

U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

Region I

Report No. 50-322/79-11

Docket No. 50-322

License No. CPPR-95 Priority -- Category B

Licensee: Long Island Lighting Company

175 East Old Country Road

Hicksville, New York 11801

Facility Name: Shoreham Nuclear Power Station, Unit 1

Inspection at: Shoreham, New York

Inspection conducted: July 23-27, 1979

Inspectors: H. H. Nicholas
H. H. Nicholas, Reactor Inspector

9/5/79
date signed

L. E. Briggs
L. E. Briggs, Reactor Inspector

9/6/79
date signed

J. C. Higgins
J. C. Higgins, Reactor Inspector

9/6/79
date signed

Approved by: D. L. Capton
D. L. Capton, Chief, Nuclear Support
Section No. 1, RO&NS Branch

9/6/79
date signed

Inspection Summary:

Inspection on July 23-27, 1979 (Report No. 50-322/79-11)

Areas Inspected: Routine, unannounced inspection by regional based inspectors of the overall preoperational test program including preoperational test program requirements, test procedures and test sequencing, test procedure verification, and test procedure review; cooling water systems; management meeting; tours of the facility; and, followup on previous inspection items. The inspection involved 74.5 inspector-hours onsite by three regional based inspectors.

Results: No items of noncompliance were identified.

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DETAILS

1. Persons Contacted

Long Island Lighting Company

+Mr. L. Calone, Chief Technical Engineer
Mr. R. Cavaliere, Test Engineer
Mr. R. Corona, Test Engineer
*+Mr. D. Durand, OQA Engineer
Mr. J. Emr, Safety Engineer
+Mr. T. Gerecke, QA Manager
Mr. J. Higgins, QA Engineer
+Mr. J. Kelly, Field QA Manager
*+Mr. L. Lewin, Asst. Startup Manager
Mr. A. Muller, QC Engineer
*+Mr. J. Novarro, Project Manager
*Mr. J. Rivello, Plant Manager
+Mr. J. Smith, Regulatory Supervisor
+Mr. J. Taylor, Startup Manager
Mr. D. Terry, Lead Startup Engineer

Stone and Webster Corporation

*+Mr. J. Baker, Lead Advisory Engineer
Mr. C. Fonseca, Asst. Project Engineer
Mr. B. Perkins, Test Engineer
Mr. R. Sherwin, Test Engineer
Mr. D. Yasi, Test Engineer

General Electric Corporation

Mr. A. Pederson, Operations Manager

The inspectors also interviewed other licensee personnel during the course of the inspection.

+ denotes those present at the management meeting.

* denotes those present at the exit interview.

2. Status of Previous Inspection Findings

(Open) Unresolved item (322/79-05-01): Verify that the time frame within which the startup manual will be periodically reviewed and updated is specifically designated. This resolution is in progress and will be examined on a subsequent inspection.

(Open) Deficiency item (322/79-05-02): Failure to review and update EQAP's annually as required by EQAP 5.1. Action is being taken to prevent a reoccurrence and will be reviewed on a subsequent inspection.

(Open) Unresolved item (322/79-05-03): Verify that the startup manual was revised to be consistent with the QA organization and May 1979 FSAR revision. This revision is in progress and will be examined and verified during a subsequent inspection.

3. Overall Preoperational Test Program

a. Preoperational Test Program Requirements

Discussion:

The inspector met with the startup manager and his staff and discussed various phases of the preoperational test program requirements including:

- Test Program,
- Test Organization,
- Test Program Administration,
- Document Control, and,
- Design Changes and Modifications.

The following areas were also discussed and expanded upon:

- Pipe support and restraint systems,
- Component and pipe expansion,
- Inservice inspection,
- Loose parts monitoring system, and,
- Vibration.

The concerns in these areas are procedures, testing, and documentation.

References:

The following references were used for reviews and discussions:

- Startup Manual,
- Final Safety Analysis Report,
- Station Operations Manual,
- Quality Assurance Manual,
- Quality Assurance Procedures,
- System Description Manual, and,
- Regulatory Guide 1.68, Initial Test Programs for Water Cooled Nuclear Power Plants.

Findings:

As a result of reviews of references and discussions with the startup manager and his staff, no discrepancies were noted with the test program requirements, and the inspector had no further questions in this area at this time.

The inspector identified a concern, the Loose Parts Monitoring system was not found to be listed in the preoperational test program startup procedure status listing nor was a procedure available.

The startup manager acknowledged the inspector's concern and agreed that the Loose Parts Monitoring System will be included in the test program and a procedure will be forthcoming.

The inspector had no further questions on this item at this time. This will be an inspector followup item (IFI) (322/79-11-01).

b. Test Procedures and Test Sequencing

Discussion:

The inspector met with the licensee's representatives and discussed the status of procedures, their review and approval, and test sequencing.

Findings:

Based upon discussions with the licensee's representatives, a review of the procedure status, the review cycle, and the test sequencing; procedures are being received by NRC for review in adequate time.

The inspector had no further questions at this time.

c. Test Procedure Verification

The following procedure were reviewed to verify that adequate testing is planned to satisfy regulatory guidance and licensee commitments:

- PT 136.001 Revision 0, Approved February 21, 1979, Nuclear Boiler Process Instrumentation
- PT 311.001A Revision 0, Approved November 14, 1978, 480 V Emergency Bus Distribution: BUS 111
- PT 311.001B Revision 0, Approved November 14, 1978, 480 V Emergency Bus Distribution: BUS 112

- PT 311.001C Revision 0, Approved November 14, 1978, 480 V Emergency Bus Distribution: BUS 113
- PT 707.000 Revision 0, Approved December 21, 1977, Fuel Pool Cooling System
- PT 709.001 Revision 0, Approved March 15, 1978, Reactor Water Cleanup
- PT 117.001-3 Revision 3, Approved August 10, 1978, Instrument and Service Air
- PT 504.001 Revision 0, Approved March 21, 1979, Smoke, Flame and Temperature Detection
- PT 102.001 Revision 0, Approved August 23, 1978, Circulating Water System
- PT 107.001-3 Revision 3, Approved March 16, 1977, Makeup Demineralizer and Transfer System
- PT 117.002 Revision 0, Approved May 23, 1979, Loss of Instrument Air
- PT 118.001 Revision 0, Approved May 16, 1978, Reactor Building Closed Loop Cooling Water
- PT 122.001 Revision 0, Approved August 23, 1978, Service Water System
- PT 312.001A Revision 0, Approved May 2, 1979, 120 VAC - RPS - MG - Sets
- PT 312.001B Revision 0, Approved May 2, 1979, 120 VAC - RPS - MG - Sets
- PT 319.001 Revision 0, Approved April 25, 1979, Plant Communications
- PT 415.001 A-1 Revision 0, Approved March 16, 1977, Screenwell Pump House Ventilation System
- PT 415.001 B-1 Revision 0, Approved March 16, 1977, Screenwell Pump House Ventilation System
- PT 651.001 Revision 0, Approved December 20, 1978, Process Computer

- PT 654.005 Revision 0, Approved July 19, 1978, Drywell Floor Seal Pressure Monitoring System
- PT 655.001 Revision 0, Approved June 20, 1979, Seismic Monitoring System
- PT 703.001 Revision 0, Approved May 23, 1979, Fuel Handling and Vessel Servicing Equipment
- PT 402.001 Revision 0, Approved July 25, 1979, Primary Containment Atmospheric Control System
- PT 315.001A Revision 0, Approved July 25, 1979, 125 VDC Power Distribution
- PT 315.001B Revision 0, Approved July 25, 1979, 125 VDC Power Distribution
- PT 315.001C Revision 0, Approved July 25, 1979, 125 VDC Power Distribution

This inspection verified that the licensee had a procedure written, reviewed and approved. Licensee management approval was in accordance with established procedures and test objectives were consistent with test titles.

Findings:

No discrepancies were noted in the review of these procedures and the inspector had no further questions at this time.

d. Test Procedure Review

Procedures Reviewed:

- PT 120.002 Revision 0, Approved November 14, 1978, Reactor Pressure Vessel Internals Vibration Test
- PT 123.001 Revision 0, Approved June 15, 1977, Standby Liquid Control System
- PT 121.001 Revision 0, Approved January 26, 1979, Residual Heat Removal System
- PT 119.001 Revision 0, Approved November 14, 1978, Reactor Core Isolation Cooling System

- PT 413.001 Revision 0, Approved November 14, 1978, Primary Containment Cooling
- PT 133.001 Revision 0, Approved November 14, 1978, Remote Shutdown Panel
- PT 656.001 Revision 0, Approved May 10, 1979, Feed Water Control

The procedures were reviewed for technical and administrative adequacy and included the following:

- Management review and approval,
- Procedure format,
- Test objectives clearly stated,
- Prerequisites,
- Environmental conditions,
- Acceptance criteria,
- References,
- Initial conditions,
- Test objectives are met,
- Performance verification,
- Recording conduct of test,
- Restoration of system to normal after test,
- Identification of personnel conducting and evaluating test data, and
- Independent verification of critical steps or parameters.

The inspector ascertained by review of the above procedures that they are consistent with regulatory requirements, guidance and licensee commitments.

Findings:

No discrepancies were noted in the review of these procedures and the inspector had no further questions at this time.

4. Cooling Water Systems

Discussion:

The inspector interviewed licensee's representatives in the startup testing group and held discussions on the following:

- Intake Canal and Screenwell Pump House,
- Circulating Water System,
- Service Water System,
- Reactor Building Closed Loop Cooling Water System,
- Turbine Building Closed Loop Cooling Water System,

- Demineralized Water Makeup System,
- Well Water Supply System,
- Potable Water Supply and Domestic Water System, and,
- Fire Main Distribution.

References:

- Final Safety Analysis Report,
- Startup Manual,
- System Description Manual, and
- Prints, Drawings and Diagrams.

Findings:

As a result of inspections of systems, components, areas, structures, review of referenced documents, and discussions with personnel, no discrepancies were noted and the inspector had no further questions at this time.

A review of these systems, their procedures, completions and turnovers, will continue during subsequent inspections.

5. Management Meeting

During the course of the inspection the inspectors met with on site management (see Paragraph 1 for attendees) to discuss various aspects of the NRC resident inspection program.

Items that were discussed included plans for a future meeting to cover the resident inspection program in greater depth, the resident inspectors office facilities, NRC phone lines to the site, NRC and LILCo organization, and, an overview of the NRC inspection program throughout the preoperational testing and startup testing phases.

6. Plant Tours

Several plant tours were conducted during the course of the inspection including containment drywell and wetwell, reactor building, turbine building, radwaste building, control building, control room, diesel generator rooms, auxiliary boiler room, battery rooms, Intake Canal and screenwell pump house, and, fire pumphouse.

The inspectors observed the status of construction, cleanliness and preservation of equipment, fire protection equipment, work in progress, existing pipe and component supports and tagging of equipment. With the exception of the below item, the inspectors had no questions at this time as a result of these tours.

The inspector noted that several fire extinguishers in the reactor building were either not sealed or below full charge. The inspectors discussed with the licensee's representatives their program for checking and maintaining fire extinguishers and fire hose stations. The inspectors also reviewed the logs maintained in the fire protection area and noted that significant effort was being expended to maintain all fire protection equipment operable. This area will receive further inspector review during subsequent inspection. This will be an inspector followup item. (IFI) (322/79-11-02)

7. Exit Interview

At the conclusion of the site inspection on July 27, 1979, an exit meeting was conducted with the licensee's senior site representatives (denoted in Paragraph 1). The findings were identified and previous unresolved and open items were discussed.

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