



March 7, 2005

L-HU-05-004
10 CFR 50.54(f)

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
11555 Rockville Pike
Rockville, Maryland 20852

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

Point Beach Nuclear Plant Units 1 and 2
Dockets 50-266 and 50-301
License Nos. DPR-24 and DPR-27

Kewaunee Nuclear Power Plant
Docket 50-305
License No. DPR-43

Prairie Island Nuclear Generating Plant Units 1 and 2
Dockets 50-282 and 50-306
License Nos. DPR-42 and DPR-60

Nuclear Management Company 90-Day Response to Generic Letter 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized Water Reactors"

By letter dated September 13, 2004, the Nuclear Regulatory Commission (NRC) issued Generic Letter (GL) 2004-02. The NRC required that specific information be provided within 90 days of the date of the safety evaluation report that provides guidance for performing the evaluation of the susceptibility of the emergency core cooling system and containment spray system recirculation functions to the adverse effects of debris blockage. The NRC issued this safety evaluation report by letter dated December 6, 2004.

Nuclear Management Company, LLC (NMC) is providing the 90-day response to GL 2004-02. Enclosure 1 contains the NMC response for the above listed nuclear plants.

Summary of Commitments

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

- NMC will perform latent debris sampling at Point Beach Nuclear Plant, Unit 1, during the Fall 2005 refueling outage and at Unit 2 during the Spring 2005 refueling outage.
- NMC will perform latent debris sampling at Palisades Nuclear Plant during the Spring 2006 refueling outage.
- NMC will complete walkdowns at Prairie Island Nuclear Generating Plant, Unit 2, including latent debris sampling, during the Spring 2005 refueling outage.

I declare under penalty of perjury that the foregoing is true and correct. Executed on March 7, 2005.



Edward J. Weinkam
Director, Regulatory Services
Nuclear Management Company, LLC

Enclosure (1)

cc: Administrator, Region III, USNRC
Project Manager, Palisades Nuclear Plant, Point Beach Nuclear Plant,
Prairie Island Nuclear Generating Plant, Kewaunee Nuclear Power Plant,
USNRC
Resident Inspector, Palisades Nuclear Plant, Point Beach Nuclear Plant,
Prairie Island Nuclear Generating Plant, Kewaunee Nuclear Power Plant,
USNRC

ENCLOSURE 1
NUCLEAR MANAGEMENT COMPANY, LLC
90-DAY RESPONSE TO GENERIC LETTER 2004-02

Nuclear Regulatory Commission (NRC) Requested Information

Within 90 days of the date of the safety evaluation report providing the guidance for performing the requested evaluation, addressees are requested to provide information regarding their planned actions and schedule to complete the requested evaluation. The information should include the following:

- (a) *A description of the methodology that is used or will be used to analyze the susceptibility of the ECCS and CSS recirculation functions for your reactor to the adverse effects identified in this generic letter of post-accident debris blockage and operation with debris-laden fluids identified in this generic letter. Provide the completion date of the analysis that will be performed.*

Nuclear Management Company (NMC), LLC Response

- (a) NMC intends to utilize the deterministic approach described in Nuclear Energy Institute (NEI) document NEI 04-07, "Pressurized Water Reactor Sump Performance Evaluation Methodology," dated December 2004, which was approved by the NRC in a safety evaluation report (SER), dated December 6, 2004, to analyze the susceptibility of the emergency core cooling system (ECCS) and containment spray system (CSS) recirculation functions to the adverse effects of post-accident debris blockage and operation with debris-laden fluids.

In cases where the NEI methodology varies from the NRC SER, the SER guidance will be used. Use of risk informed evaluation methodology (Chapter 6 of NEI methodology) is not currently planned. Planned exceptions to the use of the NEI methodology and the SER guidance are:

1. Additional testing and/or evaluations of existing data, to demonstrate the capability of original equipment manufacturer (OEM) coatings to withstand post-accident environmental conditions, and to reduce the zone of influence for qualified coatings, are in progress and/or planned by various groups involved with resolution of GSI-191. When this additional information becomes available, NMC intends to use the tests, evaluation results, industry guidance and NRC guidance, to revise site-specific analyses as appropriate.
2. The NEI methodology and the NRC SER do not provide specific guidance for evaluating the chemical precipitation effects. Cooperative NRC-EPRI tests for chemical precipitation are in progress. The significance of chemical precipitant and the methodology for head loss to account for

the chemical precipitant is currently not developed. When this information becomes available, NMC intends to use future test results, industry guidance, and NRC guidance to account for chemical precipitant in the site-specific analyses.

3. The NEI methodology and the NRC SER do not provide specific guidance for evaluating the long-term downstream effects of operating with debris-laden fluid and resultant component wear. When this additional information becomes available, NMC intends to use future industry test results, Westinghouse/B&W owner's group guidance, and component manufacturer data to evaluate performance degradation caused by debris-laden fluid in the site-specific analyses.

The evaluations based on the NEI methodology and the NRC SER for the current plant configurations will be completed prior to September 1, 2005. The evaluation for chemical effects and long-term downstream effects may be completed after September 1, 2005, depending on the schedule for testing and availability of industry guidance on the subject.

NRC Requested Information

- (b) *A statement of whether you plan to perform a containment walkdown surveillance in support of the analysis of the susceptibility of the ECCS and CSS recirculation functions to the adverse effects of debris blockage identified in this generic letter. Provide justification if no containment walkdown surveillance will be performed. If a containment walkdown surveillance will be performed, state the planned methodology to be used and the planned completion date.*

NMC Response

- (b) NMC has performed containment walkdowns at Palisades, Point Beach Units 1 and 2, Prairie Island Unit 1, and Kewaunee, in support of the analysis of the susceptibility of the ECCS and CSS recirculation functions to the adverse effects of debris blockage. The walkdowns at Prairie Island, Unit 2, will be completed during the Spring 2005 refueling outage. The methodology that was used to perform the containment walkdowns was the NEI walkdown methodology, NEI 02-01, "Condition Assessment Guidelines: Debris Sources Inside PWR Containments," Revision 1.

NEI 02-01 provided guidance on latent debris sampling. Additional guidance was later provided in NEI 04-07 and the NRC SER. Latent debris sampling has been completed at Kewaunee and Prairie Island Unit 1. Palisades and Point Beach, Units 1 and 2, will use conservative assumptions for latent debris in their analyses.

NMC will collect plant-specific latent debris samples at Point Beach Nuclear Plant, Unit 1, during the Fall 2005 refueling outage and Unit 2, during the Spring 2005 refueling outage. NMC will collect plant-specific latent debris samples at Palisades Nuclear Plant during the Spring 2006 refueling outage, and at Prairie Island Nuclear Generating Plant, Unit 2, during the Spring 2005 refueling outage. Results of the plant-specific latent debris sampling will then be used to validate the latent debris loading assumptions in the analyses.