

June 22, 2005

Daniel J. Malone  
Site Vice President  
Nuclear Management Company, LLC  
27780 Blue Star Memorial Highway  
Covert, MI 49043

SUBJECT: REQUESTS FOR ADDITIONAL INFORMATION (RAIs) FOR THE REVIEW OF  
THE PALISADES NUCLEAR PLANT, LICENSE RENEWAL APPLICATION  
(TAC NO. MC6433)

Dear Mr. Malone:

By letter dated March 22, 2005, Nuclear Management Company, LLC, (NMC or the applicant) submitted an application pursuant to 10 CFR Part 54, to renew the operating license for Palisades Nuclear Plant (PNP), for review by the U.S. Nuclear Regulatory Commission (NRC). Subsequently, on May 5, 2005, the NRC received a supplement to the license renewal application. The NRC staff is reviewing the information contained in the license renewal application (LRA) and supplement and has identified, in the enclosure, areas where additional information is needed to complete the review.

These RAIs were discussed with your staff, Mr. Robert Vincent, and a mutually agreeable date for this response is within 30 days from the date of this letter. If you have any questions, please contact me at 301-415-2232 or e-mail [MJM2@nrc.gov](mailto:MJM2@nrc.gov).

Sincerely,

*/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

Enclosure: As stated

cc w/encl: See next page

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Palisades Nuclear Plant

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Palisades Nuclear Plant

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DISTRIBUTION: Letter to D. Malone, Re: RAIs for Palisades LRA, Dated: June 22, 2005  
**ADAMS Accession No.: ML051730291**

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**PALISADES NUCLEAR PLANT  
LICENSE RENEWAL APPLICATION (LRA)  
REQUESTS FOR ADDITIONAL INFORMATION (RAIs)  
PACKAGE 1 - SYSTEM CONDITION MONITORING**

**RAI B2.1.20-1(a)**

NUREG-1801 XI.M29 states that the plant walk-downs cover the entire outer surface of the tank up to its surface in contact with soil or concrete. The applicant is requested to clarify if the entire exposed external surface of the above ground steel tanks are included within scope of the Systems Monitoring Program.

**RAI B2.1.20-1(b)**

The LRA AMR Tables credit the Systems Monitoring Program for managing external surfaces of elastomers, but elastomers are not specifically addressed in the Systems Monitoring program. The applicant is requested to clarify if elastomers are within scope of the Systems Monitoring Program and, if so, consider the unique aging degradation characteristics of elastomers in the specified environment and include a discussion of elastomers within each element of the program.

**RAI B2.1.20-1(c)**

Considering the limited shelf life and service life of elastomers for the specified environment, the applicant is requested to clarify if elastomers meet the definition of long-lived components within scope of license renewal.

**RAI B2.1.20-2(a)**

NUREG-1800 Item 4 indicates that the justification, including codes and standards, that the technique and frequency are adequate to detect the aging effects before a loss of SC intended function. Industry documents such as EPRI 1009743 (Aging Identification and Assessment Checklist), EPRI GS-7086 (Testing, Monitoring, and Maintenance of Aboveground Storage Tanks) and API 575 (Inspection of Atmospheric and Low-Pressure Storage Tanks) include inspection and testing practices for mechanical systems and components. The applicant is requested to clarify what codes and standards or manufacturer's recommendations are applied to determine that the technique and frequency are adequate to detect degradation before the loss of intended component function.

**RAI B2.1.20-2(b)**

LRA AMR Tables credit the Systems Monitoring Program for managing change in material properties and cracking for elastomers used inside/outside containment. The applicant is requested to clarify how visual inspections are performed to detect changes in material properties and identify if other methods such as hardness testing or physical manipulation in combination with visual inspections are appropriate.

**RAI B2.1.20-2(c)**

The applicant is requested to clarify if sampling is applied to inspect a group of SCs or clarify if the entire surfaces of all accessible components are inspected.

Enclosure

**RAI B2.1.20-2(d)**

For those surfaces that are insulated, the applicant is requested to clarify if insulation will be removed to provide access for inspections. Where insulation is not removed, the applicant is requested to justify the basis that any potential degradation will be detected.

**RAI B2.1.20-2(e)**

For bolted connections, the applicant is requested to clarify how evidence of corrosion and wear will be detected where the threaded surfaces are not normally visible.

**RAI B2.1.20-3**

NUREG-1800 Section A.1.2.3.6 Item 4 states that qualitative inspections should be performed to the same predetermined criteria as quantitative inspections by personnel in accordance with ASME Code and through approved site specific programs. The applicant is requested to identify the inspection criteria such as ASME Code VT-1 examination, or other industry standards and identify the qualifications of personnel performing the inspections.