



LONG ISLAND LIGHTING COMPANY

SHOREHAM NUCLEAR POWER STATION

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

JOHN D. LEONARD, JR.
VICE PRESIDENT - NUCLEAR OPERATIONS

SNRC-1449

APR 27 1988

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Humphrey Concerns 3.3 and 3.4
Shoreham Nuclear Power Station - Unit 1
Docket No. 50-322

- References:
- (1) LILCO letter SNRC-824, dated January 28, 1983, (J. L. Smith, Manager, Special Projects) to Harold R. Denton, Director, Office of Nuclear Reactor Regulation, NRC, subject: Humphrey Concerns 3.3 and 3.4
 - (2) NUREG-0420, Safety Evaluation Report related to the operation of Shoreham Nuclear Power Station - Unit No. 1, Supplement No. 4, September 1983
 - (3) Shoreham Nuclear Power Station, Facility Operating License, NPF-36

Gentlemen:

The purpose of this letter is to inform you that, during the course of a detailed review of Shoreham Nuclear Power Station (SNPS) compliance with commitments made to the NRC, Long Island Lighting Company (LILCO) discovered that complete compliance was not achieved with all commitments, as contained in the reference (1) letter, related to the deletion of the Steam Condensing Mode (SCM) during normal operation. The SNPS Project Manager and Resident Inspector were immediately notified of this condition. As explained below, LILCO believes that SNPS is in compliance with the staff conclusions stated in reference (2) and the Condition of License as found in reference (3) and that the closure of manual isolation valves in the Residual Heat Removal (RHR) system, as committed to in reference (1), is unnecessary to ensure that the Steam Condensing Mode of the Residual Heat Removal system will not be used during normal plant operation. However, we request your review, concurrence and approval of the present controls.

8805090084 880427
PDR ADOCK 05000322
P DCD

*Acc'd
1/0 Rec'd
w/out Check*

Reference (1) stated that LILCO had elected to delete the SCM as an operating condition of the RHR system for all normal plant operations at SNPS. Accordingly, LILCO committed to issuing a SNPS standing order to operating personnel prohibiting the use of SCM during normal plant operations. In addition, to preclude inadvertent operation in the SCM, LILCO, in reference (1), had proposed the following:

- a) isolate RHR system pressure control valves 1E11*PCV007A and 1E11*PCV007B (using manual isolation valves);
- b) isolate upstream RHR system pressure control valves 1E11*PCV003A and 1E11*PCV003B (using upstream manual isolation valves);
- c) isolate RHR Heat Exchanger level controllers 1E11*LIC002A and 1E11*LIC002B by closing manual isolation valves; and
- d) isolate RHR Heat Exchanger pressure controllers 1E11*PIC003A and 1E11*PIC003B by closing manual isolation valves.

In reference (2), Section 3.8.2, Concrete and Structural Steel Internal Structures, the NRC staff found "that, given the above commitments^{1/}, the adequacy of Shoreham's Mark II containment has been retained at the level that was found acceptable during the NRC staff's previous review. Therefore, the NRC staff will condition the operating license for Shoreham to delete the SCM as an operating mode for the RHR for all normal plant operations. However, the SCM may be put into service when all other means for core/containment cooling have been lost, such as during postulated severe accidents."

Additionally, in Section 5.4.2.1, Steam Condensing Mode of Residual Heat Removal, of reference (2), the NRC staff found that "the steam condensing mode of RHR is not an essential mode. Moreover, Shoreham does not use SCM for mitigation during transients and accidents. The applicant is committed to the

1/ The "above commitments" refer to reference (1) and specifically cite "(the) SCM will be deleted as an operating mode of RHR for plant operating modes 1, 2 and 3. However, to accommodate certain non-design-basis events involving multiple failures (e.g., station blackout), the applicant stated that the SCM will be retained as an option that will be available for use by the operator when all other sources of core/containment cooling have been exhausted."

precautionary measures described above ^{2/}. For these reasons, the NRC staff has concluded that the applicant's proposal to delete the steam condensing mode of RHR during normal plant operation is acceptable."

In accordance with reference (1), LILCO issued Standing Order #13 on February 13, 1983. This Standing Order is explicit in its prohibition of the use of the SCM. In addition, Section 8.1.7 of plant procedure SP 23.121.01, Residual Heat Removal (RHR) System, has been revised and specifically prohibits the use of SCM during normal operation. The SCM use is limited to the Loss of AC Power emergency procedure, and an explanation is given as to why the limitation exists. Also, operator training further reinforces the prohibition of SCM use.

We wish to advise you that the additional physical commitments proposed by reference (1), items a through d above, have not been implemented and have been determined to be inadvisable. LILCO has determined that isolation of the aforementioned components would have a negative impact on normal RHR system operation and that, in the event of loss of AC power, SCM operation would be very difficult. Pressure control valves 1E11*PCV007A and B, and 1E11*PCV003A and B, which are electro-pneumatically operated and which fail closed with a loss of AC power, are normally closed. However, the valves are equipped with a handwheel so that they can be operated locally. Local manual operation of these valves must be performed with communications set-up between valve operators and those personnel that will be monitoring Heat Exchanger pressure and level. Additionally, manual isolation of the pressure control valves 1E11*PCV007A and B, and 1E11*PCV003A and B (items a and b) would render SCM system use inoperable during a Loss of AC Power event unless operators were dispatched into the plant to manually open these valves. This would be unnecessarily time consuming. Furthermore, isolation of Heat Exchanger level and pressure controllers (items c and d) by closure of manual valves 1E11*01V7053A and B, 1E11*01V7054 A and B, and 1E11*01V7055A and B, will also isolate RHR heat exchanger level and pressure transmitter instrumentation - 1E11*LT002A and B and 1E11*PT003A and B, respectively - and therefore,

2/ The "precautionary measures described above" refer to reference (1) and specifically cite that "the applicant will issue a standing order to operating personnel prohibiting the use of steam condensing during normal plant operations. In addition, valves used in SCM will be maintained normally closed and administratively controlled to preclude inadvertent operation during normal plant operations. However, the applicant anticipates the use of SCM during station blackout when all other means of core/containment cooling have been exhausted."

specifically for PT003A and B, deny Control Room and field personnel information that is routinely used by them to monitor heat exchanger performance. These controllers are also required during routine maintenance - for example, during Heat Exchanger draining and refilling as required by procedure SP 23.121.01. Additionally, if these controllers are isolated, the SCM would not be available in a loss of AC power event. For these reasons, the manual shut off valves associated with these controllers and valves are normally left open.

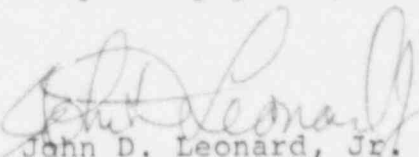
LILCO believes that, with the actions taken to date, there are sufficient administrative controls in place that any additional restrictions on SCM operation are unnecessary. The present controls prevent any inadvertent or accidental use of the SCM, yet keep the SCM available when all means of core/containment cooling have been exhausted.

With the above in mind, LILCO believes that the Shoreham Nuclear Power Station remains in full compliance with the staff conclusions stated in reference (2) and the Condition of License as found in reference (3). However, we request your review and concurrence that our position is acceptable to the staff.

In accordance with the requirements of 10 CFR 170.21, LILCO encloses a \$150.00 check covering the prescribed application fee for this approval request.

Please do not hesitate to call my office or members of my staff should you require additional information regarding this matter.

Very truly yours,



John D. Leonard, Jr.
Vice President - Nuclear Operations

MAP:ck

cc: S. Brown
F. Crescenzo
W. T. Russell