

GULF STATES UTILITIES COMPANY

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AREA CODE 713 838-2843

September 10, 1980

RBG - 8526
File Nos. G9.5, G15.4.1

Mr. W. C. Seidle, Chief
Reactor Construction & Engineering
Support Branch
U.S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive
Suite 1000
Arlington, TX 76011

Dear Mr. Seidle:

River Bend Station - Unit 1
Refer to: RIV
Docket No. 50-458/Rpt. 80-07

This letter responds to the infractions contained in your I&E Report No. 50-458/80-07 as required by 10CFR 2.201. This inspection at the River Bend construction site was conducted by Mr. A. B. Beach and Mr. J. P. Tapia of your staff during the period July 15-18, 1980, of activities authorized by NRC Construction Permit No. CPPR-145 for River Bend Station, Unit No. 1.

We trust that the enclosed response satisfactorily answers the concerns raised in your report. We shall be glad to discuss any further points that you may have.

Sincerely,

E. L. Draper, Jr.

E. L. Draper, Jr.
Vice President - Technology

ELD/RJK/mb

Enclosures

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ATTACHMENT I

RESPONSE TO NOTICE OF VIOLATION

A. Failure to Follow Procedural Requirements for Good Housekeeping

Criterion V of Appendix B to 10 CFR 50 requires that activities affecting quality shall be prescribed by documented procedures of a type appropriate to the circumstances, and shall be accomplished in accordance with these procedures.

Stone & Webster Construction Methods Procedure CMP 1.4.11.75, "Housekeeping," in Section 3.1.5, requires that locations of eating places be designated so that littering of paper and garbage can be controlled. Section 3.1.7 of this procedure provides that waste be collected as frequently as necessary to maintain a clean work area. In addition, Section 3.4.1 states, "that where large accumulations of materials occur, such as the stripping of concrete forms, promptly remove the material or store it neatly."

Contrary to the above:

On July 16, 1980, the IE inspector noted the following conditions during a site tour:

1. A large amount of trash and debris covered the floor of the Reactor Building including in and around the Reactor Pedestal area. Paper cups and cans littered scaffolding erected near formwork in the vicinity of concrete placement activities. There was also evidence of eating in areas not designated as eating areas, and failure to use proper toilet facilities.
2. In the Control Building, waste collection containers were filled to overflowing, indicating that waste was not being collected as necessary to maintain a clean work area. No housekeeping activities were observed by the IE inspector.
3. Concrete forms removed from the Diesel Generator Building were stored haphazardly on the top of reinforcing steel to be used in the shield walls of the Reactor Building.

This is an infraction.

GSU Response to Infraction A

1. Corrective Steps Which Have Been Taken, and the Results Achieved:

Condition 1. Currently the entire jobsite is classified as an allowable eating area. As the job progresses we anticipate changing this classification to limit allowable eating places. We have informed all employees that unless trash and food waste were disposed of properly in trash containers we would have to prohibit eating lunches in certain areas.

We have also increased our cleanup efforts to ensure that trash barrels and food waste are collected on a daily basis. We have also warned our portable toilet subvendor to provide better service.

Condition 2. In order to collect waste as necessary to maintain a clean work area we have instituted the use of a second shift trash removal and housekeeping crew. In addition our daily housekeeping efforts have been increased insuring that trash containers and waste is removed and emptied from designated areas daily. We believe that this increased effort will result in a satisfactory level of cleanliness.

Condition 3. The particular concrete forms mentioned have been removed and stored properly or used in another location.

2. Corrective Steps Which Will be Taken to Avoid Further Noncompliance.

Condition 1. If corrective measures taken thus far fail to provide the required effectiveness we will issue a memorandum designating specific locations as non-eating places.

Condition 2. Continued emphasis will be placed on housekeeping to ensure that all trash containers and waste are removed and emptied daily.

Condition 3. All concrete forms when being removed will either be "jumped up" to the next pour height or returned to the Carpenters shop for storage or reuse of materials.

3. Date When Full Compliance Will be Achieved.

Condition 1. September 15, 1980

Condition 2. September 15, 1980

Condition 3. August 28, 1980

B. Inappropriate Accept/Reject Criteria for Total Air Content In An Exterior Wall Placement

Criterion V of Appendix B to CFR 50 requires that activities affecting quality shall be prescribed by documented procedures of a type appropriate to the circumstances, and shall be accomplished in accordance with these procedures. These procedures shall include appropriate qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished.

Stone & Webster Specification 210.350, "Specification For Mixing and Delivering Concrete," requires that the total air content for concrete placed in safety-related exterior walls two feet below finish grade and above to be in the range of 3.5% - 6.5%.

Contrary to the above:

On July 17, 1980, the IE inspector discovered, during a review of placement records, that the "Concrete Pour Card/Checklist," for exterior wall placement DG-4-W-94A1, a safety-related exterior wallpour, above two feet below finish grade, indicated accept/reject criteria of 0% - 6 1/2%.

This is a deficiency.

GSU Response to Deficiency B

1. Corrective Steps Which Have Been Taken, and the Results Achieved.

The responsibility of filling in attributes such as, entrained air, on the "Concrete Pour Card/Checklist" is now assigned to the Field Engineers rather than the construction personnel who previously were responsible. It is felt that the Field Engineers are more knowledgeable with the criteria in our specifications and thus mistakes of this nature should be eliminated.

2. Corrective Steps Which Will Be Taken to Avoid Further Noncompliance:

As a result of recent measures we believe we have resolved this deficiency therefore no further corrective steps are contemplated at this time.

3. Date When Full Compliance Will be Achieved:

August 18, 1980.

4. Comments:

It should be noted, as stated in the details of the report that FQC inspection personnel at the placement were aware of the correct air content accept/reject criteria, their inspection plan contained the proper air content limits, and that the concrete placed in the pour in question contained the proper air content.

ATTACHMENT II

RESPONSE TO NOTICE OF DEVIATION

A. Hot Weather Concreting

The River Bend PSAR, in Section 3.8.4.6, requires that workmanship conform to ACI 305-72, "Recommended Practice for Hot Weather Concreting."

1. ACI 305-72, paragraph 5.2, "Inspection," states that, "Inspectors should record at frequent intervals air temperature, concrete temperature, general weather conditions, wind velocity, and relative humidity. The record should include frequent checks on temperatures of concrete as delivered and after placing in the forms, and observations on the performance and appearance of the concrete as delivered and after placing in the forms."

Contrary to the above:

The inspection record for concrete placement No. ET-15-94J6-1 did not contain the wind velocity, relative humidity, temperature of the concrete as placed, nor the observations on the performance and appearance of the concrete as placed. Ambient air temperature varied from 98 to 101 degrees F at the time of placement.

2. ACI 305-72, paragraph 4.2.4.1, states that, "Whatever temperature limitation is considered worthwhile can be maintained to best advantage if mixers, belts, pump lines, and chutes are shaded. Pump lines and other surfaces can be kept appreciably cooler by covering them with damp burlap, kept damp with a soaker hose."

Contrary to the above:

Placement No. ET-15-W-94J6-1 was accomplished by pumping via an exposed and unprotected rigid pipeline approximately 300 feet long. Ambient air temperature varied from 98 to 101 degrees F.

This is a deviation.

GSU RESPONSE TO DEVIATION A1

1. Action taken and results achieved

As of July 18, 1980, Stone and Webster Field Quality Control requires the recording of air temperature, concrete temperature, general weather conditions, wind velocity, and relative humidity at frequent intervals when placing Category I concrete during hot weather.

2. Corrective Action taken to prevent recurrence:

Stone and Webster Field Quality Control Inspection Plan R1-210.370-FO-507, Revision D, will be revised to require the above information be recorded and include observations on the performance and appearance of the concrete as delivered and after placing in the forms.

3. Date Corrective Action will be completed:

September 15, 1980

GSU RESPONSE TO DEVIATION A2

1. Action taken and results achieved:

An E&DCR (P-1216) is in the approval cycle which will define when hot weather requirements are necessary and what precautionary measures will be taken to minimize the hot weather effects.

2. Corrective Action to prevent recurrence:

This E&DCR will define what precautions are to be taken during hot weather. In addition, to prevent possible future line plugging problems, we are continuing to stress our concrete training as we believe the inefficiency in our concrete pumping and placement crews is the main cause of this type of problem.

3. Date Corrective Action will be completed:

Corrective actions will be complete by October 1, 1980

4. Comments

As stated in ACI 305-1.2, "Hot weather is defined as any combination of high air temperature, low relative humidity, and wind velocity tending to impair the quality of fresh or hardened concrete or otherwise resulting in abnormal properties". Historically our relative humidity (See Table 2.3.2-1 of River Bend PSAR) and low concrete temperatures combined with high air temperatures have provided favorable water adsorption rates as indicated in ACI 305-2.1.5, Fig. 2.1.4. Therefore, no special preparations were made to protect the concrete pump line from high air temperatures.

B. Concrete Placement

The River Bend PSAR, in Section 3.8.4.6, requires that workmanship conform to ACI 304-59 (sic-73), "Recommended Practice for Measuring, Mixing, Transporting, and Placing Concrete." ACI 304-73, Chapter 9, "Pumping Concrete," paragraph 9.7, "Field Control" states that, "For pumped concrete, it frequently is desirable to sample at both the point of delivery to the pump and the point of discharge from the line and perform correlation testing to determine if any significant changes in slump, air content, and other mix characteristics are occurring. If significant changes are found to be occurring, appropriate allowance should be made for them."

Contrary to the above:

During placement No. ET-15-W-94J6-1, the IE inspector observed a significant loss of slump which caused plugging of the pipeline. It was verified that no sampling was performed at the discharge of the pipeline and that appropriate allowances for increasing the slump at the line discharge were not considered or initiated.

This is a deviation.

GSU RESPONSE TO DEVIATION B

1. Action taken and results achieved:

As of July 18, 1980, Stone & Webster Field Quality Control has been performing correlation testing on all Category I concrete placements where pump lines are utilized.

2. Corrective Action to prevent recurrence:

Stone & Webster Field Quality Control Inspection Plan will be revised to reflect the above requirement and Stone & Webster construction will adjust the slump and/or air content, based on the correlation test results.

3. Date Corrective Action will be completed:

September 15, 1980