



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

December 17, 1985

Docket No. 50-397

Mr. G. C. Sorensen, Manager
Regulatory Programs
Washington Public Power Supply System
P. O. Box 968
3000 George Washington Way
Richland, Washington 99352

Dear Mr. Sorensen:

Subject: Correction to Amendment No. 19 for Facility Operating
License NPF-21, WPPSS Nuclear Project No. 2

On November 22, 1985, the U. S. Nuclear Regulatory Commission issued Amendment No. 19 to Facility Operating License NPF-21 to the Washington Public Power Supply System for WPPSS Nuclear Project No. 2, located in Benton County near Richland, Washington. This amendment was in response to your request of May 6, 1985 as supplemented by your letter dated May 22, 1985.

This action amended the WNP-2 Technical Specifications changing the Surveillance Requirement 4.8.1.1.2 by modifying the minimum allowable voltage required for auto starting of diesel generators DG-1 and DG-2 making it consistent with the output breaker closure permissive setpoint.

Paragraph 4.8.1.1.2.b is unrelated to the change but was inadvertently omitted when the relevant pages were retyped. The corrected pages are attached and should be substituted for the pages that accompanied the Amendment No. 19 transmittal.

Sincerely,

Handwritten signature of Elinor G. Adensam in cursive.

Elinor G. Adensam, Director
Project Directorate No. 3
Division of BWR Licensing

Enclosure:
As stated

cc: See next page

RECEIVED ORIGINAL

Certified By Handwritten signature of Helmut M. Elm.

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DEPARTMENT OF ENERGY
Certified By

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PDR 851217

Mr. G. C. Sorensen, Manager
Washington Public Power Supply System

WPPSS Nuclear Project No. 2
(WNP-2)

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ATTACHMENT TO LICENSE AMENDMENT NO.19

FACILITY OPERATING LICENSE NO. NPF-21

DOCKET NO. 50-397

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain vertical lines indicating the areas of change.

REMOVE

3/4 8-3
3/4 8-4
3/4 8-5
3/4 8-6

INSERT

3/4 8-3
3/4 8-4
3/4 8-5
3/4 8-6

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS

4.8.1.1.1 Each of the above required independent circuits between the offsite transmission network and the onsite Class 1E distribution system shall be:

- a. Determined OPERABLE at least once per 7 days by verifying correct breaker alignments and indicated power availability, and
- b. Demonstrated OPERABLE at least once per 18 months during shutdown by transferring, manually and automatically, unit power supply from the normal circuit to the alternate circuit.

4.8.1.1.2 Each of the above required diesel generators shall be demonstrated OPERABLE:

- a. In accordance with the frequency specified in Table 4.8.1.1.2-1 on a STAGGERED TEST BASIS by:
 1. Verifying the fuel level in the day fuel tank.
 2. Verifying the fuel level in the fuel storage tank.
 3. Verifying the fuel transfer pump starts and transfers fuel from the storage system to the day fuel tank.
 4. Verifying the diesel starts from ambient condition and accelerates to at least 900 rpm (60 Hz) in less than or equal to 10 seconds* for DG-1 and DG-2 and 13 seconds* for DG-3. The generator voltage and frequency shall be 4160 (+420, -250) volts and 60 ± 3.0 Hz within 10 seconds* for DG-1 and DG-2 and 4160 ± 420 volts within 13 seconds* for DG-3 after the start signal. The diesel generator shall be started for this test by using one of the following signals:
 - a) Manual.
 - b) Simulated loss-of-offsite power by itself.
 - c) Simulated loss-of-offsite power in conjunction with an ESF actuation test signal.
 - d) An ESF actuation test signal by itself.
 5. Verifying the diesel generator is synchronized, loaded to greater than or equal to 4400 kW for DG-1 and DG-2 and 2600 kW for DG-3 in less than or equal to 60 seconds*, and operates with these loads for at least 60 minutes.
 6. Verifying the diesel generator is aligned to provide standby power to the associated emergency busses.
 7. Verifying the pressure in all diesel generator air start receivers to be greater than or equal to 230 psig for DG-1 and DG-2 and 200 psig for DG-3.

*These diesel generator starts from ambient conditions shall be performed at least once per 184 days in these surveillance tests and all other engine starts for the purpose of this surveillance testing shall be preceded by an engine pre-lube period and/or other warmup procedures recommended by the manufacturer so that mechanical stress and wear on the diesel engine is minimized.

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- b. At least once per 31 days and after each operation of the diesel where the period of operation was greater than or equal to 1 hour by checking for and removing accumulated water from the day fuel tanks.
- c. At least once per 92 days by removing accumulated water the fuel storage tanks.
- d. At least once per 92 days and from new fuel oil prior to addition to the storage tanks, by obtaining a sample obtained in accordance with ASTM-D270-1975, and by verifying that the sample meets the following minimum requirements and is tested within the specified time limits:
 1. As soon as sample is taken or from new fuel prior to addition to the storage tank, as applicable, verify in accordance with the tests specified in ASTM-D975-77 that the sample has:
 - a) A water and sediment content of less than or equal to 0.05 volume percent.
 - b) A kinematic viscosity @ 40°C of greater than or equal to 1.9 centistokes, but less than or equal to 4.1 centistokes.
 - c) A specific gravity as specified by the manufacturer @ 60/60°F of greater than or equal to 0.8299 but less than or equal to 0.8762 or an API gravity @ 60°F of greater than or equal to 30 degrees.
 2. Within 1 week after obtaining the sample, verify an impurity level of less than 2 mg of insolubles per 100 ml when tested in accordance with ASTM-D2274-70.
 3. Within 2 weeks after obtaining the sample, verify that the other properties specified in Table 1 of ASTM-D975-77 and Regulatory Guide 1.137, Position 2.a, are met when tested in accordance with ASTM-D975-77.
- e. At least once per 18 months, during shutdown, by:
 1. Subjecting the diesel to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for this class of standby service.
 2. Verifying the diesel generator capability to reject a load of greater than or equal to 1377 kW for DG-1, greater than or equal to 1377 kW for DG-2, and greater than or equal to 2380 kW for DG-3 while maintaining engine speed \leq 75% of the difference between nominal speed and the overspeed trip set-point or 15% above nominal, whichever is less.
 3. Verifying the diesel generator capability to reject a load of 4400 kW for DG-1 and DG-2 and 2600 kW for DG-3 without tripping. The generator voltage shall not exceed 4784 volts during and following the load rejection.

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

4. Simulating a loss-of-offsite power by itself, and:
 - a) For divisions 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 autoconnected shutdown loads through the load sequencer and operates for greater than or equal to 5 minutes while its generator is loaded with the shutdown loads. After energization, the steady state voltage and frequency of the emergency busses shall be maintained at 4160 ± 420 volts and 60 ± 3.0 Hz during this test.
 - b) For division 3:
 - 1) Verifying deenergization 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 13 seconds and operates for greater than or equal to 5 minutes while its generator is loaded with the shutdown loads. After energization, the steady-state voltage and frequency of the emergency bus shall be maintained at 4160 ± 420 volts and 60 ± 3.0 Hz during this test.
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 $4160 (+420, -250)$ volts for DG-1 and DG-2, 4160 ± 420 volts for DG-3 and 60 ± 3.0 Hz within 10 seconds for DG-1 and DG-2 and 13 seconds for DG-3 after the auto-start signal; the steady-state generator voltage and frequency shall be maintained within 4160 ± 420 volts and the above frequency limit during this test.
6. Simulating a loss-of-offsite power in conjunction with an ECCS actuation test signal, and:
 - a) For divisions 1 and 2:
 - 1) Verifying deenergization of the emergency busses and loads 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 loads through the load sequencer and operates

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

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 ± 420 volts and 60 ± 3.0 Hz during this test.

- b) For division 3:
 - 1) Verifying deenergization of the emergency bus.
 - 2) Verifying the diesel generator starts on the auto-start signal, energizes the emergency bus with the permanently connected loads and the auto-connected emergency loads within 30 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 ± 420 volts and 60 ± 3.0 Hz during this test.
- 7. Verifying that all automatic diesel generator trips are automatically bypassed upon loss of voltage on the emergency bus concurrent with an ECCS actuation signal except:
 - a) For division 1 and 2, engine overspeed and generator differential current, incomplete starting sequence and emergency manual stop.
 - b) For division 3, engine overspeed, generator differential current and emergency manual stop.
- 8. Verifying the diesel generator operates for at least 24 hours. During the first 2 hours of this test, the diesel generator shall be loaded to greater than or equal to 4650 kW for DG-1 and DG-2 and 2850 kW for DG-3. During the remaining 22 hours of this test, the diesel generator shall be loaded to 4400 kW for DG-1 and DG-2 and 2600 kW for DG-3. The generator voltage and frequency shall be $4160 (+420, -250)$ volts for DG-1 and DG-2, 4160 ± 420 volts for DG-3 and 60 ± 3.0 Hz within 10 seconds for DG-1 and DG-2 and 13 seconds for DG-3 after the start signal; the steady-state generator voltage and frequency shall be maintained within 4160 ± 420 volts and the above frequency limit during this test.

Within 5 minutes after completing this 24-hour test, perform Surveillance Requirement 4.8.1.1.2.e.4.a)2) and b)2).*

*If Surveillance Requirements 4.8.1.1.2.e.4.a)2) and/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 4400 kW for DG-1 or DG-2 or 2600 kW for DG-3 for 1 hour or until operating temperature has stabilized.