

June 23, 1983

DMB 016

Docket No. 50-366

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

Dear Mr. Beckham:

The Commission has issued the enclosed Amendment No. 32 to Facility Operating License No. NPF-5 for the Edwin I. Hatch Nuclear Plant, Unit No. 2. The amendment consists of a one-time change to the Technical Specifications (TSs) in response to your telecopied application dated June 20, 1983, as supplemented by your telecopied letter dated June 21, 1983.

On June 21, 1983, you received oral authorization from the NRC for this one-time change in TS Tables 3.3.2-1 and 3.3.2-2. The change permitted bypassing the Reactor Vessel Water Level - Low trip setpoint for isolation of the shutdown cooling system during feedwater sparger bracket repair.

A copy of the Safety Evaluation is also enclosed. Notice of Issuance and Final Determination of No Significant Hazards Consideration and Opportunity for Hearing will be included in the Commission's Monthly Notice.

Sincerely,

"ORIGINAL SIGNED BY:"

George W. Rivenbark, Sr. Project Manager
Operating Reactors Branch #4
Division of Licensing

Enclosures:

- 1. Amendment No. 32 to NPF-5
- 2. Safety Evaluation

cc w/enclosures:
See next page

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Hatch 1/2
Georgia Power Company

50-321/366

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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. 50-366

EDWIN I. HATCH NUCLEAR PLANT, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 32
License No. NPF-5

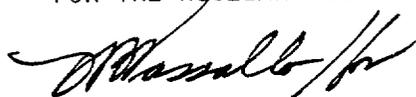
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Georgia Power Company, et al, (the licensee) telecopied June 20, 1983, as supplemented June 21, 1983, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (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 a 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. 32, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This amendment became effective on June 21, 1983.

FOR THE NUCLEAR REGULATORY COMMISSION



John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: June 23, 1983

ATTACHMENT TO LICENSE AMENDMENT NO. 32

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 a vertical line indicating the area of changes. The corresponding overleaf pages are also provided to maintain document completeness.

Remove

3/4 3-14

3/4 3-18

Insert

3/4 3-14

3/4 3-18

TABLE 3.3.2-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION

<u>TRIP FUNCTION</u>	<u>VALVE GROUPS OPERATED BY SIGNAL (a)</u>	<u>MINIMUM NUMBER OPERABLE CHANNELS PER TRIP SYSTEM (b)(c)</u>	<u>APPLICABLE OPERATIONAL CONDITION</u>	<u>ACTION</u>
4. HIGH PRESSURE COOLANT INJECTION SYSTEM ISOLATION				
a. HPCI Steam Line Flow -High## (2E41-N004 and 2E41-N005)	3	1	1, 2, 3	26
b. HPCI Steam Supply Pressure - Low (2E41-N001 A, B, C, D)	3, 8	2	1, 2, 3	26
c. HPCI Turbine Exhaust Diaphragm Pressure - High (2E41-N012 A,B,C,D)	3	2	1, 2, 3	26
d. HPCI Equipment Room Temperature - High (2E41-N610 A, B)	3	1	1, 2, 3	26
e. Suppression Pool Area Ambient Temperature-High (2E51-N603 C, D)	3	1	1, 2, 3	26
f. Suppression Pool Area Δ Temp.-High (2E51-N604 C, D)	3	1	1, 2, 3	26
g. Suppression Pool Area Temperature Timer Relays (2E41-M603 A, B)	3 ⁽ⁱ⁾	1	1, 2, 3	26
h. Emergency Area Cooler Temperature- High (2E41-N602 A, B)	3	1	1, 2, 3	26
i. Drywell Pressure-High (2E11-N011 C, D)	8	1	1, 2, 3	26
j. Logic Power Monitor (2E41-K1)	NA ^(h)	1	1, 2, 3	27

Not required OPERABLE during performance of the special startup test program on HPCI and RCIC reliability authorized by Amendment No. 9

HATCH - UNIT 2

3/4 3-13

Amendment No. 9

JUL 1974

TABLE 3.3.2-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION

<u>TRIP FUNCTION</u>	<u>VALVE GROUPS OPERATED BY SIGNAL (a)</u>	<u>MINIMUM NUMBER OPERABLE CHANNELS PER TRIP SYSTEM (b)(c)</u>	<u>APPLICABLE OPERATIONAL CONDITION</u>	<u>ACTION</u>
5. <u>REACTOR CORE ISOLATION</u>				
<u>COOLING SYSTEM ISOLATION</u>				
a. RCIC Steam Line Flow-High (2E51-N017, 2E51-N018)	4	1	1, 2, 3	26
b. RCIC Steam Supply Pressure - Low (2E51-N019 A, B, C, D)	4, 9	2	1, 2, 3	26
c. RCIC Turbine Exhaust Diaphragm Pressure - High (2E51-N012 A, B, C, D)	4	2	1, 2, 3	26
d. Emergency Area Cooler Temperature - High (2E51-N602 A, B)	4	1	1, 2, 3	26
e. Suppression Pool Area Ambient Temperature-High (2E51-N603 A, B)	4	1	1, 2, 3	26
f. Suppression Pool Area Δ T-High (2E51-N604 A, B)	4	1	1, 2, 3	26
g. Suppression Pool Area Temperature Timer Relays (2E51-M602 A, B)	4 ⁽¹⁾	1	1, 2, 3	26
h. Drywell Pressure - High (2E11-N011 A, B)	9	1	1, 2, 3	26
i. Logic Power Monitor (2E51-K1)	NA ^(h)	1	1, 2, 3	27
6. <u>SHUTDOWN COOLING SYSTEM ISOLATION</u>				
a. Reactor Vessel Water Level-Low## (2B21-N017 A, B, C, D)	2, 5, 6, 10, 11, 12	2	3, 4, 5	26
b. Reactor Steam Dome Pressure-High (2B31-N018 A, B)	11	1	1, 2, 3	28

Not required OPERABLE during feedwater bracket repair commencing on June 21, 1983.

HATCH - UNIT 2

3/4 3-14

Amendment No. 9

TABLE 3.3.2-2 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SETPOINTS

<u>TRIP FUNCTION</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUE</u>
3. <u>REACTOR WATER CLEANUP SYSTEM ISOLATION</u>		
a. Δ Flow - High	≤ 79 gpm	≤ 79 gpm
b. Area Temperature-High	$\leq 130^\circ\text{F}$	$\leq 130^\circ\text{F}$
c. Area Ventilation Δ Temperature - High	$\leq 75^\circ\text{F}$	$\leq 75^\circ\text{F}$
d. SLCS Initiation	NA	NA
e. Reactor Vessel Water Level-Low	> 12.5 inches*	≥ 12.5 inches*
4. <u>HIGH PRESSURE COOLANT INJECTION SYSTEM ISOLATION</u>		
a. HPCI Steam Line Flow-High	$\leq 300\%$ of rated flow	$\leq 300\%$ of rated flow
b. HPCI Steam Supply Pressure - Low	≥ 100 psig	≥ 100 psig
c. HPCI Turbine Exhaust Diaphragm Pressure-High	≤ 10 psig	≤ 10 psig
d. HPCI Equipment Room Temperature-High	$\leq 175^\circ\text{F}$	$\leq 175^\circ\text{F}$
e. Suppression Pool Area Ambient Temperature-High	$\leq 175^\circ\text{F}$	$\leq 175^\circ\text{F}$
f. Suppression Pool Area ΔT - High	$< 50^\circ\text{F}^{**}$	$< 50^\circ\text{F}^{**}$
g. Suppression Pool Area Temperature Timer Relays	NA	NA
h. Emergency Area Cooler Temperature - High	$\leq 175^\circ\text{F}$	$\leq 175^\circ\text{F}$
i. Drywell Pressure - High	≤ 2 psig	≤ 2 psig
j. Logic Power Bus Monitors	NA	NA

*See Bases Figure B 3/4 3-1.

**Initial setpoint. Final setpoint to be determined during startup testing.

TABLE 3.3.2-2 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SETPOINTS

<u>TRIP FUNCTION</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUE</u>
5. <u>REACTOR CORE ISOLATION</u>		
<u>COOLING SYSTEM ISOLATION</u>		
a. RCIC Steam Line Flow - High	\leq 300% of rated flow	\leq 300% of rated flow
b. RCIC Steam Supply Pressure - Low	\geq 50 psig	\geq 50 psig
c. RCIC Turbine Exhaust Diaphragm Pressure-High	\leq 10 psig	\leq 10 psig
d. Emergency Area Cooler Temperature-High	\leq 175°F	\leq 175°F
e. Suppression Pool Area Ambient Temperature High	\leq 175°F	\leq 175°F
f. Suppression Pool Area ΔT - High	\leq 50°F**	\leq 50°F**
g. Suppression Pool Area Temperature Timer Relays	NA	NA
h. Drywell Pressure - High	\leq 2 psig	\leq 2 psig
i. Logic Power Monitor	NA	NA
6. <u>SHUTDOWN COOLING SYSTEM ISOLATION</u>		
a. Reactor Vessel Water Level - Low##	\geq 12.5 inches*	\geq 12.5 inches*
b. Reactor Steam Dome Pressure - High	\leq 135 psig	\leq 135 psig

*See Bases Figure B 3/4 3-1.

**Initial setpoint. Final setpoint to be determined during startup testing.

##Not required OPERABLE during feedwater sparger bracket repair commencing on June 21, 1983. This involves only Group 11.

HATCH - UNIT 2

3/4 3-18

Amendment No.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 32 TO FACILITY OPERATING LICENSE NO. NPF-5

GEORGIA POWER COMPANY
OGLETHORPE POWER CORPORATION
MUNICIPAL ELECTRIC AUTHORITY OF GEORGIA
CITY OF DALTON, GEORGIA

EDWIN I. HATCH NUCLEAR PLANT, UNIT NO. 2
DOCKET NO. 50-366

1.0 Introduction

By letter dated June 20, 1983, Georgia Power Company (the licensee) requested a temporary change to the facility Technical Specifications involving automatic isolation of shutdown cooling on low water level in the reactor vessel. During post-refueling activities, unscheduled repair of a feedwater sparger support bracket inside the vessel became necessary. To facilitate this repair action, the licensee proposes to lower the vessel water level to just below the bracket, approximately minus 80 inches on the water level instrumentation and approximately seven feet above the top of the active fuel. This level is below both the "low" and "low-low" setpoints for the protection system. At the "low" level, automatic isolation of the shutdown cooling system will occur. In order to retain shutdown cooling, the licensee proposes to bypass the automatic isolation of the shutdown cooling temporarily.

The licensee requested expedited review of this request because this unexpected repair is on the critical path for unit startup and prompt NRC action is needed to avoid a significant delay in the return to power.

After discussions with the NRC staff, the licensee provided a supplement to the amendment request via a letter dated June 21, 1983.

2.0 Evaluation

The licensee has considered conducting this repair without lowering the water level. That evaluation concluded that this repair work cannot readily be performed under water. The equipment to be used is not designed for underwater use and would require modifications. The procedures would require revision in order to accommodate changes in testing of welds (dye penetrant test is presently called for). No qualified craft personnel are available for underwater work. It would require approximately six weeks to mockup and test craft personnel on the procedures, revise procedures and modify equipment. In addition, it would

be difficult to examine the repair work to ascertain that the repair work was acceptable. Further, the licensee considered the radiation exposure to the workers in an underwater repair. Due to the contribution of activity in the water itself and the increased length of time required to perform the repair, underwater repair would be expected to generate greater radiological consequences to workers than an out-of-water repair. Therefore, for radiological considerations, the licensee has concluded that lowering the water level is the more desirable alternative. Based upon both considerations of what is involved to perform an underwater repair and of the radiological consequences, it appears that lowering the water level is preferable in this case.

In the design of the protection system, when vessel water level reaches the "low" setpoint (+12.5 inches on the operating range instrumentation), Group II of the primary containment isolation system is automatically actuated. Group II includes the supply valves used for the shutdown cooling mode of the residual heat removal (RHR) system. The purpose of isolating shutdown cooling is to isolate a possible pipe break in the system which could be the cause of the loss of water level.

The licensee contends that the pipe break scenario is credible only when the reactor is pressurized. Since the reactor is presently fully depressurized, this automatic protection is therefore not necessary. The licensee has stated that no activity will be allowed to be in progress which has the potential for draining the reactor vessel. This commitment provides protection against water loss due to inadvertent opening of valves or other maintenance activities.

Further, the licensee has agreed to revise the special procedures for this repair action to provide a control room operator assigned to manually isolate the shutdown cooling system should the water level fall an additional 10 inches to -90 inches. This is considered to be a compensatory measure to temporarily replace the automatic action that is to be bypassed. We find this action acceptable based upon (1) the likelihood of a pipe break occurring in cold shutdown is substantially less than at hot, pressurized operating conditions, and (2) should a break occur, the rate of water loss will be slower for a fully depressurized condition, thus providing additional time in which protective action can be taken. Further, should the level fall to -100 inches, the operator will manually actuate one train of core spray to regain level.

An additional consideration is the automatic actuation of the low pressure emergency core cooling systems (ECCS), i.e., low pressure coolant injection and core spray, which occurs when the water level reaches the "low-low-low" setpoint. This setpoint is -146.5" which is approximately five feet below the water level expected during this repair and two feet above the top of the active fuel. The low pressure ECCS functions

are provided by the RHR system. However, when the RHR system is in its shutdown cooling mode, the RHR system cannot provide the low pressure coolant injection (LPCI) function on an automatic basis. Therefore, the licensee has agreed to pre-position the manual valves which provide suction from the suppression pool (i.e., LPCI mode) for one train of the RHR system. This action will provide that during this repair action, the LPCI function will be available on an automatic basis. This provides additional protection. The licensee has agreed to assure that one train of core spray is also operable at all times during the repair action.

In order to facilitate this repair inside the vessel, lowering the water level temporarily is preferable to an underwater repair effort. The likelihood of a need to isolate the shutdown cooling is reduced because the system is cold and fully depressurized, and the licensee has committed to avoid any activities with the potential to drain the reactor vessel. In the event of a loss of level, additional time is available to provide such an isolation on a manual basis. The licensee is taking compensatory actions to provide manual isolation of shutdown cooling and manual actuation of core spray in the event the water level decreases significantly. Action has been taken to assure that both LPCI and core spray will be actuated automatically before the core could be uncovered.

In view of the low likelihood of a need to isolate the shutdown cooling and the compensatory provisions for manual isolation and for emergency water additions, we conclude that it is acceptable to temporarily defeat the automatic isolation of shutdown cooling.

3.0 Environmental Considerations

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.

4.0 Final No Significant Hazards Consideration Determination

The State was informed by telephone of our proposed no significant hazards consideration determination June 20, 1983. The State contact had no comments on the proposed determination. Based on our review of the licensee's submittals as described in our above evaluation and for the reasons stated below, we have made a final determination that the licensee's amendment request does not involve a significant hazards consideration.

The likelihood of a need to isolate the shutdown cooling system is reduced because the system is cold and fully depressurized and the licensee has committed to avoid any activities with the potential to drain the reactor vessel while this repair work is in progress. In the event of a loss of level, time is available to provide such an isolation on a manual basis, and the licensee is taking compensatory action as noted in the evaluation to provide for manual isolation of the shutdown cooling system and manual actuation of the core spray if the water level decreases significantly. Action has also been taken to assure that both the low pressure coolant injection and core spray systems will be automatically actuated before the core could be uncovered. For these reasons, we conclude that the amendment would not involve a significant increase in the probability or the consequences of an accident previously evaluated.

A spectrum of events which cause water level to fall below the level at which action will be taken, as stated above, have been evaluated in the Hatch Unit 2 Final Safety Analysis Report. For this reason, we conclude that the amendment would not create the possibility of a new or different kind of accident.

The availability of the multiple sources of makeup water to the reactor vessel in conjunction with the compensatory measures that the licensee is taking, as noted above, assures that margins of safety are being maintained. For this reason, we conclude that the amendment does not involve a significant reduction in a margin of safety.

5.0 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 this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: June 23, 1983

Principal Reviewers:
J.T. Beard