

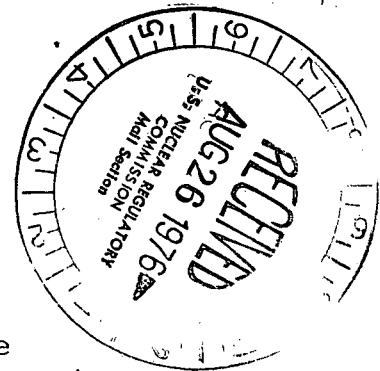
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Consolidated Edison Company of New York, Inc.
4 Irving Place, New York, N Y 10003
Telephone (212) 460-3819

August 24, 1976

Re: Indian Point Unit No. 3
Docket No. 50-286
R.O.-76-3-28(A) - Update Report

Mr. James P. O'Reilly, Director
Office of Inspection and Enforcement
Region 1
U.S. Nuclear Regulatory Commission
King of Prussia, Pa, 19406



Dear Mr. O'Reilly:

Attached is an update report for Reportable Occurrence R.O.-76-3-28(A). A paragraph, indicated in the attachment with a change bar, was inadvertently omitted from the previous report submitted on August 18, 1976.

Three copies of this letter and the attachment are also enclosed.

Very truly yours,

William J. Cahill, Jr.
William J. Cahill, Jr.
Vice President

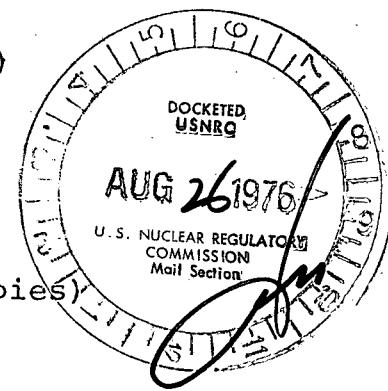
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Attachment

Copy to Dr. Ernst Volgenau, Director (40 copies)
Office of Inspection and Enforcement

Mr. Robert W. Reid, Chief (3 copies)
Operating Reactors Branch No. 4
Office of Nuclear Reactor Regulation

Mr. William G. McDonald, Director (3 copies)
Office of Management Information and
Program Control

Mr. George T. Berry,
General Manager and Chief Engineer
Power Authority of the State of New York



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These reports describe an empirical model for conservatively projecting the magnitude and frequency of rod bow with burnup and identifies generic design margins available to offset corresponding DNB and power spike effects.

Westinghouse has informed Con Edison that the NRC has reached and issued an interim licensing position (D.B. Vassallo to C. Eicheldinger letter dated May 11, 1976) concluding that the generic design margins are adequate to offset bow effects for 15 X 15 fuel design with linear core power densities exceeding that corresponding to 100% rated power operation of the Indian Point Unit No. 3 plant. Thus, no additional penalty or information is required to account for the power spike effect on F_Q (for LOCA), and the extent of fuel rod bow, as a function of burnup.

However, recent data on the effect of fuel rod bow on DNB, results in larger DNB penalties. The NRC requires that $F_{\Delta H}$ be reduced to account for loss of DNB margins, or that existing margins be used to demonstrate that the $F_{\Delta H}$ penalty is not required. These margins were specifically identified to be above design reactor coolant flow and/or decreased reactor core inlet temperature (and an associated overtemperature trip set-point modification).

Indian Point Unit No. 3 has considerably greater reactor coolant flow than design (about 9% greater) and a lower reactor coolant inlet temperature (about 2 to 3°F lower than design); however, for first cycle operation, administrative action will be taken to apply the $F_{\Delta H}$ penalty, with no benefit taken for the demonstrated margins present. Thus, the maximum $F_{\Delta H}$, for first cycle operation, will include a penalty directly proportional to the core average burnup, which varies from 0% at 0 MWD/MTU to 4% at 15,000 MWD/MTU.

In addition, Westinghouse has reviewed the effect of increased upper head region temperature on previous reactor vessel thermal stress evaluations. It has been determined that the new calculated stress values still satisfy the reactor vessel design criteria. Therefore, no overstressing of the Indian Point Unit No. 3 reactor vessel results from the assumption of hot leg temperature in the upper head region.