80-181 81-135
			THREE	2	2	COLUMN 3	84-040, 046
		BASE ANCHOR BOLTS	ONE TWO	8 8	8 8 24	BASE OF COLUMN 1 BASE OF COLUMN 2 THRU 3	77-161 80-107
			THREE	8	8	BASE OF COLUMN 1 THRU 3 BASE OF COLUMN 3	81-81 84-051
		COLUMN CONNECTING BOLTS	ONE TWO	6 6	6 6 18	TOP OF COLUMN 1 TOP OF COLUMN 2 TOP OF COLUMN 1 THRU 3	77-162 80-108 81-142,153
			THREE	6	18	TOP OF COLUMN 1 THRU 3	83B-219
		TIE BACK BOLTS	ONE TWO	1 1	1 1 3	PAD 1 PAD 2 PAD 1 THRU 3	77-76 80-179 81-145,147,158,159
			THREE	1	1	PAD 3	83B-171

NORTHERN STATES POWER CO.

PRAIRIE ISLAND UNIT 2

## INSERVICE INSPECTION-EXAMINATION SUMMARY

TABLE SBPAGE 8 OF 8

MAJOR ITEM: SEISMIC BOLTING

SUB ITEM	EXAM CATE- GORY	COMPONENT OR SYSTEM AND DESCRIPTION OF ITEM TO BE EXAMINED	INSP. PER.	REQ'D. AMT.	AMT. EXAM	ITEM IDENTIFICATION	INSPECTION REPORT NO.
		<u>PUMP NO. 22 (CONT'D)</u>					
		TIE BACK PINS	ONE	1	1	PAD 1	77-66
			TWO	1	1	PAD 2	80-186
					3	PAD 1 THRU 3	81-135
			THREE	1	1	PAD 3	84-045
		THROUGH ANCHOR BOLTS	ONE	2	2	PAD 1, SOUTH 2	77-158
			TWO	2	2	PAD 1, CENTER 2	80-109, 109R
					6	PAD 1, ALL BOLTS	81-145, 168
			THREE	2	2	PAD 1, NORTH 2	83B-220
		LATERAL SUPPORT AND WALL BOLTS	ONE	4	4	PAD 2	77-161
			TWO	3	3	PAD 3, TOP ROW	80-109
					10	PAD 2 & 3, ALL BOLTS	81-158, 159
			THREE	3	3	PAD 3, BOTTOM ROW	83B-238

COMPONENT/SYSTEM	NSP ISO	NDE METHOD	W BASELINE IDENT.	REPORT NO.	BASELINE INDICATIONS	ISI INDICATIONS	EXAMINATION LIMITATIONS
STEAM GENERATOR NO. 21							
UPPER RING GIRDER SNUBBER BOLTS	85/86	VT	SNUBBER BOLTS	85-003	NONE	NONE	NONE
RING CONNECT BOLTS	85	VT	RING BOLTS	85-001 85-001R	NONE	2-LOOSE BOLTS NONE-BOLTS TIGHTENED	NONE
STEAM GENERATOR NO. 22							
UPPER RING GIRDER SNUBBER BOLTS	85/86	VT	SNUBBER BOLTS	85-002	NONE	NONE	NONE
RING CONNECT BOLTS	85	VT	RING BOLTS	85-004	NONE	NONE	NONE
REACTOR COOLANT PUMP NO. 21							
THRU ANCHOR BOLTS	84	VT	PAD #1	85-009	NONE	NONE	NONE

NORTHERN STATES POWER CO.  
PRAIRIE ISLAND UNIT 2  
ISOMETRIC SUMMARY - SEISMIC BOLTING AUGMENTED

TABLE III  
PAGE 1 OF 1

NSP ISO NUMBER	REVISION	COMPONENT OR SYSTEM	LOOP	LINE SIZE	LINE NUMBER	UT - CAL. STANDARD
2-ISI-77	0	STEAM GENERATOR SUPPORT BASE	A&B	-	4/GENERATOR	-
2-ISI-78	0	STEAM GENERATOR SUPPORT TOP	A&B	-	4/GENERATOR	-
2-ISI-79	0	REACTOR COOLANT PUMP SUPPORT BASE	A&B	-	3/PUMP	-
2-ISI-80	0	REACTOR COOLANT PUMP SUPPORT TOP	A&B	-	3/PUMP	-
2-ISI-81	0	R.C. PUMP #22 LOWER LATERAL SUPPORT	B	-	-	-
2-ISI-84	0	R.C. PUMP #21 LOWER LATERAL SUPPORT	A	-	-	-
2-ISI-85	0	STEAM GENERATOR UPPER SUPPORT	A&B	-	-	-
2-ISI-86	0	STEAM GENERATOR UPPER SUPPORT SNUBBERS	A&B	-	-	-
2-ISI-87	0	STEAM GENERATOR SUPPORT PAD	A&B	-	4/GENERATOR	37/38
2-ISI-88	0	PRESSURIZER BASE	-	-	-	-
2-ISI-89	0	ACCUMULATOR BASE	A&B	-	-	-

#### APPENDIX D

TABLE	I	- PERSONNEL LISTING
TABLE	II	- ULTRASONIC CALIBRATION BLOCKS
TABLE	III	- PROCEDURE LISTING
TABLE	VI	- EQUIPMENT AND MATERIALS

## PERSONNEL ROSTER

CONTRACTOR:

Lambert MacGill Thomas, Incorporated

12/04/85

515 Aldo Avenue

Santa Clara, CA 95054

NAME	JOB TITLE	ET RECERT	MT RECERT	PT RECERT	UT RECERT	IGSCC QUAL?	VT-1 RECERT	VT-2 RECERT	VT-3 RECERT	VT-4 RECERT	VISION DUE	REMARKS COMMENTS
J. . FRENCH	TECHNICIAN	/ /	/ /	II 07/08/88	II 03/23/86	Y	II 09/29/87	/ /	/ /	/ /	02/20/86	
D.A. HALLING	TECHNICIAN	/ /	/ /	/ /	I 03/21/88	N	/ /	/ /	/ /	/ /	12/18/85	
D.B. MACGILL	SUPERVISOR	II 02/15/88	III 03/22/86	III 01/27/86	III 01/22/86	Y	/ /	/ /	/ /	/ /	06/05/86	
N.A. MACGILL	DATA MGMT	/ /	/ /	/ /	/ /	N	/ /	/ /	/ /	/ /	10/03/85	
D.B. RICHEY	TECHNICIAN	/ /	II 02/15/88	II 02/15/88	II 02/15/88	N	II 04/29/88	/ /	II 05/01/88	II 05/01/88	01/07/86	VT-3/4 LIMITED
R.J. WATKINS	TECHNICIAN	/ /	II 04/26/88	II 10/18/87	I 03/22/88	N	/ /	/ /	/ /	/ /	10/18/85	
L.J. WOOD	TECHNICIAN	/ /	/ /	/ /	I 05/25/87	N	/ /	/ /	/ /	/ /	12/10/85	



## PERSONNEL ROSTER

CONTRACTOR:

WESTINGHOUSE ELECTRIC CORPORATION

Nuclear Svcs Integration Div.

12/04/85

P.O. Box 2728

Pittsburgh, PA 15230

NAME	JOB TITLE	ET	MT	PT	UT	IGSCC	VT-1	VT-2	VT-3	VT-4	VISION	REMARKS
		RECERT	RECERT	RECERT	RECERT	QUAL?	RECERT	RECERT	RECERT	RECERT	DUE	COMMENTS
S.J. BEEHNER	EVALUATOR	IIA										
		08/13/88	/ /	/ /	/ /		/ /	/ /	/ /	/ /	01/28/86	
G.T. BEHARY	TECHNICIAN	I										
		07/31/87	/ /	/ /	/ /		/ /	/ /	/ /	/ /	03/13/86	
J.P. CARSON	TECHNICIAN				II	Y	II					SONIC SYSTEMS
		/ /	/ /	/ /	03/15/88		09/12/88	/ /	/ /	/ /	09/11/86	MANUAL UT LIGAMENTS
J.J. CHAPLA	EVALUATOR	IIA										
		08/13/88	/ /	/ /	/ /		/ /	/ /	/ /	/ /	07/25/86	
G.E. CONRAD	TECHNICIAN						II	II	II	II		
		/ /	/ /	/ /	/ /		06/13/86	06/13/86	06/13/86	06/13/86	01/11/86	RX INTERNALS
M.D. CORADI	TECHNICIAN	II										
		07/09/88	/ /	/ /	/ /		/ /	/ /	/ /	/ /	07/19/86	
J.W. ESTEL	TECHNICIAN	II										
		09/24/87	/ /	/ /	/ /		/ /	/ /	/ /	/ /	02/05/86	
F.D. GAROFALO	EVALUATOR	IIA										LEAD EVALUATOR
		02/24/87	/ /	/ /	/ /		/ /	/ /	/ /	/ /	02/05/86	
J.H. GRAW	TECHNICIAN				II	N						
		/ /	/ /	/ /	11/29/85		/ /	/ /	/ /	/ /	05/29/86	TOOL
R.A. HAINES	TECHNICIAN				III	N						
		/ /	/ /	/ /	05/14/87		/ /	/ /	/ /	/ /	11/28/85	TOOL

## PERSONNEL ROSTER

CONTRACTOR:

12/04/85

WESTINGHOUSE ELECTRIC CORPORATION

P.O. Box 2728

Nuclear Svcs Integration Div.

Pittsburgh, PA 15230

NAME	JOB TITLE	ET	MT	PT	UT	IGSCC	VT-1	VT-2	VT-3	VT-4	VISION	REMARKS
		RECERT	RECERT	RECERT	RECERT	QUAL?	RECERT	RECERT	RECERT	RECERT	DUE	COMMENTS
R.P. HAZEN	TECHNICIAN	II										
		10/18/86	/ /	/ /	/ /		/ /	/ /	/ /	/ /	12/11/85	
W.E. HAZLETT	TECHNICIAN				II	N						
		/ /	/ /	/ /	05/18/87		/ /	/ /	/ /	/ /	11/14/85	TOOL
R.W. HUGHES	TECHNICIAN						II	II	II	II		
		/ /	/ /	/ /	/ /		06/13/86	06/13/86	06/13/86	06/13/86	07/18/86	RX INTERNALS
R.H. INGRAHAM	IEDA SUP.	III										IEDA SUPERVISOR
		01/11/86	/ /	/ /	/ /		/ /	/ /	/ /	/ /	08/30/86	
S.R. KING	TECHNICIAN	I										
		08/18/86	/ /	/ /	/ /		/ /	/ /	/ /	/ /	04/04/86	
D. KUREK	SUPER/EVAL		III	III	III	N						
		/ /	03/11/86	03/11/86	03/11/86		/ /	/ /	/ /	/ /	11/16/85	TOOL
L.E. MARKLE	TECHNICIAN				II	N						
		/ /	/ /	/ /	05/03/86		/ /	/ /	/ /	/ /	04/03/86	TOOL
S.J. MCCOY	TRAINEE	TR										
		08/20/88	/ /	/ /	/ /		/ /	/ /	/ /	/ /	07/10/86	
K.M. PETERSON	TECHNICIAN	I										
		09/06/87	/ /	/ /	/ /		/ /	/ /	/ /	/ /	08/01/86	
G.P. PIERINI	EVALUATOR	IIA										
		07/26/88	/ /	/ /	/ /		/ /	/ /	/ /	/ /	07/19/86	

## PERSONNEL ROSTER

CONTRACTOR:

WESTINGHOUSE ELECTRIC CORPORATION

Nuclear Svcs Integration Div.

12/04/85

P.O. Box 2728

Pittsburgh, PA 15230

NAME	JOB TITLE	ET	MT	PT	UT	IGSCC	VT-1	VT-2	VT-3	VT-4	VISION	REMARKS
		RECERT	RECERT	RECERT	RECERT	QUAL7	RECERT	RECERT	RECERT	RECERT	DUE	COMMENTS
R.A. POLLICE	SUPERVISOR	II										DAY SUPERVISOR
		12/20/86	/ /	/ /	/ /		/ /	/ /	/ /	/ /	12/20/85	
R.D. REHAK	TECHNICIAN	II										
		10/15/85	/ /	/ /	/ /		/ /	/ /	/ /	/ /	12/05/85	
R.G. SPIVEY	TECHNICIAN				II	Y						SONIC SYSTEMS
		/ /	/ /	/ /	08/25/87		/ /	/ /	/ /	/ /	05/01/86	MANUAL UT LIGAMENTS
G.F. TESTA	EVALUATOR	IIA										
		08/13/88	/ /	/ /	/ /		/ /	/ /	/ /	/ /	05/10/86	
G.W. THOMAS	TECHNICIAN	II										
		10/13/85	/ /	/ /	/ /		/ /	/ /	/ /	/ /	08/29/86	
D.J. TOMMARELLO	EVALUATOR	IIA										
		08/13/88	/ /	/ /	/ /		/ /	/ /	/ /	/ /	02/05/86	
K.R. TROUT	TRAINEE	TR										
		08/20/88	/ /	/ /	/ /		/ /	/ /	/ /	/ /	01/24/86	
R.A. VOLLMER	EVALUATOR	IIA										
		08/13/88	/ /	/ /	/ /		/ /	/ /	/ /	/ /	02/18/86	
T.J. WALSH	TECHNICIAN				II	N						
		/ /	/ /	/ /	11/15/87		/ /	/ /	/ /	/ /	11/06/85	TOOL
J.M. ZEVCHAK	EVALUATOR	IIA										
		08/13/88	/ /	/ /	/ /		/ /	/ /	/ /	/ /	03/14/86	

NORTHERN STATES POWER COMPANY

PRAIRIE ISLAND UNIT II  
ULTRASONIC CALIBRATION BLOCKS

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TABLE II  
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NSP No.	SIZE & DIA.	PIPE SCHEDULE & THICKNESS	MATERIAL	SERIAL OR HEAT NUMBER	CALIBRATION REPORTS	DATE
25A	T=5-5/16" +CLAD L=17-3/4" W=7-1/16"		SA-533 GR. B CL. 1	C2220/1	JF-02 JF-03 DBR-01	10-01-85 10-01-85 10-01-85
39	4"	SCH. --- .598	SA-182, F304	M7853	JF-01	09-26-85

NORTHERN STATES POWER COMPANY  
PRAIRIE ISLAND UNIT 2  
PROCEDURE LISTING

APPENDIX D  
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PAGE 1 of 2

PROCEDURE NUMBER AND REVISION	FIELD CHANGE	PROCEDURE TITLE	PLANT APPROVAL DATE	FIELD CHANGE REMARKS	CHANGE DESCRIPTION
NSP-PT-1, REV. 2	NONE	LIQUID PENETRANT EXAMINATION	9-14-85		
NSP-UT-1, REV. 1	NONE	ULTRASONIC EXAMINATION OF PIPE WELDS	9-14-85		
NSP-UT-2, REV. 1	NONE	AUTOMATIC DATA RECORDING	9-14-85		
NSP-UT-3, REV. 1	NONE	ULTRASONIC EXAMINATION OF FERRITIC VESSELS	9-14-85		
NSP-VT-1, REV. 2	NONE	VISUAL EXAMINATION	9-14-85		
NSP-VT-2, REV. 2	NONE	VISUAL EXAMINATION OF HANGER ASSEMBLIES	9-14-85		
NSP-VT-3, REV. 1	NONE	VISUAL EXAMINATION OF PUMP AND VALVE INTERNAL PRESSURE BOUNDARY SURFACES	9-14-85		
ISI-88, REV. 1	NONE	REMOTE VISUAL EXAMINATION OF REACTOR VESSEL INTERNALS	1-15-85	NONE	

PROCEDURE LISTING

PROCEDURE NUMBER AND REVISION	FIELD CHANGE	PROCEDURE TITLE	PLANT APPROVAL DATE	FIELD CHANGE REMARKS	CHANGE DESCRIPTION
ISI-154, REV. 3	1	PRESERVICE AND INSERVICE INSPECTION OF REACTOR VESSELS	1-15-85	WATER TEMPERATURE CHECK	CONTACT CONTROL ROOM EVERY 12 HOURS
OPS-NSD-101, REV. 5	NONE	PRESERVICE AND INSERVICE INSPECTION DOCUMENTATION	1-15-85	NONE	
NSD-ISI-10, REV. 6	NONE	QUALIFICATION OF ULTRASONIC MANUAL EQUIPMENT	1-15-85	NONE	
ISI-55, REV. 0	NONE	MANUAL ULTRASONIC EXAMINATION OF LIGAMENT AREAS	1-15-85	NONE	

NORTHERN STATES POWER COMPANY  
PRAIRIE ISLAND UNIT 2  
EQUIPMENT AND MATERIALS

APPENDIX D  
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MATERIAL OR EQUIPMENT	TYPE OR SERIAL NUMBER	CALIBRATION DATE OR BATCH NUMBER	REMARKS
<u>LMT EQUIPMENT</u>			
<u>ULTRASONIC:</u>			
NORTEC 131D	S/N 167	CAL: 9-3-85	
NORTEC 131D	S/N 417	CAL: 9-4-85	
<u>RECORDERS:</u>			
GOULD	S/N 18940	CAL: 6-3-85	
GOULD	S/N 19016	CAL: 7-23-85	
<u>TEMPERATURE GAUGES:</u>			
PTC SURFACE THERMOMETERS	S/N 739	CAL: 8-22-85	
	S/N 740	CAL: 8-22-85	
<u>ROMPAS BLOCKS:</u>			
304 S.S.	S/N LMT-044		JORGENSEN
4140 C.S.	S/N LMT-066		JORGENSEN
<u>MATERIALS:</u>			
MAGNAFLUX SPOTCHECK	PENETRANT CLEANER DEVELOPER	BATCH #83M051 BATCH #82G049 BATCH #84C057	SKL-HF/S SKC-NF/ZC-7B SKD-NF/ZP-9B
ULTRASONIC COUPLANT	LMT GEL	BATCH #61384	
<u>ULTRASONIC TRANSDUCORS:</u>		<u>SIZE</u>	<u>FREQ</u>
AEROTECH	S/N K07023	1.0" DIA.	2.25 MHZ
AUTOMATION	S/N C85202	.375" x 375"	2.25 MHZ
HARISONIC	S/N R5239	1/2" x 1"	2.25 MHZ
HARISON	S/N V10705	1" x 1"	2.25 MHZ
LCD121785WMH05			

NORTHERN STATES POWER COMPANY  
PRAIRIE ISLAND UNIT 2  
EQUIPMENT AND MATERIALS

APPENDIX D  
TABLE IV  
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MATERIAL OR EQUIPMENT	TYPE OR SERIAL NUMBER	CALIBRATION DATE OR BATCH NUMBER	REMARKS
WESTINGHOUSE VESSEL EQUIPMENT:			
<u>ULTRASONIC</u>		CAL: DUE DATE:	
INTERFACE	S/N 06319E	2-6-86	
MARK VI	S/N 05773E	2-6-86	
RECEIVER	S/N 05774E	2-6-86	
TRIGGER	S/N 05575E	2-6-86	
MONITOR GATE	S/N 06316E	2-6-86	
DATA DISPLAY	S/N 06317E	2-6-86	
SYSTEM CONTROLLER	S/N 06318E	N/A	
POWER SUPPLY MODULE	S/N 06320E	2-1-86	
SERIAL DATA LINK	S/N 06294E	2-7-86	
PULSER/PRE-AMP	S/N 06321E	2-7-86	
EBS	S/N 103	1-10-86	
SONIC MARK I	S/N 05286E	CAL: 9-25-85	
SONIC MARK I	S/N 784522	CAL: 5-13-85	NOT USED FOR EXAMS
<u>THERMOMETERS:</u>			
PTC INSTRUMENTS MODEL 312	S/N SSI-CT-006	CAL: 12-14-84	
<u>MATERIALS:</u>			
ULTRASONIC COUPLANT	SONOTRACE 40	BATCH #8440 BATCH #8328 BATCH #8444	
LCD121785WMH05			



NORTHERN STATES POWER COMPANY  
PRAIRIE ISLAND UNIT 2  
EQUIPMENT AND MATERIALS

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MATERIAL OR EQUIPMENT	TYPE OR SERIAL NUMBER	CALIBRATION DATE OR BATCH NUMBER	REMARKS
<u>TRANSDUCERS:</u>	<u>S/N</u>	<u>SIZE</u>	<u>FREQUENCY</u>
AEROTECH	E21202	.5" X 1.0"	5.0 MHZ
GAMMA	15136	.375"	1.5 MHZ
GAMMA	30125	.375"	2.25 MHZ
GAMMA	75105	.375"	5.0 MHZ
GAMMA	A05240	.50"	2.25 MHZ
GAMMA	A11250	1.0"	2.25 MHZ
GAMMA	D17921	1.0"	2.25 MHZ
HARISONIC	12172	.5" x .5"	2.25 MHZ
HARISONIC	12174	.5" x .5"	2.25 MHZ
HARISONIC	A8046	.2" X .310"	2.25 MHZ
		DUAL	
HARISONIC	A8048	.2" X .310"	2.25 MHZ
		DUAL	
HARISONIC	T2233	.750"	1.0 MHZ
HARISONIC	Y6051	1.5"	2.25 MHZ
HARISONIC	Y6052	1.5"	2.25 MHZ
HARISONIC	Y6053	1.5"	2.25 MHZ
HARISONIC	Y6059	1.5"	2.25 MHZ
HARISONIC	Y6068	1.5"	2.25 MHZ
HARISONIC	Y6070	.750"	2.25 MHZ
HARISONIC	Y6078	.750"	1.0 MHZ
HARISONIC	Y6079	.750"	1.0 MHZ
HARISONIC	Y6082	.5" X 1.0"	5.0 MHZ
HARISONIC	Y7424	1.5"	2.25 MHZ
HARISONIC	Y7708	1.5"	2.25 MHZ
HARISONIC	Y7712	1.5"	2.25 MHZ
HARISONIC	Y7713	1.5"	2.25 MHZ
HARISONIC	Y11460	1.5"	2.25 MHZ
HARISONIC	Y11461	1.5"	2.25 MHZ
HARISONIC	Y11463	1.5"	2.25 MHZ
HARISONIC	Y11464	1.5"	2.25 MHZ
HARISONIC	Y11468	1.5"	2.25 MHZ
HARISONIC	Y11567	1.5"	2.25 MHZ
HARISONIC	Y11568	1.5"	2.25 MHZ
HARISONIC	Y11570	1.5"	2.25 MHZ
HARISONIC	Y11571	1.5"	2.25 MHZ
HARISONIC	Y11574	1.5"	2.25 MHZ
HARISONIC	Y11578	1.5"	2.25 MHZ
HARISONIC	Y11580	1.5"	2.25 MHZ
HARISONIC	Y11581	1.5"	2.25 MHZ
HARISONIC	Y11585	1.5"	2.25 MHZ
HARISONIC	Y11586	1.5"	2.25 MHZ
HARISONIC	Y11587	1.5"	2.25 MHZ
HARISONIC	Y11588	1.5"	2.25 MHZ
LCD121785WMH05			

NORTHERN STATES POWER COMPANY  
PRAIRIE ISLAND UNIT 2  
EQUIPMENT AND MATERIALS

APPENDIX D  
TABLE IV  
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MATERIAL OR EQUIPMENT	TYPE OR SERIAL NUMBER	CALIBRATION DATE OR BATCH NUMBER	REMARKS
<u>TRANSDUCERS:</u>	<u>S/N</u>	<u>SIZE</u>	<u>FREQUENCY</u>
HARISONIC	Y11595	.750"	1.0 mhz
HARISONIC	Y12167	.37" X .50"	2.25 MHZ
HARISONIC	Y12168	.37" X .50"	2.25 MHZ
HARISONIC	Y12169	.37" X .50"	2.25 MHZ
HARISONIC	Y12170	.37" X .50"	2.25 MHZ
HARISONIC	Y12171	.50" X .50"	2.25 MHZ
HARISONIC	Y12172	.50" X .50"	2.25 MHZ
HARISONIC	Y12173	.50" X .50"	2.25 MHZ
HARISONIC	Y12174	.50" X .50"	2.25 MHZ
HARISONIC	Y12175	.50" X .50"	2.25 MHZ
SONIC	S791378	.5" DIA.	5.0 MHZ
ULTRAN	32701	1.0" DUAL	2.25 MHZ
ULTRAN	32703	1.0" DUAL	2.25 MHZ
ULTRAN	32704	1.0" DUAL	2.25 MHZ
ULTRAN	33101	1.0" DUAL	2.25 MHZ
LCD121785WMH05			

APPENDIX E

NIS-1 FORM

FORM NIS-1, OWNERS DATA REPORT FOR INSERVICE INSPECTION

FORM NIS-1 OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

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

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- 5.) Commercial Service Date: 12-20-74 6.) National Board No. for Unit: --
- 7.) Components Inspected:

<u>Component or Appurtenance</u>	<u>Manufacturer or Installer</u>	<u>Manufacturer or Installer Serial No.</u>	<u>State or Province No.</u>	<u>National Board No.</u>
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B1.0 REACTOR VESSEL	CREUSOT-LORIE	687	MINN.200-1	----
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B1.1 LONGITUDINAL AND CIRCUMFERENTIAL SHELL WELDS IN CORE REGION  
CIRCUMFERENTIAL  
 WELD NO. 3  
 WELD NO. 2

B1.2 LONGITUDINAL AND CIRCUMFERENTIAL WELDS IN SHELL AND MERIDINAL  
AND CIRCUMFERENTIAL SEAM WELDS IN BOTTOM HEAD  
CIRCUMFERENTIAL  
 WELD NO. 4  
 WELD NO. 5

B1.3 VESSEL-TO-FLANGE CIRCUMFERENTIAL WELD  
VESSEL-TO-FLANGE  
 W-1  
 STUD HOLES  
 1 THRU 8,  
 23 THRU 28,  
 47 THRU 48

B1.4 PRIMARY NOZZLE-TO-VESSEL WELD AND NOZZLE INSIDE RADIUS SECTION  
REACTOR CORE  
 COOLANT INLET  
 NOZZLES  
 W-6, 9

SAFETY INJECTION  
 NOZZLES  
 WELD 8, 11

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B1.6 NOZZLE-TO-SAFE END WELDS

REACTOR CORE

COOLANT

INLET NOZZLE

RCC-A-14 S.E.

RCC-B-14 S.E.

B1.9 LIGAMENTS BETWEEN THREADED STUD HOLES

STUD HOLES

1 THRU 8,

23 THRU 28,

47 AND 48

B1.12 INTEGRALLY WELDED VESSEL SUPPORTS

SUPPORTS

A AND B

B1.14 VESSEL CLADDING

CLAD PATCHES

CP1 AND CP5

B1.15 VESSEL INTERIOR

UPPER AND LOWER

INTERNALS

B1.17 REMOVAL CORE SUPPORT STRUCTURES

CORE SUPPORT AND

ASSOCIATED ITEMS

FORM NIS-1 OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

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- 7.) Components Inspected:

<u>Component or Appurtenance</u>	<u>Manufacturer or Installer</u>	<u>Manufacturer or Installer Serial No.</u>	<u>State or Province No.</u>	<u>National Board No.</u>
<u>B1.18 CONTROL ROD DRIVE HOUSINGS</u>				
<u>PERIPHERAL HOUSINGS</u>				
<u>CR-35, CR-37</u>				

<u>PRESSURIZER</u>				
<u>B2.9 VESSEL CLADDING</u>				
<u>UPPER HEAD</u>	<u>WESTINGHOUSE</u>	<u>1191</u>	<u>---</u>	<u>68-57</u>
<u>MANWAY</u>				

PIPING

<u>B4.12 PRESSURE RETAINING BOLTING</u>				
<u>RESIDUAL TEMPERATURE</u>	<u>NAVCO</u>	<u>---</u>	<u>---</u>	<u>---</u>
<u>DETECTOR RETURN B</u>				
<u>BOLT @ FLANGE W-7</u>				

REACTOR CORE COOLANT PUMPS

<u>B5.5 INTEGRALLY WELDED SUPPORTS</u>				
<u>REACTOR COOLANT</u>	<u>WESTINGHOUSE</u>	<u>W515</u>	<u>---</u>	<u>---</u>
<u>PUMP NO. 22</u>				
<u>SUPPORT A</u>				
<u>SUPPORT B</u>				
<u>SUPPORT C</u>				

B5.6 CASING WELD

<u>REACTOR COOLANT</u>	<u>WESTINGHOUSE</u>	<u>W515</u>	<u>---</u>	<u>---</u>
<u>PUMP NO. 22</u>				
<u>CASING WELD</u>				

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- 7.) Components Inspected:

<u>Component or Appurtenance</u>	<u>Manufacturer or Installer</u>	<u>Manufacturer or Installer Serial No.</u>	<u>State or Province No.</u>	<u>National Board No.</u>
<u>VALVES</u>				
<u>B6.7 VALVE BODIES</u>				
REACTOR VESSEL SAFETY INJECTION LOW HEAD A 2-8844A	NAVCO	---	---	---
RESIDUAL HEAT REMOVAL TAKE OFF A 2-8701A	NAVCO	---	---	---
PRESSURIZER SAFETY 2-8010A	NAVCO	---	---	---
<u>B6.9 PRESSURE RETAINING BOLTING</u>				
PRESSURIZER RELIEF 2-8000A	NAVCO	---	---	---

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- 7.) Components Inspected:

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<u>ASME CLASS II</u>				
<u>PIPING-PRESSURE BOUNDARY</u>				
<u>C2.6 SUPPORT COMPONENTS</u>				
MAIN STEAM LOOP A 2-MSH-109	NAVCO	---	---	---
SAFETY INJECTION PUMPS SUCTION PUMP NO. 21 C, SIH-21	NAVCO	---	---	---
SAFETY INJECTION PUMPS SUCTION PUMP NO. 22 B, SIH-29	NAVCO	---	---	---



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- 7.) Components Inspected:

<u>Component or Appurtenance</u>	<u>Manufacturer or Installer</u>	<u>Manufacturer or Installer Serial No.</u>	<u>State or Province No.</u>	<u>National Board No.</u>
<u>SIESMIC BOLTING</u>				
<u>STEAM GENERATOR NO.21</u>	WESTINGHOUSE	1181	---	68-39
UPPER RING GIRDER SNUBBER BOLTS BOLTS 1 THRU 16				
RING CONNECTING BOLTS BOLTS 1 THRU 40				
<u>STEAM GENERATOR NO.22</u>	WESTINGHOUSE	1182	---	68-40
UPPER RING GIRDER SNUBBER BOLTS BOLTS 1 THRU 16				
RING CONNECTING BOLTS BOLTS 1 THRU 40				
<u>REACTOR COOLANT PUMP #21</u>	WESTINGHOUSE	W510	---	---
THRU ANCHOR BOLTS COL. 1 BOLTS 1 THRU 6				

FORM NIS-1 (back)

- 8.) Examination Dates 9/9/85 to 10/21/85  
9.) Inspection Interval 12/20/84 to 12/20/94  
10.) Abstract of Examinations.

Include a list of examination and a statement concerning status of work required for current interval.  
This was the last inspection conducted for inspection period three of the first Ten Year Inspection Interval. The examinations completed all of the items required for the first interval.

- 11.) Abstract of Conditions Noted.

The only anomalies detected were one rounded and three linear PT indications on the O.D. surface of reactor coolant pump no. 22; and loose bolts on the steam generator ring connecting bolts.

- 12.) Abstract of Corrective Measures Recommended and Taken.

THE PT anomalies were accepted based on the acceptance standard of the 1980 Edition of ASME Section XI and found to be within the allowable limitations of Table IWB-3518-2; the loose bolts on the steam generator upper ring girder were tightened.

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 JAN 14 19 86 Signed NORTHERN STATES POWER COMPANY By [Signature]  
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 A.S.B. I & I CO. of HARTFORD, CT have inspected the components described in this Owner's Data Report during the period 9-4-85 to 10-21-85, 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 JAN 14 19 86

[Signature]  
Inspector's Signature

Commissions NA 9904, MN 86-34  
National Board, State, Province & No