



UNITED STATES
NUCLEAR REGULATORY COMMISSION
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
WASHINGTON, D. C. 20555

July 17, 1984

Honorable Nunzio J. Palladino
Chairman
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Dr. Palladino:

SUBJECT: ACRS INTERIM REPORT ON RIVER BEND STATION

During its 291st meeting, July 12-14, 1984, the Advisory Committee on Reactor Safeguards reviewed the application of Gulf States Utilities Company (Applicant), acting on behalf of itself and as agent for the Cajun Electric Power Cooperative, for a license to operate the River Bend Station. A tour of the facilities was made by members of the Subcommittee on the morning of June 7, 1984, and a Subcommittee meeting was held in Baton Rouge, Louisiana on June 7 and 8, 1984 to consider the application. During our review, we had the benefit of discussions with representatives of the Applicant, the NRC Staff, and members of the public. We also had the benefit of the documents referenced. The Committee commented on the construction permit application for this Station in its report dated January 14, 1975.

The River Bend Station is located in West Feliciana Parish, Louisiana on the east side of the Mississippi River approximately 24 miles north-northwest of Baton Rouge. Originally the River Bend Station was to consist of two units. Unit 2 was cancelled on January 5, 1984. Unit 1 is approximately 90% complete, with an estimated fuel load date of April 1985.

The River Bend Station uses a General Electric BWR-6 nuclear steam supply system (NSSS) with a rated core thermal power of 2894 MWt and a Mark III pressure suppression containment system with a design pressure of 15 psig.

The Applicant has structured its organization, and has provided for continuity from project initiation up to and including operation, in a notable manner. This structuring is along project team lines and appears to have provided good control and interfacing among the utility, the general contractor-architect engineer, and the NSSS designer. Further, it appears this structuring has provided this first time nuclear utility with good personnel development for the utility's overall nuclear plant responsibilities. In addition to this, the

July 17, 1984

Applicant has practiced aggressive recruiting and careful selection of qualified people and has phased them into the project in a timely manner.

The dedicated diesel generator that drives the high pressure core spray pump currently depends on cooling water supplied by pumps powered by the other two diesel generators during loss of offsite power conditions. We recommend that the merit of removing this dependency be examined.

The Applicant stated that they plan to conduct a limited probabilistic risk assessment (PRA) for the River Bend Station. We support the proposal to perform a plant-specific PRA and recommend that it include seismic- and fire-induced accident scenarios.

Although River Bend is in a relatively quiet seismic portion of the country, NRC contractor estimates of the recurrence interval for the safe shutdown earthquake are similar to those for most eastern sites. We recommend that the Applicant review, in detail, the seismic capability of the emergency AC power supplies, the DC power supplies, and small components such as actuators, relays, and instrument lines that are part of the decay heat removal system.

The Applicant has proposed to include in the River Bend Emergency Procedures a procedure for venting the containment under certain accident conditions. The bases for the decision to take this action are not yet clear. The NRC Staff has not completed its review of this proposal. We wish to be advised when the NRC Staff has reached a position on this matter and to have an opportunity to comment generically or specifically.

The NRC Staff has identified a number of license conditions and confirmatory matters, and several outstanding issues which remain to be resolved. Except for the matter of hydrogen control, we are satisfied with progress on the other topics and believe that they should be resolved in a manner satisfactory to the NRC Staff. We have not completed our review of hydrogen control for the River Bend Station, particularly as it may be impacted by differences in containment design features between River Bend and Mark III BWRs previously reviewed.

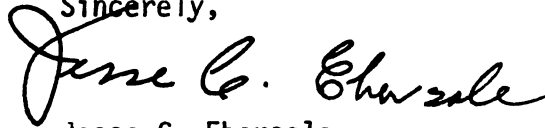
The Committee will complete its review of the full power operating license when the NRC Staff and the Applicant have made sufficient additional progress in resolving the matter of hydrogen control. In the interim, we believe that if due consideration is given to the recommendations above, and subject to satisfactory completion of construction, staffing, and preoperational testing, the River Bend Station can

Honorable Nunzio J. Palladino - 3 -

July 17, 1984

be operated at power levels up to 5% of full power without undue risk to the health and safety of the public.

Sincerely,

A handwritten signature in cursive script that reads "Jesse C. Ebersole". The signature is written in black ink and is positioned above the printed name and title.

Jesse C. Ebersole
Chairman

References:

1. Gulf States Utilities Company, "Final Safety Analysis Report, River Bend Station," Volumes 1-18 and Amendments 1-11
2. U. S. Nuclear Regulatory Commission, "Safety Evaluation Report Related to the Operation of River Bend Station," NUREG-0989, dated May 1984