



## 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-1804

APR 19 1991

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

1990 Annual Environmental Operating Report  
Shoreham Nuclear Power Station - Unit 1  
Docket No. 50-322

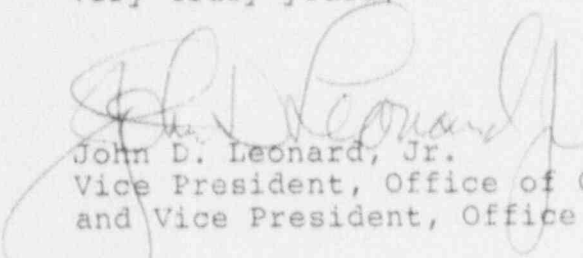
Gentlemen:

Attached is a copy of the 1990 Annual Environmental Operating Report for the Shoreham Nuclear Power Station (SNPS).

This report is being submitted in accordance with the requirement contained in Section 5.4.1 of Appendix B to Operating License NPF-82.

If there are any questions, please contact this office.

Very truly yours,

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

MAP/ab  
Attachment

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

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Shoreham Nuclear Power Station  
Annual Environmental Operating Report - 1990

1.0 Introduction

Appendix B to the operating license (NPF-82) for the Shoreham Nuclear Power Station (SNPS), entitled "Environmental Protection Plan (Non-Radiological)," requires the submittal of an Annual Environmental Operating Report prior to May 1 each year for the previous calendar year. The report which follows below is in response to this requirement. It documents implementation of the Environmental Protection Plan (EPP) and addresses all study, recording and reporting requirements of the Plan.

The period covered in this Annual Environmental Operating Report is from January 1, 1990 to December 31, 1990. Shoreham held a full power license during this period. However, because of the settlement agreement reached with New York State, the plant never operated and the effect of SNPS on the environment was negligible.

2.0 EPP Non-Compliances (Section 5.4.1 of EPP)

None

3.0 Changes in Facility Design or Operation Involving an Unreviewed Environmental Question (Section 3.1 of EPP)

None

4.0 List of Non-Routine Reports (Section 5.4.2 of EPP)

None

5.0 List of State Pollutant Discharge Elimination System (SPDES) Permit Related Reports Sent to the New York State Department of Environmental Conservation (NYSDEC) Relating to Matters in EPP Section 2.1 (Section 5.4.1 of EPP)

5.1 Aquatic monitoring - thermal effects

None

5.2 Aquatic monitoring - intake related effects

None

6.0 Summary of Environmental Protection Activities Required by  
EPP Section 4.2

6.1 Groundwater Well Monitoring

The EPP requires that an NRC approved groundwater well monitoring program be established at the Shoreham Station to demonstrate that extraction of groundwater from station supply wells for plant operations does not adversely impact offsite private water supplies either due to excessive drawdown or saltwater intrusion. No routine reporting is required except that if unusual or adverse effects are noted, a report shall be issued pursuant to EPP Section 4.1 (Unusual or Important Environmental Events).

Although not required by the EPP until initiation of testing above 5% power, LILCO began sampling in 1987 to establish baseline water levels and chloride content. The groundwater sampling program was discontinued in July 1989 after LILCO shareholders approved the Shoreham settlement agreement with New York State.

6.2 Protection of Wading River Marsh.

Protection of Wading River Marsh, particularly from drifting sand, was of concern during construction of the plant. The construction permit directed LILCO to protect the marsh from drifting sand through use of ground cover, other vegetation and administrative action. Now that construction has ended, the potential for adverse affects has diminished.

Aside from the protection offered by the EPP, the Wading River marsh is protected through New York State wetlands laws and regulations; any activities that might affect the marsh in any way cannot be conducted without permission and permits from NYSDEC. There is no routine reporting requirement for this item.

6.3 Beach Erosion Monitoring and Replenishment

Section 4.2.3 of the EPP requires monitoring of beach sand accumulation and/or erosion in the vicinity of the plant site. Any beach material eroded from east of the plant's jetties is to be replaced with accumulated sand dredged from the plant intake or from the mouth of Wading River Creek. Monitoring, maintenance dredging and beach replenishment are also required to meet conditions of a Shoreham Technical Specification and the State Water Quality Certification issued by the Department of Environmental Conservation. The work is

generally conducted each spring to clean the intake canal and the mouth of Wading River Creek of sand that has accumulated since the previous dredging. These activities are carried out under dredging and wetlands permits issued by the U.S. Army Corps of Engineers, the New York State Department of Environmental Conservation and the Town of Brookhaven.

Maintenance dredging and beach replenishment were not conducted by LILCO in 1986 or 1987 because the New York State Department of State (DOS) declined to concur with LILCO's certification that the proposed dredging was consistent with New York's Coastal Management Program. DOS approval is required for the Army Corps of Engineers to issue the required maintenance permit to dredge. The previous ten year Army Corps permit had expired in 1985, the year of LILCO's last previous significant dredging.

In 1988 the Company received a favorable decision from the Secretary of U. S. Department of Commerce on its appeal against DOS' refusal to make the required "consistency" determination. The Corps subsequently issued the required permit and dredging of the intake canal was initiated in December 1988 and completed in February 1989. This dredging was intended to re-establish the design depths of the intake canal and bring it within Tech Specs; spoil removed from the intake canal during this operation was temporarily placed in a holding area on Shoreham's west beach pending receipt of a renewed NYSDEC wetlands permit to spread it as nourishment along the beaches east of the plant. Since the spoil was deemed unsuitable for beach nourishment by the NYSDEC and LILCO did not have the required permit, an agreement was reached with the State in 1990 to remove this unsuitable spoil and place it in an upland area on LILCO property in such a manner as to be prevented from re-entering the waterway. This work was initiated in December 1990 and completed in early 1991.

The dredging of Wading River Creek is now performed by the Town of Riverhead since the renewed NYSDEC permit issued on April 28, 1989 only authorized dredging in the intake canal and then only in the event that LILCO's shareholders disapproved the Shoreham settlement agreement. Riverhead dredged Wading River Creek in May - June 1990.



#### 6.4 Herbicide Usage

Section 4.2.4 of the EPP requires that records be maintained of any herbicides utilized on the plant's transmission line rights-of-way. These records, which are also required to be kept for review by NYSDEC for a period of 3 years, are maintained in the appropriate Divisional Offices at LILCO. There is no routine reporting associated with this item.