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Docket No. 50-321

Georgia Power Company
Oglethorpe Electric Membership Corporation
Municipal Electric Association of Georgia
City of Dalton, Georgia
ATTN: Mr. Charles F. Whitmer
Vice President-Engineering
Georgia Power Company
Atlanta, Georgia 30302

Gentlemen:

The Commission has issued the enclosed Amendment No. 56 to Facility License No. DPR-57 for the Edwin I. Hatch Nuclear Plant Unit No. 1. This amendment consists of changes to the Technical Specifications in response to your requests dated February 9 and 10 and April 26, 1978.

This amendment modifies the Technical Specifications by (1) revising the limiting conditions for operation and surveillance requirements associated with the Plant Service Water System to reflect the addition of an independent capability of providing cooling water to diesel generator 1B, (2) revising the surveillance requirements for relief/safety valves to reflect the replacement of three-stage topworks valves with the two stage topwork design which is identical to that to be used on Hatch Unit 2, and (3) revising the operability requirements for the Standby Gas Treatment System to reflect an extension of the HNP-1 secondary containment by the addition of that space which comprises the refueling floor of HNP-2.

Copies of the related Safety Evaluation and Notice of Issuance are also enclosed.

Sincerely,

Original signed by

Thomas A. Ippolito, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Enclosures and cec:
See page 2

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DATE	6/14/78	6/14/78	6/15/78	6/16/78		6/15/78

NRC FORM 318 (9-76) NRCM 0240 ☆ U.S. GOVERNMENT PRINTING OFFICE: 1976 — 626-624

Enclosures:
1. Amendment No. 56 to DPR-57
2. Safety Evaluation
3. Notice

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

GEORGIA POWER COMPANY
OGLETHORPE ELECTRIC MEMBERSHIP CORPORATION
MUNICIPAL ELECTRIC ASSOCIATION 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. 56
License No. DPR-57

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The applications for amendment by Georgia Power Company, et al, (the licensee) dated February 9 and 10, and April 26, 1978, comply 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:

   (2) Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 56, 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 the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Thomas A. Ippolito, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: June 16, 1978

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 56 TO FACILITY OPERATING LICENSE NO. DPR-57

GEORGIA POWER COMPANY
OGLETHORPE ELECTRIC MEMBERSHIP CORPORATION
MUNICIPAL ELECTRIC ASSOCIATION OF GEORGIA
CITY OF DALTON, GEORGIA

EDWIN I. HATCH NUCLEAR PLANT UNIT NO. 1

DOCKET NO. 50-321

I. INTRODUCTION

By letters dated February 9, February 10, and April 26, 1978, Georgia Power Company (the licensee) requested changes to the Technical Specifications appended to Facility Operating License No. DPR-57 for the Edwin I. Hatch Nuclear Plant, Unit 1 (HNP-1). The proposed changes would: (1) revise the limiting conditions for operation and surveillance requirements associated with the Plant Service Water System to reflect the addition of an independent capability of providing cooling water to diesel generator 1B, (2) revise the surveillance requirements for relief/safety valves to reflect the replacement of three-stage topworks valves with the two stage topwork design that is identical to that to be used on Hatch Unit 2, and (3) revise the operability requirements for the Standby Gas Treatment System to reflect an extension of the HNP-1 secondary containment by the addition of that space which comprises the refueling floor of HNP-2. During the course of staff review of these requests we determined that revision of the operability requirements and addition of surveillance for the Main Control Room Environmental System should be made. The staff recommended this revision based on the Technical Specifications of HNP-2, since both Units share a common Control Room and should have consistent Technical Specifications. The changes were discussed with the licensee and he agreed with the staff recommendations.

II. EVALUATION

a. Plant Service Water System

In the arrangement of the Plant Service Water (PSW) system described in the HNP-1 FSAR, Section 10.7, cooling water to Diesel Generator 1B (designated as the "Swing" diesel generator supplying either HNP-1 or HNP-2) is normally supplied by the Division I section of the PSW system.

In the event of failure of the Division I section, cooling water to Diesel Generator 1B will automatically be supplied by the Division II section of the PSW system. The modification to the PSW system of HNP-1 was accomplished by the licensee to reflect the current design bases for HNP-2 such that the cooling water to swing Diesel Generator 1B will be independently supplied by a standby service water pump (as shown in Figure 9.2-3 sheet 1 of HNP-2 FSAR). However, the cooling water intertie between Diesel Generator 1B and the existing PSW system's divisional piping has been retained for use when the standby service water pump is inoperable.

The standby service water pump motor is supplied electric power from MCC R24-S026. The design of this 600V ac motor control center is such that it is supplied by the 4160V ac bus to which Diesel Generator 1B is aligned. The circuits for swing Diesel Generator 1B automatically align it to the accident unit.

Automatic start of the standby service water pump is initiated by a start signal from Diesel Generator 1B or by a signal from the Diesel Generator 1B load sequencer, and the pump will run when power to MCC R24-S026 is available.

The licensee's application proposes the addition of operating limits associated with inoperability of various components of the PSW system which provides cooling water to the Diesel Generators. In the modified PSW system, the licensee has changed the primary source of cooling water for swing Diesel Generator 1B. By providing a separate and independent standby service water pump and eliminating the automatic swing between the Division I and Division II sections of the HNP-1 PSW system, the reliability of the HNP-1 diesel generator cooling water system is enhanced. This is because a single failure to any one cooling supply will render only its respective diesel generator inoperable and will not affect operation of the two remaining diesel generators. The original cooling water intertie between the two divisions of the HNP-1 PSW system, has been retained to operate as originally designed, i.e., whenever the standby service water pump is inoperable. The intertie provides additional flexibility for the cooling water supply system of Diesel Generator 1B. Since the two pairs of motor-operated valves that are provided between the HNP-1 PSW system and the standby service water pump will be closed with power to their motor operators locked out, a single failure will not compromise the independence of the standby service water pump and the HNP-1 PSW system.

Diesel Generator 1B and its associated buses ensures that the diesel is automatically aligned to the accident unit. The motor control center that supplies power to the standby service water pump will "follow" Diesel Generator 1B. Thus, this pump does not depend on the availability of either HNP-1 or HNP-2, but is supplied directly by the swing diesel generator.

Control, indications and alarms associated with the standby service water pump will be located in both HNP-1 and HNP-2 main control panels. Alarms will also be provided that monitor the status of 600V MCC R24-S026. Based on our review of the indications and alarms, we determined that specific indication should be provided to monitor the correct position of the various control switches that are associated with the automatic start of the standby service water pump. In discussions with representatives of Georgia Power, the licensee confirmed that indications are currently available to the operators of both HNP-1 and HNP-2 when the various control switches are not in proper alignment to enable the automatic start of the standby service water pump.

The proposed changes to the Technical Specifications would add Limiting Conditions of Operation, Surveillance Requirements and associated Bases for the standby service water pump. These changes are addressed in Sections 3.5.J and 4.5.J of the Technical Specifications for HNP-1. The requirements included in the revised sections are consistent with the current Technical Specifications that govern the Plant Service Water system.

During the course of our review, we determined that certain changes to the licensee's submittal should be made: (1) the normal availability of the PSW system should include all pumps, i.e., 4 plant service water pumps and the standby service water pump in lieu of the licensee's proposed 3 plant service water pumps and the standby service water pump; (2) the demonstration of operability of the divisional intertie valves should be specifically included in the Surveillance Requirements associated with those conditions in which the standby service water pump is inoperable and cooling water to diesel generator 1B is intertied with the PSW divisonal piping supply. These changes were discussed with the licensee and he agreed with the staff's recommendations.

Based on the above, we find the addition of limiting conditions for operation and surveillance requirements for the standby service water pump, as proposed by the licensee and amended by the staff to be acceptable.

b. Safety/Relief Valves

The licensee's submittal dated February 10, 1978, indicated his intent to modify the safety/relief valves for the main steam supply system by replacing the three stage topworks with a new design consisting of a two stage topworks. The salient feature of the modification as it relates to the current Technical Specifications is the removal of the function of the spring bellows. The function of the bellows was to control the pilot valve opening pressure, and the current specifications require monitoring

bellows. By the removal of the bellows [illegible]

the integrity of the belows. By the removal of the bellows function, the associated surveillance requirement would no longer be required.

The staff has previously reviewed the new design of pilot-operated valves manufactured by Target Rock Corporation. As part of that review, the licensee (Georgia Power Company) indicated that testing of the valves will be performed to establish satisfactory service requirements. It is further noted that the General Electric Company has agreed to work with the staff and with licensees to maintain a surveillance program once the new design safety-relief valves are installed on boiling water reactors. The licensee has indicated his intent to participate in this program. On the basis of the foregoing, we find the proposed elimination of the surveillance requirement of the integrity of the relief valve bellow to be acceptable. However, to provide for the flexibility of partial replacement of all safety/relief valves with the newer two-stage topworks design, we have revised the licensee's submittal to retain the surveillance requirement of monitoring the integrity of the bellows, annotating that this requirement does not apply to the newer design. This revision to the licensee's submittal was discussed with representatives of Georgia Power and they agreed.

c. Standby Gas Treatment System

Changes to the SGTS technical specifications were requested by the licensee to account for the expansion of the Unit 1 secondary containment to include the Unit 2 refueling floor. This modification will expand the volume of the Hatch Unit 1 secondary containment and, thus, the volume served by the Unit 1 standby gas treatment system (SGTS). The proposed changes to the Technical Specifications include operating requirements for having both Unit 1 and Unit 2 SGTS operable. The joint operation of both Units' SGTS will provide the necessary capability to reduce and hold the expanded Unit 1 secondary containment at a negative pressure.

We have reviewed and evaluated the proposed changes to Section 3.7.B of the Hatch Unit 1 Technical Specifications. The licensee has proposed that three of the four SGTS trains from both units be required to be operable when the Hatch Unit 1 secondary containment is required. The staff has modified the licensee's submittal to specifically require that both trains from Unit 1 and one of two from Unit 2 be operable. This will assure the capability of the SGTS trains to draw down and maintain a negative pressure in the Unit 1 secondary containment when the Hatch Unit 1 secondary containment is required. Requiring both Unit 1 trains to be operable will assure that adequate suction can be drawn from below the refueling floor in the Unit 1 reactor building, assuming a single active failure causing the loss of one train. To allow operational flexibility, one train in Unit 1 may be inoperable for up to 7 days providing the remaining systems are demonstrated operable at an increased surveillance frequency. If the system is not made operable within the 7 days, Unit 1

reactor operations and irradiated fuel handling and/or handling of casks in the vicinity of the spent fuel pools are terminated.

The staff has added the requirement that both Unit 1 SGTS trains and one of the two Unit 2 SGTS trains be operable before Unit 1 reactor operations and irradiated fuel handling or handling of casks can begin. This will prevent starting operations with the plant in a degraded condition. This change was discussed with the licensee and he agreed.

The requirements for Unit 1 secondary containment integrity were also amended by the staff to include requirements for sealing hatches and closing access doors between the Unit 1 and Unit 2 secondary containments. This will assure that the Unit 2 secondary containment is isolated from the Unit 1 secondary containment and, thus, the capability of ths SGTS to maintain a negative pressure is not affected. There is also a requirement to maintain the Unit 1 secondary containment during all operational conditions of Unit 2 except cold shutdown. This is in agreement with the Unit 2 specifications. The licensee did not object to these changes.

Based on the above considerations, the staff has concluded that the proposed specifications will provide adequate assurance that sufficient SGTS trains will be operable to mitigate the potential consequences of postulated accidents. We further conclude that the conclusions reached in the Hatch Unit 1 Safety Evaluation (May 1973) concerning the capability of the SGTS trains to collect activity released to the secondary containment during postulated accidents remain valid and the dose consequences of postulated accidents remain unchanged. Therefore, the staff has concluded that the proposed changes to Section 3.7.B of the Technical Specifications as modified by the staff are acceptable.

d. Control Room Environmental System

By Amendment No. 51 to DPR-57 the HNP-1 Technical Specifications were revised by adding a pressurization mode of operation for the main control room which is shared between the two units. By Amendment No. 44 of the HNP-2 FSAR, the licensee indicated that the control room ventilation system would be tested by verifying that on an initiation signal, the system automatically switches into the pressurization mode and maintains a pressure differential in the control room of ≥ 0.1 inch water guage relative to the adjacent turbine building. The test will be performed periodically. The staff review determined that this pressure differential provides adequate margin to assure that the control room will be maintained at a slightly positive pressure during pressurization and is acceptable. As a result of this review, Operating Limits and Surveillance requirements for this mode of operation were issued for HNP-2.[2] To provide consistency between the two Hatch units, especially where each unit's Technical Specifications apply to the same system, e.g. Control Room Environmental System, the staff suggested that HNP-1 specifications be revised. This revision was discussed with the licensee and he agreed.

Environmental Consideration

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: June 16, 1978

REFERENCES

1. Report to the Advisory Committee on Reactor Safeguards by the Office of Nuclear Reactor Regulation, NRC, in the matter of Georgia Power Company, et al; Edwin I. Hatch Nuclear Plant, Unit No. 2, Docket No. 50-336, January 1978.

2. Operating License NPF-5 with attached Technical Specifications for Edwin I. Hatch Nuclear Plant, Unit No. 2, dated June 13, 1978.

ATTACHMENT TO LICENSE AMENDMENT NO. 56

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	Insert
3.5-12	3.5-12
3.5-13	3.5-13
3.5-21	3.5-21
3.6-9	3.6-9
3.7-10	3.7-10
3.7-11	3.7-11
3.7-12	3.7-12
3.7-13	3.7-13
3.7-34	3.7-34
3.7-34a	3.7-34a
3.12-1	3.12-1

3.5.J Plant Service Water System

1. Normal Availability

The reactor shall not be made critical from the cold shutdown condition unless the Plant Service Water System (including 4 plant service water pumps and the standby service water pump) is operable.

2. Inoperable Components

a. The standby service water pump may be inoperable for a period not to exceed 60 days provided all diesel generators are operable.

b. One PSW pump may be inoperable for a period not to exceed 30 days provided all diesel generators are operable.

c. One PSW pump and the standby service water pump may be inoperable for a period not to exceed 30 days provided all diesel generators are operable.

d. Two PSW pumps or one PSW division may be inoperable for a period not to exceed 7 days provided the diesel generators associated with the operable PSW components are operable.

4.5.J Plant Service Water System

1. The automatic pump start functions and automatic isolation functions shall be tested once per operating cycle.

2. Inoperable Components

a. When the standby service water pump is made or found to be inoperable, the four remaining PSW pumps, both PSW divisions, and all three diesel generators, shall be demonstrated to be operable immediately.

b. When one PSW pump is made or found to be inoperable, the standby service water pump, the three remaining PSW pumps, both PSW divisions and all three diesel generators, shall be demonstrated to be operable immediately and weekly thereafter.

c. When one PSW pump and the standby service water pump are made or found to be inoperable, the three remaining PSW pumps, both PSW divisions, and all three diesel generators, shall be demonstrated to be operable immediately and weekly thereafter.

d. When two PSW pumps or one PSW division are made or found to be inoperable, the standby service water pump and all active components of the operable division or divisions and the diesel generators associated with the operable PSW components, shall be demonstrated to be operable immediately and daily thereafter.

3.5.J Plant Service Water System

2. Inoperable Components (Cont'd)

e. Two PSW pumps or one PSW division, and the standby service water pump may be inoperable for a period not to exceed 7 days provided the diesel generators associated with the operable PSW components are operable.

For each condition above in which the standby service water pump is inoperable, cooling water to diesel generator 1B shall be intertied with the PSW divisional piping supply.

3. Shutdown Requirements

If the requirements of Specifications 3.5.J.1 and 3.5.J.2 cannot be met the reactor shall be placed in the cold shutdown condition within 24 hours.

4.5.J Plant Service Water System

2. Inoperable Components (Cont'd)

e. When two PSW pumps or one PSW division, and the standby service water pump are made or found to be inoperable, all active components of the operable division or divisions and the diesel generators associated with the operable PSW components, shall be demonstrated to be operable immediately and daily thereafter.

When cooling water to diesel generator 1B is intertied with the PSW divisional piping supply, operability of the divisional interlock valves shall be demonstrated.

3.5.K Equipment Area Coolers

1. The equipment area coolers serving the Reactor Core Isolation Cooling (RCIC), High Pressure Coolant Injection (HPCI), Core Spray or Residual Heat Removal (RHR) pumps must be operable at all times when the pump or pumps served by that specific cooler is considered to be operable.

2. When an equipment area cooler is not operable, the pump(s) served by that cooler must be considered inoperable for Technical Specification purposes.

4.5.K Equipment Area Coolers

1. Each equipment area cooler is operated in conjunction with the equipment served by that particular cooler; therefore, the equipment area coolers are tested at the same frequency as the pumps which they serve.

3.5.J/4.5.J Plant Service Water System

The Plant Service Water (PSW) system consists of two subsystems (divisions) of two pumps each and a separate standby service water pump system for diesel generator 1B. During normal full power operation the two subsystems function as a 3 out of 4 pump cross connected system supplying cooling water to the turbine and reactor building cooling systems. In the event of an accident signal, non safety-related cooling loads are isolated and the PSW pumps in the two subsystems supply cooling water to diesel generators 1A and 1C, the reactor building cooling system and the control room air conditioners, while the standby service water pump is available to automatically supply cooling water to diesel generator 1B should it be needed. Additionally, diesel 1B has a manual back-up water supply available from the Unit 1 Division 1 or Division 2 PSW subsystems so that during maintenance on the standby diesel service water pump, either division of the PSW system can manually be aligned to supply cooling water to the 1B diesel. The two subsystems and the standby service water pump system are split in the accident mode for greater reliability with one pump in each of the two subsystems automatically starting while a start signal from diesel generator 1B initiates standby service water pump operation. Only one of the Division 1 PSW pumps and one of the Division 2 PSW pumps are required for cooling diesel generators 1A and 1C, respectively, while the standby service water pump provides adequate cooling water to diesel generator 1B. In the event that the standby service water pump is inoperable, the HNP-1 Division 1-Division 2 intertie supply piping can be aligned to cool the 1B diesel. In this condition, one PSW pump is capable of supplying the cooling requirements for the reactor building cooling system, the control room air conditioners, and the 1A, 1B, and 1C diesel generators.

The PSW system can supply all power generation systems at full load and the diesel generators with redundancy if one PSW pump and/or the standby service water pump are inoperable. Hence, a 60-day outage time is justified if the standby service water pump is inoperable since all four PSW pumps are available (divisional intertie to 1B diesel required). In addition, a 30-day outage is justified if one PSW pump is inoperable, or if one PSW pump and the standby service water pump are inoperable (divisional intertie to 1B diesel required). Should two PSW pumps (or one subsystem) become inoperable, or should two PSW pumps (or one subsystem) and the standby service water pump become inoperable (division intertie to 1B diesel required) plant operation will probably only continue at less than full power. However, safety-related loads are still adequately powered for these conditions. Therefore, a 7 day outage time is justified for such events.

K. Engineering Safety Features Equipment Area Coolers

The equipment area cooler in each pump compartment is capable of providing adequate ventilation flow and cooling. Engineering analyses indicate that the temperature rise in safeguard compartments without adequate ventilation flow or cooling is such that continued operation of the safeguard equipment or associated auxiliary equipment cannot be assured.

The surveillance and testing of the equipment area coolers in each of their various modes is accomplished during the testing of the equipment served by these coolers. The testing is adequate to assure the operability of the equipment area coolers.

L. References

1. FSAR Section 6, Core Standby Cooling System.

2. HNP-2 PSAR Appendix I, Conformance to NRC Interim Acceptance Criteria for Emergency Core Cooling Systems.

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS

6.H. Relief/Safety Valves

When more than one relief/safety valve is known to be failed an orderly shutdown shall be initiated and the reactor depressurized to less than 113 psig within 24 hours. Prior to reactor startup from a cold condition all relief/safety valves shall be operable

4.6.H. Relief/Safety Valves

1. End of Operating Cycle

Approximately one-half of all relief/safety valves shall be benchchecked or replaced with a benchchecked valve each refueling outage. All 11 valves will have been checked or replaced upon the completion of every second operating cycle.

2. Each Operating Cycle

Once during each operating cycle, at a reactor pressure >100 psig each relief valve shall be manually opened until thermocouples downstream of the valve indicate steam is flowing from the valve.

3. Integrity of Relief Valve Bellows*

The integrity of the relief valve bellows shall be continuously monitored and the pressure switch calibrated once per operating cycle and the accumulators and air piping shall be inspected for leakage once per operating cycle.

4. Relief Valve Maintenance

At least one relief valve shall be disassembled and inspected each operating cycle.

I. Jet Pumps

Whenever the reactor is in the Start & Hot Standby or Run Mode with both recirculating pumps operating, all jet pumps shall be operable. If it is determined that a jet pump is inoperable, an orderly shutdown shall be initiated and the reactor shall be in the Cold Shutdown Condition within 24 hours.

I. Jet Pumps

Whenever both recirculating pumps are operating with the reactor in the Start & Hot Standby or Run Mode, jet pump operability shall be checked daily by verifying that the following conditions do not occur simultaneously.

1. The two recirculation loops have a flow imbalance of 15% or more when the pumps are operated at the same speed.

*Does not apply to two-stage Target Rock SRVs

3.7.A.6.c. H_2 and O_2 Analyzer

Whenever the reactor is in power operation, there shall be at least one CAD System H_2 and O_2 analyzer serving the primary containment. If one H_2 and O_2 analyzer is inoperable, the reactor may remain in operation for a period not to exceed seven days.

4.7.A.6.c. H_2 and O_2 Analyzer

Instrumentation surveillance is listed in Table 4.2-11.

d. Post-LOCA Repressurization Limit

The maximum post-LOCA primary containment repressurization limit allowable using the CAD System shall be 30 psig. Venting via the SGTS to the main stack must be initiated at 30 psig following the initial post-LOCA pressure peak.

7. Shutdown Requirements

If Specification 3.7.A cannot be met, an orderly shutdown shall be initiated and the reactor shall be in the Cold Shutdown Condition within 24 hours.

B. Standby Gas Treatment System

1. Operability Requirements

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 standby gas treatment systems in each unit 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 banks 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 ANSI N510-1975.

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
B. Standby Gas Treatment System	B. Standby Gas Treatment System
1. Operability Requirements (Cont'd)	1. Surveillance When System Operable (Cont'd)
If at least one of the two inoperable systems 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.	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.
3.7.B.2. Performance Requirements	2. Filter Testing
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% 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% 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.	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.

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C. Secondary Containment

1. Secondary Containment Integrity

a. Integrity of the secondary containment shall be maintained during all modes of Unit 1 plant operation except when all of the following conditions are met:

(1) The reactor is subcritical and Specification 3.3.A is met.

(2) The reactor water temperature is below 212°F and the reactor coolant system is vented.

(3) No activity is being performed which can reduce the shutdown margin below that stated in Specification 3.3.A.

(4) The fuel cask or irradiated fuel is not being moved in the reactor building.

(5) All hatches between Unit 1 secondary containment and Unit 2 secondary containment are closed and sealed.

(6) At least one door in each access path between Unit 1 secondary containment and Unit 2 secondary containment is closed.

b Integrity of the Unit 1 secondary containment shall be maintained during all modes of Unit 2 plant operations except Operational Condition 4 as defined in the Unit 2 Technical Specifications.

C. Secondary Containment

1. Surveillance While Integrity Maintained

Secondary containment surveillance shall be performed as indicated below:

a. A preoperational secondary containment capability test shall be conducted after isolating the secondary containment and placing the standby gas treatment system filter trains in operation. Such tests shall demonstrate the capability to maintain a minimum 1/4-inch of water vacuum under calm wind (<5 mph) conditions with each filter train flow rate not more than 4000 cfm.

4.7.C.1. Surveillance While Integrity Maintained (Cont'd)

b. Secondary containment capability to maintain a minimum 1/4-inch of water vacuum under calm wind (<5 mph) conditions with each filter train flow rate not more than 4000 cfm shall be demonstrated at each refueling outage, prior to refueling.

3.7.C.2. Violation of Secondary Containment Integrity

If Specification 3.7.C.1 cannot be met, procedures shall be initiated to establish conditions listed in Specification 3.7.C.1.a through 3.7.C.1.d.

2. Surveillance After Integrity Violated

After a secondary containment violation is determined the standby gas treatment system will be operated immediately after the affected zones are isolated from the remainder of the secondary containment. The ability to maintain the remainder of the secondary containment at 1/4-inch of water vacuum pressure under calm (<5 mph) wind conditions shall be confirmed.

D. Primary Containment Isolation Valves

1. Valves Required to be Operable

During reactor power operation, all primary containment isolation valves listed in Table 3.7-1. and all reactor coolant system instrument line excess flow check valves shall be operable except as stated in Specification 3.7.D.2.

D. Primary Containment Isolation Valves

1. Surveillance of Operable Valves

Surveillance of the primary containment isolation valves shall be performed as follows:

a. At least once per operating cycle the operable isolation valves that are power operated and automatically initiated shall be tested for simulated automatic initiation and the closure times specified in Table 3.7-1.

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3.7.A.7. 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. 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 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.

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.

3.12 MAIN CONTROL RC ENVIRONMENTAL SYSTEM

Applicability

The Limiting Conditions for Operation apply to the operating status of the main control room environmental system.

Objective

The objective of the Limiting Conditions for Operation is to assure the availability of the main control room environmental system under conditions for which its capability is required to protect plant operators.

Specifications

A. Ventilations System Operability Requirements

1. Operability Requirement

a. Two independent control room air treatment systems shall be operable at all times when secondary containment integrity is required. However, from and after the date that one circuit of the control room air treatment system is made or found to be inoperable for any reason, reactor operation or refueling operation is permissible only during the succeeding seven days. If the system is not made fully operable within 7 days, reactor shutdown shall be initiated and the reactor shall be in cold shutdown within the next 36 hours and irradiated fuel handling operations shall be terminated within 2 hours.

b. The control room ventilation system shall be capable of maintaining the control room at a positive pressure relative to the turbine building when in the pressurization pressurization mode.

4.12 MA CONTROL ROOM ENVIRONMENTAL SYSTEM

Applicability

The Surveillance Requirements apply to the periodic tests and examinations of the main control room environmental system.

Objective

The objective of the Surveillance Requirements is to verify the operability, availability or efficiency of the main control room environmental system under conditions for which its capability is required to protect plant operators.

Specifications

A. Ventilation System Tests

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

a. The pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 6 inches of water at system design flow rate (±10%).

b. Automatic initiation of the control room air treatment system.

c. Each circuit shall be operated for at least 15 minutes each month.

d. The control room ventilation system shall be demonstrated capable of maintaining the control room at a positive pressure ≥1/10 inche W.G. relative to the turbine building during system operation at a flow rate ≤400 cfm.

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-321

GEORGIA POWER COMPANY, ET AL

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 56 to Facility Operating License No. DPR-57 issued to Georgia Power Company, Oglethorpe Electric Membership Corporation, Municipal Electric Association of Georgia and City of Dalton, Georgia, which revised Technical Specifications for operation of the Edwin I. Hatch Nuclear Plant, Unit No. 1, located in Appling County, Georgia. The amendment is effective as of its date of issuance.

The amendment modifies the Technical Specifications by (1) revising the limiting conditions for operation and surveillance requirements associated with the Plant Service Water System to reflect the addition of an independent capability of providing cooling water to diesel generator 1B, (2) revising the surveillance requirements for relief/safety valves to reflect the replacement of three-stage topworks valves with the two stage topwork design which is identical to that to be used on Hatch Unit 2, and (3) revising the operability requirements for the Standby Gas Treatment System to reflect an extension of the HNP-1 secondary containment by the addition of that space which comprises the refueling floor of HNP-2.

The applications for the amendment comply with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR Section 51.5(d)(4), an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the applications for amendment dated February 9 and 10 and April 26, 1978, (2) Amendment No. 56 to License No. DPR-57, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C. and at the Appling County Public Library, Parker Street, Baxley, Georgia 31513. A single copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Operating Reactors.

Dated at Bethesda, Maryland, this 16th day of June 1978.

FOR THE NUCLEAR REGULATORY COMMISSION

Thomas A. Ippolito, Chief
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Division of Operating Reactors