

3/4.8 ELECTRICAL POWER SYSTEMS

3/4.8.1 A.C. SOURCES

A.C. SOURCES - OPERATING

LIMITING CONDITION FOR OPERATION

3.8.1.1 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

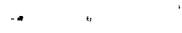
- a. Two physically independent circuits between the offsite transmission network and the onsite Class 1E distribution system, and
- b. Three separate and independent diesel generators, each with:
 1. Separate day fuel tanks containing a minimum of 1400 gallons of fuel,
 2. A separate fuel storage system containing a minimum of 53,000 gallons of fuel for diesel generator 1 (DG-1) and 53,000 gallons of fuel for diesel generator 2 (DG-2), and 33,000 gallons of fuel for diesel generator 3 (DG-3).
 3. A separate fuel transfer pump.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

- a. With ~~either one offsite circuit or DG-1 or DG-2~~ of the above required A.C. electrical power sources inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirements 4.8.1.1.1.a. within 1 hour and 4.8.1.1.2.a.4., for one diesel generator at a time, within 4 hours and at least once per 8 hours thereafter, ~~restore at least two offsite circuits and DG-1 and DG-2~~ to OPERABLE status within 72 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours. [Insect A]

- [Insect B] b. With one offsite circuit and DG-1 or DG-2 of the above required A.C. electrical power sources inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirements 4.8.1.1.1.a. within 1 hour and 4.8.1.1.2a.4., for one diesel generator at a time, within 4 hours and at least once per 8 hours thereafter, ~~restore at least one of the inoperable A.C. sources to~~ OPERABLE status within 12 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours. Restore at least two offsite circuits and DG-1 and DG-2 to OPERABLE status within 72 hours from time of initial loss or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours. [Insect C]



ELECTRICAL POWER SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

ACTION (Continued)

- d. ~~c.~~ With DG-3 of the above required A.C. electrical power sources inoperable, ~~demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirements 4.8.1.1.1a. within 1 hour and 4.8.1.1.2a.4., for one diesel generator at a time, within 4 hours and at least once per 8 hours thereafter, restore the inoperable DG-3 to OPERABLE status within 72 hours or declare the HPCS system inoperable and take the ACTION required by Specification 3.5.1.~~
- e. ~~d.~~ With DG-1, DG-2, ~~or DG-3~~ of the above required A.C. electrical power sources inoperable, in addition to ACTION a., b., or c., as applicable, verify within 2 hours that all required systems, subsystems, trains, components, and devices that depend on the remaining OPERABLE ~~diesel~~ DG-1 or DG-2 ~~generators~~ as a source of emergency power are also OPERABLE; otherwise, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- f. ~~e.~~ With two of the above required offsite circuits inoperable, demonstrate the OPERABILITY of three diesel generators by performing Surveillance Requirement 4.8.1.1.2a.4. for one diesel generator at a time, within ~~24 4 hours and at least once per 8 hours thereafter, unless the diesel generators are already operating, restore at least one of the inoperable offsite circuits to OPERABLE status within 24 hours or be in at least HOT SHUTDOWN within the next 12 hours. With only one offsite circuit restored to OPERABLE status, restore at least two offsite circuits to OPERABLE status within 72 hours from time of initial loss or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.~~
- g. ~~f.~~ With DG-1 and DG-2 of the above required A.C. electrical power sources inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirements 4.8.1.1.1a. ~~and 4.8.1.1.2a.4.~~ within 2 hours and at least once per 8 hours thereafter, restore at least one of the inoperable DG-1 and DG-2 to OPERABLE status within 2 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours. Restore both DG-1 and DG-2 to OPERABLE status within 72 hours from time of initial loss or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours. [Insert]

h. [Insert E]

3 pages

INSERT A

Unless the respective diesel generator has been successfully tested within the past 24 hours, demonstrate the OPERABILITY of DG-1 and DG-2 by performing Surveillance Requirement 4.8.1.1.2.a.4, for each DG, within 24 hours.

INSERT B

- b. With either DG-1 or DG-2 inoperable, demonstrate the OPERABILITY of the above required offsite sources by performing Surveillance Requirement 4.8.1.1.1.a within 1 hour and at least once per 8 hours thereafter. Unless the cause of the inoperable DG is known to not impact the OPERABILITY of the remaining OPERABLE DGs, demonstrate the OPERABILITY of the remaining OPERABLE DGs by performing Surveillance Requirement 4.8.1.1.2.a.4 for each DG within 24 hours. Restore the inoperable DG to OPERABLE status within 72 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

INSERT C

Demonstrate the OPERABILITY of the remaining OPERABLE DGs by performing Surveillance Requirement 4.8.1.1.2.a.4 for each DG, within 24 hours.

INSERT D

Unless the cause(s) of the inoperable DGs is known to not impact the OPERABILITY of DG-3, demonstrate the OPERABILITY of DG-3 by performing Surveillance Requirement 4.8.1.1.2.a.4 for DG-3 within 8 hours.

INSERT E

- h. With DG-1 and DG-3 or DG-2 and DG-3 of the above required A.C. electrical power sources inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirements 4.8.1.1.1.a within 2 hours and at least once per 8 hours thereafter. Unless the cause of the inoperable DGs is known not to impact the operability of the remaining operable DG, demonstrate the operability of the remaining DG by performing Surveillance Requirement 4.8.1.1.2.a.4 within 8 hours. Restore at least one of the inoperable DGs to OPERABLE status within 2 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours. Restore both inoperable DGs to OPERABLE status within 72 hours from time of initial loss or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

