Dockets Nos. 50-321
and 50-366

Mr. J. T. Beckham, Jr.
Vice President - Nuclear Generation
Georgia Power Company
P. O. Box 4545
Atlanta, Georgia 30302

DEC 11 1985

Dear Mr. Beckham:

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The Commission has issued the enclosed Amendments Nos. 118 and 58 to Facility Operating Licenses Nos. DPR-57 and NPF-5 for the Edwin I. Hatch Nuclear Plant, Units Nos. 1 and 2. The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated June 15, 1983, as supplemented and modified by your letters dated September 1, 1983, and August 20, 1985.

The amendments revise the TSs for Hatch Units 1 and 2 to 1) eliminate the time restriction on opening the purge and vent isolation valves during operating Modes 1, 2 and 3 for the purpose of inerting, deinerting and pressure control; 2) add a Limiting Condition for Operation and surveillance requirements for fast acting dampers in the standby gas treatment system; and 3) require replacement of resilient seats on the purge and vent isolation valves.

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

Sincerely,

Original signed by

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

Enclosures:
1. Amendment No. 118 to DPR-57
2. Amendment No. 58 to NPF-5
3. Safety Evaluation

cc w/enclosures:
See next page

BWR PD#2
DMuller
11/27/85

*See previous white for concurrences.

ORB#4:DL	ORB#4:DL	ORB#4:DL	OELD
RIngram*	GRivenbark;cf*	JStolz*	
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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. 118
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 June 15, 1983, as supplemented and modified by letters dated September 1, 1983, and August 20, 1985, 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.

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:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 118 , 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 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

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

Attachment:
Changes to the Technical Specifications

Date of Issuance: December 11, 1985

ATTACHMENT TO LICENSE AMENDMENT NO. 118

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
3.7-10a	3.7-10a
--	3.7-10b
3.7-11	3.7-11
3.7-11a	3.7-11a
3.7-34	3.7-34
3.7-34a	3.7-34a
--	3.7-34b

3.7.A.7 Primary Containment Purge System

a. When primary containment is required, all drywell and suppression chamber 18 inch purge supply and exhaust isolation valves shall be operable and in the fully closed position except when required for inerting, de-inerting, or pressure control.

b. Each drywell and suppression chamber 18 inch purge supply and exhaust isolation valve shall have a leakage rate as specified in 4.7.A.2.

c. The drywell and suppression chamber 18 inch excess flow isolation dampers shall be operable at all times when the Unit 1 primary containment integrity is required and the 18 inch isolation valve(s) to the drywell or suppression chamber are open.

If these requirements cannot be met, close the drywell and suppression chamber 18 inch purge supply and exhaust isolation valve(s) or otherwise isolate the penetration(s) within 4 hours or fulfill the requirements of Specification 3.7.A.8.

8. Shutdown Requirements

If Specification 3.7.A cannot be met, an orderly shutdown shall be initiated and the reactor shall be brought to Hot Shutdown within 12 hours and shall be in the Cold Shutdown condition within the following 24 hours.

4.7.A.7 Primary Containment Purge System

a. In addition to the requirements of Specification 4.7.D, each drywell and suppression chamber 18 inch purge supply and exhaust isolation valve shall be verified to be closed at least monthly.

b. Each refueling outage each drywell and suppression chamber 18 inch purge supply and exhaust isolation valve with a resilient material seat shall be demonstrated operable by having its valve seat replaced and verifying that the leakage rate is within its limit.

c. At least once per 2 years the dampers will be visually inspected and cycled to verify the dampers have no damage which renders them incapable of performing their design function.

B. Standby Gas Treatment System

1. Operability Requirements

1.a A minimum of three (2 of 2 in Unit 1 and 1 of 2 in Unit 2) of the four independent standby gas treatment system trains shall be operable at all times when Unit 1 secondary containment integrity is required.

With one of the Unit 1 standby gas treatment systems inoperable, for any reason, Unit 1 reactor operation and fuel handling and/or handling of casks in the vicinity of the spent fuel pools is permissible for a period of seven (7) days provided that all active components in the remaining operable standby gas treatment systems in each unit (minimum of 1 in Unit 1 and 1 in Unit 2) shall be demonstrated to be operable within 4 hours, and daily thereafter.

B. Standby Gas Treatment System

1. Surveillance When System Operable

At least once per operating cycle, not to exceed 18 months, the following conditions shall be demonstrated:

a. Pressure drop across the combined HEPA filters and charcoal absorber bank is less than 6 inches of water at the system design flow rate (+10% -0%).

b. Operability of inlet heater at rated power when tested in accordance with ANSI N510-1975.

c. Air distribution is uniform within 20% across the filter train when tested in accordance with N510-1975.

B. Standby Gas Treatment System

1. Operability Requirements (Cont'd)

If the inoperable Unit 1 standby gas treatment system is not made fully operable within the seven (7) day period, the Unit 1 reactor shall be shutdown and placed in the cold shutdown condition within the next 36 hours and Unit 1 or Unit 2 fuel handling operations shall be terminated within 4 hours.

Unit 1 reactor operation and Unit 1 or Unit 2 fuel handling shall not be allowed if both of the Unit 1 standby gas treatment systems are inoperable or if both of the Unit 2 standby gas treatment systems are inoperable except as allowed by 3.7.B.1.b.

1.b With both Unit 2 SGTS inoperable for surveillance of the Unit 2 primary containment excess flow isolation dampers, Unit 1 reactor operation is permissible for a period of 12 hours if the following conditions are met:

(1) Maintain at least 1/4" H_2O vacuum in Unit 1 secondary containment by using normal ventilation and Unit 1 SGTS as necessary

(2) Assure operability of both Unit 1 SGTS filter trains

(3) Assure Unit 2 SGTS valves to refueling floor cannot be opened

(4) Allow no fuel movement in Units 1 or 2

(5) Unit 2 secondary containment integrity is intact except for Unit 2 SGTS operability requirements.

1.c If the requirements of 3.7.B.1.b cannot be met, an orderly shutdown shall be initiated and the reactor shall be brought to Hot Shutdown within 12 hours and shall be in Cold Shutdown within the following 24 hours.

B. Standby Gas Treatment System

1. Surveillance When System Operable (Cont'd)

d. Automatic initiation of each train of the Unit 1 and Unit 2 standby gas treatment systems.

e. Manual operability of the bypass valve for filter cooling.

Amendment No. 22, 40, 57, 86, 100, 118

3.7.B.2 Performance Requirements

a. The results of the in-place DOP and halogenated hydro-carbon tests at design flows on HEPA filters and charcoal absorber banks shall show 99% DOP removal and 99% halogenated hydrocarbon removal when tested in accordance with ANSI N510-1975.

b. The results of laboratory carbon sample analysis shall show 90% of radioactive methyl iodine removal when tested in accordance with RDT-M16-1T (80°C, 95% R.H.).

c. Fans shall be shown to operate within +10% -0% design flow when tested in accordance with ANSI N510-1975.

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 absorber bank or after any structural maintenance on the system housing.

d. Each circuit shall be operated with the heaters on at least 10 hours every month.

3.7.A.7 Primary Containment Purge System

The purge system is designed to perform two basic functions: pressure control and inert/de-inert the primary containment. Under normal operations the purge system is used to maintain containment pressure less than two psig. Post LOCA, the purge system, through the 2 inch bypass lines, is also used to reduce containment pressure. The 18 inch lines are the primary means of reducing the oxygen concentration inside containment before long term power operations to less than 4% in accordance with Technical Specification 3.7.A.5. Conversely, it is also the path for restoring oxygen concentration to life sustaining levels before drywell entry. The system is hard-piped to the Standby Gas Treatment System; therefore, any entrained radioactivity will be reduced before being released to the environment through the main stack.

The use of the drywell and suppression chamber purge lines is not limited since the 18" valves will close during a LOCA or steam line break accident and therefore the site boundary dose guideline of 10 CFR Part 100 would not be exceeded in the event of an accident during purging operations. The design of the 18" purge supply and exhaust isolation valves meets the requirements of Branch Technical Position CSB 6-4, "Containment Purging During Normal Plant Operations.

Replacement of the 18" valve resilient seats on a cyclic basis will allow the opportunity for repair before gross leakage failure develops. The 0.60 L_a leakage limit shall not be exceeded when the leakage rates determined by the leakage integrity tests of these valves are added to the previously determined total for all valves and penetrations subject to the B and C tests.

Surveillance testing of the excess flow isolation dampers is recommended by the vendor to verify that the blades pivot freely and no other damage is evident. Industry practice does not require testing for closure under simulated flow conditions for "tornado" type dampers.

3.7.A.8 Shutdown Requirements

Bases for shutdown requirements are discussed above in conjunction with the individual requirements for primary containment integrity.

B. Standby Gas Treatment System

The standby gas treatment systems are designed to filter and exhaust the Unit 1 secondary containment atmosphere to the off-gas stack during secondary containment isolation conditions, with a minimum release of radioactive materials from these areas to the environs.

B. Standby Gas Treatment System (Continued)

The Unit 1 standby gas treatment system fans are designed to automatically start upon receipt of a high radiation signal from either the Unit 1 or Unit 2 refueling floor ventilation exhaust duct monitors or the Unit 1 reactor building ventilation exhaust duct monitors, or upon receipt of a signal from the Unit 1 primary containment isolation system. The Unit 2 standby gas treatment system fans are designed to automatically start, to assist the Unit 1 fans to exhaust the Unit 1 secondary containment atmosphere upon receipt of a high radiation signal from either the Unit 1 or Unit 2 refueling floor ventilation exhaust duct monitors or the Unit 1 reactor building ventilation exhaust duct monitors, or upon receipt of a signal from the Unit 1 primary containment isolation system. In addition, the systems may also be started manually, from the Main Control Room.

In the case of the Unit 1 standby gas treatment system, upon receipt of any of the isolation signals, both fans start, isolation dampers open and each fan draws air from the isolated Unit 1 secondary containment.

In the case of the Unit 2 standby gas treatment system, upon receipt of an isolation signal from the Unit 1 primary containment isolation system, reactor building ventilation exhaust duct monitors, or the Unit 1 or Unit 2 refueling floor ventilation exhaust duct monitors, both fans start, fan supply and discharge dampers open, and the fans draw air from the isolated Unit 1 secondary containment.

Once the SGTS systems have been initiated automatically, the operator may place any one of the Unit 1 and Unit 2 trains in the standby mode provided the remaining train in each unit is operable. Should a failure occur in the remaining operating trains, resulting in air flow reduction below a preset value, the standby systems will restart automatically.

As a minimum for operation, one of the two Unit 1 standby gas treatment trains and one of the two Unit 2 standby gas treatment trains is required to achieve the design differential pressure, given the design building infiltration rate. Once this design differential pressure is achieved, any leakage past the secondary containment boundary shall be inleakage.

A detailed discussion of the standby gas treatment systems may be found in Section 5.3.3.3 of the Unit 1 FSAR, and in Section 6.2.3 of the Unit 2 FSAR.

Any one of the four filter trains has sufficient adsorption capacity to provide for cleanup of the Unit 1 secondary containment atmosphere following containment isolation. Any one of the four available

B. Standby Gas Treatment System (Continued)

standby gas treatment trains may be considered an installed spare. Therefore, with one of the standby gas treatment trains in each unit inoperable, there is no immediate threat to the Unit 1 containment system performance, and reactor operation or fuel handling operations may continue while repairs are being made. Should either or both of the remaining standby gas treatment trains be found to be inoperable, the Unit 1 plant should be placed in a condition that does not require a standby gas treatment system.

An exception can be taken for a brief period to both trains of Unit 2 SGTS being available when Unit 2 is in Cold Shutdown and Unit 1 is operating. This exemption is based on the low probability of the occurrence of a DBA LOCA on Unit 1 during the brief period that Unit 2 SGTS remained inoperable. In addition, Unit 2 SGTS would be in a condition such that it could be restored quickly to assist in the mitigation of the LOCA, if required.

Inspection of the excess flow isolation dampers will not affect Unit 1 SGTS availability, if the Unit 1 refueling floor equipment hatch cover is not in place, since the Unit 1 SGTS flow path during drawdown comes from the Unit 1 refueling floor or reactor building which is one common air volume in Unit 1. If the damper is removed during SGTS drawdown demand, the suction will remain from this same common air volume.

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 release of radioiodine to the environment. 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 guidelines stated in 10 CFR 100 for the accident analyzed.

3.7.C. Secondary Containment

The secondary containment is designed to minimize any ground level release of radioactive materials which might result from a serious accident. The refueling area of the reactor building includes the Unit 1 and Unit 2 refueling floor volumes. Therefore, the reactor building provides secondary containment during Unit 1 reactor operation when the drywell is sealed and in service; and provides primary containment when the Unit 1 and/or Unit 2 reactor is shutdown and its respective drywell is open, as during refueling.

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. 58
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 June 15, 1983, as supplemented and modified by letters dated September 1, 1983, and August 20, 1985, 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.

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:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 58 , 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 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

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

Attachment:
Changes to the Technical Specifications

Date of Issuance: December 11, 1985

ATTACHMENT TO LICENSE AMENDMENT NO. 58

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
3/4 6-2	3/4 6-2
--	3/4 6-46
--	3/4 6-47
3/4 9-10	3/4 9-10
--	3/4 9-10a
B 3/4 6-6	B 3/4 6-6
--	B 3/4 6-7

3/4.6 CONTAINMENT SYSTEMS

3/4.6.1 PRIMARY CONTAINMENT

PRIMARY CONTAINMENT INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.1.1 PRIMARY CONTAINMENT INTEGRITY shall be maintained.

APPLICABILITY: CONDITIONS 1, 2* and 3.

ACTION:

Without PRIMARY CONTAINMENT INTEGRITY, restore PRIMARY CONTAINMENT INTEGRITY within 1 hour or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.1 PRIMARY CONTAINMENT INTEGRITY shall be demonstrated:

a. At least once per 31 days by verifying that;

1. All penetrations[1] not capable of being closed by OPERABLE containment automatic isolation valves and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic valves secured in position, and

2. All equipment hatches are closed and sealed.

*See Special Test Exception 3.10.1

[1] Except valves, blind flanges, and deactivated automatic valves which are located inside the containment, and are locked, sealed or otherwise secured in the closed position. These penetrations shall be verified closed during each COLD SHUTDOWN except such verification need not be performed more often than once per 92 days.

SURVEILLANCE REQUIREMENTS (Continued)

b. By verifying each containment airlock OPERABLE per Specification 3.6.1.3.

c. By verifying the suppression chamber OPERABLE per Specification 3.6.2.1.

CONTAINMENT SYSTEMS

PRIMARY CONTAINMENT PURGE SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.6.5.1 The drywell and suppression chamber 18 inch purge supply and exhaust isolation valves shall be OPERABLE with:

a. Each valve closed except for purge system operation for inerting, deinerting and pressure control.

b. A leakage rate such that the provisions of Specification 3.6.1.2 are met.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2 and 3.

ACTION:

a. With an 18 inch drywell and suppression chamber purge supply and/or exhaust isolation valve(s) inoperable or open for other than inerting, deinerting or pressure control, close the open 18 inch valve(s) or otherwise isolate the penetration(s) within 4 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

SURVEILLANCE REQUIREMENTS

4.6.6.5.1 The primary containment purge system shall be demonstrated OPERABLE:

a. In addition to the requirements of Specification 3.6.3, at least once per 31 days, when not PURGING and VENTING, by verifying that each 18 inch drywell and suppression chamber valve is closed.

b. At least once per 18 months by replacing the valve seat of each 18 inch drywell and suppression chamber purge supply and exhaust isolation valve having a resilient material seat and verifying that the leakage rate is within its limit.

PRIMARY CONTAINMENT PURGE SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.6.5.2 The drywell and suppression chamber 18 inch fast acting excess flow isolation dampers shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

a. With an 18 inch drywell and suppression chamber excess flow isolation damper inoperable, close the open 18 inch drywell and suppression chamber purge supply and exhaust isolation valves or otherwise isolate the penetration within 4 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

SURVEILLANCE REQUIREMENTS

4.6.6.5.2 The primary containment purge system excess flow isolation dampers shall be demonstrated capable of performing their design function by:

a. At least once per operating cycle, the dampers will be visually inspected and cycled to verify the dampers have no damage which renders them incapable of performing their design function.

TABLE 3.9.5.2-1

SECONDARY CONTAINMENT VENTILATION SYSTEM AUTOMATIC ISOLATION DAMPERS

DAMPER FUNCTION	ISOLATION TIME (Seconds)
1. Refueling Floor Normal (Supply) Ventilation Dampers (2T41 - F003 A and B)	4.2
2. Refueling floor Normal (Exhaust) Ventilation Dampers (2T41 - F023 A and B)	4.2

REFUELING OPERATIONS

STANDBY GAS TREATMENT SYSTEM

LIMITING CONDITION FOR OPERATION

3.9.5.3 Two Hatch-Unit 2 independent standby gas treatment subsystems and two Hatch-Unit 1 independent standby gas treatment subsystems shall be OPERABLE.

APPLICABILITY: CONDITIONS 5 and *.

ACTION:

a. With one of the above required standby gas treatment subsystems inoperable, restore the inoperable subsystem to OPERABLE status within 30 days, or:

   1. Suspend all irradiated fuel and spent fuel shipping cask handling in the Hatch - Unit 1 secondary containment, and

   2. In CONDITION 5, suspend Hatch - Unit 2 CORE ALTERATIONS and operations that could reduce the SHUTDOWN MARGIN.

b. With two or more of the above required standby gas treatment subsystems inoperable:

   1. Suspend all irradiated fuel and spent fuel shipping cask handling in the Hatch - Unit 1 secondary containment, and

   2. In CONDITION 5, suspend Hatch - Unit 2 CORE ALTERATIONS and operations that could reduce the SHUTDOWN MARGIN.

c. Both Unit 2 independent trains of standby gas treatment may be inoperable for 12 hours during Unit 1 reactor operation for surveillance of the Unit 2 primary containment excess flow isolation dampers if the following conditions are met:

   1. Using Unit 1 standby gas treatment system and normal ventilation, maintain at least 1/4" H_2O vacuum in Unit 1 secondary containment

   2. Assure operability of both Unit 1 SGTS filter trains

   3. Assure Unit 2 SGTS valves to the refueling floor cannot be opened

   4. Allow no fuel movement in Units 1 or 2

*When irradiated fuel or the spent fuel shipping cask is being handled in the Hatch - Unit 1 secondary containment.

LIMITING CONDITION FOR OPERATION (Continued)

5. Unit 2 secondary containment integrity is intact except for Unit 2 standby gas treatment system operability requirements

If any of the above conditions cannot be met, an orderly shutdown shall be initiated and the reactor shall be brought to Hot Shutdown within 12 hours and shall be in Cold Shutdown within the following 24 hours.

d. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.5.3.1 Each of the above required Hatch - Unit 2 standby gas treatment subsystems shall be demonstrated OPERABLE per Specification 4.6.6.1.1.

4.9.5.3.2 Each of the above required Hatch - Unit 1 standby gas treatment subsystems shall be demonstrated OPERABLE per Hatch - Unit 1 Technical Specifications.

3/4.6.4 VACUUM RELIEF

Vacuum relief breakers are provided to equalize the pressure between the suppression chamber and drywell and between the reactor building and suppression chamber. This system will maintain the structural integrity of the primary containment under conditions of large differential pressures.

The vacuum breakers between the suppression chamber and the drywell must not be inoperable in the open position since this would allow bypassing of the suppression pool in case of an accident. There are an adequate number of valves to provide some redundance so that operation may continue with no more than three vacuum breakers inoperable in the closed position.

Each set of vacuum breakers between the reactor building and the suppression chamber provides 100% relief, so operation may continue with one valve out-of-service for 7 days.

3/4.6.5 SECONDARY CONTAINMENT

Secondary containment is designed to minimize any ground level release of radioactive material which may result from an accident. The reactor building provides secondary containment during normal operation when the drywell is sealed and in service. When the reactor is shutdown or during refueling the drywell may be open and the reactor building then becomes the primary containment.

Establishing and maintaining a vacuum in the building with the standby gas treatment system once per 18 months, along with the surveillance of the doors, hatches and dampers, is adequate to ensure that there are no violations of the integrity of the secondary containment. Only one closed damper in each penetration line is required to maintain the integrity of the secondary containment.

3/4.6.6 CONTAINMENT ATMOSPHERE CONTROL

The OPERABILITY of the containment iodine filter trains ensures that sufficient iodine removal capability will be available in the event of a LOCA. The reduction in containment iodine inventory reduces the resulting site boundary radiation doses associated with containment leakage. The operation of this system and resultant iodine removal capacity are consistent with the assumptions used in the LOCA analyses.

CONTAINMENT ATMOSPHERE CONTROL (Continued)

The OPERABILITY of the systems required for the detection and control of hydrogen gas ensures that these systems will be available to maintain the hydrogen concentration within containment below its flammable limit during post-LOCA conditions. Either recombiner is capable of controlling the expected hydrogen generation associated with: (1) zirconium-water reactions, (2) radiolytic decomposition of water, and (3) corrosion of metals within containment. The hydrogen mixing system is provided to ensure adequate mixing of the containment atmosphere following a LOCA. This mixing action will prevent localized accumulations of hydrogen from exceeding the flammable limit.

The requirement for the primary containment atmosphere oxygen concentration to be less than 4% by volume is being added for fire protection considerations. This is being done in lieu of the installation of sprinkler for the recirculation pumps inside the drywell.

3/4.6.6.5 PRIMARY CONTAINMENT PURGE SYSTEM

The primary containment purge system is designed to perform two basic functions: pressure control and inert/de-inert the primary containment. Under normal operations the purge system is used to maintain containment pressure less than two psig. Post LOCA, the purge system, through the 2 inch bypass lines, is also used to reduce containment pressure. The 18 inch lines are the primary means of reducing the oxygen concentration inside containment before long term power operations to less than 4% in accordance with Technical Specification 3.6.6.4. Conversely, it is also the path for restoring oxygen concentration to life sustaining levels before drywell entry. The system is hard-piped to the Standby Gas Treatment System; therefore, any entrained radioactivity will be reduced before being released to the environment through the main stack.

The use of the drywell and suppression chamber purge lines is not limited since the 18" valves will close during a LOCA or steam line break accident and therefore the site boundary dose guideline of 10 CFR Part 100 would not be exceeded in the event of an accident during purging operations. The design of the 18" purge supply and exhaust isolation valves meets the requirements of Branch Technical Position CSB 6-4, "Containment Purging During Normal Plant Operations."

Replacement of the 18" valve resilient seats on a cyclic basis will allow the opportunity for repair before gross leakage failure develops. The 0.60 L_a leakage limit shall not be exceeded when the leakage rates determined by the leakage integrity tests of these valves are added to the previously determined total for all valves and penetrations subject to Type B and C tests.

PRIMARY CONTAINMENT PURGE SYSTEM (Continued)

An exception can be taken for a brief period to both trains of Unit 1 SGTS being available when Unit 1 is in Cold Shutdown and Unit 2 is operating. This exemption is based on the low probability of the occurrence of a DBA LOCA on Unit 2 during the brief period that Unit 1 SGTS remained inoperable. In addition, Unit 1 SGTS would be in a condition such that it could be restored quickly to assist in the mitigation of the LOCA, if required.

An exception can be taken for a brief period to both trains of Unit 2 SGTS being available when Unit 2 is in Cold Shutdown and Unit 1 is operating. This exemption is based on the low probability of the occurrence of a DBA LOCA on Unit 1 during the brief period that Unit 2 SGTS remained inoperable. In addition, Unit 2 SGTS would be in a condition such that it could be restored quickly to assist in the mitigation of the LOCA, if required.

Surveillance testing of the excess flow isolation dampers is recommended by the vendor to verify that the blades pivot freely and no other damage is evident. Industry practice does not require testing for closure under simulated flow conditions for "tornado" type dampers.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENTS NOS. 118 AND 58 TO

FACILITY OPERATING LICENSES 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

DOCKETS NOS. 50-321 AND 50-366

1.0 Introduction

By letter dated June 15, 1983, as supplemented and modified by letters dated September 1, 1983, and August 20, 1985, Georgia Power Company (GPC) requested certain additions to the Edwin I. Hatch Nuclear Plant, Units 1 and 2, Technical Specifications pertaining to operation and leak rate testing of the containment purge system isolation valves. The requested changes also reflect the design modifications which incorporate fast acting excess flow isolation dampers into the standby gas treatment system (SGTS).

2.0 Evaluation

The addition of the fast acting dampers to the SGTS was proposed to assure that no functional damage to the SGTS would result in the event of a Loss of Coolant Accident (LOCA) while purging the containment and therefore permit the removal of the restriction imposed on the amount of time that the 18" purge and vent isolation valves could be opened for inerting, deinerting and pressure control in Operational Modes 1 through 3. The excess flow isolation dampers will isolate the common 18" vent line from the torus and drywell before it ties into the SGTS filter train suction when it senses a small percentage of DBA-LOCA flow. These isolation dampers have been installed on Unit 2 and will be installed on Unit 1 during the refueling outage scheduled for November 1985. By our letter to GPC dated January 16, 1984, we informed GPC of the acceptability of the proposed design modification and the associated removal of the time restriction on opening the purge and vent isolation valves during Modes 1, 2 and 3 for inerting, deinerting and pressure control.

Prior to actually removing the restriction on the time limit, it is necessary to add Technical Specifications requiring operability and surveillance of the excess flow isolation dampers. GPC's August 20, 1985, submittal proposed Technical Specifications that will require cycling and visual inspection of parts for deformation, free operation of linkage and position indication during each refueling outage.

This submittal also proposed a Limiting Condition for Operation to allow both Unit 2 SGTS trains to be temporarily inoperable to allow surveillance testing of the Unit 2 dampers provided both SGTS trains associated with Unit 1 are operable and Unit 2 is in Operational Condition 4 or 5. The Unit 1 Technical Specifications will continue to require both units' SGTSs to be operable when the unit is in Operational Modes 1 through 3.

Both the June 15, 1983, and the August 20, 1985, submittals proposed a Technical Specification that requires the replacement of the resilient seats every 18 months to preclude seat deterioration. This procedure was found to be acceptable by the NRC staff in lieu of the increased test frequency in a letter dated January 16, 1984, from J. Stolz to J. Beckham.

Based on our review as discussed above, we conclude that the Technical Specification changes requested by letter dated June 15, 1983, as supplemented and modified by letters dated September 1, 1983, and August 20, 1985, are acceptable.

3.0 Environmental Consideration

These amendments involve a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes in surveillance requirements. 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 these amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, these 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 these amendments.

4.0 Conclusion

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

Dated: December 11, 1985

Principal Contributor: M. Fields and F. Eltawila.