

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

2. By verifying the OPERABILITY of the required molded case and lower voltage circuit breakers, by selecting and functionally testing a representative sample of at least 10% of all the circuit breakers of that type. Circuit breakers selected for functional testing shall be selected on a rotating basis. The functional test shall consist of injecting a current input at the specified setpoint to each selected circuit breaker and verifying that each circuit breaker functions as designed. Circuit breakers found inoperable during functional testing shall be restored to OPERABLE status prior to resuming operation. For each circuit breaker found inoperable during the functional tests, an additional representative sample of at least 10% of all the circuit breakers of the inoperable type shall also be functionally tested until no more failures are found or all circuit breakers of that type have been functionally tested.
- b. At least once per 60 months by subjecting each circuit breaker to an inspection and preventive maintenance in accordance with procedures prepared in conjunction with its manufacturer's recommendations.

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ELECTRICAL POWER SYSTEMS

BASES (Continued)

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A list of the required containment penetration conductor overcurrent protective devices, with information on location, size and equipment powered by the protective circuit is maintained in the UFSAR. The list is limited to those overcurrent devices installed for the purpose of keeping circuit fault current below the penetration rating. It does not apply to other overcurrent devices which protect penetrations where fault currents are less than the sustained rating of the penetration. This is consistent with the requirements of IEEE 741-1986 which states that no special consideration is required to protect electrical penetrations that can indefinitely withstand the maximum fault current available. Setpoints are controlled by plant procedures and drawings and any additions, deletions or modifications to the containment penetration conductor overcurrent protective devices list is governed by Section 50.59 of 10 CFR Part 50.

SURVEILLANCE REQUIREMENTS (Continued)

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BASES (Continued)

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~~3. By visually inspecting a representative of at least 20% of all fuses installed to thermally protect electrical penetrations to verify that the installed fuse is the size and type specified for that application. Additionally, the above sample will be verified to be functional by voltage or resistance measurements, or by equipment operability checks. Fuses shall be selected on a rotating basis. For each fuse found to be the wrong size or type or is functionally inoperable, an additional representative sample of 10% shall be inspected as specified above until no further discrepancies are found or all fuses have been inspected or functionally tested.~~

b. At least once per 60 months by subjecting each circuit breaker to an inspection and preventive maintenance in accordance with procedures prepared in conjunction with its manufacturer's recommendations.

ELECTRICAL POWER SYSTEMS

BASES (Continued)

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~~Visual inspection and operability checks of fuses provide assurance of the fuses ability to protect containment electrical penetrations. Destructive testing of fuses is not considered necessary since it is industry knowledge that the reaction time of fuses will not increase or otherwise degrade in the non-conservative direction, since their operation is not dependent on mechanical motion. A 20% rotating representative sample assures that all fuses are inspected periodically.~~

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