July 3, 2000

Mr. A. Alan Blind
Vice President, Nuclear Power
Consolidated Edison Company
of New York, Inc.
Broadway and Bleakley Avenue
Buchanan, NY 10511

SUBJECT: INDIAN POINT NUCLEAR GENERATING UNIT NO. 2 - REQUEST FOR ADDITIONAL INFORMATION REGARDING STEAM GENERATOR OPERATIONAL ASSESSMENT REPORT (TAC NO. MA9288)

Dear Mr. Blind:

In a letter dated June 2, 2000, Consolidated Edison Company of New York, Inc. (ConEd) submitted its condition monitoring and operational assessment reports pertaining to the inspections of the steam generators conducted during the 2000 refueling outage at the Indian Point Nuclear Generating Unit No. 2.

The U.S. Nuclear Regulatory Commission (NRC) staff has been reviewing the ConEd submittal. During telephone conferences with your staff over the past few weeks, the NRC has raised several questions wherein the NRC requires additional information to complete its review. The specific information requested is addressed in the enclosure. In a telephone conversation with representatives of your staff, the NRC discussed this information and obtained agreement that ConEd would provide the additional information requested by July 6, 2000. These questions were sent by facsimile to Mr. John McCann of your staff on June 29, 2000.

If you have any questions regarding this matter, please contact me at (301) 415-1457.

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: As stated

cc w/encl: See next page

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REQUEST FOR ADDITIONAL INFORMATION

STEAM GENERATOR OPERATIONAL ASSESSMENT

INDIAN POINT NUCLEAR GENERATING UNIT NO. 2

1. Use of the burst model in WCAP-15128 for application to Indian Point Unit 2 (IP2) may be inappropriate in view of pressurization rate concerns pertaining to the supporting database for this model as discussed at a June 8, 2000, meeting with the licensee for Arkansas Nuclear One Unit 2. Provide a predicted burst pressure model that takes into account potential uncertainties. The staff has provided you with feedback regarding your probability of detection (POD) assumptions used in the operational assessment for the low row U-bends in meetings on May 3 and June 6, 2000. Provide the staff with an updated operational assessment for this degradation mechanism that incorporates our comments on the burst pressure model and POD.

2. In the June 2 report, ConEd requested approval for 0.85 effective full-power years, which is approximately 10 months of operation. However, your cover letter to the condition monitoring and operational assessment report indicated that you planned to shut down and replace your steam generators at the end of this year. Clarify the actual period of planned operation for the steam generators.

3. The following questions stem from our review of the sludge pile operational assessment, specifically regarding your POD assumption.

    a. Provide the tube numbers for the three IP2 indications used in the development of the POD curve for the sludge pile operational assessment.

    b. Discuss why you did not include all of the available IP2 data in the development of this POD curve. Discuss how the inclusion of this additional IP2 data would influence the POD curve.

    c. Confirm that there was 1997 PlusPoint data available for the indications included in the POD database and discuss why the tubes were dispositioned as “NDD” (no detectable degradation) in 1997.

    d. Discuss how the correlation factor of 1.257 between maximum depth and burst effective average depth applies to data not from IP2.

    e. Discuss why you did not include the signal-to-noise ratios for all of the available plant and IP2-specific data used in the POD database.

Enclosure

4. The following questions stem from our review of the sludge pile operational assessment, specifically regarding your nondestructive examination (NDE) uncertainty assumptions.

   a.. Discuss the database used to develop the NDE uncertainties used in the sludge pile operational assessment. What data went into this database? How does it differ from the POD database? Justify the exclusion of any data not used.

   b. Provide a more detailed discussion of the adjustments you make to raw NDE data.

5. The following questions stem from our review of the sludge pile operational assessment, specifically regarding your growth rate assumptions.

   a. Discuss why it is appropriate to apply the 1.257 correlation factor to obtain average depth growth rates from maximum depths growth rates.

   b. Discuss why it is appropriate to combine growth rates from the 1995-1997 cycle with the 1997-2000 cycle. General industry practice has been to use the most bounding cycle of data, and it appears that growth rates from this last cycle were higher than in the previous cycle.

   c. Comment on the use of an NDE uncertainty on growth rates of ±10%. This value appears very optimistic given industry experience with bobbin coil sizing capabilities.

6. Discuss the details of industry experience regarding cracking of a row 3 tube in a Westinghouse steam generator and how that experience reflects the IP2 conditions.

7. Provide primary and secondary side pressure as a function of time immediately following the tube failure event.

8. Page 2-6 of the U-bend operational assessment report is missing some paragraphs.

9. Provide a commitment to close the open items identified in section 2.3 of the U-bend operational assessment report prior to startup.

10. Supplement section 7.0 of the U-bend operational assessment report with a discussion of outside diameter stress corrosion cracking experience with small radius U-bends.