



**Entergy Nuclear Northeast**  
Indian Point Energy Center  
450 Broadway, GSB  
P.O. Box 249  
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Fred Dacimo  
Site Vice President  
Tel 914 734 6700

May 22, 2007

Re: Indian Point Unit 3  
Docket No. 50-286  
NL-07-067

Document Control Desk  
U.S. Nuclear Regulatory Commission  
Mail Stop O-P1-17  
Washington, DC 20555-0001

Subject: **Reactor Vessel Lower Head Inspection Results;  
Indian Point Unit 3, Spring 2007 Refueling Outage (3R14)**

Dear Sir or Madam:

Entergy Nuclear Operations, Inc (ENO) is voluntarily providing the Reactor Vessel Lower Head Inspection Report (Attachment 1) for Indian Point Unit 3 (IP3). The inspection was performed during refueling outage 3R14 that was completed on March 30, 2007. The inspection consisted of a visual examination of the lower head region adjacent to each bottom mounted instrumentation (BMI) penetration including the annulus region between the penetration and the Alloy 600 weld pad.

Based on the results of this inspection, ENO concludes that there is no evidence of leakage resulting from a breach of the lower head penetrations or the attaching j-groove weld (i.e. no "popcorn-like" evidence of boron deposits at the annulus between the penetration and the weld pad).

No new commitments are being made in this letter. If you have any questions, please contact Mr. T.R. Jones, Manager, Licensing at (914) 734-6670.

Sincerely,

A handwritten signature in black ink, appearing to be "Fred R. Dacimo", written over a circular stamp or seal.

Fred R. Dacimo  
Site Vice President  
Indian Point Energy Center

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Attachment 1 (Reactor Vessel Lower Head Inspection Results; Indian Point Unit 3, Spring 2007  
Refueling Outage (3R14))

cc: see next page

cc: Mr. John P. Boska, Senior Project Manager, Section 2  
Project Directorate I  
Division of Licensing Project Management  
U.S. Nuclear Regulatory Commission

Mr. Samuel J. Collins  
Regional Administrator, Region 1  
U.S. Nuclear Regulatory Commission

Resident Inspector's Office  
Indian Point Unit 3 Nuclear Power Plant  
U.S. Nuclear Regulatory Commission

Mr. Paul Eddy  
New York State Dept. of Public Service

**ATTACHMENT 1 TO NL-07-067**

**REACTOR VESSEL LOWER HEAD INSPECTION RESULTS;  
INDIAN POINT UNIT 3, SPRING 2007 REFUELING OUTAGE (3R14)**

**ENTERGY NUCLEAR OPERATIONS, INC.  
INDIAN POINT NUCLEAR GENERATING UNIT NO. 3  
DOCKET NO. 50-286**

REACTOR VESSEL LOWER HEAD INSPECTION RESULTS;  
INDIAN POINT UNIT 3, SPRING 2007 REFUELING OUTAGE (3R14)

**(1) Summary of Inspections Performed**

During the recently completed 3R14 refueling outage, Indian Point Unit 3 (IP3) performed a bare metal visual (BMV) examination of the lower head region adjacent to each of the 58 lower head penetrations including 360° of the annulus region between the penetration and the Alloy 600 weld pad.

**(2) Extent of the Inspections**

As discussed in item (1) above, each of the 58 lower RPV head penetrations were inspected including the Alloy 600 weld pad and 360° of the annulus between the penetration and the weld pad.

**(3) Method Used**

This inspection was a visual examination performed with remote video equipment and provided a resolution equivalent to the ASME Section XI VT-2 requirements as a minimum. The inspection results were reviewed by certified VT-2 personnel meeting the requirements of ASME Section XI.

**(4) Description of the As-Found Condition of the Lower Head**

The inspections were performed in the beginning of the refueling outage (i.e. prior to refueling operations) and identified no evidence of leakage resulting from a breach of the lower head penetrations or the attaching j-groove weld (i.e. no "popcorn-like" evidence of boron deposits at the annulus between the penetration and the weld pad). No penetrations were identified with boron residue at or adjacent to the annulus region.

**(5) Findings of Relevant Indications of Through Wall Leakage**

The inspections performed during 3R14 identified no evidence of leakage resulting from a breach of the lower head penetrations or the attaching j-groove weld.

**(6) Summary of the Disposition of any Findings of Boric Acid Deposits and any Corrective Actions taken as a Result of Indications Found**

As discussed above, the inspections performed during 3R14 identified no evidence of leakage resulting from a breach of the lower head penetrations or the attaching j-groove weld. No penetrations were identified with boron residue at or adjacent to the annulus region. No corrective actions were necessary as a result of these inspections.

**References**

1. NRC Bulletin 2003-02, "Leakage from Reactor Pressure Vessel Lower Head Penetrations and Reactor Coolant Pressure Boundary Integrity", dated August 21, 2003
2. Entergy letter to NRC (NL-03-178); "90-Day Response to NRC Bulletin 2003-02 Regarding Leakage from Reactor Pressure Vessel Lower Head Penetrations and Reactor Coolant Pressure Boundary Integrity", dated November 13, 2003