GULF STATES UTILITIES COMPA POST OFFICE BOX 2951 . BEAUMONT, TEXAS 77704 AREA CODE 409 838 6631 February 1, 1985 RBG-20067 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 FEB - 8 1985 Dear Mr. Martin: River Bend Station Unit 1 Docket No. 50-458 Final Report/DR-222

On January 7, 1985, GSU notified Region IV by telephone that it had determined DR-222 concerning the voltage drop in 125-V dc cables which caused improper recharging time of the high-pressure core spray battery to be 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

JEB/FJD/1p

Attachment

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

NRC Resident Inspector-Site

INPO

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ATTACHMENT

February 6, 1985 RBG-20067

DR-222/Voltage Drop in 125-V DC Cables

Background and Description of the Problem

The deficiency concerns the voltage drop in 125-V dc cables which caused improper recharging time of the high-pressure core spray (HPCS) battery as identified in Engineering and Design Coordination Report (E&DCR) No. P-22,099. This condition is the result of the relocation of GE-furnished 125-V dc panel 1E22*S001PNL (dedicated to the HPCS system) from the control building to the diesel generator building without an engineering evaluation of electrical cable sizes.

The panel had been initially located in the control building near the HPCS battery and charger where it would serve as a Division III 125-V dc distribution panel. It was in this location that the cables were sized by Engineering.

Later the panel was relocated to the diesel generator building where it could be used as a Division III diesel generator control panel. This panel has both dc distribution circuit breakers and diesel generator control switches. The cables were not resized at the time of the relocation.

Safety Implication

The above described condition caused an excessive voltage drop in the circuit connecting HPCS battery charger 1E22*S001CCR to HPCS battery 1E22*S00BAT. As a result, the battery recharging time exceeds the design limit of 8 hours as stated in General Electric Company (GE) document NEDO-10905 and FSAR Section 8.9.2. Additionally, voltages less than the required minimum of 101-V dc would be supplied to HPCS switchgear 1E22*S004 as a result of excessive voltage drop in the cable connecting the switchgear to panel 1E22*S001PNL.

Because of the described conditions, the HPCS system may have been unable to perform its design function due to inadequate control voltage, and the operation of the HPCS would be impaired when called upon to perform its safety function.

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Corrective Action

E&DCR No. P-22,099 was initiated to install proper size cable to correct this condition. The cables connecting the remaining loads fed from panel 1E22*S001PNL are adequately sized, and no rework is necessary. No other panel is known to serve such a dual role as panel 1E22*S001. Therefore, this problem is unique and is not expected to recur.