

September 12, 1988

Docket Nos: 50-321  
50-366

Mr. W. G. Hairston, III  
Senior Vice President -  
Nuclear Operations  
Georgia Power Company  
P. O. Box 4545  
Atlanta, Georgia 30302

Dear Mr. Hairston:

SUBJECT: ISSUANCE OF AMENDMENT NO. 156 TO FACILITY OPERATING LICENSE DPR-57 -  
AND AMENDMENT NO. 96 TO FACILITY OPERATING LICENSE NO. NPF-5 -  
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 and 2 (TACS 68686/68687)

The Commission has issued the enclosed Amendment No. 156 to Facility Operating License DPR-57 and Amendment No. 96 to Facility Operating License No. NPF-5 for the Edwin I. Hatch Nuclear Plant, Units 1 and 2. The amendments consist of changes to the Technical Specifications (TS) in response to your application dated June 20, 1988.

The amendments change the TS to delete all references to the main control room chlorine detectors and to the automatic isolation of the main control room environmental control system on high chlorine level.

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,

Original Signed By:

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

Enclosures:

1. Amendment No. 156 to DPR-57
2. Amendment No. 96 to NPF-5
3. Safety Evaluation

cc w/ enclosures:  
See next page

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LA:PDII-3  
M:odd  
8/8/88

PM:PDII-3  
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Mr. W. G. Hairston, III  
Georgia Power Company

Edwin I. Hatch Nuclear Plant,  
Units Nos. 1 and 2

cc:

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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. 156  
License No. DPR-57

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment to the Edwin I. Hatch Nuclear Plant, Unit 1 (the facility) Facility Operating License No. DPR-57 filed by Georgia Power Company, acting for itself, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia, (the licensee) dated June 20, 1988, 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. DPR-57 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 156, 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

David B. Matthews, Director  
Project Directorate II-3  
Division of Reactor Projects-I/II

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: September 12, 1988

OFFICIAL RECORD COPY

LA:PDII-3  
MRood  
8/15/88

PM:PDII-3  
LCrocker:sw  
8/18/88

RR:SPLB  
JCraig  
8/18/88

ORC-WF  
R. Bachman  
8/17/88

D:PDII-3  
DBMatthews  
8/19/88

ATTACHMENT TO LICENSE AMENDMENT NO. 156

FACILITY OPERATING LICENSE NO. DPR-57

DOCKET NO. 50-321

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

Remove Page

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3.12-6

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3.2-66  
3.12-2  
3.12-3  
3.12-4  
3.12-5  
3.12-6

occurs with each monitor indicating HI HI HI, one monitor HI HI HI and the other downscale, or with both monitors downscale. The HI HI HI setpoint corresponds to the instantaneous release limit.

2. Refueling Floor Exhaust Vent Radiation Monitors

Four radiation monitors are provided which initiate isolation of the secondary containment and operation of the standby gas treatment system. The instrument channels monitor the radiation from the refueling area ventilation exhaust ducts.

Two instrument channels with two radiation monitors in each channel are arranged in a two upscale (either channel) trip logic. Trip settings for the monitors in the refueling floor exhaust ventilation ducts are based upon initiating normal ventilation isolation and standby gas treatment system operation so that none of the activity released during the refueling accident leaves the reactor building via the normal ventilation path but rather all the activity is processed by the standby gas treatment system.

3. Reactor Building Exhaust Vent Radiation Monitors

Four radiation monitors are provided which initiate secondary containment isolation, primary containment purge and vent valves isolation and standby gas treatment system actuation. The instrument channels monitor the radiation from the reactor building lower level ventilation exhaust duct.

Two instrument channels with two radiation detectors in each channel are arranged in a two upscale (either channel) trip logic. The trip settings are based on limiting the release of radioactivity via the normal ventilation path and rerouting this activity to be processed through the standby gas treatment system.

4. Control Room Intake Radiation Monitors

Two radiation monitors are provided to initiate pressurization of the main control room and recirculation of control room air through filters. The instrument channels monitor radiation from the control room ventilation intake duct.

Two instrument channels are arranged in one upscale, two downscale trip logic. The trip settings are based on limiting the radioactivity from entering the control room from outside.

5. Main Steam Line Radiation Monitors

Although their primary function is to close the MSIVs, the four Main Steam Line radiation monitors also initiate isolation of the mechanical vacuum pump and the gland seal exhaust condenser. The instrument channels monitor the radiation in the main steam line tunnel. The purpose of automatically isolating the mechanical vacuum pump line is to provide timely protection against the release of radioactive materials from the main condenser. Upon receipt of main steam line high radiation signals, the primary containment and reactor vessel isolation control system initiates closure of the mechanical vacuum pump line valve. This isolation precludes or limits the release of fission product radioactivity which, upon fuel failure would be transported from

3.12.A.2. Performance Requirements

- a. The results of the in-place DOP and halogenated hydrocarbon tests at design flows on HEPA filters and charcoal absorber banks shall show >99-percent DOP removal and >99-percent halogenated hydrocarbon removal, respectively when tested in accordance with ANSI N510-1975.
- b. The results of laboratory carbon sample analysis shall show >90-percent radioactive methyl iodide removal when tested in accordance with RDT-M16-1T (25°C, 95-percent R.H.).
- c. Fans shall be shown to operate within  $\pm 10$ -percent design flow when tested in accordance with ANSI N510-1975.

4.12.A.2. Filter Testing

- a. The tests and analysis shall be performed at least once per operating cycle, not to exceed 18 months, or after every 720 hours of system operation or following painting, fire or chemical release in any ventilation zone communicating with the system.
- b. DOP testing shall be performed after each complete or partial replacement of the HEPA filter bank or after any structural maintenance on the system housing.
- c. Halogenated hydrocarbon testing shall be performed after each complete or partial replacement of the charcoal adsorber bank of after any structural maintenance on the system housing.

B. Isolation Valve Operability and Closing Time

(Deleted)

B. Isolation Valve Testing

(Deleted)

3.12.C. Radiation Monitors

The control room air intake radiation monitors or suitable respective temporary units shall be operable whenever the ventilation system is required to be operable by Specification 3.12.A.1. except that one radiation monitor may be out of service 30 days.

D. Shutdown Requirements

In the event that Specifications 3.12.A. through 3.12.C. cannot be met, the reactor shall be placed in the Cold Shutdown Condition within 36 hours or, if refueling operations are in progress, such operations will be terminated within 2 hours.

E. Chlorine Monitors

(Deleted)

4.12.C. Radiation Monitors

The control room air intake radiation monitors shall be tested in accordance with Table 4.2-8.

E. Chlorine Monitors

(Deleted)



### 3.12. MAIN CONTROL ROOM ENVIRONMENTAL SYSTEM

The control room air treatment system is designed to filter the control room atmosphere for intake air and/or for recirculation during pressurization conditions.

#### A. Ventilation System Operability Requirements

The control room air treatment system operates on emergency power and is designed to filter the control room atmosphere for intake air and or recirculation air during control room pressurization conditions. The control room air treatment system is designed to automatically start upon receipt of an initiation signal and to align the system dampers to provide for pressurization of the control room.

Pressurization will be initiated upon receipt of any one of the following signals: High radiation at control room intake, LOCA signal from Unit 1 or 2, main steam line high radiation from Unit 1 or 2, main steam line high flow from Unit 1 or 2, or refueling floor high radiation from Unit 1 or 2. In this mode the normal control room exhaust fan is stopped and outside air is taken in through one of the charcoal filters to pressurize the control room with respect to the surrounding turbine building.

High efficiency particulate air (HEPA) filters are installed before the charcoal adsorbers to prevent clogging of the iodine adsorbers. The charcoal adsorbers are installed to reduce the potential intake of radioiodine to the control room. Bypass leakage for the charcoal adsorbers and particulate removal efficiency for HEPA filters are determined by halogenated hydrocarbon and DOP, respectively. The laboratory carbon sample test results indicate a radioactive methyl iodide removal efficiency for expected accident conditions. Operation of the fans significantly different from the design flow will change the removal efficiency of the HEPA filters and charcoal adsorbers. If the performances are as specified, the calculated doses would be less than the allowable levels stated in Criterion 19 of the General Design Criteria for Nuclear Power Plants, Appendix A to 10 CFR Part 50.

B. Isolation Valve Operability and Closing Time

(Deleted)

C. Radiation Monitors

At least one channel (detector) in the control room air intake radiation monitoring system must be operable at all times for indication-alarm of radioactivity being drawn into the main control room. Main control room intake air filtration is required when a trip signal from the detectors is given via failure or pressurization signals from both channels or a failure signal in one channel and a pressurization signal in the other channel.

D. Shutdown Requirements

Shutdown requirements are based on the need to ensure habitability for operations personnel during normal plant operation and subsequent to a postulated design basis accident.

F. Chlorine Monitors

(Deleted)

4.12. MAIN CONTROL ROOM ENVIRONMENTAL SYSTEM

A. Ventilation System Tests

Pressure drop across the combined HEPA filters and charcoal adsorbers of less than 6 in. 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 shall 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 2 in. 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 15 minutes demonstrates operability and removes the moisture build-up during testing.

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.

B. Isolation Valve Testing

(Deleted)

C. Radiation

Bases for the control room air intake radiation monitors are specifically discussed in Bases for Limiting Conditions for Operation, Specification 3.2.H.4., and are generally discussed in Bases for Surveillance Requirements, Specification 4.2.

D. References

1. (Deleted)

2. (Deleted)

3. ANSI Standard N101.1, 1972, "Efficiency Testing of Air-Cleaning Systems Containing Devices for Removal of Particulates".



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. 96  
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 June 20, 1988, 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.

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. 96, 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

David B. Matthews, Director  
Project Directorate II-3  
Division of Reactor Projects-I/II

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: September 12, 1988

PDII-3  
MRood  
08/8/88

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08/8/88

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NRR:SPLB  
JCraig  
08/18/88

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OCC-WF PDII-3  
R Bachmann DMatthews  
08/17/88 08/19/88

ATTACHMENT TO LICENSE AMENDMENT NO. 96

FACILITY OPERATING LICENSE NO. NPF-5

DOCKET NO. 50-366

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

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HATCH - UNIT 2

3/4 3-58a

Amendment No. 96

TABLE 3.3.6.7-1 (SHEET 1 OF 2)  
MCRECS ACTUATION INSTRUMENTATION

<u>TRIP FUNCTION</u>	<u>MINIMUM NUMBER OPERABLE CHANNELS PER TRIP SYSTEM(a)(b)</u>	<u>APPLICABLE OPERATIONAL CONDITION</u>	<u>ACTION</u>
1. Reactor Vessel Water Level - Low Low Low (Level 1) (c) 2B21-N691 A, B, C, D	2	1, 2, 3	52
2. Drywell Pressure - High (c) 2E11-N694 A, B, C, D	2	1, 2, 3	52
3. Main Steam Line Radiation - High (c) 2D11-K603 A, B, C, D	2	1, 2, 3, (*)	53
4. Main Steam Line Flow - High (c) 2B21-N686 A, B, C, D 2B21-N687 A, B, C, D 2B21-N688 A, B, C, D 2B21-N689 A, B, C, D	2/line	1, 2, 3	53
5. Refueling Floor Area Radiation - High (c) 2D21-K002 A, D	1	1, 2, 3, 5, *	54
6. Control Room Air Inlet Radiation - High (c) 1Z41-R615 A, B	1	1, 2, 3, 5, *	54

TABLE 3.3.6.7-1 (SHEET 2 OF 2)

MCRECS ACTUATION INSTRUMENTATION

ACTION

- ACTION 52 - Take the ACTION required by Specification 3.3.3.
- ACTION 53 - Take the ACTION required by Specification 3.3.2.
- ACTION 54 -

- a. With one of the required radiation monitors inoperable, restore the monitor to OPERABLE status within 7 days or, within the next 6 hours, initiate and maintain operation of the MCRECS in the pressurization mode of operation.
- b. With no radiation monitors OPERABLE, within 1 hour initiate and maintain operation of the MCRECS in the pressurization mode of operation.
- c. The provisions of Specification 3.0.4 are not applicable.

NOTES

- \* When handling irradiated fuel in secondary containment.
- a. A channel may be placed in an inoperable status for up to 2 hours for required surveillance without placing the trip system in the tripped condition, provided at least one other OPERABLE channel in the same trip system is monitoring that parameter.
  - b. With a design providing only one channel per trip system, an inoperable channel need not be placed in the tripped condition where this would cause the Trip Function to occur. In these cases, the inoperable channel shall be restored to OPERABLE status within 2 hours or the ACTION required by Table 3.3.6.7-1 for that Trip Function shall be taken.
  - c. Actuates the MCRECS in the control room pressurization mode.
  - d. (Deleted)
  - e. Within 24 hours prior to the planned start of the hydrogen injection test with the reactor power at greater than 20-percent rated power, the normal full-power radiation background level and associated trip setpoints may be changed based on a calculated value of the radiation level expected during the test. The background radiation level and associated trip setpoints may be adjusted during the test based on either calculations or measurements of actual radiation levels resulting from hydrogen injection. The background radiation level shall be determined and associated trip setpoints shall be set within 24 hours of re-establishing normal radiation levels after completion of hydrogen injection and prior to establishing reactor power levels below 20-percent rated power.



TABLE 3.3.6.7-2  
MCRECS ACTUATION INSTRUMENTATION SETPOINTS

<u>TRIP FUNCTION</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUE</u>
1. Reactor Vessel Water Level - Low Low Low (Level 1)	≥ -113 inches	≥ - 113 inches
2. Drywell Pressure - High	≤ 1.92 psig	≤ 1.92 psig
3. Main Steam Line Radiation - High	≤ 3 × full-power background*	≤ 3 × full-power background*
4. Main Steam Line Flow - High	≤ 138% rated flow	≤ 138% rated flow
5. Refueling Floor Area Radiation - High	≤ 20 mr/hour	≤ 20 mr/hour
6. Control Room Air Inlet Radiation - High	≤ 1 mr/hour	≤ 1 mr/hour

\*Within 24 hours prior to the planned start of the hydrogen injection test with the reactor power at greater than 20-percent rated power, the normal full power radiation background level and associated trip setpoints may be changed based on a calculated value of the radiation level expected during the test. The background radiation level and associated trip setpoints may be adjusted during the test based on either calculations or measurements of actual radiation levels resulting from hydrogen injection. The background radiation level shall be determined and associated trip setpoints shall be set within 24 hours of re-establishing normal radiation levels after completion of hydrogen injection and prior to establishing reactor power levels below 20-percent rated power.

HATCH - UNIT 2

3/4 3-58d

Amendment No. 96

TABLE 4.3.6.7-1

MCRECS ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

	<u>TRIP FUNCTION</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>CHANNEL CALIBRATION</u>	<u>OPERATIONAL CONDITIONS IN WHICH SURVEILLANCE REQUIRED</u>
1.	Reactor Vessel Water Level - Low Low Low (Level 1)	S	M	R	1, 2, 3
2.	Drywell Pressure - High	S	M	R	1, 2, 3
3.	Main Steam Line Radiation - High	D	W <sup>(*)</sup>	R	1, 2, 3
4.	Main Steam Line Flow - High	S	M	R	1, 2, 3
5.	Refueling Floor Area Radiation - High	D	M <sup>(*)</sup>	Q	1, 2, 3, 5 *
6.	Control Room Air Inlet Radiation - High	NA	M <sup>(*)</sup>	R	1, 2, 3, 5, *

\* When handling irradiated fuel in the secondary containment.

a. Instrument alignment using a standard current source.

## PLANT SYSTEMS

### 3/4.7.2 MAIN CONTROL ROOM ENVIRONMENTAL CONTROL SYSTEM (MCRECS)

#### LIMITING CONDITION FOR OPERATION

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3.7.2 Two independent MCRECS shall be OPERABLE.

APPLICABILITY: CONDITIONS 1, 2, 3, 5, and \*\*.

ACTION:

- a. With one MCRECS inoperable, restore the inoperable system to OPERABLE status within 7 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- b. With both MCRECS inoperable, be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.

#### SURVEILLANCE REQUIREMENTS

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4.7.2 Each MCRECS shall be demonstrated OPERABLE:

- a. At least once per 12 hours by verifying that the control room air temperature is  $\leq 105^{\circ}\text{F}$ .
- b. At least once per 31 days, by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the system operates for at least 15 minutes.
- c. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system by:
  1. Performing a visual inspection of the system and all associated components before each leak test in accordance with Section 5 of ANSI N510-1975.

\*\*When handling irradiated fuel in secondary containment.

## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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2. Verifying that the cleanup system satisfies the in-place testing acceptance criteria and uses the test procedures of Regulatory Positions C.5.a, C.5.c and C.5.d of Regulatory Guide 1.52, Revision 1, July 1976, and the system flow rate is 2500 cfm  $\pm$  10 percent.
  3. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 1, July 1976, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 1, July 1976.
  4. Verifying a system flow rate of 2500 cfm  $\pm$  10 percent during system operation when tested in accordance with ANSI N510-1975.
- d. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 1, July 1976, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 1, July 1976.
- e. At least once per 18 months by:
1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is  $<$  6 in. W. G. while operating the system at a flow rate of 2500 cfm  $\pm$  10 percent.
  2. (Deleted)

## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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3. Verifying that on each of the below pressurization mode actuation test signals, the system automatically switches to the pressurization mode of operation and maintains the main control room at a positive pressure of  $\geq 0.1$ -in. W.G. relative to the adjacent turbine building during system operation at a flow rate  $\leq 400$  cfm.
  - a) Reactor vessel water level - low low low
  - b) Drywell pressure - high
  - c) Refueling floor area radiation - high
  - d) Main steam line radiation - high
  - e) Main steam line flow - high
  - f) Control room intake monitors radiation - high
- f. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove  $\geq 99$  percent of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 2500 cfm  $\pm 10$  percent.
- g. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove  $\geq 99$  percent of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 2500 cfm  $\pm 10$  percent.

## INSTRUMENTATION

### BASES

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#### MONITORING INSTRUMENTATION (Continued)

##### 3/4.3.6.4 POST-ACCIDENT MONITORING INSTRUMENTATION

The OPERABILITY of the post-accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess important variable following an accident.

##### 3/4.3.6.5 SOURCE RANGE MONITORS

The source range monitors provide the operator with information on the status of the neutron level in the core at very low power levels during startup. At these power levels, reactivity additions should not be made without this flux level information available to the operator. When the intermediate range monitors are on scale adequate information is available without the SRMs and they can be retracted.

##### 3/4.3.6.6 TRAVERSING INCORE PROBE SYSTEM

The OPERABILITY of the traversing incore probe system with the specified minimum complement of equipment ensures that the measurements obtained from use of this equipment accurately represent the spatial neutron flux distribution of the reactor core. The OPERABILITY of this system is demonstrated by irradiating each detector to be used and normalizing their respective outputs.

##### 3/4.3.6.7 MCRECS ACTUATION INSTRUMENTATION

The OPERABILITY of the MCRECS ensures the necessary protective actions will be automatically initiated to provide protection for control room personnel.

##### 3/4.3.6.8 (Deleted)



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20565

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENTS 156 AND 96 TO

FACILITY OPERATING LICENSES 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 1 AND 2

DOCKET NOS. 50-321 AND 50-366

1.0 INTRODUCTION

By letter dated June 20, 1988, Georgia Power Company (the licensee) requested changes to the Technical Specifications (TS) for the Edwin I. Hatch Nuclear Plant, Units 1 and 2. The proposed amendments would delete all references to the main control room chlorine detectors and to the automatic isolation of the main control room environmental control system on high chlorine level.

Units 1 and 2 of the Hatch Nuclear Plant share a common control room which is served by the main control room environmental control system (MCRECS). In addition to its normal function of regulating the temperature and humidity in the control room, the MCRECS also operates in either of two modes to protect the reactor operators from external hazards. Protection from high radiation originating in either unit is provided by automatically aligning the intake dampers to take outside air in through charcoal filters while simultaneously stopping the exhaust fan. In this mode, the control room is pressurized with respect to the surrounding turbine building to preclude air in-leakage. In addition, the system is equipped with chlorine detectors. Upon receipt of a high chlorine signal, the intake dampers close automatically and the exhaust fan is stopped such that the MCRECS operates in a recirculation mode, avoiding the introduction of gaseous chlorine into the control room. Protection from chlorine gas is required because the licensee currently stores on site and uses gaseous chlorine to treat the plant circulating water (CW), the residual heat removal service water (RHRSW), and the plant service water (PSW) systems, as well as sanitary water and the plant sewage system. The design basis for the plant includes the rupture of two 1-ton cylinders of chlorine gas.

2.0 EVALUATION

The licensee now proposes to eliminate the potential sources of gaseous chlorine by replacing the present chlorination system with a sodium hypochlorination system. Concurrently, all chlorine cylinders would be removed from the site. Following the proposed change, no gaseous chlorine would be stored or used on site. Sodium hypochlorite will be stored in tanks located in the chlorination building, but even if a tank should rupture, toxic vapors would not be released.

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As stated in the staff's "Safety Evaluation Report Related to Operation of Edwin I. Hatch Nuclear Plant, Unit No. 2," NUREG-0411, there are no chlorine hazards to the plant posed by commercial facilities or nearby transportation modes. Protection of the control room against accidental chlorine releases was provided solely to guard against the accidental release of the chlorine stored on-site. Thus, when the on-site sources of gaseous chlorine are removed, there are no residual concerns regarding potential chlorine hazards to the control room.

Thus, the proposed change to sodium hypochlorination will remove the threat to control room habitability now posed by the gaseous chlorine, and will eliminate the need for chlorine detectors and for operation of the MCRECS in the isolation mode.

The staff concludes that the proposed change to sodium hypochlorite for use in plant chlorination systems will result in an overall improvement in plant safety since the hazard attendant to use of gaseous chlorine will be eliminated. We further conclude that when the change to sodium hypochlorination systems is made, there is no further need for chlorine gas detectors or for operation of the MCRECS in the isolation mode, and that TS reference to these may be deleted.

### 3.0 ENVIRONMENTAL CONSIDERATION

These amendments involve changes to the installation or use of facility components located within the restricted area as defined in 10 CFR Part 20 and changes in surveillance requirements. The staff has 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 environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

### 4.0 CONCLUSION

The Commission made a proposed determination that the amendments involve no significant hazards consideration which was published in the Federal Register on August 10, 1988 (53 FR 30135), 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 amendments will not be inimical to the common defense and security or to the health and safety of the public.

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Dated: September 12, 1988