



March 14, 2006

10 CFR 50.46

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

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

Report of Changes in Emergency Core Cooling System Models

Nuclear Management Company, LLC (NMC), is submitting a 30-day report of changes in the emergency core cooling system (ECCS) models for the Palisades Nuclear Plant (PNP). The report is submitted in accordance with 10 CFR 50.46(a)(3)(ii) as a significant change in peak cladding temperature (PCT) of greater than 50° F.

NMC identified a potential issue with the containment heat structures in the Final Safety Analysis Report (FSAR) Appendix K large break loss of coolant accident (LBLOCA) analysis for PNP (FANP CR 2005-4791). NMC provided new containment heat structure data to Framatome-ANP (FANP) and requested an analysis of the impact on PCT.

While performing the analysis for the impact on PCT, FANP found conservative errors in the ICECON input for the Palisades Appendix K LBLOCA analysis of record (FANP CR 2006-585). The original 1975 development of the model overstated the thickness of some containment heat structures.

The PCT impact of these two errors is included in the enclosure. Note that the two errors identified have removed excessive conservatisms in the containment heat sinks used in the LOCA mass and energy calculation, and have resulted in a reduction in the PCT. A reanalysis is not considered to be necessary since the identified errors will result in a significant benefit, and more than compensate for the PCT penalties identified in previous 10 CFR 50.46 reports, as summarized in the enclosure.

There remains over 250 ° F of margin to the PCT limit of 2200 ° F; therefore, PNP continues to meet all 10 CFR 50.46 requirements, and does not intend to perform a reanalysis to incorporate these identified errors.

Summary of Commitments

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

A handwritten signature in black ink, appearing to read 'Paul A. Harden', with a stylized, cursive script.

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

Enclosure

CC Administrator, Region III, USNRC
Project Manager, Palisades, USNRC
Resident Inspector, Palisades, USNRC

**ENCLOSURE
LARGE BREAK LOSS OF COOLANT ACCIDENT
PEAK CLADDING TEMPERATURE SUMMARY**

	ΔPCT (°F)	PCT (°F)
PCT (Last Acceptable Model Results)		1929
10 CFR 50.46 Changes		
CR 9266 Error In Break Loop SG Exit Junction Inertia	+1	
CR 9429 Error In Fast Flux Input To RODEX2	+4	
PCT (2001 Annual Report)		1934
10 CFR 50.46 Changes		
CR 9156 Error In TOODEE2 Clad Thermal Expansion	-1	
CR 8674 RFPAC V&V Findings From CDUP	+28	
PCT (2002 Annual Report)		1961
PCT (2003 Annual Report)		1961
PCT (2004 Annual Report)		1961
PCT (2005 Annual Report)		1961
10 CFR 50.46 Changes		
CR 2005-4791 Large Break LOCA Containment Heat Sink Modeling Inputs	-5	1956
CR 2006-585 Incorrect ICECON Heat Structure Input for Palisades Appendix K LBLOCA	-41	1915