

BOSTON EDISON COMPANY  
800 BOYLSTON STREET  
BOSTON, MASSACHUSETTS 02199

84-105

App. A

M. J. FELDMANN  
SENIOR VICE PRESIDENT

November 17, 1975

Director of Nuclear Reactor Regulation  
ATTN: D. L. Ziemann, Chief  
Operating Reactors Branch #2  
Division of Reactor Licensing  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Docket No. 50-293  
License No. DPR-35

Single Loop Operation Analyses

Dear Sir:

In an attachment to your June 18, 1975, letter to Mr. M. J. Feldmann of Boston Edison Company, you indicated that a proposal for partial loop operation should be supported by sufficient justification to allow operation in this mode. In a letter dated July 9, 1975, Boston Edison indicated that the Analysis for Partial Loop Operation was being conducted and would be submitted when completed and reviewed. This analysis has now been completed and is hereby submitted in support of single loop operation.

In order to maintain peak cladding temperatures at or below 2200°F during a postulated LOCA while operating with a single recirculation loop, a steady state MAPLHGR limit somewhat lower than the two pump operating limit must be imposed while on single loop operation. The MAPLHGR reduction factor for Pilgrim I has been conservatively calculated to be 0.867.

In addition, jet pump flow characteristics differ between one and two pump operation. Reverse flow through ten of the twenty jet pumps while in single loop operation requires that the equation for the RBM rod block setpoint be modified as indicated in Section 4.2 of NEDO-20999 to provide additional local core protection from the postulated rod withdrawal error. The next time the reactor is operated on single loop operation, testing will be performed to determine the appropriate rod block setting equation, and an additional Technical Specification revision incorporating this limit will be proposed at that time. The limits determined from the testing will be administratively imposed until the future proposed revisions are issued. In accordance with the above statements, Boston Edison hereby amends its submittal of July 9, 1975, by proposing the attached Technical Specification revisions to provide appropriate limits while on single recirculation loop operation. These proposed changes effect Technical Specification Pages 205A and 205C, and add Pages 205M, 205N, 205(O), 205P, 205Q, 205R, and 205S.

A copy of NEDO-20999, the analyses in support of Pilgrim I operation on one recirculation loop, is attached.

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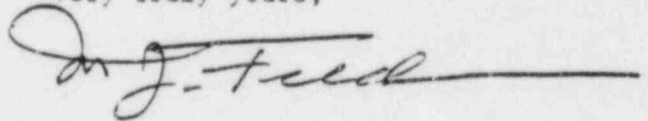
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November 17, 1975  
Page 2

In the interim until these proposed Technical Specification revisions are issued, and since (1) the present Technical Specifications allow operation with a single recirculation loop, and  
(2) justification for single loop operation with the bypass hole plugs has now been provided,  
Boston Edison proposes to operate Pilgrim I on a single recirculation loop as the need arises and within the operational constraints defined herein.

The more conservative of the MAPLHGR's proposed herein as Technical Specifications and .867 times the MAPLHGR's imposed by the NRC order of December 27, 1974 will be utilized as interim limits while on single loop operation until the proposed Technical Specifications are issued.

If you have further questions on this subject, please contact us.

Very truly yours,



(3 originals and 40 copies)

Commonwealth of Massachusetts)  
County of Suffolk )

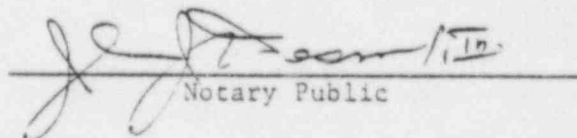
Then personally appeared before me M. J. Feldmann, who, being duly sworn, did state that he is Senior Vice President - Nuclear of Boston Edison Company, the applicant herein, and that he is duly authorized to execute and file the submittal contained herein in the name and on behalf of Boston Edison Company and that the statements in said submittal are true to the best of his knowledge and belief.

My Commission expires:

JOHN J. DESMOND, III, NOTARY PUBLIC  
MY COMMISSION EXPIRES APRIL 29, 1978

Notary: J. J. Desmond  
M. J. Feldmann  
D. W. Edward  
G. C. Andognini  
W. E. Fider  
L. G. Stockley  
J. A. Smith  
E. F. Kearney

Boston Edison Company Reading Room



Notary Public