

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

of the five

b. Four separate and independent diesel generators*, each with:

1. Separate engine mounted day fuel tanks containing a minimum of 325 gallons of fuel,
2. A separate fuel storage system containing a minimum of 47,570 gallons of fuel, and for diesel generators A, B, C & D; and 60,480 gallons for diesel generator E,
3. A separate fuel transfer pump.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

- a. With one offsite circuit of the above 3.8.1.1.a required A.C. electrical power sources inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirement 4.8.1.1.1.a within one hour and at least once per 8 hours thereafter and Surveillance Requirement 4.8.1.1.2.a.4 within 24 hours sequentially on four diesel generators; restore at least two offsite circuits 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.
- b. With one diesel generator of 3.8.1.1.b inoperable, demonstrate the OPERABILITY of the A.C. offsite sources by performing Surveillance Requirement 4.8.1.1.1.a within 1 hour and at least once per 8 hours thereafter; and Surveillance Requirement 4.8.1.1.2.a.4 within 24 hours; restore the diesel generator 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.

*Shared with Unit 2. An OPERABLE diesel generator may be removed from service for a period of eight hours when aligning diesel generator E to the Class 1E distribution system. If alignment of diesel generator E is not completed within eight hours, the appropriate ACTION will be followed. The specified time limits in the ACTION will be measured from the time alignment of diesel generator E began.

TABLE 4.8.1.1.2-2 (Continued)

UNIT 1 AND UNIT 2

DIESEL GENERATOR LOADING TIMERS

<u>DEVICE TAG NO.</u>	<u>SYSTEM</u>	<u>LOCATION</u>	<u>TIME SETTING</u>
62X-20204	Emergency Switchgear Rm Cooler B & RHR SW pp H&V Fan B	0C877B	60 sec
262X-20104	Emergency Switchgear Rm Cooler A	0C877A	120 sec
262X-20204	Emergency Switchgear Rm Cooler B	0C877B	120 sec
* 62X-516	DG Rm Exh Fan A	0B516	2 min
* 62X-526	DG Rm Exh Fan B	0B526	2 min
* 62X-536	DG Rm Exh Fan C	0B536	2 min
* 62X-546	DG Rm Exh Fan D	0B546	2 min
62X1-20304	Control Structure Chilled Water System	0C877A	3 min
62X1-20404	Control Structure Chilled Water System	0C877B	3 min
62X1-20310	Control Structure Chilled Water System	0C876A	3 min
62X2-20410	Control Structure Chilled Water System	0C876B	3 min
62X2-20304	Control Structure Chilled Water System	0C877A	3.5 min
62X2-20404	Control Structure Chilled Water System	0C877B	3.5 min
62X-K11AB	Emergency Switchgear Rm Cooling Compressor A	2C8250A	260 sec
62X-K11BB	Emergency Switchgear Rm Cooling Compressor B	2C8250B	260 sec
* CRX-5652A	DG Room Supply Fans E1 & E2	0B565	2 min
* 62X-5653A	DG Room Exhaust Fan E3	0B565	1 min
* 62X-5652A	DG Room Exhaust Fan E4	0B565	1 min

SUSQUEHANNA - UNIT 1

3/4 8-8a

Amendment No. 36

* When associated diesel generator is declared OPERABLE

TABLE 3.8.4.2.2-1

MOTOR OPERATED VALVES THERMAL OVERLOAD PROTECTION - AUTOMATIC

<u>Valve Number</u>	<u>System(s) Affected</u>
HV-01110E	ESW
HV-01120E	ESW

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3. A separate fuel transfer pump.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

- a. With one offsite circuit of the above 3.8.1.1.a required A.C. electrical power source inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirement 4.8.1.1.1.a within one hour and at least once per 8 hours thereafter and Surveillance Requirement 4.8.1.1.2.a.4 within 24 hours sequentially on four diesel generators; restore at least two offsite circuits 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.
- b. With one diesel generator of 3.8.1.1.b inoperable, demonstrate the OPERABILITY of the A.C. offsite sources by performing Surveillance Requirement 4.8.1.1.1.a within 1 hour and at least once per 8 hours thereafter; and Surveillance Requirement 4.8.1.1.2.a.4 within 24 hours; restore the diesel generator 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.

*Shared with Unit 1. An OPERABLE diesel generator may be removed from service for a period of eight hours when aligning diesel generator E to the Class 1E distribution system. If alignment of diesel generator E is not completed within eight hours, the appropriate ACTION will be followed. The specified time limits in the ACTION will be measured from the time alignment of diesel generator E began.

TABLE 4.8.1.1.2-2 (Continued).
UNIT 1 AND UNIT 2
DIESEL GENERATOR LOADING TIMERS

<u>DEVICE TAG NO.</u>	<u>SYSTEM</u>	<u>LOCATION</u>	<u>TIME SETTING</u>
62X-20204	Emergency Switchgear Rm Cooler B & RHR SW pp H&V Fan B	0C877B	60 sec
262X-20104	Emergency Switchgear Rm Cooler A	0C877A	120 sec
262X-20204	Emergency Switchgear Rm Cooler B	0C877B	120 sec
* 62X-516	DG Rm Exh Fan A	0B516	2 min
* 62X-526	DG Rm Exh Fan B	0B526	2 min
* 62X-536	DG Rm Exh Fan C	0B536	2 min
* 62X-546	DG Rm Exh Fan D	0B546	2 min
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* CRX-5652A	DG Room Supply Fans E1 & E2	0B565	2 min
* 62X-5653A	DG Room Exhaust Fan E3	0B565	1 min
* 62X-5652A	DG Room Exhaust Fan E4	0B565	1 min

SUSQUEHANNA - UNIT 2

3/4 8-9

* When associated diesel generator is declared OPERABLE

TABLE 3.8.4.2.2-1

MOTOR OPERATED VALVES THERMAL OVERLOAD PROTECTION - AUTOMATIC

<u>Valve Number</u>	<u>System(s) Affected</u>
HV-01110E	ESW
HV-01120E	ESW

