



GULF STATES UTILITIES COMPANY

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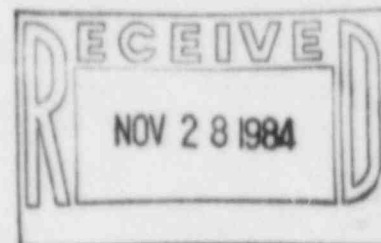
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November 19, 1984

RBG-19486

File Nos. G9.5, G9.25.1.1

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



Dear Mr. Martin:

River Bend Station Unit 1
Docket No. 50-458
Final Report/DR-258

On October 9, 1984, GSU notified Region IV by telephone that it had determined DR-258 to be reportable under 10CFR50.55(e). This deficiency concerns excessive leakage of containment isolation check valves. The attachment to this letter is GSU's final 30-day written report pursuant to 10CFR50.55(e) with regard to this deficiency.

Sincerely,

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

JEB
JEB/PJD/lp

Attachment

cc: Director of Inspection & Enforcement
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

NRC Resident Inspector-Site

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ATTACHMENT

November 19, 1984
RBG-19486

DR-258 Leakage of Containment Isolation Check Valves

Background and Description of the Problem

A containment isolation valve leak test on check valve 1SWP*V174 caused leaking 10 times greater than the plant allowable leakage rate of 0.1 scfh per nominal inch valve diameter. The differential test pressure was 8 psig. The subject valve, procured from Velan Engineering Ltd. of Montreal, Quebec under Purchase Order No. RBS-228.211-049 and designed and fabricated in accordance with Specification No. 228.211, required an acceptable pneumatic leak test rate of 0.1 scfh per inch diameter port size but at a test pressure of 45 psig. The Velan test results indicated that the valve met this criteria. Testing of a similar swing check valve (1SWP*V175) installed in a vertical pipe run rather than in a horizontal pipe run, such as 1SWP*V174, achieved acceptable results. Conclusions drawn from these two observations would indicate that the higher test pressures or gravitational force effects on the valve disc created a tighter seal, thus achieving the favorable results.

Further testing of 17 of the other 23 containment isolation check valves found nine other valves leaking beyond the acceptable limits for the specific test being conducted. An inspection of various valve seals indicated distortion of the seating surface, which was probably caused by heat during welding of the valves inline.

Safety Implication

If these excessive leak rates had remained uncorrected, it is possible that after an accident, increased radioactive leakage from the containment could occur, thereby adversely affecting the safe operations of the plant.

Corrective Action

Currently the containment isolation valves which did not pass the River Bend Station - Unit 1 leak tests are being lapped. The results have been favorable. Specifically, valve 1SWP*V174 has been retested with acceptable results. In conjunction with the lapping process being conducted on the valves, a study is being performed on the feasibility of adding soft seats to all the containment isolation check valves. If the valves do not successfully pass the leakage tests after lapping, the soft seal option may be pursued. If the valves do pass the leak tests, the soft seal option may be considered for use at some other time.