



December 19, 2006

NRC 2006-0080  
10 CFR 2.201

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

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

Response to an Apparent Violation in Inspection Report  
05000266/2006011; 0500301/2006011; EA-06-274

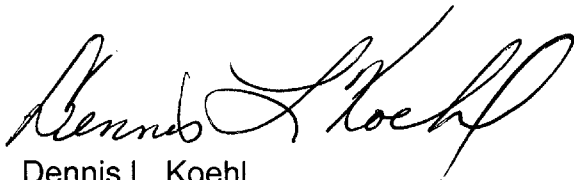
Reference: (1) Letter from NRC to NMC dated November 21, 2006

As a result of inspections conducted by the U. S. Nuclear Regulatory Commission (NRC) between April 1, 2006, and October 27, 2006, an Apparent Violation of NRC requirements contained in 10 CFR 50.71(e) and a non-cited violation were documented in Reference (1). The Apparent Violation states that the Point Beach Nuclear Plant (PBNP) Final Safety Analysis Report (FSAR) was not updated in 1983 with the results of a reactor vessel head (RVH) drop analysis conducted in 1982. It further states that in response to NRC questions in 2005, Nuclear Management Company LLC (NMC) made the determination that amendments to the PBNP Operating Licenses were necessary prior to updating the FSAR with this analysis, and furthermore, that administrative controls for the movement of the PBNP RVHs were needed. These amendments and administrative controls were not in place for RVH moves from 1983 through 2004.

Pursuant to the provisions of 10 CFR 2.201, Nuclear Management Company, LLC is responding to the Apparent Violation in the enclosure to this letter. NMC concurs that the Apparent Violation has been properly characterized as a violation of the requirements of 10 CFR 50.71(e).

Summary of Regulatory Commitments

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

A handwritten signature in black ink, appearing to read "Dennis L. Koehl". The signature is fluid and cursive, with the first name "Dennis" and last name "Koehl" clearly distinguishable.

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

Enclosure

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

## **ENCLOSURE**

### **Response to an Apparent Violation in Inspection Report 05000266/2006011; 0500301/2006011; EA-06-274**

Pursuant to the provisions of 10 CFR 2.201, the following is the NMC response to an Apparent Violation (EA-06-274) of NRC requirements as documented in NRC Inspection Report 05000266/2006011; 0500301/2006011 dated November 21, 2006.

#### **APPARENT VIOLATION**

Contrary to the requirements of 10 CFR 50.71(e), the Point Beach Nuclear Plant (PBNP) Final Safety Analysis Report (FSAR) was not updated in 1983 with the results of a reactor vessel head (RVH) drop analysis conducted in 1982. Evaluation of this analysis by Nuclear Management Company, LLC (NMC) in 2005, in response to questions from the NRC, resulted in NMC's determination that amendments to the PBNP Operating Licenses were necessary prior to updating the FSAR with this analysis. This evaluation also concluded that the establishment of administrative controls on the movement of the PBNP reactor vessel heads (RVHs) was required. The amendments and administrative controls were not in place for RVH moves from 1983 through 2004.

#### **NMC RESPONSE**

NMC concurs that the failure to update the FSAR in accordance with the requirements of 10 CFR 50.71(e) was a violation of NRC requirements.

##### **Reasons for Violation:**

There have been several evaluations performed to determine the reasons for this Apparent Violation. A description of each of these evaluations and its conclusions is provided below.

##### **1. Root Cause Evaluation (RCE) 277, Reactor Vessel Head Drop Analysis**

RCE 277, Reactor Vessel Head Drop Analysis, was performed to identify the historical and present-day issues relating to the absence of a design basis or licensing basis analysis of record for a reactor vessel head (RVH) drop accident.

2. RCE 300, Personnel Awareness and Understanding of Licensing Bases

RCE 300, Personnel Awareness & Understanding of Licensing Bases, was chartered in early December 2005, as a result of a streaming analysis performed by the PBNP senior management team in late November 2005. RCE 300, Revision 1, was issued on April 27, 2006. The purpose of this RCE was to determine the root and contributing causes for the limited awareness and inadequate understanding of regulatory commitments and requirements, including legacy issues, such that docketed correspondence has not always been incorporated into licensing basis documents, such as the FSAR. Additionally, the RCE evaluated why regulatory commitments contained in the correspondence have not always been adequately translated into license basis implementing documents such as procedures.

3. PBSA-ENG-05-04, 10 CFR 50.59 Focused Self-Assessment and Common Factors Assessment

A focused self-assessment of implementation of the 10 CFR 50.59 process at PBNP was conducted on October 10-28, 2005. The purpose of the self-assessment was to prepare for the baseline inspection in December 2005, as well as to evaluate the effectiveness of training conducted in August 2005. One result of the self-assessment was completion of a common factors analysis (CFA) in order to determine why some previous corrective actions had not been effective. The Common Factors Assessment (CFA) was conducted during February 2006.

4. Common Cause Evaluation (CCE) of Component Design Basis Inspection (CDBI) Corrective Action Documents

The purpose of this CCE was to obtain additional insights into PBNP design and licensing basis issues. The CCE confirmed the conclusions of RCE 300 with respect to its finding that design and licensing basis information is fragmented and that additional attention should be placed on the preparation, review and approval of procedures that implement design requirements to ensure these requirements are appropriately mapped.

The reasons for the Apparent Violation are:

- Activities associated with the design and licensing basis were not elevated to a level of importance such that the processes and procedures produce predictable successful outcomes.
- The NMC RVH replacement team failed to provide requested information on the RVH analysis to the vendor.
- Personnel did not understand the hierarchy of the plant's licensing and design bases within the regulatory framework of Title 10, Code of Federal Regulations.

- The processes intended to implement the regulations were fragmented and insufficient to ensure that design and license basis requirements were properly mapped into their respective implementing documents. In the case of the reactor vessel head replacement project, there were no internal processes and procedures to effectively govern conduct of the project.
- Clear ownership, roles and responsibilities associated with license basis maintenance and control were not clearly defined.

#### Corrective Steps Taken and Results Achieved:

Corrective steps were taken to address issues specific to the RVH drop analysis and the non-cited violation of 10 CFR 50.59. These corrective steps are summarized as follows:

1. On April 16, 2005, commitments were made by NMC to NRC that provided compensatory measures to enable movement of the original RVH. These commitments were formalized via letter NRC 2005-0050A dated April 20, 2005, and subsequently implemented.
2. On April 29, 2005, an application for a proposed amendment was submitted to the Commission via letter NRC 2005-055. This application was supplemented by letters dated May 13, May 19, June 1, June 4, June 9, June 20, and June 23, 2005.
3. On June 24, 2005, NMC issued TRM 3.9.4, Reactor Vessel Head Lift, which provides required administrative controls during lifting of a RVH over a reactor containing fuel assemblies. At the time of issue, TRM 3.9.4 was applicable only to Unit 2.
4. On July 24, 2005, NMC requested a similar amendment for Unit 1 via letter NRC 2005-0094.
5. On August 15, 2005, the Unit 2 RVH drop analysis was incorporated into the FSAR and submitted to the NRC via the periodic FSAR update as required by 10 CFR 50.71(e).
6. On September 23, 2005, TRM 3.9.4 was revised to reflect provisions of the NRC Safety Evaluation which delineated administrative controls during lifting of a RVH over a reactor containing fuel assemblies. This revision of TRM 3.9.4, therefore, applied to both PBNP units.
7. On August 15, 2006, the PBNP FSAR was revised and submitted to the NRC during the periodic update of the FSAR as required by 10 CFR 50.71(e) to reflect applicability for both units.

8. Affected plant implementing documents such as Safe Load Path guidance for movement of heavy loads, RVH routine maintenance procedures used during each refueling outage, Operations containment closure checklists and refueling-related procedures, etc., have been revised.
9. The NMC Project Management Manual has been implemented at PBNP.
10. A current licensing basis (CLB) policy was developed and issued on June 20, 2006. The policy defines and describes the CLB; establishes ownership of CLB documents; defines personnel roles and responsibilities for implementing and maintaining the CLB; establishes expectations for use and adherence to the CLB; and describes available tools and methods for searching the CLB.
11. A training needs assessment for the CLB policy was completed and concluded that informational sharing and/or formal training sessions were required for appropriate station personnel. Lesson plans have been developed and approved. Engineering, Regulatory Affairs and 10 CFR 50.59 screening and evaluation-qualified personnel received training during August 2006.
12. Corrective actions identified in the December 2005 10 CFR 50.59 self-assessment were incorporated into the Engineering Continuing Training Program. The revised training was provided to engineering in August 2006.
13. A continuing training module was developed and conducted with engineering personnel to develop a common understanding of the definition and vision of technical rigor and to provide personnel with an awareness of the available human performance tools to improve technical rigor. Training was completed in December 2006.
14. The licensee response to the October 9, 1996, NRC "Request for Information Pursuant to 10 CFR 50.54(f) Regarding Adequacy and Availability of Design Basis Information," was reviewed. A validation package was compiled supporting the licensee response dated February 6, 1997. Following this effort, a "living validation package" was compiled which reflected the 2006 status of statements of fact contained in the response.
15. A procedures writer/reviewer certification matrix, along with a Job Familiarization Guide (JFG), was developed and is being implemented. In addition, as part of this certification process, information sharing sessions are being conducted to provide personnel involved in procedure writing and reviewing with "hands-on" practical experience in searching the site's Regulatory Information System, which includes the Regulatory Commitment Database.
16. Ownership of the FSAR was transferred from Engineering to Regulatory Affairs on December 15, 2006.

Corrective Steps To Be Taken:

There are no additional corrective actions required to address this violation.

Date Full Compliance Will Be Achieved:

Full compliance with NRC requirements was achieved on August 15, 2006, for both units when the vessel head drop analysis for Unit 1 was incorporated into the FSAR.