

ELECTRICAL POWER SYSTEMSSURVEILLANCE REQUIREMENTS (Continued)

5. Verifying that on an ECCS actuation test signal, without loss of offsite power, the diesel generator starts on the auto-start signal and operates on standby for greater than or equal to 5 minutes. The generator voltage and frequency shall be 4160 ± 416 volts and 60 ± 1.2 Hz within 10 seconds after the auto-start signal; the steady state generator voltage and frequency shall be maintained within these limits during this test.
6. [DELETED] INSERT
7. Simulating a loss of offsite power in conjunction with an ECCS actuation test signal, and:
 - a), For Division 1 and 2:
 - 1) Verifying deenergization of the emergency busses and load shedding from the emergency busses.
 - 2) Verifying the diesel generator starts on the auto-start signal, energizes the emergency busses with permanently connected loads within 10 seconds, energizes the auto-connected shutdown loads through the load sequencer and operates for greater than or equal to 5 minutes while its generator is loaded with the emergency loads. After energization, the steady state voltage and frequency of the emergency busses shall be maintained at 4160 ± 416 volts and 60 ± 1.2 Hz during this test.
 - b) For Division 3:
 - 1) Verifying de-energization of the emergency bus.
 - 2) Verifying the diesel generator starts on the auto-start signal, energizes the emergency bus with the permanently connected loads within 10 seconds and the autoconnected emergency loads within 20 seconds and operates for greater than or equal to 5 minutes while its generator is loaded with the emergency loads. After energization, the steady state voltage and frequency of the emergency bus shall be maintained at 4160 ± 416 volts and 60 ± 1.2 Hz during this test.
8. Verifying that all automatic diesel generator trips are automatically bypassed upon an ECCS actuation signal except:
 - a) For Divisions 1 and 2, engine overspeed, generator differential current, and low lube oil pressure.
 - b) For Division 3, engine overspeed and generator differential current.

ELECTRICAL POWER SYSTEMSSURVEILLANCE REQUIREMENTS (Continued)

9. Verifying the diesel generator operates for at least 24 hours. Diesel generators 11 and 12 shall be loaded to greater than or equal to 5450 kW but not to exceed 5740 kW for 24 hours. Diesel generator 13 shall be loaded to greater than or equal to 3630 kW for the first 2 hours of this test and to 3300 kW during the remaining 22 hours. The generator voltage and frequency shall be 4160 ± 416 volts and 60 ± 1.2 Hz within 10 seconds after the start signal; the steady state generator voltage and frequency shall be maintained within these limits during this test. Within 5 minutes after completing this 24-hour test, perform Surveillance Requirement 4.8.1.1.2.d.7.a).2) and b).2)*.
10. Verifying that the auto-connected loads to each diesel generator do not exceed 5740 kW for diesel generators 11 and 12 and 3300 kW for diesel generator 13.
11. Verifying the diesel generator's capability to:
 - a) Synchronize with the offsite power source while the generator is loaded with its emergency loads upon a simulated restoration of offsite power,
 - b) Transfer its loads to the offsite power source, and
 - c) Be restored to its standby status.
12. Verifying that with the diesel generator operating in a test mode and connected to its bus that a simulated ECCS actuation signal overrides the test mode by returning the diesel generator to standby operation.
13. [DELETED]
14. [DELETED]
15. Verifying that the automatic load sequence timer is OPERABLE with the interval between each load block within $\pm 10\%$ of its design interval for diesel generators 11 and 12.

*If Surveillance Requirement 4.8.1.1.2.d.7.a)2) or b)2) are not satisfactorily completed, it is not necessary to repeat the preceding 24 hour test. Instead, the diesel generator may be operated at the load specified by Surveillance Requirement 4.8.1.1.2.a.5 for one hour or until operating temperatures have stabilized.

INSERT

6. Operating at greater than or equal to 5 % ~~at not~~ to exceed 5740 for diesel generators 11 and 12 and greater ~~at~~ equal to 3300 kW for diesel generator 13 for one hour or until operating temperatures have stabilized. Within 5 minutes perform Surveillance Requirement 4.8.1.1.2.d.7.a)2) and b)2).



GE Nuclear Energy

July 19, 1988

General Electric Company
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Mr. J. G. Cesare, Director
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Systems Energy Resources, Inc.
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III 21 1988
NUCLEAR SUPPORT
S.E.R.I., -

Grand Gulf Nuclear Station
DIESEL GENERATOR OPERABILITY
TECH SPEC SURVEILLANCE
REQUIREMENTS
SEGE-88/052

ATTENTION: Gary Sandlin

Dear Mr. Cesare:

Per SERI's request, we have completed our review of your proposed Tech Spec change "NL-88/06 separate 24 hour diesel generator test from LOP/LOCA test." It is concluded that the proposed change of separating the performance of the LOP/LOCA test requirements from immediately (5 minutes) after the 24 hour test run and replacing that with performing the same LOP/LOCA test after stabilization of full load operating temperatures will still meet the intent of the Tech Spec (and Regulatory Guide 1.108) in demonstrating the functional capability of the diesel generators at full load temperature conditions. It is judged that after one hour of operation with the loads given in the proposed Spec, full load temperature conditions would have been established for the test. Therefore, GE concurs with the attached proposed Tech Spec change. If you have any questions, please call me or Tommy Lee of our licensing staff.

Sincerely yours

A. R. Smith
Grand Gulf Engineering Services Manager

ARS/klj

cc: T. H. Cloninger
D. J. Kemppainen
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Central File
File: 7.2.4
TCL88024



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*** VIA TELECOPY ***

JUL 21 1988
NUCLEAR SUPPORT
S.E.R.I.

Date: July 18, 1988
To: Grand Gulf Nuclear Station
Attention: Bill Angle
Reference: Your telecopy of 7/18/88
"One Hour Run"

We concur that the Diesel Operating temperatures will be stable within one hour of a start from keepwarm temperature, and that running another 23 hours prior to a loop/loca test will serve no purpose. Your specification change therefore seems warranted.

Yours Truly,
J. A. Manns for
M. H. Lowrey

ML:bb