

ATTACHMENT 22  
DIESEL GENERATORS

1. T.S. 3/4.8.1 (pages 3/4 8-1, 3/4 8-2 and 3/4 8-8) A.C. Sources

To Action Statements a, b and d make the changes noted on the attached pages. Replace Table 4.8.1 with the attached Table. These changes are requested in accordance with Generic Letter 84-15 " Proposed Staff Actions to Improve and Maintain Diesel Generator Reliability " dated July 2, 1984.

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### 3/4.8 ELECTRICAL POWER SYSTEMS

#### 3/4.8.1 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. Each Class 1E 4160 volt bus capable of being powered from:
  - 1) Either transformer of a given units normal System Auxiliary Transformer bank, and
  - 2) Either transformer of the other units System Auxiliary Transformers bank, withEach units System Auxiliary Transformer bank energized from an independent transmission circuit.
- b. Two separate and independent diesel generators, each with:
  - 1) A separate day tank containing a minimum volume of 450 gallons of fuel,
  - 2) A separate Fuel Oil Storage System containing a minimum volume of 44,000 gallons of fuel, and
  - 3) A separate fuel transfer pump.

APPLICABILITY: MODES 1, 2, 3, and 4.

##### 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 Specification 4.8.1.1.1a ~~or Specification 4.8.1.1.2a.4~~ within 1 hour and at least once per 8 hours thereafter; restore at least two offsite circuits and two diesel generators to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With one offsite circuit and one diesel generator of the above required A.C. electrical power sources inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Specifications 4.8.1.1.1a ~~and 4.8.1.1.2a.4~~ within 1 hour and at least once per 8 hours thereafter; restore at least one of the inoperable sources to OPERABLE status within 12 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Restore at least two offsite circuits and two diesel generators to OPERABLE status within 72 hours from the time of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

and Specification  
4.8.1.1.2.a.4  
within 24 hours

and Specification  
4.8.1.1.2.a.4  
within 8 hours

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## ELECTRICAL POWER SYSTEMS

### LIMITING CONDITION FOR OPERATION

#### ACTION (Continued)

- c. With one diesel generator inoperable in addition to ACTION a. or b. above, verify that:
1. All required systems, subsystems, trains, components and devices that depend on the remaining OPERABLE diesel generator as a source of emergency power are also OPERABLE, and
  2. When in MODE 1, 2, or 3, the diesel-driven auxiliary feedwater pump is OPERABLE and the Unit 2, A diesel generator is OPERABLE,\* if the inoperable diesel generator is the emergency power supply for the motor-driven auxiliary feedwater pump.
- If these conditions are not satisfied within 2 hours be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- d. With two of the above required offsite A.C. circuits inoperable, demonstrate the OPERABILITY of two diesel generators by performing Specification 4.8.1.1.2a.4) within ~~1 hour and at least once per 8 hours thereafter~~, unless the diesel generators are already operating; restore at least one of the inoperable offsite sources to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours. With only one offsite source restored, restore at least two offsite circuits to OPERABLE status within 72 hours from time of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- e. With two of the above required diesel generators inoperable, demonstrate the OPERABILITY of two offsite A.C. circuits by performing Specification 4.8.1.1.1a. within 1 hour and at least once per 8 hours thereafter; restore at least one of the inoperable diesel generators to OPERABLE status within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Restore at least two diesel generators to OPERABLE status within 72 hours from time of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

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\*Until 2 years after issuance of an operating license for Unit 1 the Unit 2, A diesel generator must be capable of providing power to bus 141, and the LCO, ACTION and SURVEILLANCE requirements of Specifications 3/4.8.1.3 shall be applicable. Subsequently, LCO 3.8.1.1.b.1), 2), and 3), and Surveillance Requirements 4.8.1.1.2 shall be applicable to the Unit 2, A diesel as applicable for demonstrating that the Unit 2, A diesel is OPERABLE as an emergency power supply for the Unit 1 motor-driven auxiliary feedwater pump.

Table 4.8.1

DIESEL GENERATOR TEST SCHEDULE

Number of Failures in  
Last 20 Valid Tests\*

Test Frequency

$\leq 1$

At least once per 31 days

$\geq 2$

At least once per 7 days\*\*

\*Criteria for determining number of failures and number of valid tests shall be in accordance with Regulatory Position C.2.e of Regulatory Guide 1.108, Revision 1, August 1977, where the number of tests and failures is determined on a per diesel generator basis. For the purposes of this test schedule, only valid tests conducted after the completion of the preoperational test requirements of Regulatory Guide 1.108, Rev 1, Aug 1977, shall be included in the computation of the "last - 20 valid tests."

\*\*This test frequency shall be maintained until seven consecutive failure free demands have been performed and the number of failures in the last 20 valid demands has been reduced to one or less.



ATTACHMENT 23  
REMOTE SHUTDOWN MONITORING INSTRUMENTATION

1. Table 3.3-9 and Table 4.3-6 (pages 3/4 3-51 and 3/4 3-52)

Delete Item 8 "RHR Flow Rate" from Tables 3.3-9 and 4.3-6. Also renumber Items 9 and 10 as 8 and 9 respectively. This deletion is requested since RHR flow rate is not a required parameter in performing a safe and controlled remote shutdown. Other indications of adequate core cooling are provided by the RCS temperature, pressure and level indications.

TABLE 4.3-6

REMOTE SHUTDOWN MONITORING INSTRUMENTATION  
SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>
1. Intermediate Range Neutron Flux	M	R
2. Source Range Neutron Flux	M*	R
3. Reactor Coolant Temperature - Wide Range	M	R
4. Pressurizer Pressure	M	R
5. Pressurizer Level	M	R
6. Steam Generator Pressure	M	R
7. Steam Generator Level	M	R
<del>8. RHR Flow Rate</del>	<del>M</del>	<del>R</del>
8. RHR Temperature	M	R
9. Auxiliary Feedwater Flow Rate	M	R

\*When below P-6.

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TABLE 3.3-9

## REMOTE SHUTDOWN MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>READOUT LOCATION</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>MINIMUM CHANNELS OPERABLE</u>
1. Intermediate Range Neutron Flux	PL06J	2	1
2. Source Range Neutron Flux	PL06J	2	1
3. Reactor Coolant Temperature - Wide Range			
a. Hot Leg	PL05J	1/loop	1/loop
b. Cold Leg	PL05J	1/loop	1/loop
4. Pressurizer Pressure	PL06J	1	1
5. Pressurizer Level	PL06J	2	1
6. Steam Generator Pressure	PL04J/PL05J	1/stm gen	1/stm gen
7. Steam Generator Level	PL04J	1/stm gen	1/stm gen
<del>8. RHR Flow Rate</del>	<del>LOCAL</del>	<del>2</del>	<del>1</del>
8. RHR Temperature	LOCAL	2	1
9. Auxiliary Feedwater Flow Rate	PL04J/PL05J	2/stm gen	1/stm gen

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