March 26, 1986

Docket No.: 50-321

Mr. J. T. Beckham, Jr.

Georgia Power Company

Atlanta, Georgia 30302

Vice President - Nuclear Generation

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OPA	SNorris
LHarmon	GRivenbark
ACRS-10	Gray File
TBarnhart-8	RScholl

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Dear Mr. Beckham:

P. O. Box 4545

The Commission has issued the enclosed amendments to Facility Operating Licenses No. DPR-57 and NPF-5, for the Edwin I. Hatch Nuclear Plant, Unit Nos. 1 and 2. The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated December 21, 1983 as modified by your letter dated April 16, 1984.

The amendments revise the TSs for Hatch Units 1 and 2 to modify the limiting conditions for operation and the surveillance intervals for the Hydrogen and Oxygen Post-Accident Monitors and to correct a typographical error.

A copy of our Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's Biweekly <u>Federal Register</u> Notice.

Sincerely,

Original signed by

George W. Rivenbark, Project Manager BWR Project Directorate #2 Division of BWR Licensing

Enclosures:

1. Amendment Nos. 124 and 62

2. Safety Evaluation

cc w/enclosures: See next page

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Mr. J. T. Beckham, Jr. Georgia Power Company Edwin J. Hatch Nuclear Plant, Units Nos. 1 and 2

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#### cc: Bruce W. Churchill, Esquire Shaw, Pittman, Potts & Trowbridge 1800 M Street, N.W. Washington, D.C. 20036

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Regional Administrator, Region JJ U.S. Nuclear Regulatory Commission, 101 Marietta Street, Suite 3100 Atlanta, Georiga 30303

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Chairman Appling County Commissioners County Courthouse Baxley, Georgia 31513



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. 50-321

#### EDWIN I. HATCH NUCLEAR PLANT, UNIT NO. 1

#### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 124 License No. DPR-57

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Georgia Power Company, et al., (the licensee) dated December 21, 1983 as modified by letter dated April 16, 1984, 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.
- 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. DPR-57 is hereby amended to read as follows:

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#### Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 124, 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.

FOR THE NUCLEAR REGULATORY COMMISSION

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Daniel R. Muller, Director BWR Project Directorate #2 Division of BWR Licensing

Attachment: Changes to the Technical Specifications

Date of Issuance: March 26, 1986

- 2 -

# ATTACHMENT TO LICENSE AMENDMENT NO. 124

# FACILITY OPERATING LICENSE NO. DPR-57

# DOCKET NO. 50-321

Replace the following pages of the Appendix "A" Technical Specifications with the attached pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change.

Remove	Insert
3.2-22	3.2-22
3.2-23a	3.2-23a
3.2-48	3.2-48
3.7-33	3.7-33
3.7-39	3.7-39

# Table 3.2-11

# INSTRUMENTATION WHICH PROVIDES SURVEILLANCE INFORMATION

Amen	INSTRUMENTATION WHICH PROVIDES SURVEILLANCE INFORMATION					
dment No.	Ref. No. (a)	Instrument (b)	Required Operable Instrument Channels	Type and Range	Action	Remarks
<b>79, 9</b> ; 124,	1	Reactor Vessel Water Level	1 2	Recorder -150" to +60" Indicator -150" to +60"	(c) (c)	(d) (d)
2, 99,	2	Shroud Water Level	1 1	Recorder -317" to -17" Indicator -317" to -17"	(c) (c)	(d) (d)
793,	3	Reactor Pressure	1 2	Recorder 0 to 1500 psig Indicator 0 to 1500 psig	(c) (c)	(d) (d)
108,	4	Drywell Pressure	2	Recorder -10 to +90 psig	(c)	(d)
727	5	Drywell Temperature	2	Recorder O to 500°F	(c)	(d)
ູ ພ •	6	Suppression Chamber Air Temperature	2	Recorder O to 500°F	(c)	(d)
2-22	7	Suppression Chamber Water Temperature	2	Recorder O to 250°F	(c)	(d)
	8	Suppression Chamber Water Level	2 2	Indicator O to 300" Recorder O to 30"	(c) (c)(e)	(d) (d)
	9	Suppression Chamber Pressure	2	Recorder -10 to +90 psig	(c)	(d)
	10	Rod Position Information System (RPIS)	1	28 Volt Indicating Lights	(c)	(d)
	11	Hydrogen and Oxygen Analyzer	1	Recorder O to 5%	(†)	(d) <sup>`</sup>
	12	Post LOCA Radiation Monitoring System	1	Recorder Indicator 1 to 10 <sup>6</sup> R/hr	(c) (c)	(d) (d)
	13	a) Safety/Relief Valve Position Primary	1/SRV	Indicating Light at 85 psig	(f)	
	-	Indicator b) Safety/Relief Valve Position Secondary Indicator	1	Recorder O to 600°F	(f)	

#### NOTES FOR TABLE 3.2-11 (Continued)

With the plant in the power operation, startup, or hot shutdown condition and with the number of operable channels less than the required operable channels, initiate the preplanned alternate method of monitoring the appropriate parameter within 72 hours and:

1. either restore the inoperable channel(s) to operable status within 7 days of the event, or

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Amendment No. XX8, 124,

- 2. prepare and submit a special report to the NRC pursuant to Specification 6.9.2 within 14 days following the event outlining the action taken, the cause of the inoperability, and the plans and schedule for restoring the system to operable status.
- A channel contains two detectors: one for mid-range noble gas, and one for high range noble gas. Both detectors must be operable to consider the channel operable.

i. Instrumentation shall be operable with continuous sampling capability within 30 minutes of an ECCS actuation during a LOCA. See Section 3.7.A.6.c for the LIMITING CONDITION FOR OPERATION.

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Amendment No. 79, 99, XX, 124,

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	· Table 4.2-11
Check and	Calibration Minimum Frequency for Instrumentation
	Which Provides Surveillance Information

Ref. No. (a)	Instrument	Instrument Check Minimum Frequency (b)	Instrument Calibration Minimum Frequency (c)
1	Reactor Vessel Water Level	Each shift	Once/operating cycle (f)
2	Shroud Water Level	Each shift	Once/operating cycle (f)
3	Reactor Pressure	Each shift	Once/operating cycle (f)
4	Drywell Pressure	Each shift	Every 6 months
5	Drywell Temperature	Each shift	Every 6 months
6	Suppression Chamber Air Temperature	Each shift	Every 6 months
7	Suppression Chamber Water Temperature	Each shift	Every 6 months
. 8	Suppression Chamber Water Level	Each shift	Every 6 months
9	Suppression Chamber Pressure	Each shift	Every 6 months
10	Rod Position Information System (RPIS)	Each shift	N/A
11	Hydrogen and Oxygen Analyzer	Monthly	Every 3 months
12	Post LOCA Radiation	Each shift	Every 6 months

 a) Safety/Relief Valve Position Pri- Monthly Every 18 months mary Indicator
b) Safety/Relief Valve Position Monthly Every 18 months Secondary Indicator

#### BASES FOR LIMITING CONDITIONS FOR OPERATION

# 3.7.A.5 Oxygen Concentration (Continued)

The occurrence of primary system leakage following a major refueling outage or other scheduled shutdown is much more probable than the occurrence of the loss-of-coolant accident upon which the specified oxygen concentration limit is based. Permitting access to the drywell for leak inspections during a startup is judged prudent in terms of the added plant safety offered without significantly reducing the margin of safety. Thus, to preclude the possibility of starting the reactor and operating for extended periods of time with significant leaks in the primary system, leak inspections are scheduled during startup periods, when the primary system is at or near rated operating temperature and pressure. The 24-hour period to provide inerting is judged to be sufficient to perform the leak inspection and establish the required oxygen concentration.

The primary containment is normally slightly pressurized during periods of reactor operation. Nitrogen used for inerting could leak out of the containment but air could not leak in to increase oxygen concentration.

#### 6. Containment Atmosphere Dilution (CAD)

In order to ensure that the containment atmosphere remains inerted, i.e., the oxygen-hydrogen mixture is maintained below the flammable limit, the capability to inject nitrogen into the containment after a LOCA is provided. The post-LOCA Containment Atmosphere Dilution system design basis and description are presented in Section 5.2.4.9 of the FSAR.

By maintaining at least a 7-day supply of nitrogen onsite, there will be sufficient time after the occurrence of a LOCA for obtaining additional nitrogen from local commercial sources.

The H<sub>2</sub> and O<sub>2</sub> analyzer system is a redundant system consisting of two H<sub>2</sub> analyzers and two O<sub>2</sub> analyzers with a sampling system which provides for four sampling points. Two sample lines are connected to the drywell and two are connected to the torus. One H<sub>2</sub> analyzer and one O<sub>2</sub> analyzer sample the drywell while the other H<sub>2</sub> and O<sub>2</sub> analyzers sample the torus. Using a system of automatic valves, the sample lines are switched to provide sampling from different areas of the drywell and the torus. This system provides periodic but continuous post-LOCA sampling alternately from the two drywell sample points and the two torus sample points. The period of sampling from each point is adjustable.

Due to the nitrogen addition, the pressure in the containment after a LOCA will increase with time. Under the worst expected conditions, the containment pressure will reach 30 psig in approximately 20 days. If and when that pressure is reached, venting from the primary containment shall be manually initiated.. The venting path will include the standby gas treatment system and the main stack in order to minimize the offsite dose.

Amendment No. 124

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BASES FOR SURVEILLANCE REQUIREMENTS

#### 4.7.A.6. Containment Atmosphere Dilution (CAD)

As discussed in the Bases for Specification 3.7.4.6, the  $H_2 O_2$ analyzer system is redundant and flexible by design. If either an  $H_2$  or  $O_2$  analyzer fails, the periodic sampling remains unchanged, since the second  $H_2$  and  $O_2$  analyzer is still in service. For normal operation, a monthly calibration check using known samples will be adequate to determine the operability and calibration of each analyzer and to ensure the system's reliability.

# B. Standby Gas Treatment System and

C. Secondary Containment

Pressure drop across the combined HEPA filters and charcoal adsorbers of less than 6 inches of water at the system design flow rate will indicate that the filters and adsorbers are not clogged by excessive amounts of foreign matter. A test frequency of once per operating cycle established system performance capability.

The frequency of tests and sample analysis are necessary to show that the HEPA filters and charcoal adsorbers can perform as evaluated. Replacement adsorbent should be qualified according to the guidelines of Regulatory Guide 1.52. The charcoal adsorber efficiency test procedures should allow for the removal of one adsorber tray, emptying of one bed from the tray, mixing the adsorbent thoroughly and obtaining at least two samples. Each sample should be at least two inches in diameter and a length equal to the thickness of the bed. If the iodine removal efficiency test results are unacceptable, all adsorbent in the system should be replaced. Any HEPA filters found defective should be replaced with filters qualified pursuant to Regulatory Position C.3.d of Regulatory Guide 1.52.

Operation of the system every month will demonstrate operability of the filters and adsorber system. Operation for 10 hours is used to reduce the moisture build up on the adsorbent.

If painting, fire, or chemical release occurs such that the HEPA filter or charcoal adsorber could become contaminated from the fumes, chemicals or foreign materials, the same tests and sample analysis should be performed as required for operational use.

Demonstration of the automatic initiation capability is necessary to assure system performance capability.



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. 62 License No. NPF-5

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Georgia Power Company, et al., (the licensee) dated December 21, 1983 as modified by letter dated April 16, 1984, 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.
- 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. NFP-5 is hereby amended to read as follows:

#### Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 62, 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.

FOR THE NUCLEAR REGULATORY COMMISSION

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and R. M.

Daniel R. Muller, Director BWR Project Directorate #2 Division of BWR Licensing

Attachment: Changes to the Technical Specifications

Date of Issuance: March 26, 1986

# ATTACHMENT TO LICENSE AMENDMENT NO. 62

# FACILITY OPERATING LICENSE NO. NPF-5

# DOCKET NO. 50-366

Replace the following pages of the Appendix "A" Technical Specifications with the attached pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change. The corresponding overleaf pages are also provided to maintain document completeness.

# Remove

#### Insert

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# TABLE 3.3.6.4-1

# POST-ACCIDENT MONITORING INSTRUMENTATION

ЦЦ ЦЦ	POST-ACCIDENT NONITORING INSTRUMENTATION	
I BILLE	INSTRUMENT	MINIMIM · CHANNELS OPERANLE
	1. Reactor Vessel Pressure (2B21-R623 A, B)	2
	2. Reactor Vessel Shroud Water Level (2B21-R610, 2B21-R615)	2
•	3. Suppression Chamber Water Level (2T48-R622 A, B)	. 2
	4. Suppression Chamber Water Temperature (2T47-R626, 2T47-R627)	2
	5. Suppression Chamber Pressure (2T48-R608, 2T48-R609)	2
3/	6Drywell Pressure (2T48-R608, 2T48-R609)	2
ын Ц	7. Drywell Temperature (2T47-R626, 2T47-R627)	2
4	8. Post-LOCA Gamma Radiation (2D11-K622 A, B, C, D)	2
	9. Dryw11 H2-02 Analyzer (2P33-R601 A, B)	2*
	10. a) Safety/Relief Valve Position Primary Indicator (2B21-N301 A-H and K-M)	(H)
	b) Safety/Relief Valve Position Secondary Indicator (2021-NOO4 A-H and K-M)	<b>(</b> a)
	11. Drywell High Range Pressure (2T48-R601 A, B)	2
	12. Drywell High Range Radiation (2011-K621 A, B, 2T48-R601A, B)	2 (b)
	13. Main Stack Post-Accident Effluent Monitor (D11-R631)	1 (b)(c)
	14. Reactor Building Vent Plenum Post-Accident Effluent Monitor (2011-R631)	1 (b)(c)

\*The Drywell  $H_2O_2$  Analyzers shall be operable with continuous sampling capability within 30 minutes of an ECCS actuation during a LOCA.

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Amendment 79. 62, 33, 32, 25,



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

## SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

#### SUPPORTING AMENDMENT NOS. 124 AND 62 TO FACILITY UPERATING LICENSE NOS. DPR-57 AND NPF-5

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

EDWIN I. HATCH NUCLEAR PLANT, UNITS NOS. 1 AND 2

DOCKET NOS. 50-321 AND 50-366

#### 1.0 INTRODUCTION AND EVALUATION

On December 21, 1983, Georgia Power Company (licensee) requested changes to the Hatch Unit 1 and Unit 2 Technical Specifications (TSs) for the Hydrogen and Oxygen Post-Accident Monitors. This request, related to TMI Item II.F.1.1, was supplemented by the licensee on April 16, 1984. These requested changes are discussed below:

- A. The licensee requested that the range of the Hydrogen and Oxygen Analyzer listed in Table 3.2-11 of the Unit 1 TSs be changed from 0 to 52 to 0 to 5%. The licensee provided the following basis: "This change is purely administrative in that it corrects a typographical error inserted into the Technical Specifications by Amendment No. 79. This change would have no effect on existing accident probabilities or consequences, would not create any new type of accident scenario, and would not decrease the margin of safety." We agree with the licensee and conclude that this change is acceptable.
- B. The licensee has requested that TS Table 3.2.11 note (c) be deleted from the Action column for the Hydrogen and Oxygen Analyzer listed as item 11 in this table. This note allowed operation for 30 days whenever a parameter (hydrogen or oxygen in this case) is reduced to one indication. It allows operation for seven days if one of the parameters is not indicated in the control room if surveillance at local panels is substituted for the missing control room indication during the seven days. TS 3.7.A.6c provides a redundant and more restrictive requirement for operability of the Hydrogen and Oxygen Analyzer in that it requires at least one Hydrogen and Oxygen Analyzer to be operable whenever the reactor is in power operation and TS 3.7.A.8 requires the plant to be brought to hot shutdown within 12 hours if TS 3.7.A.6.c cannot be met.

Since TS 3.7.A.6c and TS 3.7.A.8 are more restrictive on the operation of the Hydrogen and Oxygen Analyzer than is note (c), removal of note (c) as a requirement for the Hydrogen and Oxygen Analyzer is acceptable.

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- C. The licensee requested that a new note be added to TS Table 3.2.11 and made applicable to the Hydrogen and Oxygen Analyzer. This note would require that the Hydrogen and Oxygen Analyzer be operable with continuous sampling capability within 30 minutes of an ECCS actuation during a LOCA. This requirement is consistent with the requirements of NUREG-0737 "Clarification of TMI Action Plant Requirements", Item II.F.1.6 and is acceptable. We have designated this new note as note (i).
- D. The licensee requested that the instrument check minimum frequency as listed in Table 4.2-11 of the Unit 1 TS be changed from "Each Shift" to "Monthly." The licensee provided the following basis: "This change would decrease the frequency of Instrument Checks. However, operating experience has shown that frequent operation of the H<sub>2</sub> and O<sub>2</sub> analyzers tends to lower the reliability of that equipment. Furthermore, the vendor for these analyzers has recommended the monthly instrument check frequency as being optimal for maintaining maximum equipment operability." We note that the present STS suggest a monthly frequency. We conclude that this request is acceptable.
- The licensee requested that the instrument calibration minimum Ε. frequency for the H<sub>2</sub> and O<sub>2</sub> analyzer as listed in Table 3.2-11 of the Unit 1 TS be changed from "Every 6 months" to "Every 3 months." The licensee provided the following basis: "This change constitutes a more restrictive operational limitation. The new calibration interval is consistent with the vendor's recommendations for these analyzers. The probability of a postulated accident occurring and the effects resulting from any such accident are unchanged. The Technical Specification changes create no new accident scenario, and increase the margin of safety." The staff notes that the minimum frequency recommended in the STS is once each refueling. The Generic Letter recommended once each 92 days. The staff has concluded that the licensee has provided a sound technical basis for the request and that the basis is as conservative or more conservative than past staff guidance. Therefore, we conclude that this change is acceptable.

#### 2.0 ENVIRONMENTAL CONSIDERATION

The amendments involve changes in a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. We have determined that the amendments involve 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 amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environment impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

# 3.0 CONCLUSION

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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 amendments will not be inimical to the common defense and security or to the health and safety of the public.

Dated: March 26, 1986

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Principal Contributor: Ray Scholl, G. Rivenbark