U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-322/84-43

Docket No. 50-322

License No. CPPR-95 Priority - Category B

Licensee: Long Island Lighting Company
175 East Old York Road
Hicksville, New York 11801

Facility Name: Shoreham Nuclear Power Station

Inspection At: Shoreham, New York

Inspection Conducted: November 13-15, 1984

Inspectors: R.L Nimitz 12/18/84
R. L. Nimitz, Senior Radiation Specialist date

Approved by: W. Pasciak 12/20/84
W. Pasciak, Chief, Boiling Water Reactor Radiation Safety Section date

Inspection Summary: Inspection on November 13-15, 1984 (Report No. 50-322/84-43)

Areas Inspected: Routine announced inspection of the licensee's Radiological Controls Program including: organization and staffing; licensee action on previously identified items; and licensee action on Bulletins, Circulars, and Information Notices. The inspection involved 19 inspector hours onsite by one region-based inspection.

Results: No violations were identified.

DETAILS

1. Persons Contacted

1.1 LILCO

*J. Alexander, Reactor Engineer
*R. Grunseich, Supervisor Nuclear Licensing
*A. Moller, Manager, QC Division
*J. Schmitt, Manager, Radiological Controls Division
*W. Steiger, Plant Manager
*J. Wynne, Compliance Engineer
*N. Norcos, Radiochemistry Engineer
*R. Jongleblood, Radwaste Engineer
*N. DiMascio, Health Physics Engineer
*B. Beyten, Systems Engineer

1.2 Contractors

*J. Riley, GE Operations
*G. Rhoads, Impell
*W. Burnett, Impell
A. Aurcrello, Stone and Webster

1.3 NRC

*P. Eselgroth, Senior Resident Inspector
*N. Blumberg, Lead Reactor Engineer

*Denotes those individuals attending the exit interview on November 15, 1984.

The inspector also contacted other personnel.

2. Purpose of Inspection

The purpose of the routine announced Radiological Controls inspection was to examine the following elements:

- Radiological Controls Organization
- Licensee action on previous inspection findings
- Licensee action on Bulletins, Circulars, and Information Notices

3. Radiological Controls Organization

The inspector reviewed the licensee's Radiological Controls Organization to determine if any changes were made to the organization since this area was last reviewed.

The review was with respect to criteria contained in the following:

- Technical Specification 6.3, "Organization"
- Regulatory Guide 8.10, "Operating Philosophy for Maintaining Occupational Radiation Exposures As Low As is Reasonably Achievable"

The evaluation of licensee performance in the area was based on discussion with licensee personnel and review of documentation.

No violations were identified.

Within the scope of this review, the following was noted:

- The licensee has reorganized the site organization into four separate divisions. One of the divisions is the Radiological Controls Division. The Radiological Controls Division consists of the Radiochemistry Section, the Health Physics Section and the Radwaste Section.
- The revised organization was adequate to support fuel loading. However, licensee chemistry representatives indicated additional chemistry personnel would be needed to support start-up activities.

Within the scope of the review, the following matters requiring licensee attention were identified:

- The licensee should revise procedure SP No. 71.002.01, "Radiochemistry Section Policy and Objectives," to remove radioactive waste responsibilities now assigned to the Radwaste Section.
- The licensee should establish a Radwaste Section Policy and Objectives document. This document should clearly describe: 1) the responsibilities and authorities of all appropriate members of the Radwaste Section; 2) interface mechanisms with other station groups; 3) the minimum qualification requirements for all appropriate positions in the Radwaste Section.
- The licensee should clearly describe the minimum qualification requirements of the Radiological Controls Division Manager.
- The licensee should revise Technical Specification 6.2.2, "Unit Staff" to include the organizational changes made.

The licensee's actions on the above matters will be reviewed during subsequent inspection (50-322/84-43-01).

4. Licensee Action on Previous Inspection Findings

4.1 (Closed) Follow-up Item (50-322/83-19-01) NRC to review licensee implementation of IE Bulletin 80-10 requirements. This item was reviewed during Inspection No. 50-322/83-25 and is closed for administrative purposes. (See follow-up item 50-322/84-25-06)

4.2 (Closed) Follow-up Item (50-322/83-30-09) Licensee to revise and approve his radioactive waste transportation procedures to include latest revision of 10 CFR 71 and the requirements of 10 CFR 61. Licensee also to implement the requirements of IE Bulletin 79-19 in consideration of the revisions to 10 CFR 71. The licensee has revised his radioactive waste procedures to include the latest revisions of 10 CFR 71 and the requirements of 10 CFR 71. The procedures have been approved and selective review found them adequate to support fuel load and routine operations. Regarding conformance to IE Bulletin 79-19, the matter is discussed in section 5 of this report.

4.3 (Closed) Follow-up Item (50-322/82-26-03) Licensee to ensure prefilters are removed from the Reactor Building Standby Ventilation System and the Control Room Emergency Ventilation System prior to inplace leak testing. The licensee has revised inplace testing procedures to require removal of the prefilter prior to testing.

4.4 (Closed) Follow-up Item (50-322/84-13-01) Licensee to adjust liquid effluent monitor to ensure detection of Xe-133. The licensee recalibrated the liquid effluent monitor per revised procedure 74.631.32 on July 23, 1984. The results were reviewed and approved on August 10, 1984. The NaI detector can now detect Xe-133.

4.5 (Closed) Follow-up Item (50322/84-25-05) Licensee to load new charcoal into Reactor Building Standby Ventilation System Train A. The licensee loaded new charcoal into Train A in March 1984. The charcoal met Technical Specification laboratory and inplace adsorber testing requirements.

4.6 (Closed) Follow-up Item (50-322/84-25-01) Licensee to update Final Safety Analysis Report (FSAR) to show potential unmonitored release paths. Inspector review of FSAR Revision 33 (Section 11.3.10) indicated the licensee incorporated the potential unmonitored release paths identified.

4.7 (Closed) Follow-up Item (50-322/84-25-04) Licensee to complete review, revision and reissuance of procedures for initiation of airborne alpha radioactivity sampling. The licensee has revised and reissued alpha airborne radiochemistry sampling procedures for initiation of sampling and analysis of alpha airborne radioactivity based on the presence of certain indicators of fuel degradation. However, inspector review indicated the licensee was planning to use a single 10 CFR 20, Appendix B, concentration value (i.e., Pu-239) in lieu of a mixture concentration value for unidentified alpha emitters or a value based on analysis of the mixture present. The licensee's use of the single value could result in underestimation of alpha airborne radioactivity exposure. This matter remains open and will be followed via follow-up item number 50-322/84-43-02.

4.8 (Closed) Follow-up Item (50-322/84-25-03) Licensee to establish an access control program for personnel access to radiological control areas. The licensee established procedure SP No. 61.010.01 "Access Controls" to provide guidance for accessing the radiological control areas. This procedure provides minimum requirements for escorted and unescorted personnel access into radiological control and restricted areas.

4.9 (Closed) Follow-up Item (50-322/84-25-02) Licensee to develop a program to evaluate beta dosimetry to support routine plant operations. The licensee has established a program to evaluate dosimetry for routine plant operations. The licensee has selected appropriate calibration sources for testing dosimetry.

4.10 (Closed) Circular No. 80-19 (50-322/80-CI-18) Licensee to implement the guidance of Circular No. 80-18. This matter was reviewed during Inspection No. 50-322/84-06. The remaining open area dealt with adequacy and approval of licensee procedures for performing 10 CFR 50.59 reviews of modifications to radwaste systems. The licensee revised procedure SP No. 12.010.02 to include review guidance contained in IE Circular 80-18. This circular is closed.

5 Licensee Action on Bulletins, Circulars and Information Notices

5.1 Bulletins

IE Bulletin 79-19

The inspector reviewed licensee implementation of guidance contained in IE Bulletin 79-19, "Packaging of Low-Level Radioactive Waste for Transport and Burial".

The bulletin required licensee's to take certain action to assure safe transfer, packaging, and transport of low-level radioactive waste. The bulletin was issued to construction sites for information purpose. The following bulletin requirements were reviewed:

- Maintain a current set of DOT and NRC regulations concerning the transfer, packaging and transport of low-level radioactive waste material.

  The licensee maintains current DOT and NRC regulations concerning the transfer, packaging, and transport of low-level radioactive waste material. The regulations are distributed to and used by the cognizant licensee Radioactive Waste Organization representatives.

- Maintain a current set of requirements (license) placed on the waste burial firm by the Agreement States of Nevada, South Carolina, or Washington before packaging low-level radioactive waste material for transfer and shipment to the Agreement State licensee. If a waste collection contractor is used, obtain the appropriate requirements from the contractor.

The licensee receives and maintains current Agreement State requirements placed on the waste burial sites. The requirements are distributed to and used by the cognizant licensee Radioactive Waste Organization representatives.

- Designate, in writing, people in your organization who are responsible for the safe transfer, packaging, and transport of low-level radioactive material.

  The licensee recently revised his radiological controls organization to establish a separate radiological controls section. The licensee has not yet revised applicable procedures to reflect modified radioactive waste responsibilities. This matter remains open (50-322/84-43-03).

- Provide management-approved, detailed instructions and operating procedures to all personnel involved in the transfer, packaging, and transport of low-level radioactive material. Special attention should be given to controls on the chemical and physical form of the low-level radioactive material and on the containment integrity of the packaging.

  The licensee has established approved, detailed procedures for all personnel involved in the transfer, packaging, and transport of low-level radioactive material. The licensee has also given special attention to (i.e., established procedures for) controls on the chemical and physical form of the material and containment integrity of packaging.

- Provide training and periodic retraining in the DOT and NRC regulatory requirements, the waste burial license requirements, and in your instructions and operating procedures for all personnel involved in the transfer, packaging and transport of radioactive material. Maintain a record of training dates, attendees, and subject material for future inspections by NRC personnel.

  The licensee has established a training program for training personnel involved in the transfer, packaging, and transport of radioactive material.

  Inspector review of training documentation found appropriate operations personnel to have been trained. At the time of this inspection, the licensee had not fully staffed and trained his radioactive waste organization personnel. The licensee plans to train the new radioactive waste organization members when they are hired. This matter remains open (50-322/84-43-04).

- Provide training and periodic retraining to those employees who operate the processes which generate waste to assure that the volume of low-level radioactive waste is minimized and that such waste is processed into acceptable chemical and physical form for transfer and shipment to a low-level radioactive waste burial facility.

  The licensee has established a training program for those employees who operate the processes which generate waste to assure that radwaste volume is mimimized and the waste form is acceptable. Regarding retraining, the licensee has established a program to train radwaste operations personnel in new procedures and procedure changes. However, no program to retrain (as necessary) these personnel in material provided during their initial training was established. The licensee should review the initial training program and determine what (if any) attributes of the initial training program should be addressed during retraining. Also, no retraining program for other staff personnel had been established other than the procedure change/modification training provided to operations personnel. This matter remains open (50-322/84-43-05).

- Establish and implement a management-controlled audit function of all transfer, packaging, and transport activities to provide assurance that personnel, instructions and procedures, and process and transport equipment are functioning to ensure safety and compliance with regulatory requirements.

  The licensee has established and implemented a management-controlled audit function to assure that Radioactive Waste Program elements are functioning to ensure safety and compliance with regulatory requirements.

  During the period mid 1982-mid 1983, a contractor performed a preoperational Radioactive Waste Management Program audit at the station. Radioactive Waste Program improvement recommendations were transmitted to the Station Manager.

  Due to time limitations, the inspector was unable to determine if the licensee had received NRC acknowledgement of approval of his Radioactive Waste Quality Assurance Program. This matter remains open (50-322/84-43-06).

5.2 Circulars

IE Circular 78-03

The inspector reviewed licensee implementation of guidance contained in IE Circular 78-03, "Packaging Greater than Type A Quantities of Low Specific Activity Radioactive Material for Transport".

This circular provided licensee guidance for container selection for shipping low specific actively radioactive material in excess of Type A quantities.

Inspector review found that the licensee has established appropriate procedure controls to ensure conformance with the guidance contained in IE circular 78-03.

This circular is closed.

5.3 Information Notices

Information Notice No. 84-59

The inspector reviewed licensee action on the information contained in Information Notice No. 84-59, "Deliberate Circumventing of Station Health Physics Procedures".

This Information Notice was provided to licensees to alert them to events where station health physics procedures have been circumvented relative to work performed by contractor personnel.

Inspector review found that the licensee had revised appropriate health physics procedures to include guidance for use in detecting deliberate circumvention of health physics procedural requirements.

This Information Notice is closed.

6. Exit Interview

The inspector met with licensee representatives (denoted in Section 1) on November 15, 1984. The inspector discussed the purpose, scope and findings of this inspection. At no time during this inspection did the inspector provide written material to the licensee.