

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of

ALABAMA POWER COMPANY

(Joseph M. Farley Nuclear Plant
Unit Nos. 1 and 2)

) Docket Nos. 50-348
) and 50-364
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EXEMPTION

I.

The Alabama Power Company (the licensee) is the holder of Facility Operating License Nos. NPF-2 and NPF-8 which authorized operation of the Joseph M. Farley Nuclear Power Plant Unit Nos. 1 and 2. These licenses provide, among other things, that they are subject to all rules, regulations and Orders of the Commission now or hereafter in effect.

The facilities comprise two pressurized water reactors (PWR) at the licensee's site located near the City of Dothan, Alabama.

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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." This restriction was needed since an inadequate data base had existed for evaluating the complex interaction of many factors affecting the service life and removal efficiency of radioactive gases and vapors by sorbents canisters.

Also, due to the lack of a data base a NIOSH/MSHA certification schedule to ensure that canisters meet acceptable performance criteria has not been established.

However, 10 CFR Part 20.103(e) allows an exemption to be authorized by the Commission in lieu of a NIOSH/MSHA certification schedule based on adequate testing, material and performance characteristics. An application by a licensee for this authorization must include a demonstration by testing, or on the basis of reliable test information, that the material and performance characteristics of the equipment are capable of providing the proposed degree of protection under anticipated conditions of use. The licensee makes such an application.

By letter dated January 13, 1984, as supplemented by letters dated February 10 and 13, March 5 and May 8, 1984, the licensee requested an exemption based on 10 CFR 20.103(e) to allow the use of a protection factor of 50 when utilizing radioiodine GMR-I canisters for personnel respiratory protection during scheduled refueling outage work. The licensee cited research data, test results, test protocol and a quality assurance sampling plan that it stated satisfies the recommended qualification process of NUREG/CR-3403. The Commission staff evaluated the information provided by the licensee to support the exemption request. In addition, the Commission staff met with the licensee's representatives, the canister vendor (Mine Safety Appliances Company), and a Commission contract representative from the Los Alamos National Laboratory on April 25, 1984, for in-depth discussions of the licensee's request. The Commission's safety evaluation on this matter relating to the use of a radioiodine protection factor for GMR-I Canisters at Farley 1 and 2 has been issued. The safety evaluation concludes that the licensee's proposed use of radioiodine GMR-I canisters with certain usage

restrictions and controls can result in significant dose savings over alternative methods while still providing effective protection.

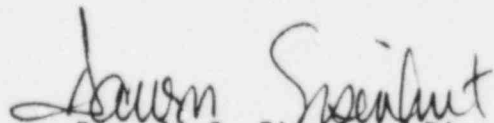
III.

Accordingly, the Commission has determined that, pursuant to 10 CFR 20.501, an exemption as requested by the licensee's letter of January 13, 1984, supplemented February 10 and 13, March 5, and May 8, 1984, is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest. The Commission hereby grants an exemption from the restrictions of 10 CFR Part 20, Appendix A, footnote d-2(c), and authorizes the use of the GMR-I Canister, with restrictions as shown in the Commission staff safety evaluation, at the Joseph M. Farley Nuclear Plant Units 1 and 2. The exemption is subject to amendment by the Commission staff and shall remain in effect until rescinded by the Commission staff or superseded by regulation.

Pursuant to 10 CFR 51.32, the Commission has determined that the issuance of the exemption will have no significant impact on the environment (49 FR 40510), October 16, 1984.

This Exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Darrell G. Eisenhut, Director
Division of Licensing
Office of Nuclear Reactor Regulation

Dated at Bethesda, Maryland
this 23rd day of October 1984