

## IPRenewal NPEmails

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**From:** Green, Kimberly  
**Sent:** Tuesday, November 19, 2013 4:08 PM  
**To:** Waters, Roger M. (rwater1@entergy.com)  
**Cc:** IPRenewal NPEmails  
**Subject:** RAI on RVI Applicant/Licensee Action Item 1  
**Attachments:** ML13318A450.pdf

Roger,

Attached is the electronic copy of the RAI on Applicant/Licensee Action Item 1. The hard copy is in the mail. If you have any questions, please let me know.

Kim  
(301) 415-1627  
[kimberly.green@nrc.gov](mailto:kimberly.green@nrc.gov)

**Hearing Identifier:** IndianPointUnits2and3NonPublic\_EX  
**Email Number:** 4445

**Mail Envelope Properties** (F5A4366DF596BF458646C9D433EA37D701541FA696C5)

**Subject:** RAI on RVI Applicant/Licensee Action Item 1  
**Sent Date:** 11/19/2013 4:07:52 PM  
**Received Date:** 11/19/2013 4:07:57 PM  
**From:** Green, Kimberly

**Created By:** Kimberly.Green@nrc.gov

**Recipients:**

"IPRenewal NPEmails" <IPRenewal.NPEmails@nrc.gov>

Tracking Status: None

"Waters, Roger M. (rwater1@entergy.com)" <rwater1@entergy.com>

Tracking Status: None

**Post Office:** HQCLSTR01.nrc.gov

Files	Size	Date & Time
MESSAGE	275	11/19/2013 4:07:57 PM
ML13318A450.pdf	64874	

**Options**

**Priority:** Standard  
**Return Notification:** No  
**Reply Requested:** No  
**Sensitivity:** Normal  
**Expiration Date:**  
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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

November 19, 2013

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 2013-06 (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 (IP2 and IP3), for review by the U.S. Nuclear Regulatory Commission (NRC or the staff). The 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 2009 and supplemented August 30, 2011 (SER Supplement 1).

By letter dated July 14, 2010, Entergy amended its license renewal application (LRA) and submitted the Indian Point Nuclear Generating Unit Nos. 2 and 3 Reactor Vessel Internals (RVI) Program. By letter dated September 28, 2011, as supplemented by letter dated February 17, 2012, Entergy submitted the "Indian Point Energy Center Reactor Vessel Internals Inspection Plan" (RVI Inspection Plan). The RVI Inspection Plan, as supplemented, was intended to be consistent with the Nuclear Regulatory Commission (NRC)-approved Electric Power Research Institute (EPRI) topical report, "Materials Reliability Program: Pressurized Water Reactor Internals Inspection and Evaluation Guidelines," (MRP-227-A), and to partially fulfill Commitment 30 associated with the IP LRA.

By letter dated May 15, 2012, the staff requested additional information regarding the Indian Point RVI Program and RVI Inspection Plan. Entergy provided a partial response to the staff's request for additional information (RAI) by letter dated June 14, 2012, and provided the remainder of the response by letter dated September 28, 2012, including a response to RAI 6, related to Applicant/Licensee Action Item 1 from MRP-227-A. Subsequent to receiving Entergy's response to RAI 6, the NRC staff and EPRI met on November 28, 2012 (ADAMS Accession No. ML13014A672), January 22-23, 2013 (ADAMS Accession No. ML13042A048), and February 25, 2013 (ADAMS Accession No. ML13067A262) to facilitate development of a generic approach for resolution of Applicant/Licensee Action Item 1.

The staff is therefore issuing the enclosed follow-up RAI 6-A, which is based on the two questions that industry and the NRC staff agreed upon during the January 22-23, 2013, closed meeting, as modified by the February 25, 2013, teleconference as sufficient for verification of plant-specific applicability for Westinghouse-design RVI.

This RAI was discussed with Mr. Roger Waters, and a mutually agreeable date for Entergy's response is within 60 days from the date of this letter. If you have any questions, please contact me at 301-415-1627, or by e-mail at [Kimberly.Green@nrc.gov](mailto:Kimberly.Green@nrc.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Kimberly Green", with a stylized flourish at the end.

Kimberly Green, Sr. Mechanical Engineer  
Aging Management of Structures, Electrical, and  
Systems Branch  
Division of License Renewal  
Office of Nuclear Reactor Regulation

Docket Nos. 50-247 and 50-286

Enclosure:  
As stated

cc: Listserv

The staff is therefore issuing the enclosed follow-up RAI 6-A, which is based on the two questions that industry and the NRC staff agreed upon during the January 22-23, 2013, closed meeting, as modified by the February 25, 2013, teleconference as sufficient for verification of plant-specific applicability for Westinghouse-design RVI.

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Sincerely,

**/RA/**

Kimberly Green, Sr. Mechanical Engineer  
Aging Management of Structures, Electrical and  
Systems Branch  
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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**ADAMS Accession No.: ML13318A450**

\*concurring via email

<b>OFFICE</b>	LA:DLR/RPB1*	APM: DLR/RASB	BC:DLR/RPB1	APM: DLR/RASB
<b>NAME</b>	YEdmonds	KGreen	YDiaz-Sanabria	KGreen
<b>DATE</b>	11/18/13	11/18/13	11/19/13	11/19/13

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REQUESTS FOR ADDITIONAL INFORMATION, SET 2013-06  
RELATED TO INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 AND 3  
LICENSE RENEWAL APPLICATION  
REACTOR VESSEL INTERNALS PROGRAM AND INSPECTION PLAN  
DOCKET NOS. 50-247 AND 50-286

**RAI 6-A**

As discussed in References 1 and 2, provide the following information related to verification of the applicability of MRP-227-A to Indian Point Nuclear Generating Unit Nos. 2 and 3 (IP2 and IP3):

1. Do the IP2 or IP3 reactor vessel internals (RVI) have non-weld or bolting austenitic stainless steel components with 20 percent cold work or greater, and if so, do the affected components have operating stresses greater than 30 ksi? If so, perform a plant-specific evaluation to determine the aging management requirements for the affected components.
2. Has IP2 or IP3 ever utilized atypical fuel design or fuel management that could make the assumptions of MRP-227-A regarding core loading/core design non-representative for that unit, including power changes/uprates? If so, describe how the differences were reconciled with the assumptions of MRP-227-A, or provide a plant-specific aging management program for affected components as appropriate.

References

1. Meeting Summary EPRI-Westinghouse January 22-23, 2013, February 21, 2013 (ADAMS Accession No. ML13042A048)
2. 2/25/2013 Summary of Telecom with EPRI and Westinghouse Electric Company, March 15, 2013 (ADAMS Accession No. ML13067A262)

ENCLOSURE

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE  
INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 AND 3, LICENSE  
RENEWAL APPLICATION, SET 2013-06 (TAC NOS. MD5407 AND MD5408)

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