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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

Response to Request for Additional Information
Regarding the Point Beach Nuclear Plant License Renewal Application
(TAC Nos. MC2099 and MC2100)

By letter dated February 25, 2004 (NRC 2004-0016), Nuclear Management Company, LLC (NMC), submitted the Point Beach Nuclear Plant (PBNP) Units 1 and 2 License Renewal Application (LRA). By letter dated July 30, 2004, the Nuclear Regulatory Commission (NRC) requested additional information regarding Sections 3.2 and 3.4 of the LRA for PBNP. Enclosed is our response to that request.

Should you have any questions concerning this submittal, please contact Mr. James E. Knorr at (920) 755-6863.

Summary of Commitments

There is one new commitment made as part of this response:

1. Scoping, Screening and Aging Management Review results from the recent Auxiliary Feedwater System area modifications will be provided as part of the LRA annual update of current licensing basis.

A093

I declare under penalty of perjury that the forgoing is true and correct. Executed on August 30, 2004.

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
PSCW

ENCLOSURE 1

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2
LICENSE RENEWAL APPLICATION

The following information is provided in response to the Nuclear Regulatory Commission (NRC) staff's request for additional information (RAI) regarding the Point Beach Nuclear Plant (PBNP) License Renewal Application (LRA). The NRC staff's questions are restated below, with the NMC response following.

Section 3.2 Engineered Safety Features

NRC Question RAI 3.2-1:

In LRA Tables 3.2.2-1, 3.2.2-2, and 3.2.2-3, stainless steel HXs, with heat transfer as the intended function, are identified with only internal environments and associated aging effects. The external environment is listed as not applicable. The applicant is requested to explain why for these components the external environment and associated aging effects need not be identified. The applicant is also requested to address the similar question for the stainless steel HXs in Tables 3.2.2-1 and 3.2.2-2, which have pressure boundary as their intended function.

NMC Response:

Due to the way the PBNP license renewal database was developed and used, tubing assets were identified as two separate components (tubing ID and tubing OD). This allowed the user to designate an internal environment for each (tubing ID and tubing OD), but since the database required each component to have both an internal and external environment, the external environment would then be documented as "N/A." This was done to keep internal and external environments somewhat standard (see PBNP LRA Table 3.0-1, Internal Service Environments, and Table 3.0-2, External Service Environments). Note that in Tables 3.2.2-1, 3.2.2-2, and 3.2.2-3, there is a heat exchanger (HX) material type with two different internal environments, which is reflective of the environments for the ID and OD of the tubing. Because the tubing has a pressure boundary intended function in addition to the heat transfer function, this same information was duplicated for the pressure boundary intended function line items.

The only components that have a heat transfer intended function are the tubes. External environments (indoor-no air conditioning, outdoor, etc.) would only apply to the shell of the HX, and since the shell only has a pressure boundary function, it (the shell) and its external environment are not identified under the heat transfer intended function. Additionally, the shell is typically made of a different material than the tubes, and therefore would not be represented by the same line item as the HX tubing in the LRA.

This was explained in the 3.x.2 tables in the LRA with Note 8 for each line item that had an "N/A" for an external environment.

NRC Question RAI 3.2-2:

In LRA Tables 3.2.2-1 and 3.2.2-2, carbon/low alloy steel tank components are identified with only external environments and the associated aging effects. The internal environment is listed as "N/A." On the other hand, stainless steel tank components are identified with internal environments with the associated aging effects. The applicant is requested to explain the material construction of the tank, and the environments to which it is exposed, to support the information provided in the tables.

NMC Response:

In both Table 3.2.2-1, Safety Injection System, and Table 3.2.2-2, Containment Spray System, the identified issue is due to having carbon/low alloy steel tanks that are clad with stainless steel. Due to the design of the license renewal database, each component can only have one material. However, instead we have two separate assets to describe the tanks. One asset would be the carbon/low alloy steel shell, which is subject to an external environment, but since the cladding is inside, we indicate the internal environment to be "N/A." Similarly, the stainless steel cladding has an internal environment, but the external environment is "N/A."

The attempt was made to explain the "N/A" in the 3.x.2 tables in the LRA using Note 2 or Note 8 for each line item that had an "N/A" for an internal or external environment.

Section 3.4 Steam and Power Conversion System

NRC Question RAI 3.4-1:

In LRA Table 3.4.2-3, stainless steel HXs, with either heat transfer or pressure boundary as the intended function, are identified with only internal environments and associated aging effects. The external environment is listed as not applicable. The applicant is requested to explain why for these components the external environment and associated aging effects need not be identified.

NMC Response:

This is a similar issue to RAI 3.2-1.

Due to the way the license renewal database was developed and used, tubing assets were identified as two separate components (tubing ID and tubing OD). This allowed the user to designate an internal environment for each (tubing ID and tubing OD), but since the database required each component to have both an internal and external

environment, the external environment would then be documented as "N/A." This was done to keep internal and external environments somewhat standard (see PBNP LRA Table 3.0-1, Internal Service Environments, and Table 3.0-2, External Service Environments). Note that in Table 3.4.2-3, there is a HX material type with two different internal environments, which is reflective of the environments for the ID and OD of the tubing.

The only HX components that have a heat transfer intended function are the tubes. External environments (indoor-no air conditioning, outdoor, etc.) would only apply to the shell of the HX. The shell only has a pressure boundary function; therefore, the shell and its external environment are not identified under the heat transfer intended function. Additionally, the shell is typically made of a different material than the tubes, and therefore would not be represented by the same line item as the tubing in the LRA. In Table 3.4.2-3, the HX shell is cast iron and has an "indoor-no air conditioning" external environment. The Systems Monitoring AMP applies to the HX shell.

The attempt to explain the "N/A" in the 3.x.2 tables was made in the LRA using Note 8 for each line item that had an "N/A" for an external environment.

NRC Question RAI 3.4-2:

In the first quarter of 2003, Point Beach Nuclear Plant entered the Multiple/Repetitive Degraded Cornerstone Column (Column IV) of the Action Matrix of NRC Inspection Manual Chapter 0305, "Operating Reactor Assessment Program," as a result of a high significance (Red) inspection finding involving the potential for a common mode failure of the auxiliary feedwater system (AFW) following a loss of the instrument air system. A second Red inspection finding (Yellow for Unit 1 and Red for Unit 2) was subsequently identified which involved the potential common mode failure of the AFW pumps due to plugging of the recirculation line pressure reduction orifices. In view of the aforementioned inspection findings and the subsequent corrective actions for the two AFW issues, the applicant is requested to address the following questions in the context of the license renewal application:

> (a) Clarify whether the instrument air system and the recirculation line pressure reduction orifices are in scope for the LRA evaluation, and that appropriate AMPs have been identified to manage the components.
>
> (b) For aging management evaluation as summarized in LRA Table 3.4.2-3 for the auxiliary feedwater system, discuss any impact on the scoping of mechanical components in the auxiliary feedwater system, and the AMR performed for the affected components, as a result of the recent physical modifications made to resolve the auxiliary feedwater pump room Appendix R issues.

NMC Response:

(a) As shown on drawing LR-M-217 Sh. 1 and Sh. 2 (submitted with the LRA), portions of the instrument air system, including cylinders, tanks, tubing and valves associated with air side of the recirculation valves on all AFW pumps are in-scope. (Note that there is a slight drawing error at locations C-7 and E-7 on Sh. 1, an end stub of air tubing is shown as not in-scope. This is incorrect. These end stubs are in-scope. Although not indicated on Sh. 1, these sections of air tubing are actually supplied from the cylinder back-up sections of air tubing shown on Sh. 2 at locations D-10 and H-6, and are correctly shown as in-scope on that drawing.)

Also, as shown on LR-M-217 Sh. 1, all of the pressure reduction orifices (1RO-4003, 2RO-4003, RO-4008, and RO-4015) and their associated recirculation lines back to the condensate storage tanks are in scope.

These components are represented in Table 3.4.2-3 under the following component types: accumulators/cylinders, pipe and fittings, restricting orifices, tanks, valve bodies, and valve operators. As shown in Table 3.4.2-3, appropriate AMPs have been selected based on aging effects identified for each material/environment combination.

(b) Recent physical modifications to the AFW pump room are not represented in the LRA because they were not in place at the time our 'snapshot' of component data was taken to perform license renewal activities. However, these modifications will be included in our annual update, and appropriate AMPs and activities would then be identified for these new components.