

August 1, 1985

DMB 016

Docket No. 50-321

DISTRIBUTION

Docket File

NRC PDR

L PDR

ORB#4 Rdg

HThompson

OELD

EJordan

BGrimes

JPartlow

ACRS-10

RIngram

GRivenbark

Gray File

Mr. J. T. Beckham, Jr.
Vice President - Nuclear Generation
Georgia Power Company
P. O. Box 4545
Atlanta, Georgia 30302

Dear Mr. Beckham:

We have reviewed the submittal dated July 1, 1985 from Georgia Power Company (GPC) regarding the inspection/mitigation program of reactor coolant stainless steel piping during the 1985 refueling outage at Hatch Unit 1 plant. GPC indicated that a total of 130 piping welds, including 4 unrepaired welds, will be ultrasonically inspected. Those welds were also inspected during the 1984 outage in accordance with Generic Letter 84-11 and represented all the accessible piping welds that are susceptible to intergranular stress corrosion cracking (IGSCC) in the recirculation, residual heat removal and reactor water cleanup systems. GPC further indicated that all the IGSCC susceptible piping welds will be either treated with induction heating stress improvement (IHSI) or repaired with weld overlay during the upcoming 1985 outage. Based on the above, we conclude that the subject inspection/mitigation program proposed by GPC is acceptable with the exception of the comments provided below. Those comments, reflecting the current staff position as well as the pertinent guidelines proposed in the draft revision 2 of NUREG-0313, were given to GPC in recent telephone conversations.

- (1) The recently reported ultrasonic inspection results by the utilities have shown that the performance by the qualified UT personnel lacks uniformity and consistency. To resolve this concern, the NRC has determined that all UT personnel performing detection and evaluation should be requalified at the EPRI NDE Center. EPRI is expeditiously setting up the testing facilities for the requalification at the NDE Center and expects to be ready to implement the requalification program no later than September 15, 1985. We suggest that GPC contact the EPRI NDE Center to arrange a schedule for the requalification of the UT personnel to be used in the 1985 outage.
- (2) The UT personnel performing inspections of the overlay repaired welds should be properly trained and qualified at the NDE Center, using the demonstrated procedures and techniques.
- (3) For defective welds with axial indications, the current staff position recommends the application of weld overlay to provide a leakage barrier. This staff position is strengthened by the recently increased reporting of leakage from axial cracks in IHSI treated welds. Therefore, we recommend that GPC consider overlaying the two unrepaired welds with axial indications during the 1985 outage.

8508140215 850801
PDR ADOCK 05000321
G PDR

- (4) Code IWB-3540 is being revised to take account of the low toughness associated with the flux welds and is expected to be published soon. The staff has developed interim guidelines for allowable flaw sizes in flux welds which may be used now.

The key points of the staff interim guidelines are summarized below:

- (a) The secondary stresses (mainly thermal stresses) should be included in the calculation of the stress ratio.
- (b) The flaw size limits for the flux welds are 2/3 of the Code IWB-3640 allowables using stress ratios as modified by (a).

Therefore, the unrepaired welds previously justified for continued service without repair may require overlay repair when reevaluated in accordance with the current staff interim guidelines.

- (5) All IHSI treated welds should be ultrasonically inspected after the treatment.

Sincerely,

ORIGINAL SIGNED BY
JOHN F. STOLZ

John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing

cc: See next page

[Signature]
ORB#4-DL
GRivenbark;cr
8/1/85

[Signature]
ORB#4-DL
JStolz
8/1/85

Mr. J. T. Beckham, Jr.
Georgia Power Company

Edwin I. Hatch Nuclear Plant,
Units Nos. 1 and 2

cc:
G. F. Trowbridge, Esq.
Shaw, Pittman, Potts and Trowbridge
1800 M Street, N.W.
Washington, D.C. 20036

Mr. L. T. Gucwa
Engineering Department
Georgia Power Company
P. O. Box 4545
Atlanta, Georgia 30302

Mr. H. C. Nix, Jr., General Manager
Edwin I. Hatch Nuclear Plant
Georgia Power Company
P. O. Box 442
Baxley, Georgia 31513

Mr. Louis B. Long
Southern Company Services, Inc.
P. O. Box 2625
Birmingham, Alabama 35202

Resident Inspector
U.S. Nuclear Regulatory Commission
Route 1, P. O. Box 279
Baxley, Georgia 31513

Regional Administrator, Region II
U.S. Nuclear Regulatory Commission,
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Mr. Charles H. Badger
Office of Planning and Budget
Room 610
270 Washington Street, S.W.
Atlanta, Georgia 30334

Mr. J. Leonard Ledbetter, Commissioner
Department of Natural Resources
270 Washington Street, N.W.
Atlanta, Georgia 30334

Chairman
Appling County Commissioners
County Courthouse
Baxley, Georgia 31513