Stephen E. Quinn
Vice President

Consolidated Edison Company of New York, Inc.
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January 25, 1995

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

Document Control Desk
US Nuclear Regulatory Commission
Mail Station P1-137
Washington, DC 20555

SUBJECT: Extended RPI Deviation Limits and On-Line Calibration of the RPI Channels for Indian Point Unit No. 2

This letter is in response to our January 5, 1995 telephone conference. Per your request enclosed is a revised non-proprietary version of the report on the captioned subject entitled "Extended RPI Deviation Limits and On-line Calibration of the RPI Channels for Indian Point Unit No. 2", January, 1995 NET-085-02-NP Revision 1. The attachment provides the additional information you requested in the telephone conference.

We trust that this additional information and the revised report resolve remaining staff questions, and will permit completion of NRC review of our application.

Should you have any questions regarding this matter, please contact Mr. Charles W. Jackson, Manager, Nuclear Safety and Licensing.

Very truly yours,

Stephen E. Quinn

cc: Mr. Thomas T. Martin
Regional Administrator - Region I
US Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Mr. Francis J. Williams, Jr., Project Manager
Project Directorate I-1
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ATTACHMENT

Approval of the extended deviation, limits and on-line calibration technique would provide cost savings to Con Edison, reduced outage time and result in less thermal transients to the plant.

We have estimated the savings to Con Edison when the method is implemented. The first savings would occur should the calibration be required while the plant is on line. At present, the plant would have to be shutdown, the calibration performed and the plant returned to power. This must be contrasted with reducing power to 50%, performing the calibration and returning to full power. It is estimated that for each such occurrence a savings of one full day would be achieved at a savings of approximately $400,000. We have already experienced a forced shutdown February 9, 1984 to recalibrate and we have been close a few times. In terms of how may rods would be recalibrated, based on the number of groups, the maximum number of rods that could be out of calibration would be 14, however the maximum expected is typically 3-6 rods. To calibrate each rod would take approximately 15 minutes. Currently 3 RPIs are either out of calibration or are intermittently indicating out of cal.

The other savings would accrue by doing the initial cycle calibration at power rather than at shutdown. Typically the soak period at hot shutdown to achieve equilibrium is 48 hours. Past outage history has indicated that without this soak period, a recalibration would always be necessary after the initial calibration. With the on-line method, equilibrium could be achieved at some hold point at reduced power (probably at the chemistry hold at 30% power). Since the plant would be at a hold point, there would be sufficient time to soak (the power increase to 30% would also represent soak time). Also, since the plant would be at a hold there would be sufficient time in parallel to do the calibration. It is estimated that by doing the initial cycle calibration at power 36 hours of outage time could be saved, with a savings of 600,000. This would result in significant savings over the remainder of license period.

Notwithstanding these cost savings, on-line RPI calibration precludes the need to bring the reactor to the hot shutdown condition. Bringing the plant to the hot shutdown condition represents a greater challenge to the system than maintaining the plant on-line and at power.