APPENDIX

NOTICE OF VIOLATION

Gulf States Utilities River Bend Station Docket: 50-458

Operating License: NPF-47

During an NRC inspection conducted on May 21 through June 22, 1990, a violation of NRC requirements was identified. The violation involved a failure to control design measures adequately. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1990) (Enforcement Policy), the violation is listed below:

Criterion III of Appendix B to 10 CFR Part 50, requires that design control measures be established for verifying or checking the adequacy of design, and for assuring that applicable regulatory requirements and the design basis are correctly translated into specifications, drawings, procedures, and instructions.

Contrary to the above, the NRC inspectors identified the following examples of the failure to verify or to check the adequacy of design.

- 1. Emergency diesel generators (EDGs) 1 and 2 loading calculations did not analyze the sequencing of loads over the full time band of the load sequence timers, and hence the potential for overloading the EDGs existed. The loading calculations for EDGs 1 and 2 did not analyze the differences between the actual accident transient loads and the loads simulated in the EDG manufacturer's shop test. The loading calculations for EDG 3 did not demonstrate that the EDG 3 would pick up loads in the proper sequence without overloading the diesel.
- Postulated failures of Division 3 bus loads (HPCS and SSW pump motors) during a "fast-transfer" of this bus to the preferred offsite power source had not been analyzed.
- 3. The short circuit calculations did not consider the potential for low short circuit protection margins for certain EDS equipment that could occur when the EDGs were tested in parallel with the offsite grid. In addition, short circuit calculations incorrectly assumed a 1.0 PU (per unit) voltage while the plant conditions allowed up to 1.05 PU voltage.
- 4. Calculations for the sizing of grounding resistors did not include the sizing of the EDG 3 grounding resistor and did not analyze the current and thermal sustaining capability of the EDGs 1 and 2 grounding resistors.
- Postulated failures of Division 3 bus loads, because of the EDG 3 high resistance ground scheme incorrectly annunciating ground faults, had not been analyzed.

- Short circuit calculations to demonstrate the protection and coordination of 125-V DC and 120-V AC control circuits had not been performed.
- 7. The potential failure of the standby service water system to initiate because of one operating normal service water pump keeping header pressure above the low differential pressure set point had not been analyzed.
- 8. The potential of the EDG air start system receiver pressure dropping to a level that was just above the Technical Specification limit and possibly preventing the automatic start of the EDG had not been analyzed.
- Excessive hydraulic stress on mechanical piping during simultaneous starting of two standby service water pumps had not been analyzed.

This is considered to be a Severity Level IV violation. (Supplement 1) (458/90200-001)

Pursuant to the provisions of 10 CFR 2.201, Gulf States Utilities is hereby required to submit to this office, within 30 days of the date of the letter transmitting this Notice, a written statement or explanation in reply, including for each violation: (1) the reason for the violation if admitted. (2) the corrective steps which have been taken and the results achieved, (3) the corrective steps which will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Where good cause is shown, consideration will be given to extending the response time.

Dated at Arlington, Texas, this 1766 day of august 1990