

September 28, 2005

LICENSEE: Nuclear Management Company, LLC

FACILITY: Palisades Nuclear Plant

SUBJECT: SUMMARY OF A TELEPHONE CONFERENCE CALL HELD ON  
AUGUST 24, 2005, BETWEEN THE U.S. NUCLEAR REGULATORY  
COMMISSION (NRC) AND NUCLEAR MANAGEMENT COMPANY, LLC (NMC)  
CONCERNING RESPONSES TO FOLLOW-UP QUESTIONS FROM THE SITE  
AGING MANAGEMENT PROGRAM AND AGING MANAGEMENT REVIEW  
AUDIT (TAC NO. MC6433)

The U.S. Nuclear Regulatory Commission staff (the staff) and representatives of NMC held a telephone conference call on August 24, 2005, to discuss and clarify the applicant's responses to follow-up questions from the site aging management program and aging management review audit. The conference call was useful in clarifying these responses.

Enclosure 1 provides a listing of the conference call participants. Enclosure 2 contains a listing of the questions discussed with the applicant, including a brief description on the status of the items.

The applicant had an opportunity to comment on this summary.

**/RA/**

Michael J. Morgan, Project Manager  
License Renewal Section A  
License Renewal and Environmental Impacts Program  
Division of Regulatory Improvement Programs  
Office of Nuclear Reactor Regulation

Docket No.: 50-255

Enclosures: As stated

cc w/encls: See next page

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The applicant had an opportunity to comment on this summary.

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DISTRIBUTION: Summary of telephone conference held on August 24, 2005 with NMC, LLC  
Dated: September 28, 2005

**ADAMS Accession No.: ML052730460**

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**LIST OF PARTICIPANTS FOR TELEPHONE CONFERENCE CALL  
TO DISCUSS FOLLOW-UP QUESTIONS FROM THE SITE AGING MANAGEMENT  
PROGRAM AND AGING MANAGEMENT REVIEW AUDITS  
AUGUST 24, 2005**

**Participants**

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**RESPONSES TO FOLLOW-UP QUESTIONS FROM THE SITE AGING MANAGEMENT  
PROGRAM AND AGING MANAGEMENT REVIEW AUDITS PALISADES NUCLEAR PLANT  
LICENSE RENEWAL APPLICATION  
AUGUST 24, 2005**

The U.S. Nuclear Regulatory Commission (NRC) staff (the staff) and representatives of Nuclear Management Company, LLC (NMC), held a telephone conference call on August 24, 2005, to discuss and clarify the applicant's responses to follow-up questions from the Palisades Nuclear Plant (PNP) Aging Management Program (AMP) and Aging Management Review (AMR) audits. The following questions were discussed during the telephone conference call.

**Question 3.5.1-07W2**

The PNP Structural Monitoring Program AMP does not discuss the need or lack of need to perform periodic ground water monitoring to ensure that the below-grade water chemistry does not become aggressive in the future. Justify not performing periodic ground water monitoring during the current licensing basis (CLB) and potential extended license period to check water chemistry for non-aggressiveness. See Question 3.5.1-21W2. Response needs to be docketed.

**Discussion:** The applicant indicated that the question is clear. The applicant will answer the question as part of their formal, docketed response to the AMR/AMP audit report.

**Question 3.5.1-21W2**

The PNP Structural Monitoring Program AMP does not discuss the need or lack of need to perform periodic ground water monitoring to ensure that the below-grade water chemistry does not become aggressive in the future. Justify not performing periodic ground water monitoring during the CLB and potential extended license period to check water chemistry for non-aggressiveness. See Question 3.5.1-07W2. Response needs to be docketed.

**Discussion:** The applicant indicated that the question is clear. The applicant will answer the question as part of their formal, docketed response to the AMR/AMP audit report.

**Question 3.3.1-30W1**

In LRA Table 3.5.2-8 (Table 2) on page 3-364 for component type Fire Barrier- Auxiliary Bldg - Concrete, Protected, explain why a GALL Volume 2 line item and a Table 1 item are shown with a Note H for the aging effect loss of material. The audit team feels that these two columns should be blank with a Note H. Response needs to be docketed.

**Discussion:** The applicant indicated that the question is clear. The applicant will answer the question as part of their formal, docketed response to the AMR/AMP audit report.

**Question 3.3.1-20W1**

In LRA Table 3.5.2-8 (Table 2) on page 3-364 for component type Fire Barrier- Auxiliary Bldg - Fire Stop, Protected, explain why a GALL Volume 2 line item and a Table 1 item are shown with a Note H for the aging effect loss of material. The audit team feels that these two columns should be blank with a Note H. Also applies to LRA Table 3.5.2-8 on page 3-366 for component type Fire Barrier - Intake Structure Bldg - Fire Stop, Protected for aging effect loss of material; to LRA Table 3.5.2-8 on page 3-368 for component type Fire Barrier - Turbine Bldg - Fire Stop, Protected for aging effect loss of material and to LRA Table 3.5.2-8 on page 3-370

for component type Fire Barrier - Water Treatment Bldg - Fire Stop, Protected for aging effect loss of material. Response needs to be docketed.

**Discussion:** The applicant indicated that the question is clear. The applicant will answer the question as part of their formal, docketed response to the AMR/AMP audit report.

**Question 3.3.1-24-03-S**

In the discussion column of Table 3.3.1, Item 24 of the PNP LRA, the applicant refers to the boric acid corrosion monitoring, one time inspection, and system monitoring programs for managing loss of material of the closure bolting. GALL Volume 1, Table 3 recommends bolting integrity program for this line item. LRA Tables 3.3.2-1, 3.3.2-2, 3.3.2-3, 3.3.2-5, 3.3.2-7, 3.3.2-8, 3.3.2-9, 3.3.2-11, 3.3.2-12, 3.3.2-13, 3.3.2-14, and 3.3.2-15 credits bolting integrity program for managing loss of material aging effect for carbon steel and low alloy steel fasteners in air and reference GALL VII.I.2-a and Table 3.3.1, Item 24. Please clarify this discrepancy between LRA Table 1, Item 24 and the above mentioned Table 2 line items. Response needs to be docketed.

**Discussion:** The applicant indicated that the question is clear. The applicant will answer the question as part of their formal, docketed response to the AMR/AMP audit report.

**Question 3.3.1-05-07-S**

In LRA Section 3.3.2.5, the applicant states that the Open Cycle Cooling Water program is credited for the internal environments of applicable auxiliary systems and external surfaces of carbon steel components in auxiliary systems for managing the aging effect of loss of material. However, the open cycle cooling water program is not used in Table 2 line items where this Table 1 item is addressed. Clarify this discrepancy. Response needs to be docketed.

**Discussion:** The applicant indicated that the question is clear. The applicant will answer the question as part of their formal, docketed response to the AMR/AMP audit report.

**Question 3.1.1-02-01-P**

On page 3-59, only water chemistry (WC) is used for loss of material from the instrument nozzles. How is the effectiveness of the WC program to be verified? (Note that ISI is also applied to this component type to manage cracking).

**Discussion:** The applicant indicated that the question is clear. The applicant will answer the question as part of their formal, docketed response to the AMR/AMP audit report.

**Question 3.1.1-02-02-P**

On page 3-59, cracking of instrument nozzles is managed but 3.1.1-02 is identified. Please clarify why 3.1.1-12 was not used.

**Discussion:** The applicant indicated that the question is clear. The applicant will answer the question as part of their formal, docketed response to the AMR/AMP audit report.

**Question 3.1.1-13-01-P**

On page 3-41, for the PC sample heat exchanger shell, please confirm that 3.2.1-13 was intended or make some other correction to the AMR.



**Discussion:** The applicant indicated that the question is clear. The applicant will answer the question as part of their formal, docketed response to the AMR/AMP audit report.

**Question 3.1.1-26-01-P**

On page 3-44, flanges are associated with the item for bolting. An alternative Table 1 item number (and Note) is needed.

**Discussion:** The applicant indicated that the question is clear. The applicant will answer the question as part of their formal, docketed response to the AMR/AMP audit report.

**Question 3.1.1-36-02-P**

On page 3-40, this Table 1 item is applied to pump casings of Cast Austenitic Stainless Steel (CASS). In Table 1, the item explicitly excludes CASS, and therefore should not be applied to the CASS valve bodies and pump casings.

**Discussion:** The applicant indicated that the question is clear. The applicant will answer the question as part of their formal, docketed response to the AMR/AMP audit report.

**Question 3.1.1-36-03-P**

On page 3-37, GALL Volume 2 Item IV.C2.2-h appears for Alloy 600 safe ends. This GALL Item refers to stainless steel components and does not appear to be appropriate. Please clarify.

**Discussion:** The applicant indicated that the question is clear. The applicant will answer the question as part of their formal, docketed response to the AMR/AMP audit report.

**Question 3.1.1-36-04-P**

On page 3-38, GALL Volume 2 Item IV.C2.2-f appears twice for the water chemistry AMP applied to non-CASS valves. Is this a duplication, or is there a different GALL Item that was intended?

**Discussion:** The applicant indicated that this was a duplication. Therefore, this question is WITHDRAWN.

**Question 3.1.1-38-01-P**

On page 3-40, loss of material from the internal surface of the quench tank is managed using the system monitoring program. The environment is listed as containment air. Is this correct? According to the PNP FSAR Section 4.3.8, the tank is normally filled with nitrogen, which would seem an appropriate basis for use of the system monitoring AMP in lieu of the Boric Acid Control (BAC) program.

**Discussion:** The applicant indicated that the question is clear. The applicant will answer the question as part of their formal, docketed response to the AMR/AMP audit report.

**Question 3.1.1-43-02-P**

On page 3-53 of the LRA, Note F implies that GALL specifies a material. It does not. GALL also recommends using water chemistry. Please provide the basis for managing this aging effect using only RVI Internals.

**Discussion:** The applicant indicated that the question is clear. The applicant will answer the question as part of their formal, docketed response to the AMR/AMP audit report.

**Question 3.1.1-45-03-P**

On page 3-51 of the PNP LRA, GALL Volume 1 associates Item B3.3-a with 3.1.1-43, which addresses crack initiation and growth, dimension/void swelling, in addition to 3.1.1-45, which addresses crack initiation and growth. (Application of the RVI and WC program is consistent with GALL.)

**Discussion:** The applicant indicated that the question is clear. The applicant will answer the question as part of their formal, docketed response to the AMR/AMP audit report.

**Question 3.1.2-06-P**

On page 3-56 of the PNP LRA, loss of material from the low-alloy steel tube bundle wrapper is managed using only the WC program. In the precedent tables, Item D1-8 is cited, but this calls for both the WC program and the SG Tube Integrity Program. Please identify how the effectiveness of the WC program will be verified.

**Discussion:** The applicant indicated that the question is clear. The applicant will answer the question as part of their formal, docketed response to the AMR/AMP audit report.

**Question 3.2.1-11-01-P**

On page 3-76 of the PNP LRA, loss of fracture toughness of CASS is addressed. GALL AMP XI.M13 suggests that this aging effect does not require aging management for valve bodies and that the ISI program is sufficient for managing aging of these component types. The ASME Section XI ISI program manages cracking, not loss of fracture toughness. Please change the aging effect managed using ISI or explain how the ISI will be used to manage loss of fracture toughness.

**Discussion:** The applicant indicated that the referenced AMP should have been "XI.M12" and not "XI.M.13" and that they are consistent with GALL. Therefore, this question is WITHDRAWN.