October 8, 1997

Mr. H. L. Sumner, Jr.
Vice President - Nuclear
Hatch Project
Southern Nuclear Operating
Company, Inc.
Post Office Box 1295
Birmingham, Alabama 35201-1295

SUBJECT: ISSUANCE OF AMENDMENTS - EDWIN I. HATCH NUCLEAR PLANT, UNIT 1 (TAC NO. M98774)

Dear Mr. Sumner:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 209to Facility Operating License DPR-57 for the Edwin I. Hatch Nuclear Plant, Unit 1. The amendment consists of changes to the Technical Specifications (TS) in response to your application dated May 9, 1997, as supplemented September 19, 1997.

The amendment revises the minimum critical power ratio safety limits for a mixed core of GE9B/GE12/GE13 fuel for Cycle 18 operation.

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

Sincerely,
ORIGINAL SIGNED BY:
Ngoc B. (Tommy) Le, Project Manager
Project Directorate II-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-321

Enclosures:
1. Amendment No. 209to DPR-57
2. Safety Evaluation

cc w/encl: See next page

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*See related SE Memo from L. Phillips to NLe dated 9/ 8/97
DOCUMENT NAME: G:\HATCH\HAT98774.AMD **See previous concurrence

OFFICE	DRPE/PD22/PM	DRPE/PD22/LA	OGC*	DRPE/PD22/D
NAME	NB.LE*	L.BERRY	MYOUNG	H.BERKOW
DATE	9/23/97	10/ /97	9/23/97	10/ /97
COPY	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY

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P PDR

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SOUTHERN NUCLEAR OPERATING COMPANY, INC.

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 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 209
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 the Southern Nuclear Operating Company, Inc. (Southern Nuclear), acting for itself, Georgia Power Company, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia (the licensees), dated May 9, 1997, as supplemented September 19, 1997, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as 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 hereby amended by page 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 Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 209 , are hereby incorporated in the license. Southern Nuclear shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective prior to the restart from the Hatch Unit 1 outage currently scheduled to begin in October 1997.

FOR THE NUCLEAR REGULATORY COMMISSION

Herbert N. Berkow, Director
Project Directorate II-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Technical Specification
Changes

Date of Issuance: October 8, 1997

ATTACHMENT TO LICENSE AMENDMENT NO. 209

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 vertical lines indicating the areas of change.

Remove	Insert
2.0-1	2.0-1

2.0 SAFETY LIMITS (SLs)

2.1 SLs

2.1.1 Reactor Core SLs

2.1.1.1 With the reactor steam dome pressure < 785 psig or core flow < 10% rated core flow:

THERMAL POWER shall be ≤ 25% RTP.

2.1.1.2 With the reactor steam dome pressure ≥ 785 psig and core flow ≥ 10% rated core flow:

MCPR shall be ≥ 1.10 for two recirculation loop operation or ≥ 1.12 for single recirculation loop operation.*

2.1.1.3 Reactor vessel water level shall be greater than the top of active irradiated fuel.

2.1.2 Reactor Coolant System (RCS) Pressure SL

Reactor steam dome pressure shall be ≤ 1325 psig.

* The specified limits are for Cycle 18 only.

2.2 SL Violations

With any SL violation, the following actions shall be completed:

2.2.1 Within 1 hour, notify the NRC Operations Center, in accordance with 10 CFR 50.72.

2.2.2 Within 2 hours:

2.2.2.1 Restore compliance with all SLs; and

2.2.2.2 Insert all insertable control rods.

2.2.3 Within 24 hours, notify the plant manager, the corporate executive responsible for overall plant nuclear safety, and the offsite review committee.

(continued)

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 209 TO FACILITY OPERATING LICENSE DPR-57

SOUTHERN NUCLEAR OPERATING COMPANY, INC., ET AL.

EDWIN I. HATCH NUCLEAR PLANT, UNIT 1

DOCKET NO. 50-321

1.0 INTRODUCTION

By letter dated May 9, 1997, as supplemented September 19, 1997, Southern Nuclear Operating Company, Inc. (Southern Nuclear), et al. (the licensee) proposed a license amendment to change the Technical Specifications (TS) for the Edwin I. Hatch Nuclear Plant, Unit 1. The proposed changes would revise the Minimum Critical Power Ratio (MCPR) safety limits based on the cycle-specific analysis of the mixed core of GE9B/GE12/GE13 fuel for Cycle 18. The September 19, 1997, supplemental letter provided clarifying information that did not change the initial proposed no significant hazards consideration determination.

2.0 EVALUATION

The licensee requested a change to the Hatch Unit 1 TS in accordance with 10 CFR 50.90 for the Cycle 18 operation. The proposed revision of the TS is described below.

The Safety Limit MCPR (SLMCPR) in TS 2.1.1.2 would be raised from 1.07 to 1.10 for two recirculation loop operation and from 1.08 to 1.12 for single recirculation loop operation for Cycle 18 when the reactor steam dome pressure is $\geq$ 785 psig and core flow is $\geq$ 10% rated core flow.

The staff has reviewed the above proposed changes to TS 2.1.1.2, and noted that these changes are based on the analyses performed using Hatch Unit 1 cycle-specific inputs and approved methodologies including GESTAR II (NEDE-24011-P-A-13, Sections 1.1.5 and 1.2.5 and its reference NEDO-10958-A, January 1977), and the relevant information provided in the proposed Amendment 25 to GESTAR II, NEDE-24011 (which is under staff review). The core MCPR distribution and bundle R-factor distributions are also evaluated for the nonequilibrium Cycle 18 core compared with that of the generic GE13 equilibrium core to ensure that 99.9 percent of fuel rods in the core will not experience the boiling transition. The results of the plant-specific analysis indicate that for Hatch Unit 1, Cycle 18, the core has a much flatter radial power distribution than was used to perform the GE13 generic safety limit (SL) MCPR evaluation.

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On the basis of the review discussed above, the staff concludes that the proposed changes to the TS are acceptable for Hatch Unit 1 Cycle 18 application since the changes are analyzed based on the NRC-approved methodologies and conservative cycle-specific parameters for SLMCPR analysis are used that demonstrate that 99.9 percent of fuel rods in the core will not experience boiling transition.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Georgia State official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to the installation or use of facility components located within the restricted area as defined in 10 CFR Part 20. The NRC 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 previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (62 FR 40857 dated July 30, 1997). 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.

5.0 CONCLUSION

The Commission 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: T. Huang

Date: October 8, 1997