June 18, 2001

Mr. Mark Reddemann
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 - THIRD AND FOURTH 10-YEAR INTERVAL INSERVICE INSPECTION PROGRAM PLAN RELIEF REQUESTS RR-1-23 (UNIT 1) AND RR-2-29 (UNIT 2), (TAC NOS. MB1076 AND MB1077)

Dear Mr. Reddemann:

By letter dated January 8, 2001, Nuclear Management Company, LLC (the licensee) submitted Relief Requests RR-1-23 and RR-2-29 for the inservice inspection (ISI) programs for Point Beach Nuclear Plant (PBNP), Units 1 and 2, respectively.

In Relief Requests RR-1-23 and RR-2-29 which were submitted pursuant to 10 CFR 50.55a(a)(3)(i), the licensee proposed an alternative to the requirements in the American Society of Mechanical Engineers (ASME) *Boiler and Pressure Vessel Code*, Section XI, Subsection IWA-2430(b), and 10 CFR 50.55a(g)(4)(ii) for the determination of the fourth and successive inspection intervals. In their alternative, the licensee proposed to have the same interval start date (July 1, 2002) for the fourth interval of both Point Beach units.

The Nuclear Regulatory Commission (NRC) staff has reviewed the licensee's proposed alternative to establish the same fourth 10-year ISI interval start date for PBNP, Units 1 and 2. The licensee's third 10-year ISI examinations will be completed as scheduled for both PBNP units prior to the beginning of the fourth 10-year interval. There will be no reduction in the number of examinations for either unit as a result of the fourth 10-year interval date change. The licensee will be using the latest applicable ASME Code edition for both units' fourth 10-year ISI interval. Therefore, the NRC staff concludes that the licensee's proposed alternative provides reasonable assurance of quality and safety and is authorized pursuant to 10 CFR 50.55a(a)(3)(i) for the fourth 10-year interval ISI program plans for PBNP, Units 1 and 2.

Further details on the basis for the NRC staff's conclusion are contained in the enclosed safety evaluation (SE). If you have any questions regarding this issue or the SE, please contact Beth Wetzel, the Senior Project Manager, at 301-415-1355.

Sincerely,

/RA/
Claudia Craig, 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

Further details on the basis for the NRC staff's conclusion are contained in the enclosed safety evaluation (SE). If you have any questions regarding this issue or the SE, please contact Beth Wetzel, the Senior Project Manager, at 301-415-1355.

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cc w/encl: See next page

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Point Beach Nuclear Plant, Units 1 and 2

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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO THE THIRD AND FOURTH 10-YEAR INSERVICE INSPECTION INTERVALS

RELIEF REQUESTS RR-1-23 AND RR-2-29

NUCLEAR MANAGEMENT COMPANY, LLC

POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

DOCKET NOS. 50-266 AND 50-301

1.0 INTRODUCTION

By letter dated January 8, 2001, the Nuclear Management Company, LLC (the licensee), submitted Relief Requests RR-1-23 (Unit 1) and RR-2-29 (Unit 2) concerning the third and fourth inservice inspection (ISI) programs for PBNP, Units 1 and 2, respectively. ISI of the American Society of Mechanical Engineers Code (ASME Code) Class 1, 2, and 3 components is to be performed in accordance with Section XI of the ASME *Boiler and Pressure Vessel* (B&PV) Code and applicable addenda as required by 10 CFR 50.55a(g), 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 the licensee demonstrates that: (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.

Pursuant to 10 CFR 50.55a(g)(4), ASME Code Class 1, 2, and 3 components (including supports) shall meet the requirements, except the design and access provisions and the pre-service examination requirements, set forth in the ASME Code, Section XI, "Rules for Inservice Inspection (ISI) of Nuclear Power Plant Components," to the extent practical within the limitations of design, geometry, and materials of construction of the components. The regulations require that inservice examination of components and system pressure tests conducted during the first 10-year interval and subsequent intervals comply with the requirements in the latest edition and addenda of Section XI of the ASME Code, which was incorporated by reference in 10 CFR 50.55a(b) 12 months prior to the start of the 120-month interval, and is subject to the limitations and modifications listed therein. The Code of record for the Point Beach Nuclear Power Plant, Units 1 and 2, third 10-year ISI interval is the 1986 edition of the ASME B&PV Code. The Code of record for the PBNP, Units 1 and 2, fourth 10-year ISI interval will not be determined until 12 months prior to the beginning of the fourth 10-year interval pursuant to 10 CFR 50.55a(g)(4)(ii).

ENCLOSURE

2.0 EVALUATION

The NRC staff has evaluated the information provided by the licensee in support of the requests for relief from Code requirements and the basis for disposition is documented below.

2.1 Relief Requests 1RR-1-23 (Unit 1) and RR-2-29 (Unit 2), ASME Code, Section XI, IWA-2432, Successive Inservice Inspection Intervals

Code of Federal Regulations and ASME Code, Section XI, Requirements:

10 CFR 50.55a(g)(4)(ii): Inservice examination of components and system pressure tests conducted during successive 120-month inspection intervals must comply with the requirements of the latest edition and addenda of the Code incorporated by reference in paragraph (b) of 10 CFR 50.55a 12 months prior to the start of the 120-month inspection interval, subject to the limitations and modifications listed therein.

ASME Code, Section XI, IWA-2430(b) Inspection Intervals: The inspection interval shall be determined by calendar years following placement of the plant into commercial service.

ASME Code, Section XI, IWA-2432: Successive Inspection Intervals - 10 years following the previous inspection interval.

ASME Code, Section XI:

Table IWB-2412-1, Inspection Program B
Table IWC-2412-1, Inspection Program B
Table IWD-2412-1, Inspection Program B
Table IWF-2410-2, Inspection Program B

Licensee's Code Relief Request:

"Relief is requested from updating the ISI program on the timetable required by ASME Section XI and the Code of Federal Regulations. PBNP requests the start date for the fourth interval ISI programs be the same for both units. The proposed date for the start of the fourth inspection interval for both units is July 1, 2002."

"The relief will apply to the ISI and Pressure Test Programs."

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

"PBNP Units 1 and 2 began commercial operation on December 21, 1970, and October 1, 1972, respectively. These dates are almost two years apart (650 days), and since the ISI Programs are linked to the commercial operating dates, the Editions of ASME Section XI effective during the 650 days between the unit updates will be different. When the next update becomes effective, PBNP, Unit 1 will be using the latest ASME Section XI Edition referenced in 10 CFR 50.55a, while PBNP, Unit 2 will still be using the 1986 Edition. Updating to a new Code edition requires a significant amount of work on the part of many personnel to ensure compliance, and requires the updating of numerous documents and procedures.

"Having both units on the same edition of ASME Section XI and schedule has distinct advantages. There are fewer procedures to maintain, and procedures will be meeting the requirements of one edition of the Code, instead of two different editions. The ISI Programs can be written as one document covering both units. This reduces the chance of applying the wrong ISI requirements. One set of procedures and documents reduces the administrative burden of complying with ISI requirements without a reduction in the quality of the ISI program.

"A review of previous outages was performed. PBNP, Unit 1 had two outages lasting six continuous months or more. The first extended outage occurred during the steam generator replacement project in 1983-84 and was in the Second Interval. This outage lasted 6 months and 8 days (189 days total). The second extended outage for PBNP Unit 1 occurred in 1997 (Third Interval), and lasted for 10 [sic] months and 18 [sic] days (292 days total). This outage upgraded the steam turbines and corrected administrative processes. PBNP elected to take advantage of the IWA- 2430(e) allowance of the 1986 Edition of Section XI to extend the interval. By using the 292-day interval extension allowed by IWA-2430(e) from the 1997 outage, the interval end date moves from December 20, 2000 to October 8, 2001. If the extensions from both intervals had been used, the interval end date would have been April 15, 2002.

"On PBNP Unit 2, an outage of 11 [sic] months and 11 [sic] days (315 days) occurred during the 1996-97 steam generator replacement. PBNP elected to not use the IWA-2430(e) interval extension allowed by the 1986 ASME Section XI Code. Had it been used, this would have placed additional time between the interval end dates for the units.

"The required Third interval examinations for PBNP Unit 1 will be completed by the end of June 2001. The PBNP, Unit 1 outage after this date, which will be the first for the Fourth Interval begins is scheduled for September 2002; several months after the fourth interval begins. PBNP proposes revising the Third Interval end date for PBNP, Unit 1 to June 30, 2002. This revision will not affect the number of examinations completed for the Third Interval, or the Fourth Interval ISI plans and schedules.

"The Third Interval for Unit 2 is scheduled to end on September 30, 2002. Required examinations for the Third Interval will be completed several months ahead of this date. The proposed alternative will shorten the Third Interval by three months, to June 30, 2002. Again, this will not affect Third or Fourth Interval examination schedules. Attachment 2 shows the ISI ten-year interval relationships.

"Altering the start of the intervals for both units will allow them to begin on the same date, which is proposed to be July 1, 2002. Non-Destructive Examination (NDE) procedures will be updated to the applicable Edition of Section XI at that time.

"With the proposed alternative schedule, the required Third Interval examinations will be completed as scheduled for both PBNP units. There will be no reduction in the number of examinations for either unit as a result of the date change.

"PBNP plans to implement a Risk Informed Inservice Inspection (RI-ISI) Program for piping. The RI-ISI Program project will begin on January 1, 2001, and is expected to be completed sometime during the fourth quarter of 2001. Moving the interval start date

enables PBNP to complete the RI-ISI project in time to prepare the program submittals to include the RI-ISI relief requests."

Licensee's Proposed Alternative Examination (as stated):

"PBNP will start the fourth inspection intervals for both PBNP Units 1 and 2 on July 1, 2002.

"NDE procedures will be updated to the requirements of the selected edition of ASME Section XI, effective July 1, 2002. Examinations performed after this date will be performed to the procedures complying with the selected edition of ASME Section XI.

"Administrative procedures and documents will be updated to the requirements of the selected Edition of Section XI on July 1, 2002. All requirements of the new ISI Program will be implemented at that time."

3.0 NRC Staff's Evaluation:

The regulation at 10 CFR 50.55a(g)(4)(ii) requires that inservice examination of components and system pressure tests conducted during successive 120-month inspection intervals must comply with the requirements of the latest edition and addenda of the Code prior to the start of the 120-month inspection interval. Furthermore, the ASME Code, Section XI, IWA-2432, requires that successive inspection intervals be 10 years following the previous inspection interval. The licensee requested relief from updating the ISI program on the timetable required by the ASME Code, Section XI. The licensee proposed that the start date for the fourth interval ISI programs be the same for both PBNP, Units 1 and 2.

Commercial operation began on December 21, 1970, and October 1, 1972, for PBNP, Units 1 and 2, respectively. These dates are almost 2 years apart (650 days), and since the ISI programs are linked to the commercial operating dates, the editions of ASME Section XI effective during the 650 days between the unit updates will be different. The licensee stated that they will use the latest ASME Code, Section XI edition referenced in 10 CFR 50.55a when the fourth 10-year intervals begin for PBNP, Units 1 and 2. To update the ISI programs to a new Code edition requires a significant amount of work on the part of the licensee and having both units on the same edition of ASME Code Section XI, and schedule has distinct advantages. There are fewer procedures to maintain, and the licensee's procedures will be meeting the requirements of one edition of the Code, instead of two different editions. The ISI programs will be written as one document covering both units and this reduces the chance of the licensee applying the wrong ISI requirements to its programs. In addition, maintaining one set of procedures and documents reduces the administrative burden in complying with ISI requirements as compared with using two sets of procedures and documents, and this does not reduce the quality of the ISI program.

The licensee stated, that the required third 10-year interval examinations for PBNP, Unit 1, will be completed by the end of June 2001. The PBNP, Unit 1, outage after this date, which will be the first for the fourth interval, is scheduled for September 2002, several months after the fourth interval begins. The licensee proposes revising the third interval end date for PBNP, Unit 1, to June 30, 2002. This revision will not affect the number of examinations completed for the third or the fourth interval ISI plans and schedules.

The third interval for Unit 2 is scheduled to end on September 30, 2002. Required examinations for the third interval will be completed several months ahead of this date.

The proposed alternative will shorten the third interval by 3 months, to June 30, 2002. This will not affect the third or fourth interval examination schedules. Therefore, the licensee's third 10-year ISI examinations will be completed as scheduled for both PBNP units prior to the beginning of the fourth 10-year interval; there will be no reduction in the number of examinations for either unit as a result of the fourth 10-year interval date change.

In addition, PBNP is planning to implement a Risk-Informed ISI (RI-ISI) Program for piping and, moving the interval start date enables PBNP to complete the RI-ISI project in time to prepare the program submittals to include the RI-ISI relief requests.

Based on the above, the NRC staff concludes that the licensee's proposed alternative provides reasonable assurance of quality and safety.

4.0 CONCLUSION

The NRC staff has reviewed the information in the licensee's letter dated January 8, 2001, regarding Relief Requests RR-1-23 (Unit 1) and RR-2-29 (Unit 2), including the licensee's proposed alternative to establish the same fourth 10-year ISI interval start dates for PBNP, Units 1 and 2. The licensee's third 10-year ISI examinations will be completed as scheduled for both PBNP units prior to the beginning of the fourth 10-year interval; there will be no reduction in the number of examinations for either unit as a result of the fourth 10-year interval date change. The licensee will be using the latest applicable ASME Code edition for both units' fourth 10-year ISI interval. Therefore, the NRC staff concludes that the licensee's proposed alternative provides reasonable assurance of quality and safety and is authorized pursuant to 10 CFR 50.55a(a)(3)(i) for the fourth 10-year interval ISI program plans for PBNP, Units 1 and 2.

Principal Contributor: T. McLellan

Date: June 18, 2001