

APPENDIX

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-498/88-19
50-499/88-19

Operating License: NPF-71
Construction Permit: CPPR-129

Dockets: 50-498
50-499

Licensee: Houston Lighting & Power Company (HL&P)
P.O. Box 1700
Houston, Texas 77001

Facility Name: South Texas Project (STP), Units 1 and 2

Inspection At: STP, Matagorda County, Texas

Inspection Conducted: March 21-25 and April 4-8, 1988

Inspectors:

J. Barnes
for R. C. Stewart, Reactor Inspector, Materials
and Quality Programs Section, Division of
Reactor Safety

5-2-88
Date

Approved:

J. Barnes
I. Barnes, Chief, Materials and Quality
Programs Section, Division Reactor Safety

5-2-88
Date

Inspection Summary

Inspection Conducted March 21-25 and April 4-8, 1988 (Report 50-498/88-19)

Areas Inspected: Routine, unannounced inspection of the inservice testing program for pumps and valves. Subject activities reviewed in this area of the inspection included tracking methodology for inservice testing, test procedures and results, inservice testing trend reports, quality assurance audits, and witnessing of inservice tests.

Results: Within the area inspected, no violations or deviations were identified.

Inspection Conducted March 21-25 and April 4-8, 1988 (Report 50-499/88-19)

Areas Inspected: No inspection of Unit 2 was conducted.

Results: Not Applicable.

DETAILS1. Persons ContactedHL&P

- +J. T. Westermeier, Project Manager
- +J. E. Geiger, General Manager, Nuclear Assurance
- +*J. S. Phelps, Supervisor, Project Compliance
- +*T. J. Jordan, Project Quality Assurance Manager
- +J. N. Bailey, Engineering & Licensing Manager, Unit 2
- +*D. C. King, Construction Manager
- *M. A. McBurnett, Operations Support & Licensing Manager
- +*S. N. Head, Supervisor, Licensing Engineer
- +*W. G. Wellborn, Supervisor, Project Engineer
- +*G. Ondriska, Startup Engineer
- *P. L. Walker, Senior Licensing Engineer
- +J. A. Slabinski, Operations Quality Control Supervisor
- +D. A. Leazar, Reactor Support Manager

Bechtel Energy Corporation

- +*R. W. Miller, Project Quality Assurance Manager
- +*R. D. Bryan, Field Construction Manager
- +*R. H. Medina, Quality Assurance Supervisor
- +K. G. Hess, Project Manager

Ebasco Services Inc.

- +D. D. White, Construction Manager
- +*R. E. Abel, Quality Control Site Supervisor

The NRC inspector also interviewed other licensee and contractor employees during the inspection.

*Denotes those attending the exit interview on March 25, 1988.

+Denotes those attending the exit interview on April 8, 1988.

2. Inservice Testing (IST) Program - Pumps and Valves (MC 73756)

The objectives of this inspection were to evaluate the implementation of the South Texas Project Electric Generating Station (STPEGS), Unit 1, IST program for safety-related pumps and valves, and to assess the adequacy of the testing performed with respect to the licensee commitments and guidelines of Section XI of the ASME Code.

a. IST Program Overview

The NRC inspector ascertained from IST program review that the STPEGS, Unit 1, IST program for pumps and valves is subject to the requirements of 10 CFR 50.55a(g); Regulatory Guide 1.26, Revision 3; and the ASME Boiler and Pressure Vessel Code, Section XI, Subsections IWP and IWV, 1983 Edition through Summer 1983 Addenda. The STPEGS Final Safety Analysis Report (FSAR), Section 3.9.6, addresses the licensee commitments to ASME Code requirements. These commitments are also referenced in the STPEGS, Unit 1, Technical Specifications, Section 4.0.5, dated March 22, 1988. The licensee's administrative control document, "STPEGS Pump and Valve IST Plan," describes the commitments for compliance with the ASME Code and was initially issued on January 29, 1986. The plan is currently being implemented under Revision 3 dated February 5, 1988.

STPEGS Station Plant Procedures OPGP03-ZE-0004, Revision 6, "Plant Surveillance Program"; OPGP03-ZE-0021, Revision 2, "Inservice Testing Program for Valves"; OPGP03-ZE-0022, Revision 3, "Inservice Testing Program for Pumps"; and OPGP03-ZE-0055, Revision 3, "Plant Surveillance Scheduling," are the four principal administrative procedures that describe the administrative structure and division of responsibilities in implementing the overall IST program.

In addition to the above, the NRC inspector reviewed Supplement 4 of the Safety Evaluation Report (SSER) dated April 7, 1987, relative to ASME Code relief requests by the licensee and approvals granted by NRR. The NRC inspector concluded from his review that the IST program appeared to be well structured, complete, and consistent with regulatory and ASME Code requirements.

There were no violations or deviations identified during the above reviews.

b. Methodology Used in Implementing IST Program

In assessing the method used by the licensee in controlling the test frequencies, the NRC inspector determined that STPEGS Procedures OPGP03-ZE-0004, Revision 6, "Plant Surveillance Program," and OPGP03-0055, Revision 3, "Plant Surveillance Scheduling," are the two principal administrative control procedures utilized in implementing the Unit 1 IST test frequencies. The pump and valve testing is integrated into the plant operations technical specification surveillance requirements and maintained by a surveillance scheduling computer program.

The plant operations manager is responsible for performing and evaluating assigned surveillance procedures and for appointing a divisional surveillance coordinator. The surveillance coordinator is

responsible for implementing the surveillance scheduling program and specifying the implementation date, frequency, and the administrative window for each surveillance test.

A surveillance scheduler is responsible for scheduling (specified frequencies greater than weekly), preparing, and issuing the surveillance test packages to the operations shift supervisor.

A reactor operations surveillance schedule is developed quarterly, which reflects surveillance tests to be conducted each day, and on each shift during the quarter. This document is the day-to-day working schedule utilized by both the operations staff and the surveillance scheduler to assure compliance with the frequency of tests prescribed by technical specifications and ASME Code requirements.

No violations or deviations were identified.

c. Review of IST Test Procedures and Test Results

During the inspection, the NRC inspector made a random selection of completed IST operational test procedures in order to verify that procedures contained reference values and other pertinent attributes prescribed by guidelines of the ASME Code of Section XI, Articles IWP/IWV-3000.

Procedures selected included the following:

- ° Test Procedure 1PSP03-SI-0007, Revision 2, "Low Head SI Pump 1A." Tests Conducted: July 30, August 2, and October 9, 1987.
- ° Test Procedure 1PSP03-RH-0003, Revision 2, and Procedure 1PSP03-RH-0006, "RHR Pump 1C." Tests Conducted: September 19, 23, and 30; and October 1, 1987.
- ° Test Procedure 1PSP03-RM-0001, Revision 3, "Reactor Makeup Water System-Valve Operational Test." Tests Conducted: May 6 and 17, and August 5, 1987.
- ° Test Procedure 1PSP03-EW-0016, Revision 3, "Essential Cooling Water Valve Checklist." Tests Conducted: August 4, September 4, and October 3 and 15, 1987.

No violations or deviations were identified.

d. Test Witness

During the period April 4-8, 1988, the NRC inspector accompanied plant operations and engineering personnel during IST functional tests performed on the following components:

- Test Procedure 1PSP03-CH-0001, Revision 2, "Essential Chilled Water Pump 11A."
- Test Procedure 1PSP03-CH-0007, Revision 2, "Essential Chilled Water System-Valve Operability Test." (Witness stroke time tests conducted on eight system valves.)
- Test Procedure 1PSP03-EW-0002, Revision 4, "Essential Cooling Water Pump 1A" (including full flow Test-ECW Pump 1A Discharge Check Valve EW0006).

The NRC inspector observed that each test was conducted by an operations test coordinator located in the control room and in complete control of each step of the applicable test procedure. In addition, the NRC inspector verified that both permanent and temporary installed instruments utilized in the tests were within the calibration due dates, calculations required for pertinent data were independently verified, acceptance criteria was closely defined, and independent verifications were conducted whenever procedures dictated.

No violations or deviations were identified.

e. IST Trending

During this inspection, the NRC inspector reviewed the licensee's IST component trending program status. Although minimum operational data has been accumulated for meaningful trending analysis, the licensee has established a program wherein each assigned systems engineer is developing trending data on IST components within their assigned systems.

No violations or deviations were identified.

f. QA Audits

The licensee's QA auditing department incorporated portions of the IST program in a "Test Control" audit conducted during the period July through August 1987. Since limited IST activities were in progress (pre-operations) at this time, the audit was limited to a programmatic review; however, the licensee's surveillance group has conducted over 79 surveillances during the period January through March 1988, covering such activities as startup, preoperations and test control.

No violations or deviations were identified.

g. Inspection Findings

The NRC inspector's findings indicate that the licensee has administrative controls and technically adequate procedures to implement the IST program. Procedural guidance is provided to aid the operators to perform the respective testing functions.

Testing witnessed by the NRC inspector was performed in accordance with the operational procedures and in accordance with the Section XI of ASME Code requirements.

3. Exit Interview

The NRC inspector met with the licensee personnel denoted in paragraph 1 on March 25 and April 8, 1988, respectively, and summarized the inspection scope and findings.