

March 27, 1984

DCR  
016

Docket No. 50-366

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

Dear Mr. Beckham:

Distribution

Docket File TBarnhart 8  
Reading File WJones  
NRC PDR DBrinkman  
Local PDR ACRS 10  
DEisenhut OPA CMiles  
RIngram RDiggs  
GRivenbark  
OELD  
LHarmon  
EJordan  
JTaylor

The Commission has issued the enclosed Amendment No. 36 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 April 5, 1982. This amendment completes all action on your April 5, 1982 application.

The amendment modifies the TSs to change a Limiting Condition for Operation to extend the time period that the reactor is allowed to be operated with one inoperable Low Pressure Coolant Injection inverter.

A copy of the Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's Monthly Notice.

Sincerely,

original signed by:

George Rivenbark, Project Manager  
Operating Reactors Branch No. 4  
Division of Licensing

Enclosures:

1. Amendment No. 36 to NPF-5
2. Safety Evaluation

cc: w/enclosures  
See next page

\*\*\*See previous concurrence

ORB#4:DL***ORB#4:DL	ORB#4:DL***	OELD***
RIngram GRivenbark;ef	JStolz	Goddard
02/02/84 02/14/84	02/02/84	02/06/84

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## Distribution

Docket File

ORB#4 File

JStolz

RIngram

GRivenbark

HDenton

DEisenhut

ACRS 10

TBarnhart 4

CMiles

LHarmon

EJordan

JTaylor

RDiggs

LPDR

NPDR

OELD

WJones

DBrinkman

Gray Files +4

Docket No. 50-366

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. to Facility Operating License No. NPF-5 for the Edwin I. Hatch Nuclear Plant, Unit 2. The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated April 5, 1982. This amendment completes all action on your April 5, 1982 application.

This amendment modifies the TSs to change a Limiting Condition for Operation to extend the time period that the reactor is allowed to be operated with one inoperable Low Pressure Coolant Injection inverter.

A copy of the Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's Monthly Notice.

Sincerely,

George Rivenbark, Project Manager  
Operating Reactors Branch No. 4  
Division of Licensing

## Enclosures:

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

cc w/enclosures:  
See next page

*Hold until  
Monthly Notice  
Time Expires.  
(End of Feb 77)  
(RS)*

OFFICE	ORB#4:DL	ORB#4:DL	ORB#4:DL	OELD	AD/GR:DL		
SURNAME	RIngram	GRivenbark,ef	JStolz	Goodman	Glains		
DATE	01/2/84	01/2/84	02/04/84	02/6/84	02/2/84		

Hatch 1/2  
Georgia Power Company

50-321/366

cc w/enclosure(s):

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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. 36  
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 April 5, 1982, 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. 36, 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 the date of its 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: March 27, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 36

FACILITY OPERATING LICENSE NO. NPF-5

DOCKET NO. 50-366

Replace the following page of the Appendix "A" Technical Specifications with the enclosed page. The revised page is identified by Amendment number and contains vertical lines indicating the areas of change. The corresponding overleaf page is provided to maintain document completeness.

Remove

3/4 8-10

Insert

3/4 8-10

## ELECTRICAL POWER SYSTEMS

### A.C. SOURCES - SHUTDOWN

#### LIMITING CONDITION FOR OPERATION

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3.8.1.2 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

- a. One circuit between the offsite transmission network and the onsite Class 1E distribution system, and
- b. One diesel generator with:
  1. A day tank containing a minimum of 900 gallons of fuel,
  2. A fuel storage tank containing a minimum of 32,000 gallons of fuel, and
  3. A fuel transfer pump.

APPLICABILITY: CONDITIONS 4 and 5.

#### ACTION:

With less than the above required A.C. electrical power sources OPERABLE, suspend all operations involving CORE ALTERATIONS, irradiated fuel handling, positive reactivity changes or operations that have the potential of draining the reactor vessel. The provisions of Specification 3.0.3 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.8.1.2 At least the above required A.C. electrical power sources shall be demonstrated OPERABLE per Surveillance Requirements 4.8.1.1.1, 4.8.1.1.2, except for the requirement of 4.8.1.1.2.a.5, 4.8.1.1.3 and 4.8.1.1.4.

## ELECTRICAL POWER SYSTEMS

### 3/4.8.2 ONSITE POWER DISTRIBUTION SYSTEMS

#### A.C. DISTRIBUTION - OPERATING

#### LIMITING CONDITION FOR OPERATION

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3.8.2.1 The following A.C. distribution system buses, inverters and motor-generator (MG) sets shall be OPERABLE with breakers open between redundant buses:

- a. 4160 volt Essential Buses 2E, 2F, and 2G,
- b. 600 volt Essential Buses 2C and 2D,
- c. 120/208 volt Essential Cabinets 2A and 2B,
- d. 120/208 volt Instrument Buses 2A and 2B, and
- e. A.C. inverters 2R44-S002 and 2R44-S003.

APPLICABILITY: CONDITIONS 1, 2 and 3

#### ACTION:

- a. With one of the inverters in 3.8.2.1.e inoperable, restore the inverter to an OPERABLE status within a period not to exceed seven (7) consecutive days or be in at least HOT SHUTDOWN within the next 12 hours and be in COLD SHUTDOWN within the following 24 hours.
- b. With one of the above required A.C. distribution system buses inoperable, restore the inoperable bus to OPERABLE status within 8 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- c. With two or more of the above required A.C. distribution system buses or inverters inoperable, restore at least all except one of the inoperable buses and inverters to OPERABLE status within 2 hours or 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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4.8.2.1 The above required A.C. distribution system buses and inverters shall be determined OPERABLE:

- a. At least once per 7 days by verifying correct breaker alignment and indicated power availability, and
- b. At least once per 31 days by determining that the 250 volt DC/600 volt AC inverters 2R44-S002 and 2R44-S003 are OPERABLE by verifying inverter output voltage of 600 volts  $\pm$  5% while supplying their respective buses.



## ELECTRICAL POWER SYSTEMS

### 3/4.8.2 ONSITE POWER DISTRIBUTION SYSTEMS

#### A.C. DISTRIBUTION - OPERATING

#### LIMITING CONDITION FOR OPERATION

3.8.2.1 The following A.C. distribution system buses, inverters and motor-generator (MG) sets shall be OPERABLE with breakers open between redundant buses:

- a. 4160 volt Essential Buses 2E, 2F, and 2G,
- b. 600 volt Essential Buses 2C and 2D,
- c. 120/208 volt Essential Cabinets 2A and 2B,
- d. 120/208 volt Instrument Buses 2A and 2B, and
- e. A.C. inverters 2R44-S002 and 2R44-S003.

APPLICABILITY: CONDITIONS 1, 2 and 3

#### ACTION:

- a. With one of the inverters in 3.8.2.1.e inoperable, restore the inverter to an OPERABLE status within a period not to exceed seven (7) consecutive days or be in at least HOT SHUTDOWN within the next 12 hours and be in COLD SHUTDOWN within the following 24 hours.
- b. With one of the above required A.C. distribution system buses inoperable, restore the inoperable bus to OPERABLE status within 8 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- c. With two or more of the above required A.C. distribution system buses or inverters inoperable, restore at least all except one of the inoperable buses and inverters to OPERABLE status within 2 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

#### SURVEILLANCE REQUIREMENTS

4.8.2.1 The above required A.C. distribution system buses and inverters shall be determined OPERABLE:

- a. At least once per 7 days by verifying correct breaker alignment and indicated power availability, and
- b. At least once per 31 days by determining that the 250 volt DC/600 volt AC inverters 2R44-S002 and 2R44-S003 are OPERABLE by verifying inverter output voltage of 600 volts  $\pm$  5% while supplying their respective buses.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 36 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

By letter dated April 5, 1982, Georgia Power Company (GPC) requested a revision to the Edwin I. Hatch Nuclear Plant, Unit No. 2 (Hatch Unit 2) Technical Specifications (TSs). This revision would change the Limiting Condition for Operation (LCO) for an inoperable Low Pressure Coolant Injection (LPCI) inverter.

2.0 Evaluation

Under the existing LCO, an inoperable inverter must be returned to an operable status within eight hours or the unit must be in at least hot shutdown within the next 12 hours and in cold shutdown within the following 24 hours. This proposed change would extend the current time limit (TS 3.8.2.1.e) to allow one LPCI inverter to be inoperable for a period not to exceed seven consecutive days providing the other inverter is operating.

One system of the Emergency Core Cooling Systems (ECCS), the LPCI mode of the Residual Heat Removal (RHR) System, employs two inverters (one for each division) to supply motive power to the valves that are required to actuate in the LPCI mode. The RHR System consists of two redundant, and independent subsystem loops. The present LCO (3.5.3.2.Q) for the LPCI subsystem of the RHR allows power operation to continue with one LPCI subsystem or one LPCI pump inoperable, but requires restoration of the inoperable LPCI loop or pump to operable status within seven days or be in at least hot shutdown within the next 12 hours and in cold shutdown within the following 24 hours. GPC states that the LCO for the inverters should not be more restrictive than the LCO for the system whose operation the inverters support. The proposed change would provide the same LCO time limit for an inoperable inverter as is currently provided for an inoperable LPCI subsystem.

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Typically, in onsite power distribution system designs, the inverters supply motive power not only to valves but also to instrumentation and controls. This is one of the reasons why the stringent LCO requirement generally applies to inverters. However, our review of the subject plant onsite AC control power distribution system indicates that each inverter supplies power to the RHR related motor operated valves (MOV) only and does not provide power to other vital instrumentation or controls. Under normal circumstance, the LPCI operation requires only opening the LPCI injection valve since all other MOVs are normally open. Also, there is a backup power source available to the valves from 600 volt bus 2C & 2D through a station service transformer in each redundant electrical division.

The RHR pumps are fed from the 4160 volt essential AC buses and all LPCI valves are normally powered by the main station batteries by way of the subject inverters. The inverters supply power to the valves associated with the pumps in the same electrical division. The inverter provides motive power for the valves in the RHR suction, discharge, minimum flow bypass and LPCI inboard isolation (referred to as LPCI injection). These injection valves must be operable in order for their respective RHR loops to be considered operable.

On the basis that the inverter supplies power only to the MOVs of the LPCI system, we agree with GPC that the LCO for the LPCI inverter should not be more restrictive than that for an inoperable LPCI system and conclude that the proposed change for LPCI inverters is acceptable.

### 3.0 Environmental Consideration

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this 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 this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: March 27, 1984

The following NRC staff personnel have contributed to this Safety Evaluation:  
P. Kang