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Docket No. 50-321

Georgia Power Company  
 Oglethorpe Electric Membership Corporation  
 ATTN: Mr. I. S. Mitchell, III  
 Vice President and Secretary  
 Georgia Power Company  
 Atlanta, Georgia 30302

Gentlemen:

The Commission has issued the enclosed Amendment No. 39 to Facility Operating License No. DPR-57 for the Edwin I. Hatch Nuclear Plant Unit No. 1. The amendment consists of changes to the Technical Specifications in response to your application dated September 3, 1976.

The amendment to the Technical Specifications will modify the requirements related to safety-relief valve settings.

In reviewing your application, it was found that certain changes were required to improve the clarity of the proposed Technical Specifications. These changes were discussed with and approved by your staff.

Copies of the Safety Evaluation and the Federal Register Notice are also enclosed.

Sincerely,

George Lear, Chief  
 Operating Reactors Branch #3  
 Division of Operating Reactors

Enclosures:

1. Amendment No. 39
2. Safety Evaluation
3. Federal Register Notice

CC:  
 See next page

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Georgia Power Company  
Oglethorpe Electric Membership Corporation

- 2 -

cc:

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

GEORGIA POWER COMPANY  
OGLETHORPE ELECTRIC MEMBERSHIP CORPORATION

DOCKET NO. 50-321

EDWIN I. HATCH NUCLEAR PLANT UNIT NO. 1

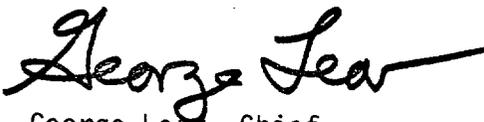
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 39  
License No. DPR-57

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Georgia Power Company and Oglethorpe Electric Membership Corporation (the licensees) dated September 3, 1976, 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;
  - 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 a change to the Technical Specifications as indicated in the attachment to this license amendment.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink that reads "George Lear". The signature is written in a cursive style with a long horizontal stroke at the end.

George Lear, Chief  
Operating Reactors Branch #3  
Division of Operating Reactors

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: November 17, 1976

ATTACHMENT TO LICENSE AMENDMENT NO. 39  
TO THE TECHNICAL SPECIFICATIONS  
FACILITY OPERATING LICENSE NO. DPR-57  
DOCKET NO. 50-321

Replace page 1.2-1 with the attached revised page.

1.2 REACTOR COOLANT SYSTEM INTEGRITYApplicability

The Safety Limit, established to preserve the reactor coolant system integrity, applies to the limit on the reactor vessel steam dome pressure.

Objective

The objective of the Safety Limit (associated with preserving the reactor coolant system integrity) is to establish a pressure limit below which the integrity of the reactor coolant system is not threatened due to any overpressure condition.

SpecificationsA. Reactor Vessel Steam Dome Pressure1. When Irradiated Fuel is in the Reactor

The reactor vessel steam dome pressure shall not exceed 1325 psig at any time when irradiated fuel is present in the reactor vessel.

2.2 REACTOR COOLANT SYSTEM INTEGRITYApplicability

The Limiting Safety System Settings apply to trip settings of the instruments and devices which are provided to prevent the reactor vessel steam dome pressure Safety Limit from being exceeded.

Objective

The objective of the Limiting Safety System Settings is to define the level of the process variables at which automatic protective action is initiated to prevent the reactor vessel steam dome pressure Safety Limit from being exceeded.

SpecificationsA. Nuclear System Pressure1. When Irradiated Fuel is in the Reactor

When irradiated fuel is present in the reactor vessel, and the head is bolted to the vessel, the limiting safety system settings shall be as specified below:

<u>Protective Action</u>	<u>Limiting Safety System Settings (psig)</u>
a. Scram on high reactor pressure (reactor vessel steam dome pressure)	$\leq 1045$
b. Nuclear system relief valves open on nuclear system pressure	4 valves at 1080 4 valves at 1090 3 valves at 1100

The allowable setpoint error for each valve shall be  $\pm 1\%$ . In the event that an installed safety-relief valve requires replacement, a spare valve whose setpoint is lower than that of the failed valve may be substituted for the failed valve until the first refueling outage following such substitution. No more than two valves with lower setpoints may be substituted in place of valves with higher setpoints. Spare valves which are used as substitutes under the abovementioned provisions shall have a setpoint equal to 1080 psig  $\pm 1\%$  or 1090 psig  $\pm 1\%$ .



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 39 TO FACILITY OPERATING LICENSE NO. DPR-57

GEORGIA POWER COMPANY  
OGLETHORPE ELECTRIC MEMBERSHIP CORPORATION  
EDWIN I. HATCH NUCLEAR PLANT UNIT NO. 1

DOCKET NO. 50-321

Introduction

By letter dated September 3, 1976, Georgia Power Company (GPC) requested an amendment to Facility Operating License No. DPR-57 for Edwin I. Hatch Nuclear Plant Unit No. 1 (HNP-1) which would modify the Technical Specification requirements related to safety-relief valve lift settings. This request was in response to our letter of July 23, 1976.

Background

The Technical Specifications which were established in conjunction with the issuance of Facility Operating License No. DPR-57 for HNP-1 included the following requirements related to the lift settings for the eleven safety-relief valves:

"Nuclear System Relief Valves	4 valves	1080 psig $\pm$ 1%
Open on Nuclear	4 valves	1090 psig $\pm$ 1%
System Pressure	3 valves	1100 psig $\pm$ 1%"

On March 6, 1976, the NRC issued Amendment No. 8 to Facility Operating License No. DPR-57 which modified the HNP-1 Technical Specifications related to safety-relief valve lift settings by incorporating the following requirements:

"Nuclear System Relief Valves	4 valves	less than or equal to 1091 psig
Open on Nuclear	4 valves	less than or equal to 1101 psig
System Pressure	3 valves	less than or equal to 1111 psig"

In the safety evaluation supporting Amendment No. 8, the NRC staff concluded that: (1) the proposed safety-relief valve lift settings were within the original allowable setpoint tolerance band, (2) the only critical aspect of the lift setting for valves of this type is the maximum value of the setting and the maximum allowable value is not increased, and (3) the proposed changes to the lift settings did not involve safety considerations which had not been previously addressed in the HNP-1 final safety analysis report (FSAR).

Subsequent to the issuance of License Amendment No. 8, the NRC staff has reevaluated the necessity for maintaining a  $\pm 1\%$  tolerance band on safety-relief valve lift settings. As a result of this reevaluation, we requested GPC to submit an application for license amendment to change the HNP-1 Technical Specifications related to safety-relief valve lift settings by incorporating settings which include a  $\pm 1\%$  tolerance band. In response to our request, GPC has proposed the following requirements:

"Nuclear System		
Relief Values	4 values	at 1080 psig
Open on Nuclear	4 values	at 1090 psig
System Pressure	3 values	at 1100 psig

The allowable setpoint error for each valve shall be  $\pm 1\%$ . In the event that an installed safety-relief valve requires replacement, a spare valve whose setpoint is lower than that of the failed valve may be substituted for the failed valve until the first refueling outage following such substitution. No more than two valves with lower setpoints may be substituted in place of valves with higher setpoints. Spare valves which are used as substitutes under the abovementioned provisions shall have a setpoint equal to 1080 psig  $\pm 1\%$  or 1090 psig  $\pm 1\%$ ."

### Evaluation

#### Lift Settings:

Although the conclusions made in the safety evaluation supporting License Amendment No. 8 for HNP-1 remain valid, the NRC staff has subsequently reevaluated the need for maintaining a  $\pm 1\%$  tolerance band on safety-relief valve lift settings and has concluded that:

- a. The  $\pm 1\%$  tolerance limit on the lift settings for safety-relief valves is consistent with the requirements of the current Edition and Addenda of the ASME Boiler and Pressure Vessel Code.
- b. The  $\pm 1\%$  tolerance provides some measure of assurance that the forces associated with the lifting and reseating characteristics of the valves will remain within acceptable limits. Thus, operation within these limits serves as a practical and indirect method of verifying that these characteristics remain acceptable and reduces the probability of occurrence of an uncontrolled reactor coolant system depressurization caused by failure of one or more of these valves to reseal properly.
- c. The  $\pm 1\%$  tolerance limit on the specified lift settings provides additional assurance that the safety-relief valves will not actuate at an undesirable low setpoint.

The safety-relief valve lift settings proposed by GPC are identical to those which were in effect prior to License Amendment No. 8, i.e., the same lift settings including a + 1% tolerance band. Consequently, we conclude that (1) the proposed changes provide additional assurance that the HNP-1 safety-relief valves will operate as designed, and (2) the results of the existing safety analysis, as presented in the HNP-1 FSAR, remain applicable.

#### Spare Safety-Relief Valves:

The Technical Specification changes proposed by GPC include provisions which would establish a certain degree of operational flexibility in the event that an installed safety-relief valve fails. These provisions would allow substitution of a spare safety-relief valve for a failed valve, even though the specified lift setting of the spare valve may be lower than that of the valve which is being replaced.

Operation with a spare safety-relief valve which has a lower lift setting than that of the valve which has been replaced is conservatively bounded by the current HNP-1 safety analysis. The effects of such operation on the transient and overpressure protection analyses would be a slight decrease in the duration of the high pressure condition and/or a slight decrease in the peak pressure resulting from the transient.

#### Summary

Based on the discussion above, we conclude that the proposed changes to the HNP-1 Technical Specifications related to safety-relief valve lift settings are acceptable.

#### Environmental Aspects

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in authorized power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4) that an environmental statement, negative declaration, or environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the changes do not involve a significant increase in the probability or consequences of accidents previously considered and do not involve a significant decrease in a safety margin, the changes do not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: November 17, 1976

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-321

GEORGIA POWER COMPANY  
OGLETHORPE ELECTRIC MEMBERSHIP CORPORATION

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY  
OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 39 to Facility Operating License No. DPR-57 issued to Georgia Power Company and Oglethorpe Electric Membership Corporation, which revised Technical Specifications for operation of the Edwin I. Hatch Nuclear Plant, Unit No. 1, located in Appling County, Georgia. The amendment is effective as of its date of issuance.

The amendment consists of changes to the Technical Specifications to modify the requirements related to safety-relief valve lift settings and the use of spare safety-relief valves.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment dated September 3, 1976, (2) Amendment No. 39 to License No. DPR-57 and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. and at the Appling County Public Library, Parker Street, Baxley, Georgia 31513.

A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Operating Reactors.

Dated at Bethesda, Maryland, this 17 day of November 1976.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in cursive script that reads "George Lear". The signature is written in black ink and is positioned above the typed name and title.

George Lear, Chief  
Operating Reactors Branch #3  
Division of Operating Reactors