

August 2, 2005

Mr. Michael R. Kansler
President
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

SUBJECT: INDIAN POINT NUCLEAR GENERATING UNIT NO. 2 - RESPONSE TO NUCLEAR REGULATORY COMMISSION BULLETIN 2003-02, "LEAKAGE FROM REACTOR PRESSURE VESSEL LOWER HEAD PENETRATIONS AND REACTOR COOLANT PRESSURE BOUNDARY INTEGRITY" (TAC NO. MC0542)

Dear Mr. Kansler:

On August 21, 2003, the Nuclear Regulatory Commission (NRC) issued NRC Bulletin 2003-02, "Leakage from Reactor Pressure Vessel Lower Head Penetrations and Reactor Coolant Pressure Boundary Integrity," to the industry. This bulletin informed addressees that current methods of inspecting the reactor pressure vessel (RPV) lower heads may need to be supplemented with bare-metal visual inspections in order to detect reactor coolant pressure boundary leakage. The bulletin also requested these addressees provide the NRC with information related to inspections that have been performed to verify the integrity of the RPV lower head penetrations.

The bulletin requested that addressees provide a description of the RPV lower head penetration inspection program that would be implemented at their respective plants during the next and subsequent refueling outages. This description was to include the extent of the inspection, the inspection methods to be used, the qualification standards for the inspection methods, the process used to resolve the source of findings of boric acid deposits or corrosion, the inspection documentation to be generated, and the basis for concluding that their plant satisfied applicable regulatory requirements related to the structural and leakage integrity of the RPV lower head penetrations.

By letter dated November 13, 2003, Entergy Nuclear Operations, Inc. (Entergy) provided its response to this request. Entergy described its plans to perform a 360-degree bare-metal visual examination of all 58 RPV lower head penetrations during the fall 2004 refueling outage at Indian Point Nuclear Generating Unit No. 2 (IP2). In its same response, Entergy indicated that it planned to perform this bare-metal visual inspection during subsequent refueling outages, beyond the fall 2004 refueling outage, unless industry experience or site-specific observations indicate the need for an alternate inspection approach. As such, Entergy is requested to notify the NRC staff in writing of any changes to this commitment prior to implementation.

The bulletin also requested that addressees provide a summary of the RPV lower head penetration inspection that was performed at their plants, the extent of the inspection and the methods used, a description of the as-found condition of the lower head, any findings of relevant indications of through-wall leakage, and a summary of the disposition of any findings of boric acid deposits and any corrective actions taken as a result of indications found.

By letter dated January 17, 2005, Entergy provided a summary of its inspection results at IP2 for the fall 2004 refueling outage. Entergy reported that a bare-metal visual examination was performed on the 58 RPV lower head penetrations that included each Alloy 600 penetration, the Alloy 600 weld pad, and the 360-degree circumference around the annulus between the penetration and the weld pad. There was no reactor coolant system pressure boundary leakage observed.

Based on its review of Entergy's responses to NRC Bulletin 2003-02, the NRC staff finds that Entergy has met the reporting requirements of the bulletin for IP2. Accordingly, TAC No. MC0542 is closed for IP2.

Sincerely,

/RA/

John P. Boska, Senior Project Manager, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

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M. Kansler

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Sincerely,

/RA/

John P. Boska, Senior Project Manager, Section 1
Project Directorate I
Division of Licensing Project Management
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