



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 4 TO FACILITY OPERATING LICENSE NPF-68

GEORGIA POWER COMPANY, ET AL

DOCKET NO. 50-424

VOGTLE ELECTRIC GENERATING PLANT, UNIT 1

1.0 INTRODUCTION

By letter dated March 23, 1988, Georgia Power Company, et al., (the licensee) requested a change to the Technical Specifications for Vogtle Electric Generating Plant, (VEGP), Unit 1. The proposed change would add a footnote to VEGP Unit 1 Technical Specification (TS) 3/4.7.6, "Control Room Emergency Filtration System," to allow pre-operational testing of VEGP Unit 2 Emergency Heating, Ventilation, and Air Conditioning System.

2.0 EVALUATION

VEGP Unit 1 is protected from VEGP Unit 2 construction and testing activities by physical barriers and administrative controls. In particular, the VEGP Unit 1 and Unit 2 control room areas are separated by a temporary wall and the HVAC systems are separated by a series of dampers, removed duct sections, and caps on open ducts.

The licensee plans to remove the temporary wall separating the VEGP Unit 1 and VEGP Unit 2 control room areas during the first VEGP Unit 1 refueling outage, in order to minimize the negative impact of the wall removal on the operation of VEGP Unit 1. This schedule requires that pre-operational testing of the VEGP Unit 2 HVAC systems begin prior to the VEGP Unit 1 refueling outage. The VEGP Unit 2 testing activities will result in occasional positive pressures in the VEGP Unit 2 control room, which could negate the positive pressure requirement for the VEGP Unit 1 control room and is the reason that the proposed amendment is necessary. These testing activities are scheduled to begin immediately and end just in time to remove the temporary wall during the VEGP Unit 1 refueling outage scheduled to begin in September 1988.

The licensee initially believed that the required pre-operational testing of the VEGP Unit 2 emergency HVAC systems could be performed during full power operation of VEGP Unit 2 pressurization testing and the continued compliance with the VEGP Unit 1 Technical Specification Bases through compensatory operator action. The Nuclear Regulatory Commission (NRC) staff informed the licensee on March 17, 1988 of their position that a Technical Specification amendment was necessary. Therefore, approval of the proposed amendment on an exigent basis is necessary to avoid a potential extension of the planned VEGP Unit 1 refueling outage or a separate outage for removal of the temporary wall.

The VEGP Unit 1 Control Room Emergency Filtration System (CREFS) is required by TS 4.7.6 to be capable of maintaining the control room at a positive pressure of greater than or equal to 1/8 inch water gauge relative to adjacent areas at less than or equal to a pressurization flow of 850 cfm during system operation. During pre-operational testing of Unit 2 heating, ventilation, and air conditioning (HVAC) systems, an adjacent area (the Unit 2 control room) will intermittently have positive pressures which in certain cases can affect the ability to establish and maintain the specified Unit 1 control room differential pressure; however, the bases of 4.7.6 can still be met by operator actions. If Unit 1 CREFS operation were required in the emergency (pressurization) mode while a positive pressure existed in the Unit 2 control room, the basis of TS 4.7.6 would be met if the operating Unit 2 Emergency HVAC system(s) were manually shut down within 4.5 minutes after receipt of a Unit 1 control room isolation signal. This time of 4.5 minutes is calculated with a difference from the Final Safety Analysis Report (FSAR) analysis. FSAR analysis takes credit for 20 seconds between accident initiation and radioactivity reaching the Unit 1 control room outside air intake, whereas the analysis supporting this amendment takes credit for 80.9 seconds. The main difference in the time is that the FSAR analysis assumes core release at time zero, whereas this amendment assumes core release at the time at which the first rod burst is calculated to occur. The NRC staff finds that this assumption is conservative and is acceptable.

In order to assure that the 4.5 minute time limit will be met, the licensee will station dedicated operators in the Unit 1 and Unit 2 control rooms during positive pressure operation of the Unit 2 emergency HVAC system. If a Unit 1 control room isolation signal is received, the Unit 1 operator will make immediate contact with the Unit 2 operator to order shutdown of the Unit 2 emergency HVAC system. The NRC staff has reviewed the above and finds the 4.5 minute time acceptable based on the analysis which meets the basis of TS 4.7.6 and the dedicated operators, who can act within the required time.

The Unit 2 emergency HVAC units can be run in a recirculation mode which does not pressurize the Unit 2 control room. The NRC staff finds that style of operation acceptable because it meets the original TS prior to this amendment. Also, manual shutdown of the Unit 2 normal HVAC units is not necessary, because those units automatically trip when the Unit 1 emergency units are started. The NRC staff finds that that operation meets the original TS prior to this amendment and is acceptable.

In summary, the NRC staff finds the amendment to allow pre-operational positive pressure testing of the Unit 2 emergency HVAC units acceptable.

3.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the Federal Register (53 FR 10450) on March 31, 1988, and consulted with the state of Georgia. No public comments were received and the state of Georgia did not have any comments. Because this amendment is being issued on an exigent basis, the following final no significant hazards consideration finding is made.

The Commission has made a final determination that the amendment request involves no significant hazards considerations. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

The NRC staff has reviewed the amendment and has determined that it would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated because dedicated operators will shut down the VEGP Unit 2 emergency HVAC systems in the event of a control room isolation signal to ensure that radiation doses are not increased above those previously evaluated. Also, chlorine gas will not be stored on site in a quantity that requires any chlorine protection. In addition, the NRC staff has found that the amendment would not (2) create the possibility of a new or different kind of accident from any accident previously evaluated because the change does not involve any physical alteration of the plant. Therefore, a failure mode which could lead to a new or different type of accident is not introduced. Finally, the amendment would not (3) involve a significant reduction in a margin of safety because dedicated operators with no other duties will be stationed to shut down the VEGP Unit 2 emergency HVAC systems in the event of an accident.

Accordingly, the Commission has determined that this change does not involve significant hazards considerations.

4.0 ENVIRONMENTAL CONSIDERATION

These amendment involves changes in the use of facility components located within the restricted area as defined in 10 CFR Part 20. 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 determined that the amendment involves no significant hazards consideration. Accordingly, the 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 or environmental assessment need be prepared in connection with the issuance of this amendment.

5.0 CONCLUSION

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 this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: J. B. Hopkins, DRPI/II/PDII-3

Dated: April 16, 1988

DATED: April 16, 1988

AMENDMENT NO. 4 TO FACILITY OPERATING LICENSE NPF-68 - VOGTLE ELECTRIC
GENERATING PLANT, UNIT 1

DISTRIBUTION:

Docket File
NRC PDR
Local PDR
PDI-3 R/F
Vogtle R/F
SVarga
GLainas
MRood
JHopkins
OGC-WF
EJordan
TBarnhart (4)
ACRS (10)
WJones
ERutcher
GPA/PA
ARM/LFMB
DHagan
JPartlow