



**GULF STATES UTILITIES COMPANY**

RIVER BEND STATION POST OFFICE BOX 220 ST. FRANCISVILLE, LOUISIANA 70775  
AREA CODE 504 635 6094 346 8651

March 11, 1988  
RBG-27552  
File Nos. G9.5, G9.8.9.6

U. S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, D. C. 20555

Gentlemen:

River Bend Station - Unit 1  
Docket No. 50-458

This letter provides additional information as discussed with the Staff on March 4, 1988 regarding Gulf States Utilities Company's (GSU) June 18, 1987 (RBG-26202) submittal to amend the River Bend Station Operating License (NPF-47) Appendix A (Technical Specifications).

If further assistance is required, please contact Mr. Barry M. Burmeister at (504) 381-4148.

Sincerely,

J. E. Booker  
Manager-River Bend Oversight  
River Bend Nuclear Group

JEB/VJK/BMB/JRH/ch

Attachment

cc: U. S. Nuclear Regulatory Commission  
611 Ryan Plaza Drive, Suite 1000  
Arlington, TX 76011

NRC Resident Inspector  
P. O. Box 1051  
St. Francisville, LA 70775

Mr. William H. Spell, Administrator  
Nuclear Energy Division  
LA Department of Environmental Quality  
Post Office Box 14690  
Baton Rouge, LA 70898

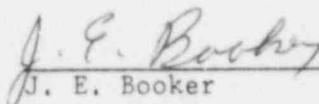
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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

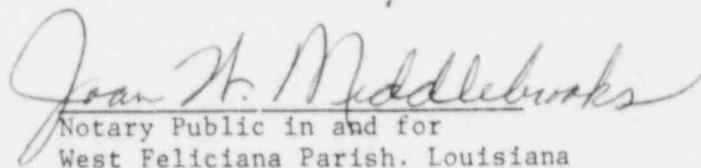
STATE OF LOUISIANA §  
§  
PARISH OF WEST FELICIANA §  
§  
In the Matter of § Docket No. 50-458  
§  
GULF STATES UTILITIES COMPANY §  
§  
(River Bend Station §  
Unit 1) §

AFFIDAVIT

J. E. Booker, being duly sworn, states that he is Manager-River Bend Oversight for Gulf States Utilities Company; that he is authorized on the part of said Company to sign and file with the Nuclear Regulatory Commission the documents attached hereto; that he has read all of the statements contained in such documents attached thereto and made a part thereof; and that all such statements made and matters set forth therein are true and correct to the best of his knowledge, information and belief.

  
J. E. Booker

Subscribed and sworn to before me, a Notary Public in and for the State and Parish above named, this 11<sup>th</sup> day of March,  
19 88.

  
Notary Public in and for  
West Feliciana Parish, Louisiana

My Commission is For Life.

## ATTACHMENT

QUESTION 1: Attachment 1, Reactor Water Cleanup (RWCU) area temperature, Significant Hazards Consideration discussions 1 and 2 state that reviews have been performed to ensure the required changes to Equipment Qualifications have been determined, changes to the qualified life were implemented and documented. Please provide additional information on what changes were made?

RESPONSE 1: The equipment qualification master list was reviewed to identify all class 1E equipment located in the RWCU areas. The equipment located in the affected environmental zones included:

- Limitorque motorized valve actuators
- Electrical cable
- Hydrogen igniters
- Solenoid operated valves
- Electrical preamplifiers/connectors

Once the equipment was identified, the qualification documentation for each item was reviewed. The increase in temperature from 90°F to a maximum of 105°F was enveloped by the original qualification for all equipment items; however, qualified lives and replacement maintenance intervals previously determined were recalculated for the temperature increase. The equipment in this area is similar to equipment qualified for drywell use at a maximum normal service temperature of 145°F. Therefore, no deleterious effects are anticipated as a result of the increase in temperature to 105°F. Any changes to the qualified lives of the equipment were reflected in the plant procedures to assure continued compliance. It should be noted that all program revisions for the affected equipment were incorporated prior to the NRC Equipment Qualification Program Inspection at River Bend conducted during November 1987.

Question 2: Attachment 2, RCIC/RHR High Flow Isolation Actuation Instrumentation Setpoints, Description identified that during a review of the RCIC/RHR Steam line high flow setpoint a correction was required. Please provide further information on the cause of this change?

RESPONSE 2: The initial setpoint was based on steam flow in an eight inch line supplying steam for RHR-A and B in the Steam Condensing Mode and RCIC operation. Errors were found in the original flow calculation which resulted in the overestimation of the

total steam flow. The errors appeared to have resulted from the multiple operating modes of the RHR System. The original design calculation incorrectly used the parameters for one RHR loop in the steam condensing mode and one RHR loop in the Suppression Pool cooling mode. The steam flow to both RHR loops utilized in the calculation was assumed to be twice this steam flow or  $218.6 \times 10^3$  lbm/hr. The steam flow in the proper RHR operating mode (both loops in steam condensing mode) should have been  $153.4 \times 10^3$  lbm/hr. Additionally, the calculation had used a value of  $20.5 \times 10^3$  lbm/hr (RCIC taking suction from suppression pool) for RCIC steam flow, however this value should have been  $30.2 \times 10^3$  lbm/hr (RCIC taking suction from CST). The net effect of these two errors was the overestimate of total steam flow through the steam supply line ( $239.1 \times 10^3$  lbm/hr vs.  $183.6 \times 10^3$  lbm/hr). The net effect of this error on the isolation setpoint was that in the event of a break of the 4-inch RCIC steam supply line, the resulting steam line flow would not have been sufficient to cause an isolation of the steam supply line on high flow. The revised setpoint will provide an isolation of the steam supply for a line break in the four inch RCIC supply piping and will be based on a maximum steady state flow of  $183.6 \times 10^3$  lbm/hr plus 25%. Since the revised setpoint is conservative with respect to the present Technical Specification and would ensure the isolation of RCIC, a modification has been made to change the setpoint.

At the time of the discovery of this error, the NRC Senior Resident Inspector was made aware of the discovery and the condition was evaluated for reportability. A review of the Safety Analysis Report (SAR) revealed that the analyses assume that the steam supply line is isolated due to high temperature as sensed by the temperature monitoring Leak Detection System as discussed in the SAR section 7.6.1.2. No credit was taken for the high flow isolation. Based on this, the condition was determined to be not reportable pursuant to 10CFR50.73.