July 3, 1995

Mr. C. K. McCoy
Vice President - Nuclear
Vogtle Project
Georgia Power Company
P. O. Box 1295
Birmingham, AL 35201

Distribution
Docket File
PUBLIC
PDII-2 Reading
S. Varga
PA O-17 F2
OC/LFDCB T-9 E10
W. Lefave, O-8 D1
R. Crlenjak,RII
W. Reckley, O-13 D1
G. Hill(4) T-5 C3
C. Grimes O-11 F23
ACRS(4) T-2 E26
OGC O-15 B18
E. Merschoff, RII
J. Zwolinski, O-14 H3
C. Harbuck, O-11 E22

SUBJECT: ISSUANCE OF AMENDMENTS - VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2 (TAC NOS. M88395 AND M88396)

Dear Mr. McCoy:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 88 to Facility Operating License NPF-68 and Amendment No. 66 to Facility Operating License NPF-81 for the Vogtle Electric Generating Plant, Units 1 and 2. The amendments consist of changes to the Technical Specifications (TS) in response to your application dated November 19, 1993.

The amendments relocate the requirements of TS 3/4.3.4, Turbine Overspeed Protection, to Section 16.3 of the Vogtle Final Safety Analysis Report (FSAR). In addition, the surveillance intervals for exercising the high pressure turbine stop valves, the low pressure turbine intermediate stop valves and intercept valves, and the high pressure turbine control valves are extended after relocation to the FSAR.

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,

/s/
Louis L. Wheeler, Senior Project Manager
Project Directorate II-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket Nos. 50-424 and 50-425

Enclosures:
1. Amendment No. 88 to NPF-68
2. Amendment No. 66 to NPF-81
3. Safety Evaluation

cc w/encl: See next page

DOCUMENT NAME: G:\VOGTLE\VOG88395.AMD
To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

| OFFICE | LA:PD22:DRPE | E | PM:PD22:DRPE | E | LPM: | | OGC | N | D:PD22:DRPE | |
|---|---|---|---|---|---|---|---|---|---|---|
| NAME | LBerry | | LWheeler:dt | | WReckley | WDR | | | HBerkow | |
| DATE | 6/19/95 | | 6/19/95 | | 6/20/95 | | 6/21/95 | | 7/3/95 | |

OFFICIAL RECORD COPY

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

July 3, 1995

Mr. C. K. McCoy
Vice President - Nuclear
Vogtle Project
Georgia Power Company
P. O. Box 1295
Birmingham, AL 35201

SUBJECT: ISSUANCE OF AMENDMENTS - VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2 (TAC NOS. M88395 AND M88396)

Dear Mr. McCoy:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 88 to Facility Operating License NPF-68 and Amendment No. 66 to Facility Operating License NPF-81 for the Vogtle Electric Generating Plant, Units 1 and 2. The amendments consist of changes to the Technical Specifications (TS) in response to your application dated November 19, 1993.

The amendments relocate the requirements of TS 3/4.3.4, Turbine Overspeed Protection, to Section 16.3 of the Vogtle Final Safety Analysis Report (FSAR). In addition, the surveillance intervals for exercising the high pressure turbine stop valves, the low pressure turbine intermediate stop valves and intercept valves, and the high pressure turbine control valves are extended after relocation to the FSAR.

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,

Louis L. Wheeler, Senior Project Manager
Project Directorate II-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket Nos. 50-424 and 50-425

Enclosures:
1. Amendment No. 88 to NPF-68
2. Amendment No. 66 to NPF-81
3. Safety Evaluation

cc w/encl: See next page

cc:
Mr. J. A. Bailey
Manager - Licensing
Georgia Power Company
P. O. Box 1295
Birmingham, Alabama 35201

Mr. J. B. Beasley
General Manager, Vogtle Electric
Generating Plant
P. O. Box 1600
Waynesboro, Georgia 30830

Regional Administrator, Region II
U. S. Nuclear Regulatory Commission
101 Marietta Street, NW., Suite 2900
Atlanta, Georgia 30323

Office of Planning and Budget
Room 615B
270 Washington Street, SW.
Atlanta, Georgia 30334

Office of the County Commissioner
Burke County Commission
Waynesboro, Georgia 30830

Mr. J. D. Woodard
Senior Vice President -
Nuclear Operations
Georgia Power Company
P. O. Box 1295
Birmingham, Alabama 35201

Harold Reheis, Director
Department of Natural Resources
205 Butler Street, SE. Suite 1252
Atlanta, Georgia 30334

Attorney General
Law Department
132 Judicial Building
Atlanta, Georgia 30334

Mr. Ernie Toupin
Manager of Nuclear Operations
Oglethorpe Power Corporation
2100 East Exchange Place
Tucker, Georgia 30085-1349

Charles A. Patrizia, Esquire
Paul, Hastings, Janofsky & Walker
12th Floor
1050 Connecticut Avenue, NW.
Washington, DC 20036

Arthur H. Domby, Esquire
Troutman Sanders
NationsBank Plaza
600 Peachtree Street, NE.
Suite 5200
Atlanta, Georgia 30308-2216

Resident Inspector
U. S. Nuclear Regulatory Commission
P. O. Box 572
Waynesboro, Georgia 30830

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

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. 88
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 November 19, 1993, 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-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. 88 , 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 and shall be implemented within 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Herbert N. Berkow, Director
Project Directorate II-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Technical Specification
Changes

Date of Issuance: July 3, 1995

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

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. 66
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 November 19, 1993, 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. 66 , 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 and shall be implemented within 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Herbert N. Berkow, Director
Project Directorate II-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Technical Specification
Changes

Date of Issuance: July 3, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 88

FACILITY OPERATING LICENSE NO. NPF-68

DOCKET NO. 50-424

AND

TO LICENSE AMENDMENT NO. 66

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 | Insert Pages |
|---|---|
| 3/4 3-73 | 3/4 3-73 |
| B 3/4 3-6 | B 3/4 3-6 |

INSTRUMENTATION

3/4.3.4 TURBINE OVERSPEED PROTECTION

**(Deleted)**

3/4.3.3.7 CHLORINE DETECTION SYSTEMS

The OPERABILITY of the Chlorine Detection Systems ensures that sufficient capability is available to promptly detect and initiate protective action in the event of an accidental chlorine release. This capability is required to protect control room personnel and is consistent with the recommendations of Regulatory Guide 1.95, Revision 1, "Protection of Nuclear Power Plant Control Room Operators Against an Accidental Chlorine Release," January 1977.

This capability will not be required if the quantity of chlorine gas stored on site is small ($\leq$ 20 lbs.) and utilized for laboratory and calibration purposes. This applicability is consistent with the exclusions and recommendations of Regulatory Guide 1.95, Revision 1, "Protection of Nuclear Power Plant Control Room Operators Against an Accidental Chlorine Release," January 1977.

3/4.3.3.8 LOOSE PARTS DETECTION SYSTEM

Not used.

3/4.3.3.9 RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

Not used.

3/4.3.3.10 EXPLOSIVE GAS MONITORING INSTRUMENTATION

This instrumentation includes provisions for monitoring (and controlling) the concentrations of potentially explosive gas mixtures in the GASEOUS WASTE PROCESSING SYSTEM. The OPERABILITY and use of this instrumentation is consistent with the requirements of General Design Criteria 60 and 63 of Appendix A to 10 CFR Part 50.

3/4.3.3.11 HIGH ENERGY LINE BREAK ISOLATION SENSORS

The operability of the high energy line break isolation sensors ensures that the capability is available to promptly detect and initiate protective action in the event of a line break. This capability is required to prevent damage to safety-related systems and structures in the auxiliary building.

3/4.3.4 TURBINE OVERSPEED PROTECTION

**(Deleted)**

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 88 TO FACILITY OPERATING LICENSE NPF-68

AND AMENDMENT NO. 66 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 November 19, 1993, Georgia Power Company, et al. (GPC or the licensee) proposed changes to the Vogtle Electric Generating Plant (VEGP), Units 1 and 2, Technical Specifications (TSs) and changes to the Final Safety Analysis Report (FSAR) regarding turbine overspeed protection (TOSP) requirements. The proposed amendments delete TS 3/4.3.4 (Turbine Overspeed Protection) and its Bases from the plant TSs and relocates the surveillance requirements to the FSAR. For the FSAR change, the licensee also proposed to modify the surveillance interval for exercising the high pressure turbine (HPT) stop valves, the low pressure turbine (LPT) intermediate stop valves and intercept valves, and the high pressure turbine control valves. The proposed FSAR modification would increase the surveillance intervals for exercising the valves through a complete close-open cycle to a maximum of three months based on the generic data and unit-specific turbine wheel missile analysis and wheel inspection requirements. The current TSs require these valves to be complete cycle tested on a weekly basis.

Section 182a of the Atomic Energy Act, as amended (the "Act"), requires that applicants for nuclear power plant operating licenses state TSs and that these TSs be included as a part of the license. The Commission's regulatory requirements related to the content of TSs are set forth in 10 CFR 50.36. That regulation requires that the TSs include items in five specific categories, including (1) safety limits, limiting safety system settings and limiting control settings; (2) limiting conditions for operation; (3) surveillance requirements; (4) design features; and (5) administrative controls and states also that the Commission may include such additional TSs as it finds to be appropriate. However, the regulation does not specify the particular TSs to be included in a plant's license.

The Commission has provided guidance for the contents of TSs in its "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors" ("Final Policy Statement"), 58 FR 39132 (July 22, 1993), in which the Commission indicated that compliance with the Final Policy Statement satisfies Section 182a of the Act. In particular, the Commission indicated that certain items could be relocated from the TSs to licensee-controlled documents, consistent with the standard enunciated in *Portland General Electric Co.* (Trojan Nuclear Plant), ALAB-531, 9 NRC 263, 273 (1979). In that case, the Atomic Safety and Licensing Appeal Board indicated that "technical

specifications are to be reserved for those matters as to which the imposition of rigid conditions or limitations upon reactor operation is deemed necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety."

Consistent with this approach, the Final Policy Statement identified four criteria to be used in determining whether a particular matter is required to be included in the TS, as follows: (1) Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary; (2) A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident or Transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; (3) A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a Design Basis Accident or Transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; and (4) A structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety.[1] As a result, existing Limiting Condition for Operation (LCO) requirements which fall within or satisfy any of the criteria in the Final Policy Statement must be retained in the TS, while those LCO requirements which do not fall within or satisfy these criteria may be relocated to other, licensee-controlled documents.

The turbine overspeed protection system does not satisfy any of the four criteria identified in the Final Policy Statement and, therefore, are not required to be included in TS. Furthermore, the licensee's submittal satisfies the requirements of the Commission's Policy for relocation of the turbine overspeed protection system requirements to other licensee-controlled documents, which in the case of Vogtle is the FSAR. The Policy Statement requirements for relocation of a TS requirement include a clear statement of the basis for the relocation, a safety evaluation, and a statement that the changes have been reviewed by a multidisciplinary group of responsible, technical supervisory personnel, including onsite operations personnel.

This evaluation covers both the proposed TS revision to relocate TS 3/4.3.4 to the FSAR and the proposed FSAR amendment which includes changes to the surveillance intervals for the turbine control, stop, and intercept valves.

## 2.0 BACKGROUND

VEGP is a two unit, four loop Westinghouse plant with one General Electric (GE) turbine generator on each unit. Four steam generators on each unit supply steam to the HPT via four high-pressure steam lines. One turbine stop valve and one control valve form a single assembly on each high-pressure steam line. The steam expands while passing through the HPT then goes through six moisture separator reheaters (MSRs). A combined intermediate stop and intercept valve is located in each of the six steam lines leading from the outlet of an MSR to the inlet of one of three LPTs with turbine rotors having

---

[1] The Commission recently promulgated a proposed change to 10 CFR 50.36, pursuant to which the rule would be amended to codify and incorporate these criteria (59 FR 48180, September 20, 1994). The Commission's Final Policy Statement specified that the Reactor Core Isolation Cooling, Isolation Condenser, Residual Heat Removal, Standby Liquid Control, and Recirculation Pump Trip are included in the TS under Criterion 4 (58 FR 39132, July 22, 1993).

shrunk-on wheels. Two steam lines supply each LPT. During operation, the valves are held open against closing springs by hydraulic fluid pressure. The emergency trip system releases hydraulic fluid pressure in the valve actuators, causing springs to close the valves.

Failure to close the steam inlet valves in any one main steam line between the steam generators and the HPT, or between a MSR and a LPT, coincident with generator separation, will result in a turbine overspeed condition. Excessive turbine overspeed could generate potentially damaging missiles that could damage safety-related components or structures. The surveillance requirements for valve operability ensure that all turbine steam inlet valves are capable of closing to protect the turbine from excessive overspeed.

The existing surveillance test requires that all four HPT stop valves, six LPT intermediate stop valves, and six LPT intercept valves move through one cycle (from the valve position prior to the test, to fully closed, and returning to the original position). The test is performed by a control room operator with an observer at the valve. The test verifies freedom of movement of the valve components by confirming that nothing inhibits the valve from closing.

In the proposed FSAR change the licensee plans to optimize the test intervals for cycling the HPT stop and control valves and the LPT intermediate stop valves and intercept valves by routinely evaluating the effects of three sets of valve test intervals on wheel missile generation probabilities after each LPT rotor inspection. The test intervals would be weekly/monthly/weekly (WMW), monthly/quarterly/monthly (MQM), and quarterly/quarterly/quarterly (QQQ). For example, a WMW test interval means that the HPT stop valves would be tested weekly, the HPT control valves tested monthly, and the LPT intermediate and intercept valves tested weekly. The valve test intervals chosen for each LPT rotor inspection period would be based on maintaining the wheel missile generation probability less than 1E-05 per year. While these standard test intervals have been selected for routine evaluation, the licensee states that other test schedules may be evaluated on a case-by-case basis not to exceed a maximum three-month interval.

The licensee provided a supplementary report to the NRC that describes the general methodology for selecting turbine steam valve surveillance test intervals for GE nuclear turbines with low-pressure rotors utilizing shrunk-on wheels. The report concludes that use of the updated missile analysis, in conjunction with a maximum three month steam valve test interval, will permit nuclear plant owners with GE turbines to balance steam valve test times against LPT wheel inservice inspection intervals. GE reports that with the exception of updated steam valve failure-to-close data, this methodology is a direct application of the existing GE wheel probabilistic analysis which has been routinely used for establishing wheel reinspection intervals since being approved by the NRC in 1986.

## 3.0 EVALUATION

In accordance with the Final Policy Statement, the licensee has provided a basis for relocating the TOSP system TS requirements to Chapter 16 of the FSAR. This basis includes an evaluation to show that the existing TS requirements for the TOSP system do not meet any of the four criteria of the Commission's Final Policy Statement used to determine which design and operational features belong in the TSs in accordance with 10 CFR 50.36.

The TOSP system is provided to prevent the generation of potentially damaging missiles due to a failure or transient that could result in an overspeed condition. However, a turbine overspeed event does not represent a significant abnormal degradation of the reactor coolant system (RCS) pressure boundary, and it is not a design basis accident or transient. Therefore, the TOSP system does not meet either of the first two criteria of the Policy Statement which relate to abnormal degradation of the RCS pressure boundary and initial conditions of a design basis accident or transient analysis that assumes the failure of, or presents a challenge to the integrity of a fission product barrier. The TOSP system also does not meet the third criterion as it is not part of the primary success path which mitigates a design basis accident or transient that either assumes a failure of, or presents a challenge to the integrity of a fission product barrier. The TOSP system serves only to minimize the potential for a damaging turbine overspeed event which could lead to turbine missile generation.

The fourth Policy Statement criterion relates to operating experience, probabilistic risk assessment (of a structure, system or component), and the significance to the public health and safety. Potential damage from turbine missiles was identified as an unresolved safety issue (Item A-37) in NUREG-0371, "Task Action Plan for Generic Activities (Category A)." As identified in NUREG-0933, "A Prioritization of Generic Safety Issues," the conclusion reached for this issue was that it be dropped from further consideration based in part on low public risk exposure. Therefore, generically, turbine missiles are not considered as a significant risk to the public health and safety. For Vogtle, plant-specific calculations discussed in Section 3.5.1 of the FSAR, indicate that the probability of turbine missile damage to a safety-related structure is approximately $0.9 \times 10^{-6}$ for the plant (total for both units). The probability for severe core damage would be less. The staff, therefore, agrees with the licensee and concludes that the TOSP system does not meet the fourth criterion of the Policy Statement. On this basis, the staff concludes that the TOSP system is not required to be controlled by the TSs, and future changes to the TOSP system and its surveillance requirements, which have been relocated to the FSAR, will be adequately controlled by 10 CFR 50.59. The staff, therefore, also concludes that the relocation of the surveillance requirements to the FSAR will not significantly affect the probability of a turbine missile strike or the probability of missile damage. Hence, the proposed relocation is acceptable.

Section 5.13 of NUREG-1366, "Improvements to Technical Specifications Surveillance Requirements," provides a comprehensive evaluation of TOSP system testing. The evaluation contains NRC recommendations about the testing frequency of the turbine valves. NUREG-1366 recommends that, where the turbine manufacturer agrees, the turbine valve testing frequency should be changed to one test done quarterly (i.e., the surveillance interval could be extended for up to a maximum of 3 months if such a change is supported by the turbine manufacturer's generic data and the licensee follows the manufactures methodology using plant specific data to justify the new test frequency). For the Vogtle GE turbine, that methodology followed by the licensee is set forth in the General Electric proprietary report GET-8093 (nonproprietary version GET-8093.1), "Probability of Missile Generation in General Electric Nuclear Turbines, Supplementary Report: Steam Valve Surveillance Test Interval Extension," dated September 1993. GET-8093 is a supplement to the staff approved January 1984 GE proprietary report entitled "Probability of Missile Generation in General Electric Nuclear Turbines," which identified methods to

determine the optimal inspection interval for turbine discs in operating and new reactor plants. Refer to Appendix U of the Hope Creek Supplemental Safety Evaluation Report No. 6 (NUREG-1048) for the staff's evaluation and acceptance of the 1984 GE report.

Section 10.2 of the Standard Review Plan (SRP), NUREG-0800, provides guidance in evaluating the surveillance testing of steam valves. The purpose of the guidance is to ensure that the turbine overspeed protection system will perform in a manner which meets the requirements of General Design Criterion (GDC) 4 of Appendix A to 10 CFR Part 50 with regard to the protection of structures, systems, and components important to safety from the effects of turbine missiles.

The staff agrees with the licensee's determination that the proposed change in the valve surveillance intervals should result in maintaining levels of safety consistent with the overall plant design. The staff finds that the proposed change to the steam valve surveillance test intervals for the HPT stop and control valves and the LPT intermediate stop valves and intercept valves does not increase the probability of turbine missile generation and maintains the turbine wheel missile probabilities within NRC limits. The staff further concludes that the increased surveillance interval should result in an improvement in safety, a decrease in equipment degradation, and the elimination of an unnecessary burden on human resources. This conclusion was also documented by the staff in Generic Letter (GL) 93-05, "Line-Item Technical Specifications Improvements to Reduce Surveillance Requirements for Testing During Power Operations." Based on these conclusions, the proposed FSAR changes regarding turbine valve testing frequency are acceptable.

In conclusion, the proposed FSAR amendment changing the valve surveillance intervals is within the boundary of the guidance provided in NUREG-1366. The proposed amendment to VEGP FSAR Chapter 16 complies with the requirements of GDC 4 of Appendix A to 10 CFR Part 50 with regard to the protection of structures, systems and components important to safety from the effects of turbine missiles and the intent of the guidance of Section 10.2 of the SRP. The licensee provided adequate justification and supplementary information in accordance with the Commission's Policy Statement for the relocation of TS 3/4.3.4 to the FSAR, and provided further justification for the corresponding revision to surveillance test intervals for the turbine steam valves, including the turbine manufacturer's endorsement of this approach. Based on the staff's evaluation of the licensee's request, the proposed changes to relocate the requirements of TS 3/4.3.4 to the FSAR, and the proposed amendment to the FSAR itself, are acceptable.

## 4.0 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.

## 5.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and change surveillance requirements. 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 radiation 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 (59 FR 7689 dated February 16, 1994). 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 the amendments.

## 6.0 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: William T. Lefave
Louis L. Wheeler

Date: July 3, 1995