## 3.8 ELECTRICAL POWER SYSTEMS

## 3.8.1 A.C. SOURCES

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.
- b. Two separate and independent Class 1E diesel generators each with:
  - A separate day fuel tank containing a minimum volume of 500 gallons of fuel.
  - A separate fuel storage system containing a minimum volume of 19,000 gallons of fuel.
  - A separate fuel transfer pump.

APPLICABILITY: RECOVERY MODE.

## ACTION:

- a. With either an offsite circuit or diesel generator 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 and 4.8.1.1.2.a.4 in accordance with the applicable row in the Testing Frequency Matrix of Table 3.8-1: restore the full complement of the above required A.C. electrical power sources to OPERABLE status within 72 hours, except when performing the Annual Preventive Maintenance Outage at which time 7 days shall be allowed.
- b. With one offsite circuit and one diesel generator or two offsite circuits or two diesel generators 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 and 4.8.1.1.2.a.4 in accordance with the applicable two rows in the Testing Frequency Matrix of Table 3.8-1; restore at least one of the inoperable sources to OPERABLE status in accordance with the Restoration Time Matrix of Table 3.8-2. Restore the full complement of the above required A.C. electrical power sources to OPERABLE status within 72 hours from the time of initial loss.

TABLE 3.8-1 TESTING FREQUENCY MATRIX

		Component Testing Frequencies			
		a	<b>a</b> <sub>2</sub>	b <sub>1</sub>	b <sub>2</sub>
Inoperable	•7	X	*	*	*
	<b>a</b> <sub>2</sub>	*	X	*	*
	b <sub>1</sub>	*	*	X	*
	b <sub>2</sub>	*	*	*	X

Key: \*Within 4 hours and every 12 hours thereafter
a<sub>1</sub> Offsite power circuit No. 1
a<sub>2</sub> Offsite power circuit No. 2
b<sub>1</sub> Class 1E diesel generator (Red)
b<sub>2</sub> Class 1E diesel generator (Green)

TABLE 3.8-2
RESTORATION TIME MATRIX

		Restore One Component (Hours)	Restore Other Component (Hours)
Combination of Two Inoperable Components	<b>a</b> a	24	72
	ab	12	72
	bb	12	72

Note:

a and b above correspond to components described in Specification 3.8.1.1 items a and b respectively.