## UNITED STATES NUCLEAR REGULATORY COMMISSION

| In the Matter of   | }                 |
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| GEORGIA POWER COMPANY OGLETHORPE POWER CORPORATION MUNICIPAL ELECTRICAL AUTHORITY OF GEORGIA CITY OF DALTON, GEORGIA | Docket No. 50-424 |
| (Vogtle Electric Generating Plant,<br>Unit 1)  | )                 |

## EXEMPTION AMENDMENT

1.

Georgia Power Company, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia (the licensee), are the holders of Facility Operating License No. NPF-68 issued March 16, 1987, which authorizes full power operation of the Vogtle Electric Generating Plant, Unit 1 (the facility). The license provides, among other things, that it is subject to all rules, regulations and Orders of the Nuclear Regulatory Commission (the Commission).

The facility consists of a pressurized water reactor at the licensee's site located in Burke County, Georgia.

II.

10 CFR Part 20, Appendix A, "Protection Factors for Respirators," establishes protection factors of air-purifying respirators for protection against particulates only. Furthermore, footnote d-2(c) states, "No allowance is to be made for the use of sorbents against radioactive gases or vapors." On October 27, 1988, the Commission granted an exemption to the facility from the

restriction of 10 CFR Part 20, Appendix A, footnote d-2(c), and authorized the use of the MSA GMR-I canister with restrictions as shown in Attachment 1 to that exemption.

By letter dated September 28, 1989, the licensee requested an amendment to the exemption to allow the MSA GMR-I canisters to be stored in a Class C storage environment as defined in ANSI N45.2.2 versus a Class A or better environment which is a restriction contained in Attachment 1 to the exemption granted October 27, 1988. The licensee provided a summary of test results from Mine Safety Appliances justifying Class C storage requirements for the MSA GMR-I canisters. The Commission's staff evaluated the information provided by the licensee to support the exemption amendment. The Commission's Safety Evaluation relating to Class C storage for MSA GMR-I canisters at Vogtle 1 is being issued concurrently with this exemption amendment. The Safety Evaluation concludes that Class C storage is acceptable for radioiodine MSA GMR-I canisters.

## III.

Accordingly, the Commission has determined that, pursuant to 10 CFR 20.501, an exemption amendment as requested by the licensee's letter of September 28, 1989, is authorized by law and will not result in undue hazard to life or property. The Commission hereby grants an amendment to the exemption granted October 27, 1988, and authorizes Class C storage for the MSA GMR-I canisters, as shown in the amended Attachment 1 to the exemption of October 27, 1988 (attached). The exemption amendment is subject to modification by rule, regulation or Order of the Commission.

Pursuant to 10 CFR 51.32, the Commission has determined that the issuance of the exemption amendment will have no significant impact on the environment (55 FR 6565).

This exemption amendment is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Division of Reactor Projects - 1/11 Office of Nuclear Reactor Regulation

Attachment: Usage Restrictions

Dated at Rockville, Maryland this 23rd day of February 1990.

## Attachment 1

Limitations, Usage Restrictions, and Controls Applicable to the Use of MSA GMR-I Canister at the Vogtle Electric Generating Plant, Unit 1

- 1. Protection factor equal to 50 as a maximum value.
- The maximum permissible continuous use time is eight hours after which the canister will be discarded.
- 3. Canisters are not to be used in the presence of organic solvent vapors.
- Canisters are to be stored in a Class C or better environment, as defined in ANSI N45.2.2.
- The allowable service life for sorbent canisters is to be calculated from the time of unsealing the canister, including periods of non-exposure.
- Canister is to be used with a full facepiece capable of providing a fit factor equal to or greater than 500.
- Canisters are not to be used in total challenge concentrations of organic iodines and other halogenaied compounds greater than 1ppm, including nonradioactive compounds.
- 8. Canisters are not to be used in environments where temperatures are greater than 110°F, or up to 120°F if the dewpoint is equal to or less than 107°F.

In addition to the limitations and usage restrictions noted above, the following additional controls will be utilized by the licensee:

- Temperatures will be measured prior to and/or during the use of GMR-I canisters to assure that work temperatures are within limits.
- Air samples will be taken prior to and during any activities that involve the use of the GMR-I canister for protection against radioactive iodine.
- 3. A GMR-I canister found to have exceeded 3 years from date of manufacture will not be used for protection against radioactive iodine.
- 4. In the initial implementation of the GMR-I program, the following verification measures will be in effect:
  - Weekly whole body counts for individuals using the GMR-I canisters for radioiodine protection;
  - A whole body count for individuals that exceed 10 MPC in a week and used the GMR-I canister for respiratory protection in that period;
  - c. Anyone that measures 70 nCI or greater iodine uptake to the thyroid during a whole body count will be restricted from entering a radioiodine atmosphere pending Health Physics evaluation;
  - d. The radiological survey and whole body count information will be compiled to evaluate the effectiveness of the program.