



March 9, 2007

10 CFR 50.55a

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

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

Response to Request for Additional Information on Relief Request #1 and Relief Request #2 for Pressurizer Nozzle Penetrations (TAC No. MD3165/3166)

By letter dated September 15, 2006, Nuclear Management Company, LLC (NMC) requested relief from certain sections of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code, Section XI, 2001 Edition with addenda through 2003, for the Palisades Nuclear Plant (PNP).

By electronic email dated December 19, 2006, the Nuclear Regulatory Commission (NRC) sent a request for additional information (RAI) on the relief requests. Enclosure 1 provides the response to the RAI for PNP.

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 ADDITIONAL INFORMATION
PALISADES NUCLEAR PLANT**

NRC Request

Relief Request #1 in Enclosure 1

1. *(A) Discuss whether any pressurizer heater sleeve nozzle penetrations were examined ultrasonically and visually during the 2006 refueling outage. (B) If examination was performed, discuss the examination results. (C) If pressurizer penetration nozzles were repaired during the 2006 outage, discuss any problems concerning the repair.*

NMC Response

1. (A) During the 2006 refueling outage, a bare metal visual inspection was performed on the 120 pressurizer heater sleeve penetrations.

(B) The bare metal visual inspection yielded acceptable results.

(C) There were no repairs of the pressurizer penetration nozzles during the 2006 outage.

NRC Request

2. *As stated in the relief request, the proposed repair consists of removing a portion of the original nozzle from the penetration, inserting a backing plug in the penetration, and covering the penetration opening with a welded pad. The proposed repair will not allow a new heater element to be inserted into the plugged nozzle penetration. The pressurizer depends on the heater elements as the heat source. Therefore, provide the maximum (limiting) number of the heater sleeves that can be repaired by this repair technique without challenging the intended function of the pressurizer.*

NMC Response

2. NMC performed an evaluation to determine the number of heater sleeves that can be repaired by this repair technique without challenging the intended function of the pressurizer. It was conservatively determined that twelve heater sleeves could be repaired. Further evaluation would be required if more than twelve heater sleeves require repair.

NRC Request

Relief Request #2 in Enclosure 2

3. *On pages 1 and 4, the licensee referenced Westinghouse analysis, LTR-MRCDA-06-171-P, "Low Alloy Steel Component Corrosion Analysis Supporting NMC Small-Diameter Alloy 600 Nozzle Repair/Replacement Program at*

Palisades (Proprietary)." This analysis is Attachment 3 to the submittal. Westinghouse published this report on September 12, 2006. The conclusion of LTR-MRCDA-06-171-P states that the final crack length in the pressurizer lower head of the Palisades nuclear plant is relatively small. The staff understands that this analysis is a plant-specific flaw analysis for the Palisades nuclear plant. However, on pages 1 and 4 of the current submittal, it is not clear how this analysis supports the current submittal because in Attachment 1 to Relief Request #2, the licensee discussed data from the generic Westinghouse report, WCAP-15973-P, instead from the Palisades plant-specific report, LTR-MRCDA-06-171-P. Discuss how the analysis, LTR-MRCDA-06-171-P, supports the current submittal.

NMC Response

3. In Section 4, "Conclusion and Findings," of WCAP-15973-P, an exception was taken for the side shell nozzles at PNP. The analysis, LTR-MRCDA-06-171-P, was performed due to this exception. The analysis pertains to the pressurizer temperature nozzle on the pressurizer shell. The analysis confirmed that the bounding case analyzed in WCAP-15973-P is applicable to PNP. Because the WCAP-15973-P identified the need for the PNP plant specific analysis, the analysis was included in the submittal for the purpose of documentation completeness.

NRC Request

4. *In response to NRC Condition 4 in Attachment 1 to Relief Request #2 (page 4 of 9), the licensee stated that the earliest date for a pressurizer heater sleeve repair was estimated on March 19, 2006. Confirm if this date is correct for the earliest pressurizer heater sleeve repair. If not, discuss a new date for the earliest heater sleeve repair and whether the response to NRC Condition 4 remains acceptable.*

NMC Response

4. The earliest date for a pressurizer heater sleeve repair would be during the upcoming refueling outage, which is scheduled to begin in September 2007. The corrosion rate analysis described in NRC Condition 4, calculates the amount of general corrosion for the pressurizer bottom head over the remaining plant life, following repairs to a pressurizer heater sleeve. The analysis uses the March 19, 2006 date as the earliest date for a pressurizer repair, as this date provides a bounding corrosion rate for PNP. Therefore, this analysis remains acceptable because the remaining life of the PNP license has decreased by approximately 18 months and the earliest repair date is less than assumed in the analysis. The response to NRC Condition 4 remains acceptable, with the correction of the earliest repair date of September 2007. Also note that subsequent to the September 15, 2006 submittal, PNP received license extension approval.