

October 12, 2001

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

SUBJECT: EDWIN I. HATCH NUCLEAR PLANT, UNIT 2 RE: ISSUANCE OF AMENDMENT  
(TAC NO. MB2000)

Dear Mr. Sumner:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 167 to Facility Operating License NPF-5 for the Edwin I. Hatch Nuclear Plant, Unit 2. The amendment consists of changes to the Technical Specifications in response to your application dated May 23, 2001.

The amendment revises the Safety Limit Minimum Critical Power Ratio to reflect the results of a cycle-specific calculation that was performed using NRC-approved methodology.

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,  
*/RA/*

Leonard N. Olshan, Senior Project Manager, Section 1  
Project Directorate II  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-366

Enclosures:

1. Amendment No. 167 to NPF-5
2. Safety Evaluation

cc w/encls: See next page

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SOUTHERN NUCLEAR OPERATING COMPANY, INC.

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 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 167  
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 Southern Nuclear Operating Company, Inc. (the licensee), acting for itself, Georgia Power Company, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia (the owners), dated May 23, 2001, 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.

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. NPF-5 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. 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 as of its date of issuance and shall be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*/ra/*

Richard J. Laufer, Acting Chief, Section1  
Project Directorate II  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment:  
Technical Specification  
Changes

Date of Issuance: October 12, 2001

ATTACHMENT TO LICENSE AMENDMENT NO. 167

FACILITY OPERATING LICENSE NO. NPF-5

DOCKET NO. 50-366

Replace the following page of the Appendix A Technical Specification with the attached revised page. The revised page is identified by amendment number and contain vertical lines indicating the areas of change.

Remove

Insert

2.0-1

2.0-1

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 167 TO FACILITY OPERATING LICENSE NPF-5

SOUTHERN NUCLEAR OPERATING COMPANY, INC., ET AL.

EDWIN I. HATCH NUCLEAR PLANT, UNIT 2

DOCKET NO. 50-366

## 1.0 INTRODUCTION

By letter dated May 23, 2001, Southern Nuclear Operating Company, Inc. ( the licensee), et al., proposed license amendments to change the Technical Specifications (TS) for the Edwin I. Hatch Nuclear Plant, Unit 2. The proposed changes would revise the Safety Limit Minimum Critical Power Ratio (SLMCPR) in TS 2.1.1.2 to reflect a cycle-specific calculation performed for the Unit 2 Cycle 17 operation.

## 2.0 EVALUATION

The licensee proposed to change the SLMCPR values for Hatch Unit 2 Cycle 17 operation from 1.07 to 1.08 for two recirculation loop operation and from 1.08 to 1.10 for single loop operation with the reactor steam dome pressure  $\geq 785$  psig and core flow  $\geq 10\%$  rated core flow.

The licensee described the methodology used to calculate the SLMCPR values for Hatch Unit 2 Cycle 17 operation. The SLMCPR analysis was performed by Global Nuclear Fuel (GNF) using Hatch Unit 2 plant- and cycle-specific fuel and core parameters, NRC-approved methodologies including GESTAR II (NEDE-24011-P-A-13, Sections 1.1.5 and 1.2.5), NEDO-10958-A (GETAB January 1977), NEDC-52505P, Revision (R-Factor Calculation Method for GE11, GE12, and GE13 Fuel), NEDC-32691P, NEDC-32694P, and Amendment 25 to NEDE-24011P.

The staff reviewed the justification for the SLMCPR value of 1.08 for two recirculation loop operation and 1.10 for single loop operation using the approach stated in Amendment 25 to GESTAR-II. Based on its review, the staff has concluded that the SLMCPR analysis for Hatch Unit 2 Cycle 17 operation using the plant- and cycle-specific calculation in conjunction with the approved method is acceptable. The Hatch Unit 2 Cycle 17 SLMCPR will ensure that 99.9% of the fuel rods in the core will not experience boiling transition, which satisfies the requirements of Generic Design Criterion 10 of Appendix A to 10 CFR Part 50 regarding acceptable fuel design limits. Therefore, the staff has concluded that the justification for analyzing and determining the SLMCPR value of 1.08 for two recirculation loop operation and 1.10 for single recirculation

loop operation for Hatch Unit 2 Cycle 17 is acceptable since approved methodologies were used and the increase of the SLMCPR values due to both a flatter core MCPR distribution and flatter in-bundle power distributions in Cycle 17 relative to Cycle 16 was fully justified.

### 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Georgia State official was notified of the proposed issuance of the amendments. 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 involve no significant hazards consideration, and there has been no public comment on such finding (66 FR 31714). Accordingly, the amendment 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 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 amendments 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 12, 2001

Edwin I. Hatch Nuclear Plant

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