6/8/76

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. 34 to Facility Operating License No. DPR-57 for Edwin I. Hatch Nuclear Plant Unit No. 1. This amendment is in respose to your request dated December 2, 1975.

This amendment revised the provisions in the Environmental Technical Specifications relating to (1) chlorination of the circulating water system and the plant service water system, (2) the maximum allowable chemical concentrations for discharge to the river of chemicals that affect water quality, and (3) estimated annual usage of Sodium Nitrite ($NaNO_2$).

We have evaluated the potential for environmental impact of plant operation in accordance with the enclosed amendment as follows:

1. The changes associated with chlorination of the circulating water and plant service water systems serve to clarify (1) the chlorination procedures in effect at Hatch Unit No. 1, and (2) the required sampling frequency and sampling locations for total residual chlorine. The changes do not result in a change in the amount of total residual chlorine release to the Altamaha River or to the duration of such releases.

2. The changes to the table of maximum allowable chemical concentrations which may be released to the Altamaha River for chemicals that affect water quality serve to clarify the original intent of the Specification (i.e., that the maximum allowable chemical concentrations released to the river shall not exceed the ambient river concentrations by more than the values indicated).

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SURNAME ➤						
DATE ➤						

3. The change to the estimated annual usage of sodium nitrite reflects actual operating experience at Hatch Unit No. 1. Since the cooling water systems which use sodium nitrite as a corrosion inhibitor are not normally discharged to the environment, there is no significant impact to the environment due to the increased usage estimate. Moreover, in the unlikely event that these systems were discharged to the Altamaha River, the resulting concentration of the nitrite (NO_2^-) ion in the river would be well below the toxic threshold for aquatic organisms in the river.

Consequently, we have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in 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.

This amendment does not involve new safety information of a type not considered by a previous Commission safety review of the facility. It does not involve a significant increase in the probability or consequences of an accident, does not involve a significant decrease in a safety margin, and therefore does not involve a significant hazards consideration. The Commission has further concluded that there is reasonable assurance that the health and safety of the public will not be endangered by the proposed action.

A copy of the related Federal Register Notice is also enclosed.

Sincerely,

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

Enclosures:
1. Amendment No. 34 to DPR-57
2. Federal Register Notice

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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. 34
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 December 2, 1975, 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; and

   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.

   E. After weighing the environmental aspects involved, 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

George Lear

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

Attachment:
Changes to the
Technical Specifications

Date of Issuance: June 8, 1976

ATTACHMENT TO LICENSE AMENDMENT NO. 34

TO THE TECHNICAL SPECIFICATIONS

FACILITY OPERATING LICENSE NO. DPR-57

DOCKET NO. 50-321

Replace pages 2-3, 2-4 and 2-6 with the attached revised pages. Add page 2-6a.

2.2 Hydraulic

Not applicable

2.3 Chemical

2.3.1 Chlorine

Objective

The objective of this specification is to keep total residual chlorine levels of the Altamaha River below those which may be harmful to aquatic organisms.

Specification

The total residual chlorine of the water discharged to the Altamaha River shall not exceed a maximum concentration of 0.5 mg/1 nor an average concentration of 0.2 mg/1.

Blowdown from the circulating water system shall be terminated while the circulating water system is being chlorinated directly from the chlorinators.

Blowdown from the circulating water system shall not normally be terminated when chlorinated water from the service water system is being released into the circulating water system.

Chlorinated water with measurable total residual chlorine will be released to the river for no more than two (2) hours per day.

Monitoring Requirements

When chlorination of the cooling towers is completed, grab samples will be taken near the condenser inlet and analyzed for total residual chlorine until the concentration of the total residual chlorine is equal to or less than 0.2 mg/1. Blowdown will then be released to the river and no grab samples will be taken at the discharge structure. However, if it becomes necessary to open the blowdown valve before the total residual chlorine is equal to or less than 0.2 mg/1, then grab samples will be taken at the discharge structure to assure that the total chlorine residual released to the river does not exceed two (2) hours per day or a concentration in excess of 0.5 mg/1.

When the chlorinated service water is being discharged into the circulating water flume and the blowdown valve is open, grab samples will be taken near the condenser inlet, at the service water discharge to the circulating

water flume, and at the discharge structure to be analyzed for total residual chlorine. If the total residual chlorine detected at the discharge structure is equal to or less than 0.2 mg/l, then sampling at the discharge structure will be terminated. This sampling, after each period of chlorination, will be continued until the relationship between chlorinated service water and the blowdown discharge concentration is established. Thereafter, the concentration relationship shall be checked monthly.

When chlorination of the service water has been completed, grab samples will be taken at the service water discharge to the circulating water flume to determine the total residual chlorine concentration prior to the service water being bypassed to the river. The service water will not be bypassed to the river until the total residual chlorine is equal to or less than 0.2 mg/l. No sample will be taken at the discharge structure.

When blowdown from the cooling tower system is terminated during chlorination, a series of grab samples of the service water discharge will be taken for analysis of the total residual chlorine if the service water system is being chlorinated.

Bases

Chlorine is expected to be used intermittently as a biocide to reduce or prevent the growth of algae and other organisms in the plant cooling water systems. The limits specified in the discharge to the Altamaha River together with the dilution in the river is considered adequate to protect aquatic biota.

Analysis of grab samples for total residual chlorine concentration following chlorination will assure that peak chlorine concentration can be controlled to keep the concentration below the specified limits.

This specification is tentative and will be finalized following the special study described in subsection 4.3 After one year of operation, these limits will be re-evaluated.

2.3.2 Corrosion Inhibitors

Not applicable

2.3.3 Suspended and Total Dissolved Solids

Not applicable

2.3 Chemical

2.3.5 Other Chemicals that Affect Water Quality

Objective

The objectives of this specification are to prevent unacceptable degradation of the water quality of the Altamaha River and to protect the aquatic biota.

Specification

The following concentrations of chemicals as measured prior to discharge to the river will not exceed ambient river concentrations by more than the values indicated:

Chemical	Concentration (ppm)
Silicates	60
Iron	2
Calcium	60
Magnesium	20
Sodium	77
Potassium	15
Sulfates	300
Phosphates	3
Carbonates	160
Copper	2
Zinc	5
Fluoride	1
Ammonia	2

The estimated maximum annual usage of the following chemicals is anticipated:

200,000 lbs.	50% Caustic (NaOH)
150,000 lbs.	66 Be' H_2SO_4
100 gals.	Hydrazine (35%)* N_2H_4
1,000 lbs.	$NaNO_2$*
800 gals.	NaOCl 9% solution

If any of the above limits are exceeded, an inspection will be made to determine the cause, and the situation corrected. Laboratory chemicals are not included in the above.

Monitoring Requirement

Grab samples will be taken monthly at the discharge and at an upstream location in the river. These samples shall be analyzed in the plant laboratory for the above listed chemicals. Grab samples will be taken monthly at the tank when batches of chemicals,

such as demineralized waste, are discharged to determine the concentration prior to dilution. The analysis will be performed in accordance with APHA accepted standards.

Each planned discharge of the Reactor Building Closed Cooling Water System or the Turbine Building Closed Cooling Water System to the river shall be monitored for solium nitrite.

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

Notice is hereby given that the U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 34 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 will revise the provisions in the Environmental Technical Specifications relating to (1) chlorination of the circulating water system and the plant service water system, (2) the maximum allowable chemical concentrations for discharge to the river of chemicals that affect water quality, and (3) estimated annual usage of Sodium Nitrite ($NaNO_2$).

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 statement, negative declaration or 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 December 2, 1975, (2) Amendment No. 34 to License No. DPR-57, and (3) the related evaluation presented in Commission's letter to the licensee dated June 8, 1976. 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 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 8 day of June 1976.

FOR THE NUCLEAR REGULATORY COMMISSION

George Lear

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