

APPENDIX

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-498/88-56
50-499/88-56

Operating License: NPF-76
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: August 8-12, 1988

Inspector: *M. E. Murphy* 8/25/88
M. E. Murphy, Reactor Inspector, Test Programs Section, Division of Reactor Safety Date

Approved: *W. C. Seidle* 8/25/88
W. C. Seidle, Chief, Test Programs Section, Division of Reactor Safety Date

Inspection Summary

Inspection Conducted August 8-12, 1988 (Report 50-498/88-56)

Areas Inspected: No inspection of Unit 1 was conducted.

Results: Not applicable.

Inspection Conducted August 8-12, 1988 (Report 50-499/88-56)

Areas Inspected: Routine, unannounced inspection of the overall preoperational test program, preoperational test procedure verification, review of preoperational test procedures and review of completed preoperational procedures.

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

DETAILS1. Persons ContactedHL&P

J. Westermeier, Project Manager
 S. Dew, Manager, Operations Support
 S. Phillips, Project Compliance Engineer
 G. Parkey, Plant Superintendent, Unit 2
 M. McBurnett, Operations Support Licensing Manager
 D. Brown, Construction Manager
 W. Wellburn, Supervising Project Engineer
 T. Jordan, Manager, Project Quality Assurance (QA)
 M. Duke, Staff Engineer
 S. Head, Supervisor, Licensing Engineer
 M. Wisenburg, Plant Superintendent, Unit 1
 W. Blair, Maintenance Manager
 L. Giles, Manager, Unit 2 Operations
 J. Loesch, Plant Operations Manager
 S. Eldridge, Plant Operations Support
 J. Slabinski, Unit 2 Operations Quality Control (QC) Supervisor
 E. Nichols, Jr., Electrical Maintenance Division Manager
 J. Green, Manager, Inspection & Surveillance
 G. Ondriska, Startup Staff
 R. Chewing, Chairman, Nuclear Safety Review Board
 M. Polishak, Lead Engineer
 R. Bryan, Construction Manager
 A. Harrison, Supervisor, Project Engineering
 J. Bailey, Engineering & Licensing Manager
 S. Hill, Unit 2 Maintenance Supervisor
 J. Geiger, General Manager, Nuclear Assurance
 S. Rosen, General Manager, Operations Support

Bechtel

K. McNeal, Project QA Engineer
 C. O'Neil, Unit 2 Engineering Manager
 L. Hurst, Project Manager

Ebasco

R. Sisson, Site Resident Engineer
 W. Pardee, QA Site Supervisor
 R. Abel, Quality Program Site Manager

All personnel listed above attended the exit interview conducted on August 12, 1988.

The NRC inspector also interviewed other personnel during the inspection.

2. Overall Preoperational Test Program Review (IP 70301)

This part of the inspection was to determine that the licensee's administrative controls over preoperational testing have been developed in accordance with FSAR commitments and regulatory requirements. The NRC inspector reviewed the following startup administrative instructions:

<u>Number</u>	<u>Rev.</u>	<u>Name</u>	<u>Effective Date</u>
1	4	Startup Manual Use and Control	02/19/88
2	3	Startup Organization	01/04/88
3	5	Startup Quality Assurance Plan	02/19/88
4	3	Equipment Clearance	09/18/87
5	3	Release for Test	08/21/87
6	9	Document Control	11/17/87
7	3	Preventive Maintenance Program	09/25/87
8	8	Master Completion List	08/21/87
9	3	Control of Measuring and Test Equipment	08/30/87
10	5	Indoctrination, Training and Certification of Test Personnel	01/04/88
11	13	Startup Work Requests	02/19/88
12	5	Problem Identification and Resolution	09/25/87
13	3	Configuration Control Package	10/03/87
14	5	Temporary Alteration Control	10/23/87
15	8	Material Control and Vendor Services	05/23/88
16	3	Review of Startup and Operating Experiences	10/03/87
17	14	Prerequisite Testing	09/25/87
18	7	Preoperational Testing	02/10/88

19	6	Acceptance Testing	09/25/87
20		NOT ISSUED	
21	7	Turnover to Operations	06/09/88
22	3	Conduct of Startup Operations	08/31/87
23		NOT ISSUED	
24	1	Pre-RFT Cleaning Program	08/30/87

This review verified that the licensee has prepared a description of the test program, and has identified and assigned responsibilities for the general areas of testing. The instructions provide for establishing and maintaining a test schedule and the development of test procedures. The test procedures are required to state the test objective, provide a test summary, establish the necessary prerequisites and detail the acceptance criteria.

These instructions provide a description of the licensee's test organization. This description established qualifications and defined the responsibilities for key personnel. The organizational responsibilities between organizations involved in the test program are clearly defined.

Specific responsibilities and the mechanics for system turnover from construction to the startup test organization have been established. Control of the systems, components and instrumentation during and subsequent to testing had been provided. Administrative measures have been established for the scheduling and conduct of testing. A formal program for the review, evaluation and disposition of test results has been implemented.

The licensee has provided a formal program for the review, approval, issuance, and revision of test procedures. Supporting procedures, such as operation or surveillance, engineering drawings, and vendor's manuals are administratively controlled to ensure availability of the latest revisions.

Design change control, temporary modifications, jumpers, and bypasses are adequately controlled by these administrative instructions. Plant maintenance, preventive maintenance, maintenance records, equipment protection, cleanliness, and handling of test and measurement equipment are comprehensively addressed by these instructions.

Training requirements have been established for personnel involved in test procedure preparation, approval, performance, documentation, and result review and approval. This training includes administrative controls, QA/QC, and technical objectives.

There were no violations or deviations identified in this area of the inspection.

3. Preoperational Test Procedure Verification (IP 70311)

This area of the inspection was to ensure that the scope of the preoperational test program is consistent with regulatory guidance and the licensee's commitments.

The NRC inspector reviewed Regulatory Guide 1.68 and the applicable portions of the FSAR. This review verified that the preoperational test program adequately addresses NRC requirements and the licensee's commitments. The licensee has a test procedure written, reviewed, and approved for each of the required systems or areas.

There were no violations or deviations identified in this area of the inspection.

4. Preoperational Test Procedure Review (IP 70300)

During this inspection, the NRC inspector reviewed the following preoperational test procedure:

- o 2SF-P-02, "Safeguards Response - Plant Blackout," Revision 0, dated August 5, 1988

This procedure was reviewed for technical adequacy, proper administrative review and authorization, inclusion of adequate acceptance criteria, and proper procedure prerequisites.

Within the scope of this review, no violations or deviations were identified.

5. Preoperational Test Result Evaluation (IP 70400)

The NRC inspector reviewed the following completed test procedures:

- o 2-RS-P-01, "Rod Control System," Revision 1, dated May 19, 1988
- o 2-HM-P-01, "Mechanical Auxiliary Building HVAC System," Revision 1, dated May 20, 1988
- o 2-HE-P-02, "Electrical Penetration Space HVAC System," Revision 0, dated September 11, 1987
- o 2-CH-A-03, "Mechanical Auxiliary Building Chilled Water System," Revision 1, dated May 10, 1988
- o 2-RS-A-01, "CRDM Power Supply (Motor Driven Generator Sets)," Revision 0, dated October 19, 1987

This review was conducted on the as-run copy of the test procedures and included the completed data packages, the test summary and evaluation, the

QA signoffs, and all test changes. All test deficiencies were tracked from identification through disposition and retests where required.

The review determined that the licensee is performing an adequate evaluation of test results and all test data meet established acceptance criteria or are properly dispositioned.

The licensee has an adequate procedure for correcting deficiencies and for retesting, if necessary. The licensee is following his procedures for review, evaluation, and acceptance of test results.

6. Exit Interview

An exit interview was held on August 12, 1988. At the exit interview, the NRC inspector summarized the scope and findings of the inspection. The licensee did not identify as proprietary any of the information provided to, or reviewed by, the NRC inspector.