



GULF STATES UTILITIES COMPANY

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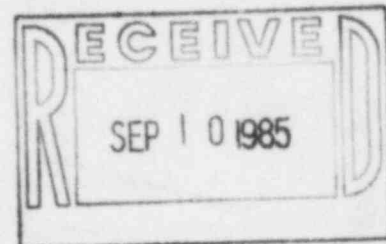
AREA CODE 409 838-6631

August 30, 1985
RBG- 22,003
File Nos. G9.5, G9.25.1.1

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

Dear Mr. Martin:

River Bend Station - Unit 1
Docket No. 50-458
Final Report/DR-322



On August 23, 1985, GSU notified Region IV by telephone of DR-322 concerning the loss of water from the standby cooling tower. GSU had determined this DR was reportable under 10CFR50.55(e). The attachment to this letter is GSU's final 30-day written report pursuant to 10CFR50.55(e)(3) with regard to this deficiency.

Sincerely,

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

ME PJO
JEB/PJD/mmg

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

NRC Resident Inspector-Site

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ATTACHMENT

August 30, 1985
RBG- 22,003

DR-322/Loss of Water From The Standby Cooling Tower

Background and Description of the Problem

This deficiency concerns the loss of water from the Standby Cooling Tower (SCT) during operation with all fans in service. During the performance of Startup Procedure 1-PT-256, Standby Service Water System Testing, water was observed to be spilling from the spray tile areas onto concrete walkways and over the side of the SCT. This spillage resulted in a water loss of approximately one inch every three hours with all pumps and fans running. This water loss occurred in the inlet area of the tornado missile-protected SCT.

During SCT operation, ambient air is first drawn in through the tower inlet area, then upward through the tile fill, and is finally discharged by the fans. At the same time, warm water returning from the plant is sprayed down on top of the fill, cascades down through it, and finally falls to the basin water surface.

It appears that during operation, the inlet airflow forms eddies at the edges of the inlet area, which blows water against the tower walls instead of allowing it to fall vertically. This water collects on the concrete walkways and runs over the side.

Safety Implication

A water loss of one inch every three hours would result in a total loss of 20 feet of water level or approximately 40 percent of the available basin storage capacity over 30 days of operation. This is above the 5-percent water margins presently available in the basin design.

Corrective Action

A galvanized angle (curb) bolted to the concrete walkways has been installed at each of the four air intake cells of the standby cooling tower in accordance with Nonconformance and Disposition Report No. 12548. This insures that water will not run over the side but will return to the basin.