

August 20, 1992

Docket Nos. 50-424
and 50-425

Distribution
See next page

Mr. W. G. Hairston, III
Senior Vice President -
Nuclear Operations
Georgia Power Company
P. O. Box 1295
Birmingham, Alabama 53201

Dear Mr. Hairston:

SUBJECT: ISSUANCE OF AMENDMENTS - VOGTLE NUCLEAR GENERATING PLANT,
UNITS 1 AND 2 (TAC Nos. M80317 and M80318)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 53 to Facility Operating License NPF-68 and Amendment No. 32 to Facility Operating License NPF-81 for the Vogtle Nuclear Generating Plant, Units 1 and 2. The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated May 3, 1991, as supplemented August 19 and October 11, 1991, and July 20, 1992.

The amendments revise TS 3.6.3, "Containment Isolation Valves," to add a footnote stating that isolation valves associated with the containment hydrogen monitors may be opened on an intermittent basis under administrative control. The Bases for TS 3.6.3 is also revised.

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

Sincerely,
ORIGINAL SIGNED BY
Darl S. Hood, Project Manager
Project Directorate II-3
Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 53 to NPF-68
2. Amendment No. 32 to NPF-81
3. Safety Evaluation

cc w/enclosures:
See next page

OFC	PDII-3	PDII-3/PM
NAME	LBerry	DHood/rst
DATE	7/29/92	7/29/92

OGC	PDII-3/II	SPLB
R Bachman	D Matthews	CMcCracken
8/17/92	8/20/92	8/11/92

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Mr. W. G. Hairston, III
Georgia Power Company

Vogtle Electric Generating Plant

cc:

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DATED: August 20, 1992

AMENDMENT NO. 53
AMENDMENT NO. 32

TO VOGTLE ELECTRIC GENERATING PLANT, UNIT 1
TO VOGTLE ELECTRIC GENERATING PLANT, UNIT 2

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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
VOGTLE ELECTRIC GENERATING PLANT, UNIT 1
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 53
License No. NPF-68

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to the Vogtle Electric Generating Plant, Unit 1 (the facility) Facility Operating License No. NPF-68 filed by the Georgia Power Company, acting for itself, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia (the licensees), dated May 3, 1991, as supplemented August 19 and October 11, 1991, and July 20, 1992, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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2. Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-68 is hereby amended to read as follows:

Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. , and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this license. GPC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

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

FOR THE NUCLEAR REGULATORY COMMISSION



David B. Matthews, Director
Project Directorate II-3
Division of Reactor Projects-I/II
Office of Nuclear Reactor Regulation

Attachment:
Technical Specification
Changes

Date of Issuance: August 20, 1992



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

GEORGIA POWER COMPANY

OGLETHORPE POWER CORPORATION

MUNICIPAL ELECTRIC AUTHORITY OF GEORGIA

CITY OF DALTON, GEORGIA

VOGTLE ELECTRIC GENERATING PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 32
License No. NPF-81

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to the Vogtle Electric Generating Plant, Unit 2 (the facility) Facility Operating License No. NPF-81 filed by the Georgia Power Company, acting for itself, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia (the licensees), dated May 3, 1991, as supplemented August 19 and October 11, 1991, and July 20, 1992, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-81 is hereby amended to read as follows:

Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. , and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this license. GPC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

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

FOR THE NUCLEAR REGULATORY COMMISSION



David B. Matthews, Director
Project Directorate II-3
Division of Reactor Projects-I/II
Office of Nuclear Reactor Regulation

Attachment:
Technical Specification
Changes

Date of Issuance: August 20, 1992

ATTACHMENT TO LICENSE AMENDMENT NO.53

FACILITY OPERATING LICENSE NO. NPF-68

DOCKET NO. 50-424

AND

TO LICENSE AMENDMENT NO. 32

FACILITY OPERATING LICENSE NO. NPF-81

DOCKET NO. 50-425

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain vertical lines indicating the areas of change.

Remove Pages

3/4 6-15*
3/4 6-16

B 3/4 6-3*
B 3/4 6-4

Insert Pages

3/4 6-15*
3/4 6-16

B 3/4 6-3*
B 3/4 6-4

* overleaf page, no change

CONTAINMENT SYSTEMS

3/4.6.3 CONTAINMENT ISOLATION VALVES

LIMITING CONDITION FOR OPERATION

3.6.3 The containment isolation valves shall be OPERABLE.*

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

With one or more of the containment isolation valve(s) inoperable, maintain at least one isolation valve OPERABLE in each affected penetration that is open and:

- a. Restore the inoperable valve(s) to OPERABLE status within 4 hours, or
- b. Isolate each affected penetration within 4 hours by use of at least one deactivated automatic valve secured in the isolation position, or
- c. Isolate each affected penetration within 4 hours by use of at least one closed manual valve or blind flange, or
- d. Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- e. The provisions of Specification 3.0.4 are not applicable provided that the affected penetration is isolated in accordance with ACTION b or c above, and provided that the associated system, if applicable, is declared inoperable and the appropriate ACTION statements for that system are performed.

SURVEILLANCE REQUIREMENTS

4.6.3.1 The containment isolation valves shall be demonstrated OPERABLE prior to returning the valve to service after maintenance, repair or replacement work is performed on the valve or its associated actuator, control or power circuit by performance of a cycling test, and verification of isolation time.

*Isolation valves associated with the containment hydrogen monitors may be opened on an intermittent basis under administrative control.

CONTAINMENT SYSTEMS

BASES

3/4.6.2.3 CONTAINMENT COOLING SYSTEM

The OPERABILITY of the Containment Cooling System ensures that: (1) the containment air temperature will be maintained within limits during normal operation, and (2) adequate heat removal capacity is available when operated in conjunction with the Containment Spray Systems during post-LOCA conditions.

3/4.6.3 CONTAINMENT ISOLATION VALVES

The OPERABILITY of the containment isolation valves ensures that the containment atmosphere will be isolated from the outside environment in the event of a release of radioactive material to the containment atmosphere or pressurization of the containment and is consistent with the requirements of General Design Criteria 54 through 57 of Appendix A to 10 CFR Part 50. Containment isolation within the time limits specified for those isolation valves designed to close automatically ensures that the release of radioactive material to the environment will be consistent with the assumptions used in the analyses for a LOCA. The containment isolation valves associated with the containment hydrogen monitors may be opened on an intermittent basis under administrative control. Since the controls for these valves are located in the main control room, which is continuously manned, an operator will be available to ensure rapid isolation if necessary. A list of containment isolation valves is provided in Table 16.3-4 of the VEGP FSAR.

3/4.6.4 COMBUSTIBLE GAS CONTROL

The OPERABILITY of the equipment and systems required for the detection and control of hydrogen gas ensures that this equipment will be available to maintain the hydrogen concentration within containment below its flammable limit during post-LOCA conditions. Either recombiner unit 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. These Hydrogen Control Systems are consistent with the recommendations of Regulatory Guide 1.7, "Control of Combustible Gas Concentrations in Containment Following a LOCA," Revision 2, November 1978.

The Hydrogen Mixing Systems are 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.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 53 TO FACILITY OPERATING LICENSE NPF-68

AND AMENDMENT NO. 32 TO FACILITY OPERATING LICENSE NPF-81

GEORGIA POWER COMPANY, ET AL.

VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2

DOCKET NOS. 50-424 AND 50-425

1.0 INTRODUCTION

By letter dated May 3, 1991, as supplemented August 19 and October 11, 1991, and July 20, 1992, Georgia Power Company, et al. (the licensee) proposed license amendments to change the Technical Specifications (TS) for the Vogtle Electric Generating Plant (Vogtle or the facility), Units 1 and 2. The proposed change would add a footnote to TS 3.6.3, "Containment Isolation Valves," to state that "Isolation valves associated with the containment hydrogen monitors may be opened on an intermittent basis under administrative control." The proposed footnote would apply while the plant is in Modes 1 through 4. The proposed change would also supplement associated TS Basis 3/4.6.3 "Containment Isolation Valves" to state that "The containment isolation valves associated with the containment hydrogen monitors may be opened on an intermittent basis under administrative control. Since the controls for these valves are located in the main control room, which is continuously manned, an operator will be available to ensure rapid isolation if necessary."

The licensee's supplemental submittals dated August 19 and October 11, 1991, and July 20, 1992, provided additional information to support the original request and did not change the NRC's proposed no significant hazards consideration determination.

2.0 EVALUATION

TS 3.6.3 requires that the containment isolation valves (CIVs) be operable in Modes 1 through 4. The associated action statement requires, in part, that with one or more of the CIVs inoperable, at least one isolation valve is to be maintained operable in each affected penetration that is open. TS 4.6.4.1 requires that each hydrogen monitor (AI-12979, AI-12980) be demonstrated operable by periodically performing channel checks, analog channel operational tests, and channel calibrations using sample gas of specified composition. The opening of the CIVs related to the containment hydrogen monitors to perform the surveillance requirements of TS 4.6.4.1 has the advantage of allowing verification of the flow path as well as the flow rate delivered by the hydrogen monitor pump.

The licensee also notes that testing of the post-accident sampling system (PASS) with respect to sampling the containment atmosphere requires that these valves be opened.

The CIVs for the hydrogen monitoring system are normally-closed, remote-manual valves that do not receive an automatic closure signal to cause containment isolation. The hydrogen monitoring system is a Seismic Category 1 system. All piping and valves in the system have been qualified as ASME Section III, Class 2. This system is designed to retain its integrity and operability under all conditions following a design basis accident. The system has also demonstrated the capability of withstanding the post-accident environment inside containment. Relevant portions of PASS are also designed to Seismic Category 1 requirements and will function under post-accident conditions.

The licensee's intent is to open these valves under administrative control for the purpose of surveillance testing or sampling the containment atmosphere. In its letter of July 20, 1992, the licensee indicates that the CIVs would be closed in the event that it becomes necessary to discontinue an operation for which the valves were opened. Specifically, the licensee states "In the event that an operation for which the valves were opened cannot be completed, the applicable procedures will contain a cautionary note to ensure that the subject valves are closed." The NRC staff finds, therefore, that opening of the CIVs while the plant is in Modes 1 through 4 will occur only on an intermittent basis and only for the duration needed to accomplish the surveillance.

During the review of the licensee's application, the NRC staff requested the licensee to discuss the method of closing these valves promptly if required. The licensee first responded by letter dated August 19, 1991, which proposed to supplement associated TS Basis 3/4.6.3 as quoted above in the Introduction of this safety evaluation. The response notes that since the controls for these valves are located in the main control room, an operator would be available to close these valves rapidly if required. In its subsequent response on October 11, 1991, the licensee clarified the procedural controls which would direct the operator to close the subject valves and the approximate time in the sequence of events at which closure of the valves would be expected to occur. The correspondence revealed that the subject valves are equipped with position indication in the monitor light boxes on the main control board. Upon a containment isolation signal while in Modes 1 through 4, the operator would be directed to verify that the CIVs are in their correct state. If the valves failed to close as shown by the light box indication, the operator would then be instructed to close them. When an event is coincident with a safety injection actuation, step 6 of the licensee's procedure 19000-C, "E-0 Reactor Trip or Safety Injection," requires the operator to verify that the monitor light box indications are correct for an injection phase after load sequencing. This verification would be made during the initial moments of the event. If an abnormal condition occurs, the operator would follow procedure 18004-C, "Reactor Coolant System Leakage." This procedure would either direct the operator to enter procedure 19000-C or, depending on plant conditions, establish containment integrity by initiating a containment isolation, ensuring that all manual containment isolation valves are closed, and initiating closure of the containment equipment and personnel

hatches. These CIVs are designed to operate during an event when the maximum differential pressure is 80 psid or less. The staff finds that the actions given in the procedure ensure that these CIVs would be closed within a few minutes of identification of the need for containment isolation.

Based on the above, the NRC staff has reasonable assurance that, if opened while the plant is in Modes 1 through 4, the CIVs for the containment hydrogen monitoring system will be under the operator's cognizance and control and will be closed if not needed to be open or if required to be closed due to an abnormal event. Therefore, the proposed change is acceptable. The staff also finds the revision to TS Basis 3.6.3 to be consistent with the new footnote and the licensee's procedures and, therefore, to be acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Georgia State official was notified of the proposed issuance of the amendments. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

These amendments change a requirement with respect to the installation or use of facility components located within the restricted area as defined in 10 CFR Part 20. The NRC staff has 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 exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (56 FR 29277 dated June 26, 1991). Accordingly, the 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.

5.0 CONCLUSION

The Commission has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: D. Hood, PDII-3/DRP-I/II
K. Bristow, SPLB/DST

Dated: August 20, 1992