



Long
Island
Power
Authority

Shoreham Nuclear Power Station
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LSNRC-2044

U. S. Nuclear Regulatory Commission
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Washington, D.C. 20555

Submittal of the 10CFR50.59 Report for the
Period January 1, 1992 Through June 11, 1992
Shoreham Nuclear Power Station - Unit 1
Docket No. 50-322

- Ref: (1) U.S. Nuclear Regulatory Commission (S. W. Brown) letter dated February 29, 1992 to Long Island Lighting Company (J.D. Leonard, Jr.); subject: Issuance of Order Approving Shoreham License Transfer.
- (2) U. S. Nuclear Regulatory Commission (S. W. Brown) letter dated June 11, 1992 to Long Island Power Authority (L. M. Hill); subject: Order Approving the Decommissioning Plan and Authorizing Decommissioning of Shoreham Nuclear Power Station, Unit 1.

Gentlemen:

This letter transmits Enclosure A, Shoreham Nuclear Power Station 10CFR50.59 Report for the period from January 1, 1992 through June 11, 1992. During the period addressed by this report, Long Island Lighting Company (LILCO) was owner and licensee of the Shoreham Station under Possession Only License NPF-82, as amended, from January 1, 1992 through February 28, 1992. Long Island Power Authority (LIPA) became the owner and licensee of the Station on February 29, 1992 (reference 1). On June 11, 1992 the Commission approved LIPA's Decommissioning Plan and authorized the decommissioning of the Shoreham Nuclear Power Station (reference 2). The Decommissioning Order irrevocably removed Shoreham as a production or utilization facility. Subsequent changes to the Decommissioning Plan were performed in accordance with Condition (4) of the Decommissioning Order which states:

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- "(4) The licensee may make changes to the Decommissioning Plan other than those associated with the above conditions provided that:
- (a) Such changes are approved in writing by the onsite review committee;
 - (b) the Director, Office of Nuclear Material Safety and Safeguards is notified of such changes in writing, and is provided with a copy of the written approval by the onsite review committee, not less than 30 days before such changes are implemented; and
 - (c) such changes do not result in an unreviewed safety question or result in environmental impacts different from and exceeding those set forth in the licensee's Supplement to Environmental Report, December 1990.

Changes not meeting the above criteria must be submitted by the licensee to the Director, Office of Nuclear Material Safety and Safeguards for prior NRC review and approval before they may be implemented."

Title 10 CFR Section 50.59(b)(2) requires that this report list those changes, tests and experiments which did not, by safety evaluation, involve an unreviewed safety question and were completed during the reporting period. The activities addressed by the enclosed report (1) were performed during the period January 1, 1992 through June 11, 1992, (2) were permitted by the Shoreham Possession Only License (NPF-82) and 10CFR50.59, and (3) did not foreclose decommissioning options or materially affect the cost of decommissioning.

The format of the enclosed report is as follows:

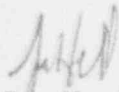
SPCN/SE No. - In the report, 10CFR50.59 items completed during the reporting period are listed by their Station Procedure Change Notice (SPCN) number, or Safety Evaluation (SE) number. For convenience of reference, these are each listed separately in ascending order.

Description of Change - A brief description of the change, test, or experiment addressed by the change document.

Summary - The safety evaluation determination that the change, test or experiment does not involve an unreviewed safety question pursuant to the three criteria of 10CFR50.59(a)(2).

Should you require any additional information concerning this submittal, please do not hesitate to contact this office.

Very truly yours,



L. M. Hill
Resident Manager

AVD/ab
Enclosure

cc: L. Bell
C. L. Pittiglio
T. T. Martin
R. Nimitz

LSNRC-2044
Enclosure A

10 CFR §50.59 Report

Period From January 1, 1992
Through June 11, 1992

Shoreham Nuclear Power Station
Docket No. 50-322

SPCN 91-1854

Description of Change

SPCN 91-1854 revised Station Procedure (SP) 61.010.01, "Access Controls," by reinstating dosimetry requirements for Radiologically Controlled Area (RCA) entry. Previously, during the defueled condition of Shoreham, personal dosimetry was required for entry to Radiation Work Permit (RWP) areas only. The revised Procedure provided a more conservative dosimetry approach due to extensive movement of radioactive sources within the RCA in preparation for and during decommissioning.

Summary

- I. No. The revision to SP 61.010.01 is unrelated to any accident analysis described in the Safety Analysis Report and does not affect the function or operation of any plant system or equipment. Reverting to requiring dosimetry within the RCA is an administrative change.
- II. No. See I above.
- III. No. See I above.

SPCN 92-0016

Description of Change

SPCN 92-0016 revised Station Procedure (SP) 23.122.01, "Service Water," by placing the valves that supply Emergency Service Water to the Spent Fuel Storage Pool (SFSP) in a protected condition. The revised Procedure permitted the Emergency Service Water supply to the SFSP to be placed in a protected condition by closing the boundary valves and de-energizing their power supplies and draining any water between the valves into the Salt Water Drain Tank.

Summary

- I. No. Per DSAR Chapter 15, Accident Analysis, section 15.1.19, Loss of AC Power, active fuel pool cooling is not required because of the very low heat generation rate of the fuel and the large thermal capacity of the pool. Loss of the Spent Fuel Pool water makeup capability will result only in a very slow evaporative loss of the pool water. This evaporation rate is so slow that ample time exists to restore normal pool makeup sources so that pool level can be quickly restored. Thus, the passive protection provided by the SFSP and low fuel decay heat eliminate the need for active makeup requirements.
- II. No. See I above.
- III. No. All applicable technical specifications are adhered to for fuel stored in the SFSP. The margin of safety as defined in the basis for any technical specification will not be reduced.

SE 92-100

Description of Change

This safety evaluation addresses the engineering and implementation of isolating the system interfaces for the dismantlement and removal of Sample (P33), (Reactor Building only), Control Rod Drive (C11), Core Spray (E21) and Residual Heat Removal (E11) Systems respectively. These four systems interface mechanically and electrically with many other plant systems. These four systems are not required and serve no function in the plant's defueled condition. The mechanical and electrical isolation of the four systems does not have any impact on equipment or structures classified as QA Category I and/or Seismic Category I.

Summary

- I. No. The probability of any accident previously evaluated will not be increased because the affected components, systems and structures of the four systems and the portions of interfacing systems are not required in the defueled condition. The proper administrative controls are in place to preclude any effect on any operable or functional systems that are required by the plant.
- II. No. See I above.
- III. No. The four systems and interfacing systems will not affect any fuel or radwaste storage or handling equipment. Administrative controls are in place to permit surveillances and actions to occur during implementation to assure compliance with the ODCM, FHAR, Defueled Technical Specifications or any other technical requirement.

SE 92-104 (Revision 1)

Description of Change

This safety evaluation was performed to support the engineering and implementation of isolating the Condensate Transfer and Storage (P11) system and the Demineralized and Makeup Water (P21) system. Isolating the piping from the Condensate Storage Tank (CST) and the Demineralized Water Storage Tank (DWST) to non-operable plant systems by cutting and capping does not involve an unreviewed safety question.

Summary

- I. No. The affected components, systems and structures of the interfacing systems are not required in the defueled condition. The proper administrative controls are in place to preclude any effect on any operable or functional systems that are required by the plant in the defueled condition. The isolation of the systems will not affect any fuel storage and handling capability. All interfaces for the systems affected have been examined for their relationship to operable and functional systems.
- II. No. See I above.
- III. No. The interfacing systems will not affect any fuel or radwaste storage or handling equipment or systems. Administrative controls are in place to permit surveillances and actions to occur during implementation to assure compliance with the ODCM, FHAR, Defueled Technical Specifications or other technical requirements.

SE 92-113

Description of Change

This safety evaluation assessed the safety concerns of placing the Control Rod Blade (CRB) shipping cask liner storage racks in the open unoccupied area of the Spent Fuel Storage Pool (SFSP) for CRB disposal operations.

Summary

- I. No. There are two radiological release accidents addressed in the Shoreham DSAR. The "fuel handling" accident, which is relevant to this safety evaluation, assumes that a fuel bundle during handling is dropped onto the top of a fuel rack from a height of 30', causing immediate damage to both the dropped and the struck bundles as well as radiological releases.

The probability of the "fuel handling" accident will not be increased because:

1. No fuel bundle will be handled during the CRB disposal operation; and
 2. If a CRB liner bumping accident is considered as a "fuel damage" accident, the probability of occurrence of this accident is considered very low as compared with that of a "fuel drop" accident.
- II. No. The major concern of placing Category II equipment in the SFSP is "fuel damage". The specific "fuel bundle drop" case postulated in the DSAR analysis is a bounding case, whereby the results of all other fuel damage accidents would be much less severe than that case. The term "fuel damage" covers a set of accidents which may involve radiological releases from the fuel; by a fuel handling accident, a fuel bundle drop, the drop of a heavy object less than 1200 lbs. on top of the Spent Fuel Racks (SFRs), or, as in the current case, by the tilting of a loaded CRB liner impacting the side of the SFRs. Therefore, the impact of a loaded CRB liner bumping against the SFRs with the possibility of causing fuel damage is not a new type of accident, but is instead within the scope of a "fuel handling" accident.
- III. No. The bases sections of the Defueled Technical Specification (DTS) have been reviewed and no reduction of safety margins specified in the DTS was found due to CRB disposal operation.

SE 92-127

Description of Change

This safety evaluation has been prepared to address the fabrication and installation details for Decommissioning Crane Z. Decommissioning Crane Z will be used to service decommissioning activities in the Reactor Building.

Summary

- I. No. The supporting structural system was found to be adequate to sustain the loads imposed by Decommissioning Crane Z during decommissioning activities and during seismic DBE events. The base mounting of Decommissioning Crane Z to the concrete pocket for the Dryer/Separator plugs was found to be structurally adequate. The installation of Decommissioning Crane Z, does not compromise or affect the function of any safety related or non-safety related systems, components or structures.
- II. No. See I above.
- III. No. The crane being installed is not addressed in the Defueled Technical Specifications (DTS) and is unrelated to any DTS.

SE 92-129

Description of Change

This safety evaluation was prepared to address the disposition and implementation of the removal of the work table located in the northwest corner of the Spent Fuel Storage Pool (SFSP) to avoid possible interferences with Control Rod Blade (CRB) disposal activities.

Summary

- I. No. The work table is not needed to support any components for operations that will be performed in the SFSP. Its removal will not have an adverse effect on the intended function of any system, component or structure. The activities associated with the removal of the work table do not compromise or affect the function of any safety or non-safety related system, component or structure. The lifting and handling of the work table shall be done in accordance with NUREG-0612 (if it is determined that the total lifting weight exceeds the defined "Heavy Load" for Shoreham Station), and at no time shall any of the lifting operations be performed over the spent fuel.
- II. No. See I above.
- III. No. The components affected by this activity are unrelated to the Defueled (Possession Only License) Technical Specifications. There are no operational requirements being eliminated as a result of the work table removal.

SE 92-147

Description of Change

This safety evaluation addresses the engineering and implementation for the elimination of smoke detector 1R71-PED-15G, which failed and caused Zone PED 15 to be in a continuous alarm state. This smoke detector is located on the ceiling above elevation 78' in the wing of the CRD Rebuild Room of the Reactor Building and is inaccessible for repairs.

Summary

- I. No. This modification and implementation activities do not affect any components, systems or structures associated with previously evaluated accidents. The fuel pool, fuel storage and handling equipment, and liquid radwaste tanks are not affected.
- II. No. The modification and implementation activities have no possibility of affecting the fuel or contributing to a release of radioactive material.
- III. No. The modification and implementation activities do not affect any systems, structures, or components that are addressed in the Defueled Technical Specifications.

FE 92-153

Description of Change

This safety evaluation addresses the engineering and implementation of removing the system piping, tubing and components for the dismantlement and removal of the Process Sample (P33), Control Rod Drive (C11), Core Spray (E21) and Residual Heat Removal (E11) Systems from the Reactor Building. The four systems are not required and serve no function in the plant's defueled condition.

Summary

- I. No. The affected components, systems and structures of the four systems are not required in the defueled condition. The proper administrative controls are in place to preclude any effect on any operable or functional systems that are required by the plant. The methods and techniques for the removal of the piping, tubing and components of the four systems have been developed to envelope the existing accident analysis. The affected systems do not affect the fuel pool, fuel storage and handling equipment or liquid radwaste tanks.
- II. No. See I above.
- III. No. The four systems are not required by Technical Specifications. Administrative controls are in place to permit surveillances and actions to occur during implementation, to assure compliance with the ODCM, FHAR, Defueled Technical Specifications or any other technical requirement.

SE 701-F

Description of Change

This safety evaluation was performed to revise Shoreham's Fire Hazard Analysis Report (FHAR) by revising Figures 4 through 10, 12, and 13 to eliminate the 3-hour firewall rating from (1) the primary containment wall, (2) the LPCI M-G room walls, and (3) the walls on the north and south sides of the RPV cavity, dryer/separator and RWCU filter demineralizer rooms from EL. 150' to 175'. Appropriate footnotes were added to pages 2-8 and E2-1 to clarify the wall rating associated with this equipment.

Summary

- I. No. The previously evaluated accidents analyzed in the Safety Analysis Report are not affected by this revision to the FHAR. The deletion of the 3-hour fire rating of these walls will not increase the probability of malfunctioning of equipment related to fuel storage or handling or to radwaste storage. Adequate measures will be taken to prevent decommissioning activities from increasing the probability or consequences of an accident associated with a fire in the primary containment.
- II. No. The proposed change does not implement any new actions nor does it affect the way that any system is operated. The revision does not change the physical characteristics of the barriers.
- III. No. The change is unrelated to any margin of safety as defined in the basis for any technical specification.

SE 801-F

Description of Change

This safety evaluation was prepared to evaluate the creation of a new introductory section for the FHAR entitled "Applicability of the FHAR to the Defueled/Decommissioning Mode." This new section provides clarification on how the FHAR is to be used during decommissioning and updates the FHAR for conditions that have already been approved in other license changes. Additionally, three figures in Section 4 were updated to delete the 3-hour fire rating of the primary containment wall, and a revision was made to two tables to indicate that the smoke detector will no longer be maintained operable.

Summary

- I. No. The accidents previously evaluated in the Safety Analysis Report and Decommissioning Plan are not affected by the addition of this new introductory section. The new section mainly updates or clarifies how the existing text must be used to accomodate pre-decommissioning activities. The clarifications are consistent with the defueled and non-operating condition of the plant.
- II. No. The change does not implement any new actions nor does it affect the way that any system is operated. The change is administrative in nature and mainly updates the FHAR to reflect facility changes.
- III. No. The change is unrelated to any technical specification, and does not affect any margin of safety as defined in the basis for any technical specification.