



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

January 14, 2015

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

SUBJECT: INDIAN POINT NUCLEAR GENERATING UNIT NO. 3 - REQUEST FOR
ADDITIONAL INFORMATION REGARDING CHANGE TO REACTOR VESSEL
CAPSULE WITHDRAWAL SCHEDULE (TAC NO. MF5148)

Dear Sir or Madam:

By letter dated November 5, 2014, Entergy Nuclear Operations, Inc., the licensee, submitted a proposed revision to the reactor vessel surveillance capsule withdrawal schedule pursuant to Title 10 of the *Code of Federal Regulations* Part 50, Appendix H, which requires that withdrawal schedules must be approved by the Nuclear Regulatory Commission (NRC).

The NRC staff is reviewing the submittal and has determined that additional information is needed to complete its review. The specific questions are found in the enclosed request for additional information (RAI). Based on our discussions we understand that a response to the RAI will be provided within 30 days of the date of this letter.

Please contact me at (301) 415-1364 if you have any questions on this issue.

Sincerely,

A handwritten signature in black ink that reads "Douglas V. Pickett".

Douglas V. Pickett, Senior Project Manager
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-286

Enclosure:
Request for Additional Information

cc w/encl: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION
PROPOSED REVISION TO REACTOR VESSEL
SURVEILLANCE CAPSULE WITHDRAWAL SCHEDULE
ENTERGY NUCLEAR OPERATIONS, INC
INDIAN POINT NUCLEAR GENERATING UNIT NO. 3
DOCKET NO. 50-286

By letter dated November 5, 2014 (Accession No. ML14323A729), Entergy Nuclear Operations, Inc. (Entergy, the licensee) requested approval from the Nuclear Regulatory Commission (NRC) regarding a revision to the reactor vessel surveillance capsule withdrawal schedule pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, Appendix H, Section III.B.3.

BACKGROUND

Section 10 CFR Part 50, Appendix H, states that the purpose of the material surveillance program is to monitor changes in the fracture toughness properties of ferritic materials in the reactor vessel beltline region of light water nuclear power reactors which result from exposure of these materials to neutron irradiation and thermal environment. Under the program, fracture toughness test data are obtained from material specimens exposed in surveillance capsules, which are withdrawn periodically from the reactor vessel.

ISSUE

Out of the capsules that have been removed and tested, capsule Z had the highest fluence value at 1.04×10^{19} n/cm² with a lead factor of 3.48. The most recent capsule tested, which was removed in 2003, had a capsule fluence of 8.74×10^{18} n/cm² with a lead factor of 1.49. The proposed schedule would postpone the withdrawal and testing of the next capsule until refueling outage 23 (currently scheduled for March 2025) which would have a capsule fluence of approximately 1.85×10^{19} n/cm² with a lead factor of 1.52. This fluence would correspond to a reactor vessel peak fluence of 1.22×10^{19} n/cm².

REQUEST

Estimate when the vessel peak fluence is expected to exceed the fluence of capsule Z. Further, describe how the fluence of the reactor vessel beltline materials will be monitored once the reactor vessel peak fluence surpasses that of capsule Z.

Enclosure

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/RA/
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ADAMS ACCESSION NO.: ML15012A302

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