

Docket No. 50-366

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JAN 09 1986

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

Dear Mr. Beckham:

The Commission has issued the enclosed Amendment No. 60 to Facility Operating License No. NPF-5 for the Edwin I. Hatch Nuclear Plant, Unit No. 2. The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated May 9, 1985, as supplemented August 30, 1985.

The amendment revises the TSs to delete the breaker setpoints from Table 3.8.2.6-1, to remove the reference to these setpoints from the surveillance requirements, and to add a requirement that the breakers be tested as specified by NEMA AB-2-1980. It also corrects several erroneous identification numbers listed in Table 3.8.2.6-1.

A copy of our Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's Biweekly Federal Register Notice.

Sincerely,

Original signed by

George W. Rivenbark, Project Manager  
BWR Project Directorate #2  
Division of BWR Licensing

Enclosures:

1. Amendment No. 60 to NPF-5
2. Safety Evaluation

cc w/enclosures:  
See next page

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12/23/85

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

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

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

GEORGIA POWER COMPANY  
OGLETHORPE POWER CORPORATION  
MUNICIPAL ELECTRIC AUTHORITY OF GEORGIA  
CITY OF DALTON, GEORGIA  
DOCKET NO. 50-366  
EDWIN I. HATCH NUCLEAR PLANT, UNIT NO. 2  
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 60  
License No. NPF-5

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Georgia Power Company, et al., (the licensee) dated May 9, 1985 as supplemented August 30, 1985, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-5 is hereby amended to read as follows:

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Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 60, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



Daniel R. Muller, Director  
BWR Project Directorate #2  
Division of BWR Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: January 9, 1986

ATTACHMENT TO LICENSE AMENDMENT NO. 60

FACILITY OPERATING LICENSE NO. NPF-5

DOCKET NO. 50-366

Replace the following pages of the Appendix "A" Technical Specifications with the attached pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change. The corresponding overleaf pages are also provided to maintain document completeness.

Remove

3/4 8-18  
3/4 8-20  
3/4 8-21  
3/4 8-22  
3/4 8-23

Insert

3/4 8-18  
3/4 8-20  
3/4 8-21  
3/4 8-22  
3/4 8-23

## ELECTRICAL POWER SYSTEMS

### A.C. CIRCUITS INSIDE PRIMARY CONTAINMENT

#### LIMITING CONDITIONS FOR OPERATION

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3.8.2.5 The following A.C. circuits inside primary containment shall be de-energized\*:

- a. Circuit Numbers 2, 4, 6, 8, 10, 12, 14, 40 and 42 in panel 2T51-S003,
- b. Circuit Numbers 2, 4, 6, 8, 10, 12, 40 and 42 in panel 2T51-S004,
- c. Circuit Numbers 26 and 32 in panel 2R25-S105, and
- d. Compartment 1EL on MCC 2R24-S014.

APPLICABILITY: CONDITIONS 1, 2 and 3.

#### ACTION:

With any of the above required circuits energized, trip the associated circuit breaker(s) in the specified panel within 1 hour.

#### SURVEILLANCE REQUIREMENTS

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4.8.2.5 Each of the above required A.C. circuits shall be determined to be de-energized at least once per 24 hours by verifying that the associated circuit breakers in the specified panels are in the tripped condition.

\*Except during entry into the drywell.

## ELECTRICAL POWER SYSTEMS

### PRIMARY CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

#### LIMITING CONDITION FOR OPERATION

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3.8.2.6 All primary containment penetration conductor overcurrent protective devices shown in Table 3.8.2.6-1 shall be OPERABLE.

APPLICABILITY: CONDITIONS 1, 2 and 3.

#### ACTION:

With one or more of the primary containment penetration conductor overcurrent protective devices shown in Table 3.8.2.6-1 inoperable;

- a. De-energize the circuit(s) by tripping the associated circuit breaker(s) within 72 hours and the provisions of Specification 3.0.4 are not applicable, or
- b. Be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

#### SURVEILLANCE REQUIREMENTS

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4.8.2.6.1 All primary containment penetration conductor overcurrent protective devices shown in Table 3.8.2.6-1 shall be demonstrated OPERABLE:

- a. At least once per 18 months:
  1. For at least one 4 KV reactor recirculation pump circuit, such that both recirculation pump circuits are demonstrated OPERABLE at least once per 36 months, by performance of:
    - (a) A CHANNEL CALIBRATION of the associated protective relays, and
    - (b) An integrated system functional test which includes simulated automatic actuation of the system and verifying that each relay and associated circuit breakers and control circuits function as designed.
  2. For molded case circuit breakers, by performance of a functional test of at least one circuit breaker of each type, such that all circuit breakers of each type are demonstrated OPERABLE at least once per N x 18 months, where N is the number of circuit breakers of each type. The functional test shall consist of injecting a current input as specified by NEMA AB2-1980 to the circuit breaker and verifying that the circuit breaker functions as designed. Should any circuit breaker fail to function as designed, all other circuit breakers of that type shall be tested.

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- b. At least once per 60 months by subjecting each circuit breaker to an inspection and preventive maintenance in accordance with procedures prepared in conjunction with its manufacturer's recommendations.

4.8.2.6.2 Circuit breakers associated with inoperable overcurrent protective devices shall be verified to be tripped at least once per 7 days.

TABLE 3.8.2.6-1

PRIMARY CONTAINMENT PENETRATION CONDUCTOR  
OVERCURRENT PROTECTIVE DEVICES

<u>DEVICE NUMBER AND LOCATION*</u>	<u>SYSTEM/COMPONENT POWERED</u>
a. Type 1:	
1. 4KV CKT. BKR. 2R22-S001, FR.5	MG SET A DRIVE MOTOR 2B31-S001A
2. 4KV CKT. BKR. 2R22-S008, FR.2	MG SET A PUMP MOTOR 2B31-C001A
3. 4KV CKT. BKR. 2R22-S002, FR.2	MG SET B DRIVE MOTOR 2B31-S001B
4. 4KV CKT. BKR. 2R22-S009, FR.2	MG SET B PUMP MOTOR 2B31-C001B
b. Type 2:	
1. 600 VAC, MCB, T.M. 2R24-S012, COMPT. 2DL	DRYWELL COOLING UNIT 2T47-B009B
2. 600 VAC, MCB, T.M. 2R24-S012, COMPT. 2DR	DRYWELL COOLING UNIT 2T47-B009B
3. 600 VAC, MCB, T.M. 2R24-S012, COMPT. 3FL	DRYWELL COOLING UNIT 2T47-B008B
4. 600 VAC, MCB, T.M. 2R24-S012, COMPT. 3FR	DRYWELL COOLING UNIT 2T47-B008B
5. 600 VAC, MCB, T.M. 2R24-S011, COMPT. 1DL	DRYWELL COOLING UNIT 2T47-B008A
6. 600 VAC, MCB, T.M. 2R24-S011, COMPT. 1DR	DRYWELL COOLING UNIT 2T47-B008A
7. 600 VAC, MCB, T.M. 2R24-S011, COMPT. 20AR	DRYWELL COOLING UNIT 2T47-B009A
8. 600 VAC, MCB, T.M. 2R24-S011, COMPT. 20D	DRYWELL COOLING UNIT 2T47-B009A

\*M.C.B. - molded case circuit breaker.

M.O. - magnetic only

T.M. - thermal magnetic

TABLE 3.8.2.6-1 (continued)

PRIMARY CONTAINMENT PENETRATION CONDUCTOR  
OVERCURRENT PROTECTIVE DEVICES

SYSTEM/COMPONENT	POWERED	DEVICE NUMBER	AND LOCATION*
c. Type 3:			
RECIRC. PUMP MOTOR HEATER	2B31-C001B	1.	600 VAC, MCB, T.M.
RECIRC. PUMP MOTOR HEATER	2B31-C001A	2.	600 VAC, MCB, T.M.
d. Type 4:			
CABLES EHB05M01 AND	EHB08M02	1.	120 VAC, MCB, T.M.
CRTS, EGT08M01 AND	BGT08M02	2.	120 VAC, MCB, T.M.
e. Type 5:			
DRYWELL EQUIP. DR. SUMP	DISCH. MOV 2G11-F018	1.	600 VAC, MCB, M.O.
DRYWELL EQUIP. DRAIN SUMP	RECIRC. MOV 2G11-F015	2.	600 VAC, MCB, M.O.
FCIC STEAMLINE INBOARD	ISO. MOV. 2E51-F007	3.	600 VAC, MCB, M.O.
RHR HEAD SPRAY ISOLATION	MOV. 2E11-F022	4.	600 VAC, MCB, M.O.
HPCI STEAM LINE INBOARD	ISOLATION MOV. 2E41-F002	5.	600 VAC, MCB, M.O.
RCU INBOARD ISOLATION	MOV. 2G31-F001	6.	600 VAC, MCB, M.O.
MAIN STEAM LINE DRAIN	MOV. 2B21-F016	7.	600 VAC, MCB, M.O.

\*M.C.B. - molded case circuit breaker  
M.O. - magnetic only  
T.M. - thermal magnetic

TABLE 3.8.2.6-1 (Continued)

PRIMARY CONTAINMENT PENETRATION CONDUCTOR  
OVERCURRENT PROTECTIVE DEVICES

<u>DEVICE NUMBER AND LOCATION*</u>	<u>SYSTEM/COMPONENT POWERED</u>
c. Type 6:	
1. 600 VAC, MCB, M.O. 2R24-S018A, COMPT. 2A	LOOP 'A' PUMP SUCTION MOV 2B31-F023A
2. 600 VAC, MCB, M.O. 2R24-S018A, COMPT. 2B	LOOP 'A' PUMP DISCH. MOV 2B31-F031A
3. 600 VAC, MCB, M.O. 2R24-S018B, COMPT. 3A	LOOP 'B' PUMP SUCTION MOV 2B31-F023B
4. 600 VAC, MCB, M.O. 2R24-S018B, COMPT. 3B	LOOP 'B' PUMP DISCH. MOV 2B31-F031B
5. 600 VAC, MCB, M.O. 2R24-S014, COMPT. 1B	DRYWELL EQUIP. DRAIN PUMP B 2G11-C006B
6. 600 VAC, MCB, M.O. 2R24-S014, COMPT. 7D	DRYWELL FLOOR DRAIN SUMP PUMP 'B' 2G11-C001B
7. 600 VAC, MCB, M.O. 2R24-3013, COMPT. 4A	DRYWELL FLOOR DRAIN SUMP PUMP 1A 2G11-C001A
8. 600 VAC, MCB, M.O. 2R24-S013, COMPT. 4B	DRYWELL EQUIP. DRAIN SUMP PUMP A 2G11-C006A
9. 600 VAC, MCB, M.O. 2R24-S012, COMPT. 18B	DRYWELL COOLING UNIT 2T47-B007B
10. 600 VAC, MCB, M.O. 2R24-S012, COMPT. 19A	DRYWELL COOLING UNIT 2T47-C001B
11. 600 VAC, MCB, M.O. 2R24-S011, COMPT. 6C	RHR SHUTDOWN COOLING ISO. MOV 2E11-F009
12. 600 VAC, MCB, M.O. 2R24-S011, COMPT. 18A	DRYWELL COOLING UNIT 2T47-B007A
13. 600 VAC, MCB, M.O. 2R24-S011, COMPT. 18C	DRYWELL COOLING RETURN AIR FAN 2T47-C001A

\*M.C.B. - molded case circuit breaker  
M.O. - magnetic only  
T.M. - thermal magnetic

TABLE 3.8.2.6-1 (Continued)

PRIMARY CONTAINMENT PENETRATION CONDUCTOR  
OVERCURRENT PROTECTIVE DEVICES

<u>DEVICE NUMBER</u> <u>AND LOCATION*</u>	<u>SYSTEM/COMPONENT</u> <u>POWERED</u>
c. Type 7:	
1. 208 VAC, MCB, M.O. 2R24-S013, COMPT. 11D	DRYWELL CHEMICAL SUMP PUMP 2G11-C101
2. 208 VAC, MCB, M.O. 2R24-S012, COMPT. 23C	DRYWELL RETURN AIR FAN 2T47-C002B
3. 208 VAC, MCB, M.O. 2R24-S011, COMPT. 22C	DRYWELL COOLING RETURN AIR FAN 2T47-C002A

\*M.C.B. - molded case circuit breaker.  
M.O. - magnetic only  
T.M. - thermal magnetic

ELECTRICAL POWER SYSTEMS

3/4.8.2 ONSITE POWER DISTRIBUTION SYSTEMS

ELECTRIC POWER MONITORING FOR REACTOR PROTECTION SYSTEM

LIMITING CONDITION FOR OPERATION

3.8.2.7 The power monitoring system for a RPS MG set or the Alternate Source shall be OPERABLE if in service.

APPLICABILITY: At all times.

ACTION:

With the power monitoring system for a RPS MG set or the Alternate Source inoperable, restore the inoperable power monitoring system to OPERABLE status within 30 minutes or remove the RPS MG set or Alternate Source associated with the inoperable power monitoring system from service.

One channel of a power monitoring system may be inoperable, as necessary for test or maintenance, not to exceed 8 hours per month.

SURVEILLANCE REQUIREMENTS

4.8.2.7 The above specified RPS power monitoring system instrumentation shall be determined OPERABLE:

- a. At least once per 6 months by performing a FUNCTIONAL TEST;  
and
- b. At least once per operating cycle by demonstrating the OPERABILITY of over-voltage, under-voltage and under-frequency protective instrumentation by performance of a CHANNEL CALIBRATION including simulated automatic actuation of the protective relays, tripping logic and output circuit breakers and verifying the following setpoints.
  1. Over-voltage  $\leq$  132 VAC,
  2. Under-voltage  $\geq$  108 VAC, with time delay relay set to zero\*,  
and
  3. Under-frequency  $\geq$  57 Hz.

\*Pending NRC approval of different value.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO.60 TO FACILITY OPERATING LICENSE

NO. NPF-5

GEORGIA POWER COMPANY  
OGLETHORPE POWER CORPORATION  
MUNICIPAL ELECTRIC AUTHORITY OF GEORGIA  
CITY OF DALTON, GEORGIA

EDWIN I. HATCH NUCLEAR PLANT, UNIT NO. 2

DOCKET NO. 50-366

1.0 INTRODUCTION

During scheduled surveillance testing, four breakers were discovered which needed trip setpoints set at values higher than those currently specified in Technical Specification (TS) Table 3.8.2.6-1 in order for their associated circuits to function properly. TS Table 3.8.2.6-1 lists trip setpoints (in amperes) for circuit breakers which provide overcurrent protection for electrical penetrations through the primary containment.

By letter dated May 9, 1985, Georgia Power Company (GPC or the licensee) requested an emergency change to Edwin I. Hatch Nuclear Plant, Unit No. 2, TS 3.8.2.6 dealing with these setpoints.

The licensee requested approval of either of two separate proposed revisions to the TSs. The licensee's preferred revision would remove all setpoints from Table 3.8.2.6-1, "Primary Containment Penetration Conductor Overcurrent Protective Devices." The alternate revision would modify the setpoints of four specific breakers serving the drywell cooling unit and the drywell cooling return air fans. Two additional changes of an administrative nature were requested. These changes are common to either proposed revision. One administrative change corrects a typographical error in the parts listing for a component. The other administrative change revises motor control center frame identifications for two breakers for circuits which have been moved. According to the licensee, these administrative changes would not affect unit operation but are necessary to maintain the technical accuracy of the table. During the review, questions were raised concerning the surveillance requirements of TS 4.8.2.6.1.a.2.

We reviewed the May 9, 1985, submittal on an emergency basis. Removal of all setpoints from Table 3.8.2.6-1 was not evaluated at that time, as this did not appear appropriate in the context of an Emergency TS review.

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Additionally, two changes of an administrative nature, as proposed by the licensee, were not addressed. We approved the proposed alternate revision to the TSs on May 10, 1985 (oral authorization) and issued Amendment No. 46 to the Unit 2 license incorporating this revision on May 14, 1985. In our letter transmitting this amendment, we stated that the other areas of change to the TSs requested in the licensee's May 9, 1985, letter should be addressed in separate NRC actions. By letter dated August 30, 1985, the licensee supplemented the information submitted in its May 9, 1985, letter. The purpose of this Safety Evaluation is to address these other areas.

## 2.0 EVALUATION

The licensee proposed removing the breaker trip setpoints from TS Table 3.8.2.6-1, removing the reference to the setpoints from the surveillance requirements and replacing the reference to the setpoints with the surveillance requirement that the breakers be tested as specified by NEMA AB-2-1980 (the applicable standard against which the breakers are tested).

The basis for the circuit breaker trip setpoints in Table 3.8.2.6-1 is the protection of the electrical penetration from the effects of overcurrent. However, the values listed in the table correspond to the current at which damage to the connected load could occur. This amount of current is generally much lower than that at which damage to the penetration itself could occur. TS 3.8.2.6 requires that the associated equipment, in this specific case the drywell cooling fans, be deenergized if the trip setpoint listed in the table cannot be met. Such action would result in the loss of the unit due to high containment temperatures. The trip setpoints presently listed in the TS Table 3.8.2.6-1 are not based solely on protection of containment penetrations. The trip setpoints of the affected breakers are based on general guidelines designed to protect cables inside containment assuming a ground fault in the load. Since the function of the motor is lost before the breaker opens, protection of the cables is an economic consideration rather than a safety consideration. Therefore, changes to the setpoints do not affect plant safety as long as they provide protection for the penetration thermal capability (current versus time limits) and allow sufficient current to be supplied to the loads.

Upon removal of the setpoints from the TSs, any changes to the presently calculated setpoints for the subject breakers will require a plant change review and safety evaluation in accordance with the requirements of 10 CFR 50.59. This review would address the design basis, which is protection of the penetration, as well as any other relevant engineering factors. Thus, appropriate settings for the breakers will be assured by a controlled design review process.

NEMA AB-2-1980 requires thermal magnetic breakers be tested at 1275% of the continuous current rating followed by a test of 300% of breaker rating. Magnetic only breakers are tested by use of a current at 141% of the trip setpoint. These parameters of multiplication are the same as our draft Standard Technical Specifications. These tests will demonstrate that the breakers are operable at their specific setpoints.

The licensee has also proposed to change the parts number for item 13 on TS page 3/4-8-21 and the motor control center frame identification numbers for items 3 and 5 on TS page 3/4 8-21. These are administrative changes made to correct the currently listed numbers.

Based on our review of the proposed changes as discussed above, we conclude that they are acceptable.

### 3.0 ENVIRONMENTAL CONSIDERATION

The amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and a change in surveillance requirements. We have determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

### 4.0 CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: January 9, 1986

Principal Contributors: S. Rhow, G. Rivenbark