

ATTACHMENT 1

NRC DOCKETS 50-321, 50-366
OPERATING LICENSES DPR-57, NPF-5
EDWIN I. HATCH NUCLEAR PLANT UNITS 1 AND 2
PROPOSED CHANGE TO ENVIRONMENTAL TECHNICAL SPECIFICATIONS

The proposed change to the Environmental Technical Specifications (Appendix B to Operating Licenses DPR-57 and NPF-5) would be incorporated as follows:

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ATTACHMENT 2

NRC DOCKET 50-321, 50-366
OPERATING LICENSE DPR-57, NPF-5
EDWIN I. HATCH NUCLEAR PLANT UNITS 1, 2
REQUEST FOR CHANGE TO ENVIRONMENTAL TECHNICAL SPECIFICATIONS

Pursuant to 10 CFR 170.22, Georgia Power Company has evaluated the attached proposed amendment to Operating Licenses DPR-57, NPF-5 and has determined that:

- a. The proposed amendment does not require evaluation of a new Safety Analysis Report and rewrite of the facility license;
- b. the proposed amendment does not require evaluation of several complex issues, involve ACRS review, or require an environmental impact statement;
- c. The proposed amendment does not involve a complex issue or more than one environmental or safety issue;
- d. The proposed amendment does involve a single environmental issue; namely, deletion of continuous flow monitoring requirements for the Recombiner Building vent.
- e. The proposed amendment is therefore a Class III amendment for one unit and a Class I amendment for the other unit.

If, at any time during reactor power operation, it is determined that the hydrogen concentration limit is being exceeded, action shall be initiated within 4 hours to return the hydrogen concentration to within the prescribed limit. If the hydrogen concentration is not reduced to less than 4% by volume within 24 hours, the offgas system flow shall be stopped.

- (3) The installed hydrogen monitoring systems shall have daily sensor checks, monthly functional checks, and quarterly calibrations. The portable hydrogen gas analyzer shall be calibrated immediately prior to installation and shall be subject to daily sensor checks, monthly functional checks, and quarterly calibrations until removed from service.
- i. An unplanned or uncontrolled offsite release of radioactive materials in gaseous effluents in excess of 150 Ci of noble gas or 0.02 Ci of radioiodines in gaseous form shall be reported to the NRC within 30 days in accordance with Section 5.7.2.

2.1.4 Specifications for Gaseous Waste Sampling and Monitoring

- a. Plant records shall be maintained and reports of the sampling and analysis results shall be submitted in accordance with Section 5.7. Estimates of the sampling and counting errors associated with each reported value should be included.
- b. Gaseous releases to the environment, except as noted in Specification 2.1.4.f below, shall be monitored continuously for gross radioactivity, and the flow measured and recorded. Whenever these radiation monitors are inoperable, grab samples shall be taken and analyzed daily for gross radioactivity. If the flow measurement devices are inoperable, estimates of flow will be made. If these monitors are inoperable for more than 7 days, these releases from the corresponding release point shall be terminated.
- c. An isotopic analysis shall be made of a representative sample of gaseous activity, excluding tritium, at the location of pretreatment monitor and at a point prior to dilution and discharge, (1) within one month of initial criticality, (2) at least monthly thereafter, (3) following each refueling outage, and (4) if the gaseous waste monitors indicate an increase of greater than 50% in the steady state fission gas release after factoring out increases due to power changes.
- d. All waste gas effluent monitors shall be calibrated at least quarterly by means of a known radioactive source which has been calibrated to a National Bureau of Standards source. Each monitor shall have a functional test at least monthly and an instrument check at least daily.

- e. Sampling and analysis of radioactive material in gaseous waste, including particulate forms and radioiodines, shall be performed in accordance with Table 2.1-2.
- f. Gaseous releases to the environment from the recombiner building ventilation system shall be monitored continuously for gross radioactivity. Recombiner building ventilation system flow shall be measured and recorded quarterly.

Bases

The release of radioactive materials in gaseous wastes to unrestricted areas shall not exceed the concentration limits specified in 10 CFR Part 20 and should be as low as reasonably achievable in accordance with the requirements of 10 CFR Part 50.36. These specifications provide reasonable assurance that the resulting annual air dose from the site due to gamma radiation will not exceed 10 mrad, that an annual air dose from the site due to beta radiation will not exceed 20 mrad from noble gases, and that the annual dose to any organ of an individual from iodines and particulates will not exceed 15 mrem per site. At the same time, these specifications permit the flexibility of operation, compatible with considerations of health and safety, to assure that the public is provided with a dependable source of power under unusual operating conditions which may temporarily result in releases higher than the design objective levels but still within the concentration limits specified in 10 CFR Part 20. It is expected that by using this operational flexibility under unusual operating conditions and by exerting every effort to keep levels of radioactive material in gaseous wastes as low as reasonably achievable, the annual releases will not exceed a small fraction of the concentration limits specified in 10 CFR Part 20.

The maximum permissible concentration of radioactive iodine in air should be reduced by a factor of 243 to allow for the grass-cow-milk pathway. (This factor is 1220 for the grass-goat-milk pathway.) This factor has been derived for radioactive iodine, taking into account the milk pathway. It has been applied to radionuclides of iodine and to all radionuclides in particulate form with a half life greater than 8 days. The factor is not appropriate either for iodine where milk is not a pathway of exposure or for the other radionuclides.

The design objectives have been developed based on operating experience, taking into account a combination of system variables including defective fuel, primary system leakage, and the performance of the various waste treatment systems.

For Section 2.1.3a(1), dose calculations have been made for the critical sector. These calculations consider site meteorology, buoyancy characteristics, and radionuclide content of the effluent from each Unit. Meteorological calculations for offsite locations were performed, and the most critical location was selected to set the release rate. The controlling distances are 1490 meters to the east for ground releases and 1700 meters to the ESE for elevated releases. The gamma dose contribution was determined using Equation 7.63 in Section 7-5.2.5 of Meteorology and Atomic Energy - 1968. The releases from vents are considered to be ground-level releases which could result in a beta dose from cloud submersion.