

August 31, 1987

Docket No.: 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 No. 84 to Facility Operating License NPF-5  
- Edwin I. Hatch Nuclear Plant, Unit 2 (TAC 11158)

The Commission has issued the enclosed Amendment No. 84 to Facility Operating License 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 September 27, 1982, as supplemented December 7, 1983, May 4, 1984, December 18, 1985, April 4, 1986, and January 5, 1987.

The amendment revises the Technical Specifications to delete Section 3.7.8 related to settlement of Class I structures.

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,

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

Enclosures:

1. Amendment No. 84 to NPF-5
2. Safety Evaluation

cc w/enclosures:

See next page

PDII-3/DRP-I/II  
MDuncan/rad  
07/16/87

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PDII-3/DRP-I/II  
LCrocker  
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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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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. 84  
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 September 27, 1982, as supplemented December 7, 1983, May 4, 1984, December 18, 1985, April 4, 1986, and January 5, 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. 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. 84, 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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Darl S. Hood, Acting Director  
Project Directorate II-3  
Division of Reactor Projects-I/II

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: August 31, 1987

PDII-3/DRP-I/II  
MDuncan/rad  
07/16/87

*JLC*  
PDII-3/DRP-I/II  
LCrocker  
07/16/87

OGC-Bethesda  
*Sturck*  
08/24/87

*DSH*  
PDII-3/DRP-I/II  
DHood, Acting Director  
07/24/87  
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ATTACHMENT TO LICENSE AMENDMENT NO. 84

FACILITY OPERATING LICENSE NO. NPF-5

DOCKET NO. 50-366

Remove the following pages of the Appendix A Technical Specifications.  
The overleaf page is provided for convenience.

<u>Remove Page</u>	<u>Insert Page</u>
3/4 7-31	--
3/4 7-32	--
B 3/4 7-3	B 3/4 7-3
B 3/4 7-4	--

## PLANT SYSTEMS

### BASES

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#### 3/4.7.4 SNUBBERS (Continued)

The service life of a snubber is evaluated via manufacturer input and information through consideration of the snubber service conditions and associated installation and maintenance records (newly installed snubber, seal replaced, spring replaced, in high radiation area, in high temperature area, etc...). The requirement to monitor the snubber service life is included to ensure that the snubbers periodically undergo a performance evaluation in view of their age and operating conditions. These records will provide statistical bases for future consideration of snubber service life. The requirements for the maintenance of records and the snubber service life review are not intended to affect plant operation.

#### 3/4.7.5 SEALED SOURCE CONTAMINATION

The limitations on sealed source removable contamination ensure that the total body or individual organ irradiation does not exceed allowable limits in the event of ingestion or inhalation of the source material. The limitations on removable contamination for sources requiring leak testing, including alpha emitters, is based on 10 CFR 70.39(c) limits for plutonium. Quantities of interest to this specification which are exempt from the leakage testing are consistent with the criteria of 10 CFR Part 30.11-20 and 70.19. Leakage from sources excluded from the requirements of this specification is not likely to represent more than one maximum permissible body burden for total body irradiation if the source material is inhaled or ingested.

#### 3/4.7.6 (Deleted)



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 84 TO

FACILITY OPERATING LICENSE NPF-5

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

EDWIN I. HATCH NUCLEAR PLANT, UNIT 2

DOCKET NO. 50-366

INTRODUCTION

Section 3.7.8 of the Hatch Unit 2 Technical Specifications (TS) requires evaluation or shutdown of the unit whenever certain limit values of total settlement of Class 1 structures or of differential settlement between Class 1 structures are exceeded. The TS were initially issued on June 13, 1978, without the differential settlement limit values, but with a requirement that the limit values be established and reported to the Commission by November 1, 1978. By letter dated December 1, 1978, Georgia Power Company (the licensee) submitted proposed values for the differential settlement as part of an amendment request that would substantially revise the entire Section 3.7.8.

While this proposal was still under review by the staff, the licensee, by letter dated September 27, 1982 (Reference 1), requested that all its earlier submittals related to the proposed revision of Section 3.7.8 of the TS be withdrawn and requested an amendment that would delete Section 3.7.8 of the TS in its entirety. This September 27, 1982 letter was followed by letters dated December 7, 1983, May 4, 1984, December 18, 1985, April 4, 1986 and January 5, 1987, (References 2, 3, 4, 5 and 6, respectively), that discussed, clarified and augmented the September 27, 1982 request.

EVALUATION

Any large, heavy structure can be expected to experience some settlement during and after construction as the weight of the structure causes consolidation of the foundation material supporting the structure. In general, the NRC staff has required licensees to commit to a program in the plant Final Safety Analysis Report (FSAR) to monitor the settlement of plant structures and to take corrective action if the settlement is excessive. For Hatch Unit 2, in view of the excessive settlement problems that had been observed at the Midland plant and the fact that the Hatch plant is located on a deep soil foundation, absolute and differential settlement limits and the settlement monitoring program were made a part of the plant

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TS. TS 3/4.7.8 was established out of concern that excessive absolute or differential settlement of plant structures could alter the geometric arrangement of the structures, resulting in a change to the plant design features described in response to 10 CFR 50.36(c)(4). From the results of the settlement monitoring program provided by the licensee in the report submitted with the January 5, 1987 letter (Reference 6), the licensee concludes that the monitored plant structures are not now settling and have not been settling for at least the last eight years. The data provided in the report indicated that: (1) The settlement of the structures under consideration have essentially stopped and the measured total settlement for each structure is less than the predicted value, (2) no appreciable tilt has occurred in any of the structures and in all cases the ratio of measured differential settlement to the allowable differential settlement is no greater than 30 percent, and (3) for penetration differential settlements (between structure and soil) the ratio of the measured to the allowable is no greater than 59 percent.

Since the total absolute and differential settlements that have occurred are well within the limits established by the TS and in view of the data which show that all settlement has now essentially stopped, the licensee proposes to delete TS 3/4.7.8. However, to provide assurance that the building settlements have stabilized, and to assess the effects of any flood or earthquake on building settlements, the licensee proposes to conduct a revised settlement monitoring program, which is to be implemented through a Plant Hatch operating procedure as follows:

- (1) All building settlement benchmarks are to be surveyed once a year through 1988, once every two years through 1992, then once every five years thereafter except when an unusual meteorological or seismic event occurs, in which case the structures would be surveyed as soon as possible.
- (2) The scheduled surveys would be conducted at the same time of the year to avoid any fluctuations due to seasonal temperature.
- (3) When the current survey reading differs from the previous one by more than 1/4-inch, a resurvey is required.
- (4) The surveyed settlement values shall not exceed the predicted or allowable values. If the total settlement of any structure reaches the predicted value, or the differential settlement across structures or between structure and soil exceeds 75 percent of the allowable values, a resolution of the problem by the licensee will be required.

The staff has reviewed the settlement survey data submitted by the licensee and concurs with the licensee's conclusion that the settlement of the plant structures has essentially stabilized. In view of the more than eight-year period with no essential change in settlement data, the staff concludes that there is now no further safety concern regarding additional plant settlement that might affect the design features as described in response to 10 CFR 50.36(c)(4). Thus, we conclude that there is no need to continue the

settlement monitoring program prescribed by TS 3/4.7.8, and that TS 3/4.7.8 may be deleted. Further information regarding future settlement of plant structures will be obtained in accordance with the procedure proposed by the licensee.

#### ENVIRONMENTAL CONSIDERATIONS

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The 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 this amendment involves no significant hazards consideration and there has been no public comment on such finding. 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.

#### CONCLUSION

The Commission made proposed determinations that the amendment involves no significant hazards consideration which were published in the Federal Register (48 FR 52812) on November 22, 1983, and (52 FR 28376) on July 29, 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 amendment 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, GPC, to the Director, NRR, NRC, dated September 27, 1982.
2. Letter from L. T. Gucwa, GPC, to J. F. Stolz, NRC, dated December 7, 1983.
3. Letter from L. T. Gucwa, GPC, to J. F. Stolz, NRC, dated May 4, 1984.
4. Letter from L. T. Gucwa, GPC, to D. Muller, NRC, dated December 18, 1985.
5. Letter from L. T. Gucwa, GPC, to D. Muller, NRC, dated April 4, 1986.
6. Letter from L. T. Gucwa, GPC, to NRC, dated January 5, 1987.

Principal Contributors: L. Crocker  
C. P. Tan

Dated: August 31, 1987

DATED August 31, 1987

AMENDMENT NO. 84 TO FACILITY OPERATING LICENSE NPF-5, EDWIN I. HATCH, UNIT 2

DISTRIBUTION:

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