

United States Nuclear Regulatory Commission Official Hearing Exhibit	
In the Matter of:	Entergy Nuclear Operations, Inc. (Indian Point Nuclear Generating Units 2 and 3)
ASLBP #:	07-858-03-LR-BD01
Docket #:	05000247   05000286
Exhibit #:	NRC000167-00-BD01
Admitted:	4/24/2013
Rejected:	
Other:	
	Identified: 4/24/2013 Withdrawn: Stricken:

**NRC000167**  
April 22, 2013

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )  
 )  
ENTERGY NUCLEAR OPERATIONS, INC. ) Docket Nos. 50-247-LR/ 50-286-LR  
 )  
(Indian Point Nuclear Generating )  
 Units 2 and 3 )

DECLARATION OF WILLIAM C. HOLSTON  
UPDATING NRC STAFF'S TESTIMONY ON CONTENTION NYS-5  
(BURIED PIPING AND TANKS) TO ADDRESS NEW INFORMATION  
SUBMITTED BY APPLICANT ENTERGY NUCLEAR OPERATIONS, INC.

I, William C. Holston, being first duly sworn, do hereby state as follows:

1. I previously submitted prefiled written testimony in this proceeding (along with Kimberly J. Green) on behalf of the NRC Staff ("Staff"), concerning Contention NYS-5 (Buried Piping and Tanks). Our prefiled written testimony, entitled "NRC Staff's Testimony of Kimberly J. Green and William C. Holston Concerning Contention NYS-5 (Buried Pipes and Tanks)" ("Staff Testimony"), dated December 7, 2012, was admitted by the Atomic Safety and Licensing Board ("Board") as Exhibit NRCR20016. In addition, Ms. Green and I provided oral testimony concerning Contention NYS-5 on December 10 and 11, 2012. See Tr. 3274-3979.

2. In our prefiled written and oral testimony, Ms. Green and I set forth our views regarding the adequacy of the Buried Piping and Tanks Inspection Program ("BPTIP") which Entergy Nuclear Operations, Inc. ("Entergy" or "Applicant") has committed to implement to manage the effects of aging for buried piping and tanks for license renewal of Indian Point Nuclear Generating Unit Nos. 2 and 3 ("IP2" and "IP3"). As I pointed out in Answer 23 of my prefiled testimony, "[t]he Applicant provided its Buried Piping and Tanks Inspection program to

manage aging effects for buried piping and tanks, as described in LRA Sections A.2.1.5 and B.2.1.6, and RAI responses dated July 27, 2009 (NYS Exhibit 000203), March 28, 2011 (Exhibit NYS000151), July 14, 2011 (Exhibit NYS000152), and July 27, 2011 (Exhibit NYS000153)." Staff Testimony (Ex. NRCR00016), at 29. As I further noted, "[t]he Staff's evaluation of these responses and the Applicant's changes to the program are documented in SER Supplement 1, issued in August 2011 (Exhibit NYS000160). *Id.* at 38-39.

3. In March 2013, after evidentiary hearings had concluded on Contention NYS-5, the Applicant submitted a revision to its RAI responses concerning the BPTIP, in a letter from Fred R. Dacimo (Entergy) to the NRC Document Control Desk, dated March 5, 2013 (NL-13-037); I understand that the Board admitted this letter as Exhibit ENT000606. In addition, Entergy witnesses Nelson Azevedo, Alan Cox and Ted Ivy submitted a "Joint Declaration," in which they amended their prefiled and oral testimony on this contention to reflect this new information; I understand that the Board admitted their Joint Declaration as Exhibit ENT000607.

4. I have reviewed Exhibits ENT000606 and ENT000607, and have considered what effect, if any, the information contained therein may have upon the Staff's evaluation of the Applicant's aging management program ("AMP") for buried piping and tanks (the BPTIP), as set forth in SER Supplement 1 and the Staff's testimony in this proceeding. Based upon my review, I have concluded that a revision should be made to my prefiled written testimony to reflect the new information that has been provided by Entergy; I have further concluded, however, that this new information does not affect any of the conclusions stated in SER Supplement 1 or in the Staff's testimony in this proceeding.

5. More specifically, Entergy has provided new information indicating that (a) it has combined the BPTIP buried piping categories of "code class/safety related" and "hazardous material" into a single buried piping classification ("Code/SR/Hazmat"), and (b) it has completed all of the 20 buried piping inspections for IP2 that were to be completed prior to the period of extended operation ("PEO"). See Ex. ENT000606, Attachment 1 at 1-2; Ex. ENT000607 at 3-6.

Entergy's witnesses stated that the new information does not affect the BPTIP descriptions provided in the IP2 and IP3 UFSAR Supplements, or Entergy's Commitments 3 and 48. *Id.* at 3-4. Further, they stated that no change has been made to the total number of excavated direct visual inspections of this piping to be conducted prior to and during the PEO, or to Entergy's use of the risk-ranking process described in the Supplements to the IP2 and IP3 Updated Final Safety Analysis Reports ("UFSARs"). Ex. ENT000607 at 4. In addition, they stated that the revisions are consistent with Staff guidance in LR-ISG-2011-03 (Ex. NRC000162), and that the revisions have no effect on the conclusion in SER Supplement 1 that Entergy is performing a sufficient number of risk-informed inspections. *Id.* at 3 & 4.

6. I have reviewed the new information provided in Exhibits ENT000606 and ENT000607, and have determined that a revision should be made to one paragraph in Answer 31 of my prefilled written testimony, to address the new information. Specifically, the following paragraph in Answer 31 of my testimony should be revised to read as follows:

~~Of t~~ The 94 excavated direct visual examinations of buried in-scope piping which the Applicant has committed to conduct, ~~53 of its planned inspections will be conducted on~~ include systems containing hazardous materials (i.e., materials that are radioactive or deleterious to the environment). ~~In~~ In addition, if the soil sample testing demonstrates that the soil environment is corrosive, 16 of the additional 24 inspections that ~~will be conducted (i.e., the 24 inspections that would supplement the planned 94 inspections) will be conducted on systems containing hazardous materials.~~ As discussed above, the Applicant is also risk-ranking the inspection locations based on the potential for corrosion and the consequences of leakage. The committed inspection scope of ~~53 inspections for systems containing hazardous material~~, combined with the Applicant's preventive actions, its selection of risk-informed inspection locations in the Applicant's Buried Piping and Tanks Inspection program, and its Corrective Action program, provides reasonable assurance that in-scope buried components which contain radioactive fluids or other hazardous material will meet their intended CLB functions during the period of extended operation.

See Staff Testimony on Contention NYS-5 (Ex. NRCR20016) at 40-41.

7. Apart from the paragraph recited and revised above, the new information does not affect any other portions of my prefilled written or oral testimony, and does not affect any of the conclusions stated in my prefilled written or oral testimony or the conclusions stated in SER Supplement 1, regarding the Applicant's AMP for buried piping and tanks.<sup>1</sup>

8. I have reviewed the Joint Declaration submitted by Entergy's witnesses (Ex. ENT000607), including the statements summarized in Paragraph 5 above. Based on my review, I agree (a) that the new information does not affect the BPTIP descriptions provided in the IP2 and IP3 UFSAR Supplements, or Entergy's Commitments 3 and 48; (b) that no change has been made to the total number of excavated direct visual inspections of in-scope buried piping to be conducted prior to and during the PEO, or to Entergy's use of the risk-ranking process described in the Supplements to the IP2 and IP3 UFSAR; (c) that the revisions are consistent with Staff guidance in LR-ISG-2011-03 (Ex. NRC000162); and (d) that the revisions have no effect on the conclusion in SER Supplement 1 that Entergy is performing a sufficient number of risk-informed inspections.

---

<sup>1</sup> For example, in my prefilled written testimony, I described the Applicant's proposed inspection schedule, noting that "the Applicant has committed to conduct a total of at least 94 excavated direct visual inspections, as follows: 34 excavated direct visual examinations of in scope buried piping prior to the period of extended operation [("PEO")], and 30 excavated direct visual examinations of in-scope buried piping during each ten year period during the 20-year period of extended operation." Staff Testimony on Contention NYS-5 (Ex. NRCR20016), at 39. I further testified that "[t]his number of inspections is sufficient to provide a good understanding of coating and backfill conditions for buried in-scope piping." *Id.* In addition, I noted that "the Applicant's AMP requires that the selection of inspection locations be risk informed, thus ensuring that the scheduled inspections are conducted in the areas that will have the highest consequence as a result of potential leakage and/or the highest risk of corrosion." *Id.* at 32. These statements and conclusions are not affected by the new information contained in Ex. ENT000606 and Ex. ENT000607.

9. I hereby declare under penalty of perjury that the foregoing statements are true and correct to the best of my knowledge, information and belief.

Executed in Accord with 10 C.F.R. § 2.304(d).

William C. Holston  
Senior Mechanical Engineer  
Division of License Renewal  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555  
(301) 415-8573  
[William.Holston@nrc.gov](mailto:William.Holston@nrc.gov)

Dated at Rockville, Maryland  
this 22<sup>nd</sup> day of April 2013