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Fred Dacimo  
Vice President  
License Renewal

NL-13-037

March 5, 2013

United States Nuclear Regulatory Commission Official Hearing Exhibit	
In the Matter of:	Entergy Nuclear Operations, Inc. (Indian Point Nuclear Generating Units 2 and 3)
	<b>ASLBP #:</b> 07-858-03-LR-BD01 <b>Docket #:</b> 05000247   05000286 <b>Exhibit #:</b> ENT000606-00-BD01 <b>Admitted:</b> 3/22/2013 <b>Rejected:</b> <b>Other:</b>
	<b>Identified:</b> 3/22/2013 <b>Withdrawn:</b> <b>Stricken:</b>

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

**SUBJECT:** Revision to the Response to Request for Additional Information (RAI)  
Aging Management Programs  
Indian Point Nuclear Generating Unit Nos. 2 & 3  
Docket Nos. 50-247 and 50-286  
License Nos. DPR-26 and DPR-64

**REFERENCE:**

1. Entergy Letter NL-11-032, "Response to Request for Additional Information (RAI) Aging Management Programs," dated March 28, 2011.
2. Draft License Renewal Interim Staff Guidance, LR-ISG-2011-03, "Changes to the Generic Aging Lessons Learned (GALL) Report Revision 2, Aging Management Program XI.M41, "Buried and Underground Piping and Tanks".
3. Final License Renewal Interim Staff Guidance, LR-ISG-2011-03, "Changes to the Generic Aging Lessons Learned (GALL) Report Revision 2, Aging Management Program XI.M41, "Buried and Underground Piping and Tanks", published on August 2, 2012.

Dear Sir or Madam:

In Reference 1, Entergy responded to RAI 3.0.3.1.2-1 which requested additional information related to the number of total and direct visual inspections of license renewal in-scope piping during the 10 years prior to entering the period of extended operation (PEO) and during each 10 year period during the PEO. The response provided in Reference 1 was based on draft Interim Staff Guidance (ISG) LR-ISG-2011-03 (Reference 2) which classified buried piping as either safety-related or containing hazardous material. When the final version of the ISG was issued (Reference 3), the safety-related and the hazardous material categories were combined into one category. This change was implemented to allow licensees to select inspection locations based on plant-specific risk ranking rather than piping categories.

The purpose of this letter is to revise the response to parts 1a, 1b and 1c of RAI 3.0.3.1.2-1 to be consistent with the recommendations provided in Reference 3. Since IPEC has limited amounts of buried piping containing hazardous material, this change will allow inspections of more buried piping in safety-related systems in lieu of performing multiple inspections of piping in the same system containing hazardous materials. The revised response does not impact the Buried Piping and Tanks Inspection Program descriptions provided in the LRA UFSAR Supplement.

Attachment 1 provides the revised responses to parts 1a, 1b and 1c of RAI 3.0.3.1.2-1.

There are no new regulatory commitments 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

3/5/13.

Sincerely,



FRD/rw

Attachment: 1. Revised Response to Request for Additional Information (RAI), Aging Management Programs

cc: Mr. William Dean, Regional Administrator, NRC Region I  
Mr. Sherwin E. Turk, NRC Office of General Counsel, Special Counsel  
Mr. Dave Wrona, NRC Branch Chief, Engineering Review Branch I  
Mr. Nathaniel Ferrer, NRC Project Manager, Division of License Renewal  
Ms. Bridget Frymire, New York State Department of Public Service  
NRC Resident Inspector's Office  
Mr. Francis J. Murray, Jr., President and CEO NYSERDA

**ATTACHMENT 1 TO NL-13-037**

**LICENSE RENEWAL APPLICATION**  
**REVISED RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION (RAI)**  
**AGING MANAGEMENT PROGRAMS**

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

**INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 AND 3  
LICENSE RENEWAL APPLICATION  
REVISED RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION (RAI)  
AGING MANAGEMENT PROGRAMS**

Changes are shown as strikethroughs for deletions and underlines for additions.

NRC Request RAI 3.0.3.1.2-1 Part 1a

1. Respond to the following:

- a. Describe how many in-scope buried piping segments for each material, code/safety-related piping, and potential to release materials detrimental to the environment category will be inspected.

Revised Response for RAI 3.0.3.1.2-1 Part 1a

For the 10-year period prior to the PEO, the following table presents the planned inspections for buried piping subject to aging management review that is code/safety-related or has the potential to release materials detrimental to the environment (Code/SR/Hazmat) ~~(hazmat)~~. Inspections by material ~~and category~~ are indicated.

Material	Category	IP2 Inspections	IP3 Inspections
Carbon steel	<u>Code/SR/Hazmat</u>	<del>13</del> <u>26</u>	<del>14</del> <u>19</u>
<del>Carbon steel</del>	<del>Hazmat</del>	<del>13</del>	<del>5</del>
Stainless steel	<u>Code/SR/Hazmat</u>	N/A	6

NRC Request RAI 3.0.3.1.2-1 Part 1b

b. For the 45 planned inspections prior to the period of extended operation:

- i. How many will consist of an excavated direct visual inspection of the external surfaces of the buried pipe?  
ii. What length of piping will be excavated and have a direct visual inspection conducted?

Revised Response for RAI 3.0.3.1.2-1 Part 1b

The following table provides the number of planned direct visual inspections prior to the PEO. For planned direct visual inspections, future excavations will expose a minimum of 10 linear feet of pipe, for full circumferential inspections. Ten completed inspections have ranged from approximately five feet to more than ten feet averaging approximately eight linear feet.

Material	Category	IP2 Inspections	IP3 Inspections
Carbon steel	<u>Code/SR/Hazmat</u>	<del>9</del> <u>20</u>	<del>8</del> <u>11</u>
<del>Carbon steel</del>	<del>Hazmat</del>	<del>11</del>	<del>3</del>
Stainless steel	<u>Code/SR/Hazmat</u>	N/A	3

NRC Request RAI 3.0.3.1.2-1 Part 1c

- c. Understanding that the total number of inspections performed will be informed by plant-specific and industry operating experience, what minimum number of inspections of buried in-scope piping is planned during the 40 – 50 and 50 – 60 year operating periods? When describing the minimum number of planned inspections, differentiate between material, code/safety-related piping, and potential to release materials detrimental to the environment category piping inspection quantities of buried in-scope piping.

Revised Response for RAI 3.0.3.1.2-1 Part 1c

IPEC will perform direct visual inspections during each 10-year period of the PEO in accordance with the following table. The table lists inspections for different materials, for code/safety-related piping, and for piping with the potential to release materials detrimental to the environment (~~indicated as hazmat.~~)

Material	Category	IP2 Inspections	IP3 Inspections
Carbon steel	<u>Code/SR/Hazmat</u>	<del>6</del> <u>14</u>	<del>6</del> <u>14</u>
<del>Carbon steel</del>	<del>Hazmat</del>	<del>8</del>	<del>8</del>
Stainless steel	<u>Code/SR/Hazmat</u>	N/A	2

If sample results indicate the soil is corrosive as described in the response to 2.c ~~below in Reference 1,~~ then the number of inspections for the carbon steel code/safety-related/hazmat piping will be increased to eight and the number of inspections for the carbon steel hazmat piping will be increased to ~~12~~ 20.