September 28, 1984

~ DMB 0/6

Docket No. 50-366

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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. 41 to Facility Operating License No. NPF-5 for the Edwin I. Hatch Nuclear Plant, Unit No. 2. This amendment consists of changes to the Technical Specifications (TSs) in response to your application dated August 27, 1984, as supplemented September 20, 1984.

The amendment revises the overcurrent trip setpoints of the circuit breakers for four motor operated valves. These circuit breakers protect the primary containment penetration conductors for these four valves against failure due to overcurrent. The motor operators for these four valves were changed during the recent Unit 2 refueling modification outage. The trip setpoints are being changed to reflect the installation of the new motor operators.

A copy of the Safety Evaluation is also enclosed. Notice of Issuance and Final Determination of No Significant Hazards Consideration and Opportunity for Hearing will be included in the Commission's next Monthly Notice.

Sincerely,

"ORIGINAL SIGNED BY"
JOHN F. STOLZ"

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

Enclosures:
1. Amendment No. 41 to NPF-5
2. Safety Evaluation

cc w/enclosures:
See next page

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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. 41
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 August 27, 1984, as supplemented September 20, 1984, 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:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 41 , 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.

FOR THE NUCLEAR REGULATORY COMMISSION

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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: September 28, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 41

FACILITY OPERATING LICENSE NO. NPF-5

DOCKET NO. 50-366

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

Remove	Insert
3/4 8-21	3/4 8-21
3/4 8-22	3/4 8-22

TABLE 3.8.2.6-1 (Continued)

PRIMARY CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

DEVICE NUMBER AND LOCATION*		TRIP SETPOINT (Amperes)	RESPONSE TIME (Milliseconds)	SYSTEM/COMPONENT POWERED
c. Type 3:				
1.	600 VAC, MCB, T.M. 2R24-S014, COMPT. 5E	15	NA	RECIRC. PUMP MOTOR HEATER 2B31-C001B
2.	600 VAC, MCB, T.M. 2R24-S013, COMPT. 5B	15	NA	REACTOR RECIRC. PUMP MOTOR HEATER 2B31-C001A
d. Type 4:				
1.	120 VAC, MCB, T.M. 2R25-S102, CKT. 10	20	NA	CABLES BHE805M01 AND BHE808M02
2.	120 VAC, MCB, T.M. 2R25-S101, CKT. 10	20	NA	CKTS, BGE708M01 AND BGE708M02
e. Type 5:				
1.	600 VAC, MCB, M.O. 2R24-S014, COMPT. 2A	7	NA	DRYWELL EQUIP. DR. SUMP DISCH. MOV 2G11-F018
2.	600 VAC, MCB, M.O. 2R24-S014, COMPT. 6C	15	NA	DRYWELL EQUIP. DRAIN SUMP RECIRC. MOV 2G11-F015
3.	600 VAC, MCB, M.O. 2R24-S012, COMPT. 19C	22	NA	RCIC STEAMLINE INBOARD ISO. MOV. 2E51-F007
4.	600 VAC, MCB, M.O. 2R24-S011, COMPT. 9A	16	NA	RHR HEAD SPRAY ISOLATION MOV. 2E11-F022
5.	600 VAC, MCB, M.O. 2R24-S011, COMPT. 14B	35	NA	HPCI STEAM LINE INBOARD ISOLATION MOV. 2E41-F002
6.	600 VAC, MCB, M.O. 2R24-S011, COMPT. 14C	22	NA	RWCU INBOARD ISOLATION MOV. 2G31-F001
7.	600 VAC, MCB. M.O. 2R24-S011, COMPT. 15B	19	NA	MAIN STEAM LINE DRAIN MOV. 2B21-F016

*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

DEVICE NUMBER AND LOCATION*	TRIP SETPOINT (Amperes)	RESPONSE TIME (Milliseconds)	SYSTEM/COMPONENT POWERED
f. Type 6:			
1. 600 VAC, MCB, M.O. 2R24-S018A, COMPT. 2A	200	NA	LOOP 'A' PUMP SUCTION MOV 2B31-F023A
2. 600 VAC, MCB, M.O. 2R24-S018A, COMPT. 2B	215 135**	NA	LOOP 'A' PUMP DISCH. MOV 2B31-F031A
3. 600 VAC, MCB, M.O. 2R24-S018B, COMPT. 3A	270	NA	LOOP 'B' PUMP SUCTION MOV 2B31-F023B
4. 600 VAC, MCB, M. O. 2R24-S018B, COMPT. 3B	185 135**	NA	LOOP 'B' PUMP DISCH. MOV 2B31-F031B
5. 600 VAC, MCB, M.O. 2R24-S014, COMPT. 1B	190	NA	DRYWELL EQUIP. DRAIN PUMP B 2G11-C006B
6. 600 VAC, MCB, M.O. 2R24-S014, COMPT. 7D	140	NA	DRYWELL FLOOR DRAIN SUMP PUMP 'B' 2G11-C001B
7. 600 VAC, MCB, M.O. 2R24-3013, COMPT. 4A	150	NA	DRYWELL FLOOR DRAIN SUMP PUMP 1A 2G11-C001A
8. 600 VAC, MCB, M.O. 2R24-S013, COMPT. 4B	130	NA	DRYWELL EQUIP. DRAIN SUMP PUMP A 2G11-C006A
9. 600 VAC, MCB, M.O. 2R24-S012, COMPT. 18E	480	NA	DRYWELL COOLING UNIT 2T47-B007E
10. 600 VAC, MCB, M.O. 2R24-S012, COMPT. 19A	66	NA	DRYWELL COOLING UNIT 2T47-C001E
11. 600 VAC, MCB, M.O. 2R24-S011, COMPT. 6C	190	NA	RHR SHUTDOWN COOLING ISO. MOV 2E11-F009
12. 600 VAC, MCB, M.O. 2R24-S011, COMPT. 18A	455	NA	DRYWELL COOLING UNIT 2T47-B007A
13. 600 VAC, MCB, M.O. 2R24-S011, COMPT. 18C	140	NA	DRYWELL COOLING RETURN AIR FAN 2T47-C991A

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

**This trip setpoint becomes effective following the next shutdown after September 28, 1984.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 41 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

Introduction

By letter dated August 27, 1984, Georgia Power Company (the licensee) requested a change to Edwin I. Hatch Nuclear Plant, Unit No. 2, Technical Specification (TS) 3.8.2.6 dealing with setpoints for overcurrent protective devices for electrical penetrations installed in the primary containment. Due to equipment changes, the prescribed setpoints are no longer appropriate for four cases shown in TS Table 3.8.2.6-1.

For two penetrations, the new equipment should result in increased current setpoint values. These are penetrations serving the High Pressure Coolant Injection (HPCI) steam line inboard isolation valve motor (current increased from 30 to 35 amps) and the main steam line drain valve motor (current increased from 7 to 19 amps). Two penetrations now should have reduced current setpoint values. These are penetrations serving the "A" and "B" recirculation loop pump discharge valve motors (215 amps and 185 amps, respectively, to 135 amps each).

TS 3.8.2.6 allows the plant to startup and continue operation when the trip setpoints are not met, provided that the associated equipment is deenergized. The plant was completing a refueling outage and commencing a plant startup at the time of this request. While a plant startup with these loads de-energized is acceptable (and was in fact subsequently accomplished), this course of action has its drawbacks. Following a transient which results in Main Steam Isolation Valve (MSIV) closure, it would not be practical to reestablish the main condenser as a heat sink. This is because the now-closed main steam line drain valves are normally opened to equalize around the MSIVs prior to re-opening the MSIVs. Without the condenser, primary system heat would have to be released to the suppression pool via the safety-relief valves. This could be an undesirable challenge to an important safety system as well as a thermal cycle of the reactor vessel and associated equipment. For these reasons, the licensee requested expedited action on the request.

The change of the setpoints for the HPCI isolation valve penetration and for the main steam line drain valve electrical penetrations can be accomplished with the plant on-line, following NRC approval. The setpoints for the recirculation pump discharge valve electric penetrations would be adjusted during the next plant shutdown; the licensee requested, therefore, that that portion of the change be made effective at that time.

In response to questions, the licensee provided supplementary technical information in a letter dated September 20, 1984.

Evaluation

Electrical overload protection for containment penetrations is essential to protect the integrity of the reactor containment structure. Technical guidance is provided in NRC Regulatory Guide 1.63, "Electric Penetration Assemblies in Containment Structures for Water-Cooled Nuclear Power Plants," dated October 1973. This guide basically endorses IEEE Standard 317-1972 as an acceptable method of complying with the regulations. The licensee committed to conform to Regulatory Guide 1.63, as stated on page 8.3-21 of the Hatch Unit 2 Updated Final Safety Analysis Report. A major feature of these documents is to specify redundant (single-failure proof) overload protection at current-time values below the damage threshold for the penetration assembly.

The licensee has stated that the penetration assemblies involved are General Electric 100-Series penetrations using #8 wire size and are capable of withstanding the following current conditions:

1. Steady state current rating - 50 amps
2. Startup current rating (30 seconds) - 350 amps
3. Short circuit current rating (8 cycles or 0.133 seconds) - 3300 amps RMS asymmetrical or 2350 amps symmetrical

The circuit breakers involved are Westinghouse Mark 75 HFB type molded case magnetic only (providing short circuit protection only) breakers. Reviews of manufacturer's specification sheets and characteristic trip curves for this breaker indicate an interrupt time of approximately 0.016 seconds (1 cycle), which is bounded by the 8 cycle short circuit current duration potential of the penetration.

Backup protection assuming single failures of these breakers, as required by Regulatory Guide 1.63, is provided by fuses located in the motor control centers.

The original values shown in TS Table 3.8.2.6-1 were based upon vendor recommendations corresponding to 160% of the locked-rotor-amperage (LRA) of the load device (MOV). The proposed new setpoints are based upon the same calculation for the new MOVs. This recommendation is not related to nuclear plant safety. However, setpoints below 160% LRA could lead to spurious and undesirable tripping of safety-related loads.

We have determined that to protect the integrity of the penetration and to comply with Regulatory Guide 1.63, any setting between the specified 30-second limit (i.e., 350 amps) and the 160% LRA value is sufficient and acceptable. This is based in part upon the large margin afforded by the breaker which has a fast response time compared to 30 seconds. We conclude that since the values proposed by the licensee are within the 30-second values, they also are acceptable.

Exigent Circumstances

The exigent circumstances result from the licensee's late recognition that the Technical Specification change was necessary in order to provide the new overcurrent protection setpoints. While the plant can be started up and operated without this change, extended operation without this change is undesirable because it requires deenergizing the main steam line drain valve motor.

Final No Significant Hazards Consideration Determination

On August 31, 1984, a press release was sent to the local media, and during the week of September 17, 1984, a legal ad was published in several local newspapers by the Commission seeking public comment on its proposed determination that this amendment involves no significant hazards consideration. No public comments were received. The State of Georgia was consulted on this matter and had no comments on the proposed determination.

The Commission's regulations in 10 CFR 50.92 state that the Commission may make a final determination that a license amendment involves no significant hazards consideration if operation of the facility in accordance with the amendment would not:

(1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or

(2) Create the possibility of a new or different kind of accident from any accident previously evaluated; or

(3) Involve a significant reduction in a margin of safety.

The requested change is a minor change in the overcurrent protection setpoints for circuit breakers protecting four containment penetration electrical conductors. As noticed above in the Safety Evaluation, we have

concluded that this change is acceptable. The change does not affect the manner in which the plant is operated or the design bases for the plant. Therefore, we conclude that:

(1) Operation of the facility in accordance with the amendment would not significantly increase the probability or consequences of an accident previously evaluated.

(2) Operation of the facility in accordance with the amendment would not create the possibility of a new or different kind of accident from any accident previously evaluated.

(3) Operation of the facility in accordance with the amendment would not involve a significant reduction in a margin of safety.

Accordingly, we conclude that the amendment to Facility Operating License NPF-5 revising the overcurrent protection setpoints of the circuit breakers for four motor operated valves involves no significant hazards considerations.

Environmental Considerations

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. The staff has 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 made a final no significant hazards consideration finding with respect to this amendment. 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.

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: September 28, 1984

Principal Contributor: J.T. Beard