

Dockets Nos.: 50-321
and 50-366

August 10, 1987

Mr. James P. O'Reilly
Senior Vice President - Nuclear Operations
Georgia Power Company
P. O. Box 4545
Atlanta, Georgia 30302

Dear Mr. O'Reilly:

Subject: Issuance of Amendment Nos. 144 and 79 to Facility Operating Licenses
DPR-57 and NPF-5 - Edwin I. Hatch Nuclear Plant, Units 1 and 2
(TACS 63757/62758)

The Commission has issued the enclosed Amendments Nos. 144 and 79 to Facility Operating Licenses DPR-57 and NPF-5, for the Edwin I. Hatch Nuclear Plant, Units 1 and 2. The amendments consist of changes to the Technical Specifications in response to your application dated August 25, 1986, and supplemented January 23 and April 30, 1987.

The amendments modify the Technical Specifications by revising the high room temperature setpoints for the Reactor Water Cleanup system.

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

Sincerely,

LSI

Lawrence P. Crocker, Project Manager
Project Directorate II-3
Division of Reactor Projects-I/II

Enclosures:

1. Amendment No. 144 to DPR-57
2. Amendment No. 79 to NPF-5
3. Safety Evaluation

cc w/enclosures:
See next page

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PD#II-3/DRP-I/II
MDuncan/rad
08/4 /87

LC
PD#II-3/DRP-I/II
LCrocker
08/6 /87

BJ
PD#II-3/DRP-I/II
BJYoungblood
08/10 /87

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Mr. James P. O'Reilly
Georgia Power Company

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

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Chairman
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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. 50-321
EDWIN I. HATCH NUCLEAR PLANT, UNIT NO. 1
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 144
License No. DPR-57

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to the Edwin I. Hatch Nuclear Plant, Unit 1 (the facility) Facility Operating License No. DPR-57 filed by Georgia Power Company, acting for itself, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia, (the licensee) dated August 25, 1986, and supplemented January 23 and April 30, 1987, 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 set forth in 10 CFR Chapter I;
 - 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.

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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. DPR-57 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 144, 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 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

(S)

B. J. Youngblood, Director
Project Directorate II-3
Division of Reactor Projects-I/II

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 10, 1987

MD
PD#II-3/DRP-I/II
MDuncan/rad
08/4/87

mc
PD#II-3/DRP-I/II
LCrocker
08/6/87

OGC-Bethesda
08/ /87

mc
PD#II-3/DRP-I/II
BJYoungblood
08/10/87

ATTACHMENT TO LICENSE AMENDMENT NO. 144

FACILITY OPERATING LICENSE NO. DPR-57

DOCKET NO. 50-321

Replace the following page of the Appendix A Technical Specifications with the enclosed page. The revised page is identified by amendment number and contains a vertical line indicating the area of change.

Remove
Page

3.2-3

Insert
Page

3.2-3

Table 3.2-1 (Cont.)

Ref. No. (a)	Instrument	Trip Condition Nomenclature	Required Operable Channels per Trip System (b)	Trip Setting	Action to be taken if number of channels is not met for both trip systems (c)	Remarks (d)
4	Main Steam Line Radiation	High	2	<3 times normal, full power background (e)	Initiate an orderly load reduction and close MSIVs within 8 hours.	Initiates Group 1 isolation.
5	Main Steam Line Pressure	Low	2	≥825 psig	Initiate an orderly load reduction and close MSIVs within 8 hours.	Initiates Group 1 isolation. Only required in RUN mode, therefore activated when Mode Switch is in RUN position.
6	Main Steam Line Flow	High	2	<138% rated flow (±115 psid)	Initiate an orderly load reduction and close MSIVs within 8 hours.	Initiates Group 1 isolation.
7	Main Steam Line Tunnel Temperature	High	2	<194°F	Initiate an orderly load reduction and close MSIVs within 8 hours.	Initiates Group 1 isolation
8	Reactor Water Cleanup System Differential Flow	High	1	20-80 gpm	Isolate reactor water cleanup system.	Final trip setting will be determined during startup test program.
9	Reactor Water Cleanup Area Temperature	High	2	≤150°F	Isolate reactor water cleanup system.	
10	Reactor Water Cleanup Area Ventilation Differential Temperature	High	2	≤67°F	Isolate reactor water cleanup system.	
11	Condenser Vacuum	Low	2	≥7" Hg. vacuum	Initiate an orderly load reduction and close MSIVs within 8 hrs.	Initiate Group 1 isolation

3.2-3

Amendment No. 144



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. 79
License No. NPF-5

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to the Edwin I. Hatch Nuclear Plant, Unit 1 (the facility) Facility Operating License No. NPF-5 filed by Georgia Power Company, acting for itself, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia, (the licensee) dated August 25, 1986, and supplemented January 23 and April 30, 1987, 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 set forth in 10 CFR Chapter I;
 - 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:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 79, 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 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

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B. J. Youngblood, Director
 Project Directorate II-3
 Division of Reactor Projects-I/II

Attachment:
 Changes to the Technical
 Specifications

Date of Issuance: August 10, 1987

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 PD#II-3/DRP-I/II
 MDuncan/rad
 08/4/87

me
 PD#II-3/DRP-I/II
 LCrocker
 08/6/87

me
 OGC-Bethesda
 J. R. Korman
 08/6/87

me
 PD#II-3/DRP-I/II
 B. J. Youngblood
 08/10/87

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ATTACHMENT TO LICENSE AMENDMENT NO. 79

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 a vertical line indicating the area of change.

Remove
Page

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Insert
Page

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TABLE 3.3.2-2 (Continued)
ISOLATION ACTUATION INSTRUMENTATION SETPOINTS

<u>TRIP FUNCTION</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUE</u>
3. <u>REACTOR WATER CLEANUP SYSTEM ISOLATION</u>		
a. Δ Flow - High	≤ 79 gpm	≤ 79 gpm
b. Area Temperature-High	≤ 150°F	≤ 150°F
c. Area Ventilation Δ Temperature - High	≤ 67°F	≤ 67°F
d. SLCS Initiation	NA	NA
e. Reactor Vessel Water Level-Low Low (Level 2)	≥ -47 inches*	≥ -47 inches*
4. <u>HIGH PRESSURE COOLANT INJECTION SYSTEM ISOLATION</u>		
a. HPCI Steam Line Flow-High	≤ 303% of rated flow	≤ 303% of rated flow
b. HPCI Steam Supply Pressure - Low	≥ 100 psig	≥ 100 psig
c. HPCI Turbine Exhaust Diaphragm Pressure-High	≤ 20 psig	≤ 20 psig
d. HPCI Pipe Penetration Room Temperature - High	≤ 169°F	≤ 169°F
e. Suppression Pool Area Ambient Temperature-High	≤ 169°F	≤ 169°F
f. Suppression Pool Area ΔT - High	< 42°F	< 42°F
g. Suppression Pool Area Temperature Timer Relays	NA	NA
h. Emergency Area Cooler Temperature - High	≤ 169°F	≤ 169°F
i. Drywell Pressure - High	≤ 1.92 psig	≤ 1.92 psig
j. Logic Power Bus Monitors	NA	NA

*See Bases Figure B 3/h 3-1.

HATCH - UNIT 2

3/4 3-17

Amendment No. 79



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENTS NOS. 144 AND 79 TO

FACILITY OPERATING LICENSES DPR-57 AND NPF-5

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

EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

DOCKET NOS. 50-321 AND 50-366

I. INTRODUCTION

By letter dated August 25, 1986, (Reference 1) Georgia Power Company (GPC; the licensee) requested changes to Table 3.2-1 of the Hatch Unit 1 Technical Specifications (TS) and to Table 3.3.2-2 of the Hatch Unit 2 TS. The requested changes would revise the high room temperature setpoints for the Reactor Water Cleanup (RWCU) system. The licensee's initial request (Reference 1) was supplemented by letter dated January 23, 1987 (Reference 2) which furnished additional information in response to NRC questions. On April 30, 1987, the licensee provided further supplemental information (Reference 3). Both References 2 and 3 provided information to enable the NRC staff to better understand the licensee's request for change to the TS, but neither reference changed in any way the details of the change requested.

The Reactor Water Cleanup (RWCU) system is a non-safety related system which maintains the purity of the reactor water. The only portion of the RWCU system that is safety related is the piping from the reactor recirculation piping up to and including the double containment isolation valves and the related instrumentation to initiate isolation. The RWCU is isolated under upset and accident conditions in order to prevent draining the reactor vessel and to prevent dilution of the sodium pentaborate solution in the event the standby liquid control system is activated. The RWCU consists, in part, of high energy piping and, thus, appropriate signals to initiate isolation in the event of a high energy line break have been provided to ensure timely isolation.

The Technical Specifications identify the RWCU isolation signals: high differential flow, high area temperature, and high ventilation differential temperature. The licensee has requested a change only to the high area temperature setpoint.

II. EVALUATION

The licensee stated in its August 25, 1986 submittal, that during the summertime, numerous spurious isolations of the RWCU have occurred due to the receipt of a high area temperature signal. Upon investigation, there have been no leaks of reactor coolant. Rather, the high temperature signals were caused by high ambient room temperatures. Currently, the Technical Specification Tables 3.2-1 and 3.3.2-2 for Hatch Units 1 and 2, respectively, specify a high temperature setpoint of 124°F. In order to reduce the number of unnecessary isolations and resulting occupational doses received during investigation of the unnecessary isolations, the licensee requests a modification to these tables to specify a high temperature setpoint of 150°F.

The Office for analysis and Evaluation of Operational Data (AEOD) issued report numbered AEOD/E705 on March 31, 1987, entitled "RWCU System Automatic Isolation and Safety Consideration" (Reference 4). This report documents a review of the Licensee Event Reports (LERs) from January 1984 through October 1986 concerning RWCU isolations and has made the following conclusions. Of all of the RWCU isolations, 74% were due to spurious signals. Slightly less than half of the spurious isolations were initiated by temperature signals. Of the isolations where there was actual leakage from the RWCU pressure boundary, the usual initiating isolation signal was related to flow, not to area temperatures. Thus, the significant indicator for RWCU pressure boundary leakage detection is flow monitoring rather than high area temperature.

The licensee provided the results of an analysis of the largest leak from the RWCU combined with the isolation of the RWCU using the proposed increased temperature setpoint for isolation. The analysis demonstrated that the rate of water loss would not exceed the makeup capability of the feedwater system and the resulting subcompartment environmental conditions would not exceed the environmental qualifications of the instrumentation required to isolate the RWCU system.

Since the equipment required for RWCU isolation (containment isolation valves and related instrumentation) is qualified for the environment to which it would be exposed (area temperatures up to 150°F) with the proposed increased temperature isolation setpoint and since the AEOD report (Reference 4) indicated that the dominant isolation signal for loss of integrity in the RWCU pressure boundary is flow related, we conclude that the increase in the RWCU area temperature setpoint from 124°F to 150°F is acceptable for both Units 1 and 2.

ENVIRONMENTAL CONSIDERATION

The amendments involve a change in use of facility components located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendments involve no significant increase in the amounts, and no

significant change in the types, of any effluents that may be released offsite, and that there should be no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendments meet 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 amendments.

CONCLUSION

The Commission made a proposed determination that the amendments involve no significant hazards consideration which was published in the Federal Register (52 FR 5855) on February 26, 1987, and consulted with the state of Georgia. No public comments were received, and the state of Georgia did not have any comments.

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 amendments will not be inimical to the common defense and security or to the health and safety of the public.

References:

1. Letter from J.T. Beckham, Georgia Power Company, to D.R. Muller, NRC, dated August 25, 1986.
2. Letter from L.T. Gucwa, Georgia Power Company, to the NRC, dated January 23, 1987.
3. Letter from L.T. Gucwa, Georgia Power Company, to the NRC, dated April 30, 1987.
4. Report, AEOD/E705, "Engineering Evaluation Report, RWCU System Automatic Isolation and Safety Considerations," dated March 1987, prepared by the Office for Analysis and Evaluation of Operational Data, NRC.

Principal Contributors: J. Ridgely
L. Crocker

Dated: August 10, 1987

DATED August 10, 1987

AMENDMENT NO. 144 TO FACILITY OPERATING LICENSE DPR-57, EDWIN I. HATCH, UNITS 1 & 2
AMENDMENT NO. 79 TO FACILITY OPERATING LICENSE NPF-05, EDWIN I. HATCH, UNITS 1 & 2

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