APPENDIX

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report Nos. 50-498/92-10; 50-499/92-10

Operating License Nos. NPF-76 and NPF-80

Licensee: Houston Lighting & Power Company (HL&P)
Vice President, Nuclear
P.O. Box 1700
Houston, Texas 77251

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

Inspection At: STP, Matagorda County, Texas

Inspection Conducted: April 6-9, 1992

Inspector: Nemen M. Terc, Emergency Preparedness Analyst

Approved: _____ 6/2/92
for Blaine Murray, Chief, Facilities Inspection Programs Section — Date

Inspection Summary

Inspection Conducted April 6-9, 1992 (Report 50-498/92-10; 50-499/92-10)

Areas Inspected: Routine, announced regional initiative inspection of emergency detection, emergency classification, protective action decisionmaking, shift staffing, and augmentation of the emergency response organization.

Results:

Within the areas inspected, no violations or deviations were identified. The following is a summary of the inspection findings:

- A good program had been established for detection and classification of events.
- A good program was in place concerning the formulation and communication of protective action recommendations.
- Several emergency responders augmentation drills were conducted in the area of staff augmentation. However, results were inconclusive and more information is required to establish if the emergency plan augmentation

requirements are being met and that automatic and manual personnel notification methods are effective.

DETAILS

1. PERSONS CONTACTED

HL&P

*W. Kinsey, Vice President, Nuclear Generation
*S. Rosen, Vice President, Nuclear Engineering
*R. Chewing, Vice President, Nuclear Support
*D. Leazar, Manager, Plant Engineering
*J. Sharpe, Manager, Maintenance
*D. Denver, Manager, Nuclear Engineering
*W. Jump, Manager, Nuclear Licensing
*M. Covell, Manager, Emergency Planning
*J. Bartlett, Supervisor, Operator Training
*C. Ayala, Supervisory Engineer, Licensing

*Denotes those present at the exit interview

2. FOLLOWUP ON PREVIOUS INSPECTION FINDINGS (92701)

(Closed) Exercise Weakness (498/9010-07; 499/9010-07): During the 1990 exercise, the licensee did not demonstrate the ability to identify and characterize important exercise weaknesses properly. During the 1991 exercise, the licensee demonstrated that the post-exercise critique process involved adequate staffing and participation by licensee management. During the 1991 self-critique, the licensee identified correctly and characterized important exercise weaknesses. Additionally, the licensee described the use of management resources and the method for performing post-exercise critiques in Procedure IP-02.6Q, "Emergency Response Exercises and Drills." The procedure also addressed provisions to include weaknesses and deficiencies in the Licensing Commitment Tracking System.

3. EMERGENCY DETECTION AND CLASSIFICATION (82201)

The inspector held interviews, reviewed the emergency plan and implementing procedures, and toured the control room to verify that appropriate means were in place for emergency detection and classification. The inspector also determined that emergency action levels were observable and measurable based on plant conditions, onsite and offsite radiological monitoring results, and dose projections.

The inspector noted that emergency action levels found in implementing procedures were consistent with those in the emergency plan. Emergency action levels met regulatory requirements and were conducive to prompt and accurate classifications.

The inspector verified by review of emergency organizational charts, written procedures, and emergency personnel listings that there was one individual

onsite at all times who had the responsibility and authority to classify events immediately and unilaterally and to initiate emergency actions.

The inspector reviewed a sample of emergency operating procedures and determined that these procedures directed the user to classify emergencies and included specific emergency classifications levels based on plant conditions.

The inspector toured the control room and verified that the revision of the emergency action levels Procedure OERP01-ZV-IN01, "Emergency Classification," contained ranges, physical units, and conversion factors compatible with information directly available in the control room and consistent with control room instrumentation.

The inspector noted that the licensee had provided information to the state and local officials pertaining to emergency action levels. The inspector also noted that documentation existed in which state officials acknowledged receiving and reviewing emergency action levels. The inspector noted that the same information had been provided to Matagorda County, but no acknowledgement form had been received by the licensee. Comments made by state officials were incorporated in Revision 12 of the emergency plan.

No violations or deviations were identified in this program area.

Conclusion

Existing means of detection and classification including emergency action levels and related written procedures were found to be satisfactory for implementing the emergency plan.

4. PROTECTIVE ACTION DECISIONMAKING (82202)

The inspector conducted interviews and reviewed the emergency plan and implementing procedures to verify whether authority and responsibility had been assigned appropriately to individuals responsible for assessing and analyzing emergency conditions and formulating protective action recommendations.

The inspector noted that the emergency plan and implementing procedures clearly defined personnel and equipment resources, as well as the methods used to make protective action decisions. In addition, the emergency plan and emergency implementing procedures specified responsibilities for formulating and communicating protective action recommendations to offsite officials during emergency conditions. The inspector noted that Procedure OERP01-ZV-IN07, "Offsite Protective Action Recommendations," provided decisionmakers with a flow chart to facilitate the process for arriving at accurate and prompt protective action recommendations. The procedure also included a map with clear delineated protective action zones to assist onsite emergency responders to communicate effectively with offsite authorities.

Maps of the 10-mile protective action zone were distributed to state and local agencies. Annual audio-visual training was offered to state and local officials. A series of training courses were made available to offsite agencies. The available training included: overview of emergency preparedness, basic radiation protection, familiarization with pressurized water reactors, public notification methods, protective action guides, evacuation methods, county and state emergency response plan familiarization, and emergency response coordination and direction.

No violations or deviations were identified in this program area.

Conclusion

Means in place to formulate and communicate protective action recommendations were found to be satisfactory.

5. SHIFT STAFFING AND AUGMENTATION (82205)

The inspector held discussions with licensee personnel and reviewed records and procedures to determine the adequacy of shift staffing and augmentation goals for the emergency response organization. In addition, the inspector reviewed efforts made by the licensee to validate the methods used to ensure that the staff of their emergency organization could be augmented within the time limits specified in Section C.5 of the emergency plan.

The inspector noted that during the period April-July 1991, the licensee conducted eight shift augmentation drills using an automatic callout system and determined the number of responses. Each drill consisted of attempting to contact key members of the emergency response organization who would support shift personnel during an emergency. The emergency responders offsite were contacted using an automatic dialing system that activated individual pagers. There was no actual travel to the site by the responders to the site during these drills. The results from the emergency staff augmentation drills revealed that 49 persons responded in a timely manner, within the required time limitations, from a total of 66 responders. This indicated an average rate of failure of 25 percent which was considered unacceptable by the licensee. The inspector noted that there was a steady improvement from the fourth drill on. The last drill, performed on July 11, 1991, ended with 64 responders out of 66 during the July 11, 1991 drill. This last result indicated 3 percent failure to respond which was considered acceptable by both the NRC and the licensee. The licensee stated that more drills will be conducted starting in May 1992.

The licensee returned to a manual callout dialing method on August 1, 1991. The manual method was used during the August 20, 1991 exercise. On April 13, 1992, the automatic dialing system was reinstated. On April 29, 1992, the licensee reverted to the manual method. Neither of these methods have been verified.

The inspector was not able to locate licensee records which demonstrated the effectiveness of either method used after July 11, 1991. After the inspection, the inspector received the documentation discussed above on the drills performed up to July 11, 1991. However, it was not clear to the inspector how, since July 11, 1991, callout method effectiveness was verified. The frequent changes between the automatic and manual callout methodologies coupled with the absence of recent validating test results, raised concerns as to whether either callout method would meet the plan requirements. The acceptability of the licensee's current use of either a manual or automatic callout system is considered unresolved pending licensee submittal to the region of their basis for establishing staff augmentation effectiveness.

Conclusion

Several emergency responders augmentation drills were conducted up to July 11, 1991. However, records documenting verification of methods used since July 1991 were inconclusive, and more information is required to establish if the plan is being met.

6. UNRESOLVED ITEM IDENTIFIED DURING THIS INSPECTION

An unresolved item is a matter about which more information is required to ascertain whether it is an acceptable item, a deviation, or a violation.

Unresolved Item	Title	Paragraph
498/9210-01; 499/9210-01	Verification of Staff Augmentation Methods	5

7. EXIT INTERVIEW

The inspector met with licensee representatives in paragraph 1 above on April 9, 1992, and summarized the scope and findings of the inspection as presented in this report. During the April 9, 1992 exit meeting, the licensee did not identify as proprietary any of the materials provided to or reviewed by the inspectors during the inspection. Additionally, on June 2, 1992, a telephone conversation was held between Messrs. Blair Spitzberg, and William Jump in which the licensee was informed that an unresolved item was identified on this inspection.