

APPENDIX B

U. S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-458/82-05

Docket: 50-458

Category A2

Licensee: Gulf States Utilities
Post Office Box 2951
Beaumont, Texas 77704

Facility Name: River Bend, Unit 1

Inspection at: River Bend Site

Inspection conducted: May 24-28, 1982

Inspectors: *D M Hunnicutt*
for L. D. Gilbert, Reactor Inspector, Engineering Section
(Paragraphs 1, 2, 3, 4, & 6)

6/18/82
Date

D M Hunnicutt
for K. A. Whittlesey, Reactor Inspector, Engineering
Section (Paragraphs 1, 3, 5, & 6)

6/18/82
Date

Reviewed: *W A Crossman*
W. A. Crossman, Chief, Reactor Project Section B

6/18/82
Date

Approved: *D M Hunnicutt*
D. M. Hunnicutt, Chief, Engineering Section

6/18/82
Date

Inspection Summary:

Inspection on May 24-28, 1982 (Report 50-458/82-05)

Areas Inspected: Routine, unannounced inspection of licensee action on previous inspection findings; site tour; observation of work for welding and nondestructive examination (NDE) of safety-related piping; and observation of work for installation of containment penetrations. The inspection involved 68 inspector-hours onsite by two NRC inspectors.

Results: Within the four areas inspected, one violation was identified (failure to follow procedure, paragraph 4.a).

DETAILS

1. Persons Contacted

Principal Licensee Personnel

- *P. D. Graham, Director QA
- *T. C. Crouse, Construction Superintendent
- *R. Bailey, QA Engineer
- *R. Kerr, QA Engineer, Management Analysis Corporation
- *M. Walton, Assistant Project Engineer
- *K. C. Hodges, QA
- *G. Davis, Engineer
- *R. Helmick, Construction Supervisor

Stone & Webster (S&W) Personnel

- *R. L. Spence, Superintendent, Field Quality Control (FQC)
- *A. Clawson, Inspection Supervisor
- *G. M. Byrnes, Assistant Superintendent, FQC
- R. Ferguson, QC Engineer
- *R. Phebus, Senior Materials Engineer
- D. Whitlock, FQC Receipt Inspection
- D. Johnson, Piping Supervisor
- *E. A. Sweeney, Superintendent of Engineering
- *W. I. Clifford, Resident Manager
- *T. C. Mitchell, Assistant Superintendent of Engineering
- *W. L. Spielmann, Assistant Superintendent, Construction

Other Personnel

- C. Carr, QA Engineer, Graver Energy Systems, Inc.
- P. Morrison, Authorized Nuclear Inspector

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

*Denotes those attending the exit interview

2. Licensee Action on Previous Inspection Findings

(Closed) Unresolved Item (50-458/82-02):
Preheating of weldments to a minimum of 200^o F for P Number 1
carbon steel material over 3/4 inch to 1 1/2 inches thick and over 0.30%
carbon content.

The NRC inspector reviewed the instructions issued to the ASME FQC personnel to establish a 200⁰ F preheat hold point on the weld data sheet when the nominal thickness exceeds 3/4 inch and the carbon content exceeds 0.30% or if actual carbon content cannot be determined.

The NRC inspector was informed that the review of all welded materials previously installed had been completed and no weldments would have required a 200⁰ F preheat.

This item is considered resolved.

3. Site Tour

The NRC inspectors toured the reactor building and auxiliary building for Unit 1 to observe construction in progress and to inspect housekeeping.

No violations or deviations were identified.

4. Safety-Related Pipe Welding and Nondestructive Examination

a. Observation of Welding Activities

The NRC inspector observed the welding and quality control activities associated with fabricating the following safety-related piping welds:

<u>Weld</u>	<u>Control Drawing</u>	<u>System</u>	<u>Class</u>
FW-B6	1-RCS-900-B	Reactor Coolant-Recirculation	1
FW-B7	1-RCS-900-B	Reactor Coolant-Recirculation	1
FW-B4	1-RCS-900-B	Reactor Coolant-Recirculation	1
FW-A6	1-RCS-800-B	Reactor Coolant-Recirculation	1
FW-A7	1-RCS-800-B	Reactor Coolant-Recirculation	1
FW-019	1-WCS-016-A	Reactor Water Cleanup	3

In the areas reviewed for the above welds, the entries on the weld data cards were consistent with the status of the welds, the inspections of FQC Level II certified inspection personnel appeared to be adequate, filler materials were consistent with weld procedure requirements and traceable to certified material test reports, and piping components were consistent with drawing material requirements and traceable to certified material test reports.

After discussing the welding parameters used on welds FW-A7 and FW-A6 with the welding operator, the NRC inspector determined that the welds were not made in accordance with the welding procedure. Welding was

accomplished using 185 amperes and a travel speed of 2.8 inches per minute for depositing weld metal after a deposit thickness of 3/4 inch. Welding Technique Sheet W3-NSSS-54 required a travel speed of 5.3 inches per minute for 185 amperes after a deposit thickness of 3/4 inch has been completed.

This failure to follow procedure is an apparent violation of 10 CFR 50, Appendix B, Criterion V. (458/8205-01)

b. Observation of Nondestructive Examination Activities

The NRC inspector observed the liquid penetrant examination of the piping material surfaces after removal of temporary attachment AT 002 used for alignment of Weld FW-A7 of Control Drawing 1-RCS-800-B.

The FQC Level II certified inspector performed the examination consistent with requirements of Liquid Penetrant Examination Procedure QAD 9.23-RB.

No violations or deviations were identified.

c. Observation of Welding Electrode Control

The NRC inspector observed the welding electrode control in Rod Room No. 3. During observations of welding activities, the NRC inspector found electrode control to be consistent with Welding Material Control Procedure CMP 6.4, Revision C.

No violations or deviations were identified.

d. Observation of Welder Qualification Testing

The NRC inspector observed the qualification testing for gas tungsten-arc welding of pipe of three welders and verified the identification of each person.

The tests were found to be consistent with the applicable Performance Qualification Method, and no personnel discrepancies were noted.

The radiographic examination record including radiographic film for the qualification testing of one welder was reviewed and found to be consistent with ASME Section IX requirements.

No violations or deviations were identified.

5. Containment Penetration Welding

During the course of the inspection, the NRC inspector observed welding activities conducted by Graver personnel on various containment penetrations. Welding of the personnel airlock (Graver Drawing NL-12594, Rev. 2) and repairs to main steam penetration welds were selected for further inspection.

Through observation, interviews with welding personnel, and review of documentation, the NRC inspector determined that welding of the personnel hatch was being conducted in accordance with Welding Procedure 205N. A Graver QC inspector was observed monitoring amperage and the instrument calibration was current. Repairs of the guard pipe bellows to flued head forging and adapter forging welds of main steam penetration Z-1B were being accomplished in accordance with Welding Procedure WP 326N, Rev. 14. Welding was performed by qualified personnel using welding electrode traceable to certified test reports. In areas reviewed, the entries on the erection control sheets were consistent with the status of the welds.

No violations or deviations were identified.

6. Exit Meeting

The NRC inspectors met with licensee representatives (denoted in paragraph 1) and R. L. Brown (NRC Resident Reactor Inspector) on May 28, 1982, and summarized the scope and findings of the inspection. The licensee acknowledged the NRC findings.