

GULF STATES UTILITIES COMPANY

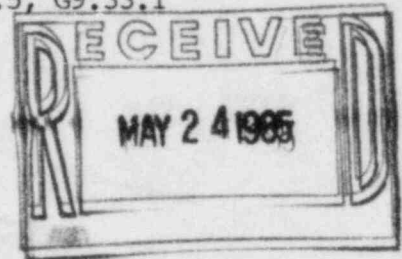


May 15, 1985

RBG- 21,023

File Nos. G9.5, G9.33.1

Mr. Robert D. Martin, Regional Administrator
U. S. Nuclear Regulatory Commission
Region IV, Office of Inspection & Enforcement
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76011



Dear Mr. Martin:

River Bend Station Unit 1
Docket No. 50-458
I&E Bulletin 84-03

In letters dated November 19, 1984 (RBG-19487), February 1, 1985 (RBG-20042), and April 5, 1985 (RBG-20635) Gulf States Utilities (GSU) responded to NRC I&E Bulletin 84-03 (Refueling Cavity Water Seal). The bulletin required GSU to evaluate the potential for and consequences of a refueling cavity water seal failure including consideration of gross seal failure, maximum leak rate due to failure of active components such as inflated seals, makeup capacity, time to cladding damage without operator action, potential effect on stored fuel and fuel in transfer, and emergency operating procedures.

Please find attached GSU's final evaluation with respect to time to cladding damage without operator action, item 4, and a summary of our review. This concludes GSU's review of Bulletin 84-03. Should you have any questions please contact Mr. Brit Hey of my staff at (409) 838-6631 ext. 2923.

Sincerely,

J. E. Booker

J. E. Booker
Manager-Engineering,
Nuclear Fuels & Licensing
River Bend Nuclear Group

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cc: U. S. NRC Document Control Desk
NRC Resident Inspector-Site

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ATTACHMENT

May 15, 1985
RBG- 21,023

GSU Final Response to NRC I&E Bulletin 84-03

1. Gross Seal Failure

Refer to RBG-19487 dated November 19, 1984.

2. Maximum Leak Rate Because of Seal Failure

Refer to RBG-19487 dated November 19, 1984.

3. Makeup Water Capacity

Refer to RBG-19487 dated November 19, 1984.

4. Time to Cladding Damage Without Operator Action

As stated in letter number RBG-20635 dated April 5, 1985 the only bundle that has the potential to become uncovered during a bellows failure would be a bundle in transit between the reactor and the containment storage racks. For any plausible weld failure of the bellows, there would be sufficient time for the refueling bridge operator to place the fuel bundle in a position (either back in the reactor or in the containment spent fuel racks) where it could not become uncovered. In addition, the bundle would not become uncovered during the transit and water coverage would provide adequate shielding for the operator while taking such action. These actions are not considered to conflict with the bulletin statement "without operator action" since they are actions that the operator was engaged in prior to the event and only represent a continuation of those actions.

The fuel element would not experience cladding damage if the bellows failed since it would always be covered with water, therefore it is not appropriate to provide a time to cladding damage.

5. Potential Effect on Stored Fuel and Fuel in Transfer

Refer to RBG-19487 dated November 19, 1984

6. Emergency Operating Procedures

Refer to RBG-20635 dated April 5, 1985.

7. Other Consequences

Refer to RBG-19,487 dated November 19, 1984.

8. Summary

GSU has evaluated the potential for and consequences of a postulated refueling cavity water seal failure. It has been determined that the potential for a seal failure is remote because of the type of design used at River Bend Station (RBS), specifically a permanently welded inplace stainless steel bellows seal assembly. For a postulated seal failure the resultant flood level in the drywell and containment would not affect any safety-related equipment required for safe plant shutdown and decay heat removal. In addition, the fuel storage pool would not have water loss sufficient to uncover any stored fuel. The seal has a pressure tap for leak testing and monitoring, and if indications so dictate, makeup water can be obtained from the condensate storage tank and the standby service water system. The only fuel bundle that would have the potential to become uncovered would be a bundle in transit. However, procedures allow and analysis indicates that the refueling bridge operator would have sufficient time to place the fuel bundle in a safe conservative position. In all respects, it is concluded that there would be no offsite dose consequences.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

STATE OF LOUISIANA

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PARISH OF WEST FELICIANA

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In the Matter of

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Docket No. 50-458

GULF STATES UTILITIES COMPANY

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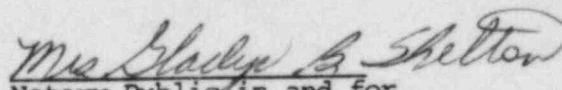
(River Bend Station,
Unit 1)

AFFIDAVIT

J. E. Booker, being duly sworn, states that he is Manager-Engineering Nuclear Fuels, and Licensing; that this position requires him to submit documents to the Nuclear Regulatory Commission in behalf of Gulf States Utilities; that the documents attached hereto 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 17th day of May, 1985.


Notary Public in and for
West Feliciana Parish,
Louisiana

My Commission is for life.