

Mano K. Nazar
Site Vice President
Prairie Island Nuclear Generating Plant
Nuclear Management Company, LLC
1717 Wakonade Dr. East • Welch MN 55089

July 3, 2002

10 CFR Part 50
Section 50.55a

U S Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

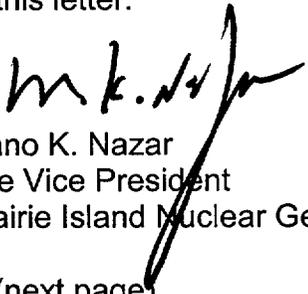
PRAIRIE ISLAND NUCLEAR GENERATING PLANT
Docket Nos. 50-282 License Nos. DPR-42

Response to a Request for Additional Information Regarding Request for Relief
No. 11 for the Unit 1 3rd 10-year Interval Inservice Inspection Program (TAC No. MB2199)

On May 29, 2001 we submitted for review Request for Relief No. 11 for Inservice Inspection Program for Unit 1, for examinations which were limited. The request was made pursuant to 10 CFR Part 50, Section 50.55a(g)(5)(iii) due to the impracticality of obtaining "100%" examination coverage for the affected items. The NRC issued a Request for Additional Information (RAI) regarding the relief request by letter dated February 4, 2002. On April 15, 2002, we provided a response to that RAI. Subsequently we held a teleconference with the NRC Staff and contractor on May 8, 2002 to discuss a request for further clarifications.

Enclosed with this letter are the clarifications as discussed during the May 8th teleconference regarding the RAI.

In this letter we have made no new Nuclear Regulatory Commission commitments. Please contact Jack Leveille (651-388-1121, Ext. 4142) if you have any questions related to this letter.


Mano K. Nazar
Site Vice President
Prairie Island Nuclear Generating Plant

c: (next page)

A047

USNRC
July 3, 2002
Page 2

NUCLEAR MANAGEMENT COMPANY, LLC

c: Regional Administrator - Region III, NRC (2 copies of attachment)
Senior Resident Inspector, NRC
NRR Project Manager, NRC
Chief Boiler Inspector, State of MN
P. Fisher, Hartford Insurance

Enclosure: Clarification Response to RAI

Enclosure

Clarification Response to RAI
(4 pages)

Clarification Response to RAI

- (1) **In PART B: For Weld W-2 (Shell-Flange), contour surface prevents full scanning of the Code required volume. The scanning covered 27.26% of the required volume. I assume that there are multiple RHR Heat Exchangers and the Code allows these examinations to be limited to one vessel, or distributed among multiple vessels. With such a low completion percentage, clarify if examination of multiple vessels or some other examinations (even if it is not required by the Code) other than VT-2 examination during pressure testing can be performed to assure the structural integrity.**

Answer: There are only two Residual Heat Removal (RHR) heat exchangers (HXs) on Prairie Island Unit 1, RHR HX #11 and #12, both of identical design. The PI Unit 1 plant was built prior to 1974 American Society of Mechanical Engineers (ASME) Section XI requirements for access and weld accessibility. RHR HX #12 was selected for inspection and was prepared for inspection. #12 RHR HX was inspected during the second interval; no Section XI inspections have ever been performed on #11 RHR HX and #11 RHR HX was never prepared for inspection. It would be an unnecessary burden to require inspection of #11 RHR HX Shell to Flange Weld to only achieve an additional 27% coverage. NRC Information Notice 98-42, "Implementation of 10 CFR 50.55a(g), Inservice Inspection Requirements," would still require a relief request on this weld.

The only examination performed on RHR HX #12 Weld W-2 is the UT (ultrasonic examination) and the VT-2 (visual examination) as required by 1989 Section XI Code. Weld W-1, the Head to Shell Weld on #12 HX, is also inspected each interval and was found to be limited to 74% coverage. The NRC granted relief on W-1 on Nov. 5th, 1999 with no additional requirements (TAC No. MA2220). Both RHR HX Supports (A and B), which are integral attached supports, have been inspected during the third interval. The support inspection consisted of both a PT (Surface) and VT-3 (Visual) examination. The results of these inspections showed no code unacceptable indications (one weld required minor buffing to remove some tightly adhering mill-scale). Support A was examined in 1997 and Support B was examined in 2001.

- (2) **In PART C: There are six welds (H-1, 8, 5, 6 of Main steam and H-8, 5 of FW loop) inaccessible since they were completely enclosed by guard pipes. The examination coverage in these welds is 0%. (a) Clarify how the VT-2 examination during pressure testing is performed on these welds. (2) Clarify if there are similar welds on the same line(s) which are not enclosed by guard pipes and are subject to Code-required surface examination.**

Answer: On the Main Steam System a total of 22 hangers with integral attachments are inspected each interval. The ASME Section XI 1989 Code

requires 100% inspection of all integral attachments. Six of the 22 hangers are completely enclosed in guard pipe and are inaccessible, 16 hangers with integral attachments without guard pipe are inspected. Listed below in Table 1 are all integral attached welds on the Main Steam System.

Table 1: Main Steam System Integral Attached Welds (PI Unit 1)

Summary No	ASME Cat	ASME Item	ASME Class	Component ID	Description	System	System Desc	ISO Number
301122	C-C	C3.20	2	H-1	SEISMIC RESTRAINT	MS	MAIN STEAM 'A'	ISI-51A (Note 2)
301124	C-C	C3.20	2	H-9	SEISMIC RESTRAINT	MS	MAIN STEAM 'A'	ISI-51A (Note2)
301125	C-C	C3.20	2	H-5	BEAR'G BRAK ASSY (3)	MS	MAIN STEAM 'A'	ISI-51A (Note2)
301126	C-C	C3.20	2	H-6	BEAR'G BRAK ASSY (3)	MS	MAIN STEAM 'A'	ISI-51A (Note2)
301128	C-C	C3.20	2	H-7	BEAR'G BRAK ASSY (3)	MS	MAIN STEAM 'A'	ISI-51A (Note2)
301130	C-C	C3.20	2	H-8	ANCHOR ELBOW (8)	MS	MAIN STEAM 'A'	ISI-51A (Note2)
301132	C-C	C3.20	2	H-2	SEISMIC RESTRAINT	MS	MAIN STEAM 'A'	ISI-51A (Note2)
301134	C-C	C3.20	2	H-4	SEISMIC RESTRAINT	MS	MAIN STEAM 'A'	ISI-51A (Note2)
301177	C-C	C3.20	2	H-1	BEAR'G BRAK ASSY	MS	MAIN STEAM 'A'	ISI-51B (Note 1)
301178	C-C	C3.20	2	H-1	SUPPORT BRAK ASSY	MS	MAIN STEAM 'A'	ISI-51C (Note 2)
301588	C-C	C3.20	2	H-2	SEISMIC RESTRAINT	MS	MAINSTEAM 'B'	ISI-68A (Note 2)
301589	C-C	C3.20	2	H-8	SEISMIC RESTRAINT	MS	MAINSTEAM 'B'	ISI-68A (Note 1)
301590	C-C	C3.20	2	H-4	BEAR'G BRAK ASSY / 3	MS	MAINSTEAM 'B'	ISI-68A (Note 2)
301591	C-C	C3.20	2	H-5	BEAR'G BRAK ASSY / 3	MS	MAINSTEAM 'B'	ISI-68A (Note 1)
301593	C-C	C3.20	2	H-6	BEAR'G BRAK ASSY / 3	MS	MAINSTEAM 'B'	ISI-68A (Note 1)
	C-C	C3.20	2	H-7	ANCHOR ELBOW / 8	MS	MAINSTEAM 'B'	ISI-68A* (Note 1)
301595	C-C	C3.20	2	H-1	SEISMIC RESTRAINT	MS	MAINSTEAM 'B'	ISI-68A (Note 2)
301596	C-C	C3.20	2	H-3	SEISMIC RESTRAINT	MS	MAINSTEAM 'B'	ISI-68A (Note 2)
301637	C-C	C3.20	2	H-1	BEAR'G BRAK ASSY	MS	MAINSTEAM 'B'	ISI-68B (Note 2)
301638	C-C	C3.20	2	H-1	BEAR'G BRAK ASSY	MS	MAINSTEAM 'B'	ISI-68C (Note 2)
	C-C	C3.20	2	H-2	CONSTANT SUPPORT	MS	MAINSTEAM 'B'	ISI-68B* (Note 1)
302963	C-C	C3.20	2	H-3	SEISMIC RESTRAINT	MS	MAIN STEAM 'A'	ISI-51A (Note 2)

Note 1. Enclosed by guard pipe.

Note 2. Integral attached weld MT (Surface) and VT-3 (Visual) examination completed for 3rd Ten Year Interval. No indications.

Results previously submitted to NRC in applicable outage ISI summary reports.

* Scheduled for examination at end of interval.

To date twenty MS integral attached hangers have been inspected during the 3rd 10-year interval. Four integral attached hangers are enclosed in guard pipe and not accessible. Sixteen integral attached hanger have had MT surface examinations and eighteen have had VT-3 visual examinations. No degraded integral attached weld conditions have been discovered.

On the Feedwater Loop B, there are 7 hangers with integral attachments that are required to be inspected each interval, six of these are inaccessible by guard pipe. One is accessible. Feedwater Loop A has seven integral attached hangers, which are all accessible. Listed below are all integral attached welds on the Feedwater systems that are inspected.

Table 2: Feedwater Loop A and B Integral Attachments. (PI Unit 1)

Summary No	ASME Cat	ASME Item	ASME Class	Component ID	Description	System	System Desc	ISO Number
301250	C-C	C3.20	2	H-2	SEISMIC RESTRAINT	FW	FEEDWATER LOOP 'A'	ISI-52 (Note 2)
301253	C-C	C3.20	2	H-9	ANCHOR ELBOW	FW	FEEDWATER LOOP 'A'	ISI-52 (Note 2)
301255	C-C	C3.20	2	H-6	ANCHOR ELBOW	FW	FEEDWATER LOOP 'A'	ISI-52 (Note 2)
301256	C-C	C3.20	2	H-5	RESTRAINT	FW	FEEDWATER LOOP 'A'	ISI-52 (Note 2)
301257	C-C	C3.20	2	H-4	ANCHOR ELBOW	FW	FEEDWATER LOOP 'A'	ISI-52 (Note 2)
301258	C-C	C3.20	2	H-7	BEAR'G BRAK ASSY	FW	FEEDWATER LOOP 'A'	ISI-52 (Note 2)
301288	C-C	C3.20	2	H-1	SIEMIC RESTRAINT	FW	FEEDWATER LOOP 'A'	ISI-52 (Note 2)
	C-C	C3.20	2	H-9	SEISMIC RESTRAINT	FW	FEEDWATER LOOP 'B'	ISI-69 (Note 1)*
	C-C	C3.20	2	H-2	SEISMIC RESTRAINT	FW	FEEDWATER LOOP 'B'	ISI-69 (Note 1)*
301704	C-C	C3.20	2	H-8	ANCHOR ELBOW	FW	FEEDWATER LOOP 'B'	ISI-69 (Note 1)
	C-C	C3.20	2	H-7	ANCHOR ELBOW	FW	FEEDWATER LOOP 'B'	ISI-69 (Note 1)*
301706	C-C	C3.20	2	H-5	ANCHOR ELBOW	FW	FEEDWATER LOOP 'B'	ISI-69 (Note 1)
	C-C	C3.20	2	H-4	ANCHOR ELBOW	FW	FEEDWATER LOOP 'B'	ISI-69 (Note 1)*
301726	C-C	C3.20	2	H-1	SEISMIC RESTRAINT	FW	FEEDWATER LOOP 'B'	ISI-69 (Note 2)

Note 1. Inaccessible due to guard pipe.

Note 2. Integral attachment Weld MT (Surface) and VT-3 (Visual) completed for 3rd 10 year interval. No indications.

Results previously submitted to NRC in applicable outage ISI summary report.

* Schedule for inspection at end of interval.

The VT-2 functional pressure test on both the Main Steam and Feedwater line are conducted upon shutdown when both systems are still pressurized. These systems are continuously pressurized during operations. If a leak should occur the walk down inspection for the VT-2 would adequately detect the condition regardless of the guard piping since the guard piping is open ended piping allowing leakage to be detected.

- (3) **In PART D: For Weld W-14, the weld is inaccessible due to penetration sleeve and welded restraint. Therefore, the examination coverage for both Code-required surface and volumetric examination is 0%. a) Clarify**

how the VT-2 examination during pressure testing is performed on this weld. (2) Clarify if there are similar welds among the 51 C-F-1 welds to be examined during third ISI interval. If not, clarify if there are similar welds among the total population of 377 C-F-1 welds.

Answer: Part D. Of similar design there is only one weld. This weld, W-22 on the RHR pump "B" Discharge, was inspected in 1994 during the 3rd Interval. 100% UT coverage was achieved with no apparent indications.

The VT-2 functional pressure examination is performed as required by ASME Section XI 1989 Code, with the appropriate required hold time of four hours.