October 29, 2004

NRC 2004-0106
10 CFR 50.54(f)

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

Point Beach Nuclear Plant, Units 1 and 2
Dockets 50-266 and 50-301
License Nos. DPR-24 and DPR-27

60-Day Response to Generic Letter 2004-01,
"Requirements for Steam Generator Tube Inspections"

On August 30, 2004, the Nuclear Regulatory Commission (NRC) transmitted Generic Letter (GL) 2004-01. Enclosure 1 contains the Nuclear Management Company, LLC (NMC) 60-day response to GL 2004-01 for the Point Beach Nuclear Plant (PBNP).

Summary of Commitments

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

I declare under penalty of perjury that the foregoing is true and correct.
Executed on October 29, 2004.

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

Enclosure

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

A115

bcc:

R. Amundson	T. J. Carter (ENG)	J. W. Connolly
D. E. Cooper	G. C. Packard	T. C. Kendall
H. J. Kocourek (OSRC)	D. L. Koehl	F. D. Kuester (P460)
K. M. Locke (2)	J. H. McCarthy	G. R. Sherwood
L. A. Schofield	L. E. Hawki	J. G. Schweitzer
J. Gadzala	D. A. Weaver (P346)	E. J. Weinkam III
J. D. Shaw	F. Hennessy	T. Klesper
File		

ENCLOSURE 1

GENERIC LETTER 2004-01
POINT BEACH NUCLEAR PLANT 60-DAY RESPONSE

Nuclear Regulatory Commission (NRC) Requested Information

1) *Addressees should provide a description of the SG tube inspections performed at their plant during the last inspection. In addition, if they are not using SG tube inspection methods whose capabilities are consistent with the NRC's position, addressees should provide an assessment of how the tube inspections performed at their plant meet the inspection requirements of the TS in conjunction with Criteria IX and XI of 10 CFR Part 50, Appendix B, and corrective action taken in accordance with Appendix B, Criterion XVI. This assessment should also address whether the tube inspection practices are capable of detecting flaws of any type that may potentially be present along the length of the tube required to be inspected and that may exceed the applicable tube repair criteria.*

Nuclear Management Company, LLC (NMC) Response:

<u>Point Beach Nuclear Plant (PBNP) Unit 1</u>

Steam Generator tube inspections performed at PBNP Unit 1 are consistent with the NRC's position regarding tube inspections.

PBNP Unit 1 has two Westinghouse steam generators. The tubing material in each of the steam generators is Inconel Alloy 600 thermally treated. In addition, the U-bend area in the first 8 rows was stress relieved after bending. The tubes were fully hydraulically expanded into the tube sheet.

NMC performed the following steam generator tube inspections at PBNP Unit 1 during the last inspection completed in April 2004. This scope applied to both Unit 1 steam generators except as noted:

- 100% full length bobbin inspection of in service tubes (except row 1 and two row 2 U-bends in SG A and five row 2 U-bends in SG B).
- 77% hot leg expansion transition, +2 and -2 inches with the plus-point probe.
- 100% small radius U-bends (All row 1 and the seven row 2 bends that could not be inspected with a bobbin probe) were inspected with the plus-point probe.
- 100% of all dings, dents and bulges ≥ 5 volts with the plus-point probe.
- A total of 312 plus-point examinations of special interest areas in both steam generators including all "Indication codes" indications that were not resolved after historical review.

NMC uses tube inspection methods that are capable of detecting flaw types that may be present. Prior to each inspection, a degradation assessment is performed to identify flaws that may be present and a technique validation assessment is performed to verify that the eddy current techniques are capable of detecting those flaw types identified in the degradation assessment.

PBNP Unit 2

Steam Generator tube inspections performed at PBNP Unit 2 are consistent with the NRC's position regarding tube inspections.

PBNP Unit 2 has two Westinghouse steam generators. The tubing material in each of the steam generators is Inconel Alloy 690 thermally treated. In addition, the U-bend area in the first 14 rows was stress relieved after bending. The tubes were fully hydraulically expanded into the tube sheet.

NMC performed the following steam generator tube inspections at PBNP Unit 2 during the last inspection completed in October 2003. This scope applies to both Unit 2 steam generators except as noted:

- 50% full length bobbin inspection of in service tubes.
- 25% hot leg expansion transition, +2 and -2 inches with the plus-point probe with an additional 379 peripheral tube inspections at the top of tube sheet (TTS) on both ends per SG.
- 25% row 1 U-bends and 15% row 2 U-bends with the plus-point probe.
- 20 plus-point examinations of special interest areas on SG A and 1 magnetic bias test on SG B.
- 10 additional plus-point inspections were preformed at TTS on SG A to bound possible loose parts (PLPs). No actual loose parts were noted.
- Dings, dents and bulges ≥ 5 volts were re-examined with the plus-point probe. However, the replacement SGs do not have any unresolved dings, dents or bulges ≥ 5 volts.

NMC uses tube inspection methods that are capable of detecting flaw types that may be present. Prior to each inspection, a degradation assessment is performed to identify flaws that may be present, and a technique validation assessment is performed to verify that the eddy current techniques are capable of detecting those flaw types identified in the degradation assessment.

NRC Requested Information

2) *If addressees conclude that full compliance with the TS in conjunction with Criteria IX, XI and XVI of 10 CFR Part 50, Appendix B, requires corrective action, they should discuss their proposed corrective actions (e.g., changing inspection practices consistent with the NRC's position or submitting a TS amendment request with the associated safety basis for limiting the inspections) to achieve full compliance. If*

addressees choose to change their TS, the staff has included in the Attachment suggested changes to the TS definitions for a tube inspection and for plugging limits to show what may be acceptable to the staff in cases where the tubes are expanded for the full depth of the tube sheet and where the extent of the inspection in the tube sheet region is limited

NMC Response:

Steam Generator tube inspections performed at PBNP Units 1 and 2 are consistent with the NRC's position regarding tube inspections. Therefore this question does not apply.

NRC Requested Information

3) For plants where SG tube inspections have not been or are not being performed consistent with the NRC's position on the requirements in the TS in conjunction with Criteria IX, XI, and XVI of 10 CFR Part 50, Appendix B, the licensee should submit a safety assessment (i.e., a justification for continued operation based on maintaining tube structural and leakage integrity) that addresses any differences between the licensee's inspection practices and those called for by the NRC's position. Safety assessments should be submitted for all areas of the tube required to be inspected by the TS, where flaws are not being used, and should include the basis for not employing such inspection techniques. The assessment should include an evaluation of (1) whether the inspection practices rely on an acceptance standard (e.g., cracks located at least a minimum distance of x below the top of tube sheet, even if these cracks cause complete severance of the tube) which is different from the TS acceptance standards (i.e., the tube plugging limits or repair criteria), and (2) whether the safety assessment constitutes a change to the "method of evaluation" (as defined in 10CRF50.59) for establishing the structural and leakage integrity of the joint. If the safety assessment constitutes a change to the method of evaluation under 10 CFR 50.59, the licensee should determine whether a license amendment is necessary pursuant to that regulation.

NMC Response:

Steam Generator tube inspections performed at PBNP Units 1 and 2 are consistent with the NRC's position regarding tube inspections. Therefore this question does not apply.