September 8, 2005

NRC 2005-0116
10 CFR 50.54(f)
Order EA-03-009

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Point Beach Nuclear Plant, Unit 2
Dockets 50-301
License No. DPR-27

60-Day Report Pursuant to NRC First Revised Order EA-03-009 for Unit 2 Refueling Outage 27 Reactor Vessel Inspections

References:

(1) NRC Order EA-03-009 dated February 20, 2004;
(2) NRC Bulletin 2003-02 dated August 21, 2003;
(3) Letter from NMC to NRC dated September 22, 2003 (NRC 2003-0089);
(4) Letter from NMC to NRC dated January 15, 2004 (NRC 2004-0006);
(5) Letter from NMC to NRC dated August 6, 2004 (NRC 2004-0077);
(6) Letter from NRC to NMC dated November 22, 2004.

References 1 and 2 requested information and specified requirements regarding reactor pressure vessel (RPV) examinations. Reference 1 required that specific examinations be performed to identify potential reactor coolant system leaks from the reactor vessel head and pressure-retaining components above the RPV head. In addition, Reference 1 defined specific reporting requirements following the performance of the initial and successive inspections. Reference 2 requested information regarding the RPV lower head penetration examination program and specified the reporting requirements following the initial inspection of the lower head penetrations.

NMC provided its response to BL 2003-02 by letter dated September 22, 2003 (Reference 3). As part of its response, NMC committed to perform a 100 percent bare-metal visual inspection of the lower RPV dome, including each bottom-mounted instrumentation to RPV junction, during future refueling outages at Point Beach Nuclear Plant (PBNP), Units 1 and 2. NMC performed the inspections as required and reported the results of those inspections in References 4 and 5 for the Unit 2 fall 2003 (U2R26) and Unit 1 spring 2004 (U1R28) refueling outages, respectively.

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On November 22, 2004, the NRC sent a letter to NMC indicating that the reporting requirements of BL 2003-02 had been met (Reference 6).

Following the initial inspection and all successive inspections of the RPV closure head, in accordance with Reference 1, Licensees are required to submit a report to the NRC, within 60 days of restart, detailing the examination results of the RPV head. In accordance with NRC Revised Order EA-03-009, NMC is providing the 60-day response for the PBNP Unit 2 spring 2005 refueling outage (U2R27). Enclosure 1 to this letter contains summaries of the examinations conducted following U2R27 in response to the Revised Order.

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

Dennis L. Koehl
Site Vice-President, Point Beach Nuclear Plant
Nuclear Management Company, LLC

Enclosure

cc: Administrator, Region III, USNRC
Project Manager, Point Beach Nuclear Plant, USNRC
Resident Inspector, Point Beach Nuclear Plant, USNRC

ENCLOSURE 1
60-DAY RESPONSE TO FIRST REVISED ORDER EA-03-009
POINT BEACH NUCLEAR PLANT

The NRC issued the First Revised NRC Order EA-03-009, "Establishing Interim Inspection Requirements for Reactor Pressure Vessel Heads for Pressurized Water Reactors," on February 20, 2004. In paragraph IV.E of the Revised Order, the NRC required that the examination results be provided within 60 days of the plants being returned to operation. Nuclear Management Company, LLC (NMC), hereby submits the examination results for the Point Beach Nuclear Plant (PBNP) Unit 2 spring 2005 refueling outage (U2R27).

The PBNP Unit 2 reactor pressure vessel (RPV) head was replaced during the U2R27 outage, as performed under modification MR 03-056 and work order WO0311842. Therefore, the PBNP Unit 2 RPV closure head had zero effective degradation years (EDY) at the start of the U2C28 operating cycle. With the RPV head replaced and zero EDY, PBNP Unit 2 meets the Replaced inspection category, as identified in the Revised Order.

According to paragraph IV.C(4) of the Revised Order, "...[for] those plants in the Replaced category, no RPV head and head penetration nozzle inspection shall be required during the outage for which the RPV head was replaced."

Since the head was replaced, there was no requirement to perform a bare-metal visual inspection (VT) of the RPV head top surface, as indicated in paragraph IV.C(4) of the Revised Order. However, a baseline bare-metal visual examination was performed on the RPV head, including 360 degrees around each RPV head penetration nozzle. The VT was performed by video camera mounted on a remotely operated magnetic crawler.

There were no limitations and no recordable indications.

Baseline ultrasonic, eddy current, and liquid penetrant examinations were performed at the fabricator's facility, identifying no limitations and no rejectable indications.