



# LONG ISLAND LIGHTING COMPANY

SHOREHAM NUCLEAR POWER STATION

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

November 26, 1982

SNRC-798

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

Ref. 1 Letter SNRC-747 dated 8/9/82  
LILCO (J. L. Smith) to NRC, Region I  
(R. C. Haynes)

Dear Mr. Denton:

The Ref. 1 letter responded to an unresolved I & E inspection item (Number 322/82-17-02) concerning containment leak test channels welded to the containment liner and the fact that the vents on these channels would be plugged during the performance of the containment integrated leak rate test (ILRT). As stated in that letter, LILCO's intention not to remove these plugs was considered warranted for several reasons, including the following:

- 1) A detailed evaluation of the leak test channel system showed that the channel integrity is retained when subjected to all appropriate load combinations as defined in the DAR and FSAR.
- 2) Since the plugs are to be in place during operating conditions and NRC policy and industry practice is to perform tests in the operating configuration, the plugs should be in place during testing.
- 3) Construction (welder qualification, material certification, etc.) of the leak test channels was equivalent to the construction of the remainder of the primary containment liner.
- 4) The existing configuration provides a double barrier against potential leak paths from the primary containment to the secondary containment in the area of the containment liner welds.

B029

Mr. Denton  
November 26, 1982  
Page 2

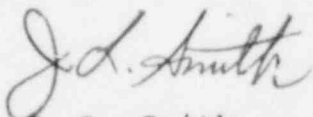
In a 10/26/82 meeting with members of your staff, the NRC essentially concurred with LILCO's approach. LILCO was requested, however, to provide a more detailed substantiation of the adequacy of the leak test angle during the postulated design basis events, which is the purpose of this letter.

The Shoreham nuclear power station containment liner serves as a pressure boundary and leak tight membrane during a postulated accident. The liner was designed using the rules of ASME III 1968 edition as a guide as discussed in Shoreham FSAR Section 3.8.1.2.2 "Steel Liner and Penetrations". The leak test angles were installed to provide a means for testing the liner welds during construction to assure leak tightness of the liner connection welds. The leak test angles were not designed as strength elements or as a pressure boundary. However, the strength of the test angles and the weld connections were evaluated using the loading combinations for steel structures as shown in Shoreham FSAR Section 3.8.4.3.4 "Loading Combinations for Steel Structures" and the Shoreham DAR (Revision 5) Table 2-3A "Load Combinations and Stress Limits for Structural Steel". Using the above loading combinations, the calculation shows that the angles and the weld connections remain intact during the postulated design basis events.

We trust the above is responsive to your request. Your approval is requested as soon as possible so that the present ILRT Test Schedule can be maintained.

Should you have any questions, please contact this office.

Very truly yours,



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

JLS/jm

c.c.: J. Higgins  
All parties