U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-322/85-15

Docket No. 50-322

License No. CPPR-95 Priority -- Category B

Licensee: Long Island Lighting Company

P.O. Box 618

Wading River, New York 11792

Facility Name: Shoreham Nuclear Power Station

Inspection At: Wading River, New York

Inspection Conducted: March 5-7, 1985

Inspectors: Harvey Zibulsky 4-8-85
H. Zibulsky, Chemist date

Approved by: W. J. Pasciak 4/9/85
W. J. Pasciak, Chief date
BWR Radiological Protection
Section

Inspection Summary:
Inspection on March 5-7, 1985 (Report Number 50-322/85-15)

Areas Inspected: Routine announced inspection of the licensee's non-radiological chemical program. Areas reviewed included: quality control of analytical measurements, analytical procedures, staffing and training. The inspection involved 16.5 hours on-site by one region based inspector.

Results: The licensee was in compliance with NRC requirements examined during the inspection.

DETAILS

1. Individuals Contacted

*W. Steiger, Jr., Plant Manager
*J. Schmitt, Radiological Controls Division Manager
*R. Grunseich, Supervisor, Nuclear Licensing
*N. Morcos, Radiochemistry Engineer
*T. Bulischeck, Acting Radiochemistry Lab Supervisor
*W. Burnett, Compliance Engineer
*G. Rhoads, Compliance Engineer
*S. Petty, Quality Control Division
C. Rowe, Quality Assurance Supervisor
R. Petricek, Plant Engineer - Radiochemistry
F. Zafonte, Chemistry Operations Foreman
G. Hood, GE Training Consultant

*Denotes those present at the exit interview.

The inspector also interviewed other licensee employees including members of the chemistry staff.

2. Laboratory Quality Control

The adequacy and effectiveness of the licensee's nonradiological chemistry quality control program was reviewed against the requirements of Sections 3.4.4, 4.4.4, and 6.8 of the Technical Specifications, and standard industrial practices.

The licensee's performance relative to these requirements and standards was determined by review of records, discussions with licensee personnel, and observations by the inspector.

For the analyses observed, calibration standards were used over the full range of operation. The licensee used the same standard solution for calibrating and measurement control. The licensee will prepare and analyze measurement control standards independent of calibration standards. The licensee's Procedure 71.018.01, Rev. 4, "General Laboratory Operation," is being utilized in the laboratory. The procedure specified that data from analyses of standards will be plotted on quality control charts with an acceptance criteria of ± 2 sigma.

No violations were identified.

3. Analytical Procedures

The inspector reviewed the licensee's analytical procedures in the nonradiological chemistry area. The procedures are required by Regulatory Guide 1.33, Revision 2, referenced in Section 6.8 of the Technical Specifications and Sections 3.4.4 and 4.4.4 also in the Technical Specifications. The inspector verified conformance to these procedures by review of licensee records and by observation of the analyses.

The inspector observed the analysis of iron and copper by atomic absorption spectrophotometry and phosphate by spectrophotometry. The procedures and instruments used for the analyses are adequate.

No violations were identified.

4. Staffing and Training

The inspector reviewed the licensee's organization with respect to staffing in the chemistry area. The chemistry department is headed by the Radiochemistry Engineer who reports to the Radiological Controls Division Manager. The Technicians report to the Chemists and Radiochemistry Foreman (position vacant) who reports to the Chemical Engineer and Analytical Services Foreman. The Chemical Engineer reports to the RMS Specialist who is responsible to the Staff Specialist. The Analytical Services Foreman reports to the Operations Foreman who reports to the Work Coordinator who is responsible to the Radiochemistry Supervisor. The Staff Specialist and the Radiochemistry Supervisor report to the Radiochemistry Engineer. There is a good communication among the laboratory personnel and an out of control analysis in the laboratory can be enacted upon without delay.

A Chemical Technician must complete an initial training program in the basic subjects such as chemistry, mathematics, and radiochemistry. This is a 14-week course with exams after the completion of each subsection. For the laboratory training, there is a sign-off sheet that is used when the technician proves proficiency in a procedure or technique.

As part of training, the chemist prepares blind standards for the technicians to analyze. This is generally done semiannually. The results are evaluated by the Senior Chemistry staff. Also, results of an interlaboratory standards program are evaluated for analyst qualification.

No violations were identified.

5. Exit Interview

The inspector met with the licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on March 7, 1985. The inspector summarized the purpose and scope of the inspection and the inspector findings. At no time during the inspection was any written material provided to the licensee by the inspector.