

March 7, 2003

Mr. Fred J. Cayia
Site Vice President
Point Beach Nuclear Plant
Nuclear Management Company, LLC
6610 Nuclear Road
Two Rivers, WI 54241

SUBJECT: POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2 - EVALUATION OF
RELIEF REQUEST NO. 4 ASSOCIATED WITH USE OF THE AMERICAN
SOCIETY OF MECHANICAL ENGINEERS CODE CASE N-532-1 FOR THE
FOURTH 10-YEAR INTERVAL INSERVICE INSPECTION PROGRAM
(TAC NOS. MB5364 AND MB5365)

Dear Mr. Cayia:

By letter dated March 22, 2002, the Nuclear Management Company, LLC (the licensee), submitted relief requests for use of the American Society of Mechanical Engineers (ASME) *Boiler and Pressure Vessel Code* (Code) Case N-532-1, "Alternative Requirements to Repair and Replacement Documentation Requirements and Inservice Summary Report Preparation and Submission," for the Point Beach Nuclear Plant, Units 1 and 2.

The Nuclear Regulatory Commission (NRC) staff has determined that the proposed request for relief is authorized by law pursuant to 10 CFR 50.55a(a)(3)(i) on the basis that the proposed alternative provides a acceptable level of quality and safety. Use of the code case is authorized until such time as the code case is published in a future version of Regulatory Guide (RG) 1.147. At that time, if the licensee intends to continue implementing this code case, it must follow all provisions of ASME Code Case N-532-1 with limitation or conditions specified in RG 1.147, if any. The duration for the authorized alternative is for the fourth 10-year inservice inspection interval.

The NRC staff's safety evaluation is enclosed.

Sincerely,

/RA/

L. Raghavan, Chief, Section 1
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-266 and 50-301

Enclosure: Safety Evaluation

cc w/encl: See next page

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PUBLIC	OGC	KReimer, RIII
PDIII-1 Reading	ACRS	
LRaghavan	GHill(4)	
DSpaulding	TChan	
RBouling	GGeorgiev	

**See previous concurrence.

*Provided SE input by memo

OFFICE	PDIII-1/PM	PDIII-1/LA	EMCB/SC*	OGC**	PDIII-1/SC
NAME	DSpaulding	RBouling	TChan	RHoeffling	LRaghavan
DATE	03/07/03	03/07/03	01/14/03	03/08/03	03/08/03

ADAMS Accession No. ML030310256

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Point Beach Nuclear Plant, Units 1 and 2

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October 2002

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
ON REQUEST FOR RELIEF NO. 4 FOR THE FOURTH 10-YEAR INTERVAL AT
NUCLEAR MANAGEMENT COMPANY, LLC
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2
DOCKET NOS. 50-266 AND 50-301

I.0 INTRODUCTION

By letter dated March 22, 2002, the Nuclear Management Company, LLC (the licensee), submitted a request for relief pursuant to 10 CFR 50.55a(a)(3)(i). The licensee sought relief from the requirements of the American Society of Mechanical Engineers (ASME) *Boiler and Pressure Vessel Code* (Code), Section XI, Article IWA-6000, "Records and Reports" and requested to use the alternative reporting requirements provided in ASME Code Case N-532-1, "Alternative Requirements to Repair and Replacement Documentation Requirements and Inservice Summary Report Preparation and Submission" at the Point Beach Nuclear Plant (PBNP), Units 1 and 2. The proposed relief is sought for the fourth 10-year inservice inspection (ISI) interval. The PBNP fourth 10-year ISI program plan meets the requirements of ASME Code, Section XI, 1998 edition with addenda through 2000. The licensee requested relief from preparing the NIS-1 and NIS-2 forms for reporting the results of ISI activities after each outage, as required by ASME Code, Section XI, Articles IWA-4000 and IWA-6000. The licensee is proposing to use the alternative requirements provided in ASME Code Case N-532-1.

2.0 REGULATORY EVALUATION

The regulation at 10 CFR 50.55a(g) specifies that ISI of nuclear power plant components shall be performed in accordance with the requirements of the ASME Code, Section XI, except where specific written relief has been granted by the Commission pursuant to 10 CFR 50.55a(g)(6)(i). The regulation at 10 CFR 50.55a(a)(3) states that alternatives to the requirements of paragraph (g) may be used, when authorized by the Nuclear Regulatory Commission (NRC), if (i) the proposed alternatives would provide an acceptable level of quality and safety or (ii) compliance with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

The Code of record for the fourth interval for PBNP Units 1 and 2 is the ASME Code, Section XI, 1998 edition with addenda through 2000.

3.0 TECHNICAL EVALUATION

Code Requirement: (as stated by the licensee):

Rules for Inservice Inspection of Nuclear Power Plant Components, Section XI, 1998 Edition with Addenda through 2000.

Article IWA-6000, Records and Reports

IWA-6210(c) The Owner shall prepare Preservice and Inservice Inspection summary reports for Class 1 and 2 pressure retaining components and their supports. A cover sheet containing the information of IWA-6230(d) shall be provided.

IWA-6210(d) The Owner shall prepare the Owner's Report for Inservice Inspections, Form NIS-1, for preservice and inservice examination of Class 1 and 2 pressure retaining components and their supports.

IWA-6210(e) The Owner shall prepare the Owner's Report for Repair/Replacement Activities, Form NIS-2.

IWA-6240 Summary reports shall be submitted to the regulatory and enforcement authorities having jurisdiction at the plant site.

Licensee's Relief Request: (as stated)

PBNP requests relief from preparing the NIS-1 and NIS-2 forms for reporting the results of Inservice Inspection activities after each outage as prescribed by Section XI, IWA-6000, Records and Reports. PBNP will utilize the alternative requirements in ASME Code Case N-532-1, "Alternative Requirements to Repair and Replacement Documentation Requirements and Inservice Summary Report Preparation and Submission," as required by IWA-4000 and IWA-6000, Section XI, Division 1.

Licensee's Basis for Requesting Relief: (as stated)

The documentation required by IWA-6000 includes the NIS-1 and NIS-2 forms. These forms give a summary of Class 1 and 2 examinations. They include what components and piping systems were examined. They do not require the inclusion of Class 3 components or the new IWE and IWL examinations.

The information included on the current NIS-1 is verified by the Authorized Nuclear Inservice Inspector (ANII) [authorized nuclear representative] on an examination by examination basis, and reviewed by several other groups. These may include quality assurance auditors and the USNRC. The NIS-1 is a narrative account of the ISI activities for an outage, and does not provide information showing Code requirements were met.

The NIS-2 reports on repairs and replacements list the components where work has been performed. Again, the ANII reviews and verifies each report. NRC regional inspectors review some of these reports during refuel outages. Sending these reports to the regulatory agencies does not provide any detail about the repair or replacement.

Code Case N-532-1 is an alternative to the documentation requirements of IWA-6000 of Section XI. Use of this alternative reduces the documentation gathered and submitted each outage. The forms in the Code Case enhance the type of information submitted, being more specific in the number of examinations performed and what types of problems were encountered. PBNP will use this Code Case to replace the NIS-1 and NIS-2 reports.

The current requirement is to submit the NIS-1 and NIS-2 summary reports to the enforcement and regulatory authorities having jurisdiction at the plant site within 90 days of the end of the outage. The NIS-1 report gives a summary of the types of examinations performed and the results. The NIS-2 reports give details on Repairs and Replacements. Code Case N-532-1 allows the use of the OAR-1[Owner's Activity Report] form and three tables of specific examination information and the NIS-2A forms for repairs and replacements. By using this Code Case, PBNP will provide more specific information about the status of examinations. This will reduce the amount of time and costs involved in collection of the data, and provide more specific information to enforcement and regulatory agencies that may audit the plant records.

Code Case N-532-1 requires specific Program B information to be submitted. The preparation of the Code required documentation involves a significant effort in man-hours and associated costs. The information provided with the NIS-1 and NIS-2 forms do not provide any supporting evidence of the status of examinations performed.

The NRC has published Draft Regulatory Guide (RG) DG-1091, which includes an acceptance of ASME Code Case N-532. The only restriction the NRC is planning on imposing is to submit the OAR-1 form within 90 days after a refueling outage. PBNP will follow this guidance with the use of Code Case N-532-1. There were two differences between N-532 and N-532-1. The first is the later Code Case references the 1998 Edition with Addenda through 2000, which PBNP will be using for the fourth interval. The second is the addition of Table 4, which shows how to reference previous editions and addenda of Section XI. Table 4 will not be applicable to PBNP.

ASME approved Code Case N-532-1 for use on March 28, 2001, as an alternative to the Code required documentation of IWA-6000. Use of this Code Case provides an acceptable level of quality and safety by the use of alternate documentation. This enhances the process of determining if PBNP has met the Program B requirements of Section XI and the elimination of verbiage not adding to the quality and safety of the plant.

Licensee's Proposed Alternative Documentation and Requirements: (as stated)

PBNP will prepare OAR-1 and NIS-2A forms in accordance with the requirements of Code Case N-532-1. The OAR-1 and NIS-2A forms will be filed in accordance with the requirements of IWA-6000 on site for review by enforcement and regulatory authorities having jurisdiction at the plant site.

For Table 1 of the Code Case, PBNP will provide the required information. On those Code Categories that are covered by requirements in addition to Section XI (e.g., Code Category B-Q for steam generator tubes), a note will be placed in the table explaining the details.

For Table 2, PBNP will list flaws or relevant conditions requiring evaluation for continued service in accordance with the following sections:

IWB-3132.3, Acceptance by Analytical Evaluation

IWB-3142.4, Acceptance by Analytical Evaluation

IWC-3122.3, Acceptance by Evaluation

IWC-3132.3, Acceptance by Evaluation

IWD-3000, Acceptance Standards (the rules of IWB-3000 will be used)

IWF-3122.3, Acceptance by Evaluation or Test

For component supports, if an evaluation or test accepts a relevant condition, and the condition will be left in place, this will be reported on the submittal to the regulatory and enforcement agencies having jurisdiction at the plant site.

For Table 3, Repairs, Replacements, or Corrective Measures that were required for continued service since the previous OAR-1 Form (or NIS-1 form) was filed, will be included.

This relief will not be applicable to IWE and IWL Inservice Inspection examinations.

NRC Staff Evaluation

The licensee sought relief from the requirements of ASME Code, Section XI, Article IWA-6000, and requested to use the alternative reporting requirements provided in ASME Code Case N-532-1 at PBNP Units 1 and 2. The proposed relief is sought for the fourth 10-year ISI interval. The PBNP fourth 10-year ISI program plan meets the requirements of ASME Code, Section XI, 1998 edition with addenda through 2000. The licensee requested relief from preparing the NIS-1 and NIS-2 forms for reporting the results of ISI activities after each outage, as required by ASME Code, Section XI, Articles IWA-4000 and IWA-6000. The licensee is proposing to use the alternative requirements provided in ASME Code Case N-532-1. ASME Code Case N-532-1 provides an alternative to the current ASME Section XI repair and replacement documentation requirements, as well as regulatory reporting requirements relating to ISI. This alternative will reduce the resources required to prepare NIS-2 forms and submit the ISI Summary Report currently required by the Code after each refueling outage. This is a significant reduction in the administrative burden required by ASME Code, Section XI,

IWA-6000. By use of this code case, the licensee will prepare an OAR on Form OAR-1 upon completion of each refueling outage providing the following information:

- an abstract of all examinations and tests performed during the outage
- a listing of item(s) with flaws or relevant conditions that required evaluation for continued service
- an abstract of repairs, replacements, and corrective measures required for continued service

Each Form OAR-1 prepared during the outage would be available onsite for NRC's review and the licensee has committed to submit the OAR-1 forms to the NRC within 90 days after a refueling outage.

The licensee considers the alternative documentation and reporting requirements of ASME Code Case N-532-1 to be a reasonable alternative and an improvement to existing requirements. Because the use of this alternative only affects documentation and reporting requirements, the licensee considers this alternative to provide an acceptable level of quality and safety.

The NRC staff reviewed the alternative documentation requirement of ASME Code Case N-532-1 and determined that the use of the code case would still require preparation of the Repair/Replacement Certificate Record, Form NIS-2A. The completed Form NIS-2A shall be certified by an ANII as defined in ASME Code, Section XI, IWA-2130, and shall be maintained by the licensee. Furthermore, Form OAR-1 shall also be prepared and certified by an ANII upon completion of each refueling outage. The NRC staff notes that each OAR-1 form shall contain an abstract of applicable examinations and tests, a list of item(s) with flaws or relevant conditions that require evaluation to determine acceptability for continued service, and an abstract of repairs, replacements and corrective measures performed as a result of unacceptable flaws or relevant conditions. Hence, the information provided in the documentation pertaining to the use of ASME Code Case N-532-1 can be used in the same manner to assess the safety implications of Code activities performed during an outage. The review using the information as prescribed by the code case will, therefore, provide the same or improved level of safety as reviews that may have been conducted using the older reporting requirements.

3.0 CONCLUSION

The NRC staff has determined that the proposed alternative documentation requirement of ASME Code Case N-532-1, in conjunction with the licensee's commitment to submit Form OAR-1's to the NRC within 90 days after a refueling outage, provides an acceptable level of quality and safety as that of the ASME Code, Section XI, 1998 edition with addenda through 2000. Therefore, the use of ASME Code Case N-532-1 is authorized pursuant to

10 CFR 50.55a(a)(3)(i) at PBNP Units 1 and 2 during the fourth 10-year ISI interval. The licensee is authorized to use ASME Code Case N-532-1 until such time as the code case is published in a future version of RG 1.147. At that time, the licensee must follow all provisions and any limitations that may be described in RG 1.147 concerning the use of ASME Code Case N-532-1. The duration of the authorized alternative is for the fourth 10-year ISI interval.

Principal Contributor: G. Georgiev

Date: March 7, 2003