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J. T. Beckham, Jr.  
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HL-2061  
002966

February 26, 1992

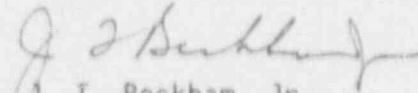
U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555

PLANT HATCH - UNITS 1, 2  
NRC DOCKETS 50-321, 50-366  
OPERATING LICENSES DPR-57, NPF-5  
FOLLOW-UP RESPONSE TO NOTICE OF VIOLATION 91-27

Gentlemen:

In response to your letter of January 27, 1992, and in accordance with the provisions of 10 CFR 2.201, Georgia Power Company is providing the enclosed response to your determination that Violation B associated with NRC Inspection Report 91-27 occurred as stated in the Notice of Violation. A copy of this response is being provided to NRC Region II for review. In the enclosure, a transcription of the NRC violation precedes GPC's response.

Sincerely,

  
J. T. Beckham, Jr.

JKB/cr

Enclosure

cc: (See next page.)

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U.S. Nuclear Regulatory Commission  
February 26, 1992  
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cc: Georgia Power Company  
Mr. H. L. Sumner, General Manager - Nuclear Plant  
NORMS

U.S. Nuclear Regulatory Commission, Washington, D.C.  
Mr. K. Jabbour, Licensing Project Manager - Hatch

U.S. Nuclear Regulatory Commission, Region II  
Mr. S. D. Ebner, Regional Administrator  
Mr. L. D. Wert, Senior Resident Inspector - Hatch

## ENCLOSURE

PLANT HATCH - UNITS 1, 2  
NRC DOCKETS 50-321, 50-366  
OPERATING LICENSES DPR-57, NPF-5  
FOLLOW-UP RESPONSE TO NOTICE OF VIOLATION 91-27

### VIOLATION 91-27-02

Criterion XVI of Appendix B of 10 CFR 50 requires that measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected. In the case of significant conditions adverse to quality, the measures shall assure that the cause of the condition is determined and corrective action taken to preclude repetition.

Contrary to the above, effective corrective actions were not promptly taken to preclude repetitive failures of service water pump motor cooling coil couplings. Numerous failures of the couplings have been identified as early as 1987. Failure of the couplings has a substantial potential to cause the loss of important safety-related pump motors. In January, 1991, the '1A' plant service water motor failed due to this problem. In October, 1991, a coupling failed in the '2A' plant service water pump motor.

This is a Severity Level IV violation. (Supplement 1)

This violation is applicable to Units 1 and 2.

### GPC RESPONSE

#### Corrective Steps Which Have Been Taken and the Results Achieved

As a result of this event, the following corrective actions were taken to address the failures of the plant service water (PSW) pump motor cooling coils.

Maintenance histories have been reviewed to investigate the repetitive failures of the cooling coils. The review showed the failures of the couplings were random in nature in that the service life between failures was not consistent.

Discussions have been held with General Electric (GE), the pump motor supplier, concerning the coupling failures. These discussions included a review of the manufacturing process for replacement couplings and concluded that no changes in the manufacturing process had occurred.

ENCLOSURE (Continued)

FOLLOW-UP RESPONSE TO NOTICE OF VIOLATION 91-27

Hydrostatic testing of the cooling coils has been added to the 5-year preventive maintenance program for the pump motors.

An investigation of the possibility of performing a meaningful nondestructive examination of the existing cooling coils has been performed. The investigation concluded the industry does not have the standard technology developed to perform meaningful, nondestructive examinations to detect inside diameter erosion/corrosion of 0.3-inch-diameter coiled copper tubing.

At GPC's request, General Electric has completed a metallurgical evaluation report on the 2A PSW coils which previously failed. The metallurgical evaluation definitively identified the cooling coil coupling as the root cause of the failure.

GPC requested GE to develop a cooling coil without couplings in an effort to eliminate the root cause of the coil failures. The new design has been completed by GE and new cooling coils have been installed on the 1B PSW pump and on the 2B PSW pump. New coils for the six remaining PSW pump motors have been manufactured and received on site.

An evaluation based on the GE metallurgical report has been completed. The evaluation concluded there was no significant concern with common mode failure. Subsequently, a probabilistic risk assessment (PRA) was performed and concluded the probability of two or more pumps failing concurrently or at about the same time due to cooling coil failure was less than the probability of two or more pumps failing due to a random failure.

Corrective Actions Which Will be Taken to Avoid Further Violations

New cooling coils for the six remaining PSW pump motors have been received on site. The new coils will be installed in an orderly manner during Spring 1992.

We do not yet have a delivery date for the residual heat removal service water (RHRSW) pump motor cooling coils because the design was very recently finalized. These coils will also be installed as soon as practical following delivery.

Maintenance, Engineering, and NSAC personnel typically involved in the identification and resolution of repetitive equipment problems have been made aware of this violation and have been reminded of the importance of timely corrective actions.

ENCLOSURE (Continued)

FOLLOW-UP RESPONSE TO NOTICE OF VIOLATION 91-27

Date When Full Compliance Will be Achieved

Corrective actions associated with eliminating the root cause of the PSW motor cooling coil failures were accelerated to the extent possible. Full compliance will be achieved when the cooling coils are replaced with those of an improved design. The changeout of the PSW cooling coils will be performed in an orderly manner during Spring 1992.