



## LONG ISLAND LIGHTING COMPANY

SHOREHAM NUCLEAR POWER STATION

P.O. BOX 618, NORTH COUNTRY ROAD • WADING RIVER, N.Y. 11792

Direct Dial Number

April 14, 1983

SNPC-874

Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Response to IE Bulletin 79-26, Revision 1  
License Condition Number 1  
(Section 4.2.3.14 of the SER)  
Shoreham Nuclear Power Station - Unit 1  
Docket No. 50-322

- References:
- 1) General Electric Service Information Letter (SIL) Number 157 Rev. 2 "Control Blade Lifetime" Sept. 1981.
  - 2) Shoreham Nuclear Power Station - Unit 1 Station Procedure SP 57.010.01 Rev 0.

Dear Mr. Denton:

In response to the requirements of IEB 79-26 Revision 1, General Electric formed an operating plant owners group to conduct examinations of control blades from several nuclear power stations with various operating histories. These examinations and the related analytical calculations have provided the basis for recommendations regarding the service life of the control blades, (reference 1).

LILCO has developed a station procedure (reference 2) which reflects the recommendations of the bulletin and the G.E. SIL. The procedure uses existing process computer software to determine the B-10 depletion, averaged over each quarter segment of the control blade. Once Shoreham becomes operational, a controlled record of blade exposure will be developed and periodically updated to provide an operating history and projected exposures through the current and subsequent fuel cycle for each control blade.

8001

8304200304 830414  
PDR ADOCK 05000322  
G PDR

April 15, 1983  
SNRC-874  
Page 2

Generally, if it is expected that any control blade will exceed 34% average B-10 depletion in any quarter segment, the procedure establishes a plant policy to:

Replace the affected control blade at the scheduled refueling outage prior to the blade exceeding the 34% depletion guideline or,

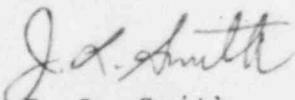
Move the high exposure control blade to a core location where reduced exposure will enable operation for the following fuel cycle without exceeding 34% depletion.

If it has been determined that a control blade has exceeded or will exceed the 34% B-10 depletion criterion before the next refueling outage, an analysis will be performed to quantify the reduction in relative reactivity worth. In all cases the calculated shutdown margin throughout the cycle (accounting for the loss of boron carbide) must be within the Technical Specification requirements.

The referenced station procedure was reviewed by the NRC resident inspector and a regional specialist. As discussed in item 5 of inspection report no. 50-322/81-20, the review determined that the procedure addresses the concerns identified in the bulletin and that the bulletin could be closed.

LILCO believes this information should be sufficient to resolve the license condition for OIE Bulletin 79-26, Revision 1 for the Shoreham Nuclear Power Station - Unit 1.

Very truly yours,



J. L. Smith  
Manager, Special Projects  
Shoreham Nuclear Power Station

RT:bc

cc: J. Higgins  
All Parties Listed in Attachment 1

ATTACHMENT 1

Lawrence Brenner, Esq.  
Administrative Judge  
Atomic Safety and Licensing  
Board Panel  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dr. Peter A. Morris  
Administrative Judge  
Atomic Safety and Licensing  
Board Panel  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dr. James H. Carpenter  
Administrative Judge  
Atomic Safety and Licensing  
Board Panel  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Daniel F. Brown, Esq.  
Attorney  
Atomic Safety and Licensing  
Board Panel  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Bernard M. Bordenick, Esq.  
David A. Repka, Esq.  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

James Dougherty  
3045 Porter Street  
Washington, D.C. 20008

Herbert H. Brown, Esq.  
Lawrence Coe Lanpher, Esq.  
Karla J. Letsche, Esq.  
Kirkpatrick, Lockhart, Hill  
Christopher & Phillips  
8th Floor  
1900 M Street, N.W.  
Washington, D.C. 20036

Mr. Marc W. Goldsmith  
Energy Research Group  
4001 Totten Pond Road  
Waltham, Massachusetts 02154

MHB Technical Associates  
1723 Hamilton Avenue  
Suite K  
San Jose, California 95125

Stephen B. Latham, Esq.  
Twomey, Latham & Shea  
33 West Second Street  
P.O. Box 398  
Riverhead, New York 11901

Ralph Shapiro, Esq.  
Canner and Shapiro, P.C.  
9 East 40th Street  
New York, New York 10016

Matthew J. Kelly, Esq.  
State of New York  
Department of Public Service  
Three Empire State Plaza  
Albany, New York 12223