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NL-17-092

July 27, 2017

U.S. Nuclear Regulatory Commission
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11545 Rockville Pike, TWFN-2 F1
Rockville, MD 20852-2738

SUBJECT: Amended Response to Request for Additional Information Question RAI 3.3.2-17-IP3-1 Regarding License Renewal Application RAI SET 2017-05 for the Review of the Indian Point Nuclear Generating Unit Nos. 2 and 3 (CAC Nos. MD5407 and MD5408)
Docket Nos. 50-247 and 50-286
License Nos. DPR-26 and DPR-64

REFERENCES:

- 1) Entergy letter dated June 8, 2017, "Reply to Requests of Additional Information for the Review of the Indian Point Nuclear Generating Unit Nos. 2 and 3, License Renewal Application RAI SET 2017-05 (CAC Nos. MD5407 and MD5408) (NL-17-069)
- 2) NRC letter dated April 28, 2017, "Requests for Additional Information for the Review of the Indian Point License Renewal Application RAI SET 2017-05 (CAC Nos. MD5407 and MD5408)," (ML17110A133)
- 3) Entergy letter dated December 15, 2016, "Amendment 18 to License Renewal Application (LRA) Indian Point Nuclear Generating Unit Nos. 2 and 3," (NL-16-138) (ML16358A526)

Dear Sir or Madam:

By Reference 1, Entergy Nuclear Operations, Inc. (Entergy) provided responses to additional information requested by the U.S. Nuclear Regulatory Commission (NRC), identified in Reference 2 pertaining to the review of the License Renewal Application (LRA) for Indian Point Energy Center (IPEC) Unit Nos. 2 and 3.

During its review of the response to RAI 3.3.2-17-IP3-1, the NRC staff noted an apparent inconsistency between the response and the revised LRA Table 3.3.2-17-IP3. The response stated that the carbon fiber-reinforced epoxy was applied on the exterior circumference of a pressure-retaining clamp, while the revised LRA Table 3.3.2-17-IP3 indicated that the piping was made of carbon fiber-reinforced epoxy. In this situation, the pressure-retaining clamp acts as the piping and the carbon fiber-reinforced epoxy acts as an exterior coating. For clarification, Entergy is providing an amended response to RAI 3.3.2-17-IP3-1 in Attachment 1.

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NRR

As a result of this amended response, a revised LRA Table 3.3.2-17-IP3 is provided in Attachment 2.

The response provided in this submittal supersedes in its entirety the response previously provided by Reference 1.

There are no new commitments being made in this submittal.

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

I declare under penalty of perjury that the foregoing is true and correct. Executed on
7/27, 2017.

Sincerely,



AJV/rl

Attachments:

1. Reply to NRC Request for Additional Information Regarding the License Renewal Application
2. Revised LRA Table 3.3.2-17-IP3

cc: Mr. Daniel H. Dorman, Regional Administrator, NRC Region I
Mr. Sherwin E. Turk, NRC Office of General Counsel, Special Counsel
Mr. William Burton, NRC Senior Project Manager, Division of License Renewal
Mr. Richard V. Guzman, NRR Senior Project Manager
Ms. Bridget Frymire, New York State Department of Public Service
Ms. Alicia Barton, President and CEO NYSERDA
NRC Resident Inspector's Office

ATTACHMENT 1

to NL-17-092

**REPLY TO NRC REQUEST FOR ADDITIONAL INFORMATION
REGARDING THE
LICENSE RENEWAL APPLICATION**

**ENTERGY NUCLEAR OPERATIONS, INC.
INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 & 3
DOCKET NOS. 50-247 AND 50-286**

RAI 3.3.2-17-IP3-1

Background

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 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.

As amended by letter dated December 15, 2016, LRA Table 3.3.2-17-IP3 states that fiberglass city water piping exposed to soil has no aging effect and no recommended aging management program.

The subject letter also describes the change to Table 3.3.2-17-IP3 as: “[p]ermanently repaired pipe (line #1033) with a pressure retaining clamp and using CSI Pipe Wrap-Ply material (carbon fiber) applied on the exterior circumference of the pipe and clamp.”

Issue

1. It is unclear to the staff, based on conflicting information provided above, if the line item represented in LRA Table 3.3.2-17-IP3 is fiberglass piping or is carbon fiber applied on the exterior circumference of the pipe.
2. The “parameters monitored or inspected” program element of GALL Report AMP XI.M41, “Buried and Underground Piping and Tanks,” as modified by LR-ISG-2015-01, “Changes to Buried and Underground Piping and Tank Recommendations,” recommends visual inspections of the external surface condition of polymeric materials to detect (a) loss of material due to wear; and (b) cracking, blistering, and change in color due to water absorption.

Request

1. Clarify if the line item represented in LRA Table 3.3.2-17-IP3 is fiberglass piping or is carbon fiber applied on the exterior circumference of the pipe.
2. State the basis for why (a) loss of material due to wear; and (b) cracking, blistering, and change in color due to water absorption are not aging effects requiring management for polymeric materials exposed to soil.

Response

1. The line item included in LRA Table 3.3.2-17-IP3 as fiberglass piping in Letter NL-16-138, dated December 15, 2016 (Reference 3), is carbon fiber-reinforced epoxy overlaid onto the exterior circumference of a carbon steel pressure-retaining clamp on carbon steel piping.

2. In clarification of the line item included in LRA Table 3.3.2-17-IP3 as fiberglass piping by Reference 3, the pressure-retaining clamp provides the pressure boundary and serves as a continuation of the piping. The effects of aging for the clamp are the same as those for other carbon steel piping in the Buried Piping and Tanks Inspection Program. Because the clamp is not a polymeric material, the effects of aging for polymeric materials exposed to soil do not apply. The line item added for fiberglass piping by Reference 3 is unnecessary in LRA Table 3.3.2-17-IP3. Removal of this line item from the table is shown in Attachment 2. Deletions are lined through.

ATTACHMENT 2

to NL-17-092

REVISED LRA TABLE 3.3.2-17-IP3

Changes are shown as strikethroughs for deletions and underlines for additions

**ENTERGY NUCLEAR OPERATIONS, INC.
INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 & 3
DOCKET NOS. 50-247 AND 50-286**

**Table 3.3.2-17-IP3
 City Water
 Summary of Aging Management Review**

Table 3.3.2-17-IP3: City Water								
Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG-1801 Vol. 2 Item	Table 1 Item	Notes
Piping	Pressure boundary	Fiberglass	Soil (ext)	None	None	—	—	F