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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 27 TO FACILITY OPERATING LICENSE NPF-68

AND AMENDMENT NO. 8 TO FACILITY OPERATING LICENSE NPF-81

GEORGIA POWER COMPANY, ET AL.

DOCKETS NOS. 50-424 AND 50-425

VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2

1.0 INTRODUCTION

By letter dated November 7, 1988, and supplemented December 1, 1988, and May 19, 1989, Georgia Power Company, et al., (the licensee) requested a change to the Technical Specifications (TSs) for Vogtle Electric Generating Plant (VEGP), Units 1 and 2. The proposed amendments would revise TS 3.3.3.6, "Accident Monitoring Instrumentation," to make the action requirements for inoperable containment hydrogen concentration monitors consistent with the requirements of TS 3.6.4.1, "Hydrogen Monitors."

2.0 EVALUATION

The licensee has provided the following information in support of their request:

The Vogtle TSs include the containment hydrogen monitors in the Containment Systems specification (3/4.6.4.1), consistent with Generic Letter 83-37, "NUREG-0737 Technical Specifications," and the Westinghouse Standard Technical Specifications. The same monitors are also included in the Accident Monitoring Instrumentation specification (3/4.3.3.6). Inclusion of the hydrogen monitors in the Accident Monitoring Instrumentation specification was based on the NRC staff position that Regulatory Guide 1.97, Category 1 instrumentation should be subject to TS requirements. The fact that the hydrogen monitors were addressed by another TS may have been overlooked.

The Accident Monitoring Instrumentation specification places overly restrictive action requirements on the hydrogen monitors. With one of two monitors inoperable, 7 days are allowed to restore the inoperable monitor to operable status; with both monitors inoperable, 48 hours are allowed to restore one monitor. This is inconsistent with the staff position in Generic Letter 83-37 and is inappropriate given the function these monitors perform. The hydrogen monitors provide indication and recording of post-loss of coolant accident (LOCA) containment hydrogen concentration. They perform no control or trip functions and are not needed for immediate post-accident mitigative action. Buildup of hydrogen in containment following a LOCA is a slow process. As discussed in Final Safety Analysis Report (FSAR) Section 6.2.5.3, with no recombiner operation, it takes 12 days for a combustible mixture (4 volume percent hydrogen) to occur. With a single recombiner started on the second day or when the bulk containment concentration reached 3.5 volume percent, the hydrogen concentration

is quickly reduced. If the subject monitors were not available following a LOCA, other means of hydrogen monitoring could be used. The Post-Accident Sample System (PASS) is capable of sampling and in-line analysis for containment hydrogen concentration within 3 hours after a decision is made to take a sample. Grab samples can be obtained from the PASS for laboratory analysis as a backup to in-line analysis.

The NRC staff has reviewed the information provided by the licensee and finds that the proposed change is in accordance with Generic Letter 83-37. Therefore, the proposed change is acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

These amendments involve changes to a requirement with respect to the use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendments involve 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 the amendments involve no significant hazards consideration, and there has been no public comment on such finding. Accordingly, the amendments meet 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 or environmental assessment need be prepared in connection with the issuance of the amendments.

4.0 CONCLUSION

The Commission made a proposed determination that the amendments involve no significant hazards consideration which was published in the Federal Register on July 26, 1989 (54 FR 31107), and consulted with the State of Georgia. No public comments were received, and the State of Georgia did not have any comments.

The staff has concluded, based on 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 the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: Jon B. Hopkins, PDII-3/DRP-I/II

Dated: February 20, 1990

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AMENDMENT NO. 27 TO FACILITY OPERATING LICENSE NPF-68 - Vogtle Electric Generating Plant, Unit 1

AMENDMENT NO. 8 TO FACILITY OPERATING LICENSE NPF-81 - Vogtle Electric Generating Plant, Unit 2

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