

APPENDIX

U. S. NUCLEAR REGULATORY COMMISSION
REGION IV

Report: 50-458/82-13

Docket: 50-458

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

Facility Name: River Bend, Unit 1

Inspection at: River Bend

Inspection Conducted: September 1, 1982 through September 30, 1982

Inspector: Ross L. Brown 10/21/82
Ross L. Brown, Senior Resident Inspector Date

Approved: W. A. Crossman 10/27/82
W. A. Crossman, Chief Date
Reactor Project Section B

Inspection Summary:

Inspection Period September 1-30, 1982 (NRC Inspection Report 50-458/82-13)

Areas Inspected: Routine, announced inspection by the Senior Resident Inspector (SRI) including site tour; follow up of previous inspection findings; safety-related components; licensee identified construction deficiencies; safety-related pipe welding; reactor coolant pressure boundary pipe welding; containment floor plates and penetration welding; and electrical systems installation. The inspection involved 106 hours by the NRC Resident Inspector.

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

DETAILS1. Persons ContactedPrincipal Licensee Employees

- *P. D. Graham, Director, Quality Assurance
- R. B. Stafford, Supervisor, Quality Assurance
- *K. C. Hodges, NRC Compliance Coordinator, Quality Assurance
- M. A. Walton, Director, Site Engineering
- W. J. Reed, Director, Nuclear Licensing (Beaumont)
- L. A. England, Lead Licensing Engineer (Beaumont)
- *R. J. King, Licensing Engineer (Beaumont)
- *V. J. Normand, Construction Supervisor
- *G. R. Kimmell, QA Engineer

Stone and Webster

- *R. L. Spence, Superintendent, Field Quality Control (FQC)
- B. R. Hall, FQC Senior Engineer
- N. W. Pressler, FQC Chief Inspector, Electrical
- R. J. Fay, FQC Supervisor, Electrical
- A. Clawson, FQC Inspection Supervisor
- D. K. Smith, Records Supervisor, Document Control (DC)
- E. Tomchek, FQC Office Supervisor (DC)
- D. D. Castleberry, FQC Inspection Supervisor
- *C. A. Goody, Resident Manager
- *E. A. Sweeney, Superintendent, Engineering
- R. W. Ferguson, FQC, Senior QA Engineer
- G. M. Byrnes, FQC Assistant Superintendent
- F. G. Avellone, FQC Inspector
- V. L. Barton, FQC Inspection Supervisor

The SRI also interviewed additional licensee, Stone and Webster (S&W), and other contractor personnel during this inspection period.

*Denotes those persons that attended the management interview.

2. Site Tour

The SRI toured most areas of the site during the inspection period to observe construction progress, general job practices, housekeeping, and fire protection.

3. Licensee Action on Previous Inspection Findings

(Closed) Unresolved Item (50-458/81-11): "Specific Code for Installation of Safety-Related Piping, Pipe Supports, and Related Component Supports." The SRI reviewed S&W letter RBS-7342 to Gulf States Utilities (GSU), that stated, "Safety-related piping, pipe supports, related component supports, and equipment (except the rod-control piping), will be installed to specifications which implement the requirements of the ASME Boiler and Pressure Vessel Code, Section III, Division I, Nuclear Power Plant Components, dated July 1, 1974." This item is considered closed.

(Closed) Violation (50-458/82-03A): "Failure to Take Adequate and Prompt Corrective Action Regarding Reporting of Significant Construction Deficiencies." The SRI, Mr. L. E. Martin, and Mr. A. B. Beach met with GSU management personnel at the corporate offices located in Beaumont, Texas, on May 18, 1982, to discuss the GSU response letter (RBG 12,597) dated May 5, 1982, related to the timely reporting of deficiencies reportable under the requirements of 10 CFR 50.55(e).

The results were as follows:

1. The changes described in Interim Change Notice, ICN 1.7-1, that requires changes to be made to the River Bend Project Procedure, RBPP 1.7, Revision 3, satisfies the GSU reporting time of 24 hours required by 10 CFR 50.55(e).
2. In the future, all GSU deficiency reports (DR) (initial, interim, and final), will carry a reference identification to assist in tracking the disposition of each report.

The SRI's review of the S&W letter C-RBS-02578 to GSU dated May 12, 1982, and DR's issued after May 18, 1982, verified conformance with GSU letters RBG 12,597 and RBG 13,164, that appear to satisfy the 10 CFR 50.55(e) requirements.

(Closed) Unresolved Item (50-458/77-05): "Warehouse Activity." The SRI's review of the storage history cards, observations of the warehouse activities, and maintenance of equipment stored in-place, appears to be in conformance with Specification 229.170. This item is considered closed.

(Closed) Unresolved Item (50-458/82-01): "Qualification of Class 1E Electrical Splice Kits." The SRI reviewed the following documents: S&W letter RBS 7057 to GSU that states S&W has reviewed and approved the Okonite Report NORN-3 LOCA Qualification Report for Okoguard insulated cables and T-95 & No. 35 splicing tapes; GSU letter RBG 11,955 to S&W that states GSU has reviewed and approved the Okonite qualification report for Class 1E insulating and jacketing tapes; and E&DCR C-10,870, which requires insulating and jacketing tape to be qualified to IEEE-383-1974.

It appears the splice kits used at River Bend Station (RBS) comply with the commitment. This item is considered closed.

4. Follow Up On Licensee Identified Deficiency Reports

(Closed) Deficiency Report (DR 33/GSU letter RBG 12,096 and DR 41/GSU letter RBG 12,264). "Spring Nuts Improperly Installed (DR 33)" and "Torquing Values Not as Specified (DR 41)." The SRI reviewed the S&W letter RBS 7775 to GSU that stated, based on the engineering calculations of a worse condition, the unistruts and power struts as installed, are capable of supporting the assigned loads. However, the tray loading is entered into the computer and will identify any overloading of the trays and the bolts can be torqued to the higher values, if required. The SRI also reviewed the memorandum dated August 10, 1982, stating the GSU engineering, QA, and site construction has reviewed the justification and agrees that the problem is not reportable under 10 CFR 50.55(e) requirements. This item is considered closed.

(Closed) Deficiency Report (DR 36/GSU letter RBG 12,133) "Subsurface Defects in RCIC Flange." The SRI reviewed GE letter 3429 to GSU stating the suspect flange was removed from the unit and returned to the vendor for reinspection. The vendor stated the inspection failed to identify any subsurface defects.

The suspect flange was replaced with a new flange, the other flanges on the unit were reexamined, and no defects were identified. This item does not appear to be reportable under 10 CFR 50.55(e).

(Closed) Deficiency Report (DR 40/GSU letter RBG 12,237) "Forging Laps in Instrument Fittings." The 10 questionable fittings were returned to the vendor, Parker-Hannifin, Co. (P-H), for their examination.

The SRI reviewed the vendor's letter dated July 12, 1980, that stated the fittings were ultrasonically examined and were found to be free of forging laps. However, the 10 fittings were replaced with fittings from a different lot of material. This item is considered closed.

(Closed) Deficiency Report (DR 47/GSU letter RBG 12,582) "Arc Strikes on Graver Shop Fabricated Drywell Items." The SRI reviewed the S&W letter RBS 7810 to GSU that stated the S&W evaluation has determined that the arc strikes on the liner plates and electrical couplings would not have adversely affected the functional integrity of these items. In addition, for the beam seats and penetrations, the S&W evaluation included the performance of a fracture mechanics analysis (Calculation 12210-MED-4) to determine typical stress variations and numbers of cycles at which arc strikes could become cracks and propagate. Based on this calculation, it has been determined that the drywell beam seats and penetrations would not be susceptible to crack propagation, since their service conditions do not subject them to cyclic stress variations at which crack propagation might occur as defined in the calculation. This item is considered closed.

(Closed) Deficiency Report (DR 49/GSU letter RBG 12,586) "Improper Storage and Maintenance of HPCS Batteries." It appears that the battery deficiencies could not have remained undetected because Section 8.3.2 of the FSAR requires provisions to be made in the DC power system so that surveillance and service tests can be performed in accordance with IEEE-450.

IEEE-450, Section 5, paragraph 5.6, states in part, a service test is a special battery test which may be required to determine if the battery will meet the design requirements of the connected load.

The battery was not installed and will be replaced. Therefore, the problem is not reportable under 10 CFR 50.55(e).

(Closed) Deficiency Report (DR 19/GSU letter 11,184) "A-500 Grade B Steel Questionable Properties." The SRI's review of NRC Inspection Report 50-458/82-03, paragraph 9, results of material testing by site personnel, and a S&W letter to GSU, verified that acceptable material was supplied by the vendor. This item is considered closed.

(Closed) Deficiency Report (DR 31/GSU letters RBG 11,801 and RBG 13,166) "Loose Limit Switches on Valve Motor Operators Supplied by Limitorque." The SRI reviewed the disposition of the S&W N&D 1946 and the instructions included in Advisory Operations Electrical Test Procedure 1.EEEN.018, Motor-Operated Valves. These documents are in conformance with GSU letter RBG 13,205.

N&D 1946 required FQC to verify the torquing activity and signing the N&D. This item is considered to be closed.

(Closed) Deficiency Report (DR 45/GSU letters RBG 13,272 and RBG 12,516) "Limited Access Welding." The SRI reviewed N&D 2625 that identified the 12 rejected welds. Of these, seven were repaired and accepted by radiography, the five welds were removed and replaced using qualified welders and procedures.

The S&W letter RBG 7894 to GSU states that the welders were qualified by retest, training sessions conducted by FQC inspection personnel, and also an investigation was conducted by construction and verified by FQC to determine if other restricted access welds exist. None were identified. This item is considered closed.

(Closed) Deficiency Report (DR 51/GSU letter RBG-12,621) "Cutting Rebar above Elevation 90 feet in the Shield Building." The SRI reviewed the S&W letter RBS 7692 to GSU that stated, in part, that four rebars were cut. Two of these four bars are diagonal additional bars at penetrations and the other two are horizontal bars.

Review of their location and design indicates that, had this condition (cutting of the rebars) remained uncorrected, overall integrity of the shield building would not have been affected and safety of operations of the nuclear plant would not have been adversely affected. The damage to the rebar as identified does not constitute significant damage to the building and extensive evaluation or repair was not required.

Based on the S&W evaluation, it appears that this problem was not reportable under 10 CFR 50.55(e).

(Closed) Deficiency Report (DR 56/GSU letter RBG 12,694) "Possible Problems with Liberty Control Co. Telephone Relays and IAC Overcurrent Relays." S&W letter RBS 7704 states that, S&W has determined that these protective relays are not used in any Class 1E RBS switchgear.

Based on this determination, the problem is not reportable under 10 CFR 50.55(e) requirements.

5. Safety-Related Pipe Welding

The SRI observed the welding of two welds in the main steam lines inside containment and reviewed the document packages at the work stations.

It appears that the activity was being performed in accordance with the applicable drawing and weld data sheets that appear to be in conformance with S&W Specification 228.160, "Field Fabrication and Erection of Piping."

No violations or deviations were identified in this area.

6. Reactor Coolant Pressure Boundary Pipe Welding

The SRI observed the joint fit-up and welding of three joints in the recirculation system risers. The welding materials (electrode and inserts), withdrawal, welding, cleanliness, and protection appear to be in conformance with applicable drawings and weld technique sheets.

No violations or deviations were identified in this inspection area.

7. Safety-Related Components

The SRI reviewed the inspection reports related to the handling and placement only of the following safety-related components:

Control Room Centrifugal Liquid Chillers, 1HVK-CHL-1D
LPCS Pump, 1E21-PC001 and LPCS Pump Motor, 1E21-MC001
Chilled Water Pump, 1VK-P1A

During the plant tours, the SRI observed the storage and protection of these and other safety-related mechanical and electrical components.

No violations or deviations were identified in this area of the inspection.

8. Containment Floor Plate and Penetration Welding

The SRI observed the welding and weld control activities associated with the installation of the suppression pool floor plates and weld build-up to the edge preparation of the equipment hatch opening in the containment vessel.

In the area reviewed for these welds, it appears the activities are in conformance with the specified requirements.

The SRI also observed liquid penetrant examination of two floor plate weld seams by a S&W Level II examiner. The examination was performed in accordance with applicable procedures.

No violations or deviations were identified in this area of the inspection.

9. Electrical Systems Installation

The SRI has continued to observe the installation of the PGCC equipment in the control room.

Review of the applicable inspection reports, inspection work sheets, etc., reveals conformance with the specified requirements of inspection plan, drawings, specifications, and instructions.

No violations or deviations were identified in this area of the inspection.

10. Management Interviews

The SRI met with one or more of the persons listed in paragraph 1 at various times during the inspection period. A meeting was conducted on September 30, 1982, to discuss the scope of the inspection and findings with those persons identified by an asterisk in paragraph 1.

INSPECTOR'S REPORT
Office of Inspection and Enforcement

Ross L. Brown
REVIEWER
W. A. Crossman

INSPECTOR: Ross L. Brown

LICENSEE/VENDOR <u>GULF STATES UTILITIES</u>	TRANSACTION TYPE <input checked="" type="checkbox"/> I - INSERT <input type="checkbox"/> M - MODIFY <input type="checkbox"/> D - DELETE <input type="checkbox"/> R - REPLACE	DOCKET NO. (8 digits) OR LICENSE NO. (BY PRODUCT) (13 digits) <u>05000458</u>	REPORT		NEXT INSP. DATE	
			NO <u>5213</u>	SEQ <u>A</u>	MO	YR

PERIOD OF INVESTIGATION/INSPECTION			INSPECTION PERFORMED BY			ORGANIZATION CODE OF REGION/HQ CONDUCTING ACTIVITY (See IEMC 0530 Manpower Reporting—Weekly Manpower Reporting for code.)		
FROM TO			<input checked="" type="checkbox"/> 1 - REGIONAL OFFICE STAFF <input type="checkbox"/> 2 - RESIDENT INSPECTOR <input type="checkbox"/> 3 - PERFORMANCE APPRAISAL TEAM			OTHER		
MO	DAY	YR	MO	DAY	YR	REGION	DIVISION	BRANCH
<u>09</u>	<u>01</u>	<u>92</u>	<u>09</u>	<u>30</u>	<u>92</u>	<u>4</u>	<u>C</u>	<u>A</u>

REGIONAL ACTION (Check one box only)	TYPE OF ACTIVITY CONDUCTED (Check one box only)			
<input checked="" type="checkbox"/> 1 - NRC FORM 591 <input checked="" type="checkbox"/> 2 - REGIONAL OFFICE LETTER	<input type="checkbox"/> 02 - SAFETY <input type="checkbox"/> 03 - INCIDENT <input type="checkbox"/> 04 - ENFORCEMENT <input type="checkbox"/> 05 - MGMT. AUDIT	<input type="checkbox"/> 06 - MGMT. VISIT <input type="checkbox"/> 07 - SPECIAL <input type="checkbox"/> 08 - VENDOR <input type="checkbox"/> 09 - MAT. ACCT.	<input type="checkbox"/> 10 - PLANT SEC. <input type="checkbox"/> 11 - INVENT. VER. <input type="checkbox"/> 12 - SHIPMENT/EXPORT <input type="checkbox"/> 13 - IMPORT	<input type="checkbox"/> 14 - INQUIRY <input type="checkbox"/> 15 - INVESTIGATION

INSPECTION/INVESTIGATION FINDINGS (Check one box only)	TOTAL NUMBER OF VIOLATIONS AND DEVIATIONS	ENFORCEMENT CONFERENCE HELD	REPORT CONTAIN 2,790 INFORMATION	LETTER OR REPORT TRANSMITTAL DATE
<input checked="" type="checkbox"/> 1 - CLEAR <input type="checkbox"/> 2 - VIOLATION <input type="checkbox"/> 3 - DEVIATION <input type="checkbox"/> 4 - VIOLATION & DEVIATION	A B C D	A B C D	A B C D	MO DAY YR. MO DAY YR.
				<u>09/17/92</u> <u>10/02/92</u>

MODULE INFORMATION												MODULE INFORMATION													
REC. ORD	MODULE NUMBER INSP				PRIORITY	DIRECT INSPEC. EFFORT IN STAFF HOURS EXPENDED THIS INSPECTION	PERCENTAGE COMPLETED TO DATE	STATUS	MODULE REQ. FOLLOWUP				REC. ORD	MODULE NUMBER INSP				PRIORITY	DIRECT INSPEC. EFFORT IN STAFF HOURS EXPENDED THIS INSPECTION	PERCENTAGE COMPLETED TO DATE	STATUS	MODULE REQ. FOLLOWUP			
TYPE	NUMBER	PHASE	MANUAL CHAPTER	PROCEDURE NUMBER					LEVEL	PHASE	MANUAL CHAPTER	PROCEDURE NUMBER	LEVEL	TYPE	NUMBER	PHASE	MANUAL CHAPTER					PROCEDURE NUMBER	LEVEL	PHASE	MANUAL CHAPTER
B	2307038	A				098					B	2557053	C												
B	2927023	A				012					B	2557073	C												
B	0990208	A				046					B	2530273	C												
B	250073	A				008050					B	2510273	C												