PROPOSED TECHNICAL SPECIFICATION CHANGES

ELECTRICAL POWER SYSTEMS

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

LIMITING CONDITION FOR OPERATION

3.8.2.5 All containment penetration conductor overcurrent protective devices shown in Table 3.8-1 shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one or more of the containment penetration conductor overcurrent protective devices shown in Table 3.8-1 inoperable:

a. De-energize the circuit(s) by tripping the associated backup circuit breaker within 72 hours and verifying the backup circuit breaker to be tripped at least once per 7 days thereafter; the provisions of Specification 3.0.4 are not applicable to overcurrent devices in circuits which have their backup circuit breakers tripped, or

b. Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.8.2.5 All containment penetration conductor overcurrent protective devices shown in Table 3.8-1 shall be demonstrated OPERABLE in accordance with the manufacturers' recommendations:

a. At least once per 18 months:

1. For at least one 6.9 kv reactor coolant pump circuit, such that all reactor coolant pump circuits and their associated backup circuits are demonstrated OPERABLE at least each 72 months by performance of:

(a) A CHANNEL CALIBRATION of the associated protective relays, and

(b) An integrated system functional test which includes simulated automatic actuation of the system and verifying that each relay and associated circuit breakers and control circuits function as designed.

2. For each type of 480 volt air frame protective device, such that all 480 volt air frame protective devices are demonstrated OPERABLE at least once each N x 18 months, where N is the number of devices of each type, by performance of:

(a) A calibration of the protective relays for devices that are actuated by protective relays which includes verification of the range, accuracy, and alarm/trip capability, and

SURVEILLANCE REQUIREMENTS (Continued)

(b) A functional test of protective devices that are actuated by protective relays which verifies that the protective device trips when its associated protective relays actuate, and

(c) A functional test which consists of injecting primary current in each overcurrent element mounted on the protective device at the specified setpoint and verifying that the protective device trips when each overcurrent element actuates. If any protective device fails to function as designed, all other protective devices of the same type shall be tested.

3. For more than 4 case protective devices, such that all protective devices of each type are demonstrated OPERABLE at least once each N x 18 months, where N is the number of devices of each type, by performance of:

(a) A functional test of at least one protective device of each type which consists of injection of primary current at the specified setpoint to the protective device and verifying that the protective device trips when the overcurrent elements are actuated. If any protective device fails to function as designed, all other protective devices of the same type shall be tested.

b. At least once per 60 months, by performing inspections and preventive maintenance on each protective device in accordance with procedures prepared in conjunction with its manufacturer's recommendations.

TABLE 3.8-1 (Continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

Primary Device Number	Backup Device Number	Location of Devices	System Powered
52-61G1	52-61H6	MCC 2B61	Safety Inject. Tank 2T2C Discharge MOV 2CV-5043-2
52-61G2	52-61K8	MCC 2B61	Check Valve Leakage Drain Valve 2CV-5106-2
52-31G1	52-31G2	MCC 2B31	Pzr Spray Isolation Valve 2CV-4654
52-41F4	42-41F5	MCC 2B41	Pzr Spray Isolation Valve 2CV-4656

3/4.8 ELECTRICAL POWER SYSTEMS

BASES

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 minimum specified independent and redundant A.C. and D.C. power sources and distribution systems satisfy the requirements of General Design Criteria 17 of Appendix "A" to 10 CFR 50.

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 accident analyses and are based upon maintaining at least one redundant set of 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 the other onsite A.C. source.

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.

The Surveillance Requirements for demonstrating the OPERABILITY of the diesel generators are in accordance with the recommendations of Regulatory Guides 1.9 "Selection of Diesel Generator Set Capacity for Standby Power Supplies", March 10, 1971, and 1.108 "Periodic Testing of Diesel Generator Units Used as Onsite Electric Power Systems at Nuclear Power Plants", Revision 1, August 1977.

Containment electrical penetrations and penetration conductors are protected by either de-energizing circuits not required during reactor operation or by demonstrating the OPERABILITY of primary and backup overcurrent protection circuit breakers during periodic surveillance. The 6.9 kv reactor coolant pump protective devices utilize protective relays as overcurrent elements. The protective device trips when the associated relays actuate. The 480 volt air frame protective devices utilize electro-mechanical overcurrent elements which are mounted on the protective device and, in some instances, protective relays to trip the protective device. Actuation of the overcurrent element or relay will trip the protective device. The molded case protective devices utilize magnetic or thermal-magnetic over-current elements which are contained in the protective device. Actuation of each overcurrent element will trip the protective device.