

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-322/84-31

Docket No. 50-322

License No. CPPR-95 Priority - Category C

Licensee: Long Island Lighting Company
P.O. Box 618
Wading River, New York 11792

Facility Name: Shoreham Nuclear Power Station

Inspection At: Shoreham, New York

Inspection Conducted: July 23-26, 1984

Inspectors: *N. Blumberg*
N. Blumberg, Lead Reactor Engineer

8/29/84
date

Approved by: *J. H. Bettenhausen*
J. H. Bettenhausen, Chief, Test
Programs Section, EPB

8/29/84
date

Inspection Summary: Inspection on July 23-26, 1984 (Report No. 50-322/84-31)

Areas Inspected: Routine, announced inspection of startup test procedures.
The inspection involved 31 hours on-site by one region based inspector.

Results: One deviation was identified - Startup test procedure acceptance
criteria did not conform to the FSAR - Paragraph 2.2.1.

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DETAILS

1. Persons Contacted

Licensee, Consultants and Contractors

- *J. Alexander, Reactor Engineer
- *R. Grunseich, Supervisor - Nuclear Licensing
- *G. Rhoads, Compliance Engineer (Consultant)
- *T. Rose, Operations Quality Assurance Engineer
- *W. Steiger, Plant Manager
- *J. Wynne, Compliance Engineer

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- *C. Petrone, Resident Inspector

*Denotes those present at exit interview.

2. Startup Test Procedure Review

2.1 Procedures Reviewed

The following procedures were reviewed for conformance to the requirements, regulatory guides, ANSI Standards, licensee procedures and other criteria detailed in Region I Inspection Report 50-322/84-27:

- STP-5, Control Rod Drive, Revision 5, January 20, 1983
- STP-15, High Pressure Coolant Injection System, Revision 2, January 20, 1983
- STP-14, RCIC System, Revision 2, May 3, 1983

2.2 Findings

2.2.1 During review of the above procedures, the inspector noted several instances in which the procedures appeared to deviate from test criteria as specified in the FSAR. The following are examples of a deviation from the FSAR:

- (1) STP-14 in one of its Level (1) Acceptance Criteria states that the RCIC turbine must not trip on overspeed. This criterion is somewhat less restrictive than that specified in FSAR Section 14 (14.1.4.8.12) which states that the RCIC turbine must not trip off during startup.
- (2) FSAR Table 14.1.1-1 specifies that the HPCI System startup test be performed during heatup, test condition (TC)-2 and TC-6. Contrary to this, STP-15 does not require a HPCI System test to be performed at TC-6.

- (3) One Level 2 criterion specified in FSAR Section 14 (14.1.4.8.13) states the following:

"The turbine gland seal condenser system shall be capable of preventing steam leakage to the atmosphere in excess of allowable releases."

However, this criterion does not appear to be evaluated in either procedure performance or procedure analysis sections of STP-15.

The differences between FSAR criteria and the startup test procedures identified in the above examples are considered a deviation from licensee commitments (322/84-31-01).

The inspector observed that acceptance criteria, test conditions, and test objectives for each test appeared to be based on the General Electric Startup Test Specifications (GESTs) and that, in some instances, the GESTs differed from the FSAR in both wording and substance. This appears to be a possible generic problem which may apply to procedures other than STP-14 and STP-15. In telephone discussions subsequent to the inspection (see paragraph 5) licensee representatives stated that changes were being made to the STP's to correct the unresolved items and deviations. In cases where the FSAR was believed to be incorrect the licensee is submitting change requests to the FSAR. The licensee further stated that a generic review had been accomplished and that procedure changes were being made for identified deficiencies.

- 2.2.2 The inspector noted the following procedural discrepancies which require resolution:

- Maximum Acceptable CRD scram times are given in the test procedure to the nearest thousandth of a second. The same scram value given in the Technical Specification (TS) are stated to the nearest hundredth of second. Because of this, maximum acceptance criteria for scram times in STP-5 exceed TS limits by two to eight thousandths of a second.
- The FSAR requires that scram times of the four slowest CRD's be determined at 50, 75, and 100 percent power. STP-5 test description paragraph 2.5.5 states "scram times of the four slowest CRD's will be determined at test condition 2, 3, and 6 during planned reactor scrams...". Since power level can vary within each test condition, the inspector informed the licensee that the test procedure should clearly specify the proper power level when testing the four slowest rods or an FSAR change be obtained.
- STP-5 provides for the initialling of each step during the testing of each control rod. Discussions with licensee

representatives indicated that no mechanism had been established for providing verification of each procedural step for each of the control rods to be tested. This item may be generic to other procedures.

- Procedure STP-14, "test analysis" step 8.14.7 states "Review test sections and insure that the gland seal system is functioning properly, preventing steam leakage to the atmosphere (Level 2)." However, this analysis is performed after completion of the procedure and there are no specific steps during performance of the test procedure to identify steam leakage. In addition, the RCIC system test is performed under three separate test conditions; however, the level (2) verification for steam leakage is verified under the first condition only. The inspector informed the licensee, that for each acceptance criteria, the test performance steps should clearly state that the item was verified and the test acceptance (analysis) section should verify that the acceptance criteria were met. Additionally, all acceptance criteria should be verified at each condition at which the test is performed unless such criteria is clearly not applicable to that condition. This item may be generic to other procedures.

The above items collectively are considered an unresolved item. A licensee representative stated that actions were being initiated to resolve each example noted above. Licensee action will be reviewed during a subsequent NRC:RI inspection (322/84-31-02).

3. QA/QC Interfaces

The inspector verified that receipt inspections of control rod blades, fuel rods and fuel bundles were performed. Records of control rod inspections performed November 1983 and January 1984 and fuel assembly inspections performed August, 1982 were reviewed. No deficiencies were identified.

4. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable, deviations or violations. One unresolved item was identified during this inspection and is detailed in paragraph 2.2.2.

5. Management Meetings

Licensee management was informed of the scope and purpose of the inspection at an entrance interview conducted on July 23, 1984. The findings of the inspection were periodically discussed with licensee representatives during the course of the inspection. An exit interview was conducted on July 26, 1984 (see paragraph 1 for attendees) at which time the findings of the inspection were presented.

Subsequent telephone discussions concerning the inspection findings were conducted between the inspector and Mr. G. Rhoads and Mr. J. Alexander on August 2 and 3, 1984.

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