

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 volts 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 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.
- 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.

*These diesel generator starts from ambient conditions shall be performed ~~only~~ 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 prelube period and/or other warmup procedures recommended by the manufacturer so that mechanical stress and wear on the diesel engine is minimized.

WASHINGTON NUCLEAR - UNIT 2

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(staff's generic modification)

at least

