

APPENDIX

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-498/92-27
50-499/92-27

Operating Licenses: NPF-76
NPF-80

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

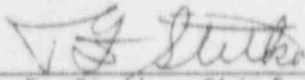
Facility Name: South Texas Project (STP), Units 1 and 2

Inspection At: STP, Matagorda County, Texas

Inspection Conducted: August 31 through September 4, 1992

Inspector: T. O. McKernon, Reactor Inspector, Operational Programs
Section, Division of Reactor Safety

Approved:



T. F. Stetka, Chief, Operational Programs
Section, Division of Reactor Safety

9/14/92
Date

Inspection Summary

Areas Inspected: Routine, unannounced inspection of the STP maintenance program and its implementation.

Results:

- o Maintenance documents and records reviewed were in accordance with the licensee's procedures. The maintenance program appeared to be functioning adequately and as intended.
- o The staff appeared aggressive in pursuing problems, finding solutions, and making improvements to the program.

Summary of Inspection Findings:

None

Attachments:

- o Attachment 1 - Persons Contacted and Exit Meeting
- o Attachment 2 - Documents Reviewed

DETAILS

1 MAINTENANCE PROGRAM IMPLEMENTATION (IP 62700)

1.1 Review of Maintenance Records

During the inspection, the inspector reviewed the documents listed in Attachment 2. The documents were reviewed to ascertain whether required administrative approvals had been obtained prior to work initiation, limiting conditions for operation were met and whether any operating mode restraint criteria were satisfied. For those maintenance activities beyond the normal skills of the craft, the inspector verified that appropriate procedures were established and implemented by qualified craft personnel and that quality control inspections were made in accordance with the licensee's requirements. Further, the review determined whether the prerequisite concurrences from interfacing departments were obtained (e.g., between maintenance and operations). Overall the review indicated that the maintenance records were complete.

Maintenance procedures were reviewed to determine if the procedures conformed to the licensee's administrative requirements, post-maintenance testing, where appropriate, were specified, and quality inspection hold points were established. The procedures, generally, described the work activities in sufficient detail and provided adequate consideration for radiological, temperature, pressure, and electrical hazards; fire protection, cleanliness, and housekeeping. Further, the procedures provided for sufficient controls for the use of equipment including, measuring and test equipment, lifted leads, bypasses, and jumpers. Satisfactory measures for ensuring operations notification when affected systems were removed or returned to service were specified. The maintenance procedures appeared satisfactory.

1.2 Review of the Maintenance Program

During the inspection, it was noted that the licensee had revised the work process program and the controlling procedure, OPGP03-ZA-00090. The following procedures were incorporated into OPGP03-ZA-00090, Revision 5:

- o OPMP02-ZG-0005, "Work Planning Procedure"
- o OPMP02-ZG-0006, "Work Implementation"
- o OPMP02-ZG-0007, "work Review"

The maintenance group believed the incorporation of the above procedures into one controlling document would improve the work control process. The work process program had been revised to streamline the work control process and to relieve the craft of undue administrative burdens.

The new OPGP03-ZA-00090 procedure incorporated the requirement for review by operations so that operational notification points (ONPs) could be added if desired. These ONPs were to serve as additional points for maintenance interface with the operations shift crew so that supplemental activity controls could be used if desired. Maintenance department "task masters" have been assigned to assist contracted work activities to ensure the appropriate work process is followed and the prerequisite materials, equipment, clearances, and other administrative prerequisites are met. The new procedure also modified the "Summary of Work Performed" section of the work package documentation and incorporated a lost time record and work deferral form in order to reduce the administrative load on the craft and to reduce the number of forms in a work package.

In addition, the control of contracted maintenance activities was changed so that a different group, the mechanical maintenance group, is responsible in lieu of the integrated planning and scheduling group. This change is designed to ensure that future contractor maintenance activities will be preplanned by the mechanical maintenance department rather than the contractor. The licensee believed that the new controls would improve the work flow process and lessen the administrative burden on the craft personnel.

During the inspection, it was determined that the licensee had experienced some difficulties in maintaining control of contracted maintenance services. A review of nonsafety-related work packages involving valve packing, completed during the Unit 2 refueling outage (2RE02), indicated that the contracted maintenance group had repacked some 34 valves in accordance with an incorrect procedure. When the problem was discovered, the licensee inspected the affected valves for hardware problems and corrected any noted problems. Additionally, the work packages were upgraded to incorporate the appropriate valve packing data forms. The inspector verified that the licensee took the appropriate corrective actions.

A review of the annual maintenance audit, the most recent maintenance status report, and an assessment of miscellaneous maintenance activities by the independent safety evaluation group indicated that the maintenance program has improved over the past year. Indicators of improvement such as decreasing total numbers of service requests, fewer repeat maintenance activities, and a decline in the percentage of preventive maintenance deferrals were noted.

1.3 Conclusion

Overall, based upon a limited and focused sampling, the maintenance program appeared to be functioning adequately and as-intended. The staff appeared aggressive in pursuing problem areas, finding solutions, and making adjustments in order to improve the maintenance program, procedures, and methodologies. Changes made to the maintenance program during the past year appeared to be working.

ATTACHMENT 1

1 Persons Contacted

HL&P

- *B. Auguillard, Senior Development Analyst
- D. Bohmen, Speakout Program Manager
- *W. Cartee, Planning & Assessment Consultant
- M. Coppinger, Mechanical Maintenance Manager
- *R. Dally-Piggott, Licensing Engineering Specialist
- *D. Hall, Group Vice President, Nuclear
- J. Hartley, Mechanical Maintenance Engineer
- *R. Hernandez, Manager Design Engineering
- *T. Jordan, General Manager, Nuclear Assurance
- *A. Joynt, Integrated Planning and Scheduling
- *W. Jump, General Manager, Nuclear Licensing
- *L. Kelly, Mechanical Maintenance Engineer
- *R. Kerr, Senior Engineer, Independent Safety Evaluation Group
- *R. Kersey, Engineer
- *W. Kinsey, Vice President, Nuclear Generation
- *C. Kloman, Motor Operated Valve Test Coordinator
- *D. Leazar, Manager Plant Engineering
- *M. McBurnett, Manager, Integrated Planning & Scheduling
- *M. McGehearty, Motor Operated Valve Test Coordinator
- *P. Newsome, Mechanical Maintenance Engineer
- *M. Pacy, Division Manager, Design Engineering
- *G. Parkey, Plant Manager
- *S. Phillips, Licensing Engineer
- *R. Rehkugler, Director, Quality Assurance
- *C. Rowland, Engineer
- *G. Schinzel, Engineering Supervisor, Plant Engineering Department
- *L. Taylor, Maintenance Planning Manager

NRC

- *R. Evans, Resident Inspector, STP
- *M. Runyan, Reactor Inspector, Plant Systems Section, Division of Reactor Safety (DRS)
- *T. Westerman, Chief, Plant Systems Section, DRS

*Denotes personnel that attended the exit meeting. In addition to the personnel listed above, the inspector contacted other personnel during this inspection period.

2 EXIT MEETING

An exit meeting was conducted on September 4, 1992. During this meeting, the inspector reviewed the scope and findings of the inspection. The licensee did not identify as proprietary any of the materials provided to, or reviewed by the inspector.

ATTACHMENT 2

Documents Reviewed

Operability Tracking Log (OTL) 2-91-603, "Mode 2 Restraints Due to In-Service Leak Testing"

OTL 2-91-653, "Containment Isolation valves"

Maintenance Procedure, OPMP01-ZA-0040, "Maintenance Work Practices and Requirements," Revision 1, dated July 24, 19C?

OPMP04-ZG-0003, "General Valve Repacking," Revision 9

OPMP02-ZG-0011, "Alternative Valve Packing and Live-Load Packing," Revision 1

STP Quality Assurance Surveillance Report, Surveillance No. 91-218
"Maintenance/Modifications - Contractor Activities," October 11-25, 1991

Station Problem Report (SPR) No. 91-0377, "MSIV Packing Material"

SPR No. 91-0386, "Lubrication Used During Packing"

Engineering Support Request 88-XX-111, "Use Authority for Graphfoil Packing"

RFA 91-1769, "Engineering Authorization for Use of Nickel Anti-seize Lubricant During Valve Repacking"

Maintenance End-of-Month Status Report for July 31, 1992

2PSP03-SI-0023, "SIS Pressure Isolation Check Valve Leak Test," Revision 1, dated December 10, 1991

Work Request (WR) SD-90588 "Inspection of the Discharge Check Valve for Starting Air Dryer #21," October 8, 1992

WR SI-90697, "Inspection of Swing Check Valves-SIS"

Operator Control Room Logs dated November 9-11, 1991

Operator Control Room Logs dated December 9-12, 1991

Operator Control Room Logs dated October 9-11, 1991

Operator Control Room Logs dated October 29-31, 1991

Quality Assurance Surveillance Reports 91-236, -224, -203, -230, -220; 92-041, -038

Independent Safety Evaluation Group (ISEG) Report 92-19, "Assessment of the Performance of Miscellaneous Maintenance Activities"