

ATTACHMENT 1 TO SNRC-1664

Application to Amend

NPF-82

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LONG ISLAND LIGHTING COMPANY
SHOREHAM NUCLEAR POWER STATION
Docket No. 50-322

APPLICATION FOR AN AMENDMENT TO
FACILITY OPERATING LICENSE NPF-82

I. Introduction

Pursuant to 10CFR50.90, Long Island Lighting Company (LILCO) hereby requests an amendment to Facility Operating License NPF-82 for the Shoreham Nuclear Power Station (Shoreham). LILCO seeks to amend NPF-82 through a series of revisions that, in sum, create a Defueled Facility Operating License.

II. Description of the Proposed Amendment

To facilitate the NRC's review of the license amendment request, LILCO has rewritten NPF-82 in its entirety to include the changes it proposes to make to reflect Shoreham's defueled condition. The license as rewritten, including revised technical specifications (NUREG-1357), is Attachment 2 to this submittal. The revised technical specifications have been changed to include a new set of Limiting Conditions for Fuel Handling and to eliminate all current Limiting Conditions for Operation. The principal changes to NPF-82 and to Shoreham's technical specifications are summarized below.

A. Principal Changes to NPF-82

- (1) Paragraph 2.A has been amended to include a reference to the Defueled Safety Analysis Report, which provides a description of Shoreham in its defueled condition.
- (2) Paragraph 2.B.(1) has been revised to state that LILCO is authorized by the NRC to "possess, use, but not operate the facility" (emphasis added).
- (3) Paragraph 2.C.(1) has been rewritten to provide that LILCO is "not authorized to operate the facility at any core power level."
- (4) The license conditions contained in paragraph 2.C.(3) through (13), which are relevant only to operation, have been removed.
- (5) A new license condition C.(3) has been added to paragraph 2 to require that LILCO obtain prior approval from the NRC Staff before placing any fuel assemblies in the reactor vessel.
- (6) Paragraph 2.D has been changed to impose requirements for the Fire Protection program as described in the Fire Hazards Analysis Report and the Defueled Safety Analysis Report.
- (7) Paragraph 2.E has been changed to refer to the revised security plan entitled "Shoreham Nuclear Power Station Security Plan for Fuel Storage in the Spent Fuel Pool."

B. Principal Changes to NUREG-1357

- (1) All Limiting Conditions for Operation have been removed; Limiting Conditions for Fuel Handling Operations have been established.
- (2) The "Definitions" section has been shortened to reflect the changes made to the balance of the technical specifications.
- (3) The section containing the plant's Safety Limits, which are applicable only to plant operation, has been removed.
- (4) The "Administrative Controls" section has been revised to reflect the organization described in the Defueled Safety Analysis Report, which is adequate to maintain the plant safely in its defueled condition and to conduct fuel handling operations.

III. Defueled Safety Analysis Report

In addition to the "no significant hazards consideration" analysis set forth in Section IV below, the license amendment request incorporates by reference the Defueled Safety Analysis Report (DSAR), which has been prepared by LILCO's Office of Nuclear Operations. The DSAR, which is Attachment 3 to this submittal, provides both a description of the defueled condition in which Shoreham will be placed if LILCO's license amendment request is granted, as well as the technical analysis to support the license amendment request.

IV. Analysis of No Significant Hazards Consideration

Pursuant to 10CFR50.91(a)(1), LILCO has performed a "no significant hazards consideration" analysis, assessing the proposed amendment using the standards set forth in 10CFR50.92(c). Based on this analysis, as presented below, LILCO has determined that the proposed amendment to NPF-82 does not involve a significant hazards consideration.

Section 50.92 provides that the NRC may make a determination "that a proposed amendment to an operating license . . . involves no significant hazards consideration" if "operation of the facility in accordance with the proposed amendment" would not

- (1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or
- (2) Create the possibility of a new or different kind of accident from any accident previously evaluated; or

(3) Involve a significant reduction in a margin of safety.

(emphasis added). Since the requested amendment to NPF-82 constitutes, in sum, a request by LILCO that it not be allowed to operate Shoreham, as a threshold matter it is evident that the amendment to the license does not involve a "significant hazards consideration."

A. The Proposed Amendment Does Not Involve a Significant Increase in the Probability or Consequences of an Accident Previously Evaluated

First, the proposed amendment to NPF-82 does not involve a significant increase in either the probability or the consequences of an accident previously evaluated. The proposed amendment, if granted, would remove LILCO's operating authority and recognize Shoreham's current non-operating and permanently defueled condition.

With Shoreham remaining in a defueled condition, the probability of previously analyzed accidents has, in fact, been significantly reduced. As is noted in the Chapter 15 of the DSAR, Shoreham's spent fuel in is a low burnup condition, and the amount of decay heat being generated by the fuel as of June 1989 is negligible -- approximately 550 watts. With the fuel in such a low burnup condition, the DSAR indicates that active systems for pool water makeup are not required and that passive cooling in the fuel pool is sufficient to maintain fuel cladding integrity.

The DSAR also establishes that the consequences of previously evaluated accidents are greatly decreased with Shoreham in a defueled status. The DSAR reviews the spectrum of accidents evaluated in the Shoreham Updated Safety Analysis Report (USAR) and indentifies those events that apply to the storage and handling of spent fuel. Two events have been found to be relevant: (1) Fuel Handling Accident (USAR Section 15.1.36), and (2) Liquid Radwaste Tank Rupture (USAR Section 15.1.32). For the Fuel Handling Accident, the DSAR calculates that the integrated whole body and skin doses are less than .00005% of the 10CFR Part 100 limits. For the Liquid Radwaste Tank Rupture, the integrated whole body, skin, and maximum organ (lung) doses are less than .0000004% of the 10CFR Part 100 limits. In addition, the DSAR also postulates a "worst case" radiological event, in which the entire gaseous inventory of the entire core is released to the reactor building. For this event the integrated whole body and skin doses are less than .031% of the dose limits established by 10CFR Part 100.

B. The Proposed Amendment Will Not Create the Possibility of a New or Different Kind of Accident from Any Accident Previously Evaluated

Second, the proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated. The amendment does not affect the function or operation of any system or equipment that has been determined to remain in an OPERABLE condition but, rather, conforms Shoreham's license with the plant's existing non-operating and defueled condition. The removal of LILCO's operating authority clearly

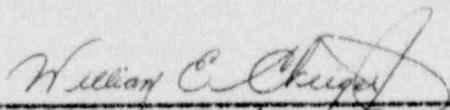
does not create the possibility of a new or different kind of accident, since, as noted above, the only remaining credible events are those associated with fuel handling and storage activities, which have already been analyzed in the USAR and which are reanalyzed for a new set of initial conditions in the DSAR.

C. The Proposed Amendment Does Not Involve a Significant Reduction in a Margin of Safety

Third, the proposed amendment does not involve a reduction in a significant margin of safety. While the amendment, if approved, would remove a large portion of Shoreham's technical specifications, including the Safety Limits section, those technical specifications that would be eliminated are relevant only to activities that would not be permitted under the amended license. Indeed, the proposed new set of technical specifications represent those technical specifications that are needed to store and handle safely Shoreham's irradiated fuel. Since fuel storage and handling are the only activities that will be permitted at Shoreham under the amended license, it necessarily follows that the proposed changes will not reduce the margin of safety that currently exists under the license.

Long Island Lighting Company

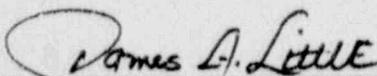
By



William E. Steiger, Jr.
Assistant Vice President
Nuclear Operations

Subscribed and sworn to me this 5th day of January 1990.

JAMES A. LITTLE
NOTARY PUBLIC, State of New York
No. 4886267, Suffolk County
Term Expires May 18, 1991



Notary Public of New York