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SOUTHERN COMPANY
Energy to Serve Your World℠

January 23, 2002

LCV-1514-A

Docket Nos. 50-424
50-425

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

Ladies and Gentlemen:

VOGTLE ELECTRIC GENERATING PLANT
REVISION TO REQUEST TO REVISE TECHNICAL SPECIFICATIONS
SURVEILLANCE REQUIREMENT 3.8.1.13

By letter dated June 27, 2001 (LCV-1514), Southern Nuclear Operating Company (SNC) proposed to revise the Vogtle Electric Generating Plant (VEGP) Unit 1 and 2 Technical Specifications (TS). The proposed change would have revised the frequencies of Surveillance Requirements (SRs) 3.8.1.13 and 3.8.1.14 from 18 months to 24 months. Surveillance Requirement 3.8.1.13 is an endurance and margin test that demonstrates the load carrying capability of the diesel generator (DG) over a period of 24 hours. Surveillance Requirement 3.8.1.14 demonstrates that the DG can be restarted from hot conditions, and it too is currently performed with a frequency of once every 18 months. The proposed change would allow SR 3.8.1.13 to be performed following the DG inspection/maintenance, which is performed at 24-month intervals. A note modifying SR 3.8.1.14 requires that the SR be performed within five minutes of shutting down the DG after operating for at least two hours at a load within a specified band. Therefore, SR 3.8.1.14 is normally performed following SR 3.8.1.13, since the operating conditions of SR 3.8.1.13 meet the requirements of the note modifying SR 3.8.1.14. The proposed change would allow this practice to continue by extending the frequency of SR 3.8.1.14 to 24 months.

However, during a recent telephone conference, the NRC staff expressed the opinion that there was no compelling technical or regulatory basis for changing the frequency of SR 3.8.1.14 so that it could be performed after SR 3.8.1.13. The aforementioned note allows SR 3.8.1.14 to be performed at any time, provided the DG is operated for at least two hours within the specified load band. Therefore, it is more of a convenience to be able to perform SR 3.8.1.14 after SR 3.8.1.13. The NRC staff offered two alternative approaches. One alternative would be to revise SR 3.8.1.14 to require it to be performed after SR 3.8.1.13, and the other would be to withdraw the proposed change to SR 3.8.1.14. A number of years ago, prior to the conversion to the improved TS, these two SRs were coupled so that the hot restart

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test had to be performed within five minutes following completion of the endurance and margin test. However, this was undesirable, since a problem with the hot restart test necessitated a repeat performance of the endurance and margin test. For the purpose of the hot restart test, the DG need only be at operating temperature, and it is not necessary that the DG run for 24 hours to accomplish this. Hence, the two SRs were uncoupled, and the requirement was added to the hot restart test that the DG be operated for at least two hours within a specified load band to ensure that the DG is at operating temperature. Rather than return to the circumstances of having the hot restart test coupled to the endurance and margin test by the TS, SNC elects to withdraw the proposed change to revise the frequency of SR 3.8.1.14 from 18 months to 24 months.

Enclosed are revised marked-up TS and Bases pages, clean-typed pages, and a revised no significant hazard determination reflecting the revision to our request of June 27, 2001.

Mr. J. B. Beasley, Jr. states he is Vice President of Southern Nuclear Operating Company and is authorized to execute this oath on behalf of Southern Nuclear Operating Company, and to the best of his knowledge and belief, the facts set forth in this letter are true.

Respectfully submitted,

J. B. Beasley, Jr.

Sworn to and subscribed before me this 23rd *day of* January, *2002.*

Glenda C. Spirks
Notary Public

My commission expires: 11/10/02

JBB/NJS

Enclosure 1: Revised Significant Hazard Consideration Evaluation
Enclosure 2: Revised marked-up TS and Bases pages
Enclosure 3: Revised clean-typed TS and Bases pages

xc: Southern Nuclear Operating Company
Mr. J. T. Gasser
Mr. M. Sheibani
SNC Document Management

U. S. Nuclear Regulatory Commission
Mr. L. A. Reyes, Regional Administrator
Mr. R. R. Assa, Project Manager, NRR
Mr. John Zeiler, Senior Resident Inspector, Vogtle

State of Georgia
Mr. L. C. Barrett, Commissioner, Department of Natural Resources

Enclosure 1

Vogtle Electric Generating Plant
Request to Revise Technical Specifications
Surveillance Requirement 3.8.1.13

Significant Hazard Consideration Evaluation

Proposed Change

The proposed change would revise the Vogtle Electric Generating Plant (VEGP) Unit 1 and Unit 2 Technical Specifications (TS) Surveillance Requirement (SR) 3.8.1.13 frequency from once every 18 months (with a maximum of 22.5 months including the 25% grace period of SR 3.0.2) to once every 24 months (for a maximum of 30 months including the 25% grace period of SR 3.0.2).

Evaluation

The proposed change has been evaluated against the criteria of 10 CFR 50.92 as follows:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

   No. The surveillance interval associated with SR 3.8.1.13 has no bearing on the likelihood of any of the initiating events assumed for any of the accidents previously evaluated. Therefore, increasing the interval for SR 3.8.1.13 does not involve a significant increase in the probability of any accident previously evaluated. The operability of the emergency diesel generators (DGs) will continue to be demonstrated by all of the other surveillance requirements associated with TS Limiting Condition for Operation (LCO) 3.8.1 which are not affected by the proposed change. Endurance and margin will continue to be demonstrated by SR 3.8.1.13. The only difference will be the increased surveillance interval, which has been shown to have a minimal impact on safety in accordance with Generic Letter 91-04. Therefore, the DGs will remain capable of performing their safety function as assumed in the accident analyses, and the proposed change does not involve a significant increase in the consequences of any accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any previously evaluated?

   No. The proposed change does not introduce any new equipment or create new failure modes for existing equipment. No new limiting single failure is created, and plant operation will not be altered. The DGs will remain capable of performing their safety function as assumed in the safety analyses. No other safety-related or important-to-safety equipment is affected by the proposed change. Therefore, the proposed change will not create the possibility of a new or different kind of accident from any previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

   No. The operability of the emergency diesel generators (DGs) will continue to be demonstrated by all of the other surveillance requirements associated with TS LCO 3.8.1 which are not affected by the proposed change. Endurance and margin functional capability will continue to be demonstrated by SR 3.8.1.13. The only difference will be the increased interval, which has been shown to have a minimal impact on safety in accordance with Generic Letter 91-04. The proposed change is consistent with current regulatory guidance and licensing actions for increasing TS surveillance intervals to accommodate operating cycles that have been extended to 24 months. Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Enclosure 1

Vogtle Electric Generating Plant
Request to Revise Technical Specifications
Surveillance Requirement 3.8.1.13

Significant Hazard Consideration Evaluation

Conclusion

Based on the above evaluation, the proposed change does not involve a significant hazard as defined in 10 CFR 50.92.

Enclosure 2

Vogtle Electric Generating Plant
Request to Revise Technical Specifications
Surveillance Requirement 3.8.1.13

Marked-up TS and Bases Pages

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.8.1.12	----------NOTE---------- This Surveillance shall not be performed in MODE 1 or 2. However, credit may be taken for unplanned events that satisfy this SR. ---------- Verify each DG's automatic trips are bypassed on actual or simulated loss of voltage signal on the emergency bus concurrent with an actual or simulated ESF actuation signal except: a. Engine overspeed; b. Generator differential current; and c. Low lube oil pressure;	18 months
SR 3.8.1.13	----------NOTES---------- 1. Momentary transients outside the kW and kVAR load ranges do not invalidate this test. 2. Credit may be taken for unplanned events that satisfy this SR. ---------- Verify each DG operates for ≥ 24 hours while maintaining voltage ≤ 4330 V: a. For ≥ 2 hours loaded ≥ 6900 kW and ≤ 7700 kW and operating as close as practicable to 3390 kVAR; and b. For the remaining hours of the test loaded ≥ 6500 kW and ≤ 7000 kW and operating as close as practicable to 3390 kVAR.	*24* ~~18~~ months

(continued)

BASES

SURVEILLANCE REQUIREMENTS

SR 3.8.1.12 (continued)

2. Post Corrective maintenance testing that requires performance of this Surveillance in order to restore the component to OPERABLE, provided the maintenance was required, or performed in conjunction with maintenance required to maintain OPERABILITY or reliability.

SR 3.8.1.13

This Surveillance Requirement demonstrates that the DGs can start and run continuously at loads in excess of the maximum expected loading for an interval of not less than 24 hours, ≥ 2 hours of which is at a load equivalent to ≥ 105% of the maximum expected loading and the remainder of the time at a load equivalent to the maximum expected loading of the DG. The DG starts for this Surveillance can be performed either from standby or hot conditions. The provisions for prelubricating and warmup, discussed in SR 3.8.1.2, and for gradual loading, discussed in SR 3.8.1.3, are applicable to this SR.

In order to ensure that the DG is tested under load conditions that are as close to design basis conditions as possible, testing must be performed using a kVAR load as close as practicable to 3390 kVAR while loaded ≥ 6500 kW and maintaining voltage ≤ 4330 V. This kVAR load is chosen to be representative of the actual design basis inductive loading that the DG would experience. The voltage limit of 4330 V is required to prevent operation of any loads at or above the maximum design voltage. The load band is provided to avoid routine overloading of the DG. Routine overloading may result in more frequent teardown inspections in accordance with vendor recommendations in order to maintain DG OPERABILITY.

The *2418* month Frequency ~~is consistent with the recommendations of Regulatory Guide 1.108 (Ref. 9), paragraph 2.a.(3), takes into consideration unit conditions required to perform the Surveillance, and is intended to be consistent with expected fuel cycle lengths.~~*allows SR 3.8.1.13 to be scheduled following a teardown inspection. The teardown inspections are performed at 24 month intervals in accordance with manufacturer recommendations. The 24 month Frequency is consistent with the regulatory guidance of Generic Letter 91-04 (Ref. 12).*

(continued)

BASES

SURVEILLANCE REQUIREMENTS

SR 3.8.1.13 (continued)

This Surveillance is modified by two Notes. Note 1 states that momentary transients due to changing bus loads do not invalidate this test. Similarly, momentary kVAR load transients above the limit will not invalidate the test. Note 2 acknowledges that credit may be taken for unplanned events that satisfy this SR. Examples of unplanned events may include:

1. ~~U~~unexpected operational events which cause the equipment to perform the function specified by this Surveillance, for which adequate documentation of the required performance is available~~; and~~.

~~2. Post Corrective maintenance testing that requires performance of this Surveillance in order to restore the component to OPERABLE, provided the maintenance was required, or performed in conjunction with maintenance required to maintain OPERABILITY or reliability.~~

SR 3.8.1.14

This Surveillance demonstrates that the diesel engine can restart from a hot condition, such as subsequent to shutdown from normal Surveillances, and achieve the required voltage and frequency within 11.4 seconds. The 11.4 second time is derived from the requirements of the accident analysis to respond to a design basis large break LOCA. The 18 month Frequency is consistent with the recommendations of Regulatory Guide 1.108 (Ref. 9), paragraph 2.a.(5).

This SR is modified by two Notes. Note 1 ensures that the test is performed with the diesel sufficiently hot. The load band is provided to avoid routine overloading of the DG. Routine overloads may result in more frequent teardown inspections in accordance with vendor recommendations in order to maintain DG OPERABILITY. The requirement that the diesel has operated for at least 2 hours at full load conditions prior to performance of this Surveillance is based on manufacturer recommendations for achieving hot

(continued)

BASES

SURVEILLANCE REQUIREMENTS

SR 3.8.1.20 (continued)

This SR is modified by a Note. The reason for the Note is to minimize wear on the DG during testing. For the purpose of this testing, the DGs must be started from standby conditions, that is, with the engine coolant and oil continuously circulated and temperature maintained consistent with manufacturer recommendations.

REFERENCES

1. 10 CFR 50, Appendix A, GDC 17.
2. FSAR, Chapter 8.
3. Regulatory Guide 1.9, Rev. 3, July 1993.
4. FSAR, Chapter 6.
5. FSAR, Chapter 15.
6. Regulatory Guide 1.93, Rev. 0, December 1974.
7. Generic Letter 84-15, "Proposed Staff Actions to Improve and Maintain Diesel Generator Reliability," July 2, 1984.
8. 10 CFR 50, Appendix A, GDC 18.
9. Regulatory Guide 1.108, Rev. 1, August 1977.
10. Regulatory Guide 1.137, Rev. 1, October 1979.
11. IEEE Standard 308-1978.
12. *Generic Letter 91-04, "Changes in Technical Specification Intervals to Accommodate a 24-Month Fuel Cycle," April 2, 1991.*

Enclosure 3

Vogtle Electric Generating Plant
Request to Revise Technical Specifications
Surveillance Requirement 3.8.1.13

Clean-typed TS and Bases Pages

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.8.1.12	----------NOTE---------- This Surveillance shall not be performed in MODE 1 or 2. However, credit may be taken for unplanned events that satisfy this SR. ---------- Verify each DG's automatic trips are bypassed on actual or simulated loss of voltage signal on the emergency bus concurrent with an actual or simulated ESF actuation signal except: a. Engine overspeed; b. Generator differential current; and c. Low lube oil pressure;	18 months
SR 3.8.1.13	----------NOTES---------- 1. Momentary transients outside the kW and kVAR load ranges do not invalidate this test. 2. Credit may be taken for unplanned events that satisfy this SR. ---------- Verify each DG operates for ≥ 24 hours while maintaining voltage ≤ 4330 V: a. For ≥ 2 hours loaded ≥ 6900 kW and ≤ 7700 kW and operating as close as practicable to 3390 kVAR; and b. For the remaining hours of the test loaded ≥ 6500 kW and ≤ 7000 kW and operating as close as practicable to 3390 kVAR.	24 months

(continued)

BASES

SURVEILLANCE REQUIREMENTS

SR 3.8.1.12 (continued)

2. Post Corrective maintenance testing that requires performance of this Surveillance in order to restore the component to OPERABLE, provided the maintenance was required, or performed in conjunction with maintenance required to maintain OPERABILITY or reliability.

SR 3.8.1.13

This Surveillance Requirement demonstrates that the DGs can start and run continuously at loads in excess of the maximum expected loading for an interval of not less than 24 hours, ≥ 2 hours of which is at a load equivalent to ≥ 105% of the maximum expected loading and the remainder of the time at a load equivalent to the maximum expected loading of the DG. The DG starts for this Surveillance can be performed either from standby or hot conditions. The provisions for prelubricating and warmup, discussed in SR 3.8.1.2, and for gradual loading, discussed in SR 3.8.1.3, are applicable to this SR.

In order to ensure that the DG is tested under load conditions that are as close to design basis conditions as possible, testing must be performed using a kVAR load as close as practicable to 3390 kVAR while loaded ≥ 6500 kW and maintaining voltage ≤ 4330 V. This kVAR load is chosen to be representative of the actual design basis inductive loading that the DG would experience. The voltage limit of 4330 V is required to prevent operation of any loads at or above the maximum design voltage. The load band is provided to avoid routine overloading of the DG. Routine overloading may result in more frequent teardown inspections in accordance with vendor recommendations in order to maintain DG OPERABILITY.

The 24 month Frequency allows SR 3.8.1.13 to be scheduled following a teardown inspection. The teardown inspections are performed at 24 month intervals in accordance with manufacturer recommendations. The 24 month Frequency is consistent with the regulatory guidance of Generic Letter 91-04 (Ref. 12).

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BASES

SURVEILLANCE REQUIREMENTS

SR 3.8.1.13 (continued)

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SURVEILLANCE REQUIREMENTS

SR 3.8.1.20 (continued)

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5. FSAR, Chapter 15.
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