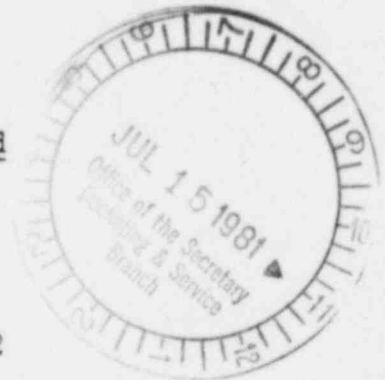


July 13, 1981

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

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



LILCO MOTION FOR SUMMARY DISPOSITION  
OF SOC CONTENTION 12 (PART TWO)

The Contention

By Board Order of June 26, 1980, SOC Contention 12 (part two) was admitted as follows:

The ongoing Mark II test program has recently determined a need to install additional downcomer bracing at least [sic] two GE-BWR plants, LaSalle and Zimmer. Additionally, further Mark II tests are underway and still to be analyzed by the Staff. Because of the potential inadequacy of this design feature, Intervenors contend that the Shoreham primary containment system has not been demonstrated to fulfill the requirements of 10 CFR, Part 50, Appendix A, Criteria 4, 16 and 50.

The Board emphasized that the contention was "limited to the issue of 'downcomer bracing.'" Id. at 3.

Material Facts as to Which  
There is No Genuine Issue to  
Be Heard

1. The original downcomer design used for the LaSalle and Zimmer plants did not include structural bracing of the downcomer system. As a result of the hydrodynamic loads identified in the Mark II program, a decision was made to modify these plants to include a bracing system for their downcomers. See attached McCaffrey Affidavit, concerning SOC Contention 12 (part two).

2. The original downcomer bracing system design at Shoreham already included a bracing system such as the systems recently installed at LaSalle and Zimmer, and thus no new bracing system had to be added at Shoreham. See id.

3. In 1979, the bracing system at Shoreham was lowered in relation to the suppression pool water level in order to minimize impact loading on it. Once lowered, the downcomers were not reconnected to the pedestal or containment structures. An investigation of hydrodynamic, seismic and other loads indicated that interconnection of the downcomers themselves without restraint ties to the pedestal or containment structure is a satisfactory configuration. See id.

4. Submerged structure loads do not affect the adequacy of the downcomer bracing system. See id.

5. The methodology used for Shoreham's steam condensation lateral loads has been reviewed and accepted by the NRC. Using this methodology, these loads do not present a problem for Shoreham. See id.

6. The steam condensation oscillation and chugging loads used for Shoreham are more conservative than load definitions already accepted by the NRC. See id.

7. Fatigue analysis of the Shoreham downcomers is in progress. Preliminary results, presented to the NRC on June 3, 1981, show that there is considerable margin in the fatigue usage factor. See id.

### Argument

#### A.

This contention, as limited by the Board and supplemented by the Answers of the Shoreham Opponents Coalition (SOC) to Applicant's Interrogatories dated May 21, 1981 (SOC's Answers), appears to raise the following issues related to downcomer bracing:

- (1) the existence of downcomer bracing equivalent to that installed at the LaSalle and Zimmer plants;
- (2) the ability of the downcomers to withstand seismic loads after the removal of "downcomer restraint ties to the pedestal and suppression pool wall"; and
- (3) the adequacy of the downcomer bracing system to accommodate submerged structure loads.

See SOC's Answers at H-2.

As shown in the attached McCaffrey Affidavit, none of these issues involves genuine disputes. Shoreham was originally designed with a downcomer bracing system. Material Fact 2. Thus, when the decision was made to modify LaSalle and Zimmer

to install downcomer bracing, nothing needed to be done at Shoreham. Subsequent lowering of the bracing system at Shoreham prompted a review of the need to attach the downcomer bracing to the reactor pedestal or containment wall. Analysis showed that Shoreham retains a large margin of safety without such attachment. Material Fact 3. Finally, LILCO has shown that the adequacy of the downcomer bracing system is not affected by submerged structure loads. Material Fact 4.

Since the Board admitted SOC Contention 12 (part two) limited to the issue of downcomer bracing and all issues concerning the bracing have been resolved as indicated above, that contention should be dismissed pursuant to 10 CFR § 2.749.

B.

SOC's Answers seem to raise three additional issues related to downcomers but not specifically to downcomer bracing:

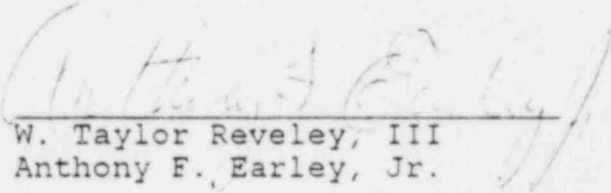
- (4) the ability of the downcomers to withstand steam condensation lateral loads;
- (5) the ability of the downcomers to withstand steam condensation oscillation and chugging loads; and
- (6) the ability of the downcomers to withstand fatigue failure.

As explained in the attached McCaffrey Affidavit, these issues have also all been resolved, although they need not be reached to dismiss SOC Contention 12 (part two).

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Respectfully submitted,

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