Attachment A

ELECTRICAL POWER SYSTEMS

3/4.8.4 ELECTRICAL EQUIPMENT PROTECTIVE DEVICES

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

LIMITING CONDITION FOR OPERATION

3.8.4.1 All containment penetration conductor overcurrent protective devices required for penetration protection ~~shown in Table 3.8-1~~ shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one or more of the above required containment penetration conductor overcurrent protective device(s) inoperable:

a. Restore the protective device(s) to OPERABLE status or de-energize the circuit(s) by tripping the associated backup circuit breaker or racking out or removing the inoperable circuit breaker within 72 hours, declare the affected system or component inoperable, and verify the backup circuit breaker to be tripped or the inoperable circuit breaker racked out, or removed, 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, their inoperable circuit breakers racked out, or removed, or

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

SURVEILLANCE REQUIREMENTS

4.8.4.1 All containment penetration conductor overcurrent protective devices required for penetration protection ~~shown in Table 3.8-1~~ shall be demonstrated OPERABLE:

a. At least once per 18 months:

1. By verifying that the medium voltage (7.2 KV) circuit breakers are OPERABLE by selecting, on a rotating basis, at least 10% of the circuit breakers of each voltage level, and performing the following:

(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 and as specified in Table 3.8-1.

DELETE ENTIRE TABLE 3.8-1

(pages 3/4 8-18 thru 3/4 8-58b)

~~TABLE 3.8-1~~

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

EQUIP NO.-SYS/DESCRIPTION	DEVICE	LOCATION	TEST SETPOINT		RESPONSE TIME
7.2 KV Swgr.					
1) XPP0030A-RC Reactor Coolant Pump A	PRIMARY	XSW1A #9	LONG TIME	3960 Amps	≤ 15.75 Sec.
			INSTANT	5805 Amps	N/A
			GROUND INST.	11 Amps	N/A
BUS1A Normal Feed	BACKUP	XSW1A #5	LONG TIME	5544 Amps	≤ 15.33 Sec.
BUS1A Emergency Feed	BACKUP	XSW1A #3	LONG TIME	5544 Amps	≤ 15.33 Sec.
2) XPP0030B-RC Reactor Coolant Pump B	PRIMARY	XSW1B #7	LONG TIME	3960 Amps	≤ 15.75 Sec.
			INSTANT	5808 Amps	N/A
			GROUND INST.	11 Amps	N/A
BUS1B Normal Feed	BACKUP	XSW1B #5	LONG TIME	5544 Amps	≤ 15.33 Sec.
BUS1B Emergency Feed	BACKUP	XSW1B #3	LONG TIME	5544 Amps	≤ 15.33 Sec.
3) XPP0030C-RC Reactor Coolant Pump C	PRIMARY	XSW1C #3	LONG TIME	3960 Amps	≤ 15.75 Sec.
			INSTANT	5808 Amps	N/A
			GROUND INST.	11 Amps	N/A
BUS1C Normal Feed	BACKUP	XSW1C #9	LONG TIME	5544 Amps	≤ 15.33 Sec.
BUS1C Emergency Feed	BACKUP	XSW1C #13	LONG TIME	5544 Amps	≤ 15.33 Sec.

MOTOR OPERATED VALVES THERMAL OVERLOAD PROTECTION AND BYPASS DEVICES

LIMITING CONDITION FOR OPERATION

3.8.4.2 The thermal overload protection and bypass devices, integral with the motor starter, of each valve listed in Table 3.8-2 shall be OPERABLE.

APPLICABILITY: Whenever the motor operated valve is required to be OPERABLE.

ACTION:

With one or more of the thermal overload protection and/or bypass devices inoperable, declare the affected valve(s) inoperable and apply the appropriate ACTION Statement(s) for the affected valve(s).

SURVEILLANCE REQUIREMENTS

4.8.4.2 The above required thermal overload protection and bypass devices shall be demonstrated OPERABLE:

a. At least once per 18 months, by the performance of a TRIP ACTUATING DEVICE OPERATIONAL TEST of the bypass circuitry for those thermal overload devices which are either:

   1. Continuously bypassed and temporarily placed in force only when the valve motors are undergoing periodic or maintenance testing, or

   2. Normally in force during plant operation and bypassed under accident conditions.

b. At least once per 18 months by the performance of a CHANNEL CALIBRATION of a representative sample of at least 25% of:

   1. All thermal overload devices which are not bypassed, such that each non-bypassed device is calibrated at least once per 6 years.

   2. All thermal overload devices which are continuously bypassed and temporarily placed in force only when the valve motors are undergoing periodic or maintenance testing, and thermal overload devices normally in force and bypassed under accident conditions such that each thermal overload is calibrated and each valve is cycled through at least one complete cycle of full travel with the motor operator when the thermal overload is OPERABLE and not bypassed, at least once per 6 years.

TABLE 3.8-2

MOTOR OPERATED VALVES THERMAL OVERLOAD PROTECTION AND/OR BYPASS DEVICES

VALVE NUMBER	FUNCTION	BYPASS DEVICE (YES/NO)
XVB9503A - CC	RHR HX A ISOLATION VALVE	NO
XVB9503B - CC	RHR HX B ISOLATION VALVE	NO
XVG9568 - CC	Comp. Cool To RB MOV	YES
XVG9600 - CC	RC Pump At RB MOV	YES
XVG9605 - CC	RB, CC Return MOV	YES
XVG9606 - CC	RB, CC Return MOV	YES
XVG0115B - CS	RWST To CHARGING Pp. VALVE	YES
XVG0115C - CS	VCT TO CHARGING Pp. ISOL. VALVE	YES
XVG0115D - CS	RWST TO CHARGING Pp. VALVE	YES
XVG0115E - CS	VCT TO CHARGING Pp. ISOL. VALVE	YES
XVG8106 - CS	CHARGING Pump MINIFLOW VALVE	NO
XVG8107 - CS	RCS CHARGING LINE VALVE	YES
XVG8108 - CS	RCS CHARGING LINE VALVE	YES
XVG8130A - CS	CHARGING Pp. SUCTION HEADER ISOL. Vv.	NO
XVG8130B - CS	CHARGING Pp. SUCTION HEADER ISOL. Vv.	NO
XVG8131A - CS	CHARGING Pp. SUCTION HEADER ISOL Vv.	NO
XVG8131B - CS	CHARGING Pp. SUCTION HEADER ISOL. Vv.	NO
XVG8132A - CS	CHARGING Pp. DISCHARGE HEADER ISOL Vv.	NO
XVG8132B - CS	CHARGING Pp. DISCHARGE HEADER ISOL Vv.	NO
XVG8133A - CS	CHARGING Pp. DISCHARGE HEADER ISOL Vv.	NO
XVG8133B - CS	CHARGING Pp. DISCHARGE HEADER ISOL Vv.	NO
XVT8100 - CS	SEAL WATER RETURN ISOL VALVE	YES
XVT8109A - CS	CHARGING Pp. A MINIFLOW ISOL Vv.	NO
XVT8109B - CS	CHARGING Pp. B MINIFLOW ISOL Vv.	NO
XVT8109C - CS	CHARGING Pp. C MINIFLOW ISOL Vv.	NO
XVT8112 - CS	SEAL WATER RETURN ISOL Vv.	YES
XVG6797 - FS	FIRE SERVICE CONTAINMENT ISOL Vv.	YES
XVK1633A - FW	CHEMICAL FEED ISOL VALVE	YES
XVK1633B - FW	CHEMICAL FEED ISOL VALVE	YES
XVK1633C - FW	CHEMICAL FEED ISOL VALVE	YES
XVG2802A - MS	EFWP MAIN STEAM BLOCK	YES
XVG2802B - MS	EFWP MAIN STEAM BLOCK	YES
XVT2813 - MS	MAIN STEAM TO EFWP DRAIN	YES
XVG8706A - RH	RHRS TO CHARGING Pump VALVE	NO
XVG8706B - RH	RHRS TO CHARGING Pump Valve	NO
XVT0602A - RH	RHR Pump A MINIFLOW VALVE	NO
XVT0602B - RH	RHR Pump B MINIFLOW VALVE	NO
XVG8801A - SI	BORON INJ. TANK DISCHARGE VALVE	YES
XVG8801B - SI	BORON INJ. TANK DISCHARGE VALVE	YES
XVG8803A - SI	BORON INJ. TANK INLET ISOL. Vv.	YES
XVG8803B - SI	BORON INJ. TANK INLET ISOL Vv.	YES

VALVE NUMBER	FUNCTION	BYPASS DEVICE (YES/NO)
XVG8808A - SI	ACCUMULATOR A ISOL VALVE	YES
XVG8808B - SI	ACCUMULATOR B ISOL VALVE	YES
XVG8808C - SI	ACCUMULATOR C ISOL VALVE	YES
XVG8809A - SI	RWST TO RHR Pp. A ISOL Vv.	NO
XVG8809B - SI	RWST TO RHR Pp. B ISOL Vv.	NO
XVG8811A - SI	RECIRC SUMP TO RHR Pp. A ISOL Vv.	YES
XVG8811B - SI	RECIRC SUMP TO RHR Pp. B ISOL Vv.	YES
XVG8812A - SI	RECIRC SUMP TO RHR Pp. A ISOL Vv.	YES
XVG8812B - SI	RECIRC SUMP TO RHR Pp. B ISOL Vv.	YES
XVG8884 - SI	HIGH HEAD TO HOT LEG INJECTION HEADER ISOL Vv.	NO
XVG8885 - SI	HIGH HEAD TO COLD LEG INJECTION HEADER ISOL Vv.	NO
XVG8886 - SI	HIGH HEAD TO HOT LEG INJECTION HEADER ISOL Vv.	NO
XVG8887A - SI	LOW HEAD INJ. TO HOT LEG RECIRC LINE Vv.	NO
XVG8887B - SI	LOW HEAD INJ. TO HOT LEG RECIRC. LINE Vv.	NO
XVG8888A - SI	LOW HEAD TO COLD LEG INJECTION ISOL Vv., RHR Pump A	NO
XVG8888B - SI	LOW HEAD TO COLD LEG CROSS TIE VALVE	NO
XVG8889 - SI	LOW HEAD TO HOT LEG INJECTION RECIRC LINE ISOL Vv.	NO
XVG3001A - SP	RWST TO RB SPRAY Pp. A SUCTION Vv.	YES
XVG3001B - SP	RWST TO RB SPRAY Pp. B SUCTION Vv.	YES
XVG3002A - SP	NAOH TANK TO RB SPRAY Pp. A SUCTION Vv.	YES
XVG3002B - SP	NAOH TANK TO RB SPRAY Pp. B SUCTION Vv.	YES
XVG3003A - SP	SPRAY HEADERS ISOL CIRC. A Vv.	YES
XVG3003B - SP	SPRAY HEADERS ISOL CIRC. B Vv.	YES
XVB3106A - SW	SW BOOSTER PUMP A DISCHARGE	YES
XVB3106B - SW	SW BOOSTER PUMP B DISCHARGE	YES
XVB3110A - SW	IND. COOLING TO A RB COOLERS	YES
XVB3110B - SW	IND. COOLING TO B RB COOLERS	YES
XVG3103A - SW	A COOLERS OUTLET	YES
XVG3103B - SW	B COOLERS OUTLET	YES
XVG3107A - SW	A COOLERS TO SW POND	YES
XVG3107B - SW	B COOLERS TO SW POND	YES
XVG3111A - SW	A RB COOLERS TO IND. COOLING	YES
XVG3111B - SW	B RB COOLERS TO IND. COOLING	YES
XVG3112A - SW	A RB COOLERS TO IND. COOLING	YES
XVG3112B - SW	B RB COOLERS TO IND. COOLING	YES
XVG3108A - SW	RB COOLER 1A INLET	YES
XVG3108B - SW	RB COOLER 2A INLET	YES
XVG3108C - SW	RB COOLER 1B INLET	YES
XVG3108D - SW	RB COOLER 2B INLET	YES
XVG3109A - SW	RB COOLER 1A OUTLET	YES
XVG3109B - SW	RB COOLER 2A OUTLET	YES
XVG3109C - SW	RB COOLER 1B OUTLET	YES
XVG3109D - SW	RB COOLER 2B OUTLET	YES

VALVE NUMBER	FUNCTION	BYPASS DEVICE (YES/NO)
XVG1001A-EF	SW LOOP A TO MOTOR DRIVEN EF Pp.	YES
XVG1001B-EF	SW LOOP B TO MOTOR DRIVEN EF Pp.	YES
XVG1002-EF	SW LOOP B TO TURBINE DRIVEN EF Pp.	YES
XVG1008-EF	SW LOOP A TO TURBINE DRIVEN EF Pp.	YES
XVG1037A-EF	SW LOOP A TO EF	YES
XVG1037B-EF	SW LOOP B TO EF	YES
FCV8701A-RH	RHR Pp. INLET A ISOL Vv.	YES
FCV8701B-RH	RHR Pp. INLET B ISOL Vv.	YES
FCV8702A-RH	RHR Pp. INLET A ISOL Vv.	YES
FCV8702B-RH	RHR Pp. INLET B ISOL Vv.	YES
XVG3004A-SP	RB SPRAY SUMP A ISOL Vv.	YES
XVG3004B-SP	RB SPRAY SUMP B ISOL Vv.	YES
XVG3005A-SP	RB SPRAY SUMP A ISOL Vv.	YES
XVG3005B-SP	RB SPRAY SUMP B ISOL Vv.	YES

LIMITING CONDITION FOR OPERATION

3.8.4.3 Circuit breakers for non-Class 1E cables located in trays which do not have cable tray covers and which provide protection for cables that if faulted could cause failure in both adjacent, redundant Class 1E cables shall be OPERABLE.

APPLICABILITY: All modes

ACTION:

a. With one or more of the above required non-Class 1E circuit breaker(s) inoperable, within 72 hours, either:

1. Restore the circuit breaker(s) to OPERABLE status; or
2. De-energize the circuit breaker(s); or
3. Establish a one (1) hour roving fire watch for those areas in which redundant systems or components could be damaged.

b. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.8.4.3 The above required circuit breakers shall be demonstrated OPERABLE.

a. At least once per eighteen (18) months:

1. By verifying that the medium voltage (7.2 KV) circuit breakers are OPERABLE by selecting, on a rotating basis, at least 10% of the circuit breakers and performing the following:

(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.

(c) For each circuit breaker found inoperable during these 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.

SURVEILLANCE REQUIREMENTS (Continued)

2. By selecting and functionally testing a representative sample of at least ten percent (10%) of each type of lower voltage circuit breakers. Circuit breakers selected for functional testing shall be selected on a rotating basis. Testing of these circuit breakers shall consist of injecting a current in excess of the breaker's nominal setpoint and measuring the response time. The measured response time will be compared to the manufacturer's data to insure that it is less than or equal to a value specified by the manufacturer. Circuit breakers found inoperable during functional testing shall be restored to OPERABLE status prior to resuming operation. For each circuit breaker found inoperable during these functional tests, an additional representative sample of at least ten percent (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 sixty (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.