

John D. O'Toole  
Assistant Vice President

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

REGULATORY DOCKET FILE COPY

December 28, 1977

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



Director of Nuclear Reactor Regulation  
ATTN: Mr. Robert W. Reid, Chief  
Operating Reactors Branch No. 4  
Division Of Operating Reactors  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Dear Mr. Reid:

On July 21, 1977, following discussions with Westinghouse Electric Corporation, Con Edison determined that an operating average primary coolant temperature ( $T_{avg}$ ) resulting in a core inlet temperature ( $T_{inlet}$ ) below that assumed in the 10 CFR 50, Appendix K, ECCS analyses may result in a higher calculated maximum peak clad temperature (PCT) following a postulated loss-of-coolant accident (LOCA). Subsequent generic ECCS sensitivity studies performed by Westinghouse indicated an approximately  $4^{\circ}F$  increase in PCT per  $1^{\circ}F$  reduction in  $T_{inlet}$ . Since the Indian Point No. 2  $T_{inlet}$  of  $522^{\circ}F$  is  $25^{\circ}F$  below the  $T_{inlet}$  of  $547^{\circ}F$  assumed in the ECCS analyses, an estimated maximum correction of  $100^{\circ}F$  in PCT was applied to the worst break case ( $DECLG, C_D=1.0$ ) increasing the calculated maximum PCT from  $2004^{\circ}F$  to  $2104^{\circ}F$ . The entire matter was the subject of Reportable Occurrence R.O.-77-2-15(A) as reported in letters dated July 22, 1977 and August 4, 1977 from Mr. William J. Cahill, Jr. to Mr. James P. O'Reilly, then Director of the Region I Office of Inspection and Enforcement.

As discussed with members of the Regulatory Staff, an additional Indian Point Unit No. 2 ECCS large break analysis has been performed for the limiting case ( $DECLG, C_D=1.0$ ) and is provided in the attached document entitled, "Analysis of the Emergency Core Cooling System in Accordance with the Acceptance Criteria of 10 CFR 50.46 and Appendix K of 10 CFR 50." This reanalysis has been performed in accordance with the NRC approved October 1975 Westinghouse Evaluation Model and assumes a conservative  $T_{inlet}$  of  $517^{\circ}F$  and consistent secondary side initial conditions. The results of this specific Indian Point Unit No. 2 reanalysis yield a calculated maximum PCT of  $2087^{\circ}F$  for the limiting break size. Thus, the calculated maximum PCT remains substantially below the 10 CFR 50, Appendix K, acceptance criteria of  $2200^{\circ}F$ .

8111100087 771228  
PDR ADOCK 05000247  
P PDR

780030232

Should you or your Staff have any questions regarding this re-analysis, we will be pleased to discuss them with you?

Very truly yours,

A handwritten signature in cursive script, reading "John D. O'Toole", followed by a long horizontal line extending to the right.

John D. O'Toole  
Assistant Vice President

attach.