Consolidated Edison Company of New York, Inc. 4 Irving Place, New York, NY 10003 Telephone (212) 460-2533

September 7, 1984

Re:

Indian Point Unit No. 2 Docket No. 50-247

Director of Nuclear Reactor Regulation U. S. Nuclear Regulatory Commission Washington, D. C. 20555

ATTN: Mr. Steven A. Varga, Chief Operating Reactors Branch No. 1 Division of Licensing

Dear Mr. Varga:

By letter dated August 16, 1984, you requested additional information regarding what was described as a potential flaw indication on the Indian Point Unit 2 reactor vessel. Your reference was to ultrasonic testing conducted in connection with our ten year inservice inspection program the results of which we reported to NRC on August 11 and 13, 1984. This is a partial response to your letter. Specifically, we are providing a response to Item III of the Attachment to your August 16 letter, which stated:

## "III. Fracture Mechanics Evaluation

To provide assurance of the continuing structural integrity of the reactor vessel, the licensee should perform a fracture mechanics evaluation assuming that the flaw indication has the following dimensions:

- the estimated size of the flaw indication,
- 2. the size of the flaw indication required to be reported based on the Section XI sizing criteria, and
- 3. the maximum possible flaw size determined from the investigation in paragraph I."

In response to Item III, a detailed fracture mechanics evaluation has been performed by Westinghouse according to ASME B&PV Code Section XI. Item III asked that three different indication dimensions be analyzed. However, the enclosed analysis of a substantially larger sized indication



than that found as a result of our reinspections employing different transducer arrangements demonstrates that even a much larger indication would not require repair, nor affect the operational characteristics of Based upon our investigation, the maximum the vessel in any way. indication size that could be postulated in the Unit 2 vessel is 0.3" deep and 2.0" long, located on the outside surface of the vessel. However, in order to insure conservatism in the calculations, and to envelope the three dimensions referred to in your August 16 letter, for purposes of the fracture mechanics evaluation we assumed a hypothetical surface flaw 1.45 inches in depth and 2.90 inches in length. fracture mechanics evaluation was conducted in accordance with ASME Code procedures using flaw characterization rules of Section XI. As you know, the evaluation process requires an assumption that there is a "crack" or "flaw", which is then analyzed for possible growth under conditions of assumed transients. For the reasons stated above and in our letter of August 13, 1984, this is an unrealistic set of assumptions made solely for the purpose of the requested fracture mechanics evaluation.

The results of the fracture mechanics analysis are set forth in the enclosed copies of "Fracture Mechanics Evaluation of Inservice Inspection Indication-Indian Point Unit 2 Reactor Vessel", WCAP-10650 (Non-Proprietary) and WCAP-10651 (Proprietary Class 2).

The information provided in WCAP-10651 is proprietary to Westinghouse Electric Corporation, and it is supported by previously submitted affidavits signed by Westinghouse, the owner of the information. The affidavits set forth the basis on which the information may be withheld from public disclosure by the Commission and address with specificity the considerations listed in paragraph (b) (4) of Section 2.790 of the Commission's regulations.

Accordingly, it is respectfully requested that all information which is proprietary to Westinghouse be withheld from public disclosure in accordance with 10 CFR Section 2.790 of the Commission's regulations. In support of this request, forwarded herewith is Westinghouse letter CAW 84-83 from Mr. Robert A. Wiesemann to Mr. Steven A. Varga dated August 23, 1984. Note that this present Consolidated Edison submittal is the reference document identified in the Westinghouse CAW-84-83 letter.

Correspondence with respect to the proprietary aspects of this request for withholding or the supporting Westinghouse affidavits should be addressed to R.A. Wiesemann, Manager, Regulatory and Legislative Affairs, Westinghouse Electric Corporation, P. O. Box 355, Pittsburgh, Pennsylvania, 15230.

We are continuing our work on the remaining items requested in your August 16 letter. However, all of the evidence available to date shows that the indication is without significance from an operating or safety standpoint.

Should you or your staff have any other questions, please contact me.

Very/truly yours

John D. O'Tool

attach.

Cc: Mr. Darrell G. Eisenhut, Director
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

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