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Georgia Power
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June 4, 1996

Docket Nos. 50-321
50-366

HL-5181

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

Edwin I. Hatch Nuclear Plant
Third 10-Year Interval Inservice Inspection Program
Additional Requests for Relief

Gentlemen:

By letter dated October 17, 1995, Georgia Power Company (GPC) submitted the Third 10-Year Interval Inservice Inspection (ISI) Program for the Edwin I. Hatch Nuclear Plant. By letters dated January 26, 1996, and April 5, 1996, GPC responded to NRC requests for additional information and submitted additional Requests for Relief. During activities associated with update of the pressure test portion of the ISI Plans to the provisions of the 1989 American Society of Mechanical Engineers, Section XI Code, GPC determined that additional Requests for Relief applicable to both units are required. Therefore, GPC requests the NRC grant the enclosed Requests for Relief, RR-15 and RR-16, per the provisions of 10 CFR 50.55a(g)(6)(i). The relief requests concern the requirement of a 4 hour hold time prior to performing leakage examinations and the requirement of performing a pneumatic pressure test. Both relief requests concern code requirements considered to be impractical. The subject Requests for Relief will be added to the ISI Program document with the next revision.

Should you have any questions in this regard, please contact this office.

Sincerely,

J. T. Beckham, Jr.

IFL/eb

Enclosures:
1. Third 10-Year Interval Request for Relief No. RR 15
2. Third 10-Year Interval Request for Relief No. RR-16

cc: (See next page.)

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cc: *Georgia Power Company*
Mr. H. L. Sumner, Nuclear Plant General Manager
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. B. L. Holbrook, Senior Resident Inspector - Hatch

Edwin I. Hatch Nuclear Plant
Third 10-Year Interval
Request for Relief No. RR-15

I. System/Component for Which Relief is Requested: ASME Class 2 (Category C-H, Item Numbers C7.40 and C7.60) High Pressure Coolant Injection (HPCI) System piping and components from pump discharge check valve F005 to outboard injection valve F006 and outboard test line valve F011, and turbine exhaust and turbine exhaust drain piping extending from the turbine to the suppression pool.

II. Code Requirement: ASME Code, Section XI, IWA-5213(d) requires a 4-hour hold time for performance of a hydrostatic test for insulated components.

ASME XI Code Case N-498-1 allows performance of a pressure test at normal system operating pressure in lieu of a hydrostatic test; however, a 4-hour hold time for insulated components is required.

III. Code Requirement for Which Relief is Requested: Relief is requested from the requirement of a 4-hour hold time prior to performing the leakage examination (VT-2) when performing the 10-year system pressure test.

IV. Basis for Relief:

Pump Discharge Piping - A test pump is required to pressurize the pump discharge piping and apply a 4-hour hold time prior to the leakage inspection. One of the boundary components for this test is HPCI pump discharge check valve F005 since the pump suction piping is designed for low pressure. The capacity of a standard high pressure test pump (>1000 psig) is relatively small (< 3 gpm), thus complicating pressurization of large bore piping and components (14 inches) especially when attempting to utilize a check valve as a pressure boundary. Therefore, pressurizing the pump discharge piping to normal system operating pressure (approximately 1050 psig) utilizing a test pump will likely require a significant time duration and may not be possible due to the leakage characteristics of the discharge check valve.

Turbine Exhaust Piping - The turbine exhaust piping is designed to exhaust spent steam from the HPCI turbine to the suppression pool for condensing. This piping is not designed to support the weight associated with filling the pipe with water as required in performing a hydrostatic pressure test. Performing a test using water as the test fluid requires the installation of temporary piping supports which requires the following: declaring the system inoperable; performing an engineering analysis to determine support requirements and seismic considerations; fabricating, installing, and removing the temporary supports; and planning and scheduling to minimize the impact on other plant activities and system unavailability.

This test also requires that the turbine be completely drained prior to placing the system back in service, in order to prevent component damage from water intrusion.

All HPCI System Piping - Performance of a leakage inspection after 4 hours of system operation is impractical due to the design basis temperature constraints on the suppression pool and the Limiting Conditions of Operation imposed by the Technical Specifications. The suppression pool temperature must be constantly monitored during HPCI System operation to ensure design basis accident conditions (suppression pool water temperature) are not exceeded. HPCI System operation and the discharge of spent steam to the suppression pool significantly increase water temperature. Historical data indicate a maximum allowable operation time of approximately 1 hour, even with the operation of the Residual Heat Removal System in the suppression pool cooling mode.

V. Alternate Examination: GPC will perform visual examinations (VT-2) of the pump discharge, turbine exhaust, and turbine exhaust drain piping and components, in conjunction with a system function test (IWA-5211(b)), once each inspection period.

VI. Justification for Granting Relief: Requiring a 4-hour hold time prior to performing the leakage examination (VT-2) results in an undue hardship without a commensurate increase in the quality and safety of the affected components. Performing a system function test and a VT-2 inspection, in accordance with IWA-5211(b), each inspection period, in addition to Operations personnel performing routine visual examinations in conjunction with quarterly inservice testing of the HPCI pump, ensures the pressure boundary integrity of the subject piping and components is maintained and/or any leakage is identified and corrective actions are implemented.

VII. Implementation Schedule: The system functional test and visual examinations will be performed during the Third 10-Year Interval.

Edwin I. Hatch Nuclear Plant
Third 10-Year Interval
Request for Relief No. RR-16

I. System/Component for Which Relief is Requested: Class 3 (Category D-A, Item Number D1.10) safety relief valve (SRV) piping which discharges into the suppression pool.

II. Code Requirement: ASME Code, Section XI, IWD-5223(f) requires performance of a pneumatic pressure test at a pressure of 90% of the pipe submergence head of water, for SRV piping which discharges into the suppression pool.

III. Code Requirement for Which Relief is Requested: Relief is requested from performing a pneumatic pressure test of SRV B21-F013 discharge piping.

IV. Basis for Relief: The SRV discharge piping is 10 inches in diameter, has a design pressure rating of 448 psig for Unit 1 and 500 psig for Unit 2, and has a submergence head of approximately 10 feet. The resultant pneumatic pressure test would be performed at approximately 4 psig. Performing a pressure test at less than 1/100 of the design pressure serves no useful purpose associated with pressure boundary or structural integrity of the SRV discharge piping.

The inspection associated with a pneumatic test usually consists of solution film testing of the test boundary, or some other inspection/test methods (e.g., sonic gun) which must be demonstrated to the satisfaction of the ANII. The majority of the discharge piping is not accessible because of the lack of permanent scaffolding in the drywell and portions of the piping are located in the drywell to suppression pool vent headers. Much of the piping in the drywell is in high radiation areas due to its proximity to reactor recirculation piping and pumps. Therefore, only a limited portion of the piping is accessible for solution film testing, or for any other method of inspection, without significant increases in manpower, radiation exposure, and budget.

Based on the above discussion, performing a pneumatic pressure test of the SRV discharge piping in accordance with the 1989 ASME Code Section XI is impractical and will not result in a compensating increase in the level of quality and safety.

V. Alternate Examination: None.

VI. Justification for Granting Relief: Pressure testing the SRV discharge piping does not result in a significant safety benefit for normal operation or shutdown of the plant. The ASME Code Section XI Committee agree with the position stated herein. The requirement to perform the pressure testing was deleted in the 1995 Code Edition. Paragraph IWD-5240 was added in the 1995 Edition exempting SRV discharge piping, as well as all open-ended discharge piping, from examination requirements.

VII. Implementation Schedule: The relief request is applicable for the Third 10-Year Interval.