



**GULF STATES UTILITIES COMPANY**

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U.S. Nuclear Regulatory Commission  
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Gentlemen:

River Bend Station - Unit 1  
Docket No. 50-458

This letter provides an update to Gulf States Utilities Company's (GSU) response to Generic Letter 89-13, "Service Water System Problems Affecting Safety-Related Equipment". In correspondence dated December 31, 1990 (RBG-34252), GSU stated that all actions per our original response (RBG-32249 dated 2/2/90) were completed with the exception of portions of Action Item II - Heat Exchanger Testing Program.

GSU, as a result of Generic Letter (GL) 89-13, developed a heat exchanger testing program to verify the performance of all safety-related heat exchangers applicable to the GL. Testing of the auxiliary building unit coolers was planned to be performed during the cooler winter months when service water was cold and auxiliary building heat loads were stable, but the relatively mild winter and low building heat loads made obtaining the heat transfer required to obtain credible test data impracticable without the addition of portable heat sources. Adding the required heat load to these areas to create the required heat transfer was rejected because of safety concerns and plant environmental qualification considerations.

In accordance with the River Bend Asiatic Clam Control Program, the auxiliary building unit coolers have been tested for flow blockage on a monthly basis. In early 1989, this test indicated some flow blockage in 4 of 11 auxiliary building unit coolers. Maintenance was performed on these suspect coolers and new coils were installed during Refueling Outage 2 (RF-2). The remaining seven unit coolers still have the originally supplied cooling coils installed. Due to the construction of the coils, maintenance cleaning of the coils is not possible. Therefore, the coils for these remaining unit coolers are planned to be replaced during RF-4 as part of the heat exchanger performance monitoring program. The replacement of these coils is not required for operability of the unit coolers as is explained below, however, due to the overall condition of the

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service water system this is considered to be an appropriate preventive maintenance task. The next planned outage of sufficient duration to perform this work will be RF-4, which is planned to start in March of 1992. During this extended outage, River Bend also plans to chemically clean and modify the service water system to a closed loop system. This will greatly improve chemical control and prevent the introduction of corrosion products and microorganisms which can degrade open water systems.

The auxiliary building heating, ventilation and air conditioning (HVAC) system is designed to remove the heat generated by electrical equipment, pumps, piping, and motors during normal operation and design basis accident conditions. As part of this system, 11 unit coolers were designed and manufactured to maintain the spaces they serve below the maximum design temperatures for each area. These unit coolers are not designed to remove energy released from a postulated line break. The line break analysis performed to establish the Environmental Design Criteria temperature and pressure profiles do not take credit for heat removal by the unit coolers.

A review of the auxiliary building HVAC calculations shows that the cooling loads on 8 of the 11 unit coolers are approximately the same during normal operating conditions and design accident conditions. In these spaces, the equipment that operates during normal and accident conditions is the same. Auxiliary building area temperatures are recorded daily in accordance with the RBS Technical Specifications. A review of the historical area temperatures for these spaces reveals that the temperatures are all well below the maximum design temperatures. The remaining 3 unit coolers serve safety-related pump rooms where the pump is not normally in operation. However, these pumps are operated on a periodic basis for testing. During this testing, temperatures in these areas also remain well below their maximum temperature. The operation of the safety-related pumps represent the heat load that would be present after an accident. Temperatures in the auxiliary building will be monitored as part of the Heat Exchanger Performance Monitoring Program to ensure there is no unacceptable degradation in unit cooler performance.

This monitoring of temperatures during operation of equipment representing post accident heat loads serves as a functional performance test of the auxiliary building unit coolers. This functional testing combined with maintenance through replacement of cooling coils during RF-4 is consistent with GSU's overall heat exchanger performance monitoring program in compliance with GL 89-13.

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If you have any questions or comments regarding this program or actions planned to comply with this generic letter, please contact L. L. Dietrich at (504) 381-4866.

Sincerely,



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River Bend Nuclear Group

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