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U.S. Nuclear Regulatory Commission
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Subject: River Bend Station - Unit 1
Docket No. 50-458
License No. NPF-47
Updated Response to Generic Letter 89-13, "Service Water System Problems Affecting Safety-Related Equipment"

Reference: RBG-34558, Update to Generic Letter 89-13 Response, dated 3/1/91

File Nos.: G1.49.5, G9.5, G9.33.4

RBF1-98-0251
RBG-44655

Ladies and Gentlemen:

The purpose of this letter is to update the River Bend Station (RBS) response to Generic Letter (GL) 89-13. On March 1, 1991, RBS provided a response update to GL 89-13, per RBG-34558. The update contained the following commitment:

> "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."

Though we made procedural changes providing for the implementation of this commitment, a review of GL 89-13 actions found no evidence of actual implementation. After further review and due to service water system changes since 1991, we no longer intend to implement the commitment and have initiated action to address the commitment deviation within our corrective action program. The following discussion identifies RBS service water system changes and progress since 1991 and provides an update to our GL 89-13 response.

In 1992, RBS modified the service water system to a closed loop system, chemically cleaned the system, replaced selected pipes and components, and cleaned several safety-related heat

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exchangers. Additionally, we initiated chemical treatment of the Standby Cooling Tower[1]. Proactive water chemistry controls are now in place. As a result, the significant sources of system biological contamination have been mitigated and normal system heat loads are no longer directly rejected to a raw water source. Therefore, Recommended Action II [2] of GL 89-13 no longer applies to the RBS service water system.

The performance testing scope of the RBS Heat Exchanger Monitoring Program has included the following heat exchangers:

- Diesel Generator Jacket Water Coolers
- Control Building Chiller Condensers
- Residual Heat Removal (RHR) Heat Exchangers

We completed initial testing on the above heat exchangers during Cycles 5, 6 and 7 (1994 through 1997) and have performed periodic retesting nominally each fuel cycle up to the present time.

Control Building Chiller Condensers continue to be tested per Technical Specification surveillance requirements. RHR Heat Exchangers continue to be tested in accordance with GL 89-13 Supplement 1, Section IID and IIIF, due to shell side concerns (untreated Suppression Pool subject to the service water problems discussed in GL 89-13). Test frequency will be reevaluated after the conduct of three tests. Due to the modification of the service water system to a closed loop system, performance testing of the Diesel Generator Jacket Water Coolers is no longer required. Past performance testing of the Diesel Generator Jacket Water Coolers has been satisfactory.

RBS initially listed the Auxiliary Building Unit Coolers, the RHR Heat Exchanger Radiation Monitor Coolers, and the Penetration Valve Leakage Control System (PVLCS) Compressor

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[1] All safety-related heat exchangers cooled by service water are on Normal Service Water during normal operations. As such, the source of any fouling would be Normal Service Water and not Standby Service Water. These heat exchangers are only exposed to Standby Service Water during planned surveillance testing and outages or accident scenarios. The Standby Cooling Tower does not represent a significant contamination source because it is treated, monitored and periodically cleaned.

[2] Conduct an initial and periodic test program to verify the heat transfer capability of all safety related heat exchangers cooled by open-cycle service water systems. (The possibility of selectively extending the test program to closed-cycle systems is also discussed.)

Aftercoolers within the testing scope of GL 89-13. However, as provided in Enclosure 2 [1] of GL 89-13, we implemented alternative actions:

- replaced all Auxiliary Building Unit Cooler coils by the end of Cycle 4;
- completed initial air side inspections on Auxiliary Building Unit Coolers during Cycle 5, with subsequent periodic inspections/cleanings;
- chemically cleaned the tube side of Auxiliary Building Unit Cooler (HVR-UC) 6 during Cycle 6, followed by inspection;
- performed initial tube side inspection on HVR-UC11B during Cycle 7;
- initially cleaned the RHR Heat Exchanger Radiation Monitor Coolers during Cycle 5; and
- replaced the PVLCS Compressor Aftercoolers during Cycle 4, followed by initial cleaning during Cycle 5.

Although not required to meet Recommended Action II of GL 89-13, we will continue the following periodic maintenance actions, in assuring continued compliance with General Design Criteria (GDC) 45 of 10CFR50, Appendix A:

- inspection/maintenance on the Auxiliary Building Unit Coolers;
- routine maintenance (cleaning) on the RHR Heat Exchanger Radiation Monitor Coolers; and
- routine maintenance (cleaning) on the PVLCS Compressor Aftercoolers.

The modifications, replacements and testing identified in this letter have resulted in substantial reliability increases in the RBS service water system and confidence that the system will perform its intended function. The commitments contained in this document are identified on the Commitment Identification Form. If you have any questions or require additional information, please contact Bill Fountain at (225*) 381-4625.

Sincerely,

DNL for RJK\WJF

[1] Enclosure 2 is entitled "Program For Testing Heat Transfer Capability." It addresses initial and periodic testing programs for safety-related heat exchangers on open-cycle service water systems. Corrective actions are allowed before testing and acceptable alternatives to testing are discussed.

cc:

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* The RBS telephone area code is in the process of being changed from 504 to 225.

COMMITMENT	ONE-TIME ACTION*	CONTINUING COMPLIANCE*
The RHR Heat Exchangers will continue to be tested in accordance with GL 89-13 Supplement 1, Section IID and IIIF, due to shell side concerns (untreated Suppression Pool subject to the service water problems discussed in GL 89-13).		X
Test frequency [on the RHR Heat Exchangers] will be reevaluated after the conduct of three tests.	X	
Continue the periodic action of inspection/maintenance on the Auxiliary Building Unit Coolers.		X
Continue the periodic action of routine maintenance (cleaning) on the Residual Heat Removal Heat Exchanger Radiation Monitor Coolers.		X
Continue the periodic action of routine maintenance (cleaning) on the PVLCS Compressor Aftercoolers.		X

*Check one only