

# 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. 63 License No. DPR-57

- The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Georgia Power Company, et al., (the licensee) dated January 19, 1979, 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 (1) 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.

 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. 63, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

 This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR RECULATORY COMMISSION

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

Attachment: Changes to the Technical Specifications

Date of Issuance: February 9, 1979

#### ATTACHMENT TO LICENSE AMENDMENT NO. 63

#### 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
3.2-5	3.2-5
3.2-8	3.2-8
3.2-53*	3.2-53*
3.2-54	3.2-54
3.2-56	3.2-56

<sup>\*</sup>Overleaf provided for convenience only.

Ref. No.	Instrument	Trip Condition Nomenclature .	Required Operable Channels per Trip System (b)	Trip Setting	Remarks
1.	Reactor Water Level (Yarway)	Low Low (LL2)	2	> - 38 inches	Initiates HPCI; Also initiates RCIC.
2.	Drywell Pressure	High	2	< 2 psig .	Initiates HPCI; Also initiates LPCI and Core Spray and pro- vides a permissive signal to ADS.
3.	HPCI Turbine Overspeed	Hechanical	1	< 5000 rpm	Trips HPCI turbine
4.	HPCI Turbine Exhaust Pressure	lligh	1	≤ 150 psig	Trips HPCI turbine
5.	HPCI Pump Suction Pressure	Low	1	≤ 15" Hg vacuum	Trips HPCI turbine
6.	Reactor Water level (Narrow Range)	High	2	<ul><li>≤ +58 inches</li></ul>	Trips HPCI turbine
7.	HPCI System Flow (Flow Switch)	- High	i	> 800 gpm	Closes HPCI minimum flow bypass line to suppression chamber.
		Low	1 .	≤ 500 gpm	Opens HPCI minimum flow bypase line if pressure permissive is present.
8	HPCI Equipment Room	High	1	≤ 175°F	Closes isolation valves in HPCI system, trips HPCI turbine.

Amendment No. 37, 51, 63

turbine.

Amendment No. 37, 57, 63

#### 3.2.B.3. HPCI Turbine Overspeed

The HPCI turbine is automatically shut down by tripping the HPCI turbine stop valve closed when the 5000 rpm setpoint on the mechanical governor is reached. A turbine overspeed trip is required to protect the physical integrity of the turbine.

#### 4. HPCI Turbine Exhaust Pressure High

When HPCI turbine exhaust pressure reaches the setpoint (< 150 psig) the HPCI turbine is automatically shut down by tripping the HPCI stop valve closed. HPCI turbine exhaust high pressure is indicative of a condition which threatens the physical integrity of the exhaust line.

#### 5. HPCI Pump Suction Pressure Low

A pressure switch is used to detect low HPCI system pump suction pressure and is set to trip the HPCI turbine at < 15 inches of mercury vacuum. This setpoint is chosen to prevent pump datage by cavitation.

# 6. Reactor Water Level High (Narrow Range)

A reactor water level of +58 inches on the Narrow Range scale is indicative that the HPCI system has performed satisfactorily in providing makeup water to the reactor vessel. The reactor vessel high water level setting which trips the HPCI turbine is near the top of the steam separators and is sufficient to prevent gross moisture carryover to the HPCI turbine. Two level switches trip to initiate a HPCI turbine shutdown.

#### 7. HPCI System Flow

To precent damage by overheating at reduced HPCI system pump flow, a pump discharge minimum flow bypass is provided. The bypass is controlled by an automatic, D. C. motor-operated valve. A high flow signal from a flow meter downstream of the pump on the main HPCI line will cause the bypass valve to close. Two signals are required to open the valve: A HPCI pump discharge pressure switch high pressure signal must be received to act as a permissive to open the bypass valve in the presence of a low flow signal from the flow switch.

#### Note:

Because the steam supply line to the HPCI turbine is part of the nuclear system process barrier, the following conditions (8-14) automatically isolate this line, causing, shutdown of the HPCI system turbine.

#### 8. HPCI Equipment Room Temperature High

High ambient temperature in the HPCI equipment room near the emergency area cooler could indicate a break in the HPCI system turbine steam line. The automatic closure of the HPCI steam line valves prevents the excessive loss of reactor coolant and the release of significant amounts of radioactive material from the nuclear system process barrier. The high

#### BASES FOR LIMITING CONDITIONS FOR O. PATION

# 3.2.B.8. HPCI Equipment Room Temperature High (Continued)

temperature setting 90 F + ambient was selected to be far enough above anticipated normal HPCI system operational levels to avoid spurious isolation but low enough to provide timely detection of HPCI turbine steam line break. The high temperature trip initiates a timer which isolates the HPCI turbine steam line if the temperature is not reduced below the setpoint.

#### 10. HPCI Steam Line Pressure Low

Low pressure in the HPCI steam line could indicate a break in the HPCI steam line. Therefore, the HPCI steam line isolation valves are automatically closed. The steam line low pressure function is provided so that in the event a gross rupture of the HPCI steam line occurred upstream from the high flow sensing location, thus negating the high flow indicating function, isolation would be effected on low pressure. The isolation setpoint of  $\geq 100$  psiz is chosen at a pressure below which the HPCI turbine can effectively operate.

# 11. HPCI Steam Line AP (Flow) High

HPCI turbine high steam flow could indicate a break in the HPCI turbine steam line. The automatic closure of the HPCI steam line isolation valves prevents the excessive loss of reactor coolant and the release of significant amounts of radioactive materials from the nuclear system process barrier. Upon detection of HPCI turbine high steam flow the HPCI turbine steam line is isolated. The high steam flow trip setting of 300% flow was selected high enough to avoid spurious isolation, i.e., above the high steam flow rate encountered during turbine starts. The setting was selected low enough to provide timely detection of an HPCI turbine steam line break.

### 12. HPCI Turbine Exhaust Diaphragm Pressure High

High pressure in the HPCI turbine exhaust could indicate that the turbine rotor is not turning, thus allowing reactor pressure to act on the turbine exhaust line. The HPCI steam line isolation valves are automatically closed to prevent overpressurization of the turbine exhaust line. The turbine exhaust diaphragm pressure trip setting of  $\leq$  10 psig is selected high enough to avoid isolation of the HPCI if the turbine is operating, yet low enough to effect isolation before the turbine exhaust line is unduly pressurized.

# 13. Suppression Chamber Area Air Temperature High

As in the HPCI equipment room, and for the same reason, a temperature of 90 F + ambient will initiate a timer to isolate the HPCI turbine steam line.

BASES FOR LIMITING CONDITIONS FOR OPERATION

# 3.2.C.5. Reactor Water Level High (Narrow Range)

A reactor water level of +58 inches on the Narrow Range scale is indicative that the RCIC system has performed satisfactorily in providing make-up water to the reactor vessel. The reactor vessel high water level setting which trips the RCIC turbine is near the top of the steam separators and is sufficient to prevent gross moisture carryover to the RCIC turbine. Two level switches trip to initiate an RCIC turbine shutdown.

#### 6. RCIC System Flow

To prevent damage by overheating at reduced RCIC system pump flow, a pump discharge minimum flow bypass is provided. The bypass is controlled by an automatic, D. C. motor-operated valve. A high flow signal from a flow meter downstream of the pump on the main RCIC line will cause the bypass valve to close. Two signals are required to open the valve: An RCIC pump discharge pressure switch high pressure signal must be received to act as a permissive to open the bypass valve in the presence of a low flow signal from the flow switch.

#### Note:

Because the steam supply line to the RCIC turbine is part of the nuclear system process barrier, the following conditions (7 - 13) automatically isolate this line, causing shutdown of the RCIC system turbine.

# 7. RCIC Equipment Room Temperature High

High ambient temperature in the RCIC equipment room near the emergency area cooler could indicate a break in the RCIC system turbine steam line. The automatic closure of the RCIC steam line valves prevents the excessive loss of reactor coolant and the release of significant amounts of radioactive material from the nuclear system process barrier. The high temperature setting of 90 F + ambient was selected to be far enough above anticipated normal RCIC system operational levels to avoid spurious isolation but low enough to provide timely detection of an RCIC turbine steam line break. The high temperature trip initiates a timer which isolates the RCIC turbine steam line if the temperature is not reduced below the setpoint.

# 9. RCIC Steam Line Pressure Low

Low pressure in the RCIC Steam Line could indicate a break in the RCIC steam line. Therefore, the RCIC steam line isolation valves are automatically closed. The steam line low pressure function is provided so that in the event a gross rupture of the RCIC steam line occurred upstream from the high flow sensing location, thus negating the high flow indicating function, isolation would be effected on low pressure. The iso-