



**Entergy Nuclear Northeast**  
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Fred Dacimo  
Site Vice President  
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July 12, 2006

Re: Indian Point Unit 2  
Docket No. 50-247  
NL-06-065

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 2, Spring 2006 Refueling Outage (2R17)**

**Reference:**

- 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-05-002); "Reactor Vessel Lower Head Inspection Results; Indian Point 2, Fall 2004 Refueling Outage 2R16", dated January 17, 2005

Dear Sir:

This letter provides the Reactor Vessel Lower Head Inspection Results (Attachment 1) for Indian Point Unit 2 (IP2) that was performed during refueling outage 2R17 which was completed on May 19, 2006. The inspection was performed in accordance with the commitment provided in Reference 2.

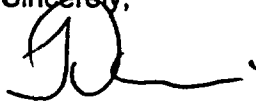
The inspection consisted of non-visual non-destructive examination (NDE) on each of the 58 lower head bottom mounted instrumentation (BMI) penetrations. The inspection identified no evidence of leakage resulting from a breach of the lower head BMI penetrations or the attachment welds. No recordable indications were found.

Based on the results of the NDE examinations during 2R17, there were no indications of degradation of the BMI penetrations. Entergy Nuclear Operations, Inc (ENO) is currently planning to visually inspect the lower head during 2R18.

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There are no new commitments made by Entergy contained in this letter. If you have any questions, please contact Mr. Patric W. Conroy, Manager, Licensing at (914) 734-6668.

Sincerely,

A handwritten signature in black ink, appearing to read 'Fred R. Dacimo', with a stylized flourish at the end.

Fred R. Dacimo  
Site Vice President  
Indian Point Energy Center

Attachment 1 (Reactor Vessel Lower Head Inspection Results; Indian Point Unit 2, Spring 2006  
Refueling Outage (2R17))

cc: see next page

cc: Mr. John P. Boska  
U.S. Nuclear Regulatory Commission

Mr. Samuel J. Collins  
U.S. Nuclear Regulatory Commission

Resident Inspector's Office  
Indian Point Unit 2 Nuclear Power Plant  
U.S. Nuclear Regulatory Commission

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

**ATTACHMENT 1 TO NL-06-065**

**REACTOR VESSEL LOWER HEAD INSPECTION RESULTS;  
INDIAN POINT UNIT 2, SPRING 2006 REFUELING OUTAGE (2R17)**

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

**REACTOR VESSEL LOWER HEAD INSPECTION RESULTS;  
INDIAN POINT 2, SPRING 2006 REFUELING OUTAGE (2R17)**

This report provides the Reactor Vessel Lower Head Inspection results for Indian Point Unit 2 (IP2) that was performed during refueling outage 2R17 which was completed on May 19, 2006. The inspection was performed in accordance with the commitment provided in Reference 2.

**(1) Summary of Inspections performed**

During the recently completed 2R17 refueling outage, IP2 completed non-visual NDEs on each of the 58 lower head bottom mounted instrumentation (BMI) penetrations.

**(2) Extent of the Inspections**

As discussed in item (1) above, each of the 58 lower RPV head penetrations were inspected. The examination covered the Alloy 600 BMI instrumentation tube volume from two inches above the highest point to two inches below the lowest point of the BMI penetration weld.

**(3) Method Used**

The inside surface of the BMI tube was inspected with a combination of volumetric (i.e., ultrasonic, UT) and surface (i.e., eddy current, ECT) examination techniques using BMI UT/ET probes

The inspection results were reviewed by certified Level II or Level III personnel, meeting the requirements of ASME Section XI.

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

The above inspections identified no evidence of leakage resulting from a breach of the lower head penetrations or the attachment welds. No recordable indications were found.

**(5) Findings of relevant indications of through wall leakage**

The inspections performed during 2R17 identified no evidence of leakage resulting from a breach of the lower head penetrations or the attachment welds.

**(6) Summary of the disposition of any findings of boric acid deposits and any corrective actions taken as a result of indications found**

Based on the results of the NDE examinations there were no indications of degradation of the BMIs. Therefore, no corrective actions or root cause determinations were deemed necessary.

**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 dated January 17, 2005 (NL-05-002); "Reactor Vessel Lower Head Inspection Results; Indian Point 2, Fall 2004 Refueling Outage (2R16)"