June 24, 1993

Docket No. 50-321

Mr. Jack D. Woodard
Senior Vice President -
Nuclear Operations
Georgia Power Company
P. O. Box 1295
Birmingham, Alabama 35201

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Dear Mr. Woodard:

SUBJECT: ISSUANCE OF AMENDMENT - EDWIN I. HATCH NUCLEAR PLANT, UNIT 1 (TAC NO. M82196)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 186 to Facility Operating License DPR-57 for the Edwin I. Hatch Nuclear Plant, Unit 1. The amendment consists of changes to the Technical Specifications (TS) in response to your application dated November 18, 1991.

The amendment revises the TS to reflect the as-built plant condition and to resolve the NRC staff's concern identified during the 1991 Electrical Distribution System Functional Inspection.

A copy of the related Safety Evaluation is also enclosed. A Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

/s/

Kahtan N. Jabbour, Project Manager
Project Directorate II-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:
1. Amendment No. 186 to DPR-57
2. Safety Evaluation

cc w/enclosures:
See next page
*SEE PREVIOUS CONCURRENCE

OFFICE	PDII-3/LA	PDII-3/PM	OGC*	PDII-3/D	EELB*
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DATE	6/17/93	6/21/93	04/09/93	6/24/93	04/02/93

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Mr. Jack D. Woodard
Georgia Power Company

Edwin I. Hatch Nuclear Plant

cc:
Mr. Ernest L. Blake, Jr.
Shaw, Pittman, Potts and Trowbridge
2300 N Street, NW.
Washington, DC 20037

Mr. J. T. Beckham
Vice President - Plant Hatch
Georgia Power Company
P. O. Box 1295
Birmingham, Alabama 35201

Mr. S. J. Bethay
Manager Licensing - Hatch
Georgia Power Company
P. O. Box 1295
Birmingham, Alabama 35201

Mr. L. Sumner
General Manager, Nuclear Plant
Georgia Power Company
Route 1, Box 439
Baxley, Georgia 31513

Resident Inspector
U.S. Nuclear Regulatory Commission
Route 1, Box 725
Baxley, Georgia 31513

Regional Administrator, Region II
U.S. Nuclear Regulatory Commission
101 Marietta Street, NW. Suite 2900
Atlanta, Georgia 30323

Mr. Charles H. Badger
Office of Planning and Budget
Room 610
270 Washington Street, SW.
Atlanta, Georgia 30334

Harold Reheis, Director
Department of Natural Resources
205 Butler Street, SE., Suite 1252
Atlanta, Georgia 30334

Chairman
Appling County Commissioners
County Courthouse
Baxley, Georgia 31513

Mr. Alan R. Herdt, Chief
Project Branch #3
U. S. Nuclear Regulatory Commission
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

Mr. Dan H. Smith, Vice President
Power Supply Operations
Oglethorpe Power Corporation
2100 East Exchange Place
Tucker, Georgia 30085-1349

Charles A. Patrizia, Esquire
Paul, Hastings Janofsky & Walker
12th Floor
1050 Connecticut Avenue, NW.
Washington, DC 20036

Mr. W. G. Hairston, III
Executive Vice President -
Nuclear Operations
Georgia Power Company
P. O. Box 1295
Birmingham, Alabama 35201

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

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 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 186
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 the Georgia Power Company, acting for itself, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia (the licensees), dated November 18, 1991, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as 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 hereby amended by page 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:

   Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 186 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective no later than 60 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

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

Attachment:
Technical Specification
Changes

Date of Issuance: June 24, 1993

ATTACHMENT TO LICENSE AMENDMENT NO.186

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 areas of change.

Remove Pages	Insert Pages
ii	ii
3.2-1	3.2-1
3.2-23b	3.2-23b
3.2-23c	3.2-23c
3.2-49a	3.2-49a
3.2-49b	3.2-49b
3.2-68	3.2-68
3.2-68a	3.2-68a
3.9-12	3.9-12

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS

3.2 PROTECTIVE INSTRUMENTATION

Applicability

The Limiting Conditions for Operation apply to the plant instrumentation which performs a protective function.

Objective

The objective of the Limiting Conditions for Operation is to assure the operability of protective instrumentation.

Specifications

The Limiting Conditions for Operation of the protective instrumentation affecting each of the following protective actions shall be as indicated in the corresponding LCO table.

4.2 PROTECTIVE INSTRUMENTATION

Applicability

The Surveillance Requirements apply to the instrumentation which performs a protective function.

Objective

The objective of the Surveillance Requirements is to specify the type and frequency of surveillance to be applied to protective instrumentation.

Specifications

The check, functional test, and calibration minimum frequency for protective instrumentation affecting each of the following protective actions shall be as indicated in the corresponding SR table.

Protective Action	LCO Table	SR Table
A. Initiates Isolation Actuation	3.2-1	4.2-1
B. Initiates or Controls HPCI	3.2-2	4.2-2
C. Initiates or Controls RCIC	3.2-3	4.2-3
D. Initiates or Controls ADS	3.2-4	4.2-4
E. Initiates or Controls the LPCI Mode of RHR	3.2-5	4.2-5
F. Initiates or Controls Core Spray	3.2-6	4.2-6
G. Initiates Control Rod Blocks	3.2-7	4.2-7
H. Limits Radioactivity Release	3.2-8	4.2-8
I. Initiates Recirculation Pump Trip	3.2-9	4.2-9
J. Monitors Leakage Into the Drywell	3.2-10	4.2-10
K. Provides Surveillance Information	3.2-11	4.2-11
L. Degraded Station Voltage Protection Instrumentation	3.2-12	4.2-12
M. (Deleted)	3.2-13	4.2-13
N. Arms the Low Low Set S/RV System	3.2-14	4.2-14

TABLE 3.2-12

DEGRADED STATION VOLTAGE PROTECTION INSTRUMENTATION

Ref. No. (a)	Instrument (b)	Required Operable Channels	Channels Required To Trip	Trip Setting	Action to be Taken if the Number of Required Operable Channels is Not Met
1	4.16 kv Emergency Bus Undervoltage Relay (Loss of Voltage Condition)	2/Bus	2/Bus	greater than or equal to 2800 volts. At 2800 volts time delay will be less than or equal to 6.5 sec.	(c)
2	4.16 kv Emergency Bus Undervoltage Relay (Degraded Voltage Condition)	2/Bus	2/Bus	greater than or equal to 3280 volts. At 3280 volts time delay will be less than or equal to 21.5 sec.	(c)

NOTES FOR TABLE 3.2-12

a. The column entitled "Ref. No." is only for convenience so that a one-to-one relationship can be established between items in Table 3.2-12 and items in Table 4.2-12.

b. This instrumentation is required to be operable during reactor startup, power operation, and hot shutdown.

c.1 With the number of operable channels one less than the required operable channels, operation may proceed until performance of the next required instrument functional test provided a trip signal is placed in the LOSP lock-out relay logic for the applicable inoperable channel.

c.2. One instrument channel may be inoperable for up to 6 hours to perform required surveillances prior to entering other applicable actions.

TABLE 3.2-13

(THIS TABLE HAS BEEN DELETED)

TABLE 4.2-12

DEGRADED STATION VOLTAGE PROTECTION INSTRUMENTATION

Ref. No. (a)	Instrument (b)	Instrument Check Minimum Frequency	Instrument Functional Test Minimum Frequency	Instrument Calibration Minimum Frequency
1	4.16 kV Emergency Bus Undervoltage Relay (Loss of Voltage Condition)	N/A	Once/month	Once/operating cycle
2	4.16 kV Emergency Bus Undervoltage Relay (Degraded Voltage Condition)	N/A	Once/month	Once/operating cycle

NOTES FOR TABLE 4.2-12

a. The column entitled "Ref. No." is only for convenience so that a one-to-one relationship can be established between items in Table 3.2-12 and items in Table 4.2-12.

b. Surveillance of this instrumentation is required during reactor startup, power operation, and hot shutdown.

TABLE 4.2-13

(THIS TABLE HAS BEEN DELETED)

3.2.J.4. Scintillation Detector For Monitoring Radioiodine (Continued)

level reading is indicative of a leak in the nuclear system process barrier in the primary containment. A sample that is continuously drawn from the primary containment is collected on an iodine filter and monitored by a gamma sensitive scintillation detector. Radiation levels are read out by a log rate meter and recorded on a strip chart located in the control room. A high radiation level alarm and a failure alarm are also provided and are annunciated in the control room. Also, a high-low flow alarm is annunciated in the control room.

5. GM Tubes for Monitoring Noble Gases

A set of GM tubes contained in an instrument rack are used to monitor the release of noble gases in the drywell and torus. A high radiation level reading is indicative of a leak in the nuclear system process barrier in the primary containment. A sample that's continuously drawn from the primary containment is passed through a shielded sample chamber which contains the beta sensitive GM tubes. Radiation levels are read out by a log rate meter and recorded on a strip chart located in the control room. A high radiation level alarm and failure alarm are provided and are annunciated in the control room. Also, a high-flow alarm is annunciated in the control room.

K. Instrumentation Which Provides Surveillance Information (Table 3.2-11)

For each parameter monitored, as listed in Table 3.2-11, there are two channels of instrumentation except for the control rod positions indicating system and the Post-Accident Effluent Monitors. By comparing readings between the two channels, a near continuous surveillance of instrument performance is available. Any significant deviation in readings will initiate an early recalibration, thereby maintaining the quality of the instrument readings.

The hydrogen and oxygen analyzing systems consist of two redundant, separate systems and are each capable of analyzing the hydrogen and oxygen content of the drywell-torus simultaneously. They are designed to be completely testable at both the analyzer rack and in the control room. With an oxygen concentration of less than 4% by volume, a flammable mixture with hydrogen is not possible.

L. Degraded Station Voltage Protection Instrumentation (Table 3.2-12)

The undervoltage relays shall automatically initiate the disconnection of offsite power sources whenever the voltage setpoint and time delay limits have been exceeded. This action shall provide voltage protection for the emergency power systems by preventing sustained degraded voltage conditions due to the offsite power source and interaction between the offsite and onsite emergency power systems. The undervoltage relays have a time delay characteristic that provides protection against both a loss of voltage and degraded voltage condition and thus minimizes the effect of short duration disturbances without exceeding the maximum time delay, including margin, that is assumed in the FSAR accident analyses.

M. (Deleted)

N. Instrumentation Which Arms Low Low Set System (Table 3.2-14)

The bases for these trip functions are found in the bases for Section 3.6.H, page 3.6-21.

3.2.1 References

1. FSAR Appendix G, Plant Nuclear Safety Operational Analysis
2. FSAR Section 7.3, Primary Containment and Reactor Vessel Isolation Control System
3. FSAR Section 14, Plant Safety Analysis
4. FSAR Section 6, Core Standby Cooling Systems
5. FSAR Section 14.4.4, Refueling Accident
6. FSAR Section 6.5.3, Integrated Operation of the Core Standby Cooling Systems
7. FSAR Section 6.5.3.1, Liquid Line Breaks
8. 10 CFR 100

4.9.A.2.e. Fuel Oil Transfer Pumps

Following the monthly test of the diesels, the fuel oil transfer pumps shall be operated to refill the day tank and to check the operation of these pumps.

3. 125/250 Volt DC Emergency Power System (Plant Batteries 1A and 1B)

The plant batteries may deteriorate with time, but precipitous failure is unlikely. The type of surveillance described in this specification is that which has been demonstrated through experience to provide an indication of a cell becoming irregular or inoperable long before it fails.

4. Emergency 4160 Volt Buses (1E, 1F, and 1G)

The emergency 4160 volt buses (1E, 1F, and 1G) are monitored to assure readiness and capability of transmitting power to the emergency load.

These buses distribute AC power to the required engineered safety feature equipment. The normal feeds and backup to the emergency buses (1E, 1F, and 1G) are taken from the startup auxiliary transformers. If neither startup auxiliary transformer is available, buses 1E, 1F, and 1G will be energized from the standby diesel generators.

5. Emergency 600 Volt Buses (1C and 1D)

The emergency 600 volt buses (1C and 1D) are monitored to assure readiness and capability of transmitting the emergency load.

6. Emergency 250 Volt DC to 600 Volt AC Inverters

The emergency 250 volt DC to 600 volt AC inverters are monitored to assure readiness and capability of transmitting power to the emergency loads.

7. Logic Systems

The periodic testing of the logic systems will verify the ability of the logic systems to bring the auxiliary electrical systems to running standby readiness with the presence of an accident signal and/or a degraded voltage or LOSP signal.

The periodic testing of the relays which initiate energization of the emergency buses by the diesel generators when voltage is lost on the emergency buses will verify operability of these relays.

The periodic simulation of accident signals will confirm the ability of the 600 volt load shedding logic system to sequentially shed and restart 600 volt loads if an accident signal were present and diesel generator voltage were the only source of electrical power.

D. RPS MG Sets

The surveillance requirements for the RPS power supply equipment will ensure the timely detection of potential component failures that might be caused by a sustained over-voltage or under-voltage conditions.

E. References

1. "Proposed IEEE Criteria for Class 1E Electric Systems for Nuclear Power Generating Stations" (IEEE Standard No. 308), June, 1969.

2. American Society for Testing and Materials, 1970 Annual Book of ASTM Standards, Part 17.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 186 TO FACILITY OPERATING LICENSE DPR-57

GEORGIA POWER COMPANY, ET AL.

EDWIN I. HATCH NUCLEAR PLANT, UNIT 1

DOCKET NO. 50-321

1.0 INTRODUCTION

By letter dated November 18, 1991, Georgia Power Company, et al. (the licensee), proposed a license amendment to change the Technical Specifications (TS) for the Edwin I. Hatch Nuclear Plant, Unit 1. The proposed change would revise the TS to reflect the as-built plant condition and to resolve the NRC staff's concern identified during the 1991 Electrical Distribution System Functional Inspection. The proposed change would only update the TS to accurately reflect the function of the emergency bus undervoltage relays. It does not change the surveillance and operability requirements of its relays.

The original design required a loss of voltage on both the emergency 4160 V bus and the alternate power supply fed from 1C startup transformer (SUT 1C) before the loss of offsite power (LOSP) relay would trip the offsite power breaker, allowing the emergency diesel generator (EDG) breaker to close and supply the emergency bus. The original design, as reflected in the previous TS Tables 3.2-13 and 4.2-13, refers to "loss of voltage" relays monitoring voltage on SUT 1C and provides a permissive for the diesel generator output breaker to close. Design Change Request (DCR) 82-34, implemented in 1983, modified the undervoltage relay logic and removed the contacts from the auxiliary relays controlled by the SUT 1C undervoltage relays from the LOSP lockout relay circuit. According to this design, the circuit would only require a loss of voltage signal from the emergency bus to trip the LOSP lockout relay and allow the emergency diesel generator breaker to close.

2.0 EVALUATION

The licensee has proposed to delete the previous TS Tables 3.2-13 and 4.2-13. These Tables list surveillance requirements for the SUT 1C undervoltage relays and state that these relays "initiate energization of onsite power sources." The current design, implemented in 1983, removed from the LOSP lockout relay circuits the contacts from the auxiliary relays controlled by the SUT 1C undervoltage relays. According to this design, the circuit would only require a loss of voltage signal from the emergency bus to energize the LOSP lockout relays and allow the diesel generator output breaker to close. Because these relays no longer input to the LOSP lockout relays circuitry, the licensee has proposed to delete these Tables from the TS. The staff finds this change acceptable.

The licensee has also proposed to change the titles of Tables 3.2-12 and 4.2-12 to agree with the titles of the corresponding Unit 2 tables; page ii; the table on page 3.2-1; and the Bases Section in support of the above described changes. The staff finds these administrative changes acceptable.

Based on its review of the licensee's submittal, the staff finds that the proposed TS revision does not change the surveillance and operability requirements of the undervoltage relays, has no adverse impact on safety, and does not pose an undue risk to public health and safety. Therefore, the TS revision is acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Georgia State official was notified of the proposed issuance of the amendments. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to the installation or use of facility components located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC 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 the amendment involves no significant hazards consideration, and there has been no public comment on such finding (57 FR 20511 dated May 13, 1992). 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.

5.0 CONCLUSION

The Commission has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: N. K. Trehan

Date: June 24, 1993