

APPENDIX B

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-458/88-18

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: August 8-12, 1988

Inspector:

H. F. Bundy
H. F. Bundy, Reactor Inspector, Test Programs
Section, Division of Reactor Safety

8/30/88
Date

Accompanying
Personnel:

R. V. Azua, Reactor Inspector, Test Programs
Section, Division of Reactor Safety

Approved:

W. C. Seidle
W. C. Seidle, Chief, Test Programs Section
Division of Reactor Safety

8/30/88
Date

Inspection Summary

Inspection Conducted August 8-12, 1988 (Report 50-458/88-18)

Areas Inspected: Routine, unannounced inspection of surveillance procedures and records.

Results: The surveillance testing program appears functional. The surveillance testing procedures (STPs) are generally adequate; however, some data sheets could be improved and better cross-referencing to the applicable

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Technical Specifications should be made. There appeared to be an excessive number of changes and test exceptions on completed STPs, particularly in the instrumentation and control area. This suggested that the procedure verification process could be improved. One violation involving failure to properly evaluate and document surveillance test results was identified (paragraph 2).

DETAILS1. Persons ContactedGSU

- *J. E. Booker, Manager, RBS Oversight
- *T. F. Plunkett, Plant Manager, RBS
- *P. D. Graham, Assistant Plant Manager, Operations
- *J. Hamilton, Director, Design Engineering
- *L. England, Director, Nuclear Licensing
- *M. F. Sankovich, Manager, Engineering Department
- *D. R. Derbonne, Assistant Plant Manager, Maintenance
- *H. J. Huff, Supervisor, Operational Planning
 - A. Frediem, Operations Supervisor
- *R. J. King, Supervisor, Nuclear Licensing
 - T. Murphy, Supervisor, Planning and Scheduling
 - D. Jernigan, Supervisor, Instrumentation and Control
 - D. B. Reynolds, Supervisor, Administrative Support
 - J. Venable, Assistant Operations Supervisor
- *J. H. McQuirter, Licensing Engineer, Nuclear Licensing
- *C. L. Miller, Senior Compliance Analyst
- *K. F. Kennedy, Coordinator, Plant Permanent File
- *C. W. Walling, Senior Mechanical Engineer, Field Engineering
- *J. E. Spivey, Senior Quality Assurance (QA) Engineer
 - J. D. Davis, Senior QA Engineer

NRC

- *E. J. Ford, Senior Resident Inspector
- W. B. Jones, Resident Inspector

Others

- *W. L. Curran, Site Representative, Cajun Electric Cooperative

The NRC inspectors also interviewed other licensee employees during the course of the inspection.

- *Denotes those present during the exit interview held on August 12, 1988.

2. Surveillance Procedures and Records (61700)

The purpose of this inspection was to ascertain whether the surveillance of safety-related systems and components was being conducted in accordance with approved procedures as required by the Technical Specifications (TS). Pursuant to this objective, the NRC inspectors reviewed the following licensee documents:

- o Administrative Procedure (ADM)-0015, Revision 12, "Station Surveillance Test Program"

- o RBS TS Surveillance Test Procedure (STP) Cross Reference Matrix dated January 21, 1988
- o Surveillance Test Scheduling and Tracking System Schedule Log from August 7-28, 1988
- o Missing Surveillance Resulting in Licensee Event Report (LER) dated March 11, 1988

The RBS supervisor of operational planning described the following vehicles for followup on TS surveillance test deficiencies:

- o Formal review of a limiting condition for operation report on Mondays, Wednesdays, and Fridays
- o Twice-per-day meetings to review overdue TS required surveillance tests

The NRC inspectors then selected certain TS surveillance requirements and reviewed the associated licensee STPs and an appropriate number of test results records for each procedure. Also selected test personnel were verified to have appropriate certifications. The TS surveillance requirements, together with the associated STPs reviewed by the NRC inspectors, are tabulated in the Attachment.

The NRC inspectors determined that the required tests were being scheduled and performed as required in accordance with approved procedures. Acceptance criteria were specified in the procedures and, with the exception discussed below, the records stated satisfaction of acceptance criteria. Appropriate instructions for returning equipment to service following testing were given. With the exceptions discussed below, there was evidence that surveillance tests were being properly evaluated and documented.

The following observations were made by the NRC inspectors:

- o The STP data sheets should be more explicit on data requirements in some instances. For example, in completing STP-000-0201, Data Sheet 1, most of the performers were writing their initials in the column entitled POSITION. However, one performer wrote in the observed valve positions. Insertion of both valve positions and initials would have been appropriate.
- o There appeared to be an excessive number of test change notices (TCNs) and test exceptions on completed STPs, particularly in the instrumentation and control area. For some STPs, almost every page was affected. This frequently made it difficult to interpret data. It appeared that many of these TCNs and test exceptions could have been avoided with a better procedure verification process.

- o The STPs did not always properly reference the TS to which they were responsive. For example, STP-203-0602 indicated satisfaction of TS 4.5.1.d. However, the cross reference matrix also required completion of STP-309-0603 to satisfy TS 4.5.1.d. The cross reference matrix required completion of STP-309-0603 for satisfaction of TS 4.7.1.1.b. However, TS 4.7.1.1.b is not mentioned in STP-309-0603. In each instance, the cross reference matrix was verified correct. In most instances, Section 8, "Acceptance Criteria," of the STP did not reference the TS which were satisfied.
- o As a result of most TCNs, several pages were added to most procedures. The added pages were usually placed after that page to which the changes were being made. These added pages were given the same number, but with a suffix such as 1a, 1b, and so on. The NRC inspectors noticed that even though these pages were added, the pagination for the overall document was usually not changed to accommodate them. This led to a situation where there were more pages in a document than were listed in the page count total. This pagination method could allow missing pages to go undetected and lead to situations where incomplete documents are filed or are sent for review with critical data missing.

The following STP deficiencies identified by the NRC inspectors are examples of an apparent violation of 10 CFR 50, Appendix B, Criterion XI, "Test Control," which states, in part, ". . . Test results shall be documented and evaluated to assure that test requirements have been satisfied." (458/8818-01)

- a. In reviewing STP-051-4210, "RPS/RHR Reactor Vessel Steam Dome Pressure-High," which was performed and completed on October 13, 1987, the NRC inspection noted that page 24 lacked initials for each line item. It was also noted that the page was stamped with the date "March 8, 1988" which was 5 months after the test was performed. The NRC inspectors inquired about this and were told by personnel at Permanent Plant Files (PPF) that when they originally received the document, it was noted that the page was missing. The whole document was returned to the sender. Attached to the document was a "Request for Correction" which stated that page 24 was missing. The clerk that received the document apparently did not attempt to locate the original test page, but instead, replaced the missing page with a blank copy and stamped it with the date on which it was sent back to PPF. This is the test package that was finally placed in the PPF.

Due to the absence of page 24, it was not possible to ascertain that the test results had been properly documented in accordance with Criterion XI. The preliminary response by the licensee included the following:

- (1) STP-051-4210 was reexamined to determine that the steps listed in the missing page did not have safety significance which would have required reperformance of the test.

- (2) The Assistant Plant Manager for Maintenance generated interoffice memorandum APM-M-88-297. The Memorandum called on all personnel to return documents, which have missing pages, to the appropriate discipline supervisor. The supervisor will evaluate the significance of the missing data to determine if it is required to indicate successful completion of the work. If the missing page is found to have significant results, the supervisor will initiate immediate actions to reperform the work.
- b. Test exceptions were written for performance of Sections 7.3.4 and 7.5.4 of STP-403-0601, "Standby Gas Treatment System Annulus Mixing System Functional Tests." This STP was completed on December 18, 1987. Completion of these sections was required by Acceptance Criterion 8.4 of STP-403-0601. Writing test exceptions on an acceptance criterion resulted in noncompliance with Criterion XI implementing documents as follows:
- o Section 8.3.1 of ADM-0015 prohibits writing a test exception on an acceptance criterion.
 - o Failure to revise STP-403-0601 in accordance with ADM-0015 constituted failure to initiate appropriate corrective action in accordance with Section 17.2.11, "Test Control," of the RBS Updated Safety Analysis Report.
 - o The adequacy of the system to meet the specified requirements in the acceptance criteria was not revealed by the recorded data as required by Quality Assurance Directive-11.

A preliminary review of this test package by the licensee indicated that none of the required responses excepted were safety significant.

- c. The data and calculation for the average stroke rate of Valve 1B33-HYVFOGOB timed in Step 7.4.12 of STP-053-0601, "Recirc Flow Control Valve Operability Test," was not included in the data package completed on October 24, 1987, as required by Criterion XI and Implementing Document ADM-0015, Section 8.6.

No further violations or deviations were identified.

3. Exit Interview

The NRC inspectors conducted an exit interview on August 12, 1988, with the licensee personnel denoted in paragraph 1. At this meeting, the scope and findings of the inspection were summarized. The licensee did not identify as proprietary any of the materials provided to, or reviewed by, the NRC inspectors during the inspection.

ATTACHMENT

PROCEDURES AND RECORDS REVIEWED

<u>TS</u>	<u>Description</u>	<u>STP-Number</u>
4.1.3.11b	Verify scram discharge volume drain and vent valves operable by cycling	052-3301, R2
4.2.1a	Daily verification that APLHGR is \geq limits	000-0001, R9
4.3.1.1, Table 4.3.1.1-1 Item 3	Channel calibration for reactor vessel steam dome pressure-high	051-4209, R4 051-4210, R4 051-4211, R6 051-4212, R5
4.3.2.2	Isolation Actuation Logic System Functional Test	051-4253, R7 051-4250, R5 051-4249, R5 051-4248, R6 051-4247, R6 051-4235, R6 051-4234, R7 051-4233, R6 051-4232, R8 051-4227, R6 051-4226, R9 051-4225, R6 051-4223, R6 051-4224, R6 051-4254, R7 051-4222, R7
4.4.1.1b	Verify rate of opening or closing for recirculation loop flow control valve is \geq 11 percent per second	053-0601, R2
4.4.1.2	Determine jet pumps are operable	053-3001, R3
4.5.1d	For HPCS, verify suction is automatically transferred from condensate storage tank to suppression pool under specified conditions	203-0602, R2 309-0603, R7
4.5.1 e 2	Manually open each ADS valve with steam pressure \leq 100 psig and verify proper responses	202-06202, R4

4.6.1.1b	Verify closure of primary containment penetrations at least once per 31 days	000-0201, R10
4.6.3.2c	Perform system functional test for primary containment unit coolers	309-0601, R6 309-0602, R4
4.6.5.5b	Verify each shield building annulus mixing system operable by performing system functional test	403-0601, R3
4.7.1.1b	Verify standby service water system subsystems operable by verifying each automatic valve actuates to correct position and each pump starts on low pressure	309-0601, R6 309-0602, R4 309-0603, R7
4.7.3c	Verify RCIC system operable by performing system functional test	209-0601, R2
4.7.6.1.1	Cycle each testable valve in the fire suppression water system through at least one complete cycle of full travel	251-3502, R4
4.7.6.5c	Perform inspection of yard fire hydrants and hydro associated hoses	251-3501, R3
4.8.1.1.2.f.7	Verify that, upon an ECCS actuation signal, all automatic diesel generator trips are auto bypassed except engine overspeed and generator differential current	309-0601, R6 309-0602, R4 309-0603, R7
4.8.2.1c	Verify for each 125V battery and charger: <ol style="list-style-type: none"> 1. No visual battery damage 2. Cell-to-cell and terminal connections are clean and tight 3. Terminal resistance $\leq 150 \times 10^{-6}$ ohm 4. Battery chargers will supply minimum current 	203-1602, R3 305-1600, R3 305-1601, R2 203-1605, R4 305-1603, R3 305-1604, R3