John D. O'Toole
Vice President

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

September 21, 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 inquiry followed ultrasonic testing we conducted during our ten year inservice inspection program and the results we reported to NRC in a meeting on August 11, 1984 and by letter dated August 13, 1984.

The purpose of this letter is to summarize the results of the additional investigations and evaluations we have undertaken both on the vessel and on mockups to definitively characterize the reported indication and to respond to specific NRC staff requests for additional information.

Based on the ultrasonic evaluation results we have concluded that the indication is a single reflector a maximum depth of 0.26 inches and no greater than 0.85 inches long. The indication is in the weld material of the longitudinal weld seam at vessel location 345° in the lower shell course at the intersection of the lower shell course to middle shell course circumferential weld, 236 inches below the vessel flange. The indication size is well within ASME Code Section XI requirements for allowable flaw size and therefore requires neither repair hor augmented inservice inspection.

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In response to Item III of your August 16, 1984 letter, a detailed fracture mechanics evaluation of a much larger postulated indication (2.9 inches long, 1.45 inches deep) was performed. That evaluation, transmitted by letter dated September 7, 1984, considered a broad spectrum of transient loadings and demonstrated that even the larger indication would not require repair, nor affect the operational characteristic of the vessel in any way.

With these additional evaluations and analyses, we have completed our investigation of the reactor vessel indication and answered in detail, all of the questions posed by the NRC Staff. All studies conducted by the Company and its expert consultants have shown that the indication is without significance from an operating or safety standpoint. Accordingly, we request your prompt review of this matter so that Indian Point Unit No. 2 may be returned to service as scheduled.

Attachment A to this letter documents the investigation of the ultrasonic indication and the evaluation of the ultrasonic techniques employed. The ultrasonic evaluation work was performed by Westinghouse, our prime contractor for inservice reactor vessel inspection and the results reviewed by both Con Edison and by a representative of Combustion Engineering (the vessel manufacturer), retained as a consultant to Con Edison. Attachment B contains our response to the remaining questions contained in the attachment to your August 16, 1984 letter. As noted above a detailed fracture mechanics evaluation of the indication was previously submitted by letter dated September 7, 1984 in response to Item III of that attachment. Attachment C contains our response to four additional NRC staff requests contained in an August 28, 1984 memorandum from William V. Johnston to Harold R. Denton through Richard H. Vollmer concerning the August 14 through 17, 1984 meeting with NRC staff and consultants and Con Edison staff and consultants relating to this issue. Attachment D contains our response to six additional NRC staff questions, concerning the fracture mechanics evaluation transmitted by letter dated September 19, 1984.

Should you or your staff have any additional questions, please contact us.

Very truly yours,

John D. O'Toole

John D. O'Toole
Vice President

Attachment

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

Senior Resident Inspector
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