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Georgia Power
the southern electric system

January 22, 1993

Docket Nos. 50-424
50-425

ELV-05102

TAC Nos. M84529
M84530

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555

Gentlemen:

**VOGTLE ELECTRIC GENERATING PLANT
REQUEST TO REVISE TECHNICAL SPECIFICATIONS
IMPLEMENTATION OF THE NEW 10 CFR 20 REQUIREMENTS**

In response to your letter dated December 3, 1992, attached is the additional information you requested regarding Georgia Power Company's license amendment request dated September 17, 1992, associated with implementation of the new 10 CFR 20 requirements at Vogtle Electric Generating Plant. Enclosure 1 contains your questions, as numbered and worded in the December 3, 1992, letter, and our responses. Enclosure 2 contains revised proposed Technical Specifications associated with the responses, which supersede the corresponding pages provided in the September 17, 1992, submittal. Additionally, the conclusions contained in the September 17, 1992, submittal's significant hazards evaluation remain valid.

Should you have any questions regarding this information, please contact this office.

Sincerely,

C. K. McCoy

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U. S. Nuclear Regulatory Commission
ELV-05102
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Enclosures:

1. Response to NRC Request for Additional Information
2. Revised Proposed Technical Specification Changes

c(w): Georgia Power Company
Mr. W. B. Shipman
Mr. M. Sheibani
NORMS

U. S. Nuclear Regulatory Commission
Mr. S. D. Ebnetter, Regional Administrator
Mr. D. S. Hood, Licensing Project Manager, NRR
Mr. B. R. Bonser, Senior Resident Inspector, Vogtle

State of Georgia
Mr. J. D. Tanner, Commissioner, Department of Natural Resources

ENCLOSURE 1

VOGTLE ELECTRIC GENERATING PLANT
REQUEST TO REVISE TECHNICAL SPECIFICATIONS
IMPLEMENTATION OF THE NEW 10 CFR 20 REQUIREMENTS
RESPONSE TO NRC REQUEST FOR ADDITIONAL INFORMATION

ENCLOSURE 1

VOGTLE ELECTRIC GENERATING PLANT
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RESPONSE TO NRC REQUEST FOR ADDITIONAL INFORMATION

Question 470.1

Your proposed definition of MEMBER OF THE PUBLIC should retain the last sentence of the original Technical Specification (TS). Also, it should state, "This category may include persons who use portions of the site for recreational, occupational, or other purposes not associated with the plant."

Response to Question 470.1

The proposed definition of MEMBER OF THE PUBLIC has been revised as requested to retain the last sentence of the original TS wording.

Question 470.2

Your proposed definition of UNRESTRICTED AREA should retain the last part of the original TS wording in the last sentence that reads, " or any area within the SITE BOUNDARY used for residential quarters or for industrial, commercial, institutional, and/or recreational purposes."

Response to Question 470.2

The proposed definition of UNRESTRICTED AREA has been revised as requested to retain the last part of the original TS wording.

Question 470.3

In BASES 3/4.11.1.4, "Liquid Holdup Tanks", you propose to replace "10 CFR Part 20, Appendix B, Table II, Column 2" with "10 CFR Part 20.1302(b)(2)(i)."

ENCLOSURE 1 (Continued)

REQUEST TO REVISE TECHNICAL SPECIFICATIONS
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NUREG-0133 and Standard Review Plan 15.7.3 provide guidance in this area. The documents state that radioactivity must be controlled so that leaked fluid does not result in concentrations to a water supply in an unrestricted area in excess of the limits of 10 CFR Part 20, Appendix B, Table II, Column 2. This is the instantaneous concentration given in the table. It is not the annual average of the concentration, as would be allowed if the proposed section of the rule (20.1302) were substituted. Your proposed use of 10 CFR 20.1302(b)(2)(i) in the Bases would imply that annual averaging of the effluent concentration is allowed. This would be incorrect as annual averaging is not allowed for this specification.

Because the new values in Appendix B, Table II, Column 2 to 10 CFR 20.1001-20.2401 are, overall, a factor of 10 lower than before, the NRC staff considers it acceptable for licensees to propose increasing these values by a factor of 10. These values will maintain the same overall level of effluent control that existed under the old Part 20. The 10 curie limit remains unchanged.

The NRC staff's position is that the BASES should be revised to reference a value of 10 times the limits of Appendix B, Table II, Column 2 to 10 CFR 20.1001-20.2401. Alternatively, provide further justification for your proposed change.

Response to Question 470.3

Bases Section 3/4.11.1.4 has been revised as requested to reference a value of 10 times the limits of 10 CFR Part 20, Appendix B (to paragraphs 20.1001 - 20.2401), Table 2, Column 2, instead of 10 CFR Part 20.1302(b)(2)(i). Note that the reference to "Table II," relative to the new 10 CFR 20, should have been to "Table 2."

Question 470.4

In "Insert 2" to the Administrative Controls, section f, Radioactive Effluent Controls Program, you use the phrase "which corresponds to a dose rate of 500 mrem/year total

ENCLOSURE 1 (CONTINUED)

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effective dose equivalent." The NRC staff finds this phrase to be unnecessary, inconsistent with the Standard Technical Specification, and to provide no additional control in the context of the TS. Therefore, it should be deleted.

The intent of the TS is to limit the concentrations of radioactive material in gases released to areas beyond the site boundary. The NRC staff finds that including words for purposes other than controlling radioactive gaseous effluent is inappropriate. If you need clarification for other necessary purposes, such clarification should be placed in appropriate licensee documents, not in the TS.

Alternatively, provide further justification for your proposed basis.

Response to Question 470.4

Proposed TS 6.7.4.f(7) has been revised by deleting the phrase "which corresponds to a dose rate of 500 mrem/year total effective dose equivalent," and replacing it with a footnote which states "At any time, ten times the concentrations stated in 10 CFR Part 20, Appendix B (to paragraphs 20.1001 - 20.2401), Table 2, Column 1, corresponds to a dose rate of 500 mrem/year total effective dose equivalent." By footnoting the concentration limits, the relationship between gaseous effluent concentrations and corresponding dose rates is clearly stated.

Limitations on gaseous effluent release rates currently contained in the Vogtle Electric Generating Plant Unit 1 and Unit 2 TS are expressed in terms of dose rate. Accordingly, several plant documents, especially emergency preparedness documents that present emergency action level guidelines, reference TS limits stated in terms of dose rate. Therefore, since key plant documentation keys itself to the dose rate limits contained in the TS, it is desirable that this continuity be maintained.

The proposed footnote is accurate and appropriate according to the first paragraph of the section titled "Table 2" contained in Appendix B (to paragraphs 20.1001 - 20.2401) of the new 10 CFR 20, which states in part, "The concentration values given in Columns 1 and 2 of Table 2 are equivalent to the radionuclide concentrations which, if inhaled or ingested

ENCLOSURE 1 (CONTINUED)

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continuously over the course of a year, would produce a total effective dose equivalent of 0.05 rem (50 millirem or 0.5 millisieverts)." Therefore, if the concentration values are increased by a factor of ten, the corresponding dose rate at any time would be 500 mrem/year as included in the proposed footnote.

Georgia Power Company views this proposed footnote as an important change to the TS, which provides a clarifying statement that does not diminish any of the controls contained in the TS and is consistent with the NRC staff's interpretation for complying with the requirements of the new 10 CFR 20.

Question 470.5

In Administrative Controls, Section 6.11, High Radiation Area, your TS should be revised to use 20.1601(a) as the appropriate update for 20.203(c). Also, you should acknowledge that in 10 CFR 20.1601(a), there are three controls listed; a "control device", an "alarm signal", and "entryways that are locked." The NRC staff's position is that your proposed TS should include this requirement.

Response to Question 470.5

Administrative Controls Section 6.11 has been revised to use 20.1601(a) as the appropriate update for 20.203(c). The requirements for controlling access to a high radiation area, as presented in the new 10 CFR 20.1601(a), have not changed from those currently stated in 10 CFR 20.203(c)(2). Both the existing and new Part 20 requirements for high radiation areas include at least one of the following: 1) control device, 2) alarm signal device, or 3) locked entrance. Technical Specifications 6.11.1 and 6.11.2 already acknowledge the three controls; therefore, no further revisions to this specification are being requested.

Question 470.6

In Administrative Controls, Section 6.11.2, High Radiation Area, the dose rate values should be revised to specify a range. This will distinguish the controls needed for a High

ENCLOSURE 1 (CONTINUED)

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Radiation Area from those for a Very High Radiation Area. The TS should be revised to specify a range of greater than 1000 mrem in 1 hour but less than 500 rads (5 grays) in 1 hour.

Response to Question 470.6

Technical Specification 6.11.2 conservatively applies access control methods that are applicable to very high radiation areas to all areas accessible to personnel in which radiation levels are greater than 1000 mR/hour. Therefore, it is not necessary to specify a dose rate range.

Question 470.7

10 CFR 20.1602, Control of Access to Very High Radiation Areas, requires that measures in addition to those in 10 CFR 20.1601 be taken to prevent unauthorized or inadvertent access to areas in which radiation levels could be encountered at 500 rads (5 grays) or more in 1 hour at 1 meter from a radiation source or any surface through which the radiation penetrates.

Propose a new TS specifying the measures to be taken to control access to Very High Radiation Areas. For example, one such measure might be based upon a separate plant procedure, approved by the plant operations review committee, which establishes the control requirements for Very High Radiation Areas.

Response to Question 470.7

Georgia Power Company intends to comply without exception to the requirements specified in 10 CFR 20.1602 for controlling access to very high radiation areas; therefore, a specific TS is not needed. Restrictions have been established, which are described in TS 6.11.2, to control or prevent access to any area where an individual could receive a dose greater than 1000 mrem within 1 hour. These restrictions bound the exposure rate defined for a very high radiation area.