



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

April 25, 2017

Mr. Anthony Vitale
Site Vice-President, IPEC
Entergy Nuclear Operations, Inc.
450 Broadway, GSB PO Box 249
Buchanan, NY 10511-0249

SUBJECT: REQUESTS FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE
INDIAN POINT LICENSE RENEWAL APPLICATION RAI SET 2017-04 (CAC
NOS. MD5407 AND MD5408)

Dear Mr. Vitale:

By letter dated April 30, 2007, Entergy Nuclear Operations, Inc. submitted an application pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 54, to renew the operating license DPR-26 and DPR-64 for Indian Point, Unit Nos. 2 and 3 for review by the U.S. Nuclear Regulatory Commission (NRC or the staff). The staff is reviewing the information contained in the license renewal application and has identified, in the enclosure, areas where additional information is needed to complete the review.

These requests for additional information were discussed with Richard Louie, and a mutually agreeable date for the response is within 30 days from the date of this letter. If you have any questions, please contact me at 301-415-6332 or e-mail william.burton@nrc.gov.

Sincerely,

/RA/

William Burton, Senior Project Manager
Project Management and Guidance Branch
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-247 and 50-286

Enclosure
Requests for Additional Information

cc w/encl: See next page

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INDIAN POINT
LICENSE RENEWAL APPLICATION (LRA)
REQUESTS FOR ADDITIONAL INFORMATION (RAI)

Section 54.21(a)(3) of Title 10 of the *Code of Federal Regulations* (10 CFR) requires the applicant to demonstrate that the effects of aging for structures and components will be adequately managed so that the intended function(s) will be maintained consistent with the current licensing basis for the period of extended operation. As described in the SRP-LR, an applicant may demonstrate compliance with 10 CFR 54.21(a)(3) by referencing the GALL Report and when evaluation of the matter in the GALL Report applies to the plant.

RAI 3.0.3.3.9-1

Section 6.2 of the revised reactor vessel internals (RVI) Inspection Plan for Indian Point, Unit Nos. 2 and 3 (IP2 and IP3) lists five specific actions to be taken with regard to baffle-former bolts (BFBs). The third and fourth item state:

3. Entergy will also perform general visual inspection to identify anomalies in the baffle structure at IP2 and IP3 during each subsequent refueling outage.
4. Entergy will perform an ultrasonic test (UT) inspection of inservice replaced (new) bolts if the general visual inspections performed in accordance with paragraph 3, above identify degraded new bolts.

For replacement BFBs, based on Items 3 and 4, UT examination will not be performed during future refueling outages unless a general visual examination of the baffle structure reveals anomalies. The staff is concerned because the applicant did not provide sufficient detail about these general visual examinations for the staff to determine whether the visual examinations would be capable of detecting degraded replacement BFBs. The applicant also did not specify the timing for the UT examination of replacement bolts if the visual examination reveals degraded replacement BFBs. The staff therefore requests the following information:

- a. Describe the examination coverage and method (e.g. VT-1, VT-3) of the general visual inspection of the baffle structure discussed in Item 3.
- b. Clarify what is meant by "anomalies." What conditions observed during the visual examination would trigger a UT examination of replacement BFBs?
- c. Justify that the general visual inspection will be capable of detecting any and all visually degraded replacement BFBs.
- d. If the general visual examination reveals degraded replacement BFBs, when will the UT examination of the replacement bolts be performed? Justify the timing of this examination, if not performed during the same refueling outage as the discovery of the degraded replacement BFBs.

RAI 3.0.3.3.9-2

Operating experience from D.C. Cook, Unit 2, during Fall 2016 suggests that replacement BFBs and baffle-edge bolts may be susceptible to degradation if a large number of clustered original degraded bolts are present near the replacement bolts.

The staff therefore requests the following information:

If clustering of degraded original BFBs is found at IP2 or IP3 during future refueling outages:

- a. Will UT examination be performed on replacement BFBs installed during previous outages? If so, describe the scope and schedule of these examinations.
- b. Will baffle-edge bolts be examined? If so, describe the method, scope and schedule of these examinations.
- c. If the UT examination of replacement BFBs and examination of edge bolts will not be performed if clustered degraded original bolts are found, justify not performing these examinations.