

LILCO, September 30, 1983

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

In the Matter of )

LONG ISLAND LIGHTING COMPANY )

(Shoreham Nuclear Power Station, )  
Unit 1) )

Docket No. 50-322 (OL)

LILCO REPORT REGARDING  
MODIFICATION OF ADS LOGIC

By Order dated September 1, 1983, the Board requested  
that LILCO, by September 30, 1983, inform the Board as follows:

whether it still intends to defer the ADS  
logic modification until the first refueling  
outage in view of the change in fuel load  
schedule subsequent to its August 5, 1983  
letter to the Staff. If so, LILCO shall  
supply the basis for its decision. LILCO  
shall make clear whether its basis depends  
on a reading of the application to Shoreham  
of the schedule set forth in item II.K.3.18  
which differs from the Board's preliminary  
view, or on the opportunity open to an appli-  
cant to establish that the NUREG-0737 imple-  
mentation schedule is not necessary to  
reasonably assure protection of public health  
and safety, or both.

This Report responds to the Board's request for information on  
LILCO's plans concerning the ADS logic modification.

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Item II.K.3.18 of NUREG-0737, "Clarification of TMI Action Plan Requirements," states that the Automatic Depressurization System (ADS) logic should be modified to eliminate the need for manual actuation to assure adequate core cooling. The Boiling Water Reactor Owners' Group (BWROG), of which LILCO is a member, submitted a letter dated October 28, 1982, delineating several modifications which could be made to meet the requirements of item II.K.3.18. The NRC Staff approved two of these modifications in an internal memorandum dated April 1, 1983.

On August 5, 1983, LILCO advised the Staff in SNRC-947 that LILCO would implement approved Option 2 on a schedule consistent with the first refueling outage. This option eliminates the high drywell pressure permissive signal and adds an ADS manual inhibit switch. LILCO has not received a response to this letter, but based on informal discussions with Staff personnel, LILCO understood that the Staff found this schedule acceptable. Based on this premise and based on existing engineering priorities for modifications to be made prior to the first refueling outage, work on a conceptual design was deferred until a later time. Thus, when LILCO received the Board's memorandum dated September 1, engineering work had not yet commenced on the ADS modification. In view of the Board's inquiry and the delay in Shoreham's estimated fuel load date to late in the first quarter or early in the second quarter of 1984, LILCO has

initiated the engineering work associated with this modification.

LILCO now intends to implement this modification prior to fuel load, but notes that initial schedule projections indicate that this may not be possible. The engineering effort requires design interface among LILCO, General Electric and Stone & Webster which will increase the time necessary to complete the design for this modification. Schedule projections based upon the preliminary conceptual design just completed suggest that engineering and material procurement for this modification can be completed sometime in late February, 1984. A firm determination of the implementation schedule cannot be made until the detailed design is completed. Implementation of this modification just prior to fuel load is considerably more difficult than it would have been during the construction phase or during a major outage. Nevertheless, LILCO will make every effort to achieve implementation prior to fuel load.

Upon completion of engineering and material procurement, LILCO will commence implementation of the modification if sufficient time is available prior to the then scheduled fuel load. It is estimated that six to eight weeks will be required to complete the physical work (including mounting new switches on control panels, wiring new annunciators, removing cable tray covers, removing fire stops, and performing cable pulls) to perform preoperational testing, to revise station procedures,

to complete operator training, and to obtain the necessary Review of Operations Committee approval. This preliminary estimate may require revision as the project progresses. If, after approval of the engineering package, insufficient time remains prior to the then scheduled fuel load to complete the modification, LILCO's intention is to defer completion of the work until the first appropriate opportunity after fuel load.


LILCO believes that the current ADS design, with implementation of the BWR Emergency Procedure Guidelines (as was done for Shoreham Emergency Procedures), is adequate for all design basis events which require reactor pressure vessel depressurization to maintain adequate core cooling. Implementation of the ADS modification enhances ADS operation but is not required prior to fuel load reasonably to assure protection of the public health and safety. LILCO believes its view is supported by the fact that the schedule originally proposed for this modification would have allowed LILCO to operate through the first refueling outage without modification.

In summary, in response to the Board's inquiry, LILCO now intends to use its best efforts to install the modification to the ADS system (Option 2) prior to fuel load. Engineering has commenced on a priority basis and procurement is underway. LILCO notes, however, that uncertainties in the fuel load date and the time required to complete the engineering and installation work associated with the modification make it impossible to predict with certainty at this time whether this modification

can be accomplished prior to fuel load. If the modification cannot be completed prior to fuel load, it is LILCO's intention to defer the modification until the first appropriate opportunity after fuel load. But given LILCO's intention to attempt to implement the modification prior to fuel load, LILCO believes it is unnecessary at this time to address the questions whether the NUREG-0737 implementation schedule, as applied to Shoreham, requires implementation of the modification prior to fuel load and, if so, whether such an implementation schedule is necessary to provide reasonable assurance of the public health and safety. Accordingly, LILCO respectfully suggests that the Board defer further consideration of this matter pending receipt from LILCO of a status report on the progress of the implementation of Option 2, which report LILCO proposes to submit on January 15, 1984. LILCO believes it will then be better able to predict with accuracy whether the modification will be completed prior to fuel load.

Respectfully submitted,

LONG ISLAND LIGHTING COMPANY



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DATED: September 30, 1983



LILCO, September 30, 1983

CERTIFICATE OF SERVICE

In the Matter of  
LONG ISLAND LIGHTING COMPANY  
(Shoreham Nuclear Power Station, Unit 1)  
Docket No. 50-322 (OL)

I certify that copies of LILCO's Report Regarding  
Modification of ADS Logic were served this date upon the  
following by first-class mail, postage prepaid, or by hand,  
as indicated by an asterisk:

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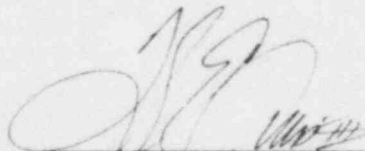
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