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Georgia Power

The Southern Electric System

April 19, 1994

Docket No. 50-366

HL-4570

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

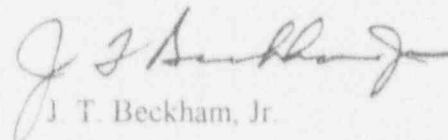
Edwin I. Hatch Nuclear Plant - Unit 2
Request for Relief From
ASME Section XI, IWA-4400 Requirements

Gentlemen:

By letter dated March 24, 1994, Georgia Power Company (GPC) requested Nuclear Reactor Regulation (NRR) staff approval of GPC's proposal to perform alternative testing in lieu of a hydrostatic pressure test for two modifications during the current Unit 2 refueling outage. One modification will remove the main steam isolation valve leakage control system and will involve cutting the American Society of Mechanical Engineers (ASME) Class 1 and Class 2 piping adjacent to the main steam lines and installing socket-welded caps. The second modification will remove and relocate the high pressure coolant injection pump discharge valve.

Based on discussions with the NRR staff, GPC has reformatted the requested approval into two relief requests for the alternative testing. Pursuant to 10 CFR 50.55 (a)(3)(i), GPC proposes to perform the alternative tests and examinations described in the separate relief requests for the Class 1 and Class 2 portions to assure the integrity of the associated welds. The relief requests are attached for NRR staff review. GPC will document the replacement/repair, testing, and examination in the NIS-1 report submitted in accordance with the current code of record for inservice inspection activities.

Sincerely,



J. T. Beckham, Jr.

JKB/cr

Enclosures (See next page.)

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Enclosures:

1. Request for Relief No. 2.1.10
2. Request for Relief No. 3.1.4

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. Ebnetter, Regional Administrator

Mr. L. D. Wert, Senior Resident Inspector - Hatch

Enclosure 1

Edwin I. Hatch Nuclear Plant - Unit 2 Second 10-Year Interval Request for Relief No. 2.1.10

I. Components for Which Relief is Requested:

Four Class 1 pipe-to-cap socket welds installed during removal of the main steam isolation valve leakage control system.

Examination Category B-J, Item B9.40

- Pipe-to-cap socket weld on 1.5 inch diameter pipe from 2B21-F028A (weld S-88-106-M005-W005).
- Pipe-to-cap socket weld on 1.5 inch diameter pipe from 2B21-F028B (weld S-88-106-M007-W008).
- Pipe-to-cap socket weld on 1.5 inch diameter pipe from 2B21-F028C (weld S-88-106-M009-W011).
- Pipe-to-cap socket weld on 1.5 inch diameter pipe from 2B21-F028D (weld S-88-106-M-011-W014).

II. Code Requirements:

Section XI, IWA-4400(a), 80W81 Edition, requires a system hydrostatic pressure test to be performed in accordance with IWA-5000 after a welded repair on a pressure retaining boundary or the installation of a replacement by welding.

III. Code Requirement From Which Relief is Requested

Relief is requested from performing the code-required post repair/replacement hydrostatic pressure test on the above 1.5 inch pipe-to-cap socket welds. Alternative examinations are proposed.

Enclosure 1

Request for Relief No. 2.1.10

IV. Alternative Examinations.

Georgia Power Company (GPC) proposes to perform the following alternative examinations in lieu of code-required hydrostatic tests.

1. Perform nondestructive examinations in accordance with the methods and acceptance criteria of the applicable Subsection of the 1992 Edition of ASME Section III.
2. Perform a VT-2 visual examination of the Class 1 and Class 2 welds in conjunction with the applicable system leakage tests, at nominal operating pressure and temperature. These tests will be performed in accordance with the existing inservice inspection program.

V. Justification for the Granting of Relief

GPC has determined that nondestructive examinations and acceptance criteria provide assurance of the structural integrity of the weld. Specifically, the higher pressures associated with a hydrostatic test do not result in a meaningful increase in information as opposed to a system leakage test. A leakage test at a higher temperature, and normal operating pressure, will produce a higher leakage rate than a hydrostatic test at room temperature and a higher pressure. Consequently, a leakage test provides a better assessment for leakage than a hydrostatic test.

The proposed alternative examinations will provide reasonable assurance that unallowable flaws are not present in the subject welds or that they will be detected and repaired prior to returning the main steam line to service. Consequently, an acceptable level of quality and safety will be achieved and public health and safety will not be endangered by allowing the proposed alternative examination in lieu of the code requirement.

Enclosure 2

Edwin I. Hatch Nuclear Plant - Unit 2 Second 10-Year Interval Request for Relief No. 3.1.4

I. Components for Which Relief is Requested

One Class 2 pipe-to-cap socket weld on piping to the main steam line and four Class 2 piping butt welds on the high pressure coolant injection system discharge piping

Examination Category Class 2 Exempt

- Pipe-to-cap socket weld on 2-inch diameter pipe downstream of 2E32-F020 returning to main steam line C (weld S-88-106-M002-W001).

Examination Category C-F, Item C5.21

- Pipe-to-valve weld on 14-inch diameter pipe (weld 2E41-2HPCI-14-R-34A)
- Pipe-to-elbow weld on 14-inch diameter pipe (weld 2E41-2HPCI-14-R-35A)
- Pipe-to-pipe weld on 14-inch diameter pipe (weld 2E41-2HPCI-14-R-41A)
- Pipe-to-pipe weld on 14-inch diameter pipe (weld 2E41-2HPCI-14-R-42A)

II. Code Requirement

Section XI, IWA-4400 (a), 80W81 Edition, requires a system hydrostatic pressure test to be performed in accordance with IWA-5000 after a welded repair on a pressure retaining boundary or the installation of a replacement by welding.

III. Code Requirement From Which Relief is Requested

Relief is requested from performing the code-required post repair/replacement hydrostatic pressure test on the above welds. Alternative examinations are proposed.

Enclosure 2

Request for Relief No. 3.1.4

IV. Alternative Examinations:

Georgia Power Company (GPC) proposes to perform the following alternative examinations in lieu of code-required hydrostatic tests.

1. Perform nondestructive examinations in accordance with the methods and acceptance criteria of the applicable Subsection of the 1992 Edition of ASME Section III.
2. Perform a VT-2 visual examination of the Class 1 and Class 2 welds in conjunction with the applicable system leakage tests, at nominal operating pressure and temperature. These tests will be performed in accordance with the existing inservice inspection program.

V. Justification for the Granting of Relief

GPC has determined that the nondestructive examinations and acceptance criteria provide assurance of the structural integrity of the weld. Specifically, the higher pressures associated with a hydrostatic test do not result in a meaningful increase in information as opposed to a system leakage test. A leakage test at a higher temperature, and normal operating pressure, will produce a higher leakage rate than a hydrostatic test at room temperature and a higher pressure. Consequently, a leakage test provides a better assessment for leakage than a hydrostatic test.

The proposed alternative examinations will provide reasonable assurance that unallowable flaws are not present in the subject welds or that they will be detected and repaired prior to returning the main steam line to service. Consequently, an acceptable level of quality and safety will be achieved and public health and safety will not be endangered by allowing the proposed alternative examination in lieu of the code requirement.