

## 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 - OFFICE OF CORPORATE SERVICES
AND
VICE PRESIDENT - OFFICE OF NUCLEAR

SNRC-1761

SEP 24 1990

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

Revision to License Change Application #7
Operating License NPF-82
Shoreham Nuclear Power Station - Unit 1
Docket No. 50-322

Ref: 1) LILCO letter SNRC-1737 dated July 20, 1990 to the U.S. Nuclear Regulatory Commission from John D. Leonard, Jr.; subject: License Change Application #7, Operating License NPF-82, In Accordance With Generic Letter 88-12

#### Gentlemen:

By this correspondence, the Long Island Lighting Company (LILCO) revises its request to amend Facility Operating License NPF-82, as described in SNRC-1737 (reference 1), by providing a revised Attachment 2. This revised Attachment 2 reflects the agreements reached in discussions with Mr. S. Brown (NRC-PM) during a telephone conversation with members of my staff on September 12, 1990. It accomplishes what our original transmittal sought to accomplish without relocating license condition 2.C.(3) to item 2.D and the laborious reidentification/renumbering of retained license conditions and sections that would have resulted.

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If additional information or further discussion is required in this matter, please do not hesitate to contact my office.

Very truly yours,

John D. Leonard, Jr.
Vice President Office of Corporate Services

and Office of Nuclear

MAP/ap

cc: S. Brown T. T. Martin B. Norris

Revised
Attachment 2
To Replace
Attachment 2 To
SNRC-1737



# UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

LONG ISLAND LIGHTING COMPANY

DOCKET NO. 50-322

SHOREHAM NUCLEAR POWER STATION, UNIT 1

INFORMATION ONLY

MC-I

FACILITY OPERATING LICENSE

License No. NPF-82

- The Nuclear Regulatory Commission (the Commission or the NRC) has found that:
  - A. The application for a license filed by the Long Island Lighting Company (the licensee) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I, and all required modifications to other agencies or bodies have been duly made;
  - B. Construction of the Shoreham Nuclear Power Station, Unit 1 (the facility), has been completed in conformity with Construction Permit No. CPPR-95 and the application, as amended, the provisions of the Act, and the regulations of the Commission;
  - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission (except as exempted from compliance in Section 2.D below);
  - D. There is reasonable assurance: (i) that the activities authorized by this operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I (except as exempted from compliance in Section 2.D below);
  - E. The licensee is technically qualified to engage in the activities authorized by this operating license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;
  - F. The licensee has satisfied the applicable provisions of 10 CFR 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;
  - G. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;

- H. After weighing the environmental, economic, technical, a.d other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of Facility Operating License No. NPF-82, subject to the conditions for protection of the environment set forth in the Environmental Protection Plan attached as Appendix B, is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied; and
- The receipt, possession, and use of source, byproduct and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40, and 70.
- Based on the foregoing findings and the Concluding Initial Decision issued by the Atomic Safety and Licensing Board on September 23, 1988, 1/Facility Operating License No. NPF-82 is hereby issued to the Long Island Lighting Company (the licensee) to read as follows:
  - A. This license applies to the Shoreham Nuclear Power Station, Unit 1, a boiling water nuclear reactor and associated equipment, owned by the licensee. The facility is located in Suffolk County, New York, and is described in the licensee's Updated Safety Analysis Report, (USAR) as supplemented and amended, and the licensee's Environmental Report, as supplemented and amended.
  - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses the Long Island Lighting Company (LILCO, the licensee):
    - Pursuant to Section 103 of the Act and 10 CFR Part 50, to possess, use, and operate the facility at the designated location in Suffolk County, New York, in accordance with the procedures and limitations set forth in this license;
    - (2) Pursuant to the Act and 10 CFR Part 70, to receive, possess, and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Updated Safety Analysis Report, as supplemented and amended;
- 1/ Sec 21.50: Partial Initial Decision, LBP-83-57, September 21, 1983;
  ALAB-788, October 31, 1984; Commission Memorandum and Order, CLI-84-21,
  November 21, 1984; Memorandum and Order Ruling on Remand Issues, LBP-84-53,
  November 30, 1984; Partial Initial Decision on Emergency Diesel Generators,
  85-18, June 14, 1985; Partial Initial Decision on Emergency Planning
  (EP), LBP-85-12, April 17, 1985; Concluding Partial Initial Decision on EP,
  LBP-85-31, August 26, 1985; LBP-87-30, November 6, 1987; CLI-87-12,
  November 5, 1987; Partial Initial Decision (EP), LBP-88-12, May 5, 1988;
  LBP-88-24, September 23, 1988; CLI-89-02, March 3, 1989.

- (3) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed neutron sources for reactor instrumentation and r'diation monit ing equipment calibration, and as fission detecto in amounts as required;
- Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (5) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to possess; but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter 1 and is subject to all applicable provisions of the Act and to the rules, regulations and orders of the Commission now or hereafter in effect except as exempted from compliance as described in Section 2.D. below; and is subject to the additional conditions specified or incorporated below:

#### (1) Maximum Power Level

The licensee is authorized to operate the facility at core power levels not to exceed 2,436 megawatts thermal (100 percent rated power) in accordance with the conditions specified herein and other items identified in Attachments 1 and 2 to this license. The items identified in Attachments 1 and 2 to this license shall be completed as specified. Attachments 1 and 2 are hereby incorporated into this license.

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. (, are hereby incorporated into this license. The Long Island Lighting Company shall operate the facility in accordance with the Technical Specifications and the Enironmental Protection Plan.

The licensee shall maintain in effect all provisions of the approved fire protection program as described in the Fire Hazards Analysis Report and the Updated Safety Analysis Report for the facility through devision 33 and as approved in the SER and Supplements 2 and 9 subject to the following provision:

(dated February 1982)

(dated December 1985)

Amendment 6)

(dated April 1981,)

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if these changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

### (4) Flux Monitor (Section 22, SER)

The licensee shall implement (installation or upgrade) provisions of Regulatory Guide 1.97 for flux monitoring prior to startup following the first refueling outage.

(5) Instrumentation and Controls Systems Required for Safe Shutdown (Section 7.4.3 SSER3, SSER4, SSER8)

Prior to startup collowing the first refueling outage, the licensee shall implement and document all of the required design changes discussed in Attachment 1 and shall perform an acceptable procedure verification test for the remote shutdown system design.

(6) Steam Condensing Mode of RHR (Section 3.8.2 SER, SSER1, SSER3, SSER4)

The licensee shall not operate the residual heat removal (RHR) system in the steam condensing mode (SCM) during any normal plant operations.

(7) Emergator Cy Diesel Generator License Condition (Section 8.3 SSER 9)

The license conditions described in Attachment 2 apply to the operation, maintenance, testing, and inspection of Emergency Diesel Generators EDG-101, 102, and 103 at Shoreham. With the imposition of these conditions, the Commission has determined that the facility satisfies the requirements of General Design Criterion 17 (GDC-17) for the first cycle of operation. Prior to startup following the first refueling outage, the prenset shall submit the results of additional tests, inspections and/or analyses that taken together with the Rucley industry experience with TDI diesels up to that time, demonstrate to the satisfaction of the NRC staff that the facility will continue to satisfy the requirements of GDC-17 for the second fuel cycle and beyond.

(8) Fission Gas Release and Ballooning and Rupture (Sections 4.2.3.2 and 4.2.3.3 SER)

The licensee shall submit for NRC review and approval a reanalysis of the Emergency Core Cooling 5; stem (ECCS) performance for the second cycle and beyond utilizing models that (a)

account for the effects of high burn-up fission gas release and prepressurized fuel and (b) accommodate the irrormation in NUREG-0630 including its effects on local oxidation.

### (9) Strike Shutdown License Condition (Section 13.3.5.7 SSER 10)

Since the licensee relies on an offsite emergency response organization consisting entirely or primarily of the licensee's employees, in anticipation of the commencement of any strike by such employees, the licensee shall bring the facility to cold shutdown condition using normal operating procedures. The licensee shall commence bringing the facility to cold shutdown condition 24 hours prior to the commencement of such strike, or immediately upon receipt of less than 24 hours' notice of the impending commencement of a strike, with the goal of having the plant in cold shutdown condition by the time the strike commences. The licensee shall maintain the facility in a cold shutdown condition until the strike is over and review by the Federal Emergency Management Agency and the NRC Staff has given assurance that the Local Emergency Response Organization capability is fully restored. During a strike-occasioned shutdown, with the prior approval of the NRC Staff upon review of written application by the licensee, the licensee shall be permitted to take the reactor to a refueling mode to conduct refueling or other operations requiring access to the reactor core if it is shown that such operations cannot result in the occurrence of any events requiring offsite emergency response capability. This condition shall be terminated only in accordance with the regulatory procedures for amendment of an operating license.

## (10) Hurricane Shutdown License Condition (NRR Director's Finding Re: EP Dated 4/17/89)

If the National Weather Service issues a hurricane watch for the Long Island. New York area, the licensee, within 1 hour, shall begin to make necessary preparations to pland the reactor into a HOT SHUTDOWN condition. The licensee shall ontinue to monitor the National Weather Service advisories how by until the watch is cancelled. If the National Weather Service issues a hurricane warning for the Long Island, New York area, the licensee will take action to ensure that the reactor is in a HOT SHUTDOWN condition within the next 24 hours, unless the warning is cancelled. The licensee shall maintain the reactor in this condition until the National Weather Service has cancelled its hurricane warning.

(11) County Liaison License Condition (NRR Director's Finding Re: EP Dated 4/17/89)

The licensee shall modify its offsite emergency plan to require that a LILCO representative, knowledgeable of the offsite emergency plan, upon declaration of an Alert, Site Area Emergency or General Emergency at the Shoreham site, transport the offsite emergency plan, appropriate support information and necessary communications equipment to the Suffolk County Emergency Operations Center (FOC) or to a location designated by the Suffolk County Executive. This person shall be available to aid and assist the County Executive in responding to the emergency condition at Shoreham.

(12) Brentwood Staffing License Condition (NRR Director's Finding Re: EP Dated 4/17/89)

The licensee shall modify its offsite emergency plan to designate at least one trained person who shall be at the Brentwood facility at all times during plant operations above 5 percent rated power. This person will begin the conversion process of the Brentwood facility into the Local Emergency Response O. ganization (LERO) Emergency Operations Center (EOC) when an Alect or higher emergency class is declared.

(13) Quarterly Drills License Condition (NRR Director's Finding Re: EP Dated 4/17/89)

The licensee shall conduct training drills such that its offsite emergency plan is drilled quarterly with full or partial participation by the Local Emergency Response Organization (LERO).

(14) Defueled Emergency Preparedness License Condition

The requirements set forth in license conditions (9) through (13) will not apply if the following conditions exist: (1) The reactor is void of all fuel assemblies; and (2) The spent fuel, with a burnup of approximately two effective full-power days, is stored in the spent fuel storage pool or other approved storage configuration.

D. The facility requires exemptions from certain requirements of Appendices A and J to 10 CFR Part 50. These include: (a) exemption from GDC 56, the installation prior to startup following the first refueling outage of two isolation barriers in series in all instrument lines penetrating containment that are not part of the automatic reactor protection system (Section 6.2.3, SER, SSER 1, SSER 3, SSER 4, SSER 8); (b) exemption from the requirement of paragraphs II.H.4 and III.C.2 of Appendix J, the leak rate testing of the Main Steam Isolation valves (MSIVs) at the peak calculated conttainment pressure, P, and exemption from the requirements of paragraph III.C.3 of Appendix J that the measured MSIV leak rates be included in the summation for the local leak rate (Section 6.2.5.1 of the SER and SSER 8); (c) exemption until startup after the first refueling outage from GDC 19, that the remote shutdown system design should

provide redundant safety-grade capability to achieve and maintain hot shutdown and subsequently cold shutdown from a location or locations remote from the control room, assuming no fire damage to any required systems and equipment and assuming no accident has occurred (Section 7.4.3 of SSER 3. SSER 4. and SSER 8); and (d) temporary exemption from the requirement of 10 CFR 50.44(c)(3)(1) for containment inerting so that operation of the plant with a non-inerted containment may continue during the remainder of the initial startup test program for 120 full effective power days from initial criticality (Section 6.2.4 of SSER 9).

These exemptions are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest. Therefore these exemptions are hereby granted pursuant to 10 CFR 50.12. With the granting of these exemptions the facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission.

- E. The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27517 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.64(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Shoreham Nuclear Power Station Security Plan for Fuel Storage in the Spent Fuel Pool," with revisions submitted through April 5, 1990; the "Shoreham Nuclear Power Station Guard Training and Qualification Plan," with revisions submitted through December 14, 1983; and "Shoreham Nuclear Power Station Safeguards Contingency Plan," with revisions submitted through May 13, 1988. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein.
- F. Except as otherwise provided (in the Technical Specifications or Environmental Protection Plan, the licensee shall report any violations of the requirements contained in Section 2.C of this license in the following manner: initial notification shall be made within twenty four (24) hours to the NRC Operations Center via the Emergency Notification System with written followup within 30 days in accordance with the procedures described in 10 CFR 50.73(b), (c), and (e).
- 6. The licensee shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.

- H. This license supersedes Facility Operating License No. NPF-36, dated July 3, 1985.
- This license is effective as of the date of issuance and shall expire at midnight on April 13, 2013.

FOR THE NUCLEAR REGULATORY COMMISSION

Thomas E. Murley, Director
Office of Nuclear Reactor Regulation

#### Attachments:

1. Attachment 1 2. Attachment 2

 Appendix A - Technical Specifications (NUREG-1357)

4. Appendix B - Environmental Protection Plan

Date of Issuance: April 21, 1989