ATTACHMENT I

Proposed Electrical System Revised Technical Specifications, supporting documentation and No Significant Hazards Evaluations.

INDEX

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

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BASES

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. Two start-up transformers, and

b. Two diesel generators each with a day and a skid-mounted fuel tanks containing a minimum total volume of 2,000 gallons of fuel.

c. A fuel Storage System containing a minimum volume of 40,000 gallons of fuel and capable of transferring fuel to day tanks via a fuel transfer pump.

APPLICABILITY: ONE OR BOTH UNITS IN MODES 1, 2, 3 AND 4.

ACTION:

a. One out of two start-up transformers may be inoperable, provided:

1. OPERABILITY of two diesel generators and the other start-up transformer is demonstrated by performing Specifications 4.8.1.1.1a within one hour and at least once per 8 hours thereafter and 4.8.1.1.2a.4 within 24 hours and at least once per 96 hours thereafter, and

2. The NRC is notified within 24 hours of declaring the transformer inoperable, and

3. If the inoperable start-up transformer is not returned to service within 7 days the NRC is renotified of compensatory action(s) to provide off-site power to the vital busses.

b. One out of two diesel generators may be inoperable up to 7 days, provided:

1. OPERABILITY of two startup transformers and the other diesel generator is demonstrated by performing specifications 4.8.1.1.1a within one hour and at least once per 8 hours thereafter and 4.8.1.1.2a.4 within 24 hours and at least once per 96 hours thereafter, and

2. If the inoperable diesel generator is not made OPERABLE within 7 days, both units will be placed in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

c. With one start-up transformer and one diesel generator inoperable:

1. Demonstrate operability of the other start-up transformer and diesel generator by performing Specification 4.8.1.1.1a within one hour and at least once per 8 hours thereafter and 4.8.1.1.2a.4 within 8 hours, and

2. Notify the NRC within 24 hours of declaring the transformer and diesel generator inoperable and advise them of plans to restore the inoperable power supply equipment to service, and

3. If one of the inoperable power supply equipment is restored to service within 7 days apply the appropriate ACTION or renotify the NRC within 8 hours and advise them of compensatory actions(s) to provide off-site power to the vital busses.

d. With two start-up transformers inoperable:

1. Demonstrate the operability of both diesel generators by performing Specification 4.8.1.1.2a.4 within 8 hours unless the diesel generators are already operating, and

2. Apply appropriate ACTION if within 24 hours one start-up tranformer(s) is returned to service, and

3. Notify the NRC within 24 hours of declaring both start-up transfomers inoperable and advise them of plans to restore the transformers to service or of compensatory action(s) to restore off-site power to the vital busses.

e. With the two diesel generators inoperable, demonstrate the OPERABILITY of two offsite A.C. circuits by performing Surveillance Requirement 4.8.1.1.1.a within one hour and at least once per 8 hours thereafter; restore at least one of the inoperable diesel generators to OPERABLE status within 2 hours and then apply the appropriate ACTION or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.8.1.1.1 Each of the above required start-up transformers shall be:

a. Determined OPERABLE at least once per 7 days by verifying correct breaker alignments, indicated power availability, and

b. Demonstrated OPERABLE at least once per 18 months by transferring (manually and automatically) unit power supply from the auxiliary transformer to the start-up transformer.

4.8.1.1.2 Each diesel generator shall be demonstrated OPERABLE:

a. In accordance with the frequency specified in Table 4.8-1 by:

1) Verifying the day and skid-mounted fuel tanks contain a minimum volume of 2,000 gallons of fuel,

2) Verifying the minimum fuel volume of 40,000 gallons in the fuel storage tank,

3) Verifying the fuel transfer pump starts and transfers fuel from the storage system to the day tank,

4) Verifying the diesel starts and accelerates such that it reaches a generator voltage and frequency of 4160 ± 420 volts and 60 ± 1.2 Hz within 15 seconds* after the start signal. The diesel generator shall be started for this test by using one of the following signals:

a) Manual, or

b) Simulated loss-of-offsite power by itself, or

c) Simulated loss-of-offsite power in conjunction with an ESF Actuation test signal, or

d) An ESF Actuation test signal by itself.

5) Verifying the generator is synchronized, loaded to greater than or equal to 2500 KW in less than or equal to 10 minutes*, and operates for at least 60 minutes and the cooling system operates within design limits, and

* These diesel generator starts shall be performed once per 184 days in these surveillance tests and all other engine starts for the purpose of this surveillance testing should be preceded by engine warmup procedures recommended by the manufacturer so that the mechanical stress and wear on the diesel engine is minimized. The diesel shall not be barred-over if the second diesel is inoperable.

SURVEILLANCE REQUIREMENTS (CONTINUED)

6) Verifying the generator is aligned to provide standby power to the associated emergency busses.

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 and skid-mounted fuel tanks;

c) By sampling and verifying the fuel oil as follows:

1) At least once per 92 days a sample of diesel fuel from the fuel storage tank has:

a) An API Gravity of within 0.3 degrees at 60F, or a specific gravity of within 0.0016 at 60/60F, or an absolute specific gravity at 60/60F of greater than or equal to 0.83 but less than or equal to 0.89, or an API gravity of greater than or equal to 27 degrees but less than or equal to 39 degree; and

b) A kinematic viscosity at 40C of greater than or equal to 1.9 centistokes, but less than or equal to 4.1 centistokes (alternatively, Saybolt viscosity SUS at 100F of greater than or equal to 32.6, but less than or equal to 40.1); and

c) A flash point equal to or greater than 125F; and

d) A clear and bright appearance with proper color when tested in accordance with ASTM-D4176-82; and

e) Water and sediment within limits.

2) At least once per 92 days verify accumulated water from the fuel oil storage tank removed.

3) By obtaining a sample of fuel oil and verifying within 60 days of obtaining the sample that the properties specified in Table 1 of ASTM-D975-81 are met when tested in accordance with ASTM-D975-81 except that the analysis for sulfur may be performed in accordance with ASTM-D1552-79 or ASTM-D2622-82.

d) At least once every 31 days by obtaining a sample of fuel oil in accordance with ASTM-D2276-78, and verifying that total particulate contamination is less than 10 mg/liter when checked in accordance with ASTM-D2276-78, Method A;

SURVEILLANCE REQUIREMENTS (Continued)

e) In accordance with the frequency specified in Table 4.8-2 by:

1) Subjecting the diesel to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for this class of standby service;

2) Verifying the generator capability to reject a load of greater than or equal to 380 KW while maintaining voltage at 4160 ± 420 volts and frequency at 60 ± 1.2 Hz;

3) Verifying the generator capability to reject a load of greater than or equal to 2500 KW without tripping. The generator voltage shall return to less than or equal to 4784 volts within 2 seconds following the load rejection;

4) Verify that the diesel generator trips which are operable during the test mode of diesel opertion are inoperable when the diesel is not in the test mode operation;

5) Verifying the diesel generator operates for at least 24 hours. During the first 2 hours of this test, the diesel generator shall be loaded to greater than or equal to 2750 KW. During this period increase the load to 2850 KW until the generator load is stabilized. During the remaining time of this test, the diesel generator voltage and frequency shall be 4160 ± 420 volts and 60 ± 1.2 Hz within 15 seconds after the start signal; the steady-state generator voltage and frequency shall be maintained within these limits during this test. Within 5 minutes after completing this 24-hour test, perform Specification 4.8.1.1.2e.10.b;*

6) Verifying that the fuel transfer pump transfers fuel from the fuel storage tank to the day and the engine-mounted tank of each diesel via the installed cross-connection lines; and

7) Verifying that the following diesel generator lockout features prevent diesel gnerator starting only when required:

a) Emergency Stop

* If Specification 4.8.1.1.2e.10.b is not satisfactorily completed, it is not necessary to repeat the preceding 24-hour test. Instead, the diesel generator may be operated at 2500 KW for 1 hour or until operating temperature has stabilized.

SURVEILLANCE REQUIREMENTS (Continued)

8) Simulating a loss-of-offsite power by itself, and:

   a) Verifying deenergization of the emergency busses and load shedding from the emergency busses, and

   b) Verifying the diesel starts on the auto-start signal, energizes the emergency busses within 15 seconds, energizes the auto-connected shutdown loads through the load sequencer and operates for greater than or equal to 5 minutes while its generator is loaded with the emergency loads. After energization, the steady-state voltage and frequency of the emergency busses shall be maintained at 4160 ± 420 volts and 60 ± 1.2 Hz during this test;

9) Verifying that on an ESF Actuation test signal, without loss-of-offsite power, the diesel generator starts on the auto-start signal and operates on standby for greater than or equal to 5 minutes. The generator voltage and frequency shall be 4160 ± 420 volts and 60 ± 1.2 Hz within 1.5 seconds after the auto-start signal; the steady-state generator voltage and frequency shall be maintained within these limits during this test;

10) Simulating a loss-of-offsite power in conjunction with an ESF Actuaction test signal, and:

   a) Verifying deenergization of the emergency busses and load shedding from the emergency busses;

   b) Verifying the diesel starts on the auto-start signal, energizes the emergency busses within 15 seconds, energizes the auto-connected emergency (accident) loads through the load sequencer and operates for greater than or equal to 5 minutes while its generator is loaded with the emergency loads. After energization, the steady-state voltage and frequency of the emergency busses shall be maintained at 4160 ± 420 volts and 60 ± 1.2 Hz during this test;

11) Verifying that the auto-connected loads to each diesel generator do not exceed 2750 KW;

SURVEILLANCE REQUIREMENTS (CONTINUED)

12) Verifying the diesel generator's capability to:

a) Synchronize with the offsite power source while the generator is loaded with its emergency loads upon a simulated restoration of offsite power,

b) Be restored to its standby status; and

13) Verifying that the automatic load sequence timer is OPERABLE with the interval between each load block within ± 1 second of its design interval.

f. At least once per 10 years or after any modifications which could affect diesel generator interdependence by starting both diesel generators simultaneously, when both reactors are shutdown, and verifying that both diesel generators provide 60 ± 1.2 hz frequency and 4160 ± 420 volts in at least 15 seconds.

4.8.1.1.3 Reports - All diesel generator failures, valid or nonvalid, shall be reported to the Commission in a Special Report pursuant to Specification 6.9.2 within 30 days. Reports of diesel generator failures shall include the information recommended in Regulatory Position C.3.b of Regulatory Guide 1.108, Revision 1, August 1977. If the number of failures in the last 100 valid tests is greater than or equal to 7, the report shall be supplemented to include the additional information recommended in Regulatory Position C.3.b of Regulatory Guide 1.108, Revision 1, August 1977.

TABLE 4.8-1

Diesel Generator Test Schedule

Number of Failures in Last 20 Valid Tests	Number of Failures in Last 100 Valid Tests*	Test Frequency
≤ 1	≤ 4	Once per 31 days
≥ 2**	≥ 5	Once per 7 days

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* 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, but determined on a per diesel generator basis.

For the purposes of determining the required test frequency, the previous test failure count may be reduced to zero if a complete diesel overhaul to like-new conditions is completed, provided that the overhaul including appropriate post-maintenance operation and testing, is specifically approved by the manufacturer and if acceptable reliability has been demonstrated. The reliability criterion shall be the successful completion of 14 consecutive tests in a single series. All of these tests shall be in accordance with Surveillance Requirement 4.8.1.1.2.a.4 and 4.8.1.1.2.a.5.. If this criterion is not satisfied during the first series of tests, any alternate criterion to be used to transvalue the failure count to zero requires NRC approval.

** The associated 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.

TABLE 4.8-2

Diesel Generator Test Frequency

Diesel Generator	At each Unit 3 Refueling perform the following:	At each Unit 4 Refueling perform the following:
A	4.8.1.1.2.e.1 through 4.8.1.1.2.e.13	4.8.1.1.2.e.8 through 4.8.1.1.2.e.13
B	4.8.1.1.2.e.8 through 4.8.1.1.2.e.13	4.8.1.1.2.e.1 through 4.8.1.1.2.e.13

ELECTRICAL POWER SYSTEMS

A.C. SOURCES

SHUTDOWN

LIMITING CONDITION FOR OPERATION

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

a. One start-up transformer supplying at least one 4160 V. bus, A or B, of each unit, and

b. One diesel generator with:

1) Day and skid-mounted fuel tanks containing a minimum total volume of 2,000 gallons of fuel.

2) A fuel storage system containing a minimum volume of 40,000 gallons of fuel,

3) A fuel transfer pump aligned to fill the day tank and capable of receiving power from the operable diesel generator.

APPLICABILITY: Both units in MODES 5 and 6.

ACTION:

With less than the above minimum required A.C. electrical power sources OPERABLE, immediately suspend all operations involving CORE ALTERATIONS, positive reactivity changes, movement of irradiated fuel, or crane operation with loads over the fuel storage pool, and within 8 hours, depressurize and vent the Reactor Coolant System through a greater than or equal to 2.2 square inch vent. In addition, when in MODE 5 with the reactor coolant loops not filled, or in MODE 6 with the water level less than 23 feet above the reactor vessel flange, immediately initiate corrective action to restore the required sources to OPERABLE status as soon as possible.

SURVEILLANCE REQUIREMENTS

4.8.1.2 The above required A.C. electrical power sources shall be demonstrated OPERABLE by the performance of each of the requirements of Specifications 4.8.1.1.1, 4.8.1.1.2 (except for Specification 4.8.1.1.2a.5), and 4.8.1.1.3.

3/4.8.2 D.C. SOURCES

OPERATING

LIMITING CONDITIONS FOR OPERATION

3.8.2.1 As a minimum, the following D.C. Sources shall be OPERABLE:

a. Four D.C. busses each consisting of a

1) Battery Bank, and

2) Battery Chargers 3B, 4A and 4S and any two of battery chargers 3A, 4B and 3S.

APPLICABILITY: One or both Units in MODES 1, 2, 3 and 4.

ACTION:

a. With one of the required D.C. busses inoperable, restore the inoperable D.C. bus to OPERABLE status within 24 hours or place both units in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

b. With one of the required battery chargers inoperable restore it to operable status within 24 hours or place both units in at least Hot Standby within the next 6 hours and in Cold Shutdown within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.8.2.1 Each 125-volt battery bank and charger shall be demonstrated OPERABLE:

a. At least once per 24 hours read and record the pilot cell specific gravity. The specific gravity shall be within limits of Table 4.8-3 Category A.

b. At least once per 7 days by verifying that:

1) The pilot cell parameters (except specific gravity) in Table 4.8-2 meet the Category A limits, and

2) The total battery terminal voltage is greater than or equal to 129 volts on float charge.

c. At least once per 31 days by performing the following:

1) Rotate the pilot cell, and

2) Check water level and restore as necessary recording amount of water added.

d. At least once per 92 days and within 7 days after a battery discharge with battery terminal voltage below 105 volts, or battery overcharge with battery terminal voltage above 143 volts, verify that:

1) The parameters in Table 4.8-3 meet the Category B limits,

2) There is no visible corrosion at either terminals or connectors, or the connection resistance of these items is less than 150 x 10^{-6} ohm, and

3) The average electrolyte temperature of every sixth cell is above 60 F.

e. At least once per 92 days perform a detailed visual inspection of the battery chargers.

f. At least once per 12 months by verifying that:

1) The cells, and battery racks show no visual indication of physical damage or abnormal deterioration,

2) The cell-to-cell and terminal connections are clean, tight, and coated with anticorrosion material,

3) The resistance of each cell-to-cell and terminal connection is less than or equal to 150 x 10^{-6} ohm, and

4) Each 50kw battery charger will supply at least 400 amperes at 125 volts and each 37.5 kw battery charger will supply at least 300 amperes at 125 volts.

g. At least once per 12 months by verifying that the battery capacity is adequate to supply and maintain in OPERABLE status all of the actual or simulated emergency loads for the design duty cycle when the battery is subjected to a battery service test.

TABLE 4.8-3

BATTERY SURVEILLANCE REQUIREMENTS

	CATEGORY A(1)	CATEGORY B(2)	
PARAMETER	LIMITS FOR EACH DESIGNATED PILOT CELL	LIMITS FOR EACH CONNECTED CELL	ALLOWABLE(3) VALUE FOR CONNECTED CELL
Electrolyte Level	>Minimum level indication mark, and no overflow	>Minimum level indication mark, and no overflow	Above top of plates and no overflow
Float Voltage	$\geq$ 2.13 volts	$\geq$ 2.13 volts (6)	$\geq$ 2.07 volts
Specific Gravity (4)	$\geq$ 1.200(5)	$\geq$ 1.195	Not more than 0.020 below the average of all connected cells
		Average of all connected cells > 1.205	Average of all connected cells $\geq$ 1.205(5)

TABLE NOTATIONS

(1) For any Category A parameter(s) outside the limit(s) shown, the battery may be considered OPERABLE provided that within 24 hours all the Category B measurements are taken and found to be within their allowable values, and equalizing charge is started. All Category A and B parameter(s) must be restored to within limits within the next 6 days.

(2) For any Category B parameter(s) outside the limit(s) shown, the battery may be considered OPERABLE provided that the Category B parameters are within their allowable values, and equalizing charge is started. All Category B parameter(s) must be restored to within limits within 7 days.

(3) Any Category B parameter not within its allowable value indicates an inoperable battery.

(4) Corrected for electrolyte temperature and level.

(5) Or battery charging current is less than 2 amps when on charge.

(6) Corrected for average electrolyte temperature.

ELECTRICAL POWER SYSTEMS

D.C. SOURCES

SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.2.2 As a minimum, three 125-volt D.C. busses each consisting of a battery bank with an associated full-capacity charger shall be OPERABLE.

APPLICABILITY: Both units in MODES 5 and 6.

ACTION:

With the required battery banks or full-capacity chargers inoperable, immediately suspend all operations involving CORE ALTERATIONS, positive reactivity changes, or movement of irradiated fuel; initiate corrective action to restore the required battery banks and full-capacity chargers to OPERABLE status as soon as possible, and within 8 hours, depressurize and vent the Reactor Coolant System through a 2.20 square inch vent.

SURVEILLANCE REQUIREMENTS

4.8.2.2 The above required 125-volt battery banks and full-capacity chargers shall be demonstrated OPERABLE in accordance with Specification 4.8.2.1.

ELECTRICAL POWER SYSTEMS

3/4.8.3 ONSITE POWER DISTRIBUTION

OPERATING

LIMITING CONDITION FOR OPERATION

3.8.3.1 The following electrical busses of each unit* shall be energized in the specified manner with the 4160 Volt tie breakers open both between redundant busses within the unit and between the busses of units 3 and 4:

a. One train of AC busses consisting of:
   1) 4160-Volt Bus A, and
   2) 480-Volt Load Center Busses A and C, and
   3) 480-Volt Motor Control Center Busses A and C vital sections.
   4) 480-Volt Motor Control Center Bus A is to be fed from its Normal Source (Load Center A) with its Back-up Source (Load Center D) available.

b. One train of AC busses consisting of:
   1) 4160-Volt Bus B, and
   2) 480-Volt Load Center Busses B and D, and
   3) 480-Volt Motor Control Center Busses B and D vital sections.
   4) 480-Volt Motor Control Center Bus D is to be fed from its Normal Source (Load Center 3D/4160-Volt Bus 3B) with its Back-up Source (Load Center 4C/4160-Volt Bus 4A) available.

c. 120-Volt AC Vital Panel 06 energized from its associated inverter,**

d. 120-Volt AC Vital Panel 07 energized from its associated inverter,**

e. 120-Volt AC Vital Panel 08 energized from its associated inverter,**

f. 120-Volt AC Vital Panel 09 energized from its associated inverter,**

APPLICABILITY: One or both units in MODES 1, 2, 3, AND 4.

ACTION:

a. With one of the required trains of A.C. busses not fully energized, reenergize the train within 8 hours or place the associated unit in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

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* 480-Volt Motor Control Center D is common to Unit 3 and 4.
** A back-up inverter may be used to replace either the Unit 3 or Unit 4 normal inverter, but not both at the same time.

OPERATING (Continued)

ACTION (Continued)

b. With one A.C. vital bus not energized from an inverter connected to its associated D.C. bus: (1) reenergize the A.C. vital bus within 2 hours or place the affected unit in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours; and (2) reenergize the A.C. vital bus from an inverter connected to its associated D.C. bus within 24 hours or place the affected unit in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

c. With the normal or back-up power supply to 480-Volt Motor Control Center A inoperable, restore the inoperable power supply to OPERABLE status in 7 days or place both units in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN in the following 30 hours.

d. With the normal or back-up power supply to 480-Volt Motor Control Center D inoperable, restore the inoperable power supply to OPERABLE status in 7 days or place both units in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN in the following 30 hours.

e. With MCC 3B or MCC 4C inoperable, restore to operable status within 24 hours or place both units in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN in the following 30 hours.

f. With MCC 3A or MCC 4B inoperable, restore to operable status within 7 days or place both units in HOT STANDBY within the next 6 hours and in COLD Shutdown in the following 30 hours.

g. With one 4160 V Bus of the opposite unit inoperable, restore to operable status within 30 days or place both units in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN in the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.8.3.1.1 The specified busses shall be determined energized and aligned in the required manner at least once per 31 days by verifying correct breaker alignment and indicated power availability.

4.8.3.1.2 The specified busses shall be determined energized and aligned in the required manner at least once per 7 days by verifying tie breakers open and indicated power availability.

ELECTRICAL POWER SYSTEMS

ONSITE POWER DISTRIBUTION

SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.3.2 As a minimum, the following electrical busses of each unit shall be energized in the specified manner:

a. One train of A.C. busses consisting of one 4160-Volt bus and two 480-Volt A.C. load center and motor control center vital section busses,

b. Two 120-Volt A.C. vital busses energized from their associated inverters.*

APPLICABILITY: Both units in MODES 5 and 6.

ACTION:

With any of the above required electrical busses not energized in the required manner, immediately suspend all operations involving CORE ALTERATIONS, positive reactivity changes, or movement of irradiated fuel, initiate corrective action to energize the required electrical busses in the specified manner as soon as possible, and within 8 hours, depressurize and vent the RCS through at least a 2.20 square inch vent.

SURVEILLANCE REQUIREMENTS

4.8.3.2 The specified busses shall be determined energized in the required manner at least once per 7 days by verifying correct breaker alignment and indicated power availability.

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* A backup inverter may be used to replace either the Unit 3 or Unit 4 normal inverter, but not both at the same time.

3/4.8.1, 3/4.8.2 AND 3/4.8.3 A.C. SOURCES, D.C. SOURCES, AND ONSITE POWER DISTRIBUTION

The OPERABILITY of the A.C. and D.C. power sources and associated distribution systems during operation ensures that sufficient power will be available to supply the safety-related equipment required for: (1) the safe shutdown of the facility, and (2) the mitigation and control of accident conditions within the facility.

The ACTION requirements specified for the levels of degradation of the power sources provide restriction upon continued facility operation commensurate with the level of degradation. The OPERABILITY of the power sources are consistent with the initial condition assumptions of the safety analyses and are based upon maintaining adequate onsite A.C. and D.C. power sources and associated distribution systems OPERABLE during accident conditions coincident with an assumed loss-of offsite power and single failure of one onsite A.C. source. When one diesel generator is inoperable, there is an additional ACTION requirement to verify that 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. This requirement is intended to provide assurance that a loss-of-offsite power event will not result in a complete loss of safety function of critical systems during the period one of the diesel generators is inoperable. The term, verify, as used in this context means to administratively check by examining logs or other information to determine if certain components are out-of-service for maintenance or other reasons. It does not mean to perform the Surveillance Requirements needed to demonstrate the OPERABILITY of the component.

The OPERABILITY of the minimum specified A.C. and D.C. power sources and associated distribution systems during shutdown and refueling ensures that: (1) the facility can be maintained in the shutdown or refueling condition for extended time periods, and (2) sufficient instrumentation and control capability is available for monitoring and maintaining the unit status.

Verifying average electrolyte temperature above the minimum for which the battery was sized, total battery terminal voltage on float charge, connection resistance values, and the performance of battery service and discharge tests ensures the effectiveness of the charging system, the ability to handle high discharge rates, and verifies the battery capability to supply its required load.

Table 4.8-3 specifies the normal limits for each designated pilot cell and each connected cell for electrolyte level, float voltage, and specific gravity. The limits for the designated pilot cells float voltage and specific gravity, greater than 2.13 volts and 0.015 below the manufacturer's full charge specific gravity or a battery charger current that had stabilized at a low value, is characteristic of a charged cell with adequate capacity. The normal limits for each connected cell for float voltage and specific gravity greater

A.C. SOURCES, D.C. SOURCES, AND ONSITE POWER DISTRIBUTION (Continued)

than 2.13 volts and not more than 0.020 below the manufacturer's full charge specific gravity with an average specific gravity of all the connected cells not more than 0.010 below the manufacturer's full charge specific gravity, ensures the OPERABILITY and capability of the battery.

Operation with a battery cell's parameter outside the normal limit but within the allowable value specified in Table 4.8-3 is permitted for a period. During this period: (1) the allowable values for electrolyte level ensures no physical damage to the plates with an adequate electron transfer capability; (2) the allowable value for the average specific gravity of all the cells, not more than 0.010 below the manufacturer's recommended full charge specific gravity, ensure that the decrease in rating will be less than the safety margin provided in sizing; (3) the allowable value for an individual cell's specific gravity, ensures that an individual cell's specific gravity will not be more than 0.030 below the manufacturer's full charge specific gravity and that the overall capability of the battery will be maintained within an acceptable limit; and (4) the allowable value for an individual cell's float voltage, greater than 2.07 volts, ensures the battery's capability to perform its design function.

The action requirements concern the inoperability of certain Motor Control Centers (MCC) and 4160 V Busses are limited by the action requirements of the equipment which receive power from them. MCC 3B or 4C are only permitted to be inoperable based on the action requirements for Battery Chargers 3B and 4A respectively. The MCC 3A and 4B are only permitted to be inoperable for 24 hours based on the action requirements for each Diesel Generator. With one unit shutdown the 4160 V Busses on the opposite unit are only permitted to be inoperable for 30 days based on the action requirements for the Safety Injection pumps.

The SURVEILLANCE REQUIREMENTS to demonstrate each Emergency Diesel Generator (EDG) OPERABLE requires that the auto-connected loads to each EDG do not exceed 2750 KW. This requirement can be demonstrated by following the ESF testing method where each unit is individually tested for two loading conditions (ie: loads due to loss of offsite power (LOOP) and loads due to LOOP coincident with a Safety Injection (SI)). The results of the test on one unit with a LOOP are then added arithmetically to the test on the other unit with an LOOP coincident with an SI signal for each EDG respectively. In the load sum difference between these loads operated in the test mode and the actual expected loads (ie: load differences due to pumps run in recirculation mode) are added to the test values for each EDG. The sum of the two test condition loads on opposite units will be representative of the actual design basis auto-connect loads on each EDG.

The LCOs for inoperable start-up transformers allow for compensatory actions to preclude a natural circulation cooldown. Some examples of compensatory actions are switching the inoperable start-up transformer with a "C" bus transformer or if available connect the "C" bus transformer to the unaffected part of the inoperable start-up transformer.

NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: A.C. SOURCES - OPERATING

NO: 3/4.8.1.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Unit 3 and 4 Technical Specification in Specification 3.7, 4.8.1, Table 4.8-1, Table 4.1-2 Item 12, Table 4.18-1 Item 5, B3.7 and B4.8, and Proposed Licensing Amendment transmitted to the NRC by Letter L-86-433 dated October 20, 1986.

2) Proposed Condition of License:

a. 1. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

1. The LCO requires that the diesel generator associated day and skid-mounted fuel tanks contain a minimum volume of 2,000 gallons and that the fuel storage tank contains a minimum volume of 40,000 gallons.

2. The ACTION statement requires that if a startup transformer is inoperable, operability of the other startup transformer must be demonstrated within 1 hour and every 8 hours thereafter and both diesel generators must be demonstrated operable within 24 hours and once per 96 hours thereafter.

3. The ACTION statement requires that if one diesel generator is inoperable, operability of both startup transformers must be demonstrated within one hour and every 8 hours thereafter and the other diesel generator must be demonstrated operable within 24 hours and once per 96 hours thereafter.

4. The revision adds an ACTION statement for one startup transformer and one diesel generator inoperable.

5. The SURVEILLANCE REQUIREMENTS for startup transformer operability are added.

6. The SURVEILLANCE REQUIREMENTS for diesel generator testing require that a voltage of 4160 ± 420 be achieved following diesel acceleration. The current Technical Specification specifies a voltage of 4160 ± 624 Volts following acceleration.

7. A SURVEILLANCE REQUIREMENT is added for checking and removing accumulated water from the day and skid-mounted fuel tanks once per 31 days.

8. A SURVEILLANCE REQUIREMENT is added for sampling and verification of the quality for fuel oil.

9. The SURVEILLANCE REQUIREMENT requires demonstration that the generator is capable of rejecting a load of at least 380 KW while maintaining voltage and frequency within limits. The current Technical Specification specifies load rejection of 200 KW.

10. The proposed refueling interval SURVEILLANCE REQUIREMENT requires a 24 hour diesel generator operability test in lieu of current 8 hour test.

11. A SURVEILLANCE REQUIREMENT is added for verification of load sequence timer tolerance and lockout features function.

12. Special reporting requirement for diesel generator failures has been added.

13. A more restrictive ACTION statement requiring NRC notification of compensatory action(s) to provide off-site power to the vital busses is specified as 7 days.

14. A more restrictive ACTION statement pertaining to the length of time one Diesel Generator may be out of service with continued operations is specified as 7 days, in accordance with FPL Letter L-86-384 dated August 27, 1986.

15. A footnote has been added to Surveillance 4.8.1.1.2.a.4 permitting maintenance start procedures to be used for all test starts except one per 184 days to reduce wear from rapid diesel generator starts.

16. Table 4.8-1 which establishes the diesel generator test frequency has been revised to use a two stage sample method, last 20 starts and last 100 starts. The new criteria provides a more sensitive measure of degradation trends. A footnote is added to allow a reduced testing frequency if a diesel generator is overhauled and requalified by a special test series.

c. The proposed revision relaxes the following current requirements:

1. The current Technical Specification requires that the diesel generator be tested daily to prove operability when one Emergency Diesel Generator or one Startup Transformer is inoperable. The proposed specification requires the first test within 24 hours and increases the retest interval to four days (96 hours).

2. Although not specifically stated the current Technical Specification would imply that if both start-up transformers are inoperable, both units be shutdown in accordance with Paragraph 3.0.1. The proposed revision ACTION statement requires that if both start-up transformers are inoperable, both the diesel generators be demonstrated operable within 8 hours, and if one of the startup transformers is not restored to operable status within 24 hours then the NRC is informed of plans to restore the transformers to service or of compensatory actions(s) to restore off-site power to the vital busses.

3. Although not specifically stated, the current Technical Specification would imply that if both diesel generators are inoperable both units be shutdown in accordance with Paragraph 3.0.1. The proposed revision ACTION statement requires that if both diesel generators are inoperable, both start-up transformers be demonstrated operable within 1 hour and if one of the diesel generators is not restored to operable status within 2 hours then both units be shutdown.

4. The current Technical Specification surveillance requires verification that the diesel generator is capable of rejecting complete load without exceeding 4160 ± 624 Volts. The proposed revision deletes the peak voltage requirement immediately following a complete diesel generator load rejection test. The proposed revision specifies that during this test the generator voltage shall return to less than or equal to 4784 Volts within 2 seconds following the load rejection.

5. The current Technical Specification requiring a check of diesel fuel inventory weekly has been increased to when the diesel is demonstrated operable.

6. The current Technical Specification requires diesel generator surveillance tests be performed every 18 months with a plus or minus 25% accommodation. The proposed revision specifies that diesel generator surveillance tests be performed at a specific Unit's refueling.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated, or (2) create the possibility of a new or different kind of accident from any accident previously evaluated, or (3) involve a significant reduction in a margin of safety, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

1) The proposed change as described in Item 2.a.1 is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.

2) The proposed changes as described in Items 2.b.1, 2.b.2, 2.b.3, 2.b.4, 2.b.13, 2.b.14, and 2.b.16 are similar to example (ii) of 48 FR 14870 in that they provide additional limitations and restrictions by including the following changes to the LCO and ACTION statements: diesel fuel day tank minimum inventory; specific time frames to prove operability of remaining power sources when the LCO, cannot be met; a new ACTION statement for the condition of one diesel generator and one startup transformer inoperable; a more restrictive time limit a major power source can be out of service; and new criteria which provides long and short term measures of diesel generator reliability. The proposed

changes described in Items 2.b.5 through 2.b.12 and 2.b.15 are similar to example (ii) of 48 FR 14870 in that they provide additional more restrictive controls by including surveillance requirements: defining startup transformer operability; closer tolerance on diesel generator terminal voltage following acceleration; checking of fuel tanks for accumulated water; diesel fuel quality sampling; higher kilowatt load for load rejection test; longer duration for operability test conducted every refueling interval; new surveillance for diesel loading sequence timer and lockout function; new requirement for reporting diesel generator failures; and a new footnote specifying frequency of rapid starts for diesel generator surveillance tests.

3) The proposed change to relax the diesel generator retest time interval from every 24 hours to every 96 hours does not involve a significant hazards consideration because this change would not:

a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. Generic Letter 84-15 required Licensees to review the reliabilty of their diesel generators including a review of their programs for surveillance testing. The industry has agreed that a reduction in diesel generator testing would improve diesel generator reliability. The proposed change is intended to enhance diesel generator reliability by eliminating excessive testing which can lead to premature diesel generator failures. Since the proposed change would serve to enhance the diesel generator reliability and overall plant safety there would be no significant increase in either the probability or consequences of previously evaluated accidents.

b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.

c. Involve a significant reduction in a margin of safety because the reduced testing frequence provides increased diesel generator reliability by eliminating excessive testing that could lead to premature failures.

4) The proposed change to relax the immediate shutdown if both startup transformers are inoperable does not involve a significant hazards consideration because this change would not:

a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The proposed ACTION statement allows 24 hours for the operator to recover one or both startup transformers if both diesel generators are proven operable. The current Technical Specification requirement of an immediate shutdown would require a one or two unit natural circulation shutdown using onsite emergency power.

The revised technical specification has the advantage of maintaining the plant in a stable condition, with onsite emergency power available, while the situation is addressed and repairs are made. If one or both startup transformers can be returned to service within 24 hours, a natural circulation cooldown with reliance on the diesel generators is avoided. If repairs to one or both startup transformers cannot be made within 24 hours, compensatory action(s) to establish off-site power to the vital busses inorder to allow for a normal cooldown procedure, with RCP(s), would provide for a more organized and controlled operation.

Because the proposed change would maintain the plant in a stable initial condition that has been considered in the accident analysis, the change would not involve a significant increase in the probability of or the consequences of an accident previously evaluated.

b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involve a physical modification to the plant.

c. Involve a significant reduction in a margin of safety because the revision allows time to recover one or both startup transformers while maintaining the plants in a stable condition. Maintaining the plant in a stable condition would allow time to make repairs and avoid a natural circulation cooldown condition with reliance on the diesel generators. FPL believes the advantages of these operational considerations to maintain a stable plant condition and re-establish off-site power to the vital busses, and then preceeded with a normal cooldown procedure, would increase the margin of safety in the unlikely event that both startup transformers are inoperable.

5) The proposed change to relax the immediate shutdown if both diesel generators are inoperable does not involve a significant hazards consideration because this change would not:

a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The proposed ACTION statement allows 2 hours for the operator to recover one or both diesel generators if both startup transformers are proven operable. The current Technical Specification implies the requirement of an immediate shutdown after 1 hour which does not allow adequate time for an organized shutdown.

The additional time provided by the revised technical specification has the advantage of maintaining the plant in a stable condition while repairs are made. If repairs to one or both diesel generator(s) cannot be made within the 2 hours, the additional time to prepare for the shutdown would provide for a more organized procedure.

The 2 hour time period is consistent with industry practice in that it is the time period allowed by the Standard Technical Specifications for both diesel generators unavailable.

Because the proposed change would allow additional time to prepare to shutdown the units and the likelihood of an accident being initiated during the additional 2 hours is remote, the change would not involve a significant increase in the probability of or consequences of an accident previously evaluated.

b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involve a physical modification to the plant.

c. Involve a significant reduction in a margin of safety because the revision allows time to recover one or both diesel generator(s), while preparing for an organized shutdown. Maintaining the plant in a stable condition would allow time to make repairs and avoid a transient cooldown condition. FPL believes the advantages of these operational considerations would increase the margin of safety in the unlikely event that both diesel generators are inoperable.

6) The proposed change to delete the peak voltage requirement immediately following a full diesel generator load rejection test does not involve a significant hazards consideration because this change would not:

a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The subject surveillance is to verify the proper operation of the voltage regulator under transient conditions. The ability of the diesel generator to regulate voltage under transient conditions is verified by proposed surveillance requirements 4.8.1.1.2a(4), 4.8.1.1.2.e(2), 4.8.1.1.2.e.8.b and 4.8.1.1.2.e.10.b. Review of this surveillance requirement using more sensitive measurement devices indicate that the peak voltage observed depends on the mechanical response of the measuring instrument and, therefore, the technical and safety significance of this surveillance is minimal compared to that of proper voltage regulation following full load rejection. Because this change does not affect plant conditions or equipment prior to or during an accident, the proposed revision does not involve a significant increase in the probability of or consequences of an accident previously evaluated.

b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.

c. Involve a significant reduction in a margin of safety because the diesel generator voltage peaks observed in previous full load rejection tests are well within the design limits of equipment and are much less in magnitude and duration than high voltage tests performed on all equipment and cables subjected to the diesel generator voltage peaks. Furthermore, the Commission has indicated that this change is consistent with recently licensed plants.

7) The proposed change to relax the check on diesel fuel inventory by deleting the weekly surveillance and maintaining the inventory surveillance when the diesel generator is demonstrated operable does not involve a significant hazards consideration because this change would not:

a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The most likely time that the diesel fuel storage volumes would change would be during diesel generator testing. Therefore, maintaining the current requirement to verify the minimum fuel storage volumes on a schedule commensurate with the testing fequency will provide an adequate surveillance frequency. The maximum testing frequency is 30 days for one diesel, however, the common fuel tank supplies both diesels which are tested on a staggered basis. In addition, tank level indicators, alarms and periodic plant inspections provide indication of tank volumes. The proposed change is consistent with industry practices in that the proposed change is in accordance with the Standard Technical Specifications. Based on the above considerations and the fact that the change proposes no change in plant operating parameters or equipment, the proposed revision would not involve a significant increase in the probability of or consequences of an accident previously evaluated.

b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involve a physical modification to the plant.

c. Involve a significant reduction in a margin of safety because the frequency of checking diesel fuel inventory matches frequent diesel operations, indicators or alarms are available for continuous monitoring and the proposed change is consistent with industry practice.

8) The proposed change to relax the diesel generator surveillance test frequency from 18 months plus or minus 25% to a Units refueling outage does not involve a significant hazards consideration because this change would not:

a) Involve a significant increase in the probability of or consequences of an accident previously evaluated. The current 18 month diesel generator surveillance test frequency is designed to be consistent with the Nuclear Vendor's refueling cycle. Thus, the proposed surveillance test frequency is not a relaxation if a Unit does not deviated from it's refueling schedule by plus or minus 25%. However if a Unit has an extended operational period the need to perform the current 18 month diesel generator surveillances would force the Units into an off-normal testing configuration. Because Turkey Point's A.C. power system design is non-standard and shares common equipment very specific test

configurations are required. Both Units need to be taken off-line and one placed in at least HOT STANDBY and the other Unit placed in at least COLD SHUTDOWN inorder to complete the diesel generator surveillance requirements. This testing configuration is best accommodated in the refueling outage configuration since one Unit is already placed in at least COLD SHUTDOWN. FPL believes it is unnecessary to subject both Units to additional transient conditions when the same tests requirements can be satisfied by a required Unit's near term refueling outage. This would minimize the risk associated with the potential for plant upset and challenge to safety systems as a result of two near term plant transients. That is, one to perform the surveillance requirements followed on the near term by a startup and second shutdown for the refueling outage.

Because the proposed change would reduce transient plant conditions and place both Units in their normal test configurations this change would not involve a significant increase in the probability of or consequences of an accident previously evaluated.

b) Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involve a physical modification to the plant.

c) Involve a significant reduction in a margin of safety because the number of transient plant conditions will be reduced and normal testing configurations established.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.8.1.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: A.C. SOURCES - SHUTDOWN

NO: 3/4.8.1.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

The current Turkey Point Unit 3 and 4 Technial Specification does not explicitly specify requirements for A.C. SOURCES - SHUTDOWN.

2) Proposed Condition of License:

a. The revision is more complete than the current Technical Specification as follows:

This new Technical Specification is being proposed to be added. Addition of this specification will assure that proper normal A.C. Power and backup A.C. Power is available when both reactors are shut down.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated, or (2) create the possibility of a new or different kind of accident from any accident previously evaluated, or (3) involve a significant reduction in a margin of safety, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

1) The proposed change as described in Item 2.a is similar to example (ii) of 48 FR 14870 in that it provides a new Technical Specification with stated limitations, restrictions and controls for the required Normal and Emergency Power Sources when both reactors are in MODES 5 and 6.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.8.1.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: D.C. SOURCES - OPERATING

NO: 3/4.8.2.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Unit 3 and 4 Technical Specification in Specification 3.7, 4.8.2, B3.7 and B4.8.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more restrictive than the current Technical Specification as follows:

1. Table 4.8-3 has been added which lists battery parameters that must be verified by SURVEILLANCE REQUIREMENTS.

2. A SURVEILLANCE REQUIREMENT for battery terminal voltage verification once per 7 days has been added.

3. A SURVEILLANCE REQUIREMENT following battery discharge/overcharge or at least quarterly has been added.

4. An annual SURVEILLANCE REQUIREMENT for verification of battery capacity when subjected to battery service test has been added.

5. An annual SURVEILLANCE REQUIREMENT for battery charger capacity verification has been added.

6. A particular five out of six battery charger arrangement is required to be operable. The current Technical Specification required four out of six battery chargers.

c. The revision relaxes the following current requirement:

1. The requirement for a monthly equalizing charge to each battery has been deleted.

2. The requirement for a monthly visual inspection of each battery has been deleted.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated, or (2) create the possibility of a new or different kind of accident from any accident previously evaluated, or (3) involve a significant reduction in a margin of safety, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.

2) The proposed changes as described in Items 2.b.1, 2.b.2, 2.b.3, 2.b.4., 2.b.5 and 2.b.6 are similar to example (ii) of 48 FR 14870 in that they provide additional controls by:

Specifying the battery parameters and limits in added Table 4.8-3 that are verified by SURVEILLANCE REQUIREMENTS.

Requiring a weekly terminal voltage surveillance.

Requiring special surveillance checks at least quarterly or after an unusual discharge or overcharge.

Requiring annual battery service and charger capacity tests.

Requiring a particular five battery chargers to be operable.

3) The proposed change to relax the SURVEILLANCE REQUIREMENT for a monthly equalizing charge for each battery does not involve a significant hazards consideration because this change would not:

a) Involve a significant increase in the probability of or consequences of an accident previously evaluated.

The requirement for a monthly equalizing charge was for the original batteries which have been replaced by new lead calcium batteries. In accordance with the manufacturer's recommendations, the requirement for an equalizing charge has been changed from monthly to that required by Table 4.8-3 of the revised technical specification which relates to measured battery parameters. This change in definition of a surveillance frequency would not increase the probability of an accident previously evaluated because the design and operation of the D.C. Systems are otherwise unchanged.

b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a change in the design function of the batteries.

c. Involve a significant reduction in a margin of safety because the need for an equalizing charge in the battery is now related to the measured parameters of the battery in accordance with manufacturer's recommendations rather than calendar time.

4) The proposed change to relax the SURVEILLLANCE REQUIREMENT for a monthly visual inspection does not involve a significant hazards consideration because the change would not:

a) Involve a significant increase in the probability of or consequences of an accident previously evaluated. The current technical specifications did not provide a specific definition of what the monthly visual inspection was to include. The revised technical specifications require visual check for corrosion at terminals or connectors every 92 days or after battery discharge below 105 volts or overcharge above 143 volts. In addition the revised technical specification requires annual inspection to verify the cells, and battery racks show no visual indication of physical damage or abnormal deterioration. Any gross deterioration or malfunction could

also be noted during daily and weekly surveillances required by the revised technical specification. The visual inspections required by the revised technical specifications are consistent with industry practice in that these visual inspections are those required by the Standard Technical Specifications. Since the operation of the D.C. systems are otherwise unchanged the change in visual surveillance requirements as described would not involve a significant increase in the probability or consequences of an accident previously evaluated.

b) Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involve a change in the plant design.

c) Involve a significant reduction in a margin of safety because the current visual inspection without specific criteria is replaced by specific surveillance requirements, as described above, which are consistent with industry practice. In addition, the change in surveillance frequency or surveillance criteria does not impact the design function of the batteries during a postulated accident.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.8.2.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: D.C. SOURCES - SHUTDOWN

NO: 3/4.8.2.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

The current Turkey Point Unit 3 and 4 Technial Specification does not explicitly specify requirements for D.C. SOURCES - SHUTDOWN.

2) Proposed Condition of License:

a. The revision is more complete than the current Technical Specification as follows:

This new Technical Specification is being proposed to be added. Addition of this specification will assure that proper D.C. POWER is available when both reactors are shutdown.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated, or (2) create the possibility of a new or different kind of accident from any accident previously evaluated, or (3) involve a significant reduction in a margin of safety, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

1) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides a new Technical Specification with stated limitation, restriction and controls for the required D.C. POWER SOURCES when both reactors are in MODE 5 and 6.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.8.2.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: ONSITE POWER DISTRIBUTION - OPERATING

NO: 3/4.8.3.1

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

As described in the current Turkey Point Unit 3 and 4 Technical Specification in Specification 3.7, Table 4.18-1 Item 10 and B3.7.

2) Proposed Condition of License:

a. The amendment consolidates the current requirements into this specification and explicitly states the LCO, APPLICABLE MODES, ACTION Limits and SURVEILLANCE REQUIREMENTS.

b. The revision is more complete than the current Technical Specification as follows:

1. The LCO requires operability of all four MCC's and Load Centers. The current Technical Specification requires three Load Centers and two MCC's.

2. The availability of a back-up source for MCC's 3A and D has been added to the LCO.

3. The operability of the 120-Volt AC Vital Panels has been added to the LCO.

4. ACTION statements have been added and are consistent with Standard Technical Specification and Turkey Point design.

5. An additional 7 day SURVEILLANCE REQUIREMENT has been added to verify breaker alignment and power availability.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated, or (2) create the possibility of a new or different kind of accident from any accident previously evaluated, or (3) involve a significant reduction in a margin of safety, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

1) The proposed change as described in Item 2.a is similar to example (i) of 48 FR 14870 in that it is an administrative change which consolidates current requirements into a technical specification format consistent with the Standard Technical Specifications and does not involve technical or plant modifications.

2) The proposed changes as described in Items 2.b.1, 2.b.2, 2.b.3, 2.b.4 and 2.b.5 are similar to example (ii) of 48 FR 14870 in that they provide additional limitations restrictions and controls by including additional equipment in the LCO, additional ACTION statements consistent with Turkey Point design and more frequent surveillance of the busses to insure proper alignment and energization.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.8.3.1 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

NO SIGNIFICANT HAZARDS EVALUATION

PROPOSED TECHNICAL SPECIFICATION

TITLE: ONSITE POWER DISTRIBUTION - SHUTDOWN

NO: 3/4.8.3.2

A. DESCRIPTION OF CHANGES

1) Present Condition of License:

The current Turkey Point Unit 3 and 4 Technial Specification does not explicitly specify requirements for ONSITE POWER DISTRIBUTION - SHUTDOWN.

2) Proposed Condition of License:

a. The revision is more complete than the current Technical Specification as follows:

This new Technical Specification is being proposed to be added. Addition of this specification will assure that proper electrical power circuits are available when both reactors are shut down.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated, or (2) create the possibility of a new or different kind of accident from any accident previously evaluated, or (3) involve a significant reduction in a margin of safety, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

2) The proposed change as described in Item 2.b is similar to example (ii) of 48 FR 14870 in that it provides a new Technical Specification with stated limitations, restrictions and controls for the required ONSITE POWER DISTRIBUTION when both reactors are in MODE 5 and 6.

Based on the above considerations the changes included in the development of proposed Technical Specification 3/4.8.3.2 are considered not to involve a significant hazards consideration as defined in 10 CFR 50.92. Further, there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes.

B. BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

The standards used to arrive at a proposed determination that the changes described above involve no significant hazards consideration are included in 10 CFR 50.92. The regulations state that if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated, or (2) create the possibility of a new or different kind of accident from any accident previously evaluated, or (3) involve a significant reduction in a margin of safety, then a no significant hazards determination can be made.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

1) The changes in item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a Technical Specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.

2) The changes in items 2.b.1, 2.b.2 and 2.b.3 are similar to example (ii) of 48 FR 14870 in that they provide additional restrictions and controls in the added MODES and the more complete and restrictive ACTION and SURVEILLANCE REQUIREMENTS. The MODE applicability is expanded to include SHUTDOWN MODES 3 and 4. The ACTION statement includes minimum boron concentration and flow requirements when boration is required and the SURVEILLANCE REQUIREMENTS include daily SURVEILLANCE of boron concentration, control rod position, Reactor Coolant System temperature, Fuel Burnup, and Xenon and Samarium concentration in MODES 3 and 4.

3) The change in 2.c.1 involving boration to increase the SHUTDOWN MARGIN is only required if an inoperable rod would result in a SHUTDOWN MARGIN limit violation. The change in item 2.c.2 involves the RCS boron concentration surveillance frequency reduction in MODES 1 and 2 from twice weekly to once per 31 EFPD's. These changes do not involve a significant hazards consideration because the changes will not:

a. Involve a significant increase in the probability of or consequences of an accident previously evaluated.

The proposed change to require boration only when the SHUTDOWN MARGIN limit is violated as the result of an inoperable rod is sufficient to preserve the safety analysis assumption involving SHUTDOWN MARGIN requirements for accident mitigation. Because the accident analysis only assumes that the minimum SHUTDOWN MARGIN required by the Technical Specifications is available, preserving the limit, as required by the proposed Technical Specification, ensures that all accident analysis results that depend on SHUTDOWN MARGIN remain valid.

The proposed reduction in the RCS boron concentration surveillance in MODES 1 and 2 from twice per week to once per 31 EFPD's is adequate to support the SHUTDOWN MARGIN Technical Specification limit because the RCS boron concentration is not directly related to SHUTDOWN MARGIN in MODES 1 and 2. The SHUTDOWN MARGIN in MODES 1 and 2 is ensured by surveillance of the control rod bank position and verifying that the rod bank withdrawal is within the allowable withdrawal limit. The proposed Technical Specification surveillance frequency on rod bank position is once per 12 hours.

The 31 EFPD surveillance of RCS boron concentration is used in the overall core reactivity balance to demonstrate agreement with the predicted core reactivity trend over the fuel cycle. Past operating experience at Turkey Point as well as at other Westinghouse plants has shown that core reactivity trends change slowly with time and that the Standard Technical Specification surveillance frequency of once each 31 EFPD's is adequate for ensuring that the actual core depletion is following the predicted reactivity trend throughout the fuel cycle.

b. Create the possibility of a new or different kind of accident from any previously analyzed because the proposed change introduces no new mode of plant operation nor involves a physical modification to the plant.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve a significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications for example, a more stringent surveillance requirement.

1) The changes in Item 2.a are similar to example (i) of 48 FR 14870 in that they are administrative changes which consolidate current requirements into a Technical Specification format consistent with the Standard Technical Specifications and do not involve technical or plant modifications.

2) The changes in Items 2.b.1 and 2.b.2 are similar to example (ii) of 48 FR 14870 in that they provide a more complete set of trip functions and explicit MODE APPLICABILITY and ACTION limits are stated for each trip function. The more complete set of trip functions includes the Source and Intermediate Range trip channels required to be operable in Mode 2 and the steam generator water level low coincident with a steam flow/feed flow mismatch trip. The ACTION statement restrictions include appropriate power restrictions or increased surveillance requirements to compensate for a specific inoperable channel. For example, with an inoperable power range neutron flux channel, the ACTION statement restrictions include a power reduction and a high flux setpoint reduction or a quadrant power tilt surveillance frequency increase from 7 days to 12 hours.

3) The proposed change in item 2.c to allow a specific allowance for setpoint drift between trip channel surveillance tests does not involve a significant hazards consideration because this change would not:

   a. Involve a significant increase in the probability of or consequences of an accident previously evaluated. The drift allowance in the proposed change is equal to or smaller than the drift allowance assumed in the safety analysis. These drift allowances have been used generically in Westinghouse plant safety analyses and experience has shown that the trip system instrumentation will perform within these drift tolerances.

TECHNICAL SPECIFICATIONS IMPROVEMENT MATRIX

TECH. SPEC. NUMBER	TITLE	IMPROVED FORMAT	IMPROVED/ADDITIONAL/MORE RESTRICTIVE: NEW TECH.SPEC.	LCO	APPLICABILITY MODES	ACTION STATEMENT	SURV. REQMNTS	OTHER
3/4.6	Containment Systems-Primary Containment							
3/4.6.1.1	Containment Integrity	X					X	
3/4.6.1.2	Containment Leakage	X		X	X	X	X	
3/4.6.1.3	Containment Air Locks	X		X			X	
3/4.6.1.4	Internal Pressure	X					X	
3/4.6.1.5	Air Temperature		X					
3/4.6.1.6	Containment Vessel Structural Integrity	X		X		X	X	
3/4.6.1.7	Containment Ventilation System	X		X	X	X	X	
3/4.6.2.1	Containment Spray System	X				X		
3/4.6.2.2	Containment Cooling System	X				X		
3/4.6.3	Emergency Containment Filtering System	X			X		X	
3/4.6.4	Containment Isolation Valves	X		X			X	
3/4.6.5	Combustible Gas Control Monitors	X			X		X	
3/4.6.6	Post Accident Containment Vent System	X					X	
3/4.7	Plant Systems - Turbine Cycle							
3/4.7.1.1	Safety Valves	X		X		X		
3/4.7.1.2	Auxiliary Feedwater System	X						
3/4.7.1.3	Condensate Storage Tanks	X						
3/4.7.1.4	Specific Activity	X		X		X	X	
3/4.7.1.5	Main Steam Line Isolation Valves	X				X	X	
3/4.7.1.6	Standby Feedwater System		X					
3/4.7.2	Steam Generator Pressure/Temp. Limitation		X					
3/4.7.3	Component Cooling Water System	X		X	X		X	
3/4.7.4	Intake Cooling Water System	X			X		X	
3/4.7.5	Ultimate Heat Sink		X					
3/4.7.6	Flood Protection		X					
3/4.7.7	Control Room Emergency Air Cleanup	X			X	X	X	
3/4.7.8	Snubbers	X		X				
3/4.7.9	Sealed Source Contamination	X		X			X	
3/4.8	Electrical Power Systems							
3/4.8.1.1	A.C. Sources - Operating	X		X		X	X	
3/4.8.1.2	A.C. Sources - Shutdown		X					
3/4.8.2.1	D.C. Sources - Operating	X		X		X	X	
3/4.8.2.2	D.C. Sources - Shutdown		X					
3/4.8.3.1	Onsite Power Dist.-Operating	X		X		X	X	
3/4.8.3.2	Onsite Power Dist. - Shutdown		X					

TECHNICAL SPECIFICATIONS IMPROVEMENT MATRIX

TECH. SPEC. NUMBER	TITLE	IMPROVED FORMAT	IMPROVED/ADDITIONAL/MORE RESTRICTIVE: NEW TECH.SPEC.	LCO	APPLICABILITY MODES	ACTION STATEMENT	SURV. REQMNTS	OTHER
6.1	Responsibility	X						X
6.2	Organization							
6.2.1	Offsite	X						X
6.2.2	Facility Staff	X						X
6.2.3	Shift Technical Advisor	X						
6.3	Facility Staff Qualifications	X						X
6.4	Training	X						X
6.5	Review and Audit							
6.5.1	Plant Nuclear Safety Committee	X						X
6.5.2	Company Nuclear Review Board (CNRB)	X						X
6.6	Reportable Event Action	X						
6.7	Safety Limit Violation	X						X
6.8	Procedures and Programs	X						X
6.9	Reporting Requirements							
6.9.1	Routine Reports	X						X
6.9.2	Special Reporting Requirements	X						
6.10	Record Retention	X						X
6.11	Radiation Protection Program	X						
6.12	High Radiation Area	X						X
6.13	Process Control Program (PCP)	X						X
6.14	Offsite Dose Calculation Manual (ODCM)	X						
6.15	Major Changes to Liquid, Gaseous, and Solid Radwaste Treatment Systems		X					

NOTES: (1) The Standard Technical Specifications for Loose-Part Detection System and Motor-Operated Valve Thermal Overload Protection are not included in the revised Technical Specifications. These Technical Specifications are also not addressed in the current Turkey Point Technical Specification. The requirements of these Technical Specifications do not contribute to the primary success path of the plant safety analyses.

ATTACHMENT II

Insertion Instructions for Updating the
Proposed Revised Technical Specifications

ATTACHMENT II

Insertion Instructions for Updating the proposed
Revised Technical Specifications

The following instructions are for updating the September 29, 1986 Revised Technical Specification (RTS) package with Attachment I. All Attachment I updated pages, can quickly be identified by Rev. OA indicators.

Perform the following ACTIONS:

1) REPLACE Index pages XII and XVIII WITH Rev. OA pages XII and XVIII.

2) REPLACE the page labled "3/4.8 ELECTRICAL POWER SYSTEM TECHNICAL SPECIFICATIONS" (located between pages 3/4 7-26 and 3/4 9-1) WITH Rev. OA Electrical Power System Technical Specifications 3/4.8.1.1, 3/4.8.1.2, 3/4.8.2.1, 3/4.8.2.2, 3/4.8.3.1 and 3/4.8.3.2 (page numbers 3/4 8-1 through 3/4 8-17).

3) REPLACE the page labeled "3/4.8 ELECTRICAL POWER SYSTEMS BASES" (located between pages B3/4 7-8 and B3/4 9-1) WITH Rev. OA Electrical Power System Bases 3/4.8.1, 3/4.8.2 and 3/4.8.3 (page numbers B3/4 8-1 and B3/4 8-2).

4) REPLACE Matrix pages App. A-3 and App. A-6 WITH Rev. OA Matrix pages App. A-3 and App. A-6.

5) REPLACE No Significant Hazards Evaluation pages App. B 2-6, App. B 3/4 1-2 and App. B 3/4 1-3 WITH Rev. OA pages App. B 2-6, App. 3/4 1-2 and App. B 3/4 1-3.

6) INSERT REV. OA No Significant Hazards Evaluations 3/4.8.1.1, 3/4.8.1.2, 3/4.8.2.1, 3/4.8.2.2, 3/4.8.3.1 and 3/4.8.3.2 (pages App. B 3/4 8-1 through App. B 3/4 8-22) BETWEEN pages App. B 3/4 7-32 and App. B 3/4 9-1.