February 7, 2005

Mr. Dennis L. Koehl Site Vice President Nuclear Management Company, LLC 6610 Nuclear Road Two Rivers, WI 54241

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION (RAI) FOR THE REVIEW OF THE POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION

Dear Mr. Koehl:

By letter dated February 25, 2004, Nuclear Management Company, LLC, (NMC or the applicant) submitted an application pursuant to 10 CFR Part 54, to renew the operating licenses for Point Beach Nuclear Plant (PBNP), Units 1 and 2, for review by the U.S. Nuclear Regulatory Commission (NRC). The NRC staff is reviewing the information contained in the license renewal application (LRA) and has identified, in the enclosure, areas where additional information is needed to complete the review.

These RAIs were discussed with your staff, Mr. Jim Knorr, and a mutually agreeable date for this response is within 30 days from the date of this letter. If you have any questions, please contact me at 301-415-3703 or e-mail <u>VMR1@nrc.gov</u>.

Sincerely,

/RA/

Veronica M. Rodriguez, Project Manager License Renewal Section A License Renewal and Environmental Impacts Program Division of Regulatory Improvement Programs Office of Nuclear Reactor Regulation

Docket Nos. 50-266 and 50-301

Enclosure: As stated

cc w/encls: See next page

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Adams Accession no.: ML050380148

| OFFICE | PM:RLEP | SC:RLEP |
|--------|--------------|--------------|
| NAME | VRodriguez | SLee |
| DATE | 02 / 07 / 05 | 02 / 07 / 05 |

OFFICIAL RECORD COPY

Point Beach Nuclear Plant, Units 1 and 2

cc: Jonathan Rogoff, Esq. Vice President, Counsel & Secretary Nuclear Management Company, LLC 700 First Street Hudson, WI 54016

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James Connolly Manager, Regulatory Affairs Point Beach Nuclear Plant Nuclear Management Company, LLC 6610 Nuclear Road Two Rivers, WI 54241

Mr. Ken Duveneck Town Chairman Town of Two Creeks 13017 State Highway 42 Mishicot, WI 54228

Chairman Public Service Commission of Wisconsin P.O. Box 7854 Madison, WI 53707-7854

Regional Administrator, Region III U.S. Nuclear Regulatory Commission 801 Warrenville Road Lisle, IL 60532-4351

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James E. Knorr License Renewal Project Nuclear Management Company, LLC 6610 Nuclear Road Point Beach Nuclear Plant Two Rivers, WI 54241

DISTRIBUTION: Letter to: Dennis L. Koehl (NMC), Re: RAIs for the review of the Point Beach Nuclear Plant, Units 1 and 2, Dated: February 7, 2005 Adams Accession No.: ML050380148

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RLEP RF

E-MAIL:

OPA

RidsNrrDrip RidsNrrDe G. Bagchi K. Manoly W. Bateman J. Calvo R. Jenkins P. Shemanski J. Fair RidsNrrDssa RidsNrrDipm D. Thatcher R. Pettis G. Galletti C. Li K. Winsberg (RidsOgcMailCenter) R. Weisman M. Mayfield A. Murphy S. Smith (srs3) S. Duraiswamy Y. L. (Renee) Li RLEP Staff _____ P. Lougheed, RIII J. Strasma, RIII A. Stone, RIII H. Chernoff W. Ruland C. Marco L. Raghavan T. Mensah

POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2 LICENSE RENEWAL APPLICATION (LRA) REQUEST FOR ADDITIONAL INFORMATION (RAI)

Reactor Coolant Pump (RCP) Casing Analysis

RAI 4.4.3-1

Section 4.4.3 of the application indicates that the applicant has re-evaluated the fracture mechanics analyses to ASME Code Case–481 documented in WCAP-13045 and WCAP-14705 for the Point Beach Nuclear Plant (PBNP) Units 1 and 2 RCP casings and they remain valid for the 60-year extended license operating period. The application indicates that these components are not susceptible to thermal aging because they satisfy the criteria in the NRC safety evaluation for WCAP-14575-A. The application also indicates that the fracture mechanics analysis will not be revised and resubmitted to the NRC for the extended period of operation because the code case has been superceded by the ASME Code and the analysis is no longer needed. The staff requests that the applicant evaluate the ASME Code Case-481 analysis to the criteria for time-limited aging analysis (TLAA) in 10 CFR 54.3 to determine whether the analysis satisfies the criteria and should be considered a TLAA. If it satisfies the TLAA criteria, the applicant is requested to identify the changes to the analysis that result from the proposed additional 20 years of facility operation and to provide the results of the analysis that satisfy 10 CFR 54.21(c)(i), (ii) or (iii).

Bolting Integrity Program

RAI B.2.1.4-1

In the Preventive Actions portion of the Bolting Integrity Program, the applicant indicates that the program takes exception to Generic Aging Lessons Learned (GALL) Program XI.M18, "Bolting Integrity." As a preventive action GALL indicates that Initial Inservice Inspection (ISI) of bolting for pressure retaining components should include a check of the bolt torque and uniformity of the gasket compression after assembly. The applicant indicates that these parameters may be checked as part of maintenance activities, but the initial ISI would only include an inspection for leakage of reactor coolant system (RCS) components. The staff requests that the applicant describe the maintenance procedures that are utilized to check bolt torque and uniformity of gasket compression. In addition, please identify the frequency of the maintenance activity.

RAI B.2.1.4-2

In the Preventive Actions portion of the Bolting Integrity Program, the applicant indicates that the program takes exception to GALL Program XI.M18, "Bolting Integrity." GALL Program XI.M18, "Bolting Integrity." GALL Program XI.M18, "Bolting Integrity." indicates that the program relies on recommendations for a comprehensive bolting integrity program, as delineated in NUREG-1339, and industry recommendations, as delineated in the Electric Power Research Institute (EPRI) NP-5769, with the exceptions noted in NUREG-1339 for safety related bolting. The GALL program relies on industry recommendations for comprehensive bolting maintenance, as delineated in the EPRI

TR-104213 for pressure retaining bolting and structural bolting. The applicant indicates that enhancements to the existing plant implementation documents dealing with bolted joints will be made to incorporate recommendations *as deemed appropriate* based upon review of NUREG-1339, EPRI NP-5769, and EPRI TR-104213. The staff should be informed of, and approve, specific exceptions to the bolting recommendations in these NUREG and EPRI documents. The applicant may provide this information either prior to issuance of the extended license or after issuance of the license, provided the information is submitted for review and approval at least two years prior to entering the renewal period. If the information is to be provided after issuance of the extended license, the staff requests the applicant to include this as a commitment.

RAI B.2.1.4-3

In the Parameters Monitored or Inspected, Detection of Aging Effects and Acceptance Criteria portions of the Bolting Integrity Program, the applicant identified that the inspection program for high strength (\$150 ksi yield strength) component support bolting associated with the Steam Generator, Reactor Coolant Pump and Reactor Vessel supports would be inspected and tested in accordance with American Society for Mechanical Engineers (ASME) Boiler and Pressure Vessel Code requirements; but, would not be inspected and tested in accordance with the recommendations in GALL Program XI.M18 for high strength bolts. The applicant indicated that these bolts are not susceptible to stress corrosion cracking (SCC) because they are loaded only in shear, they have no preload and are not located in an aggressive environment. To justify that these bolts are not susceptible to SCC and the additional inspection and test recommendations in GALL Program XI.M18, the staff requests the applicant to either:

a) provide data that demonstrates that the bolting with the maximum certified yield strength, loaded to the maximum shear stress, and in a containment environment would not be susceptible to SCC, or

b) identify the inspection history for these bolts that demonstrates that they are not susceptible to SCC. The inspection history should including the inspection method, date of inspection and the inspection results.

RAI B.2.1.4-4

In the Monitoring and Trending portion of the Bolting Integrity Program, the applicant indicates that the frequency of inspection of leaking pressure retaining components (not covered by ASME Section XI) will be in accordance with the plant maintenance and/or corrective action process. GALL Program XI.M18 indicates that these components should be inspected daily. If they have leaks and if the leak rate does not increase, the inspection frequency may be decreased to weekly or biweekly. The staff requests that the applicant provide justification for utilizing the plant maintenance and/or corrective action process for determining the inspection frequency for leaking pressure retaining non-ASME Section XI components. The staff requests the applicant to identify how the plant maintenance and/or corrective action process determines the frequency of inspection of these leaking components; and identify whether any of these components have ever lost their intended function prior to repair of the leaking component.

RAI B.2.1.4-5

In the Acceptance Criteria of the Bolting Integrity Program, the applicant indicates that cracks in component support bolting will be repaired when scheduled as part of the plant maintenance and/or corrective action process. GALL Program XI.M18 indicates that cracked bolts in component supports should be replaced immediately. The staff requests the applicant to identify how the plant maintenance and/or corrective action process determines when cracked component support bolting is replaced; and identify whether any of these components have ever lost their intended function prior to repair of the cracked bolting.