

August 24, 1987

Dockets Nos.: 50-321
and 50-366

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. 146 and 82 to Facility Operating
Licenses DPR-57 and NPF-5 - Edwin I. Hatch Nuclear Plant,
Units 1 and 2 (TACS 65248/65249)

The Commission has issued the enclosed Amendments Nos. 146 and 82 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 March 27, 1987.

The amendments modify the Technical Specifications by revising the alarm setpoint
for the Unit 2 core spray sparger differential pressure and adding this setpoint
to Unit 1.

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,

LS

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

Enclosures:

1. Amendment No. 146 to DPR-57
2. Amendment No. 82 to NPF-5
3. Safety Evaluation

cc w/enclosures:
See next page

md
PD#II-3/DRP-I/II
MDurican/mac
08/14/87

mc
PD#II-3/DRP-I/II
LCrocker
08/17/87

2st
PD#II-3/DRP-I/II
DHood
08/24/87

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P PDR

Mr. James P. O'Reilly
Georgia Power Company

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

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Atlanta, Georgia 30334

Chairman
Appling County Commissioners
County Courthouse
Baxley, Georgia 31513

DATED August 24, 1987

AMENDMENT NO. 146 TO FACILITY OPERATING LICENSE DPR-57, EDWIN I. HATCH, UNITS 1 & 2
AMENDMENT NO. 82 TO FACILITY OPERATING LICENSE NPF-05, EDWIN I. HATCH, UNITS 1 & 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. 50-321
EDWIN I. HATCH NUCLEAR PLANT, UNIT NO. 1
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 146
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 March 27, 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. 146, 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

151

Darl Hood, Acting Director
Project Directorate II-3
Division of Reactor Projects-I/II

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 24, 1987

MD
PD#II-3/DRP-I/II
MDuncan/rad
08/14/87

me
PD#II-3/DRP-I/II
LCrocker
08/17/87

mm
RSB
WHodges
08/18/87
OGC-Bethesda
M. Karman
08/20/87

DSH
PD#II-3/DRP-I/II
DHood
08/24/87

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ATTACHMENT TO LICENSE AMENDMENT NO. 146

FACILITY OPERATING LICENSE NO. DPR-57

DOCKET NO. 50-321

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

<u>Remove</u> <u>Page</u>	<u>Insert</u> <u>Page</u>
3.2-14	3.2-14

Table 3.2-6

INSTRUMENTATION WHICH INITIATES OR CONTROLS CORE SPRAY

Ref. No. (a)	Instrument	Trip Condition Nomenclature	Required Operable Channels per Trip System (b)	Trip Setting	Remarks
1.	Reactor Vessel Water Level	Low Low Low (Level 1)	2	≥-113 inches	Initiates CS.
2.	Drywell Pressure	High	2	≤1.92 psig	Initiates CS. Also initiates HPCI and LPCI mode of RHR and provides a permissive signal to ADS.
3.	Reactor Vessel Steam Dome Pressure	Low	2	≥422 psig*	Permissive to open CS injection valves.
4.	Core Spray Sparger Differential Pressure		1 ^(c)	≤ 3.1 psid greater (less negative) than the normal indicated ΔP at rated core power and flow.	Monitors integrity of CS piping inside vessel (between the nozzle and core shroud).
5.	CS Pump Discharge Flow	Low	1	≥610 gpm (≥ 4.13 inches)	Minimum flow bypass line is closed when low flow signal is not present.
6.	Core Spray Logic Power Failure Monitor		1	Not Applicable	Monitors availability of power to logic system.

*This trip function shall be ≤500 psig.

- The column entitled "Ref. No." is only for convenience so that a one-to-one relationship can be established between items in Table 3.2-6 and items in Table 4.2-6.
- Whenever any CCCS subsystem is required to be operable by Section 3.5, there shall be two operable trip systems. If the required number of operable channels cannot be met for one of the trip systems, that system shall be repaired or the reactor shall be placed in the Cold Shutdown Condition within 24 hours after this trip system is made or found to be inoperable.
- Alarm only. When inoperable, verify that the core spray differential pressure is within limits at least once per 12 hours or, declare the associated core spray loop inoperable.



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. 82
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 2 (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 March 27, 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. 82, 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

151

Darl Hood, Acting Director
Project Directorate II-3
Division of Reactor Projects-I/II

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 24, 1987

PD#II-3/DRP-I/II
MDuncan/mac
08/14/87

me
PD#II-3/DRP-I/II
LCrocker
08/17/87

msp
RSB OGC-Bethesda
WHodges *M. K. G. + me*
08/18/87 08/20/87

DSH
PD#II-3/DRP-I/II
DHood
08/24/87

DR

ATTACHMENT TO LICENSE AMENDMENT NO. 82

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 page is identified by amendment number and contains vertical lines indicating the areas of change.

Remove
Page

3/4 5-6

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Page

3/4 5-6

EMERGENCY CORE COOLING SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

2. Performing a CHANNEL CALIBRATION of the core spray header ΔP instrumentation and verifying the set point to be ≤ 3.1 psid greater (less negative) than the normal indicated ΔP at rated core power and flow.

- d. At least once per 18 months by performing a system functional test which includes simulated automatic actuation of the system throughout its emergency operating sequence and verifying that each automatic valve in the flow path actuates to its correct position. Actual injection of coolant into the reactor vessel may be excluded from this test.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENTS NOS. 146 AND 82 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

INTRODUCTION

By submittal dated March 27, 1987 (Reference 1), Georgia Power Company (the licensee) requested amendments to the Technical specifications (TS) for the Edwin I. Hatch Nuclear Plant, Units 1 and 2. The requested changes would revise the TS alarm setpoint for the Unit 2 Core Spray sparger differential pressure, and would add this setpoint to the Unit 1 TS, which presently has no setpoint specified.

EVALUATION

Instrumentation is provided in both Unit 1 and Unit 2 to measure the differential pressure across the reactor shroud. Its purpose is to detect a gross failure in the core spray sparger piping, which would be indicated by a change in the differential pressure, and alert the control room operator by actuating a control room annunciator. The instrumentation provides no trip function.

The reference differential pressure setting for the Unit 1 instrumentation was never formally specified in the TS. The existing Unit 1 TS, Table 3.2-6, states "to be determined during startup testing" in the column showing setpoints for instrumentation. In fact, Unit 1 has been operating with a differential pressure instrument setting about 0.75 psid greater (less negative) than the normal differential pressure. The Unit 2 TS state that the setpoint is 1 ± 0.5 psid greater than the normal indicated differential pressure.

In practice, there is no "normal" differential pressure, since it varies with variations in reactor power and reactor coolant flow. As a result of these fluctuations in the indicated differential pressure, the licensee has found that the small margin of 1 ± 0.5 psid allowed by the TS for Unit 2 for the alarm setpoint is insufficient to prevent the occurrence of nuisance alarms.

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The licensee is now proposing to revise the instrument setpoint to " ≤ 3.1 psid greater (less negative) than the normal indicated ΔP at rated core power and flow." The proposed new setpoint is based upon Hatch specific recommendations made by General Electric in Service Information Letter (SIL) No. 300. The SIL recommends that the differential pressure setpoint be set based upon that differential pressure associated with rated power and flow, since the instrumentation was designed to be effective only when the core flow is between 90 percent and 100 percent of rated. The value of 3.1 psid is based upon a conservative analytical limit of 3.6 psid, and was selected using the methodology of Regulatory Guide 1.105. The analytical limit of 3.6 psid is still well below the change in differential pressure that would occur should there be a break in the core spray sparger piping while operating near rated power and flow.

In addition to entering the new setpoint in both the Hatch Unit 1 and Unit 2 TS, a footnote would be added to Table 3.2-6 of the Unit 1 TS to point out that the instrumentation provides an alarm only, and that if the instrumentation is inoperable, the actual differential pressure must be verified to be within limits at least once per 12 hours or the associated core spray loop must be declared inoperable.

The result of the proposed changes would be to (1) revise the setpoint for Unit 2; (2) add this setpoint for Unit 1, which presently has no setpoint specified; (3) alert the operators that the instrumentation provides only an alarm function; and (4) instruct the operators that, in the event the instrumentation becomes inoperable, the actual differential pressure must be verified to be within limits every 12 hours or the associated core spray loop must be declared inoperable.

Since the differential core spray sparger instrumentation provides an alarm only, and since the proposed revised setpoint for Unit 2 and the added setpoint for Unit 1 still provide margin to the change in differential pressure that would occur in the event of a piping break, we find these changes acceptable. The resulting TS setpoints and action statements will provide for consistency between the two sets of Technical Specifications.

ENVIRONMENTAL CONSIDERATIONS

These amendments involve a change in use of facility components located within the restricted area as defined in 10 CFR Part 20 and changes in surveillance requirements. 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 20800) on June 3, 1987, and consulted with the state of Georgia. No public comments were received, and the state of Georgia did not have any comments.

The staff has 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.

Principal Contributor: L. Crocker

Dated: August 24, 1987