



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 40 TO FACILITY OPERATING LICENSE NO. NPF-47

GULF STATES UTILITIES COMPANY

RIVER BEND STATION, UNIT 1

DOCKET NO. 50-458

1.0 INTRODUCTION

By letter dated June 23, 1989, Gulf States Utilities Company (GSU) (the licensee) requested an amendment to Facility Operating License No. NPF-47 for the River Bend Station, Unit 1. The proposed amendment would add two Gould Type HE43 circuit breakers to Table 3.8.4.1-1 of the Technical Specifications. These circuit breakers would provide primary containment conductor overcurrent protection for circuits providing power to two 480V receptacles in the drywell.

During the first refueling outage and previous outages, maintenance and construction work at River Bend Station required that temporary power cables be run into the drywell. To avoid running temporary power cables for outages, the licensee decided to provide two 480V receptacles in the drywell to power tools and other temporary equipment during future outages.

2.0 EVALUATION

GSU has proposed changes to the Technical Specifications to include two additional circuit breakers in Table 3.8.4.1-1, "Primary Containment Penetration Conductor Overcurrent Protection Devices." These circuit breakers will feed 480V receptacles in the drywell to power tools and other temporary equipment during outages and require the use of a containment electrical penetration. River Bend safety analysis report Section 8.3.1.1.4.3 states that containment electrical penetration assemblies are designed to withstand, without loss of mechanical integrity, the maximum fault current versus time condition which could occur because of single random failure of circuit overload protective devices.

Overload protection of electrical protection 480V motor control center power circuits is provided by a series-connected molded case circuit breaker and fuse; each rated to open the circuit during overload conditions, thus providing redundant protection. The circuit protection design provided for the two receptacles in this proposed change conforms to these requirements. Also, the design is identical to the configuration for receptacle 1POP-WRZA01 already listed on Technical Specification Table 3.8.4.1-1. The new receptacles perform no safety-related function and no safety-related systems, other than the containment penetrations are affected by this modification. The conduit, cable and equipment associated with this modification are being installed in accordance with IEEE 384.

The NRC staff has reviewed the licensee's submittal and has found that the electrical penetration assembly for the two receptacles is designed to withstand, without the loss of mechanical integrity, the maximum available fault current versus time conditions that could occur given single random failures of circuit overload protective devices, as recommended by Regulatory Guide 1.63; therefore, the staff finds that the proposed change is acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

The amendment involves a change in requirements with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposures. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Section 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

4.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public. The staff therefore concludes that the proposed changes are acceptable.

Dated: November 20, 1989

Principal Contributor: N. Trehan