



GULF STATES UTILITIES COMPANY

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April 15, 1983
RBG-14,819
File Code G9.33.4, G9.5

Mr. Darrell G. Eisenhut, Director
Division of Licensing
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Eisenhut:

River Bend Station Units 1 and 2
Docket Nos. 50-458/50-459

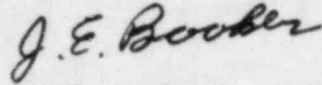
Gulf States Utilities Company (GSU) has reviewed Generic Letter 82-33, "Supplement 1 to NUREG-0737-Requirements for Emergency Response Capability," as guidance for the emergency response activities ongoing at River Bend Station (RBS) Units 1 and 2. GSU has proceeded to implement emergency response activities to meet Nuclear Regulatory Commission (NRC) requirements. The status and proposed schedule for completing each of the Generic Letter 82-33 items is attached (Attachment 1). A description of GSU's phased implementation and integration plans of the activities is also included (Attachment 2).

GSU understands the concerns of the NRC in establishing realistic plant-specific schedules that take into account the unique aspects of the work at each plant. GSU has developed a RBS plant-specific schedule for each item. GSU will work closely with the RBS NRC Project Manager to reach an agreement on the final schedules for implementation of these RBS emergency response activities. The information provided herein as agreed to by the NRC will be included in a future amendment to the RBS Final Safety Analysis Report (FSAR). If any of the agreed to dates provided herein should change, a revised schedule and justification for the change will be provided.

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GSU appreciates the NRC's efforts to clarify these issues and establish implementation schedules.

Sincerely,

A handwritten signature in cursive script that reads "J. E. Booker".

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

WJC/RJK/kt

Attachment

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

STATE OF TEXAS

X

COUNTRY OF JEFFERSON

X

In the Matter of

X

Docket Nos. 50-458
50-459

GULF STATES UTILITIES COMPANY

X

(River Bend Station,
Units 1 and 2)

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 15th day of April, 19 83.

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

My Commission Expires:

1/11/86

Response to Generic Letter 82-33
Emergency Response Activities

I.D.2 - Safety Parameter Display Console (SPDS)

The River Bend Station (RBS) SPDS consists of three graphic displays located in the Main Control Room, Technical Support Center (TSC), and Emergency Operations Facility (EOF). With exception to the Digital Radiation Monitoring System (DRMS) meteorological and radiological displays, GSU's SPDS will be supplied by General Electric Company (GE) as part of the Nuclear Steam Supply System (NSSS) scope of supply. GE has completed the hardware design and is presently finalizing the system software. The RBS SPDS configuration (safety analysis) was based upon a study documented in NUREG/CR-2100, the Symptom-Oriented Emergency Procedure Guidelines developed by the Boiling Water Reactor Owners' Group (BWROG), and Regulatory Guide (R.G.) 1.97, Rev. 2, "Instrumentation For Light-Water-Cooled Nuclear Power Plants To Assess Plant And Environs Conditions During And Following An Accident". The GE designed SPDS graphic displays for RBS will be similar to those supplied to Cleveland Electric Illuminating Company's Perry Nuclear Power Plant. GSU will review the NRC's post-implementation review for the Perry SPDS. Therefore, GSU will not request the NRC's optional pre-implementation review for RBS.

Since the software design has not yet been completed by GE, GSU cannot provide a schedule for the SPDS implementation plan at this time. The implementation plan, including the submittal date for the SPDS safety analysis, will be provided in August, 1983. Currently, it is estimated that GSU's SPDS training program plan will be completed approximately one year prior to the fuel load date. Figure 2 shows the integrated network for the SPDS with other related activities.

I.D.1 - Detailed Control Room Design Review (DCRDR)

GSU has been actively participating with industry committees including the BWROG Control Room Committee and the Nuclear Utility Task Action Committee (NUTAC) for Emergency Response Capabilities in developing a generic approach for performing a DCRDR. A partial DCRDR was conducted on the Unit 1 main control room at GE's San Jose, California facility during staging prior to shipment to the site. This partial DCRDR was based on the BWROG control room survey plan. The survey was performed to identify any major design improvements

during the early stages of testing following the initial design and fabrication.

Areas such as maintenance, surveillance, training, and manning will be performed during the final DCRDR. The results of the partial DCRDR and a checklist of items will be included in the final review.

The RBS DCRDR program is based on industry guidance documents such as NUREG-0700, NUREG-0801, and the BWROG control room survey. A program plan and schedule will be provided sixteen months prior to fuel load (see Figure 1). After submittal of the program plan, GSU will begin the review to identify any human engineering discrepancies (HED). Following this review, safety implications of the HED's will be analyzed and any necessary corrective actions will be addressed. A schedule for implementation of required modifications to the main control room will be developed. A summary report will be submitted six months prior to fuel load, which describes the review findings and scheduled implementation dates for modifications.

Changes to the main control room design will be reflected in GSU's training program for the licensed operators. Figure 2 shows the integrated network for the DCRDR with other related activities.

Regulatory Guide 1.97, Rev. 2 - Application to Emergency Response Facilities

GSU has reviewed R.G. 1.97, Rev. 2, criteria and has incorporated the indication of appropriate variables in the main control room to ensure that necessary information is available to the plant operator to help prevent and mitigate consequences of reactor accidents/transients. The RBS position on R.G. 1.97, Rev. 2 is provided in Section 1.8 of the FSAR. Tables 7.5-1 and 7.5-2 in the FSAR provide information for each type A, B, C, D and E variable. A schedule and additional information concerning the environmental and seismic qualification criteria, redundancy and sensor locations, type of power supply, and location of display will be submitted by fuel load. Integration of R.G. 1.97, Rev. 2 is shown on Figure 2.

I.C.1 - Guidance for the Evaluation and Development of Emergency Operating Procedures (EOP) for Transients and Accidents

Currently, RBS is using the BWROG Emergency Procedures Guidelines (EPG) Revision 3 as its technical guidelines for developing plant specific Emergency Operating

Procedures (EOP). Revision 3 of the BWROG EPG's was submitted to the Nuclear Regulatory Commission on December 22, 1982, in a letter from Tom Dente, Chairman, BWR Owners' Group, to D. G. Eisenhut, Director, Nuclear Reactor Regulations (NRR). Therefore, no additional GSU technical guideline submittal will be made. The draft RBS EOP Writer's Guide is being developed in accordance with INPO operating procedure writing guidelines. The calculations to determine plant specific values for inclusion in the EPG's are being performed by GE. GSU is developing the EOP verification and validation program in accordance with INPO guidelines.

The RBS Procedures Generation Package will be submitted to the NRC by August, 1983. The EOP's will be integrated into the operator cold license training program. It is anticipated that the cold license training will begin in October of 1983. The RBS Training Program Plan is estimated to be complete one year prior to fuel load.

EOP's will be available for plant operation when the RBS Operating License is issued. The current RBS Fuel Load date is April, 1985.

III.A.1.2 - Upgrade Emergency Support Facilities:

The RBS emergency response facilities (ERF) serve to provide a coordinated group of facilities to enhance management of accident conditions. The ERF's are physically separated to minimize interference and confusion. Each facility is connected by dedicated communication lines to ensure an uninterrupted flow of data and instructions.

o Technical Support Center (TSC)

A description of GSU's TSC, is given in the FSAR Section 13.3.6.1.1, and Figure 13.3-20 in the FSAR provides the floor plan of the TSC.

The TSC will be located in the Services Building. Construction of the Services Building began in early 1983. At this time, the design specifications for the TSC have not been finalized. GSU's projected completion date for a fully functional TSC (i.e., structure, instrumentation, procedures, and trained staff) is anticipated to be ten months after the fuel load date or approximately two months after commercial operation.

o Operational Support Center (OSC)

Section 13.3.6.1.2 of the FSAR provides a description of the OSC.

The OSC will be located in the Services Building. The floor plan is shown in Figure 13.3-21 of the FSAR.

The RBS Services Building is currently under construction. A fully functional OSC is anticipated to be complete two (2) months after the fuel load date and prior to commercial operation.

o Emergency Operating Facility (EOF)

FSAR Section 13.3.6.1.5 describes the EOF and its backup facility.

The structural design and construction of the RBS EOF are complete. Internal facility design has not been finalized. GSU anticipates that the EOF will be fully functional ten months after fuel load or approximately two months after Commercial Operation.

EOF coordination with non-utility participation is described in Section 13.3.6.1.5.2 of the RBS FSAR.

III.A.2.2 - Meteorological Data

RBS employs a Digital Radiation Monitoring System (DRMS) with the capability to assess radiological conditions during normal and abnormal operating conditions. The offsite dose assessment portion of the DRMS will display the meteorological data recommended by Regulatory Guide 1.97, Rev. 2. Meteorological displays will be available in the TSC and EOF only. The system design is complete and has been procured. GSU anticipates that the system will be delivered by November, 1984 and will be fully functional in the TSC and EOF ten months after the fuel load date or approximately two months after Commercial Operation.

Emergency Response Training Program

GSU's emergency response integrated training program is in its developmental stages. Activities related to emergency response capability will be considered for inclusion in the training program plan. RBS's training program plan is anticipated to be complete one year prior to fuel load. At that time GSU will have an integrated training plan which includes SPDS, DCRDR, EOP, R.G. 1.97, Rev. 2, and ERF's.

Schedule Summary Based on the Fuel Load
Date of April, 1985

SPDS Implementation Plan, Operability Schedule, & Safety Analysis	August, 1983
EOP Generation Package	August, 1983
DCRDR Program Plan	January, 1984
Training Program Plan Developed	April, 1984
DCRDR Summary Report	October, 1984
R.G. 1.97, Rev. 2 Report	April, 1985
Emergency Response Facilities Fully Functional	February, 1986
a. DRMS	February, 1986
Verification and Validation Process Complete	Summer, 1986

Discussion of the Coordination and Integration
of Initiatives for River Bend Station

GSU developed a plant-specific program, which is shown in Figure 2 (attached). In developing this plan for Emergency Response Capabilities (ERC), GSU used Guidance for an Integrated ERC Implementation Plan, that was developed by the Nuclear Utility Task Action Committee (NUTAC).

Figure 2 is divided into seven basic steps that will be considered in the development of an integrated plant-specific implementation plan. For the remaining work, each step and its relation to previous and succeeding steps is discussed in the following plan descriptions.

A. EOP Plan

The EOP plan consists of tasks that will provide a documented method for developing, utilizing, revising, and controlling Emergency Operating Procedures.

This plan will include definition of source documents, determination of manpower requirements, establishment of a schedule, and specification of the method of document control. This plan also defines the interfaces with other NUREG-0737, Supplement 1 elements to ensure complete integration.

Initial plant-specific EOPs will be developed by GSU for the purpose of mitigating the consequences of a broad range of initiating events and subsequent multiple failures or operator errors, without the need to diagnose a specific event. These procedures will be symptom-oriented and will be written with human factors considerations to improve human reliability. The initial EOPs will be developed based upon the Writer Guide and BWR Owners' Group Emergency Procedure Guidelines.

Determination of procedure adequacy is dependent upon the trained operator's needs. EOPs will be checked for completeness, understandability, technical correctness, usability, and compatibility with the control room. For operators to have confidence in the EOPs, all of these criteria will be met. A walk-through in the RBS simulator of the initial EOPs will provide the method of evaluating these criteria. Although Figure 1 indicates only one EOP walk-through, additional walk-throughs will be performed as necessary following any major modifications to the EOPs.

B. DCRDR Plan

A partial DCRDR was performed by the BWROG. At this time, GSU is following the activities of the DCRDR NUTAC, which is expected to complete its work in September, 1983. Upon finalization of the DCRDR NUTAC recommendations, GSU will evaluate the recommendations and consider them in the development of our detailed program plan.

C. R.G. 1.97 Plan

A review has been performed comparing the existing post-accident monitoring instruments with that of R.G. 1.97, Rev. 2.

D. Integration Of All Control Room Elements

When the DCRDR program plan has been completed, and the subsequent review performed, the results will be evaluated along with other control room elements. A determination will then be made as to how to correct any identified deficiency. This may be in the form of a revised EOP, a modification to the control room, or a modification to the SPDS.

Once this determination has been made, final EOPs will be written, final control room modifications will be designed if necessary, and a training program plan based on the above elements with proper objectives, performance evaluations, and revision elements will be developed.

E. Verification and Validation

After completing the Verification & Validation (V&V) activities, a report documenting the V&V effort will be developed. Improvements or modifications identified as a result of the V&V efforts will be reviewed to determine the impact on performance of other emergency response activities. GSU currently projects this process will be completed prior to startup at conclusion of the first refueling (Summer, 1986).

SCHEDULE FOR ITEM I.D.1

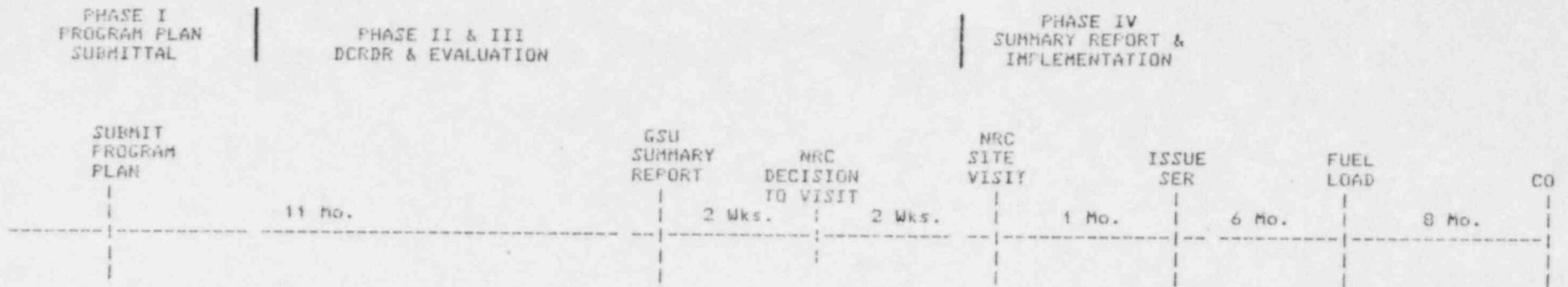


FIGURE 1

FIGURE 2

