

APPENDIX

U. S. NUCLEAR REGULATORY COMMISSION

REGION IV

NRC Inspection Report: 50-458/85-64

License: NPF-40

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 Station, St. Francisville, Louisiana

Inspection Conducted: September 16-20, 1985

Inspector:

R. E. Baer
R. E. Baer, Radiation Specialist, Facilities
Radiological Protection Section

10/16/85
Date

Approved:

B. Murray
B. Murray, Chief, Facilities Radiological
Protection Section

10/16/85
Date

Inspection Summary

Inspection Conducted September 16-20, 1985 (Report 50-458/85-64)

Areas Inspected: Routine, unannounced inspection of the licensee's radioactive waste management controls, training and qualifications, radwaste startup, liquid, and gaseous waste systems. The inspection involved 30 inspector-hours onsite by one NRC inspector.

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

8511010361 851021
PDR ADOCK 05000458
G PDR

DETAILS

1. Persons Contacted

GSU

- *J. C. Deddens, Vice President, River Bend Nuclear Group
- *T. F. Plunket, Plant Manager
- *B. E. Boyer, Environmental Analyst
- L. N. Campo, Radwaste Specialist
- *E. M. Cargill Jr., Supervisor Radiological Programs
- *J. V. Conner, Supervisor Environmental Services
- *T. C. Crouse, Manager Quality Assurance
- R. G. Easlick, Radwaste Supervisor
- W. F. Eisele Jr., Health Physicist
- *P. E. Freehill, Superintendent Startup and Test (SU&T)
- *D. R. Gipson, Assistant Plants Manager
- O. T. Hale, Radiation Protection Specialist
- *M. A. Harrington, Senior Environmental Specialist
- *B. E. Hey, Licensing Engineer
- D. E. Jacobsen, System Engineer
- G. R. Kimmell, Supervisor Operations Quality Assurance (QA)
- *J. M. McGhee, Radwaste Foreman
- C. L. Nash, Chemistry Supervisor
- *E. R. Oswood, QA Engineer
- *S. R. Radebaugh, Assistant Superintendent SU&T
- *C. A. Rohrmann, Technical Training Coordinator
- *J. E. Spivey Jr., QA Engineer
- *L. R. Thompson, Instrumentation and Control Supervisor
- *R. G. West, SU&T

Others

- R. T. Dunn, Lead Startup Engineer BOP Power Managements Consultants
- P. G. Humphrey, Lead SU&T Engineer, General Electric
- J. W. Morgan, Lead Startup Engineer, HVAC, Sunbelt
- J. K. Newton, Startup Engineer, Sunbelt
- R. R. Williams, Senior Training Specialist, NUS Corporation

The NRC inspector also interviewed several other licensee and contractor employees.

*Denotes those individuals present during the exit meeting on September 20, 1985.

2. Radwaste Organization and Management Control

The NRC inspector examined the licensee's onsite organization regarding radioactive waste management to determine compliance with the Final Safety Analysis Report (FSAR), Chapters 13.1 and 13.4, commitments, Technical Specifications (TS), Sections 6.2.2 and 6.5 and recommendations of Regulatory Guide (RG) 4.15.

This licensee had defined the responsibilities of various station departments and the radwaste section organization and management control in administrative procedure ADM-0038, "Radioactive Waste Management Program," Revision 1, May 25, 1985, which also contains a Gulf States Utilities Radioactive Waste Management Policy Statement.

The NRC inspector discussed the responsibilities and duties of the radwaste nuclear equipment operators (RNEO). The licensee has six RNEO's, one per shift, on a six shift rotation. The NRC inspector expressed concern that during off-normal work hours the RNEO would not be able to verify valve line-ups, operate valves, and perform routine surveillance of equipment and at the same time remain in the auxiliary control room to acknowledge abnormal alarms, document radwaste system evolutions, and control system components. The licensee stated that nuclear equipment operators (NEO) from the operating shift would be available to man the auxiliary control room when the RNEO performs duties outside the control room. The NRC inspector suggested that the NEO's should be knowledgeable in the radwaste system operation and capable of acknowledging alarm conditions.

The NRC inspector reviewed selected administrative and operating procedures (See Attachment 1) which had been changed since the last radioactive waste program inspection. The NRC inspector discussed with licensee representatives procedure ADM-0043, "Radwaste Management Plan," Section 6.2.2 that specified a limit below which the licensee proposed to release the material as non-contaminated waste and procedure RWS-0307, "Radioactive Waste Segregation," Section 8.2.1.4 where the licensee had stated that a positive indication of contamination would be a twice background reading on one of two models of low-level radiation detection equipment. The NRC inspector referred the licensee to 10 CFR Part 20.301, which states that no licensee shall dispose of licensed material except by transfer to an authorized recipient or as approved by the NRC. The licensee had not generated or released any material using the above stated release limits at the time of this inspection. The licensee stated they would review the above mentioned procedures.

No violations or deviations were identified.

3. Radwaste Training and Qualifications

The NRC inspector reviewed the licensee's radwaste training program and individual qualifications to determine compliance with FSAR commitments and TS Section 6.4 and 10 CFR Part 19.12 requirements.

The NRC inspector verified that individuals occupying the positions of radwaste supervisor, radwaste foreman, and RNEO had received the training and met the qualifications for their assigned positions consistent with Procedure RWS-0203, "Personnel Qualification for Radwaste Section." The NRC inspector noted that the radwaste supervisor was presently attending a general systems training course and the individual assigned as radwaste foreman held a senior reactor operator license. All five RNEO's had completed qualifications card requirements for radwaste systems operations.

The NRC inspector discussed with licensee representatives the qualifications, training, and preparation time available for personnel assigned to present training to radwaste personnel.

The NRC inspector interviewed and reviewed the qualifications of the individual assigned to the position of supervisor radiological programs to determine compliance with TS Section 6.2 and 6.3, and FSAR Section 13.1 commitments. The NRC inspector determined that the assigned individual met the recommendations of industry standard ASNI/ANS 3.1-1978 and RG 1.8, September 1975.

No violations or deviations were identified.

4. Liquid Radioactive Waste System

The NRC inspector reviewed the licensee's liquid radioactive waste program to determine compliance with TS, Sections 3.3.7.10, 3.4.4, 3.4.5, 4.4.5, and 6.15.1, FSAR Chapters 11.2 and 11.5 commitments and Inspection and Enforcement (IE) Bulletin 80-10.

The NRC inspector reviewed temporary alteration request number 85-LWS-14, dated August 22, 1985, which involved the running of a temporary line consisting of hard pipe and approximately 150 of fire hose from valve AOV115 (discharge of the floor drain collector subsystem) to valve AOV257, liquid waste discharge valve, and to the circulating water blowdown discharge line for release to the environment. This alteration allows discharge from the floor drain tanks without processing through the strainers, filters, cation, anion, mixed bed demineralizers, and the liquid radwaste effluent monitor RMS-RE107. The NRC inspector noted the licensee had performed a safety analysis, 10 CFR Part 50.59, review for this temporary alteration to the liquid effluent line. The licensee does not routinely utilize this bypass line for liquid discharges. The NRC inspector discussed with licensee representatives those controls utilized to ensure that releases involving the above alternate discharge route do not contain radioactive material and that the tank being discharged cannot accept additional liquids after sampling. The licensee stated that the operation of the liquid waste system is covered in

procedures SOP-0101, "Liquid Radwaste Collection System" and SOP-0108, "Liquid Radwaste Processing." Operating in the batch mode requires that the receiving tank be isolated, recirculated, sampled, and discharged. Incoming liquids are routed to one of the other two tanks available in the system. The licensee reaffirmed that the bypass line would only be used when no radioactivity is detectable in the effluent. The licensee stated that use of the alternate discharge would be terminated on November 22, 1985, or when the radwaste filters and demineralizers are operating correctly.

The NRC inspector reviewed the preoperational test 1-PT-603, "Liquid Radwaste System," Revision 0, November 8, 1984, the test exceptions (TE) and major/minor change request (MCR) which had been generated during the performance of testing and 1-SST-044, "Filter/Demineralizer Train A Operation," Revision 0, July 6, 1985. All deficiencies had been satisfactorily resolved or did not impact on the system operation and the test packages were approved by the Joint Test Group (JTG) on June 17, 1985, and September 3, 1985, respectively.

The NRC inspector discussed with licensee representatives the status of the digital radiation monitoring system (DRMS) which includes the liquid and gaseous effluent monitoring systems. The licensee had completed calculations to determine correction factors for the iodine plateout fraction and particulate deposition fraction on the main plant exhaust stack, fuel building ventilation exhaust and radwaste building ventilation exhaust for both the gaseous and particulate and gaseous extended range monitors. The licensee stated that they were still evaluating the possibility of having a vendor perform actual plateout and deposition tests.

The licensee had completed the preoperational test on the DRMS and was in the process of resolving the test exception. The DRMS vendor was scheduled to start the field performance test on the system.

The NRC inspector determined that the licensee had drafted an administrative procedure to control the discharge of liquid effluent. Procedure CSP-110, "Control of Plant Liquid Radioactive Discharges" which has been approved by the licensee will be used to implement the administrative procedure. The licensee had not made any liquid releases which would have required the use of a liquid radioactive waste discharge permit.

No violations or deviations were identified.

5. Gaseous Radioactive Waste System

The NRC inspector reviewed the licensee's gaseous waste management system to determine compliance with TS Sections 3.3.7.11, 3.6.5.4, 3.6.5.6, 3/4.6.6, 3/4.7.2 and 6.15.1 requirements FSAR Sections 9.4.11.3, and 11.5 commitments.

The NRC inspector discussed with licensee representatives the status of the gaseous radioactive waste system. The licensee stated that preoperational tests were to be completed by September 25, 1985. The NRC inspector noted that operating procedure, SOP-0092, "Offgas System" still contained several "LATERS" which needed to be resolved such as the recombined inlet temperatures, air purge supply air flow, and prefilter differential pressure. These values would be available after completion of the preoperational test.

The licensee had completed the preoperational tests 1-SST-17, "Field Testing of Category I Charcoal Filter Units" for the safety-related systems and 1-SST-18, "Field Testing of Category II Charcoal Filter Units," for the non-safety systems. These test results were in the review cycle prior to JTG approval. The licensee had to replace the charcoal in the standby gas treatment system to meet the TS Section 3.6.5.4. requirements for methyl iodide penetration. A sample of the charcoal had been sent offsite for laboratory analysis and the results of this test were not available for review at the time of this inspection.

No violations or deviations were identified.

6. Radiowaste Startup

The NRC inspector reviewed the licensee's records and sampling schedule for monitoring the following water systems: makeup water, feedwater, condensate demineralizer effluent, condensate pump discharge, condensate storage tank, control rod drive, reactor water clean up "A" and "B" effluent, and reactor water for compliance with TS Section 3/4.4.4. and 3/4.4.5.

The NRC inspector reviewed the licensee's program for monitoring of nonradioactive process and effluent streams to preclude the potential for unmonitored, uncontrolled release or radioactivity to the environment to determine compliance with IE Bulletin 80-10. The licensee had incorporated specific sampling and analysis surveillances in various chemistry procedures for plant systems and the environmental services section had included the sewage and storm drainage systems. The licensee had not made any liquid radioactive releases at the time of this inspection.

No violations or deviations were identified.

7. Exit Interview

The NRC inspector met with licensee representatives identified in paragraph 1 and the NRC senior resident inspector at the conclusion of the inspection on September 20, 1985. The NRC inspector summarized the scope and findings of this inspection including:

- The availability of RNEO qualified personnel during off-normal work hours.

- Station procedures that were not in agreement with the requirements of 10 CFR Part 20.301.

The licensee indicated they would review these matters.

ATTACHMENT 1

PROCEDURES REVIEWED

ADM-0038, "Radioactive Waste Management Program," Revision 1, May 25, 1985

ADM-0043, "Radwaste Management Plan," Revision 0, March 23, 1985

RWS-0203, "Personnel Qualification for Radwaste Section," Revision 2,
July 24, 1985

RWS-0205, "Radwaste Task Scheduling," Revision 1, July 25, 1985

RWS-0206, "Radwaste Scaling Factors Program," Revision 1, April 17, 1985

RWS-0207, "Radwaste Shipping Criteria," Revision 1, May 18, 1985

RWS-0208, "Waste Water Management," Revision 1, July 26, 1985

RWS-0305, "Use of the Dry Active Waste Storage Facility (DAWSF)" Revision 1,
May 11, 1985

RWS-0307, "Radioactive Waste Segregation," Revision 1, May 3, 1985

SOP-0092, "Offgas System," Revision 0, March 16, 1985

SOP-0082, "Process Radiation Monitors," Revision 1, July 13, 1985