

October 4, 2001

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

SUBJECT: INDIAN POINT NUCLEAR GENERATING UNIT NO. 2 - REQUEST FOR  
ADDITIONAL INFORMATION REGARDING ONE-TIME EXTENSION OF  
CONTAINMENT INTEGRATED LEAKAGE RATE TEST FREQUENCY  
(TAC NO. MB2414)

Dear Mr. Kansler:

In a letter dated July 13, 2001, Consolidated Edison Company of New York, Inc. (Con Edison) submitted a request to the U.S. Nuclear Regulatory Commission (NRC) to amend the Technical Specifications for the Indian Point Nuclear Generating Unit No. 2 (IP2) to allow the one-time extension of the frequency for the containment integrated leakage rate test. On September 6, 2001, the license for IP2 was transferred from Con Edison to Entergy Nuclear Indian Point 2 and Entergy Nuclear Operations, Inc. (ENO). By letter dated September 20, 2001, ENO requested that the NRC continue to review all requests pending with the NRC at the time of the license transfer which had been submitted by Con Edison.

The NRC staff is reviewing information provided in the July 13 application and has determined that additional information is needed for the staff to complete its evaluation. On September 18, 2001, NRC staff held a telephone conference call with representatives of your staff to discuss the staff's comments. During the conference call, ENO indicated that a response would be provided within 60 days. The specific questions are provided in the enclosed request for additional information (RAI).

If you should have any questions, please do not hesitate to call me.

Sincerely,

*/RA/*

Patrick D. Milano, Senior Project Manager, Section 1  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-247

Enclosure: RAI

cc w/encl: See next page

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Indian Point Nuclear Generating Unit No. 2

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Indian Point Nuclear Generating Unit No. 2

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Request for Additional Information  
Regarding Request for One-Time Extension of Frequency for  
Containment Integrated Leakage Rate Test  
Indian Point Nuclear Generating Unit No. 2

Proposed TS 4.4.A.3

1. The current wording in TS Surveillance Requirement (SR) 4.4.A.3 and the proposed change to this SR refer to the term “exemptions” when discussing modifications to the integrated leakage rate test requirements in Option B of Appendix J to 10 CFR Part 50. Since the proposed change is not an exemption to the stated regulation, revise the proposed changes to SR 4.4.A.3 to refer to “exceptions” as the method for modification.

Supporting Risk Analyses

2. It appears that the change in large early release frequency (LERF) is the change in frequency of Class 3B sequences. Therefore, provide a LERF estimate for the proposed change from a 10-year test interval to a 15-year test interval and the cumulative change from 3 tests at 10-year intervals to having one of the intervals be 15 years.
3. NRC Regulatory Guide 1.174, “An Approach for using Probabilistic Risk Assessment in Risk-Informed Decisions On Plant-Specific Changes to the Licensing Basis,” encourages the use of risk analysis techniques to help ensure and show that the proposed change is consistent with the defense-in-depth philosophy. Consistency with the defense-in-depth philosophy is maintained if a reasonable balance is preserved among prevention of core damage, prevention of containment failure, and consequence mitigation. Therefore, provide an estimate of the change in the conditional containment failure probability for the proposed and cumulative changes.

Inservice Inspection (ISI)

Because the ISI requirements mandated by 10 CFR 50.55a and the leak rate testing requirements of Option B of Appendix J to 10 CFR Part 50 complement each other in ensuring the leak-tight and structural integrity of the containment, the NRC staff needs the following information to complete its review of the license amendment request.

4. The July 13, 2001, application references a Con Edison letter to the NRC that submitted a report titled "Indian Point, Unit 2, 2000 Refueling Outage Inservice Inspection Program Summary Report," dated April 2, 2001. Based on its review of Attachment 3 to this letter, the staff understands that the licensee is using the 1992 Edition and the 1992 Addenda of Subsections IWE and IWL of Section XI of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) for containment ISI. However, it is not clear to what extent areas of the corroded liner plate and penetrations have been defined as requiring augmented inspections (IWE-1240) during the subsequent inspection periods. Please describe any such areas.

Enclosure

5. Attachment 3 to the April 2 Con Edison letter also indicates that liner corrosion and penetration coating degradation were found at various locations on the containment inside surfaces. ASME Code, Section XI, paragraphs IWE-3122.4 and IWE-3512.3 require users to limit the corrosion to 10 percent of the nominal thickness. If the licensee has determined that more than this limit of corrosion is acceptable now (or in the future), please provide a basis for such determination. Discuss how the degraded containment areas have been addressed in the licensee's risk assessment (See also Question 8 below).
6. In Attachment 3 to the April 2 Con Edison letter, the concrete/reinforcing bar degradations have been divided into three distinct zones: Red, Yellow and Green. Discuss whether the licensee plans to repair the "red," and "yellow" areas or accept the reinforcing bar cross section reductions and the associated concrete degradations without repair and factor them into the containment capacity analysis.
7. The stainless steel bellows have been found to be susceptible to trans-granular stress corrosion cracking, and the leakages through them are not readily detectable by Type B testing (See NRC Information Notice 92-20). If applicable, please provide information regarding the inspection and testing of the bellows at IP2, and how the potential bellows degradation has been factored into the licensee's risk assessment.
8. Inspections of some reinforced and steel containments have indicated degradation from the uninspectable (embedded) side of the steel shell and steel liner of the concrete containments. These degradations can only be found by VT-3 or VT-1 examinations if they are through the thickness of the shell or liner or by periodic ultrasonic examination of 100 percent of the uninspectable surfaces. Please discuss how the potential leakage due to age-related degradation mechanisms described above as well as the unrepaired corrosion of the containment components (as indicated in Questions 5 and 6 above) are factored into the risk assessment related to the extension of the containment integrated leakage rate test interval.