APPENDIX

U. S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-458/84-12 Construction Permit: CPPR-145

Docket: 50-458

Licensee: Gulf States Utilities (GSU)
P.O. Box 2951
Beaumont, Texas 77704

Facility Name: River Bend Station (RBS)

Inspection At: River Bend Site, West Feliciana Parish, Louisiana

Inspection Conducted: June 4-8, 1984

Inspectors: Ronald E. Baer 7/9/84
R. E. Baer, Radiation Specialist Date
(pars. 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10)

Kenneth Wise 7/9/84
R. Wise, Radiation Specialist Date
(pars. 1, 2, 5, 6, 8, and 9)

Approved: Blaine Murray 7/9/84
Blaine Murray, Chief, Facilities Radiation Protection Section Date

For T. H. Johnson 7/30/84
J. P. Jaudon, Chief, Reactor Project Branch 1, Section A Date

Inspection Summary

Inspection Conducted June 4-8, 1984 (Report 50-458/84-12)

Areas Inspected: Routine, announced inspection of the preoperational radiological environmental monitoring program (REMP) including: organization and management controls; training and qualifications; environmental monitoring program; meteorological monitoring program; facilities, equipment, and supplies; documentation; quality assurance (QA) program; and contractor activities. The inspection involved 70 inspector-hours onsite by two NRC inspectors.

Results: Within the eight areas inspected, no violations or deviations were identified. Six open items are discussed in paragraphs 3, 4, 5, 6, 8, and 9.

DETAILS

1. Persons Contacted

GSU

J. G. Weigand, Vice President Administration
B. E. Boyer, Radiation Protection Technician
*J. V. Conner, Environmental Services Supervisor
P. J. Dautel, Licensing
*C. Fantacci, Radiation Protection Supervisor
*P. F. Gillespie, QA Engineer
*M. A. Harrington, Environmental Specialist
*K. C. Hodges, Quality Systems Supervisor
*G. V. King, Technical Material and Plant Services Supervisor
*R. D. Redding, Technical Material and Plant Services Coordinator
*R. J. Shah, Operational QA Engineer
*R. B. Stafford, Director Quality Services
*K. Steele, Health Physicist

Others

F. A. Beeson, Construction Training Specialist, Stone & Webster
D. D. Chamberlain, Senior Resident Inspector, USNRC
M. Reed, Chemistry Technician, NORCO Technical Services
*S. Sundaram, Radiological Specialist, Sunbelt Technical Services

The NRC inspectors also interviewed several other licensee and contractor employees including training, chemistry, quality control (QC), and radiation protection personnel.

*Denotes those individuals present during the exit interview on June 8, 1984.

2. Licensee Action on Previous Inspection Findings

(Closed) Open Item (458/8303-01): Radiological Environmental Sampling Program - This item involved the lack of a comprehensive radiological sampling program which includes all the elements of Table 6.1a in the RBS final environmental statement related to construction of River Bend Nuclear Power Station, Units 1 and 2, dated September 1974. The licensee met with representatives of the Office of Nuclear Reactor Regulation (NRR) and Region IV on April 28, 1983, and later submitted the proposed program as outlined in Table 6.2-1, Supplement 5 to the Environmental Report - Operating Licensee Stage (ER-OLS). The NRR staff had completed a review and determined that the proposed plan defined in Table 6.2-1 of the ER-OLS was acceptable relative to current NRR requirements. This item is considered closed.

3. Environmental Services Organization and Management Control

The NRC inspectors examined the licensee's onsite environmental services organization and management controls to determine compliance with the Final Safety Analysis Report (FSAR) commitments.

The NRC inspectors determined that the River Bend Nuclear Group had recently undergone a reorganization and the environmental services group which previously was part of the radiation protection/chemical section reporting to the plant manager was now an independent group reporting to the vice president-administration. The NRC inspectors noted that the licensee had notified NRR by letter on March 16, 1984, of the reorganization; however, the accompanying figures did not address the environmental services group.

The NRC inspectors reviewed the following memorandums: J. G. Weigand to W. J. Cahill, April 6, 1984, which designates the environmental supervisor and responsibilities of the position; J. E. Booker to J. G. Weigand, April 9, 1984, where environmental responsibilities are delineated between the environmental services group and corporate licensing; and J. V. Conner to M. F. Cassada, May 16, 1984, which clarified the division of responsibilities between the radiation protection/chemistry section and support activities to be performed.

The NRC inspectors discussed with licensee representatives the status of updating the FSAR to reflect the current organization. The licensee stated that the FSAR was scheduled for an amendment during June 1984 and would include the current reorganization.

The NRC inspectors reviewed the position descriptions for the environmental services group to verify they included the minimum qualifications, educational requirements, responsibilities, and authorities for the position. The licensee had written four position descriptions of which only one had been approved.

This is considered Open Item 458/8412-01 pending amendment of the FSAR organizational structure figures and approval of position descriptions.

No violations or deviations were identified.

4. Training and Qualifications

The NRC inspectors reviewed the training and qualifications of the environmental services group to determine agreement with FSAR commitments and the recommendations of ANSI/ANS Standard 3.1-1978.

The NRC inspectors reviewed the training records of the five individuals assigned to the environmental services group. Personnel had received training in meteorology, hazardous waste, plant systems, and occupational and environmental radiation protection. The NRC inspectors noted that a retraining program had not been defined at the time of this inspection.

The NRC inspectors discussed with licensee representatives the existing and proposed training requirements. The licensee stated that a training program would be developed which would include on the job training with qualification check cards. The existing qualification and training required are contained in the position descriptions.

The NRC inspectors noted that only one position description had been approved. The remaining position descriptions had been in the approval cycle since March 1984.

This is considered Open Item 458/8412-02 pending completion of the training/retraining program and approval of position descriptions.

No violations or deviations were identified.

5. Radiological Environmental Monitoring Program

The NRC inspectors reviewed the licensee's procedures, records, and reports to determine compliance with commitments in the RBS ER-OLS, and recommendations contained in Regulatory Guides 1.23, 4.1, 4.8, and 4.15.

The NRC inspectors reviewed the 1983 annual report for the RBS preoperational environmental radiological monitoring program. The program has been partially implemented with full implementation still to be completed. The NRC inspectors noted that the licensee specifies in the RBS ER-OLS, Table 6.2-1, measurement of direct radiation will be made at 45 locations; 32 inner and outer ring, 3 control, and 10 specific interest. The licensee actually had 44 locations, one of the inner ring and one special interest locations were one and the same. The NRC inspectors discussed with licensee representatives the need to correct the RBS ER-OLS table to accurately depict sample locations.

The NRC inspectors reviewed the licensee's procedures for implementation of the REMP. The licensee had identified 43 procedures for the environmental services group, 19 were REMP related of which only 5 had been approved. The NRC inspectors noted that procedures for operation of the meteorological tower were not addressed.

The NRC inspectors dicussed with licensee representatives the state of the land use census program. The licensee had performed a land use census in 1980 which had been limited to a 5 kilometer (km) radius of the plant.

The licensee had committed to perform a land use survey out to a radius of 8 km from the plant prior to approval of the radiological effluent Technical Specifications by the NRR. The licensee stated that the land use survey would be performed during the calendar year 1984.

This is considered Open Item 458/8412-03 pending: revising the RBS ER-OLS Table 6.2-1 to accurately depict sample collection numbers, developing and implementing all REMP procedures, developing and implementing the meteorological tower procedures, and performing a land use census within an 8 km radius of the plant.

No violations or deviations were identified.

6. Meteorological Monitoring Program

The NRC inspectors reviewed the meteorological monitoring program for compliance with the commitments of the RBS ER-OLS; requirements of Supplement 1 to NUREG-0737; and recommendations of Regulatory Guides 1.23, 1.70, and 1.97.

The licensee had demonstrated the operability and data collection of the meteorological tower during the period March 1977 through March 1979. The meteorological tower had been struck by lighting approximately in March 1983, which resulted in the tower being inoperable. The licensee stated that rework of the tower was scheduled to start in June 1984 and the tower should be operational by October 1984.

The NRC inspectors noted that the licensee had installed a microcomputer in November 1982 and the last calibration of the wind speed sensors, temperature, dew point, and rainfall channels had been completed in April 1983. Regulatory Guide 1.23 recommends that the meteorological tower operates with at least 90 percent reliability during the 12-month period prior to docketing (licensing) and that instrumentation be calibrated at 6 month intervals.

This is considered Open Item 458/8412-04 pending demonstration of operability of the meteorology tower and calibration of tower instrumentation.

No violations or deviations were identified.

7. Facilities, Equipment, and Supplies

The NRC inspectors visited various sample stations and observed the licensee performing the collection and replacement of airborne particulate filters, charcoal cartridges, TLDs, and the collection of vegetable samples.

During the tour of the various environmental monitoring stations, the NRC inspectors verified that the locations were as described in the Environmental Service Group Procedure EMP-0102, radiological environmental sampling schedule. The NRC inspectors also verified that all air samplers were operating and were properly calibrated.

The licensee does not perform radiological analysis on the environmental samples collected; they are sent offsite to a contractor. The licensee had proposed plans to perform radiological analysis onsite and was in the process of equipping facilities during this inspection. The onsite laboratory is expected to be operational by October 1984.

No violations or deviations were identified.

7. Documentation

The NRC inspectors reviewed the RBS preoperational environmental radiological monitoring program annual report for 1983 which included intercomparison results with Battelle Northwest Laboratories for TLDs; with the U. S. Environmental Protection Agency (EPA) for radioactivity analysis on air filters, milk, food, and waste samples; and with the contractor's internal QC program. The NRC inspectors also reviewed the monthly reports furnished by the contractor for the period January through April 1984. These monthly reports also included the results of the EPA intercomparison and internal QC checks.

No violations or deviations were identified.

8. QA Program

The NRC inspectors reviewed the licensee's program for performing audits of RBS radiological environmental protection program to determine compliance with the requirements of 10 CFR Part 50, Appendix B; commitments in Chapter 17 of the FSAR; and recommendations of Regulatory Guides 4.1 and 4.15.

The licensee had not conducted a QA audit of the radiological environmental sampling program or developed the necessary audit plan and checklist at the time of this inspection. An audit had been scheduled for September-October 1984.

The NRC inspectors discussed with the licensee QA representatives the qualifications of individuals assigned to perform audits and the recommendations contained in Regulatory Guide 4.15, Section 9. The licensee stated that the auditor would be qualified to the requirements of ANSI/ASME Standard N45.2.23-1978 and a qualified environmentalist would be part of the audit team.

This is considered Open Item 458/8412-05 pending the completion of an audit of the environmental monitoring program including the meteorology tower; development of an audit plan and checklist; and verification of qualifications for audit team members.

No violations or deviations were identified.

9. Control Activities

The NRC inspectors reviewed procedures and audits covering the licensee's program for monitoring their contractors' activities.

The NRC inspectors discussed with licensee QA representatives audits conducted on the contractor performing the radiological analysis of environmental samples. The licensee had not conducted an audit but produced a copy of an audit which had been submitted to the coordinating agency for supplier evaluation (CASE) by another electric utility company. The licensee did not plan on conducting an audit of the contractor at this time.

The NRC inspectors expressed concern regarding the qualifications of this auditor. The auditor was a qualified auditor per ANSI/ASME Standard N45.2.23-1978 but had no qualifications in environmental monitoring or radiochemistry. This audit was conducted on the contractor's QA program and identified three QC inspectors, none of which were identified as being qualified in environmental monitoring or radiochemistry. The NRC inspectors stated that this audit was not considered sufficient for the environmental program analysis capabilities of the contractor.

During the exit interview, licensee representatives stated the CASE audit was not to be considered an audit of the contractor furnishing radiological analysis for the environmental program. The NRC inspectors stated that this will be considered Open Item 458/8412-06 pending completion of an audit of the contractor providing the radiological analyses of environmental samples.

No violations or deviations were identified.

10. Exit Interview

The NRC inspectors met with licensee representatives identified in paragraph 1 at the conclusion of the inspection on June 8, 1984. The NRC inspectors discussed the scope and findings of the inspection.