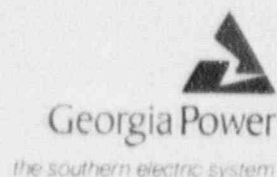


C. K. McCoy  
Vice President, Nuclear  
Vogtle Project



April 22, 1991

ELV-02116  
0608

Docket Nos. 50-424  
50-425

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D. C. 20555

Gentlemen:

VOGTLE ELECTRIC GENERATING PLANT  
REVISION TO TECHNICAL SPECIFICATION TABLE 4.8-1

In accordance with the provisions of 10 CFR 50.90 and 10 CFR 50.59, Georgia Power Company (GPC) hereby proposes to amend the Vogtle Electric Generating Plant (VEGP) Units 1 and 2 Technical Specifications, Appendix A to Operating Licenses NPF-68 and NPF-81.

This amendment modifies table 4.8-1 of the Technical Specifications (TS) related to the frequency of emergency diesel generator testing. The change will allow the return to a regular monthly testing schedule from an increased test frequency, following the completion of 7 consecutive tests without a failure and provided that the number of failures in the last 20 valid demands has been reduced to 1 or less. The modification eliminates the 5 of 100 criteria for increasing the frequency of diesel generator testing, which can result in up to 100 tests at the increased test frequency. The proposed revision to VEGP Technical Specification table 4.8-1 is consistent with table 4.8-1 of the example Technical Specification in Generic Letter 84-15.

Georgia Power Company letter, ELV-02400 dated February 26, 1991, requested a waiver of compliance with this requirement for diesel generator 2A. This change to the Technical Specifications will resolve our concerns with the frequent testing of diesel generator 2A; therefore, GPC is withdrawing the request for the waiver of compliance.

Table 4.8-1 defines the test frequency of individual diesel generators based on the number of failures in the last 20 and last 100 valid tests. A footnote explains that for 2 or more failures in the last 20 valid tests, the increased test frequency shall be maintained until 7 consecutive failure-free demands have been performed, and the number of failures in the last 20 valid demands has been reduced to 1. No such provision is made for removal of the increased testing frequency required when 5 or more failures have occurred in the last 100 valid tests. This has resulted in a continuation of accelerated diesel generator testing beyond that which is necessary to demonstrate continued diesel generator reliability. The proposed change retains the criteria for demonstration of continued reliability and reduces the possibility of excessive diesel generator

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testing. This is done by deleting the 5 out of 100 requirement, leaving the 2 out of 20 requirement as the only requirement for increasing the test frequency. The successful completion of accelerated testing following 2 failures out of the last 20 tests is sufficient to demonstrate that the diesel reliability is being maintained.

Diesel Generator 2A is currently being tested on the more frequent schedule required by the 5 out of 100 requirement. In order to avoid unnecessary diesel testing, GPC requests approval of this proposed Technical Specifications change as quickly as possible.

Enclosure 1 provides a description of the proposed change and the basis for the change request.

Enclosure 2 provides the basis for a determination that the proposed change does not involve significant hazards considerations.

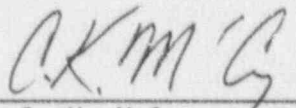
Enclosure 3 provides instructions for incorporating the proposed change into the Technical Specifications. The proposed revised page is also provided in enclosure 3.

In accordance with 10 CFR 50.91, the designated state official will be sent a copy of this letter and all enclosures.

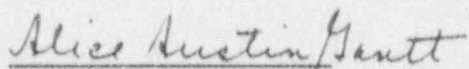
Mr. C. K. McCoy states that he is a vice president of Georgia Power Company and is authorized to execute this oath on behalf of Georgia Power Company and that, to the best of his knowledge and belief, the facts set forth in this letter and enclosures are true.

GEORGIA POWER COMPANY

By:

  
C. K. McCoy

Sworn to and subscribed before me this 19th day of April, 1991.



Notary Public MY COMMISSION EXPIRES APRIL 19, 1993

CKM/HWM/gmb

Enclosures:

1. Basis for Proposed Change
2. 10 CFR 50.92 Evaluation
3. Instructions for Incorporation and Revised Pages

xc (see next page)

U. S. Nuclear Regulatory Commission  
ELV-02116  
Page 3

xc: Georgia Power Company  
Mr. W. B. Shipman  
Mr. P. D. Rushton  
Mr. S. H. Chesnut  
NORMS

U. S. Nuclear Regulatory Commission  
Mr. S. D. Ebnetter, Regional Administrator  
Mr. D. S. Hood, Licensing Project Manager, NRR  
Mr. B. R. Bonser, Senior Resident Inspector, Vogtle

State of Georgia  
Mr. J. D. Tanner, Commissioner, Department of Natural Resources

## ENCLOSURE 1

### VOGTLE ELECTRIC GENERATING PLANT REVISION TO TECHNICAL SPECIFICATION TABLE 4.8-1

#### BASIS FOR PROPOSED CHANGE

##### Proposed Change

Table 4.8-1 provides criteria for determining whether a diesel generator should be tested at the normal frequency of every 31 days or at an accelerated frequency of every 7 days. The criteria for accelerated testing are either 2 or more failures of the last 20 tests or 5 or more failures of the last 100 tests. The table contains a footnote stating "The associated test frequency shall be maintained until seven consecutive failure free demands have been performed and the number of failures in the last 20 valid demands has been reduced to one." The footnote is applied to the condition of 2 or more failures in the last 20 valid diesel tests. The proposed change will eliminate the 5 of 100 criterion from the table and the implied requirement for performing as many as 100 tests at the accelerated test frequency, making the footnote the only criterion for returning to the normal test frequency.

##### Basis

The table specifies a normal diesel testing frequency of once every 31 days. It requires that the frequency of testing be increased to once per 7 days if either the diesel has failed 2 or more of the last 20 tests or 5 or more of the last 100 tests. The footnote described above was applied to the condition of 2 or more failures of the last 20 tests but not to the case of 5 or more failures of the last 100 tests. If the frequency of testing has increased to once per 7 days as a result of exceeding the 5 out of 100 criteria, there is no provision for returning to the normal test schedule until the number of failures is less than 5 out of the last 100 tests. This can result in increased testing beyond that which is necessary to demonstrate continued reliability.

Completion of 7 successful tests without a failure with no more than 1 failure in the last 20 tests is an acceptable demonstration of continued reliability. Increased testing beyond that point is not consistent with the intent of Generic Letter 84-15. This generic letter describes the desirability of avoiding excessive diesel testing.

The purpose of the revision is to have the same criteria for returning to the normal test schedule regardless of the reason for initiating the increased test frequency and to reduce the potential for excessive testing. The 5 of 100 criterion is being deleted because maintaining a successful test rate of 19 out of 20 consecutive tests or meeting the conditions for returning to the normal test schedule is sufficient to demonstrate that the diesel generator has not suddenly degraded.



## ENCLOSURE 2

### VOGTLE ELECTRIC GENERATING PLANT REVISION TO TECHNICAL SPECIFICATION TABLE 4.8-1

#### 10 CFR 50.92 EVALUATION

Pursuant to 10 CFR 50.92, Georgia Power Company (GPC) has evaluated the attached proposed amendment and has determined that operation of the facility in accordance with the revised Technical Specification will not involve significant hazards considerations.

#### Background

The Technical Specification requires increased frequency of diesel testing in the event of an increased rate of diesel test failure. The current Technical Specification provides two criteria for increasing the test frequency. The test frequency is increased if the total number of failures equals or exceeds 2 out of the last 20 tests or exceeds 5 of the last 100 tests. In each case the test frequency increases from once per 31 days to once per 7 days. A footnote is applied for exceeding the 2 out of 20 criterion. The footnote allows the return to the 31 day test interval following the completion of 7 consecutive tests and provided that the total number of failures in the last 20 tests is 1 or less. No such provision is made for the increased testing frequency due to exceeding the 5 out of 100 criterion. A series of diesel failures relatively close together can lead to an increased diesel testing frequency for a longer period of time than is necessary to demonstrate continued diesel reliability.

The purpose of accelerated testing is to quickly demonstrate that reliability has not degraded. This is sufficiently demonstrated by meeting the 1 in 20 requirement in conjunction with the 7 consecutive successful starts. More frequent testing beyond this point is not necessary for providing an expedited demonstration of continued reliability.

On July 2, 1984, the NRC staff issued Generic Letter 84-15 (G.L. 84-15). Enclosure 3 of G. L. 84-15 provided an example Technical Specification for maintaining diesel generator reliability. The proposed revision to VEGP Technical Specification table 4.8-1 is consistent with table 4.8-1 of the example Technical Specification in G. L. 84-15.

The intent of G. L. 84-15 was to provide guidance on maintaining diesel generator reliability. This Generic Letter includes the concept of increasing the test frequency as an acceptable method of demonstrating restored reliability. It also expresses the NRC staff's conclusion that excessive testing may result in degradation of diesel engines. The proposed Technical Specification change removes the possibility of a situation requiring additional diesel generator testing beyond that which demonstrates that reliability is being maintained.

## ENCLOSURE 2 (CONTINUED)

### REVISION TO TECHNICAL SPECIFICATION TABLE 4.8-1

#### 10 CFR 50.92 EVALUATION

##### Analysis

The requirement to successfully complete 7 consecutive tests along with the additional requirement of no more than 1 failure out of the last 20 tests is sufficient to demonstrate that the diesel generator reliability has not degraded. Fulfilling this requirement for terminating the increased surveillance frequency is sufficient to distinguish between random failures that occur close together and the possibility of abrupt diesel generator degradation. The level of confidence established by meeting the requirements of the footnote has been found acceptable as indicated by G. L. 84-15. Continuing with the accelerated testing program beyond this point is considered to be unnecessary testing. Therefore, it has been concluded that the 5 of 100 criterion for accelerated testing can be removed from table 4.8-1 of the Technical Specifications. The 2 of 20 criterion for accelerated diesel testing is sufficient to maintain diesel reliability without causing the potential for excessive diesel testing associated with the 5 of 100 criterion.

##### Results

Based on the information discussed above, the following conclusions can be reached with respect to 10 CFR 50.92.

1. This change will not increase the probability or consequences of an accident previously evaluated because it only affects the criteria for entering and leaving the accelerated testing schedule. The operability requirements and limiting conditions for operation remain unchanged. The return to a normal testing frequency following a series of diesel failures that exceeded 2 out of the last 20 tests would be made only after 7 successful tests without a failure and at least 20 tests without more than 1 failure. Continued testing on a weekly rather than a monthly schedule will not significantly improve the ability to determine whether the most recent failure indicated a sudden change in diesel reliability. Therefore, such additional testing is considered unnecessary.
2. This change will not create the possibility of a new or different kind of accident from those previously evaluated in the FSAR because it does not involve any change in plant design or in the manner of any other plant operation. The criteria for initiating and suspending accelerated diesel testing are being slightly changed. This change does not result in a significant difference in the monitoring of diesel generator reliability.
3. The diesel generators will continue to provide a redundant source of acceptably reliable onsite power. The revised criteria for initiating and suspending accelerated diesel testing have an insignificant effect on diesel generator reliability and are acceptable according to G. L. 84-15.

ENCLOSURE 2 (CONTINUED)

REVISION TO TECHNICAL SPECIFICATION TABLE 4.8-1

10 CFR 50.92 EVALUATION

Therefore, the revision to the test frequency requirements does not involve a significant reduction in the margin of safety because it does not result in a reduction in diesel generator reliability or redundancy.

Conclusion

Based on the preceding analysis GPC has determined that the proposed revision to the Technical Specifications meets the requirements of 10 CFR 50.92 (c) and does not involve a significant hazards consideration.