

March 13, 2006

10 CFR 50.55a

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

Palisades Nuclear Plant  
Docket 50-255  
License No. DPR-20

Response to Request for Clarification on Request for Relief from ASME Section XI  
Code Requirements for Repair of Pressurizer Nozzle Penetrations  
(TAC NO. MC8170)

By letter dated August 11, 2005, Nuclear Management Company, LLC (NMC) requested Nuclear Regulatory Commission (NRC) approval, pursuant to 10 CFR 50.55a(a)(3)(i), for the use of an alternative to the requirements of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, related to the repair of pressurizer heater sleeve penetrations at the Palisades Nuclear Plant (PNP).

By letter dated December 28, 2005, the NRC issued a request for additional information (RAI) on the subject relief request. NMC responded to the RAI by letter dated January 31, 2006. By electronic mail, dated February 10, 2006, the NRC sent a request for clarification of the RAI response. The clarification request was discussed in a teleconference between the NRC and NMC on February 15, 2006. The NRC requested that NMC provide responses to questions 2b and 2c. On February 17, 2006, NMC provided responses to questions 2b and 2c via electronic mail. On February 21, 2006, the NRC requested that the responses be docketed. Enclosure 1 provides the responses to questions 2b and 2c.

Summary of Commitments

This letter contains no new commitments and no revisions to existing commitments.



Paul A. Harden  
Site Vice President, Palisades Nuclear Plant  
Nuclear Management Company, LLC

Enclosure (1)

cc: Administrator, Region III, USNRC  
Project Manager, Palisades, USNRC  
Resident Inspector, Palisades, USNRC

**ENCLOSURE 1**  
**RESPONSE TO REQUEST FOR CLARIFICATION**  
**PALISADES NUCLEAR PLANT**

**NRC Request**

- 2b) *Section 3.2.3 of the staff's safety evaluation indicates that the fatigue crack growth assessment for the Palisades' pressurizer heater sleeves is for 40 years of plant operation. Attachment 1 to the NMC's January 31, 2006, response does not indicate the time that the analysis is applicable. For what time is the fatigue crack growth assessment applicable?*

**NMC Response**

- 2b) The fatigue crack growth assessment is applicable for 40 years of plant operation.

**NRC Request**

- 2c) *Tables 3 and 4 in Attachment 1 to NMC's January 31, 2006, letter identifies the allowable flaw size and the allowable stress intensities at the final crack size. The attachment does not describe the criteria used to establish the allowable flaw size and the allowable stress intensities at the final crack size. What criteria was used to establish the allowable flaw size and the allowable stress intensities at the final crack size? Was this same criteria used to establish the allowable flaw size and the allowable stress intensities at the final crack size in the tables in sections 3.4 and 3.5 of WCAP-15973-P, Revision 1?*

**NMC Response**

- 2c) The methodology and criteria from WCAP-15973-P, Revision 1 was used in the Palisades evaluation.

The criteria used to establish the allowable flaw size at the final crack size is based upon the Code criteria of paragraph IWB-3612 of Section XI of the ASME Code and the primary stress limits of NB-3000 of Section III of the ASME Code.

The criteria used to establish the allowable stress intensities at the final crack size in the tables in Sections 3.4 and 3.5 of WCAP-15973-P Revision 1, is paragraph IWB-3612 of Section XI of the ASME Code.