

October 4, 1989

Docket No. 50-458

Gulf States Utilities  
ATTN: Mr. James C. Deddens  
Senior Vice President (RBNG)  
Post Office Box 220  
St. Francisville, LA 70775

Dear Mr. Deddens:

SUBJECT: RIVER BEND STATION, UNIT 1 - AMENDMENT NO. 39 TO FACILITY  
OPERATING LICENSE NO. NPF-47 (TAC NO. 73625)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 39 to Facility Operating License No. NPF-47 for the River Bend Station, Unit 1. The amendment consists of changes to License Condition 2.C(14), Attachment 5, Item 3 in response to your application dated June 28, 1989.

The amendment modifies the implementation of neutron flux monitoring system modifications until before restart from the next refueling outage starting after 18 months from the date of receipt of the NRC staff's safety evaluation of the Boiling Water Reactor Owners Group topical report, "Position on NRC Regulatory Guide 1.97. Revision 3, Requirements for Post-Accident Neutron Monitoring System," NEDO-31558, March 1988, but no later than startup from refueling outage N. 4 unless otherwise notified in writing by the NRC staff.

A copy of our Safety Evaluation is enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

/s/  
Walter A. Paulson, Project Manager  
Project Directorate IV  
Division of Reactor Projects - III,  
IV, V and Special Projects  
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 39 to License No. NPF-47
2. Safety Evaluation

cc w/enclosures:

See next page

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DOCUMENT NAME: RIVER BEND AMENDMENT

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

October 4, 1989

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A copy of our Safety Evaluation is enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

A handwritten signature in cursive script that reads "Walter A. Paulson".

Walter A. Paulson, Project Manager  
Project Directorate IV  
Division of Reactor Projects - III,  
IV, V and Special Projects  
Office of Nuclear Reactor Regulation

Enclosures:

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2. Safety Evaluation

cc w/enclosures:  
See next page

Mr. James C. Deddens  
Gulf States Utilities Company

River Bend Nuclear Plant

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

GULF STATES UTILITIES COMPANY

DOCKET NO. 50-458

RIVER BEND STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 39  
License No. NPF-47

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Gulf States Utilities Company (the licensee) dated June 28, 1989, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to License Condition 2.C(14), Attachment 5, Item 3 of Facility Operating License No. NPF-47. Attachment 5 is hereby amended to read as follows:

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PDR ADOCK 05000458  
P FDC

ATTACHMENT 5  
TO NPF-47  
EMERGENCY RESPONSE CAPABILITIES

GSU shall complete the following requirements of NUREG-0737 Supplement No. 1 on the schedule noted below:

1. Actions and schedules for correcting all human engineering discrepancies (HEDs) identified in the "Detailed Control Room Design Review Summary Report" dated October 31, 1984 and Supplements dated May 14, June 12, 1985, and July 31, 1985, shall be implemented in accordance with the schedule committed to by GSU in the summary report and supplements and accepted by the NRC staff in Section 18.1 of SSER 3.
2. Prior to startup following the first refueling outage, GSU shall implement modifications (installation or upgrade) for those items listed below consistent with the guidance of Regulatory Guide 1.97, Revision 2 unless prior approval of an alternate design of these items is granted by the NRC staff. These items as listed in GSU's letter of June 24, 1985 are:
  - a) coolant level in the reactor;
  - b) suppression pool water level;
  - c) drywell atmosphere temperature;
  - d) primary system safety relief valve position;
  - e) standby liquid control system storage tank level;
  - f) emergency ventilation damper position; and
  - g) airborne radiohalogens and particulates.
3. GSU shall implement modifications (installations or upgrade) for neutron flux monitoring consistent with the guidance of Regulatory Guide 1.97, Revision 2 or the NRC Staff's Safety Evaluation Report of the BWR Owners Group Licensing Topical Report (NEDO-31558, Position on NRC Regulatory Guide 1.97, Revision 3, Requirements for Post-Accident Neutron Monitoring System). Modifications, if required, shall be completed before restart from the next refueling outage starting after 18 months from the date of receipt of the NRC Staff Evaluation Report on NEDO-31558, but no later than startup from refueling outage No. 4 unless otherwise notified in writing by the NRC staff.

3. The license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

  
Frederick J. Hebdon, Director  
Project Directorate IV  
Division of Reactor Projects - III,  
IV, V and Special Projects  
Office of Nuclear Reactor Regulation

Date of Issuance: October 4, 1989



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 39 TO FACILITY OPERATING LICENSE NO. NPF-47  
GULF STATES UTILITIES COMPANY  
RIVER BEND STATION, UNIT 1  
DOCKET NO. 50-458

1.0 INTRODUCTION

By letter dated June 28, 1989, Gulf States Utilities Company (GSU) (the licensee) requested an amendment to Facility Operating License No. NPF-47 for the River Bend Station, Unit 1. The proposed amendment would modify License Condition 2.C(14), Attachment 5, Item 3, to delay the implementation of neutron flux monitoring system modifications until before restart from the next refueling outage starting after 18 months from the date of receipt of the NRC staff's safety evaluation of the Boiling Water Reactor Owners Group (BWRONG) topical report, "Position on NRC Regulatory Guide 1.97, Revision 3, Requirements for Post-Accident Neutron Monitoring System," NEDO-31558, March 1988.

On June 30, 1986, the NRC staff issued a Safety Evaluation (SE) regarding the River Bend Station conformance to Regulatory Guide 1.97. This safety evaluation concluded that the River Bend Station design was acceptable except for neutron flux monitoring instrumentation. The staff found that the existing neutron flux instrumentation was acceptable for interim operation; however, the SE concluded that prior to startup from the first refueling outage, the licensee must install or upgrade the neutron flux instrumentation to conform to Regulatory Guide 1.97, Revision 2, and 10 CFR 50.49.

By letter dated August 5, 1987, as supplemented August 24, 1987, the licensee requested that the implementation date for the installation or upgrade of the neutron flux instrumentation be changed from prior to the startup following the first refueling outage to prior to startup following the second refueling outage. The licensee stated that they followed the industry development of neutron flux instrumentation that meets Regulatory Guide 1.97 and that the scheduling, procurement and installation of a licensed system meeting the Regulatory Guide would not be possible during the first refueling outage. The NRC approved the requested schedule change in Amendment No. 14 to the license dated October 26, 1987.

On April 1, 1988, the BWRONG topical report, NEDO-31558, was submitted for NRC review. This topical report, which is currently under review by the NRC staff, concludes that the existing BWR neutron monitoring system design is generally adequate for every postulated event and that a fully qualified Class 1E system for post-accident monitoring is not appropriate or justified. By letter dated May 25, 1988, the licensee requested that the previously cited license condition be modified to delay implementation of neutron flux monitoring system until a refueling outage following the

issuance of the NRC staff's safety evaluation regarding topical report, NEDO-31558. The licensee stated that based on a plant specific evaluation, the River Bend Station's design meets all the criteria provided in the topical report, and on this basis, it is their position that the present neutron monitoring system meets the functional safety intent of Regulatory Guide 1.97. GSU requested that the technical arguments presented in the topical report be evaluated by the NRC prior to the implementation of the modifications. The NRC approved the schedule change in Amendment No. 28 to the license dated August 29, 1988. The license condition, as approved, states that GSU shall implement modifications (installation or upgrade) for neutron flux monitoring consistent with the guidance of Regulatory Guide 1.97, Revision 2 or the NRC staff's SE of the BWROG topical report NEDO-31558. Modifications, if required, shall be completed before the restart from the next refueling outage starting after 10 months from the date of receipt of the NRC staff SE on NEDO-31558, but not later than January 1, 1991 unless otherwise notified in writing by the NRC staff.

The staff's evaluation of the licensee's June 28, 1989 request for further modification of the above cited license condition is contained below.

## 2.0 EVALUATION

GSU's June 28, 1989 submittal states that the current estimate for the procurement cycle and installation of modifications to the neutron monitoring system will require 18 months. Thus, the ten month period specified in the current license condition cannot be achieved at this time.

GSU has followed industry development of equipment designed to meet Regulatory Guide 1.97 criteria. GSU indicated that several options have been reviewed and that concerns have been identified regarding the ability of the systems to comply with all criteria of Regulatory Guide 1.97 or installation and operational considerations. GSU indicated that they are continuing to pursue resolution to these concerns to establish an acceptable alternate system installation but delivery constraints will require a purchase order to be placed between June and September 1989, depending on the option, to ensure delivery and final design for installation during the third refueling outage scheduled to begin in September 1990. GSU further stated that to procure, design and install a neutron monitoring system prior to receiving the NRC safety evaluation on the BWROG topical report could result in undue hardship and unnecessary costs if implementation proceeds in accordance with the current license condition. Nonetheless, GSU has maintained a bid specification for the purchase of a system meeting Regulatory Guide 1.97 requirements that is ready for issuance. The licensee has also provided quarterly reports to the NRC regarding the status of action regarding the procurement activities.

Because there could be undue hardships and unnecessary costs should GSU proceed with the procurement and installation of the neutron monitoring system prior to the issuance of the staff's safety evaluation of the topical report, and there is existing neutron flux instrumentation that

the staff previously found acceptable for interim operation in approving Amendment No. 28, and because there are unrelated systems in place to provide operators with sufficient data to assess reactor conditions (e.g., control rod position monitors, reactor vessel level and pressure monitors) in the unlikely event of an accident condition, the staff finds that the licensee's June 28, 1989 proposed change to license condition 2.C(14), Attachment 5, Item 3, will not adversely affect the safety of the plant during interim operation and is acceptable. The staff has determined that the modifications, if needed, must be finished prior to startup from the fourth refueling outage. This schedule should allow ample time to complete the related review and implementation work.

The licensee has also requested that their July 6, 1988 commitment to provide quarterly reports regarding progress of neutron flux monitoring instrumentation procurement be suspended until after the issuance of the staff's SE on NEDO-31558. GSU's basis for this request is that no further specific action remains on their part prior to generic resolution. The staff finds that this is acceptable.

### 3.0 ENVIRONMENTAL CONSIDERATION

The amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposures. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Section 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

### 4.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public. The staff therefore concludes that the proposed changes are acceptable.

Dated: October 4, 1989

Principal Contributors: W. Paulson