APPENDIX

U.S. NUCLEAR REGULATORY COMMISSION REGION IV

NRC Inspection Report: 50-498/87-61 50-499/87-61 License: NPF-71

Construction Permit: CPPR-129

Dockets: 50-498 50-499

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

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

Inspection At: STP Site, Matagorda County, Texas

Inspection Conducted: October 7-8, 1987

Inspector:

10/16/8

Æ. Baer, Radiation Specialist, Facilities Radiological Protection Section

Approved:

Murray, Chief, Facilities Radiological Protection Section (

10/16/87

Inspection Summary

Inspection Conducted October 7-8, 1987 (Report 50-498/87-61; 50-499/87-61)

<u>Areas Inspected</u>: Routine, announced inspection of the radioactive waste management program including solid radioactive waste, liquid radioactive waste, and gaseous radioactive waste.

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

DETAILS

1. Persons Contacted

HL&P

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*M. A. McBurnett, Manager, Support Licensing
*C. R. Beavers, Supervisor, Computer Support
H. S. Blinka, Performance Support Supervisor
*E. L. Brown, Licensing Engineer
J. D. Bumgardner, Shift Supervisor
*R. C. Craft, Radiological Protection Supervisor
F. R. Donley, Startup Engineer
R. L. Erickson, Senior Quality Assurance (QA) Specialist
R. A. Gangluff, Chemical Analysis Supervisor
*W. G. Isereau, Operations QA Supervisor
W. F. Jocher, Chemical Support Supervisor
G. Ondriska, Startup Engineer
W. C. Parrish, Radiological Support Supervisor
M. F. Rajcek, Chemical Operations Supervisor
*W. F. Scott II, Environmental Radwaste Technical Supervisor

- *E. L. Stansel, Plant Computer Manager
- *T. E. Underwood, Chemical Operations and Analysis Manager
- B. R. Wahlheim, Plant Engineering Engineer

Others

- D. R. Carpenter, Senior Resident Inspector, NRC
- E. P. Hildebrand, Operations Inspector, NRC

*Denotes those individuals present at the exit interview on October 8, 1987.

2. Followup on Previous Inspection Findings

(Open) Open Item (498/8630-03): Radwaste Program Audit - This item involved: (a) completion of an approved audit plan, including a checklist for the radwaste program, and (b) completion of an approved audit plan, including a checklist for the transfer, packaging, and transport of low-level radioactive waste. The NRC inspector discussed the term "audit plan," which is meant to provide as described in ANSI N45.2-1971, information about the functional area to be audited. The licensee uses the term "audit scope" when discussing audit plan activities. Open Item (498/8630-03) remains open pending completion of audit scopes and checklists as identified in parts (a) and (b) above. The NRC inspector stated this item must be resolved prior to the transfer or transport of low-level radioactive waste. (Open) Open Item (498/8630-04): <u>Radioactive Material Transport Quality</u> <u>Assurance Program</u> - This item involved the status of a QA program necessary to meet the requirements of 10 CFR Part 71.101. The licensee stated that they had not submitted their QA program for the transport of licensed material to the NRC for approval. The NRC inspector stated that the QA program must be submitted in accordance with 10 CFR 71.101(c) before transport of greater than type A quantities of radioactive material. Open Item (498/8630-04) remains <u>open</u> pending the submittal and approval of the QA program for transport of radioactive material.

(Open) Open Item (498/8630-05): Liquid Radwaste System - This item involved: (b) completion of the preoperational tests on liquid radioactive waste systems; (e) verification of tank volumes, representative sampling, discharge flow rates, and recorder readings; and (f) performance of an ALARA review of the (as-built) liquid radioactive waste system, including the recommendations of ANSI/ANS 55.6-1979. Parts (a), (c), and (d) were closed in previous inspection reports. The licensee had completed an ALARA review of the as-built liquid radwaste system and part (f) is considered closed. The NRC inspector stated that preoperational test WL02, WL03, WL05, and BR01 readed to be completed and that this open item must be resolved prior to achieving critically. Open Item (498/8630-05) remains open pending completion of parts (b) and (e).

(Open) Open Item (498/8630-06): Gaseous Radwaste System - This item involved: (a) completion of the system preoperational test; (b) performance of an ALARA review of the (as-built) gaseous radwaste system, including the recommendations of ANSI/ANS 55.4-1979; and (c) discharge flowrates and recorder readings. The licensee had completed an ALARA review of the as-built gaseous radwaste system; therefore, part (b) is considered closed. Parts (c) and (d) were closed in previous inspection reports. The NRC inspector stated that preoperational test WG01 needs to be completed and this open item must be resolved prior to initial critically. Open Item (498/8630-06) remains open pending completion of parts (a) and (c).

(Open) Open Item (498/8630-07): Solid Radwaste System - This item involved: (b) completion of preoperational tests, (c) verification of representative sampling of spent resins, and (d) performance of an ALARA review of the (as-built) solid radwaste system, including the recommendations of ANSI/ANS 55.1-1979. The licensee had completed an ALARA review of the as-built solid radwaste system; therefore, part (d) is considered <u>closed</u>. Part (a) was <u>closed</u> in a previous inspection report. The NRC inspector stated that preoperational test WSO1 and WSO2 needed to be completed and this open item must be resolved before the solidification of radioactive waste. Open Item (498/8630-07) remains <u>open</u> pending completion of parts (b) and (c).

(Closed) Open Item (498/8630-08): <u>Air Cleaning System</u> - This item involved completion of preoperational testing. The licensee had resolved and corrected system deficiencies and completed preoperational test 1-HC-A-02. This item is considered closed.

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(Open) Open Item (498/8630-10): Process and Effluent Radioactivity Monitoring System - This item involved: (a) calibration of gaseous and liquid radioactivity monitors with National Bureau of Standards traceable gaseous and liquid standards, and (b) determination of effluent monitor calibration sources. Open Item (498/8630-10) remains open pending completion of the calibration and source determination. The NRC inspector stated this item must be resolved within 6 months of the full (100 percent) power license issuance (see paragraph 4).

(Open) Open Item (498/8720-02): <u>NUREG 0737 Sampling and Analysis of Plant</u> <u>Effluents</u> - This item involved demonstrating representative sampling capability for plant effluents; entrained moisture; isokinetic sampling; continuous sampling capability whenever exhaust flow occurs; and limiting occupational dose to personnel during sample collection, handling, transport, and analysis. The NRC inspector's review indicated the licensee had drafted procedures for the collection and handling of samples and determined the samples would be processed in the radiochemistry laboratory. The licensee had not provided for dedicated equipment to remove and transport the lead shields or training to personnel expected to perform these manipulations. Open Item (498/8720-02) remains <u>open</u> pending resolution of the above concerns. The NRC inspector stated this item must be resolved within 6 months of the full (100 percent) power license issuance.

(Closed) Open Item (498/8720-04): NUREG 0737 Control Room Habitability Requirements - This item involved the lack of installation of the 6-hour supply of self-contained breathing apparatus (SCBA) in the control room envelope. The licensee had installed 14 SCBA each containing a 1-hour supply of breathing air and fifty, 1-hour breathing air replacement bottles in the control room envelope. The normal occupancy level of the control room envelope is 10 persons. The item (498/8720-04) is considered closed.

3. Program Areas Inspected

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The following program areas were inspected. These program areas and inspection procedures are identified in NRC Manual Chapter 2500. Unless otherwise noted, the inspection was completed and revealed no violations, deviations, unresolved items, or open items. Notations after a specific inspection item are used to identify the following: I = item not inspected or only partially inspected; V = violation; D = deviation; U = unresolved item; and 0 = open item.

Procedure Areas Inspected and Inspection Requirements

84522 Solid Radioactive Waste

02.01 - Construction and Installation of Solid Waste System 02.02 - Liquid Leakage, Overflow, and Spillage 02.03 - Sampling

- 02.04 Preoperational Test Program
- 02.05 Completion of Preoperational Test Program O (see paragraph 2)
- 02.06 Installation, Calibration, and Testing of Process Monitors
- 02.07 Procedures
- 02.08 Disposition of Low-Level Wastes

84523 Liquid Radioactive Waste

- 02.01 Construction and Installation of Liquid Waste System
- 02.02 Liquid Leakage, Overflow, and Spillage
- 02.03 Sampling
- 02.04 Preoperational Test Program 0 (see paragraph 2)
- 02.05 Completion of Preoperational Test Program
- 02.06 Installation, Calibration, and Testing of Process Monitors - 0 (see paragraph 2)
- 02.07 Procedures
- 02.08 Disposition of Low-Level Wastes

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Gaseous Radioactive Waste

- 02.01 Construction and Installation of Gaseous Waste System
- 02.02 Sampling
- 02.03 Preoperational Test Program 0 (see paragraph 2)
- 02.04 Completion of Preoperational Test Program 0 (see paragraph 2)
- 02.05 Installation, Calibration, and Testing of Process Monitors - 0 (see paragraph 2)
- 02.06 Procedures

4. Process and Effluent Radioactivity Monitors

The NRC inspector discussed with licensee representatives the extent of calibration expected on the process and effluent radioactivity monitors. The licensee had calibrated all the process and effluent radioactivity monitors with the solid transfer/calibration sources supplied by the instrument vendor. The licensee will perform an additional calibration with liquid or gases that are National Bureau of Standards (NBS) traceable for all effluent monitors. Gaseous process monitors for Unit 1 that are included in the Technical Specifications will also be calibrated with an NBS traceable radiogas. Off-line liquid, particulate, and iodine radioactivity monitors will also be calibrated to the steam generator blowdown and main steam line pipes, the gaseous waste processing (inlet and outlet), failed fuel liquid monitor, and area ventilation gaseous activity monitors will be calibrated with vendor supplied solid sources.

5. Exit Interview

The NRC inspector met with the personnel identified in paragraph 1 at the conclusion of this inspection on October 8, 1987. The NRC inspector summarized the scope and findings of the inspection.