

February 13, 2003

10 CFR 50.55a(a)(3)(ii)

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

**PALISADES NUCLEAR PLANT  
DOCKET 50-255  
LICENSE NO. DPR-20  
REQUEST FOR RELIEF FROM ASME SECTION XI INSERVICE INSPECTION  
PROGRAM REQUIREMENTS**

Nuclear Management Company, LLC (NMC) requests approval for relief from inservice inspection (ISI) requirements of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code, Section XI, 1989 Edition. NMC proposes an alternative to the specified inspection requirements, in accordance with 10 CFR 50.55a(a)(3)(ii), for the remainder of the current ten-year inspection interval, which is expected to conclude December 12, 2006. The basis for the relief request is attached, describing that compliance with the requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

NMC requests approval of the proposed relief request by March 17, 2003, to support Palisades upcoming refueling outage.

### SUMMARY OF COMMITMENTS

This letter restates the previously made commitment:

- Scheduled examinations under the RI-ISI program will examine at least 66% of the required remaining locations by the end of the third period (conclusion of the third inspection interval).



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CC Regional Administrator, USNRC, Region III  
Project Manager, USNRC, NRR  
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Attachment

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**ATTACHMENT**

**NUCLEAR MANAGEMENT COMPANY  
PALISADES NUCLEAR PLANT  
DOCKET 50-255**

**February 13, 2003**

**REQUEST FOR RELIEF FROM ASME SECTION XI  
INSERVICE INSPECTION PROGRAM**

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REQUEST FOR RELIEF FROM ASME SECTION XI  
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COMPONENT IDENTIFICATION

Code Class: 1 and 2

References: Table IWB-2500-1, Examination Category B-F and B-J  
Table IWC-2500-1, Examination Category C-F-1 and C-F-2

Description: ASME Class 1 and 2 Pressure Retaining Welds

Systems: Engineered Safety System (ESS)  
Radwaste System (RWS)  
Primary Coolant System (PCS)  
Chemical and Volume Control System (CVC)  
Main Steam System (MSS)  
Feedwater System (FWS)  
Vent and Air Conditioning System (VAS)  
Service Water System (SWS)

CODE REQUIREMENT

The following paragraph refers to the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code, Section XI, 1989 Edition, the code currently applicable to the Palisades Inservice Inspection Program.

Tables IWB-2412-1 and IWC-2412-1 require that a minimum of 50% of the required ASME Section XI examinations be completed by the end of the second period of an inspection interval.

BASIS FOR RELIEF

Nuclear Management Company, LLC (NMC) has completed the development of a full scope Risk Informed Inservice Inspection (RI-ISI) Program for the Palisades Nuclear Power Plant, using Westinghouse Topical Report, WCAP-14572 "Westinghouse Owners Group Application of Risk-Informed Methods to Piping Inservice Inspection Topical Report," Revision I-NP-A. The Palisades program was submitted to the Nuclear Regulatory Commission (NRC) for their review by letter dated March 1, 2002. This proposed full scope risk informed program includes ASME Class 1, 2, 3 and non-class piping welds. Palisades is presently in the second period, third interval, of the ASME Section XI (1989 Edition) Inservice Inspection Program. The second period of this third inspection interval concludes with the completion of the next refueling outage.

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The piping categories that are affected by this relief request include: B-F, B-J, C-F-1 and C-F-2. Details of these categories are as follows:

- 47 B-F welds - Five are socket welds and 42 are butt welds.
- 753 B-J welds - 359 are socket welds and 394 are butt welds.
- 986 C-F-1 welds - 66 are socket welds and 920 are butt welds.
- 316 C-F-2 welds - Zero are socket welds and 316 are butt welds.

A total of 169 Class 1 and Class 2 welds have been examined to date. Of these 169 weld locations, 132 were examined in the first period and 37 have been examined in the second period. Of these 37 welds, 15 are Class 1 and 22 are Class 2. The following table provides details of the inspections that have been performed thus far in the third interval.

Category	Completed Inspections	% Complete
B-F welds	20 of 47	42.60%
B-J welds	48 of 213	22.50%
C-F-1 welds	68 of 173	39.30%
C-F-2 welds	33 of 76	43.40%

ASME Section XI requires that a minimum of 50% of the required welds be examined by the end of the second period of the interval. Approximately 57 Class 1 and 24 Class 2 piping locations are required to be inspected to meet the second period requirements under the current program. Meeting ASME Section XI period requirements would require NMC to perform additional examinations not currently scheduled for the next refueling outage. Performing examinations in accordance with the current inspection plan would result in unnecessary personnel exposure.

The NRC previously published Information Notice (IN) 98-44, "Ten-Year Inservice Inspection (ISI) Program Update for Licensees That Intend to Implement Risk-informed ISI of Piping." This document states that, "...the Staff will consider authorizing a delay up to 2 years in implementation of the next 10-year ISI program for piping only to allow licensees to develop and obtain approval for their RI-ISI program at the next available opportunity using the Staff-approved topical reports." Although IN 98-44 does not address programs that may choose to implement a RI-ISI program at mid-interval, NMC will be confronted with a hardship and difficulty since it has submitted an ASME RI-ISI Program mid-interval. This situation creates a condition whereby the provision in 10 CFR 50.55a(a)(3)(ii) is applicable, in that compliance with the requirements would result in hardship or unusual difficulty without a compensating increase in

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the level of quality and safety. Furthermore, the intent and provisions established in IN 98-44 allow for delays in performing currently required ISI inspections by recognizing that implementing a RI-ISI program will eliminate many inspections.

These examinations will ensure that 66% of the required RI-ISI program examinations are performed during the second and third periods of the third inspection interval. The third interval is expected to conclude on December 12, 2006. Other ASME Section XI code requirements (pressure testing, augmented inspections, repair replacement, etc) would remain unchanged from the current requirements.

PROPOSED ALTERNATE EXAMINATION

NMC proposes that the RI-ISI program for the Palisades Plant, which is currently under review by the NRC, be implemented during the second period of the third inspection interval. NMC proposes to perform 29 ISI pipe weld examinations during the next refueling outage, as an alternative to the requirements of ASME Section XI. Of these 29 examinations, four are augmented Alloy 600 examinations, two are augmented weld overlay examinations and 23 of these examinations are in accordance with Palisades RI-ISI program. These 23 examinations are of piping associated with Palisades proposed full scope RI-ISI Program that includes ASME Class 1, 2, 3, and non-class piping. The RI-ISI Program presently submitted requires that 139 piping examinations be performed during a ten-year interval. NMC is in the process of supplementing their original RI-ISI submittal to include additional examinations of high safety significant segments that contain multiple line sizes. These additional piping examinations will be included in the RI-ISI interval examination requirements once determined.

Additionally, all RI-ISI piping segments that are high safety significant and contain socket welds receive a VT-2 examination during each refueling outage. The RI-ISI program for the Palisades Plant did not identify any socket weld location subject to external chloride stress corrosion cracking (ECSCC).

During the third inspection interval Palisades has completed approximately one third of the Class 1 and 2 piping weld examinations required under the existing ASME Section XI Inservice Inspection Program. This coupled with Palisades commitment to examine at least 66% of the examinations associated with the RI-ISI Program by the end of the third interval, constitutes an alternative examination method which will provide an acceptable level of quality and safety. These percentages are comparatively equivalent to the ASME Section XI code interval requirements to perform 100% of the required piping examinations by the end of the interval. Since Palisades is implementing a full scope RI-ISI Program,

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which includes ASME Class 1, 2, 3 and non-class piping, it is not possible to directly correlate the examination categories from the previous ISI Program to those associated with the RI-ISI Program.

Once the RI-ISI program is approved, examinations will be performed such that those required for the second and third period be completed by the end of the third inspection interval. Additionally, if the RI-ISI Program is not approved for any reason, then all examinations of category B-F, B-J, C-F-1 and C-F-2 welds that would be required under the current ISI program for the third inspection interval will be completed by the end of the third inspection interval.

APPLICABLE TIME PERIOD

NMC requests the proposed alternate for the remainder of the third ten-year interval of the Inservice Inspection Program for Palisades, which is expected to conclude December 12, 2006.

COMMITMENTS

Number	Restated Commitment	Due
1	Scheduled examinations under the RI-ISI program will examine at least 66% of the required remaining locations by the end of the third period (conclusion of third inspection interval).	2006 Refout