



GULF STATES UTILITIES COMPANY

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September 28, 1992
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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 the Gulf States Utilities Company (GSU) response to Generic Letter (GL) 92-04 "Resolution of the Issues Related to Reactor Vessel Water Level Instrumentation in BWRs Pursuant to 10 CFR 50.54(f)". This generic letter requested information to assess the adequacy of and corrective actions for BWR water level instrumentation with respect to the effects of noncondensable gases on system operation. The attachment to this letter furnishes the action items listed in the GL and provides the River Bend Station response to each item.

If you have any questions regarding this response, please contact Mr. Leif L. Dietrich of my staff at (504) 381-4866.

Sincerely,

W. H. Odell
Manager - Oversight
River Bend Nuclear Group

Handwritten initials: JTE, LLD, REF, JHB, WJR
EAE/LLD/JRH/WJB/WJS

Attachment

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cc: U. S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011

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

Mr. D. V. Pickett
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

STATE OF LOUISIANA)
PARISH OF WEST FELICIANA)
In the Matter of)
GULF STATES UTILITIES COMPANY)
(River Bend Station - Unit 1)

Docket No. 50-458


AFFIDAVIT

W. H. Odell, being duly sworn, states that he is a Manager-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; and that all such documents are true and correct to the best of his knowledge, information and belief.



W. H. Odell

Subscribed and sworn to before me, a Notary Public in and for the State and Parish above named, this 28th day of September, 1992. My Commission expires with Life.



Claudia F. Hurst
Notary Public in and for
West Feliciana Parish, Louisiana

Attachment

The following information represents the GSU response to the specific Requested Actions in the generic letter for River Bend Station (RBS).

Requested Action 1

In light of potential errors resulting from the effects of noncondensable gas, each licensee should determine:

- a. The impact of potential level indication errors on automatic safety system response during all licensing basis transients and accidents;
- b. The impact of potential level indication errors on operator's short and long term actions during and after all licensing basis accidents and transients;
- c. The impact of potential level indication errors on operator actions prescribed in emergency operating procedures or other affected procedures not covered in (b).

Response

- 1 a. The BWR Owners' Group (BWROG) provided to the NRC a report on BWR Reactor Vessel Water Level Instrumentation, Revision 1, dated August 28, 1992. This report addresses the safety impact of potential water level indication errors on automatic system response during all licensing basis transients and accidents. This analysis basis is contained in Section 6.0 Safety Analysis of the report and is summarized in Section 2.2 Plant Responses to Postulated Accident Scenarios. The information in the BWROG report is applicable to the design of RBS; this conclusion is based on our review of the report and the evaluation made by General Electric as contained in Attachment 2 to the report. GSU recognizes that there are differences between the design of BWR plants and systems; however, our review of the report and the Attachment 2 conclusions reinforced GSU's general understanding that the basic plant response to the design basis transients and accident events is sufficiently similar to the plant specific response to obviate the need for additional plant unique detailed re-analyses. This evaluation is sufficiently conservative to bound the results expected for RBS plant specific analysis.
- 1 b. The BWROG report addresses, in Section 6.9 Operator Responses, the operator actions that could be anticipated in response to potential water level indication errors. In the short term the report discusses in Section 6.0 that the automatic safety actions will be performed as necessary. Additional guidance has been provided to plant operations personnel as a result of the BWROG Emergency Procedures Committee (EPC) recommendation letter, dated August 19, 1992. At RBS this sensitizing guidance was included in the operators requalification training module currently being administered.

The interim guidance information has sensitized the operators to the possible concerns with accurate water level readings following a rapid depressurization while not necessitating a change to the existing long term guidance provided in the Emergency Operating Procedures (EOP). (As stated in the BWROG report in Section 6.4.1 there have not been any identified rapid depressurization events like initiation of the Automatic Depressurization System (ADS); there is only a small likelihood of such a challenging event.) At RBS, procedures for backfilling the reference legs of water level instrumentation during operation are available to the operator. These procedures have been used in the past to correct level mismatch indications and, provided that containment is accessible, are available to the operator for the recovery of instrumentation that may have lost water level indication as a result of a depressurization event.

- 1 c. As stated in Section 6.5 of the report and the 1.b response above, the operators have adequate information in the present EOPs as augmented by the recent sensitization information communication from the EPC. The EPC is continuing to review the potential need for any additional guidance in the Emergency Procedure Guidelines (EPG) to further address the potential water level indication errors. Such review will take into account the information from the BWROG program of analysis and testing regarding this issue.

Requested Action 2

Based upon the results of (1), above, each license should notify the NRC of short term actions taken, such as:

- a. Periodic monitoring of level instrumentation system leakage; and,
- b. Implementation of procedures and operator training to assure that potential level errors will not result in improper operator actions.

Response

- 2 a. GSU has taken the following short-term actions:

- Informed its operators of the information contained in the August 19, 1992 letter from the EPC.

- Reviewed existing cold reference leg configuration documentation which includes refueling outage (RF) -2 walk-down verification. RBS has a high level of confidence in the documentation of our configuration of existing water level instrumentation.

- Steam leg and condensing pot arrangements were walked-down during RF-4 verifying proper insulation status.
 - RBS level instrumentation configuration information has been provided to the BWROG to be factored into the test configurations of the BWROG program. This program was provided to the NRC in the August 12, 1992 letter from the BWROG. The significance of different characteristics of the configuration of cold reference leg water level instrumentation will be better understood after the BWROG program test information is available.
 - During RF-2 in 1989, RBS installed reactor water level instrumentation condensing chamber temperature monitoring capability. The data from this instrumentation is currently being trended to facilitate potential correlation with the information being developed by the BWROG.
 - RBS has in place procedures to backfill, as required, reactor water level reference legs and condensing chambers which exhibit indications of degraded performance.
- 2 b. The response to 1.b discusses procedures and operator training which assure that potential level errors will not result in improper operator actions.

Requested Action 3

3. Each licensee should provide its plan and schedule for corrective actions, including any proposed hardware modifications necessary to ensure the level instrumentation system design is of high functional reliability for long term operation. Since this instrumentation plays an important role in plant safety and is required for both normal and accident conditions, the staff recommends that each utility implement its longer term actions to assure a level instrumentation system of high functional reliability at the first opportunity but prior to starting up after the next refueling outage commencing 3 months after the date of this finding.

Response

3. GSU endorses the BWROG plans originally provided in BWROG letter to the NRC on August 12, 1992. GSU also reaffirms support of the BWROG plan by endorsing the BWROG letter of September 24, 1992. A follow-up response to this generic letter identifying our intentions and planned actions will be made at the conclusion of the BWROG program, scheduled for the second quarter of 1993.