GULF STATES UTILITIES COMPANY
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AREA CODE 713 838-6631

April 5, 1985
RBG- 20635
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) and February 1, 1985 (RBG-20042) Gulf States Utilities (GSU) responded to NRC I&E Bulletin 84-03 (Refueling Cavity Water Seal) items 1, 2, 3, 5, 6 & 7. 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 evaluation with respect to time to cladding damage without operator action, item 4 and to emergency operating procedures, item 6. Additional information addressing item 4 and a summary of GSU's evaluation will be provided in an interim or final report by May 15, 1985. 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

JEB/WJR/LAE/BEH/lp

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

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A-095

ATTACHMENT

April 5, 1985

GSU Partial 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 a part of the potential cladding damage issue, GSU and its NSSS supplier (General Electric) for River Bend Station (RBS) first investigated the question of whether fuel uncovery could occur if the refueling bellows failed during refueling. First, no damage would occur to the fuel in the reactor because the water could not drain below the reactor vessel flange. Also, no damage would occur to the fuel temporarily located in the containment fuel storage racks as these racks are located in the steam dryer pool adjacent to the reactor pool at an elevation lower than the curb separating these pools. This curb prevents drainage of the steam dryer pool below the top of the fuel racks. Adequate water coverage also exists for any bundles in the upender for the inclined fuel transfer tube which is used to transfer spent fuel from the containment refueling area to the long term spent fuel storage pools in the Fuel Building. These bundles are at a lower elevation than the curbs separating the containment fuel transfer pool from the reactor pool.

   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. However, before the pool level dropped sufficiently to uncover the top of the fuel bundle, personnel in the vicinity would be exposed to high radiation dose. The time at which this exposure would occur is highly dependent upon break size, fuel transfer cycle time and other parameters. GSU's analysis of this postulated event is expected to be complete by May 15, 1985.

5. Potential Effect on Stored Fuel and Fuel in Transfer

   Refer to RBG-19487 dated November 19, 1984

6. Emergency Operating Procedures

RBG-20042 dated February 1, 1985 referenced two procedures (ARP-1091 and AOP-0032) which were in the review cycle. Both of these procedures have now been approved and were issued on February 21, 1985.

7. Other Consequences

Refer to RBG-19487 dated November 19, 1984.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

STATE OF TEXAS	§	
COUNTY OF JEFFERSON	§	
In the Matter of	§	Docket Nos. 50-458
GULF STATES UTILITIES COMPANY	§	
(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
J. E. Booker

Subscribed and sworn to before me, a Notary Public in and for the State and County above named, this 5 day of April, 1985.

Martha C. Hinkley
Notary Public in and for
Jefferson County, Texas

My Commission Expires:
1-11-86