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February 26, 1993

Docket Nos. 50-424
50-425

ELV-05215

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

By letters dated September 17, 1992, and January 22, 1993, Georgia Power Company submitted proposed changes to the Vogtle Electric Generating Plant (VEGP) Unit 1 and Unit 2 Technical Specifications associated with implementation of the new 10 CFR 20 requirements. Based on subsequent telephone conversations with members of the Nuclear Regulatory Commission (NRC) Staff regarding their review of these submittals, Georgia Power Company was informed that the proposed changes related to gaseous release rates must be revised in order to demonstrate compliance with effluent limitations. Two alternatives were discussed, one based on a concentration methodology and the other based on a dose rate methodology similar to what is currently required by the VEGP Offsite Dose Calculation Manual.

Georgia Power Company has evaluated the alternatives discussed above and has elected to implement the dose rate methodology for determining compliance with gaseous effluent release rate limits. Accordingly, you will find enclosed revised proposed changes to the VEGP Unit 1 and Unit 2 Technical Specifications that reflect this decision. The proposed changes and bases for the changes are described in enclosure 1. Enclosure 2 provides an evaluation pursuant to 10 CFR 50.92 showing that the proposed changes do not involve significant hazards considerations. These changes supersede those provided for Proposed Change 6 in the September 17, 1992, submittal, and the response to Question 470.4 as provided in the January 22, 1993, submittal. The remaining proposed changes associated

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with implementation of the new 10 CFR 20 requirements, including their supporting bases and significant hazards evaluation as they relate to those changes which were provided in the September 17, 1992, and January 22, 1993, submittals, remain applicable. A copy of the proposed changes is provided in enclosure 3 which supersedes the proposed changes related to gaseous effluent release rate limits provided in the September 17, 1992, and January 22, 1993, submittals.

In accordance with 10 CFR 50.91, the designated state official will be sent a copy of this letter and all enclosures.

Mr. C. K. McCoy states that he is a vice president of Georgia Power Company and is authorized to execute this oath on behalf of Georgia Power Company and that, to the best of his knowledge and belief, the facts set forth in this letter and enclosures are true.

GEORGIA POWER COMPANY

By:

CKM'G
C. K. McCoy

Sworn to and subscribed before me this 26th day of February, 1993.

Mary A. Bentley

Notary Public

MY COMMISSION EXPIRES MAY 6, 1995

CKM/TMM

Enclosures:

1. Basis for Proposed Change
2. 10 CFR 50.92 Evaluation
3. Proposed Technical Specification Changes

(Distribution - see next page)

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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
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BASIS FOR PROPOSED CHANGE

ENCLOSURE 1

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

BASIS FOR PROPOSED CHANGE

Proposed Change

Revise proposed Vogtle Electric Generating Plant (VEGP) Technical Specification 6.7.4.f(7) submitted by Georgia Power Company letter dated September 17, 1992, as Proposed Change 6 and later revised in response to Question 470.4 by letter dated January 22, 1993. These changes pertain to gaseous effluent release rates and are needed to accommodate operational flexibility in order to facilitate implementation of the new 10 CFR 20 requirements.

Basis

The basic requirements for technical specifications concerning effluents from nuclear power reactors are stated in 10 CFR 50.36a. These requirements indicate that compliance with effluent technical specifications will keep average annual releases of radioactive material in effluents at small percentages of the limits specified in the old 10 CFR 20.106. These requirements further indicate that operational flexibility is allowed, compatible with considerations of health and safety, which may temporarily result in releases higher than such small percentages, but still within limits specified in the old 10 CFR 20.106 which references Appendix B, Table II concentrations. These referenced concentrations are specific values which relate to an annual dose of 500 mrem. It is further indicated in 10 CFR 50.36a that when using operational flexibility, best efforts shall be exerted to keep levels of radioactive materials in effluents as low as is reasonably achievable as set forth in 10 CFR 50, Appendix I.

As stated in the introduction to Appendix B of the new 10 CFR 20, the gaseous effluent concentration values given in Appendix B, Table 2, Column 1 are based on an annual dose of 50 mrem for radionuclides for which inhalation or ingestion is limiting or 100 mrem for radionuclides for which submersion is limiting. Also, release concentrations corresponding to limiting dose rates at the site boundary to less than or equal to 500 mrem/year to the total body and less than or equal to 3000 mrem/year to the skin due to noble gases, and 1500 mrem/year to any organ due to Iodine-131, Iodine-133, tritium, and particulates with half-lives greater than 8 days have been acceptable as technical specification limits for gaseous effluents. These requirements were

ENCLOSURE 1 (CONTINUED)

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

BASIS FOR PROPOSED CHANGE

recently relocated to the Offsite Dose Calculation Manual in accordance with Generic Letter 89-01 (Reference ODCM section 2.5.1), to assure that the limits of 10 CFR 50, Appendix I and 40 CFR 190 are not likely to be exceeded. Therefore, it should not be necessary to restrict the operational flexibility by incorporating the dose rates associated with the new 10 CFR 20 effluent concentration values for radionuclides based on inhalation or ingestion (50 mrem/year) or the dose rate associated with the effluent concentration values for radionuclides based on submersion (100 mrem/year).

Having sufficient operational flexibility is especially important in establishing a basis for effluent monitor setpoint calculations. As discussed above, the concentrations stated in the new 10 CFR 20, Appendix B, Table 2, Column 1 relate to a dose of 50 or 100 mrem in a year. When applied on an instantaneous basis, this corresponds to a dose rate of 50 or 100 mrem/year. Such low values are impractical for use as bases for effluent monitor setpoint calculations for many gaseous effluent release situations when monitor background, monitor sensitivity, and monitor performance must be taken into account.

Therefore, to accommodate operational flexibility needed for effluent releases, proposed Technical Specification 6.7.4 f(7), provided as Proposed Change 6 in Georgia Power Company letter dated September 17, 1992, and later revised in response to Question 470.4 by letter dated January 22, 1993, is being revised to maintain the current instantaneous dose rate limits for noble gases of 500 mrem/year to the total body and 3000 mrem/year to the skin; and for Iodine-131, Iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days, an instantaneous dose rate limit of 1500 mrem/year to any organ.

Compliance with the limits of the new 10 CFR 20.1301 will be demonstrated by operating within the limits of 10 CFR 50, Appendix I and 40 CFR 190. Operational history at VEGP has demonstrated that the use of the dose rate limit values listed above (i.e., 500 mrem/year, 3000 mrem/year, and 1500 mrem/year) has resulted in calculated maximum individual doses to members of the public that are small percentages of the limits of 10 CFR 50, Appendix I and 40 CFR 190.

ENCLOSURE 2

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10 CFR 50.92 EVALUATION

ENCLOSURE 2

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

10 CFR 50.92 EVALUATION

Pursuant to 10 CFR 50.92, Georgia Power Company has evaluated the proposed revisions to the Vogtle Electric Generating Plant (VEGP) Unit 1 and Unit 2 Technical Specifications and has determined that operation of the facility in accordance with the proposed amendment would not involve any significant hazards considerations.

Background

By letters dated September 17, 1992, and January 22, 1993, Georgia Power Company submitted proposed changes to the Technical Specifications regarding implementation of the new 10 CFR 20 requirements. Based on subsequent telephone conversations with members of the Nuclear Regulatory Commission (NRC) Staff regarding the submittal, Georgia Power Company was informed that the proposed changes related to gaseous release rates must be revised in order to demonstrate compliance with effluent limitations. Two alternatives acceptable to the NRC were discussed, one based on a concentration methodology and the other based on a dose rate methodology similar to what is currently required by the VEGP Offsite Dose Calculation Manual (ODCM). Georgia Power Company has elected to implement the dose rate methodology for determining compliance with gaseous effluent release rate limits, the details of which are discussed in enclosure 1.

Analysis

The proposed changes to the VEGP Unit 1 and Unit 2 Technical Specifications are required in order to implement the new 10 CFR 20 requirements at VEGP. Specifically, the proposed changes to the Administrative Controls Section (6.7.4 f(7)) pertaining to gaseous effluent release rates are being revised to maintain the current instantaneous dose rate limits contained in the VEGP ODCM for noble gases of 500 mrem/year to the total body and 3000 mrem/year to the skin; and for Iodine-131, Iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days, an instantaneous dose rate limit of 1500 mrem/year to any organ. The level of radiological control will not be reduced by the proposed changes since compliance with applicable regulatory requirements governing radioactive effluents, including 10 CFR 50.36a, Appendix I to 10 CFR 50 and 40 CFR 190 will continue to be maintained.

ENCLOSURE 2 (CONTINUED)

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

10 CFR 50.92 EVALUATION

Conclusion

Based on the above considerations, Georgia Power Company has concluded the following concerning 10 CFR 50.92.

1. The proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated. The proposed changes will facilitate the implementation of the new 10 CFR 20 requirements. Compliance with other applicable regulatory requirements will continue to be maintained. Also, the proposed changes do not alter the conditions or assumptions in any of the Final Safety Analysis Report (FSAR) accident analyses. Since the FSAR accident analyses remain bounding, the radiological consequences previously evaluated are not adversely affected by the proposed changes. Therefore, it can be concluded that the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.
2. The proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated. The proposed changes do not involve any change to the configuration or method of operation of any plant equipment. Accordingly, no new failure modes have been defined for any plant system or component important to safety nor has any new limiting single failure been identified as a result of the proposed changes. Also, there will be no change in types or increase in the amount of gaseous effluents released offsite. Therefore, it can be concluded that the proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.
3. The proposed changes do not involve a significant reduction in a margin of safety. The proposed changes do not involve any change in the methodology that will be used in the radiological effluent monitoring of gaseous releases since existing effluent release limits will continue to be employed. Accordingly, the methodology that will be used in the control of gaseous effluents will remain unchanged. Additionally, annual doses will be limited to the doses specified in 10 CFR 50, Appendix I and 40 CFR 190. Therefore, it can be concluded that the proposed changes do not involve a significant reduction in a margin of safety.

ENCLOSURE 2 (CONTINUED)

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10 CFR 50.92 EVALUATION

Based on the preceding information it has been determined that the proposed Technical Specification changes do not involve a significant hazards consideration as defined by 10 CFR 50.92(c).