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J. T. Beckham, Jr. Vice President - Nuclear Hatch Project Georgia Power

May 1, 1994

Docket No. 50-366

HL-4579

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

> Edwin I. Hatch Nuclear Plant - Unit 2 Reply to a Notice of Violation

Gentlemen:

In response to your letter dated April 4, 1994, and in accordance with the requirements of 10 CFR 2.201, Georgia Power Company (GPC) is providing the enclosed response to the Notice of Violation associated with Inspection Report 94-05. In the enclosure, a transcription of the NRC violation precedes GPC's response.

Sincerely,

J. T. Beckham, Jr.

JKB/cr

Enclosures:

- Violation 94-05-01 and GPC's Response
- 2. Violation 94-05-02 and GPC's Response

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. Ebneter, Regional Administrator
Mr. L. D. Wert, Senior Resident Inspector - Hatch

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Enclosure 1

Edwin I. Hatch Nuclear Plant - Unit 2 Violation 94-05-01 and GPC's Response

VIOLATION 94-05-01

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 actions taken to preclude repetition.

Contrary to the above, conditions adverse to quality were not promptly identified and corrected involving a degraded condition of the Unit 2 High Pressure Coolant Injection System turbine thrust bearing. Significantly elevated bearing temperatures were indicated during surveillance testing on January 10, 1994 and February 4, 1994. Control room operators failed to identify the indications for resolution. On March 3, 1994, it was determined that the thrust bearing had failed.

This is a Severity Level IV violation.

RESPONSE TO VIOLATION 94-05-02

Admission or Denial of Violation:

The violation occurred as described in the Notice of Violation.

Reason for the Violation:

The cause of this violation is personnel error. Specifically, personnel performing the High Pressure Coolant Injection (HPCI) System surveillances failed to identify that excessive temperature conditions existed. In one case, personnel identified the anomaly but failed to take the appropriate actions to ensure that the condition was evaluated.

During surveillances in January and February, the turbine thrust bearing temperature exceeded 160°F. However, operations personnel did not identify the elevated temperatures for evaluation. Operators checked only the temperature data point indicated on the recorder at the time of data collection as opposed to checking the complete temperature data trace for the turbine bearing oil. Also, per the procedure,

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Enclosure 1 Violation 94-05-01 and GPC's Response

the thrust bearing temperature is checked near the end of the test and the bearing temperature had decreased to below 160°F by the time the temperature was checked. As a consequence of the above, operators concluded that the procedural limit was not exceeded and that no further actions were necessary.

Regarding the instance in which the operator noted the out-of-spec temperature and did not take any actions, the operator believed that the indication was not valid. During the surveillance on March 1, 1994, the turbine bearing oil temperature increased above the procedural limit and then decreased rapidly. Although the temperature excursion was of a longer duration, the operator initially characterized the temperature excursion as a spike, that is, a spurious perturbation in the electronics. Additionally, other temperature indications were checked and were found to be normal which seemed to confirm that an actual high temperature condition did not exist. Consequently, the operator concluded that the spike was not indicative of the turbine bearing oil temperature, and no actions were needed. Therefore, the operator concluded that the procedural acceptance criterion was not violated.

The system engineer does review the bearing oil temperature data following surveillance testing of the HPCI system. However, in doing the review, he refers to the procedure data sheets as opposed to the chart recorder. Consequently, his review would not have identified the out-of-spec parameter.

Corrective Actions Which Have Been Taken and the Results Achieved:

Operations management has discussed with operations personnel that the chart traces be reviewed for the highest temperatures attained during the surveillance when taking data in performing surveillances.

Operations management also discussed with operations personnel the need to initiate deficiency cards for anomalies, including spikes, such that the necessary evaluations can be performed.

Corrective Actions Which Will be Taken to Avoid Further Violations:

No further corrective actions are required.

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Enclosure 2

Edwin I. Hatch Nuclear Plant - Unit 2 Violation 94-05-02 and GPC's Response

VIOLATION 94-05-02

Hatch Unit 2 Technical Specifications (TS) 6.8.1a, require that written procedures be established, implemented, and maintained covering activities delineated in Appendix A of Regulatory Guide (RG) 1.33, Revision 2, February 1978.

RG 1.33, Appendix A, "Typical Procedures for Pressurized Water Reactors and Boiling Water Reactors," paragraph 8.b.j., recommends specific procedures for surveillance testing of emergency core cooling systems.

Limitation 5.2.5 of Procedure 34SV-E41-002-2S: HPCI Pump Operability, states that the HPCI pump must be shut down if bearing oil temperature reaches 160°F.

Contrary to the above, written procedures were not implemented in that on March 1, 1994, during performance of Procedure 34SV-E41-002-2S, bearing temperatures in excess of 160°F were indicated and the turbine was not shut down.

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

RESPONSE TO VIOLATION 94-05-02

Admission or Denial of Violation:

The violation occurred as described in the Notice of Violation.

Reason for the Violation:

The cause of the failure to follow the procedure was personnel error on the part of the Shift Supervisor (SS) and the Superintendent of Shift (SOS). Prior to performing the surveillance, it was brought to the attention of the SS that during a previous surveillance of the HPCI System, one of the bearing oil temperatures had spiked. The SS discussed with the SOS the need to secure the system if the spike were to occur during this surveillance. The SOS directed the SS not to secure the system if the temperature only spiked, that is, a sustained high temperature condition did not occur. However, the procedure states that if bearing oil temperature reaches 160°F, the pump must be shut down. The surveillance was subsequently started. Following a manual start of the HPCI System, a licensed operator checked the HPCI bearing oil temperatures on temperature

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Enclosure 2 Violation 94-05-02 and GPC's Response

recorder 2E41-R605 and identified that the indicated turbine thrust bearing temperatures was approximately 405°F. He then notified the SS who reviewed the temperature recorder chart. Since the only abnormally high temperature was that of the thrust bearing and other HPCI System parameters gave no indication of problems, the SS questioned the validity of the indication. Additionally, because of the indicated high temperature, the SS questioned whether or not the indication was of oil temperature and not bearing metal temperature. He referred to plant drawings and verified that the indication was of oil and not bearing metal. He subsequently returned to the recorder and found that the temperature had decreased to approximately 200°F and was still decreasing. The SS was then informed that the system engineer was nearly completed with data collection for the surveillance. Considering the facts that the SS expected a spike, all other parameters were indicating normal, the temperature had decreased significantly and was continuing to decrease, and the system engineer needed only minutes to complete data collection, the SS decided to allow the system engineer to complete data collection before securing the system.

Corrective Steps Which Have Been Taken and the Results Achieved:

The SS and the SOS have been disciplined in accordance with the Georgia Power Positive Discipline Program.

The Operations Manager met with each of the shift crews to discuss the event. In each of the meetings, the manager emphasized the importance of procedural compliance.

Corrective Steps Which Will be Taken to Avoid Further Violations:

No further corrective actions have been deemed necessary at this time.

Date When Full Compliance was Achieved:

Full compliance was achieved on 3/1/94, when the HPCI system was secured, approximately 30 minutes after the turbine bearing temperature had exceeded 160°F.

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