

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

March 18, 2014

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 NOS. 2 AND 3 - REQUEST

FOR ADDITIONAL INFORMATION REGARDING CONTAINMENT INTEGRITY

ANALYSIS (TAC NOS. MF0590 AND MF0591)

Dear Sir or Madam:

By letters dated January 28, 2013, Entergy Nuclear Operations, Inc., the licensee, submitted license amendment applications for Indian Point Nuclear Generating Unit Nos. 2 and 3. The applications were in response to mass and energy release errors for containment integrity analysis identified in the Westinghouse Advisory Letter 11-5.

The Nuclear Regulatory Commission staff is reviewing the submittals 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,

Douglas V. Pickett, Senior Project Manager

Plant Licensing Branch I-1

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

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Docket No. 50-247 and 50-286

Enclosure:

Request for Additional Information

cc w/encl: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION CONTAINMENT INTEGRITY ANALYSIS

ENTERGY NUCLEAR OPERATIONS, INC.

INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 AND 3

DOCKET NOS. 50-247 AND 50-286

By letters dated January 28, 2013 (References 1 and 2), pursuant to Section 50.90 of Title 10 of the *Code of Federal Regulations*, Entergy Nuclear Operations, Inc. submitted license amendment requests for Indian Point Nuclear Generating Unit Number 2 and Indian Point Nuclear Generating Unit Number 3.

INDIAN POINT UNIT NOS. 2 AND 3

Technical Specification (TS) Limiting Condition for Operation (LCO) 3.6.5 for both Indian Point Units 2 and 3 specify the range of containment air temperature during Modes 1 through 4 between 50°F and 130°F. In support of a recent license amendment request, a sensitivity analysis performed by a licensee for the peak containment pressure during a large break Loss of Coolant Accident (LOCA) with respect to the initial containment air temperature indicated that the peak containment pressure is greater when using an initial containment temperature less than the maximum TS allowable due to the effect of higher density of non-condensable at the lower temperature. In that case, the effect of using the initial containment air temperature of 98°F versus the maximum TS value of 135°F increased the peak containment pressure by 1.3 psi. The same is also possible for Indian Point Units 2 and 3 because a higher density of non-condensable at 50°F would have a greater mass compared to the same at 130°F, and therefore may result in a higher peak containment pressure. Please provide results of large break LOCA peak containment pressures, including pressure profiles, for initial containment air temperatures of 50°F and 130°F while assuming the remaining input parameters and assumptions remain the same in both cases.

INDIAN POINT UNIT NO. 3

Reference 2, page 5 of Attachment 1, describes how containment pressure will be monitored from a locally mounted, highly accurate containment pressure instrument during hot weather conditions. Please describe (1) whether this will be a safety-related instrument and (2) where the instrument will be located.

Surveillance Requirement 3.6.4.1 requires containment pressure to be monitored every 12 hours. Considering that the highly accurate containment pressure instrument will need to be monitored outside control room, please provide the following information regarding operator actions to perform the surveillance requirement:

1. Describe any required operator actions (other than in the proposed TSs) that will be needed to support implementation of this license amendment request.

- 2. Are there any additions to, deletions or changes to current operator actions required to support this license amendment request? If so, please describe.
- 3. If there are changes or additions to operator actions, are there any effects on the time available for operators to complete the actions?
- 4. How will the operators read and log the containment pressure readings from the locally mounted controls? Will any required actions be performed by more than one operator? Will it require coordination with the Control Room? Please describe.
- 5. On the summer days when the local readings are assumed to be more accurate, will staffing numbers be increased to account for operators taking readings from the locally mounted instrument?
- 6. Describe any changes to normal, abnormal or emergency operating procedures as a result of implementation of this change.
- 7. Describe any necessary training associated with this change.

REFERENCES

- Letter from Entergy to NRC dated January 28, 2013, "Proposed Technical Specification Bases Changes to Credit Four Fan Cooler Units in Containment Integrity Analysis," Indian Point 2 (ADAMS Accession No. ML13042A243).
- 2. Letter from Entergy to NRC dated January 28, 2013, "Proposed Technical Specification Changes Regarding RWST Temperature and Containment Pressure in Containment Integrity Analysis," Indian Point Unit Number 3 (ADAMS Accession No. ML13042A224).

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/ra/

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