

April 8, 2002

Mr. Michael R. Kansler
Senior Vice President and
Chief Operating Officer
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

SUBJECT: BULLETIN 2001-01, "CIRCUMFERENTIAL CRACKING OF REACTOR PRESSURE VESSEL HEAD PENETRATION NOZZLES," RESPONSES FOR INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 AND 3 (TAC NOS. MB2634 AND MB2635)

Dear Mr. Kansler:

On August 3, 2001, the U.S. Nuclear Regulatory Commission (NRC) issued Bulletin 2001-01, "Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles," requesting licensees to provide information related to the structural integrity of the reactor pressure vessel head penetration (VHP) nozzles for their respective facilities. The information requested from the licensees included the extent of VHP nozzle leakage and cracking that has been found to date, the inspections and repairs that have been undertaken to satisfy applicable regulatory requirements, and the basis for concluding that their plans for future inspections will ensure compliance with applicable regulatory requirements at their respective pressurized-water reactor plants. In this regard, you were requested to respond to Items 1 and 4 of the Bulletin within 30 days of its issuance.

In a letter dated September 4, 2001 (ADAMS Accession Nos. ML012500124), Consolidated Edison Company of New York, Inc. (the former licensee) responded to Bulletin 2001-01 for Indian Point Nuclear Generating Unit No. 2 (IP2) and indicated that Entergy Nuclear Operations, Inc. would supplement the response in 30 days because of the pending license transfer. In a letter dated September 24, 2001 (ADAMS Accession No. ML012710201), you provided the supplemental information for IP2. In a letter dated August 31, 2001 (ADAMS Accession No. ML012610127), you responded to the Bulletin for Indian Point Generating Unit No. 3 (IP3). On November 13, 2001 (ADAMS Accession No. ML020720484), you also provided a supplemental response for Item 4(a) for IP2 and 3 in which you revised the proposed VHP inspection plans. In these letters, you state that IP2 and 3 are classified as having moderate susceptibility to primary water stress corrosion cracking in the VHP nozzles, based on a relative susceptibility ranking of 5 to 30 effective full-power years from the Oconee Nuclear Station, Unit 3, condition.

The NRC staff finds that you have provided the requested information in these response letters. In your November 13 letter, you stated that you plan to perform an effective examination of essentially 100 percent of the VHP nozzles at your next refueling outage for each unit, with "essentially 100 percent" meaning essentially 360 degrees around 100 percent of the VHPs. Although your response does not specify the inspection method and other details for each inspection, you did commit to submit written reports to the NRC staff with additional details regarding the type of inspection(s), applicable qualification requirements and acceptance

criteria, with these reports submitted 90 days before the start of each outage. The NRC staff has concluded that the inspection schedule and scope described in your Bulletin responses provide reasonable assurance that the public health and safety will be maintained at IP2 and 3. Since the proposed inspection scope and schedule described in your response were integral to the staff's findings, it is the staff's expectation that you will submit a revised response to the Bulletin if you make any substantive changes to the schedule and/or scope of future inspections for your plants. If warranted by such changes, the staff will reevaluate this issue for IP2 and 3.

You are reminded that Item 5 of the Bulletin requested the following information within 30 days after plant restart following the next refueling outage:

- a. a description of the extent of VHP nozzle leakage and cracking detected at your plant, including the number, location, size, and nature of each crack detected;
- b. if cracking is identified, a description of the inspections (type, scope, qualification requirements, and acceptance criteria), repairs, and other corrective actions you have taken to satisfy applicable regulatory requirements. This information is requested only if there are any changes from prior information submitted in accordance with this Bulletin.

Sincerely,

/RA/

Patrick D. Milano, Sr. Project Manager, Section I
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-247 and 50-286

cc: See next page

criteria, with these reports submitted 90 days before the start of each outage. The NRC staff has concluded that the inspection schedule and scope described in your Bulletin responses provide reasonable assurance that the public health and safety will be maintained at IP2 and 3. Since the proposed inspection scope and schedule described in your response were integral to the staff's findings, it is the staff's expectation that you will submit a revised response to the Bulletin if you make any substantive changes to the schedule and/or scope of future inspections for your plants. If warranted by such changes, the staff will reevaluate this issue for IP2 and 3.

You are reminded that Item 5 of the Bulletin requested the following information within 30 days after plant restart following the next refueling outage:

- a. a description of the extent of VHP nozzle leakage and cracking detected at your plant, including the number, location, size, and nature of each crack detected;
- b. if cracking is identified, a description of the inspections (type, scope, qualification requirements, and acceptance criteria), repairs, and other corrective actions you have taken to satisfy applicable regulatory requirements. This information is requested only if there are any changes from prior information submitted in accordance with this Bulletin.

Sincerely,

/RA/

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