

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-322/84-38

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 Generating Station

Inspection At: Shoreham, New York

Inspection Conducted: October 15-19, 1984

Inspectors: A. G. Krasopoulos 11/19/84
A. G. Krasopoulos, Reactor Engineer date
J. Hodson 11/15/84
J. Hodson, Reactor Engineer date
Dr. V. Cheh 11/15/84
Dr. V. Cheh, Reactor Engineer date
Approved by: C. J. Anderson 12/24/84
C. J. Anderson, Chief, Plant date
System Section

Inspection Summary: Inspection on October 15-19, 1984 (Report No. 50-322/84-38)

Areas Inspected: Routine unannounced inspection of the Fire Protection/Prevention Program including: program administration and organization; administrative control of combustibles; administrative control of ignition sources; other administrative controls; equipment maintenance, inspection and tests; fire brigade training; periodic inspections and quality assurance audits; and facility tour. The inspection involved 92 inspector-hours on site and 4 inspector-hours in office by three region based inspectors.

Results: Of the eight areas inspected, no violations were identified.

DETAILS

1.0 Persons Contacted

1.1 Long Island Lighting Company (LILCO) and Contractors

- J. Carney, Corporate Fire Protection Engineer
- *R. Grunseich, Supervisor Nuclear Licensing
- R. Gutmann, Fire Protection Program Manager
- J. Kelleher, Training Instructor
- T. Maugeri, Training Administrator
- *B. McCaffrey, Manager, Nuclear Licensing
- A. Mubber, QC Division Manager
- J. Powers, Senior QA Engineer (Stone and Webster Engineering Corp.)
- *P. Quinan, Fire Protection Supervisor
- *K. Rottkamp, Station Training Supervisor
- G. Rhoads, Compliance Engineer (Impell Corp.)
- J. Scalice, Operating Manager
- G. Sessler, EQ Engineer (Stone and Webster Engineering Corp.)
- *W. Steiger, Plant Manager
- D. Terry, Manager, Maintenance Division
- *J. Wynne, Compliance Engineer

1.2 Nuclear Regulatory Commission (NRC)

- *P. Eselgroth, Senior Resident Inspector
- C. Petrone

*Denotes those present at the exit interview.

2.0 Fire Protection/Prevention Program

The inspector reviewed several documents in the following areas of the program to verify that the licensee had developed and implemented adequate procedures consistent with the Fire Hazard Analysis (FHA), Final Safety Analysis Report (FSAR), and Proposed Technical Specifications (PTS). The documents reviewed, the scope of review, and the inspection findings for each area of the program are described in the following sections.

2.1 Program Administration and Organization

The inspector reviewed the following licensee documents:

- Proposed Technical Specifications, Section 6, Administrative Controls
- Procedure SP 12.500.01 Fire Protection Program Description, Revision 0

- Procedure SP 39.500.01, Organization and Administration of Fire Protection Program Revision 3

The scope of review was to ascertain that:

- a. Personnel were designated for implementing the program at site; and
- b. Qualifications were delineated for personnel designated to implement the program.

No unacceptable conditions were identified.

2.2 Administrative Control of Combustibles

The inspector reviewed the following licensee documents:

- Procedure SP 39.500.05, Handling and Storage of Combustible Materials and Solvents, Revision 4
- Procedure SP 39.501.01, Fire Protection Permits, Revision 0
- Procedure SP 12.023.01, Station Housekeeping, Revision 7
- Procedure SP 39.501.03, Fire Protection Inspections, Revision 0

The scope of review was to verify that the licensee had developed administrative controls which included:

- a. Special authorization for the use of combustible, flammable or explosive hazardous material in safety-related areas.
- b. Prohibition on the storage of combustible, flammable or explosive hazardous material in safety-related areas;
- c. The removal of all wastes, debris, rags, oil spills or other combustible materials resulting from the work activity or at the end of each work shift, whichever is sooner;
- d. All wood used in safety-related areas to be treated with flame retardant;
- e. Periodic inspection for accumulation of combustibles;
- f. Transient combustibles to be restricted and controlled in safety-related areas; and
- g. Housekeeping to be properly maintained in areas containing safety-related equipment and components.

No unacceptable conditions were identified.

2.3 Administrative Control of Ignition Sources

The inspector reviewed the following licensee documents:

- Procedure SP 12.500.01, Fire Protection Program Description, Revision 0
- Procedure SP 39.501.00, Fire Protection Review TS, Revision 0
- Fire Protection Permit Forum

The scope of review was to verify that the licensee had developed administrative controls which included:

- a. Requirements for special authorization (work permits) for activities involving welding, cutting, grinding, open flame or other ignition sources and that they are properly safeguarded in areas containing safety-related equipment and components; and
- b. Prohibition on smoking in safety-related areas, except where "smoking permitted" areas had been specifically designated by plant management.

No unacceptable conditions were identified.

2.4 Other Administrative Controls

The inspector reviewed the following licensee documents:

- Proposed Technical Specifications, Section 6, Administrative Controls
- Form FC-9277.1, Maintenance Work Request
- Procedure SP Number 39.500.02, Fire Brigade Organization, Response, Practice and Drills, Revision 6
- General Employee Training Program Lesson Plan, Fire Protection, Revision 2

The scope of review was to verify that the licensee had developed administrative controls which require that:

- a. Work authorization, construction permit or similar arrangement is provided for review and approval of modification, construction and maintenance activities which could adversely affect the safety of the facility;
- b. Fire brigade organization and qualifications of brigade members are delineated.

- c. Fire reporting instructions for general plant personnel are developed;
- d. Periodic audits are to be conducted on the entire fire protection program; and
- e. Fire protection/prevention program is included in the licensee's QA Program.

No unacceptable conditions were identified.

2.5 Equipment Maintenance, Inspection and Tests

The inspector reviewed the following documents to determine whether the licensee had developed adequate procedures which established maintenance, inspection, and testing requirements for the plant fire protection equipment:

- Procedure SP 34.505.02, Inspection of Fire Rated Assemblies and Functional Testing of Fire Dampers, Revision 2
- Procedure SP 24.501.01, CO₂ Fire Protection System Operability and Actuation Test, Revision 5
- Procedure SP 44.504.02, Fire Protection Halon System, Pressure, Weight and Channel Functional Test, Revision 3
- Procedure SP 24.501.02 CO₂ Fire Protection Valve Lineup Verification, Revision 3
- Procedure SP 24.502.03 Fire Suppression Spray System Air Test, Revision 2
- Procedure SP 74.030.02 Reactor Building Standby Ventilation System in Place Filter Testing, Revision 4
- *-- Procedure SP 34.503.04 Fire Protection Underground Piping Flow Test, Revision 1
- *-- Procedure SP 34.500.02 Fire Pump Diesel Engine Inspection, Revision 1
- Procedure SP 24.503.04 Fire Main System Valve Cycling, Revision 2
- *-- Procedure SP 24.503.02 Fire Pumps Functional and Flow Rate Test, Revision 3
- *-- Procedure SP 24.503.03 Fire Main System Valve Lineup Verification, Revision 6

- Procedure SP 24.501.01, Fire Pumps Operability Test, Revision 8
- Procedure SP 34.502.01 Fire Suppression System Inspection, Revision 2
- Procedure SP 24.502.02 Fire Suppression Spray System Inspection and Functional Test, Revision 6
- Procedure SP 22.008.01 Operational Surveillances, Revision 3
- Procedure SP 24.502.01 Fire Suppression Spray System Valve Lineup Verification, Revision 3
- Procedure SP 34.500.01 Diesel Fire Pump Battery A & B 24 Volt Weekly Checks, Revision 3
- Procedure SP 74.017.01 Diesel Fuel Oil Sampling and Analysis, Revision 4
- Procedure SP 39.500.07 Fire Protection Record System, Revision 8
- Procedure SP 39.506.01 Fire Protection Equipment Inspection and Maintenance, Revision 7
- Procedure SP 39.501.03 Fire Protection Inspections, Revision 0
- Procedure SP 39.500.04 Wading River Fire Department Interface, Revision 3
- Procedure 39.501.02 Fire Protection Watches and Patrols, Revision 0
- Procedure SP 44.504.01, Fire Detection Detector Channel Functional Test, Revision 5
- *-- Procedure SP 34.503.02, Fire Hose Station Inspection, Care and Maintenance, Revision 5
- Procedure SP 34.503.03, Fire Hydrant and Standpipe Operability Test, Revision 2
- Procedure SP 34.505.01, Fire Barrier Seal Inspection, Revision 1
- Procedure SP 34.505.03, Fire Doors and Associated Hardware Inspection and Testing, Revision 4
- Procedure SP 44.504.03, Fire Suppression System Detector Functional Test, Revision 3

In addition to reviewing the above documents, the inspector reviewed the maintenance/inspection/test records of the items identified by an asterisk (*) to verify compliance with proposed Technical Specifications and established procedures.

No unacceptable conditions were identified.

2.6 Fire Brigade Training

2.6.1 Procedure Review

The inspector reviewed the following licensee procedures:

- Procedure SP Number 39.500.03, Fire Protection Program Training, Revision 4
- Procedure SP Number 39.500.02, Fire Brigade Organization Response, Practice and Drills, Revision 6

The scope of review was to verify that the licensee had developed administrative procedures which included:

- a. Requirements for announced and unannounced drills;
- b. Requirements for fire brigade training and retraining at prescribed frequencies;
- c. Requirements for at least one drill per year to be performed on a "back shift" for each brigade;
- d. Requirements for local fire department coordination and training; and
- e. Requirements for maintenance of training records.

No unacceptable conditions were identified, except as follows:

Annual Physical Examination for Fire Brigade Members Not Performed

Licensee Procedure Number 39.500.03 requires that members of the Fire Brigade receive a physical examination annually, to determine their fitness and ability to perform the physically strenuous work associated with fire fighting activities.

The members of the fire brigade have not as yet received this physical examination. This is because this fire brigade was established in November 1983, in order to succeed the construction fire brigade, who until that time had the responsibility for fire fighting. The licensee committed to medically certify all members of the fire brigade within 45 days. This is an unresolved item pending a medical examination of all fire brigade members. (50-322/84-38-01)

2.6.2 Records Review

The inspector reviewed training records of fire brigade members for calendar years 1983 and 1984 to ascertain that they had successfully completed the required quarterly training/meeting, quarterly drill, and yearly hands-on fire extinguishment practice. The inspector also witnessed an unannounced fire drill and the fire drill critique.

No unacceptable condition were identified, except as follows:

Inadequate Monitoring of Training Received by the Fire Brigade Members

The inspector reviewed records of training received by members of the Fire Brigade and found them acceptable. However, the licensee does not have a monitoring program that would assure that all members of the fire brigade receive the required training or participate in drills at the required frequencies.

The licensee is cognizant of this deficiency and is in progress of establishing a procedure (a computer run) that monitors these training activities. The licensee committed to have this procedure established within 30 days. This is an unresolved item pending review of this procedure (50-322/84-38-02).

2.7 Periodic Inspections and Quality Assurance (QA) Audits

The inspector reviewed the report of the following annual audits of the Fire Protection and Loss Prevention Program:

- Audit conducted by Nuclear Review Board (NRB) number H-83-1 (Fire Protection) on December 5, 1983 to January 13, 1984.

The scope of review was to ascertain that the audit was conducted in accordance with Proposed Technical Specification 6.5.2.8.f and that audit findings are resolved in a timely and satisfactory manner. The inspector also verified that the licensee had a program to conduct annual, biennial and triennial QA audits of the Fire Protection Program, in accordance with Proposed Technical Specification 6.5.2.8, 6.5.2.8.e and 6.5.2.8.f.

No unacceptable conditions were identified except as follows:

Non-Timely Resolution of Audit Findings

The inspector reviewed the findings of NRB Audit H-83-1 and determined that although the audit was performed in January 1984, not all of the audit findings have been resolved to date. The licensee explained that this weakness in the QA Program has been identified and addressed in a letter dated May 22, 1984 to various staff members from J. W. Dye, Jr., Executive Vice President of LILCO.

The licensee committed to expedite the closeout of present audit findings and resolve future audit findings in a timely manner.

This is an unresolved item pending evaluation of future actions by the licensee (50-322/84-38-03).

2.8 Facility Tour

The inspector examined fire protection water systems, including fire pumps, fire water piping and distribution systems, post indicator valves, hydrants and contents of hose houses. The inspector toured accessible vital and nonvital plant areas and examined fire detection and alarm systems, automatic and manual fixed suppression systems, interior hose stations, fire barrier penetration seals, and fire doors. The inspector observed general plant housekeeping conditions and randomly checked tags of portable extinguishers for evidence of periodic inspections. No deterioration of equipment was noted. The inspection tags attached to extinguishers indicated that monthly inspections were performed.

No unacceptable conditions were identified.

3.0 Unresolved Items

Unresolved items are matters about which more information is required to ascertain whether they are acceptable items, violations or deviations. Unresolved items disclosed during the inspection are discussed in Section 2.6 and 2.7.

4.0 Exit Interview

The inspector met with licensee management representatives (See Section 1.0 for attendees) at the conclusion of the inspection on October 19, 1984. The inspector summarized the scope and findings of the inspection at that time.

At no time during this inspection was written material provided to the licensee by the inspector.