



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555

March 13, 1992

Docket Nos. 50-321
and 50-366

Mr. W. G. Hairston, III
Senior Vice President -
Nuclear Operations
Georgia Power Company
P. O. Box 1295
Birmingham, Alabama 35201

Dear Mr. Hairston:

SUBJECT: GENERIC LETTER 89-10, SUPPLEMENT 3, "CONSIDERATION OF THE
RESULTS OF NPC-SPONSORED TESTS OF MOTOR-OPERATED VALVES,"
HATCH NUCLEAR PLANT, UNITS 1 AND 2 (TACs M77778/M77779)

By letters dated December 11, 1990, and March 15, 1991, you responded to Generic Letter (GL) 89-10, Supplement 3, regarding the ability of BWR motor-operated valves (MOVs) on certain high energy lines to fully close under guillotine line break conditions. Your submittals indicated that the MOVs, within the scope of Supplement 3, are those on the high pressure coolant injection systems, reactor core isolation cooling steam supply lines, and reactor water cleanup water supply lines. Your March 15, 1991, letter requested that the implementation schedule for Hatch Unit 1 be extended until the spring of 1993 maintenance/refueling outage because of the unavailability of qualified equipment. Your previous schedule reflected implementation during the fall 1991 outage. Your implementation schedule for Hatch Unit 2 remains unchanged (i.e., fall of 1992 outage).

The NRC staff has reviewed your responses, including your safety assessment, and finds that your implementation schedule for Hatch Units 1 and 2 is acceptable. However, within 45 days, you should confirm that all the piping systems containing MOVs identified by GL 89-10, Supplement 3, either: (1) have area temperature monitoring capable of detecting a leak, or (2) are visually inspected by physical walk-down at least once per day, or (3) have performed or commit to perform a qualified 100% volumetric examination of service sensitive weldments in affected piping locations not suitable to be addressed as described in items (1) or (2) above.

Furthermore, among the aspects you should address, when performing the MOV modifications, are: (1) the structural limits of each MOV in light of the increased thrust and torque requirements based on industry experience and research testing, (2) the reduction in thrust delivered by the actuator that may occur as a result of the "rate of loading" phenomenon, (3) the reduction of motor output that may occur as a result of high ambient temperature,

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Mr. W. G. Hairston, III
Georgia Power Company

Edwin I Hatch Nuclear Plant

cc:

Mr. Ernest L. Blake, Jr.
Shaw, Pittman, Potts and Trowbridge
2300 N Street, NW.
Washington, DC 20037

Mr. R. P. McDonald
Executive Vice President -
Nuclear Operations
Georgia Power Company
P. O. Box 1295
Birmingham, Alabama 35201

Mr. J. T. Beckham
Vice President - Plant Hatch
Georgia Power Company
P. O. Box 1295
Birmingham, Alabama 35201

Mr. Alan R. Herdt, Chief
Project Branch #3
U. S. Nuclear Regulatory Commission
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

Mr. S. J. Bethay
Manager Licensing - Hatch
Georgia Power Company
P. O. Box 1295
Birmingham, Alabama 35201

Mr. Ernie Toupin
Program Director of Power
Production
Oglethorpe Power Corporation
2100 East Exchange Place
Tucker, Georgia 30085-1349

Mr. L. Sumner
General Manager, Nuclear Plant
Georgia Power Company
Route 1, Box 439
Baxley, Georgia 31513

Charles A. Patrizia, Esquire
Paul, Hastings Janofsky & Walker
12th Floor
1050 Connecticut Avenue, NW.
Washington, DC 20036

Resident Inspector
U. S. Nuclear Regulatory Commission
Route 1, Box 725
Baxley, Georgia 31513

Regional Administrator, Region II
U. S. Nuclear Regulatory Commission
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

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

Harold Reheis, Director
Department of Natural Resources
205 Butler Street, SE., Suite 1252
Atlanta, Georgia 30334

Chairman
Appling County Commissioners
County Courthouse
Baxley, Georgia 31513

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C. Cheng

T. Gody, Jr.

(4) the capability of the valves to satisfy any leakage limits associated with your safety analyses when closing under design basis conditions (particularly where the torque switch is set assuming low valve factors, but is bypassed for a significant portion of the valve stroke), (5) your justification for the assumed stem friction coefficient, (6) your justification for the assumed differential pressure under which the MOVs may be called upon to operate in light of the intent of GL 89-10, (7) the inaccuracy of MOV diagnostic equipment in measuring delivered torque or thrust, (8) the assumed minimum voltage available to the motor as compared to your licensing commitments, and (9) the closing stroke time under design basis conditions in relation to Technical Specifications or safety analyses (particularly for dc motors). In addition to your own MOV tests, you will be expected to monitor the MOV tests performed by other organizations for information on the torque and thrust required to operate its valves under design basis conditions. You will be expected to take action to ensure MOV operability where those tests raise questions regarding the required torque or thrust estimates. With respect to the review of the NRC-sponsored MOV tests by the Electric Power Research Institute (EPRI), the NRC staff agreed with the evaluation by the Idaho National Engineering Laboratory (INEL) provided in EGG-SSRE-9926 (November 12, 1991), "Evaluation of EPRI Draft Report NP-9926 - Review of NRC/INEL Gate Valve Test Program."

During future inspections of the GL 89-10 program, the NRC staff will confirm your assumptions and calculations for the MOVs within the scope of Supplement 3 as well as other MOVs within the scope of GL 89-10.

This completes our action on TAC Nos. M77778 and M77779. Please contact me if you have any comments regarding this matter.

Sincerely,

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 Kahtan N. Jabbour, Project Manager
 Project Directorate II-3
 Division of Reactor Projects - I/II
 Office of Nuclear Reactor Regulation

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