September 9, 2005

Mr. Dennis L. Koehl Site Vice President Point Beach Nuclear Plant Nuclear Management Company, LLC 6590 Nuclear Road Two Rivers, WI 54241-9516

#### SUBJECT: POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2 NRC LICENSE RENEWAL FOLLOWUP INSPECTION REPORT 05000266/2005015(DRS); 05000301/2005015(DRS)

Dear Mr. Koehl:

On August 17, 2005, the NRC completed a followup inspection regarding your application for license renewal for the Point Beach Nuclear Power Plant. The enclosed report documents the inspection results, which were discussed on August 17, 2005, with members of your staff.

The purpose of this inspection was an examination of activities that support the application for a renewed license for Point Beach Nuclear Power Plant, Units 1 and 2. The NRC examined procedures and representative records, interviewed personnel, and visually examined accessible portions of various systems, structures or components to verify license renewal boundaries and to observe any effects of equipment aging. The inspection specifically addressed two areas remaining open from the initial scoping, screening and aging management inspection and also assessed your commitment tracking process as it related to license renewal.

The inspection concluded that sufficient action had been taken in regard to the scoping of non-safety related components affecting safety and to definition of the One-Time Inspection Aging Management Program such that the previously identified open items could be closed. The inspection also determined that the applicant had sufficient controls in place to track the license renewal commitments and to reasonably assure that these commitments would be completed prior to the period of extended operation.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records System (PARS) component of NRC's document

D. Koehl

system (ADAMS). ADAMS is accessible from the NRC Web site at <u>http://www.nrc.gov/reading-rm/adams.html</u> (the Public Electronic Reading Room).

Sincerely,

### /**RA**/

Ann Marie Stone, Chief Engineering Branch 2 Division of Reactor Safety

Docket Nos. 50-266; 50-301 License Nos. DPR-24; DPR-27

Enclosure: Inspection Report 05000266/2005015(DRS); 05000301/2005015(DRS) w/Attachment: Supplemental Information

F. Kuester, President and Chief Executive Officer, We Generation J. Cowan, Executive Vice President Chief Nuclear Officer D. Cooper, Senior Vice President, Group Operations J. McCarthy, Site Director of Operations D. Weaver, Nuclear Asset Manager Plant Manager **Regulatory Affairs Manager Training Manager** Site Assessment Manager Site Engineering Director **Emergency Planning Manager** J. Rogoff, Vice President, Counsel & Secretary K. Duveneck, Town Chairman Town of Two Creeks Chairperson Public Service Commission of Wisconsin J. Kitsembel, Electric Division Public Service Commission of Wisconsin State Liaison Officer

D. Koehl

system (ADAMS). ADAMS is accessible from the NRC Web site at <u>http://www.nrc.gov/reading-rm/adams.html</u> (the Public Electronic Reading Room).

Sincerely,

## /**RA**/

Ann Marie Stone, Chief Engineering Branch 2 Division of Reactor Safety

Docket Nos. 50-266; 50-301 License Nos. DPR-24; DPR-27

Enclosure: Inspection Report 05000266/2005015(DRS); 05000301/2005015(DRS) w/Attachment: Supplemental Information

F. Kuester, President and Chief Executive Officer, We Generation J. Cowan, Executive Vice President **Chief Nuclear Officer** D. Cooper, Senior Vice President, Group Operations J. McCarthy, Site Director of Operations D. Weaver, Nuclear Asset Manager Plant Manager **Regulatory Affairs Manager Training Manager** Site Assessment Manager Site Engineering Director **Emergency Planning Manager** J. Rogoff, Vice President, Counsel & Secretary K. Duveneck. Town Chairman Town of Two Creeks Chairperson Public Service Commission of Wisconsin J. Kitsembel, Electric Division Public Service Commission of Wisconsin State Liaison Officer

DOCUMENT NAME:ML052560264.wpd

X Publicly Available To receive a copy of this document, indicate in the concurrence box "C" = Copy without attach/encl "E" = Copy with attach/encl "N" = No copy

OFFICE	RIII	RIII	RIII		
NAME	PLougheed:tr	PLouden	AMStone		
DATE	08/03/05	09/09/05	09/09/05		

#### OFFICIAL RECORD COPY -3-

D. Koehl

ADAMS Distribution: HKN HKC RidsNrrDipmlipb GEG KGO CAA1 RGK C. Pederson, DRS (hard copy - IR's only) DRPIII DRSIII PLB1 JRK1 ROPreports@nrc.gov

## U.S. NUCLEAR REGULATORY COMMISSION

# **REGION III**

Docket Nos: License Nos:	50-266; 50-301 DPR-24; DPR-27
Report No:	05000266/2005015(DRS); 05000301/2005015(DRS)
Applicant:	Nuclear Management Company, LLC
Facility:	Point Beach Nuclear Plant, Units 1 and 2
Location:	6610 Nuclear Road Two Rivers, WI 54241
Dates:	August 15 through 17, 2005
Inspectors: P. L	ougheed, Senior Engineering Inspector
Approved by:	A. M. Stone, Chief Engineering Branch 2 Division of Reactor Safety

## SUMMARY OF FINDINGS

IR 05000266/2005015(DRS); 05000301/2005015(DRS); 8/15/2005 - 08/17/2005; Point Beach Nuclear Plant, Units 1 and 2; License Renewal Inspection Program, Followup Inspection.

This inspection of the applicant's license renewal aging management review was performed by a regional office inspector using NRC Manual Chapter 2516 and NRC Inspection Procedure 71002. No "findings" as defined in NRC Manual Chapter 0612 were identified.

The inspector concluded that the applicant performed its license renewal scoping, screening, and aging management review in accordance with the Point Beach License Renewal Application. The previously identified open items were closed.

## **REPORT DETAILS**

#### I. Inspection Scope

This inspection was conducted by an NRC Region III inspector and performed in accordance with NRC Manual Chapter 2516 and NRC Inspection Procedure 71002, "License Renewal Inspection," dated February 18, 2005. This was a followup inspection to that documented in IR05000266/2005005; IR05000301/2005005.

This inspection specifically reviewed the applicant's scoping and screening methodology for 10 CFR 54.4(a)(2) and the aging management program for One-Time Inspections, as described in the license renewal application, submitted to the NRC on February 25, 2004. This inspection concentrated on the actions the applicant had taken in regard to these programs since the initial license renewal inspection in March 2005. The inspection also reviewed those specific elements of the applicant's commitment tracking and corrective action programs which related to license renewal. This review was to assess the applicant's ability to meet these commitments prior to the period of extended operation.

The attachments to this report list the applicant personnel contacted, the documents reviewed, and the acronyms used.

#### II. Visual Observation of Plant Equipment

During this inspection, the inspector performed a walkdown inspection of 10 CFR 54.4 (a)(2) boundaries for several non-safety-related systems. The walkdown was intended to determine the acceptability of the scoping boundaries; to observe the current condition of the systems, structures and components; and to assess the likelihood that a proposed aging management program would successfully manage any aging effects. Specific comments on the walkdown results are presented in the sections below. Portions of the following systems were walked down:

- Chemical Volume and Control System;
- Heating Steam System;
- Main Steam System; and
- Plant Sampling System.

The following structures or areas were walked down:

- Facade, Units 1 and 2;
- Cribhouse Exterior;
- Plant Auxiliary Building, Units 1 and 2;
- Demineralizer Cubicles and Demineralizer Valve Gallery;
- Sump Tank Cubicle;
- Gas Stripper Building;
- Blowdown Evaporator Building; and
- "B" and "C" Hold Up Tank Cubicles.

#### III. Review of Scoping and Screening Methodology: Non-Safety Impacting Safety

In November 2004, the applicant received a request for additional information from the Office of Nuclear Reactor Regulation (NRR) regarding the applicant's scoping and screening methodology for 10 CFR 54.4(a)(2), for non-safety components which could impact a safety-related function. As a result of this request, the applicant determined that a change in methodology was necessary to respond to the staff's questions. In March 2005, the applicant responded to the request for additional information and stated that the methodology change would require additional 10 CFR 54.4(a)(2) scoping work. The applicant committed to providing this additional information by April 2005. When the scoping, screening, and aging management inspection was performed in March through April 2005, the applicant had not yet completed its revision to the (a)(2) scoping methodology. Therefore, the inspectors created an open item, pending the applicant's submittal and NRR's review of the revised scoping methodology.

The applicant submitted its revised methodology on April 29, 2005, and NRR completed its review by August 8, 2005. The inspector specifically reviewed the exceptions taken by the applicant and performed a walkdown to verify the applicant's information. The inspector determined that the applicant realistically defined the boundaries and appropriately placed systems and components in scope. No areas were identified where the applicant inappropriately considered a system or component as out-of-scope.

The inspector reviewed the applicant's rationale for leaving the cross-over steam dump header and valves out-of-scope. The inspector determined that these components were located in a very large open area (approximately 2500 square feet), which had three safety-related transmitters along one wall. These transmitters were the only safety-related components in the area. The cross-over steam dumps (valves, manifold, and piping) were very close to one edge of the room and were approximately 40 to 45 feet away from the transmitters, with a several large fans between the cross-over system and the transmitters. The inspector concluded there was no realistic failure of the steam dumps that would impact the transmitters. Therefore, the inspector concluded that it was appropriate for the applicant to categorize the cross-over steam dumps as out-of-scope for license renewal.

The open item was satisfactorily resolved and is closed.

## IV. Review of Aging Management Programs: One-Time Inspection Program (B2.1.13)

The applicant identified the one-time inspection program as a new program to address potentially long incubation periods for certain aging effects, to provide a means of verifying that an aging effect is either not occurring or progressing so slowly as to have negligible effect on the intended function of the structure or component, and to verify the effectiveness of existing programs, such as water chemistry. The applicant also credited the one-time inspection program as managing the aging effects due to loss of material due to galvanic corrosion and selective leaching, and in infrequently accessed areas, such as high radiation, high temperature, confined spaces, and submerged areas.

The applicant deemed that implementation of the program consisted of four elements: (1) determination of appropriate inspection sample size; (2) identification of inspection locations; (3) selection of examination technique, with acceptance criteria; and (4) evaluation of results to determine the need for additional inspections or other corrective actions. However, during the scoping, screening, and aging management inspection, performed in March through April 2005, the inspectors determined that additional information on the first three elements was necessary to evaluate the acceptability of the program and should not be considered to be entirely part of the implementation process. As the applicant had not identified the number of samples, the locations, or the examination techniques for the majority of the one-time inspections, the inspectors left final review of this program as an open item.

The applicant revised the program basis document to provide more information regarding the scope, methods of evaluation, and acceptance criteria. The applicant also prepared a preliminary implementation document. The inspector reviewed these documents and the applicant's initial proposal for sample size and location. Based on this review, the applicant appeared to have reasonable justification for grouping components and selecting sample sizes. The inspector noted that the program was still being evaluated and the final number and location of samples had not yet been finalized. However, the inspector deemed there was sufficient information to determine that the program would adequately detect aging degradation for the components and systems for which it was credited.

The open item was satisfactorily resolved and is closed.

#### V. Corrective Action Program: License Renewal Commitments

The inspector reviewed the actions taken by the applicant to ensure that license renewal commitments were being adequately managed and that there was reasonable assurance that aging degradation could be adequately managed. The inspector determined that the applicant was tracking commitments in the Part 50 licensee's commitment management system, similar to other commitments made to NRC. This program has a tie to the corrective action program; however, it had not been activated for the license renewal commitments. The applicant stated it planned on activating the tie once the extended license was received. The inspector verified that all the license renewal commitments had been adequately captured in the commitment management program and that adequate controls existed to ensure that the tie to the corrective action program would be made.

The applicant also had a program that was internal to the license renewal group. The applicant used this program to track the lower level items necessary to complete the upper tier commitments. For example, the upper tier commitment would be to "Implement a system monitoring program in accordance with the LRA;" the lower level program tracks all the procedures and processes necessary to actually meet that commitment. The inspector determined that the applicant had reasonably defined the lower level items necessary to ensure the upper tier commitments were met and had appropriate controls in place to ensure these items were tracked.

The applicant noted that two of the time-limited aging analysis programs were completely implemented. These were the environmental qualification and fatigue monitoring programs. Other programs were in the process of being implemented, such as the periodic surveillance and preventative maintenance program. However, the applicant acknowledged that overall implementation was only between 10 to 20 percent complete. The applicant stated that the license renewal program team would remain intact through the end of 2006 and that they intended to focus on implementing the lower level items during this period. The inspector concluded that the applicant had a reasonable understanding of the scope of the lower level items and that those items were being tracked and implemented in a reasonably timely fashion. The inspector deemed that the applicant had adequate controls in place to ensure that license renewal commitments were being adequately managed. Based on review of the applicant's program and discussion with applicant personnel, the inspector believed there was reasonable assurance that aging degradation could be adequately managed for the period of extended operation.

#### VI. Exit Meeting Summary

The results of this inspection were discussed on August 18, 2005, with Messrs. J. Knorr and J. Thorgerson, and other members of the Point Beach License Renewal Staff. The applicant acknowledged the inspection results and presented no dissenting comments. No proprietary information was identified.

### ATTACHMENT: SUPPLEMENTAL INFORMATION

## SUPPLEMENTAL INFORMATION

## **KEY POINTS OF CONTACT**

## Applicant

W. Herrman, Strategic Programs - Senior Technical Advisor
D. Johnson, NMC Director, License Renewal
J. Knorr, Manager, License Renewal
T. Mielke, LR Lead - Mechanical
M. Ortmeyer, LR Lead - Structural/Civil
S. Schellin, LR Lead - Electrical

J. Thorgerson, LR Lead - Programs

Nuclear Regulatory Commission

M. Morris, Resident Inspector, Point Beach

## LIST OF DOCUMENTS REVIEWED

The following is a list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspectors reviewed the documents in their entirety but rather that selected sections of portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

- LR-AMP-024-OTINSP; One-Time Inspection Program Basis Document for License Renewal; Revision 4 (draft)
- LR-TR-519; One-Time inspection Program Sampling Methodology; dated August 19, 2005
- Interim Report on the Safety Aspects of the License Renewal Application for the Point Beach Nuclear Plant, Units 1 and 2; dated June 9, 2005
- NRC 2005-0088; Clarification to Information Regarding the Point Beach Nuclear Plant License Renewal Application; dated July 19, 2005
- Response to Advisory Committee on Reactor Safeguards Interim Report on the Safety Aspects of the License Renewal Application for the Point Beach Nuclear Plant, Units 1 and 2; dated July 15, 2005
- Work Order 0414053; Radiograph Each Letdown Orifice; dated May 31, 2004

## LIST OF ACRONYMS USED

- ADAMS Agency Wide Access Management System
- CFR Code of Federal Regulations
- DRS Division of Reactor Šafety
- IR Inspection Report
- NMC Nuclear Management Company, LLC
- NRC Nuclear Regulatory Commission
- NRR Office of Nuclear Reactor Regulation
- PARS Publically Available Records System