

APPENDIX

U. S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-458/84-13

Docket: 50-458

Construction Permit: CPPR-145
Category: A2

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

Facility Name: River Bend Station (RBS), Unit 1

Inspection At: River Bend Station, St. Francisville, LA

Inspection Conducted: May 17, 1984, through June 16, 1984

Inspector: E.H. Johnson 8/2/84
FRL R. E. Farrell, Senior Resident Inspector Date

Approved: E.H. Johnson 8/2/84
FRL J. P. Jaudon, Chief, Project Section A, Date
Reactor Project Branch 1

Inspection Summary

Inspection Conducted May 17, 1984, through June 16, 1984
(Report: 50-458/84-13)

Areas Inspected: Routine, announced inspection of licensee action on previous inspection findings, licensee identified deficiency reports, site tours, electrical cable qualification, safety concern program, and allegation review. The inspection involved 104 inspector-hours onsite and 36 inspector-hours offsite by one NRC inspector.

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

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DETAILS

1. Persons Contacted

Principal Licensee Employees

- *W. J. Cahill, Senior Vice President, River Bend Nuclear Group
- J. Deddens, Vice President, River Bend Nuclear Group
- *T. C. Crouse, Manager, Quality Assurance
- *R. W. Helmick, Project Engineer
- *R. B. Stafford, Director, Quality Services
- *K. C. Hodges, Supervisor, Quality Systems
- *P. F. Gillespie, Quality Assurance Engineer
- *B. Bemis, Quality Assurance Engineer
- *D. J. Duckering, Quality Assurance Engineer
- C. L. Ballard, Supervisor, Quality Engineering
- P. G. McGill, Senior Electrical Engineer
- O. deMiranda, Quality Assurance Engineer
- W. M. Searcy, Quality Assurance Engineer
- P. J. Dautel, Licensing Staff Assistant

Stone and Webster (S&W)

- *W. I. Clifford, Senior Site Representative
- C. A. Goody, Resident Manager
- P. D. Hanks, General Superintendent, Construction
- *R. L. Spence, Superintendent, Field Quality Control
- *D. P. Barry, Superintendent of Engineering
- *R. J. Fay, Chief Inspection Supervisor (Electrical)
- *J. J. Zullo, Quality Assurance Engineer
- *R. L. Lykens, Quality Assurance Program Administrator
- *D. D. Wilson, Construction Engineer

The NRC senior resident inspector (SRI) also interviewed additional licensee personnel, S&W personnel, and other contractor personnel during this inspection.

*Denotes those present at the exit interview June 20, 1984.

2. Licensee Actions on Previous Inspection Findings

- a. (Open) Violation (458/8404-01): "Failure to Maintain Protective Environment." The SRI toured the containment control rod drive hydraulics areas and drywell areas to ascertain the degree of licensee corrective action. While improvement was noted, Zone IV housekeeping is inadequately enforced and the entire containment is generally dirty with a substantial amount of uncontrolled material and tools scattered throughout. This item will be reinspected to confirm adequate corrective action by the licensee.
- b. (Open) Violation (458/8404-02): "Failure to Control Welding Material." The SRI inspected rod issue station 3, the shield building annulus, containment, drywell, and auxiliary building areas to confirm licensee corrective action. The rod issue station was in order with a marked improvement in the station attendant's job knowledge. No uncontrolled rod was found in the auxiliary building or shield building annulus. The containment control rod drive hydraulics areas yielded several useable weld stubs of various lengths and types, both shielded and unshielded. One area of the drywell basement along the wall approximately 10 feet long contained a half dozen E7018 rods ranging from full to half length. This item will be reinspected in future inspections.

3. Licensee Identified Deficiency Reports, 10 CFR 50.55(e)

- a. (Open) Deficiency Report (DR-117/GSU Letter RBG-15,272): "Low Air Mass in Containment." The SRI reviewed the licensee's report on a scenario involving the containment purge system operating in exhaust mode only with no supply coincident with a reactor water cleanup line break resulting in a containment negative pressure potentially greater than design. The licensee's report indicated that the final analysis satisfactorily showed that resulting negative pressures were within the design capacity of the containment. A design change was proposed, however, to couple containment purge exhaust to containment purge supply, disallowing exhaust when supply was unavailable, rather than simply annunciating this condition as originally planned. This design change would remove the subject scenario from the list of credible events. This item will be inspected during future inspections to verify the implementation of the design change or the acceptability of the analysis. This item remains open.
- b. (Open) Deficiency Report (DR-200/telecon to Region IV 5-31-84): "Unknown gummy foreign substance inside reactor pressure vessel." Following the hydrostatic test of the reactor pressure vessel (RPV) and attached systems, the licensee opened the RPV discovering a brown gummy substance of unknown origin had plated out on the RPV

interior. Preliminary analysis indicates that the substance is not chemically detrimental to the RPV and associated hardware. The licensee has not yet completed the investigation, but early indications are that the substance is tectyl, a metal preservative used in the residual heat removal system. The SRI will continue to monitor the licensee's effort on this item. This item remains open.

- c. (Open) Deficiency Report (DR-199/telecon to Region IV 5-25-84): "Coaxial Cable Separating from Connectors." The licensee identified a hardware condition as potentially reportable. Specifically, Conax penetration "feed through" kits received in the field were discovered to have coaxial connectors pushed on the ends of the coaxial cable rather than conductor soldered to center pin and shield braid clamped as called for in the S&W procurement specification. The assemblies were received and issued for field use. The deficiency was discovered by construction and field quality control personnel.

The licensee's documentation of the deficiency addressed only the hardware deficiency. S&W generated a "Report of a Problem" (ROAP) identifying the deficiency to their home office engineers.

The SRI examined the documents received with this hardware and noticed that vendor (Conax) quality assurance personnel certified that the hardware met all the requirements of the procurement specification. Additionally, S&W procurement quality assurance (PQA) personnel source inspected the equipment prior to shipment from the vendor and issued a S&W certificate of compliance. Thus, both the vendor and S&W certified that the equipment met the procurement specification when in fact it did not. This equipment is category 1 and purportedly seismically qualified.

The licensee has not yet completed his investigation of the matter; this item is considered unresolved (8413-01). The SRI will closely follow the licensee's investigation and corrective action to prevent recurrence. Additionally, the SRI will inspect previous occasions where deficiencies were noted in components that had been accepted by PQA to determine licensee action to prevent recurrence.

4. Site Tours

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

A portable toilet adjacent to the electrical warehouse caught fire and was destroyed, burning a hole in the side of the warehouse. The insulation provided in the warehouse wall functioned to prevent the fire from spreading. No equipment was damaged and repair to the warehouse wall was in progress.

Housekeeping and electrode control problems were identified (see paragraph 2) as continuing. Licensee construction personnel toured plant areas with the SRI to better understand and address the SRI's concerns. Corrective action is in progress.

5. Electrical Cable Qualification

The licensee has approximately 400,000 feet of Rockbestos cable installed or being installed in the plant. Rockbestos' environmental qualification program was the subject of recently issued I&E Information Notice 84-44. Additionally, Rockbestos has experienced manufacturing problems previously identified by this site and others as potential deficiencies.

The licensee met with the SRI to discuss potential action to qualify the Rockbestos cable and is now forming a program to address this problem. The SRI will continue to follow licensee action in this area.

No violations or deviations were identified in this area.

6. Safety Concern Program

The licensee has had in place a program for addressing employee safety concerns. This program has included interviews with all terminating employees at the supervisor level and up.

This program has now been expanded to include interviews with terminating foremen. The licensee also maintains a safety concern telephone line which employees may utilize to voice concerns without being identified. To date no concerns have been forwarded to the licensee via this phone line.

The licensee is continuing to expand posting of safety concern information and solicit employee input. The SRI will continue to monitor activity in this area.

No violations or deviations were identified in this area.

7. Allegation

(Closed) Allegation "Improper Weld Preheat." An allegation was received regarding the improper waiving of preheat on a weld. Specifically, it was alleged that when one of the welds on moisture

separator drain line support BF-3CA-1 was made, the supervisor improperly waived the required weld preheat of 200°F, and further that field quality control (FQC) personnel declined to stop the work or acknowledge the waiving of preheat.

At the SRI's request, the licensee investigated the incident and the results of the investigation are as follows:

- a. The support BF-3CA-1 is a category II support on a nonsafety system.
- b. The applicable weld procedure and the thickness of the material welded result in a required preweld temperature of 50°F, which was below the ambient temperature at the time the work was done.
- c. Welding supervision had imposed an administrative requirement (by memorandum but not by procedure) to preheat all welds to 200°F in an effort to preclude missed weld preheat.
- d. Welding supervision, having imposed the administrative requirement, could waive the administrative requirement and did so in this case due to the proximity of electrical cable conduit to the weld.

No technical requirements were violated, the administrative requirement was properly waived, and FQC took no action because all requirements were met.

No violations or deviations were identified in this area.

8. Unresolved Items

Unresolved Items are matters about which more information is required in order to ascertain whether they are acceptable items, violations, or deviations. An unresolved item related to acceptance of material by source inspection is discussed in paragraph 3C.

9. Exit Interview

The SRI met with the licensee representatives noted in paragraph 1 on June 20, 1984. The SRI summarized the purpose and scope of the inspection and the findings.

