

APPENDIX

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-458/88-16

Operating License: NPF-47

Docket: 50-458

Licensee: Gulf States Utilities (GSU)
P.O. Box 220
St. Francisville, Louisiana 70775

Facility Name: River Bend Station (RBS)

Inspection At: RBS, St. Francisville, Louisiana

Inspection Conducted: June 20-24, 1988

Inspector: *H. D. Chaney*
H. D. Chaney, Radiation Specialist, Facilities
Radiological Protection Section

7/27/88
Date

Approved: *R. Baer*
R. Baer, Chief, Facilities Radiological
Protection Section

7/27/88
Date

Inspection Summary

Inspection Conducted June 20-24, 1988 (Report 50-458/88-16)

Areas Inspected: Routine unannounced inspection of the liquid and gaseous effluent release program. Two allegations concerning the training and qualifications of supervisory personnel were reviewed.

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

DETAILS

1. Persons Contacted

GSU

- *J. Deddens, Vice President, River Bend Nuclear Group (RBNG)
- T. Plunkett, Plant Manager
- *J. E. Booker, Manager of RBS Oversight
- D. Burnett, Chemistry Foreman
- *E. M. Cargill, Supervisor, Radiological Programs
- *J. W. Cook, Lead Environmental Analyst
- *T. C. Crouse, Manager, Quality Assurance (QA)
- *L. A. England, Director, Nuclear Licensing
- R. G. Easlick, Radwaste Supervisor
- C. L. Fantacci, Radiation Protection Supervisor
- R. Gould, QA Engineer
- *P. D. Graham, Assistant Plant Manager, Operations
- *G. K. Henry, Director, Quality Operations
- *K. C. Hodges, Chemistry Supervisor
- *I. M. Malik, Quality Systems Supervisor
- *W. H. Odell, Manager, Administration
- W. Parker, Training Department, Operations Instructor
- A. A. Rouchon, Radwaste Equipment Operator
- D. Robinson, Computer Systems Engineer
- *M. F. Sankovich, Manager, Engineering
- J. Spivey, QA Engineer
- *K. E. Suhrke, Project Management

Others

- *W. Jones, NRC Resident Inspector
- *W. L. Curran, Cajun Electric-Site Representative

*Denotes those present at the exit interview on June 24, 1988.

The NRC inspector also interviewed several other licensee employees including QA/quality control (QC), instrumentation and control (I&C), and radiation protection (RP) personnel.

2. Inspector Observation

The following is an observation that the NRC inspector discussed with the licensee during the exit interview on June 24, 1988. Observations are not violations, deviations, unresolved items, or open items. This observation was identified for licensee consideration for program improvement, but the observation has no specific regulatory requirement. The licensee stated that the observation would be reviewed.

Audit Technical Specialist Selection - The individual used as a technical specialist for RBS Audit 87-06-I-PCON/RWMP (Process Control and Radioactive Waste Management Programs) did not have sufficient operational experience and technical training in radwaste activities to be considered a technical specialist.

3. Open Items Identified during This Inspection

An open item is a matter that requires further review and evaluation by the NRC inspector. Open items are used to document, track, and ensure adequate followup on matter of concern to the NRC inspector. The following open item was identified:

<u>Open Item</u>	<u>Title</u>	<u>See Paragraph</u>
458/8816-01	Quality Assurance Audits	5

4. Followup on Previously Identified Inspection Findings

(Closed) Deviation 458/8622-02: Installation of Radwaste Sludge Tank and Compactor - This item was previously discussed in NRC Inspection Reports 50-458/86-22 and 50-458/87-18 and concerned the licensee's failure to have installed and/or operational the radioactive liquid waste sludge tank, sample valves, and a dry waste compactor. The NRC inspector reviewed the licensee's response and implementation of corrective actions (deferring operation of the sludge tank via a revision to the updated Safety Analysis Report [USAR], installation of sample valves, and installation and testing of a waste compactor), and determined that the licensee had implemented adequate corrective actions to resolve the NRC concerns in this area.

(Closed) Open Item 458/8414-07: Calibration of Liquid and Gaseous Effluent Monitors - This item was previously discussed in NRC Inspection Reports 50-458/84-14, 50-458/84-33, 50-458/85-46, 50-458/85-53, and 50-458/86-34 and involved the licensee's calibration program for effluent monitors using National Bureau of Standards traceable liquid and gaseous radioactive sources. The NRC inspector reviewed the licensee's calibration program, its implementation, and determined that the NRC concerns in this area had been adequately resolved.

5. Radwaste Program Organization and Management Controls (83522/83722)

The licensee's organization and staffing of the radioactive waste group was inspected to determine: agreement with USAR Sections 13.1.2, 13.1.3, 13.4, and 13.5 commitments; compliance with the requirements of the facility operating license Technical Specifications (TS) 6.2, 6.5.3.8.k, l, and m, 6.6, 6.8, 6.9.1.8, 6.10.2.d, 6.10.3.a, d, and g, 6.12, 6.14, and 6.15; and recommendations of NRC Regulatory Guide (RG) 1.33, and NUREG-0761.

The NRC inspector reviewed the licensee's liquid and gaseous radioactive waste management program including performance of a batch liquid effluent release, management policies and plans, radwaste group (part of Operations Department) staffing and organization, procedures for implementing the radwaste program, quality assurance audits of implementing procedures, and routine and special reports submitted to the NRC by the licensee. The licensee's Semiannual Effluent Release Reports for 1987 were reviewed and found to satisfy TS 6.9.1.8 requirements.

During the inspection of licensee audits, the NRC inspector determined that while Audit 87-06-I-PCON/RWMP (Process Control and Radioactive Waste Management Programs) was performed in accordance with the QA Program Audit Plan and implementing procedures, it did not clearly show that licensee activities, involving the radwaste program, satisfied USAR or TS commitments and requirements. The subject audit was a comprehensive performance based audit of the licensee's implementation of the plant's radwaste management plan implementing procedures. The NRC inspector noted that the audit checklists did not contain any reference concerning the verification of TS requirements. Previous licensee audits have focused on the verification that the implementing procedures adequately addressed USAR and TS commitments and requirements. This is considered an open item pending licensee evaluation as to the degree of TS validation required in a given audit (458/8816-01).

Procedure and documents reviewed during this audit are described in the Attachment to this report.

No violations or deviations were identified.

6. Radwaste Organization Staff Qualifications and Training (83523/83723)

The training and qualifications of personnel assigned to radwaste operations duties were inspected to determine agreement with the commitments in USAR, Section 13.2.3; the requirements of 10 CFR Part 19.12, TS 6.3.1 and 6.4.1; the recommendations of RG 1.8, NUREG-0761, and industry standard ANSI/ANS 3.1-1978.

The NRC inspector reviewed radwaste organizational responsibilities, staffing, personnel qualifications, including a performance based review of personnel performing a liquid effluent release and waste stream sampling. Licensee training plans, implementing procedures, lesson outlines, on-the-job-training program, INPO accreditation, and training records for six radwaste personnel were reviewed.

No violations or deviations were identified.

7. Liquids and Liquid Wastes (84523/84723)

The licensee's program for control, processing, and discharge of radioactive liquid wastes (RLW) was inspected to determine agreement with the commitments contained in Section 11 of the USAR, and compliance with

the requirements of TS 3.11.1.1, 3.11.1.3, 3.11.1.4, 4.3.7.10, 4.11.1.1.1, 4.11.1.1.2, 4.11.1.2, 4.11.1.3, and 4.11.1.4; and agreement with the guidance in NRC RG 1.109 and NUREG-0473.

The NRC inspector reviewed the licensee's program for controlling discharges of RLW including discharge permits, valve lineups, tank recirculation, sampling and analysis of liquids, and the quarterly verification of discharge isolation valve operation upon receipt of a high activity signal. Condensate storage tank radioactive material inventory was reviewed. Reactor control room readouts of process monitors were observed. Discharge permits (Chemistry Department Form CSP0110.PER) for releases conducted in 1988 were reviewed. The licensee's calibration and periodic channel test of effluent discharge monitors (RE-107 and RE-108) were reviewed (Surveillance Procedures STP-511-4226/4280/4281/4580 and 4581). The NRC inspector also observed the performance of a planned RLL release (No. 88-0184) involving procedures (COP-001, CSP-110 and SOP-103).

No violations or deviations were identified.

8. Gaseous Waste System (84724)

The licensee's program for control, processing, and release of radioactive gaseous effluent was inspected to determine agreement with Section 11.3 of the USAR; compliance with the requirements of TS 3.3.7.11, 3.6.5.4, 3.6.5.6, 3.11.2.1, 3.11.2.2, 3.11.2.3, 3.11.2.4, 3.11.2.5, 4.3.7.11, 4.6.4.4, 4.6.5.6, 4.11.2.1.1, 4.11.2.1.2, 4.11.2.2, 4.11.2.3, 4.22.2.4, and 4.11.2.5; and the guidance in NRC RG 1.109, 1.140, 1.52, NUREG-0737, NUREG-0473, and industry standards ANSI N509-1980 and ANSI N510-1980.

The NRC inspector reviewed the licensee's documented program for control of waste gas releases to verify that proper sampling and analysis were performed and that dose rates in unrestricted areas did not exceed 10 CFR Part 50 and TS limits. The NRC inspector also reviewed the licensee's special and routine calibration program for gaseous effluent monitors that monitor the main stack and fuel building effluent release pathways. The licensee's records of in-place and laboratory testing of the high-efficiency particulate air (HEPA) filters and adsorber units for the standby gas treatment and fuel building ventilation systems was inspected.

No violations or deviations were identified.

9. Allegation (4-88-A-0015)

An allegation was received in the NRC Region IV office stating that a newly appointed (October 1, 1987) radiation protection technician (RPT) foreman: (a) was not qualified for the position, (b) used verbally abusive language when directing RPTs, and (c) gave improper written instructions to RPTs to review old Radiation Work Permits (RWP).

a. Discussion

The NRC inspector reviewed the subject foreman's qualifications, experience, and licensee's procedural restrictions governing position appointments. The foreman was promoted from the classification of RPT and had more than 5 years of RPT experience involving RBS plant operations and military duties. The foreman had been employed at RBS as an RPT for more than 3 years. In Section 13.1.2.1.3 of the USAR, the licensee commits to the training and qualification guidance of industry standard ANSI/ANS 3.1-1978 for the position of radiation protection supervisor (RPS) but not the lower position of RPT foreman, which reports to the RPS. The licensee's primary procedure governing qualification and selection of personnel for plant staff positions is Administrative Procedure (ADM) 007. This procedure is supplemented by Radiation Section Procedure (RSP) 003. ADM-007 does not address qualifications for the position of RPT foreman. RSP-003 also does not reference the qualification requirements of the RPT foreman position.

Another internal GSU document governing personnel selection and qualifications is the GSU Company Position Description for "Radiation Protection Foreman." This five-page document establishes the organizational location of the position, nature and scope of the position, and the prerequisite qualifications governing the position. This document is not referenced in higher tiered documents such as ADM-007 and RPP-003 and is considered a guidance document only. This document states, in part, "The incumbent must have 5 years of applied Radiation Protection/Dosimetry experience of which 3 years must be at a nuclear power plant. These 3 years of experience shall include at least one routine refueling outage."

The subject foreman was hired as an RPT at RBS on December 17, 1984, the licensee's first refueling outage commenced on September 14, 1987. The RPT was promoted to the position of RPT foreman on October 1, 1987.

Conclusion

This portion of the allegation was not substantiated since the foreman satisfied all aspects of the licensee's commitments.

b. Discussion

The licensee was already aware of the subject foreman's problem involving tactfulness and an aggressive verbal communication style with plant personnel when carrying out radiological protection duties and interaction with subordinates. Interviews with NRC resident inspectors and plant staff indicated that the foreman had been observed on occasion to use abusive language in enforcing radiological protection practices. The licensee had sent the foreman to two

separate supervisory skills training courses at a local university and has seen an improvement in the foreman's attitude and verbal communications skills.

Conclusion

This portion of the allegation was substantiated, but is not considered a regulatory matter in that the foreman's actions did not appear to be of a harassing or intimidating nature.

c. Discussion

The NRC inspector reviewed the purported foreman's written instructions (unsigned and undated) concerning the updating of closed RWPs that were used during the September through December 1987 refueling outage. Selected RWPs from the same period were reviewed for the type of corrections being made to them. Most of the changes were made to correct minor errors and update the listing of radiological surveys associated with a specific job. The failure to update and periodically review the RWPs during the normal course of the outage is the subject of an apparent violation which is discussed in NRC Inspection Report 50-458/88-10. Most of the RWPs reviewed had been annotated, on the routing sheet, as to the fact that updating had been accomplished. The historical data on an RWP is sometimes used for development of radiological controls for similar tasks. The foreman's instructions were aimed at making the RWPs a more presentable record package.

Conclusion

The allegation was substantiated as to the fact that the RWPs were updated/modified. It could not be substantiated that the modifications were for the express purpose of concealing errors in the RWPs.

10. Allegation (4-88-A-0048)

An allegation was received by the NRC concerning the inadequate training of GSU and RBS personnel for the purpose of replacing RPTs during a labor strike due to commence on June 18, 1988. The allogger stated that training and qualification cards for the replacement RPTs were being completed in less than one day.

Discussion

The subject strike did not take place.

The NRC inspector reviewed the licensee's proposed replacement RPT selectees and the training program for them. The licensee selected approximately 24 personnel from the GSU corporate office and RBS work site that have had previous experience as a RPT (state programs, naval nuclear power, or commercial). Except for current RP supervisors and managers with current RPT qualifications, and the manager of radiological programs eight

selectees were processed through a qualification program that included radiological surveys (radiation, air, and contamination), portable and laboratory instrumentation operation, survey results documentation, issue of respiratory protection equipment, radioactive material control, radiological posting, and access control over radiologically control areas (including high radiation areas). The licensee's records of training indicated that training involved 2 days (approximately 16 hours) of qualification. This qualification did not allow for personnel without current RBS RP experience/qualifications to establish radiological controls for work operations.

Conclusion

This allegation was not substantiated.

11. Exit Meeting

The NRC inspector reviewed the scope and findings of the inspection with licensee representatives and the NRC resident inspector noted in paragraph 1 of this report at the conclusion of the inspection on June 24, 1988. In response to the inspector's comments regarding the licensee's audit program, the licensee agreed to review their present audit plan to determine whether it properly address the programmatic and performance based aspects to be included in a given audit.

ATTACHMENT
TO NRC INSPECTION REPORT
50-458/88-16

DOCUMENTS REVIEWED

<u>TITLE</u>	<u>REVISION</u>	<u>DATE</u>
<u>River Bend Nuclear Procedures Manual (RBNP)</u>		
RBNP Directive No. 9, Radioactive Waste Management Policy Statement	1	08/13/87
<u>Station Operating Manual</u>		
<u>Administrative Procedures (ADM)</u>		
ADM-0001, Station Staff Organization, Responsibilities and Authorities	2	05/03/85
ADM-0003, Development, Control and Use of Procedures	14	03/31/88
ADM-0007, Selection, Training, Qualification and Evaluation of Plant Staff Personnel	3	01/10/86
ADM-0012, Corrective Action Program	3	07/07/87
ADM-0025, Conduct of Radiation Protection Services	3	03/31/87
ADM-0038, Radioactive Waste Management Program	4	08/26/87
ADM-0042, Conduct of Chemistry	4	10/21/87
ADM-0045, System Management and Utilization of the DRMS	1	4/15/88
ADM-0054, Radioactive Liquid Effluent Batch Discharge	3	05/19/88
<u>Chemistry Operating Procedures (COP)</u>		
COP-0001, Sampling Via the Radwaste Sample Panel - PNL 130	1	6/17/85
COP-0007, SAMpling the Off-Gas Treatment Sample Panels	5	7/16/87
COP-0015, Sampling the Circulating Water	3	01/27/87
COP-0015, Sampling the Normal Service Water	3	01/27/87
COP-0019, Sampling of Liquid Radwaste Sludge and Resin Holding Tanks	2	07/29/87
COP-0026, Sampling the Auxiliary Boiler Water	1	08/08/85
COP-0046, Sampling Gaseous Effluents Via the Wide Range Gas Monitors	5	01/27/87
COP-0050, Sampling Gaseous Streams	4	01/27/87
COP-0057, Grab Sampling of Liquid Monitors	3	08/11/87
COP-0809, DRMS System Operation	0	01/22/86
COP-1003, Post Accident Sampling of Gaseous Effluents	1	07/14/85
COP-1004, Post Accident Sampling of Liquid Effluents	3	12/20/85

TITLE	REVISION	DATE
<u>Chemistry Section Procedures (CSP)</u>		
CSP-0002, Chemistry Section Forms Control	1	01/30/87
CSP-0003, Chemistry Personnel Qualifications	3	03/13/87
CSP-0100, Chemical/Radiochemical Technical Specifications Surveillances	3	08/28/86
CSP-0107, Control of Plant Non-Radioactive Discharges	2	09/17/85
CSP-0110, Radioactive Liquid Effluent Batch Discharges	4	5/12/86
<u>Radiation Section Procedures (RSP)</u>		
RSP-0003, Personnel Qualification for the Radiation Protection Section	9	06/16/88
RSP-0008, Offsite Dose Calculation Manual (ODCM) Procedure	1	08/13/87
RSP-0200, Radiation Work Permits	3	07/13/87
<u>Radiation Protection Procedures (RPP)</u>		
RPP-0027, Gaseous Effluents Monitor Setpoint Determinations	1	05/12/88
RPP-0095, Primary Calibration of Main Condenser Off-Gas Post Treatment System Noble Gas Activity Monitors	0	08/11/86
RPP-0097, Manual Methods of Determining Cumulative Dose Contributions From Liquid Effluents	0	04/29/87
RPP-0001, Determination of Background Values for DRMS Process Radiation Monitors	0	12/22/87
<u>Radwaste Procedures (RWS)</u>		
RWS-0203, Personnel Qualifications for Radwaste Section	3	02/19/87
RWS-0204, Radwaste Processing Control Program	2	11/10/87
RWS-0208, Waste Management and Leak Detection	3	06/12/87
RWS-0209, Conduct of Radwaste Vendor Services	3	11/17/87
RWS-0211, General Performance Control for Radwaste	2	05/18/87
RWS-0212, Radwaste Process Logs and Records	2	07/02/87
RWS-0213, Radwaste (Process) Shift Relief and Turnover	2	03/07/87
RWS-0304, Radioactive Waste Handling and Control	3	07/06/87
<u>System Operating Procedures (SOP)</u>		
SOP-0108, Liquid Radwaste Processing	6	11/02/87
<u>Surveillance Test Procedures (STP)</u>		
STP-511-4214, RMS-Main Plant Exhaust Duct Noble Gas Activity 18 Month Chcal (1RMS-RE125)	1	08/26/86
STP-511-4226, RMS-Cooling Tower Blowdown Line Flow Rate 18 month Chcal	3	02/05/88

TITLE	REVISION	DATE
STP-511-4231, RMS-Main Plant Exhaust Duct Monitoring System Effluent Flow Rate Monitor, Quarterly Chfunct and 18 month Chcal (1RMS-FE126)	4	01/21/88
STP-511-4232, RMS-Main Plant Exhaust Duct Monitoring System Sampler Flow Rate Monitor, Quarterly CHFunct, 18month CHCAL (1RMS-FEX126)	4	11/20/87
STP-511-4215, RMS-Main Plant Exhaust Duct Noble Gas Activity Monitor 18month CHCAL (1RMS-RE126)	2	06/29/87
STP-511-4515, RMS-Main Plant Exhaust Duct Noble Gas Activity Monitor Quarterly CHFunct (1RMS-RE126)	2	03/18/88
STP-511-4280, RMS-Liquid Radwaste Effluent Line Radiation Monitor 18 Month Chcal (1RMS-RE107)	4	01/20/88
STP-511-4281, RMS-Radiation Monitor Cooling Tower Blowdown Line 18 Month Chcal (1RMS-RE108)	3	01/28/88
STP-511-4580, RMS-Liquid Radwaste Effluent Line Radiation Monitor Quarterly Chfunct (1RMS-RE107)	3	07/22/87
STP-511-4581, RMS-Radiation Monitor Cooling Tower Blowdown Line Quarterly Chfunct (1RMS-RE108)	3	03/18/88
STP-511-8207, Cumulative Dose Contributions From Liquid Effluents	4	10/11/85
STP-606-8215, Manual Noble Gas Dose Rate Determination	0	06/02/86
STP-406-3601, In Service Testing of the Fuel Building Filtration System	1	(11/12/87)
STP-257-3601, In Service Testing of Standby Gas Treatment Filtration System	1	06/30/85
STP-257-8601, Standby Gas Treatment System Carbon Analysis	2	(05/05/87)
STP-406-8602, Fuel Building Ventilation Charcoal Filtration System Carbon Analysis	2	(05/05/87)

Station Support Procedures

Section 5, Training Administration Procedures (TAP)

TAP-5-007, Training Records and Documentation

Section 7, Training Program Procedures (TPP)

TPP-12, Non-Licensed Operator Training

Training Plans

NEO-019-2, Liquid Radwaste Collection	2	07/23/87
NEO-020-2, Liquid Radwaste Processing	2	07/23/87

<u>TITLE</u>	<u>REVISION</u>	<u>DATE</u>
<u>Quality Assurance Documentation</u>		
Master Audit Plan for Radwaste Program (RWMP)	0	
Master Audit Plan for Process Control Program (PCON)	0	
Audit: 87-06-I-PCON/RWMP		06/87
River Bend Station Updated Safety Analysis Report		08/87
<u>Miscellaneous Documents</u>		
RBS Condition Report No. 88-0472, Meteorological Monitoring System		06/19/88
Digital Radiation Monitoring System Data Quality Report for RE-107, RE-108, RE-125, and RE-126		
Report on Liquid Effluent Monitor (RE-107 and RE-108) Primary Calibrations		04/88
Qualification Manual for Replacement Radiation Protection Technicians During the Strike (June 1988)		
Position Description for Radiation Protection Foreman		
Radiation Protection Section Organizational Chart		03/88
Radwaste Section Organizational Chart		
Training Records for B. W. Patin, A. A. Rouchon, P. A. Crescenzi, W. M. Spencer, R. A. Wilson of the Radwaste Section		