



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. 192
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 9, 1993, 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.

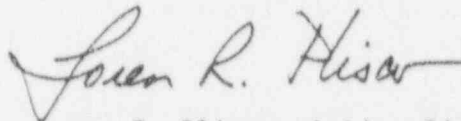
2. Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-57 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 192, 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 from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Loren R. Plisco, Acting Director
Project Directorate II-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Technical Specification
Changes

Date of Issuance: February 24, 1994



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. 50-366

EDWIN I. HATCH NUCLEAR PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 131
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 the Georgia Power Company, acting for itself, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia (the licensees), dated November 9, 1993, 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.

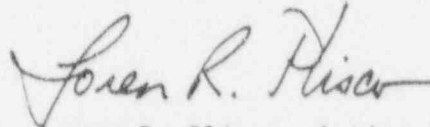
2. Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-5 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 131, 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 from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Loren R. Plisco, Acting Director
Project Directorate II-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Technical Specification
Changes

Date of Issuance: February 24, 1994

ATTACHMENT TO LICENSE AMENDMENT NO. 192

FACILITY OPERATING LICENSE NO. DPR-57

DOCKET NO. 50-321

AND

TO LICENSE AMENDMENT NO. 131

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 areas of change.

	<u>Remove Pages</u>	<u>Insert Pages</u>
Unit 1	3.9-2c 3.9-2d 3.9-4a 3.9-11	3.9-2c 3.9-2d 3.9-4a 3.9-11
Unit 2	3/4 8-5 _____ _____ B 3/4 8-1 _____	3/4 8-5 3/4 8-5a 3/4 8-5b B 3/4 8-1 B 3/4 8-2

LIMITING CONDITIONS FOR OPERATIONSURVEILLANCE REQUIREMENTS

3.9.A.2. Standby AC Power Supply (Diesel Generators 1A, 1B, and 1C)
(Continued)

4.9.A.2. Standby AC Power Supply (Diesel Generators 1A, 1B, and 1C)
(Continued)

a. Operability (Continued)

11. Once every 18 months during shutdown, a hot start test shall be performed for each diesel generator as follows:

Each diesel generator shall be operated for ≥ 2 hours loaded ≥ 2565 kW*. Within 5 minutes of shutting down the diesel generator following this run, it shall be verified the diesel generator starts and achieves, in ≤ 12 seconds, voltage ≥ 3740 V and ≤ 4580 V, and frequency ≥ 58.8 Hz and ≤ 61.2 Hz.**

b. Diesel Battery (125 Volt)
Each 125-volt diesel battery is operable and capable of supplying the required load.

b. Diesel Battery (125 Volt)
Each 125-volt diesel battery shall be subjected to the same periodic surveillance as the plant batteries in Specification 4.9.A.3.

c. Battery Charger
An operable battery charger is available. Each battery charger shall have adequate capacity to restore its battery to full charge within 24 hours from a discharged condition while carrying the DC load.

c. Battery Charger
Indicators shall be provided to monitor the status of the battery charger supply. This instrumentation shall include indication of output current and output voltage.

d. Diesel Fuel
There shall be a minimum of 99,000 gallons of acceptable diesel fuel in the diesel fuel storage tanks and a minimum of 900 gallons in each diesel fuel day tank.

d. Diesel Fuel
1. The quantity of diesel fuel available in each fuel storage tank and fuel day tank shall be measured and recorded concurrently with the operability test specified for the diesel in Specification 4.9.A.2.a.1.

*Momentary transients outside of load range do not invalidate this test.

**For the 1B diesel generator, a single hot start test every 18 months will satisfy the requirements of Unit 1 Specification 4.9.A.2.a.11 and Unit 2 Specification 4.8.1.1.2.d.14.

LIMITING CONDITIONS FOR OPERATION

SURVEILLANCE REQUIREMENTS

3.9.A.2. Standby AC Power Supply Diesel Generators (A, B, and C)
(Continued)

4.9.A.2. Standby AC Power Supply (Diesel Generators (A, B, and C))
(Continued)

d. Diesel Fuel (Continued)

2. At least once per 92 days by verifying that a sample of diesel fuel from the fuel storage tank, obtained in accordance with ASTM-D270-65, is within the acceptable limits specified in Table 1 of ASTM D975-74 when checked for viscosity, water and sediment.

e. Fuel Oil Transfer Pumps

A fuel oil transfer pump shall be operable and capable of transferring fuel oil from the storage system to the day tank.

e. Fuel Oil Transfer Pumps

1. The operation of the diesel fuel oil transfer pumps to transfer fuel from the storage system to the day tank shall be demonstrated concurrent with the operability test specified for that diesel in Specification 4.9.A.2.a.1.
2. The operation of the diesel fuel oil transfer pumps to transfer fuel from each associated fuel storage tank to the day tank of each diesel, via the installed cross connection lines, shall be demonstrated at least once per 18 months during shutdown.

3.9.A.7. Logic Systems (Continued)4.9.A.7. Logic Systems (Continued)

2. Deleted

3. Deleted

c. The common accident signal logic system, and undervoltage relays and supporting system are operable.

c.1. Once every 18 months during shutdown, each diesel generator shall be demonstrated operable by simulating a loss of offsite power in conjunction with an accident test signal and verifying: de-energization of the emergency buses and load shedding from the emergency buses; and the diesel starts on the auto-start signal with permanently connected loads in ≤ 12 seconds, energizes the auto-connected shutdown (emergency) loads through the load sequencer, operates for ≥ 5 minutes while its generator is loaded with the emergency loads, and achieves and maintains a steady-state voltage of 4160 ± 420 volts and a steady-state frequency of 60 ± 1.2 Hz.

2. The undervoltage relays for the start buses shall be calibrated annually for trip and reset voltages and the measurements recorded.

3. Verify, once per 18 months during shutdown, that all diesel generator trips, except engine overspeed, low lube oil pressure, and generator differential, are automatically bypassed upon loss of voltage on the emergency bus concurrent with an ECCS actuation signal.

4.9. AUXILIARY ELECTRICAL SYSTEMS

A. Auxiliary Electrical Systems Equipment

The auxiliary electrical power systems shall be functionally tested and inspected at a frequency to assure a high reliability of operation and a high degree of performance. This surveillance program is designed to meet the intent of "Proposed IEEE Criteria for Class 1E Electric Systems for Nuclear Power Generating Stations" (Standard No. 308).

2. Standby AC Power Supply (Diesel Generators 1A, 1B, and 1C)

a. Operability

Upon demand, the standby diesel generators shall start automatically and reach rated frequency and voltage within 12 seconds (unloaded). Based on the operation of all diesel generation units and all emergency buses, the diesel generators are capable of accepting all AC loads within 40 seconds. Since the diesel generators are utilized as standby power sources, readiness is of prime importance. Readiness can best be demonstrated by testing, which insofar as practicable simulates actual emergency conditions. The testing program is designed to test both the ability to start and the ability to run the diesel generators under load for extended periods of operation.

Each diesel generator unit is furnished with two completely independent air starting systems, either of which is capable of starting the diesel engine five times without recharging.

The monthly test of the diesel generators is conducted to check for equipment failures and deterioration. Testing is conducted until the diesels reach equilibrium operating conditions to demonstrate proper operation of these conditions. Each diesel shall be manually started, synchronized to the bus, and load picked up. The diesels shall be loaded to at least one-half rated load to prevent fouling of the engines. The diesel generators will normally be run for at least one hour. In addition, during the test when the generator is synchronized to the bus, it is also synchronized to the offsite power source and thus is not completely independent of this source. Only one diesel shall be tested at a time to prevent parallel operation with another.

The hot start test is performed on each diesel generator every 18 months. This surveillance demonstrates that the diesel engine can restart from a hot condition, such as subsequent to shutdown from normal surveillances, and achieve the required voltage and frequency within 12 seconds. The 12 second time is derived from the requirements of the accident analysis. The 18 month frequency is consistent with the recommendations of Regulatory Guide 1.108. The requirement that the diesel has operated for at least 2 hours at near full load conditions prior to performance of this surveillance is based on manufacturer recommendations for achieving hot conditions. Momentary transients due to changing bus loads do not invalidate this test.

b. Diesel Battery (125 Volt)

The surveillance of the diesel generator starting batteries is designed to provide an early indication of potential failure.

c. Battery Charger

The battery chargers are monitored to assure adequate battery charge supply and are capable of recharging their assigned battery while carrying the normal loads.

d. Diesel Fuel

Quantity and quality checks assure sufficient acceptable fuel to maintain the minimum fuel supply requirements and to avoid damage to the diesel engine.

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

9. Verifying that the diesel generator operates for at least 24 hours. During the first 2 hours of this test, the diesel generator shall be loaded to ≥ 3000 kW* and during the remaining 22 hours of this test, the diesel generator shall be loaded to 2775-2825 kW**.
10. Verifying that the auto-connected loads to each diesel generator do not exceed the 2000-hour rating of 3100 kW.
11. Verifying the diesel generator's capability to:
 - a) Synchronize with the offsite power source while the generator is loaded with its emergency loads upon a simulated restoration of offsite power,
 - b) Transfer its loads to the offsite power source, and
 - c) Proceed through its shutdown sequence.
12. Verifying that with the diesel generator operating in a test mode (connected to its bus), a simulated LOCA actuation signal overrides the test mode by: (1) returning the diesel generator to standby operation and (2) automatically energizes the emergency loads with offsite power.
13. Verifying that the fuel transfer pump transfers fuel from each associated fuel storage tank to the day tank of each diesel via the installed cross connection lines.
14. Operating each diesel generator for ≥ 2 hours loaded ≥ 2565 kW*, and within 5 minutes of shutting down the diesel generator following this run, it shall be verified the diesel generator starts and achieves, in ≤ 12 seconds, voltage ≥ 3740 V and ≤ 4580 V, and frequency ≥ 58.8 Hz and ≤ 61.2 Hz.***

* Momentary variations outside this band shall not invalidate the test.

** For the 1B diesel generator, a single 24-hour load test every 18 months will satisfy the requirements of Unit 1 Specification 4.9.A.2.a.6 and Unit 2 Specification 4.8.1.1.2.d.9.

*** For the 1B diesel generator, a single hot start test every 18 months will satisfy the requirements of Unit 1 Specification 4.9.A.2.a.11 and Unit 2 Specification 4.8.1.1.2.d.14.

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- e. At least once per 10 years or after any modifications which could affect diesel generator interdependence by starting both diesel generators simultaneously, during shutdown, and verifying that both diesel generators accelerate to synchronous speed in ≤ 12 seconds.

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3/4.8 ELECTRICAL POWER SYSTEMS

BASES

The OPERABILITY of the A.C. and D.C. power sources and associated distribution systems during operation ensures that sufficient power will be available to supply the safety related equipment required for (1) the safe shutdown of the facility, and (2) the mitigation and control of accident conditions within the facility. The minimum specified independent and redundant A.C. and D.C. power sources and distribution systems satisfy the requirements of General Design Criterion 17 of Appendix "A" to 10 CFR Part 50.

The ACTION requirements specified for the levels of degradation of the power sources provide restriction upon continued facility operation commensurate with the level of degradation. The OPERABILITY of the power sources are consistent with the initial condition assumptions of the accident analyses and are based upon maintaining at least one of the onsite A.C. and D.C. power sources and associated distribution systems OPERABLE during accident conditions coincident with an assumed loss of offsite power and single failure of the other onsite A.C. source.

Each of the five diesel generators is provided with a storage tank and a day tank. The 33,000 gallons required to be maintained in each of the fuel oil tanks represents a total volume of oil sufficient to operate any four diesel generators at 3250 kW for a period of 7 days. This is based on a conservative expected fuel consumption of 240 gallons per hour per engine.

The onsite fuel capacity will last longer than the time it would take to replenish the onsite supply from offsite sources (which is < 7 days). Valving is available so that fuel oil can be transferred between fuel oil storage tanks. However, administrative controls shall be in place to limit long-term total diesel generator load to $\leq 13,000$ kW, and to limit individual diesel generator loading to ≤ 3250 kW.

The OPERABILITY of the minimum specified A.C. and D.C. power sources and associated distribution systems during shutdown and refueling ensures that: (1) the facility can be maintained in the shutdown or refueling condition for extended time periods, and (2) sufficient instrumentation and control capability is available for monitoring and maintaining the facility status.

The surveillance requirements for demonstrating the OPERABILITY of the diesel generators are in accordance with the recommendations of Regulatory Guide 1.9, "Selection of Diesel Generator Set Capacity for Standby Power Supplies," March 10, 1971, Regulatory Guide 1.108, "Periodic Testing of Diesel Generator Units Used as Onsite Electric Power Systems at Nuclear Power Plants," Revision 1, August 1977, and Generic Letter 84-15, "Proposed Staff Actions to Improve and Maintain Diesel Generator Reliability," July 2, 1984.

The hot start test specified in Regulatory Guide 1.108 has been modified to separate this test from the loss of offsite power functional test and the 24 hour load test. The modified hot start test conforms to the BWR 4 Standard Technical Specifications, NUREG-1433. The hot start test

3/4.8 ELECTRICAL POWER SYSTEMS

BASES

is performed on each diesel generator every 18 months. This surveillance demonstrates that the diesel engine can restart from a hot condition, such as subsequent to shutdown from normal surveillances, and achieve the required voltage and frequency within 12 seconds. The 12 second time is derived from the requirements of the accident analysis. The 18 month frequency is consistent with the recommendations of Regulatory Guide 1.108. The requirement that the diesel has operated for at least 2 hours at near full load conditions prior to performance of this surveillance is based on manufacturer recommendations for achieving hot conditions. Momentary transients due to changing bus loads do not invalidate this test.

Primary containment electrical penetrations and penetration conductors are protected by either de-energizing circuits not required during reactor operation or demonstrating the OPERABILITY of primary and backup overcurrent protection circuit breakers by periodic surveillance.