

IPRenewal NPEmails

From: Wentzel, Michael
Sent: Thursday, June 18, 2015 1:13 PM
To: Louie, Richard (rlouie@entergy.com)
Subject: Draft RAI Set 2015-02
Attachments: IP RAI Set 2015-02.docx

Rich,

Attached is a draft of RAI set 2015-02, which are follow-up RAIs to Entergy's March 10, 2015 responses to the LR-ISG-2013-01 RAIs. Once you and your staff have a chance to review the RAIs, please let me know if you would like to have a phone call to clarify.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

Hearing Identifier: IndianPointUnits2and3NonPublic_EX
Email Number: 5199

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Subject: Draft RAI Set 2015-02
Sent Date: 6/18/2015 1:12:59 PM
Received Date: 6/18/2015 1:13:00 PM
From: Wentzel, Michael

Created By: Michael.Wentzel@nrc.gov

Recipients:
"Louie, Richard (rlouie@entergy.com)" <rlouie@entergy.com>
Tracking Status: None

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MESSAGE	450	6/18/2015 1:13:00 PM
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Reply Requested: No
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**UNITED STATES
NUCLEARREGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

Vice President, Operations
Entergy Nuclear Operations, Inc.
Indian Point Energy Center
450 Broadway, GSB
P.O. Box 249
Buchanan, NY 10511-0249

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE
INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 AND 3, LICENSE
RENEWAL APPLICATION, SET 2015-02 (TAC NOS. MD5407 AND MD5408)

Dear Sir or Madam:

By letter dated April 23, 2007, as supplemented by letters dated May 3, 2007, and June 21, 2007, Entergy Nuclear Operations, Inc. (Entergy) submitted an application pursuant to Title 10 of the *Code of Federal Regulations* Part 54 to renew the operating licenses for Indian Point Nuclear Generating Unit Nos. 2 and 3 to the U.S. Nuclear Regulatory Commission (NRC). The NRC staff documented its findings in the Safety Evaluation Report (SER) related to the license renewal of Indian Point Nuclear Generating Unit Nos. 2 and 3, which was issued August 11, 2009 and supplemented August 30, 2011 (SER Supplement 1), and November 6, 2014 (SER Supplement 2).

Subsequent the issuance of SER Supplement 1, the staff identified additional operating experience at several nuclear power plants regarding loss of coating integrity of internal coatings. To address this operating experience, on November 14, 2014, the NRC staff issued interim staff guidance document LR-ISG-2013-01, "Aging Management of Loss of Coating or Lining Integrity for Internal Coatings/Linings on In-Scope Piping, Piping Components, Heat Exchangers, and Tanks."

By letters dated April 1, 2014 and December 2, 2014, the NRC staff requested additional information as to how Entergy planned to manage the effects of aging as described in LR-ISG-2013-01. By letter dated March 10, 2015, Entergy responded to the NRC staff's request for additional information. Based on its review of the information contained in Entergy's letter, the NRC staff requests additional information as described in the enclosure.

This RAI was discussed with Mr. Richard Louie, and a mutually agreeable date for Entergy's response is within 30 days from the date of this letter.

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If you have any questions, please contact me at 301-415-6459, or by email at michael.wentzel@nrc.gov.

Sincerely,

Michael Wentzel, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-247 and 50-286

Enclosure:
As stated

cc w/encl: Listserv

If you have any questions, please contact me at 301-415-6459, or by email at michael.wentzel@nrc.gov.

Sincerely,

Michael Wentzel, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-247 and 50-286

Enclosure:
As stated

cc: Listserv

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OFFICE	LA:DLR	PM: DLR/RPB2	BC:DLR/RPB1	PM: DLR/RPB2
NAME		MWentzel	YDiaz-Sanabria	MWentzel
DATE				

OFFICIAL RECORD COPY

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE
INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 AND 3, LICENSE
RENEWAL APPLICATION, SET 2015-01 (TAC NOS. MD5407 AND MD5408)

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REQUEST FOR ADDITIONAL INFORMATION (RAI), SET 2015-02
RELATED TO INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 AND 3 (IP2 and IP3)
LICENSE RENEWAL APPLICATION
DOCKET NOS. 50-247 AND 50-286
REGARDING LR-ISG-2013-01

RAI 3.0.3-16

Background

As amended by letter dated March 10, 2015, LRA Table 3.3.2-19-43-IP3, "Pressurizer System," states that loss of coating integrity is managed for metal components with internal coating in a "treated borated water > 140°F" environment by the Coating Integrity Program.

Issue

Environments with high temperatures are not evaluated to be bounding within the assumptions of GALL AMP XI.M42, "Aging Management of Loss of Coating or Lining Integrity for Internal Coatings/Linings on In-Scope Piping, Piping Components, Heat Exchangers, and Tanks." The changes to the LRA do not state the specific coating material used in systems with temperatures exceeding 140°F. Therefore, the staff lacks sufficient information to conclude that the recommendations in AMP XI.M42 (e.g., inspection intervals, acceptance criteria) are sufficient for the materials exposed to temperatures greater than 140°F.

Request

State the coating materials exposed to temperatures greater than 140°F. Provide the basis for concluding that loss of coating integrity is adequately managed in the subject environment.

RAI 3.0.3-17

Background

As amended by letter dated March 10, 2015, LRA Sections A.2.1.42, A.3.1.42, and B.1.43, "Coating Integrity," state that the Coating Integrity Program will be implemented by December 31, 2024. In addition, Commitment 8, as revised, states that LRA Sections A.2.1.13, A.3.1.13 and B.1.14, "Fire Water System," will be implemented by December 31, 2019.

Issue

The implementation schedule for LRA Section B.1.43 ranges up to nine years, from 2015 to 2024. In addition, implementation of Commitment 8, as revised, ranges from 2015 to 2019. SRP-LR Table 3.0-1 for AMP XI.M42 states that the first inspections of internal coatings should be completed no later than the last refueling outage prior to the period of extended operation. The staff recognizes that Indian Point Unit 2 has entered timely renewal and Indian Point Unit 3 may shortly enter timely renewal. As such, it does not appear that the inspection section schedule recommended in Table 3.0-1 will be met. Further, it is not clear to the staff how loss of coating integrity will be managed in the time frame prior to the programs being implemented.

Request

State how loss of coating integrity will be managed between now and the proposed implementation dates and the basis for concluding that coating integrity will be adequately managed in this time period.

RAI 3.0.3-18

Background

ENCLOSURE

As amended by letter dated March 10, 2015, LRA Section B.1.14, "Fire Water System," provides an enhancement to the "corrective actions" program element associated with returning degraded coatings (i.e., peeling, delaminated, or blistered) coatings to service without repair, replacement or removal. No exceptions related to conducting adhesion testing are stated in LRA Section B.1.43, "Coating Integrity."

Issue

GALL Report AMP XI.M42, element 7, "corrective actions," recommends that the coatings/linings for in-scope components that do not meet acceptance criteria are repaired, replaced, or removed. GALL Report AMP XI.M42 allows an alternative, which recommends, among other things, that adhesion testing be performed before returning degraded (i.e., peeling, delaminated, or blistered) coatings to service. For the alternative for returning a coating exhibiting peeling and delamination to service without repair, the Fire Water System program does not include adhesion testing as part of the alternative. In addition, the enhancement states that for coatings exhibiting blistering, "light tapping" of the coating will be performed to determine the extent of blistering. AMP XI.M42 only recommends the use of "light tapping" when it is physically impossible to perform adhesion testing.

LRA Section B.1.14 did not state an exception to adhesion testing even though the proposed changes to the Fire Water System program were not consistent with GALL Report AMP XI.M42. LRA Section B.1.43 does not state an exception to adhesion testing. It is not clear to the staff whether adhesion testing will be conducted prior to returning degraded coatings/linings within the scope of the Coating Integrity Program to service.

Request

1. State whether the Coating Integrity Program will include adhesion testing prior to returning degraded coatings/linings to service.
2. If the Coating Integrity Program does not include adhesion testing for returning degraded coatings/linings to service, explain why adhesion testing is not needed as part of the alternative for returning degraded coatings to service for in-scope fire water system components.