



Entergy Nuclear Northeast
Indian Point Energy Center
450 Broadway, GSB
P.O. Box 249
Buchanan, NY 10511-0249
Tel 914 254 6700

Lawrence Coyle
Site Vice President

NL-15-069

May 20, 2015

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
11555 Rockville Pike
Rockville, MD 20852

SUBJECT: Response to Request for Additional Information Regarding License Amendment to Permanently Extend the Frequency of the Containment Integrated Leak Rate Test (TAC NO. MF3369)
Indian Point Unit Number 2
Docket No. 50-247
License No. DPR-26

REFERENCES:

1. NRC Letter to Entergy, Request for Additional Information Regarding Licensing Amendment to Permanently Extend the Frequency of the Containment Integrated Leak Rate Test (TAC NO. MF5382), dated May 6, 2015
2. Entergy Letter NL-14-128 to NRC Regarding Proposed License Amendment Regarding Extending the Containment Type A Leak Rate Testing Frequency to 15 years, dated December 9, 2014 (ML14353A015)

Dear Sir or Madam:

Entergy Nuclear Operations, Inc., (Entergy) is hereby providing the attached response to the NRC request for additional information, Reference 1, associated with the proposed changes to the Indian Point 2 Technical Specifications (TS) in Reference 2. The response to the request for additional information is provided in Attachment 1.

No new Regulatory Commitment is made in this submittal.

A copy of this response and the associated Attachments is being submitted to the designated New York State official in accordance with 10 CFR 50.91.

A017
NRC

If you have any questions or require additional information, please contact Mr. Robert Walpole, Manager, Regulatory Assurance at (914) 254-6710.

I declare under penalty of perjury that the foregoing is true and correct. Executed on May 20, 2015.

Sincerely,


LC/sp

Attachment: Response to Request for Additional Information Regarding License Amendment to Permanently Extend the Frequency of the Containment Integrated Leak Rate Test

cc: Mr. Douglas Pickett, Senior Project Manager, NRC NRR DORL
Mr. Daniel Dorman, Regional Administrator, NRC Region 1
NRC Resident Inspectors Office
Mr. Francis J. Murray, Jr., President and CEO, NYSERDA
Ms. Bridget Frymire, New York State Dept. of Public Service)

ATTACHMENT TO NL-15-069

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION
REGARDING LICENSE AMENDMENT TO PERMANENTLY EXTEND THE
FREQUENCY OF THE CONTAINMENT INTEGRATED LEAK RATE TEST

ENTERGY NUCLEAR OPERATIONS, INC.
INDIAN POINT NUCLEAR GENERATING UNIT NO. 2
DOCKET NO. 50-247

In order to complete their review of the Entergy request for Technical Specification Amendment to extend the Containment Type A leak test the Probabilistic Risk Assessment Licensing Branch has requested additional information. These requests and Entergy's responses follow:

Probabilistic Risk Assessment Licensing Branch Question 1

Nuclear Energy Institute (NEI) 94-01, Revision 2-A (Agencywide Documents Access and Management System (ADAMS) Accession No. ML100620847), "Industry Guideline for Implementing Performance-Based Option of 10 CFR Part 50, Appendix J," states that plant specific confirmatory analyses are required when extending the Type A integrated leak rate test (ILRT) interval beyond ten years and that the assessment should be performed using the approach and methodology described in Electric Power Research Institute (EPRI) Technical Report (TR) 1009325, Revision 2-A¹, "Risk Impact Assessment of Extended Integrated Leak Rate Testing Intervals" (ADAMS Accession No. ML14024A045).

EPRI TR 1009325, Revision 2-A, does not address plant-specific probabilistic risk assessment (PRA) quality. In the U.S. Nuclear Regulatory Commission (NRC) safety evaluation report, dated June 25, 2008 (ADAMS Accession No. ML081140105), the NRC staff stated, in part, that:

Licensee requests for a permanent extension of the ILRT surveillance interval to 15 years pursuant to NEI TR 94-01, Revision 2, and EPRI Report No. 1009325, Revision 2, will be treated by NRC staff as risk-informed license amendment requests. Consistent with information provided to industry in Regulatory Issue Summary 2007-06, "Regulatory Guide 1.200 Implementation," the NRC staff will expect the licensee's supporting Level 1/[large early release frequency] LERF PRA to address the technical adequacy requirements of RG 1.200, Revision 1... Any identified deficiencies in addressing this standard shall be assessed further in order to determine any impacts on any proposed decreases to surveillance frequencies. If further revisions to RG 1.200 are issued which endorse additional standards, the NRC staff will evaluate any application referencing NEI TR 94-01, Revision 2, and EPRI Report No. 1009325, Revision 2, to examine if it meets the PRA quality guidance per the RG 1.200 implementation schedule identified by the NRC staff.

According to Regulatory Issue Summary 2007-06, the NRC staff expects that licensees fully address all scope elements with Revision 2 of Regulatory Guide (RG) 1.200 (ADAMS Accession No. ML090410014) by the end of its implementation period (i.e., one year after the issuance of Revision 2). RG 1.200, Revision 2, endorses, with exceptions and clarifications, the combined American Society of Mechanical Engineers (ASME)/American Nuclear Society (ANS) PRA standard (ASME/ANS RA-Sa-2009).

In the application dated December 9, 2014 (ADAMS Accession No. ML14353A015) the licensee stated that "An internal comparison of the ASME standard to the combined ASME/ANS standard confirmed that there were few substantive changes to the internal events portion of the standard, although the expected level of documentation was increased in some cases." However, based on this statement alone, it is unclear if a full gap assessment (i.e., for each of the supporting requirements) was performed for the Indian Point Nuclear Generating Unit No. 2 (IP2) internal events PRA model to the latest endorsed version of the PRA standard.

Given that the implementation date of RG 1.200, Revision 2, was April 2010 and the license amendment request application was submitted in December 2014, identify and address any gaps between the IP2 PRA model used in this application and the RG 1.200, Revision 2, requirements that are relevant to this submittal, or explain why addressing the requirements would have no impact on this application.

Response

No gaps have been identified between the IP2 PRA model used in this application and the RG 1.200, Revision 2, requirements that are relevant to this submittal. Section A.4 of Attachment 3 in the IP2 ILRT submittal (NL-14-128) has the following statement:

A PRA technical adequacy evaluation was performed consistent with the requirements of RG-1.200, Revision 2. This evaluation combined with the details of the results of this analysis demonstrates with reasonable assurance that the proposed extension to the ILRT interval for IP2 and IP3 to fifteen years satisfies the risk acceptance guidelines in RG 1.174.

At the time the IP2 PRA model used for the ILRT submittal was developed, ASME/ANS RA-Sa-2009 had not yet been issued. Therefore, the self-assessment was performed using the latest ASME PRA Standard at that time (i.e., ASME RA Sb-2005). However, ASME/ANS RA-Sa-2009 had been issued by the time of the RG 1.200 peer review. Although the internal events self-assessment was performed based on ASME RA Sb-2005, the actual RG 1.200 peer review was performed using ASME/ANS RA-Sa-2009 given that the difference between the two versions of the PRA standard were primarily editorial in nature. Therefore, the disposition of RG 1.200 findings in Table A.2-1 of the ILRT submittal pertains to supporting requirements in ASME/ANS RA-Sa-2009. (This can be seen by observing that the findings in Table A.2-1 associated with the internal flooding analysis are associated with supporting requirements that did not exist until the release of ASME/ANS RA-Sa-2009).

¹ EPRI TR-1009325, Revision 2-A, is also identified as EPRI TR-1018243.