

October 23, 1986

Dockets Nos. 50-321
and 50-366

Mr. J. T. Beckham, Jr.
Vice President - Nuclear Generation
Georgia Power Company
P. O. Box 4545
Atlanta, Georgia 30302

Dear Mr. Beckham:

<u>DISTRIBUTION</u>	NThompson
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The Commission has issued the enclosed Amendments Nos. 130 and 65 to Facility Operating Licenses Nos. DPR-57 and NPF-5, for the Edwin I. Hatch Nuclear Plant, Units Nos. 1 and 2. The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated January 27, 1986, as supplemented by your letter dated July 10, 1986.

The amendments revise the TSs for Hatch Units 1 and 2 to require additional sampling of gaseous effluents following shutdown, startup, or power level changes greater than 15% of rated thermal power 1) to be required only if the primary coolant activity of I-131 and the noble gas activity had increased by more than a factor of 3, and 2) to be followed by analysis of only the principal gamma emitters.

A copy of our Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's next Bi-weekly Federal Register Notice.

Sincerely,

[Signature]
George W. Rivenbark, Project Manager
BWR Project Directorate #2
Division of BWR Licensing

Enclosures:

1. Amendment No. 130 to DPR-57
2. Amendment No. 65 to NPF-5
3. Safety Evaluation

cc w/enclosures:
See next page

BWR:PD#2
SNorris
10/11/86

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BWR:PD#2
GRivenbark;eh
10/23/86

BWR:PD#2
DMuller
10/23/86

OGC-Bethesda
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10/26/86

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Mr. J. T. Beckham, Jr.
Georgia Power Company

Edwin I. Hatch Nuclear Plant,
Units Nos. 1 and 2

cc:

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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
DOCKET NO. 50-321
EDWIN I. HATCH NUCLEAR PLANT, UNIT NO. 1
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 130
License No. DPR-57

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Georgia Power Company, et al., (the licensee) dated January 27, 1986, as supplemented July 10, 1986, 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 (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;
 - 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 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:

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(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 13Q are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Daniel R. Muller, Director
BWR Project Directorate #2
Division of BWR Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: October 23, 1986

ATTACHMENT TO LICENSE AMENDMENT NO. 130

FACILITY OPERATING LICENSE NO. DPR-57

DOCKET NO. 50-321

Replace the following page of the Appendix "A" Technical Specifications with the enclosed page. The revised page is identified by Amendment number and contains vertical lines indicating the area of change.

Remove

3.15-11

Insert

3.15-11

TABLE 4.15.2-1 (SHEET 2 OF 3)
RADIOACTIVE GASEOUS WASTE SAMPLING AND ANALYSIS PROGRAM
Table Notations

- a. Lower Limit of Detection is defined in table notation (a) of Table 4.16.1-1, Specification 4.16.1.
- b. For certain radionuclides with low-gamma yield or low energies, or for certain radionuclide mixtures, it may not be possible to measure radionuclides in concentrations near the Lower Limit of Detection. Under these circumstances, the Lower Limit of Detection may be increased inversely proportional to the magnitude of the gamma yield (i.e., $1 \times 10^{-4}/I$, where I = photon abundance expressed as a decimal fraction), but in no case shall the Lower Limit of Detection, as calculated in this manner for a specific radionuclide, be greater than 10 percent of the Maximum Permissible Concentration value specified in 10 CRF 20, Appendix B, Table II (column 1).
- c. Sampling and analyses for principal gamma emitters shall also be performed following shutdown, startup, or a THERMAL POWER change exceeding 15 percent of the RATED THERMAL POWER within a 1-hour period if analysis shows that the DOSE EQUIVALENT I-131 concentration in the primary coolant and the Main Stack Noble Gas Activity Monitor reading have increased more than a factor of 3.
- d. Sampling shall be performed weekly, and analyses shall be completed within 48 hours after changing (or after removal from sampler). Sampling shall also be performed once per 24 hours for 7 days following each shutdown, startup, or THERMAL POWER change exceeding 15-percent RATED THERMAL POWER in 1 hour and analyses completed within 48 hours of changing. When samples collected for 24 hours are analyzed, the corresponding Lower Limits of Detection may be increased by a factor of 10. The more frequent sampling and analysis requirement applies only if analysis shows that the DOSE EQUIVALENT I-131 concentration in the primary coolant and the Main Stack Noble Gas Activity Monitor Reading have increased more than a factor of 3.
- e. The ratio of the sample flowrate to the sampled stream flowrate shall be known for the time period covered by each dose or dose rate calculation made in accordance with Specification 3.15.2.1, 3.15.2.2, and 3.15.2.3.
- f. The principal gamma emitters for which the Lower Limit of Detection specification will apply are exclusively the following radionuclides: Kr-87, Kr-88, Xe-133, Xe-133m, Xe-135, and Xe-138 for gaseous emissions; and Mn-54, Fe-59, Co-58, Co-60, Zn-65, Mo-99, Cs-134, Cs-137, Ce-141 and Ce-144 for particulate emissions. This list does not mean that only these nuclides are to be detected and reported. Other measurable and identifiable peaks, together with the above nuclides, shall also be identified and reported. Nuclides below



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

GEORGIA POWER COMPANY
OGLETHORPE POWER CORPORATION
MUNICIPAL ELECTRIC AUTHORITY OF GEORGIA
CITY OF DALTON, GEORGIA
DOCKET NO. 50-366
EDWIN I. HATCH NUCLEAR PLANT, UNIT NO. 2
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 65
License No. NPF-5

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Georgia Power Company, et al., (the licensee) dated January 27, 1986, as supplemented July 10, 1986, 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 (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;
 - 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 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. NPF-5 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 65, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Daniel R. Muller, Director
BWR Project Directorate #2
Division of BWR Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: October 23, 1986

ATTACHMENT TO LICENSE AMENDMENT NO. 65

FACILITY OPERATING LICENSE NO. NPF-5

DOCKET NO. 50-366

Replace the following page of the Appendix "A" Technical Specifications with the enclosed page. The revised page is identified by Amendment number and contains vertical lines indicating the area of change.

Remove

3/4 11-11

Insert

3/4 11-11

TABLE 4.11.2-1 (SHEET 2 OF 3)
RADIOACTIVE GASEOUS WASTE SAMPLING AND ANALYSIS PROGRAM
Table Notations

- a. Lower Limit of Detection is defined in table notation (a) of Table 4.16.1-1 of Unit 1, Specification 4.16.1.
- b. For certain radionuclides with low-gamma yield or low energies, or for certain radionuclide mixtures, it may not be possible to measure radionuclides in concentrations near the Lower Limit of Detection. Under these circumstances, the Lower Limit of Detection may be increased inversely proportional to the magnitude of the gamma yield (i.e., $1 \times 10^{-4}/I$, where I = photon abundance expressed as a decimal fraction), but in no case shall the Lower Limit of Detection, as calculated in this manner for a specific radionuclide, be greater than 10 percent of the Maximum Permissible Concentration value specified in 10 CRF 20, Appendix B, Table II (column 1).
- c. Sampling and analyses for principal gamma emitters shall also be performed following shutdown, startup, or a THERMAL POWER change exceeding 15 percent of the RATED THERMAL POWER within a 1-hour period if analysis shows that the DOSE EQUIVALENT I-131 concentration in the primary coolant and the Main Stack Noble Gas Activity Monitor reading have increased more than a factor of 3.
- d. Sampling shall be performed weekly, and analyses shall be completed within 48 hours after changing (or after removal from sampler). Sampling shall also be performed once per 24 hours for 7 days following each shutdown, startup, or THERMAL POWER change exceeding 15-percent RATED THERMAL POWER in 1 hour and analyses completed within 48 hours of changing. When samples collected for 24 hours are analyzed, the corresponding Lower Limits of Detection may be increased by a factor of 10. The more frequent sampling and analysis requirement applies only if analysis shows that the DOSE EQUIVALENT I-131 concentration in the primary coolant and the Main Stack Noble Gas Activity Monitor Reading have increased more than a factor of 3.
- e. The ratio of the sample flowrate to the sampled stream flowrate shall be known for the time period covered by each dose or dose rate calculation made in accordance with Specification 3.11.2.1, 3.11.2.2, and 3.11.2.3.
- f. The principal gamma emitters for which the Lower Limit of Detection specification will apply are exclusively the following radionuclides: Kr-87, Kr-88, Xe-133, Xe-133m, Xe-135, and Xe-138 for gaseous emissions; and Mn-54, Fe-59, Co-58, Co-60, Zn-65, Mo-99, Cs-134, Cs-137, Ce-141 and Ce-144 for particulate emissions. This list does not mean that only these nuclides are to be detected and reported. Other measurable and identifiable peaks, together with the above nuclides, shall also be identified and reported. Nuclides below

TABLE 4.11.2-1 (SHEET 3 OF 3)

RADIOACTIVE GASEOUS WASTE SAMPLING AND ANALYSIS PROGRAM

Table Notations (Continued)

only these nuclides are to be detected and reported. Other measurable and identifiable peaks, together with the above nuclides, shall also be identified and reported. Nuclides below the Lower Limit of Detection for the analyses should not be reported as being present at the Lower Limit of Detection level for that nuclide. When unusual circumstances result in Lower Limit(s) of Detection higher than required, the reasons shall be documented in the semi-annual effluent release report.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NOS. 130 & 65 TO FACILITY LICENSE NOS. DPR-57 AND NPF-5

GEORGIA POWER COMPANY

EDWIN I. HATCH NUCLEAR PLANT UNITS 1 AND 2

DOCKET NOS. 50-321 AND 50-366

1.0 INTRODUCTION

By letter dated January 27, 1986, with modifications and clarifications submitted July 10, 1986, the Georgia Power Company (Georgia Power, the licensee) requested changes to the Hatch 1 & 2 Radiological Effluent Technical Specifications (RETS) as incorporated in Facility Operating Licenses DPR-57 and NPF-5.

2.0 EVALUATION

License Amendment Nos. 110 and 48 to Facility Operating Licenses DPR-57 and NPF-5 for the Hatch Nuclear Plant Units 1 & 2 were issued June 28, 1985. The amendments authorized the incorporation of the RETS into the Hatch 1 & 2 Technical Specifications (TS). The RETS were implemented by the licensee on July 28, 1985.

The proposed changes are consistent with NUREG-0473, "Standard Radiological Effluent Technical Specifications for BWRs", Revision 2, February 1, 1980 (model RETS) and would revise tabular notations for gaseous effluent sampling and analysis commitments. Specifically, the proposed changes call for additional sampling following shutdown, startup, or power level changes greater than 15% of rated thermal power 1) to be required only if the primary coolant activity of I-131 and the noble gas activity had increased by more than a factor of 3, and 2) to be followed by analysis of only the principal gamma emitters.

During the course of reviewing and implementing the RETS for operating reactors it became evident that the mode of operation of some power reactors would require additional sampling of gaseous effluents, almost continually, if the wording of the earlier RETS guidance were used, namely, "following each start-up, shut-down, and thermal power change exceeding 15% in one hour". Since the purpose of such additional sampling is to detect possible rapid releases of radioiodine ("iodine spiking") during significant changes in power, the augmented sampling is not necessary unless other monitoring indicators show possible problems with failed fuel. Therefore, a revision was made to the RETS guidance adding the caveat that the additional sampling and analysis should be done only if the iodine-131 activity in the primary coolant and the noble gas activity monitor reading increase by more than a factor of 3 during the power change. The first change proposed by the licensee, namely the notation for the additional sampling of gaseous effluents, follows the present revised RETS guidance. Hence, this change is acceptable.

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The second change requested involves clarification of the extent of analysis required for the special samples obtained under the circumstances described above. The format of the tabular commitments of the RETS of the licensee requires analyses of the special gaseous effluent samples for tritium as well as for principal gamma emitters. Since, as explained above, the primary purpose of these samples is to detect an "iodine spike", analysis of tritium is not necessary or pertinent. Hence, the modification of the tabular notation to specify analysis for only principal gamma emitters meets the intent of the guidance of the model RETS and, therefore, is acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change to a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and/or changes to the surveillance requirements. The staff has determined that the amendment involves 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 this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets 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 nor environmental assessment need be prepared in connection with the issuance of this amendment.

4.0 CONCLUSION

The staff has concluded, on the basis of 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, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security nor to the health and safety of the public.

Principal Contributor: W. Meinke

Dated: October 23, 1986