

TABLE 3.3-4

## ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION TRIP SETPOINTS

Functional Unit	Total Allowance (TA)	(1) $\bar{z}$ (1)	(S) (1 & 2)	Trip Setpoint	Allowable Value
6. Safety Injection	See 1 above (all SI setpoints)				
l. Trips of Main Feedwater Pumps	NA	NA	NA	NA	NA
h. Suction transfer on Low Pressure	NA	NA	NA	$\geq 442$ ft. 4 in. (4)	$\geq 441$ ft. 3 in. <del>(later)</del>
7. LOSS OF POWER					
a. 7.2 kV Emergency Bus Undervoltage (Loss of Voltage)	NA	NA	NA	$\geq 5760$ Volts with a $\leq 0.25$ second time delay	$\geq 5652$ Volts with a $\leq 0.275$ second time delay.
b. 7.2 kv Emergency Bus Under-voltage	NA	NA	NA	$\geq 6576$ Volts with a $\leq 3.0$ second time delay	$\geq 6511$ Volts with a $\leq 3.3$ second time delay
8. AUTOMATIC SWITCHOVER TO CONTAINMENT SUMP					
a. RWST Level Low-Low	NA	NA	NA	$\geq 18\%$	$\geq 15\%$
b. Automatic Actuation Logic and Actuation Relays.	NA	NA	NA	NA	NA

(1) Units in percent span

(2) S = Sensor drift plus sensor calibration accuracy

(4) Pump suction head at which transfer is initiated is stated in effective water elevation in the condensate storage tank

## CONTAINMENT SYSTEMS

### ELECTRIC HYDROGEN RECOMBINERS

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#### LIMITING CONDITION FOR OPERATION

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3.6.5.2 Two independent post accident hydrogen recombiner systems shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

ACTION:

With one hydrogen recombiner system inoperable, restore the inoperable system to OPERABLE status within 30 days or be in at least HOT STANDBY within the next 6 hours.

#### SURVEILLANCE REQUIREMENTS

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4.6.5.2 Each hydrogen recombiner system shall be demonstrated OPERABLE:

- a. At least once per 6 months by verifying, during a recombiner system functional test, that the minimum heater sheath temperature increases to greater than or equal to 700°F within 90 minutes. Upon reaching 700°F, increase the power setting to maximum power for 2 minutes and verify that the power meter reads greater than or equal to 60 Kw.
- b. At least once per 18 months by:
  1. Performing a CHANNEL CALIBRATION of all recombiner instrumentation and control circuits,
  2. Verifying through a visual examination that there is no evidence of abnormal conditions within the recombiner enclosure (i.e., loose wiring or structural connections, deposits of foreign materials, etc.), and
  3. Verifying the integrity of all heater electrical circuits by performing a resistance to ground test following the above required functional test. The resistance to ground for any heater ~~phase~~ shall be greater than or equal to 10,000 ohms.

bank

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

EQUIP NO. - SYS/DESCRIPTION	DEVICE	LOCATION	TEST SETPOINT	RESPONSE TIME
480 V SWGR.				
1) XFN0067A-AH CRDM CLNG. SYS. FAN A	PRIMARY	XSW1A3/1C	LONG TIME 540 Amps SHORT TIME 2700 Amps INSTANT <del>3375</del> 2025 Amps	< <sup>30</sup> <del>12</del> Sec. < 0.17 Sec. < 0.09 Sec.
XSW1A3 MAIN INCOMING	BACKUP	XSW1A3/4B	LONG TIME 4800 Amps SHORT TIME 7200 Amps INSTANT N/A	< 12 Sec. < 0.50 Sec. N/A
BUS TIE TO XSWIC3	BACKUP	XSW1A3/4C	LONG TIME 3000 Amps SHORT TIME 4500 Amps INSTANT N/A	< 12 Sec. < 0.32 Sec. N/A
2) XFN0067D-AH CDRM CLNG. SYS. FAN D	PRIMARY	XSW1A3/BA	LONG TIME 540 Amps SHORT TIME 2700 Amps INSTANT <del>3375</del> 2025 Amps	< <sup>30</sup> <del>12</del> Sec. < 0.17 Sec. < 0.09 Sec.
XSW1A3 MAIN INCOMING	BACKUP	XSW1A3/4B	LONG TIME 4800 Amps SHORT TIME 7200 Amps INSTANT N/A	< 12 Sec. < 0.50 Sec. N/A
BUS TIE TO XSWIC3	BACKUP	XSW1A3/4C	LONG TIME 3000 Amps SHORT TIME 4500 Amps INSTANT N/A	< 12 Sec. < 0.32 Sec. N/A
3) XCR0004-FH REACTOR BLDG POLAR CRANE	PRIMARY	XSW1A3/2C	LONG TIME 744 Amps SHORT TIME N/A INSTANT 4050 Amps	< 98 Sec. N/A < 0.09 Sec.
XSW1A3 MAIN INCOMING	BACKUP	XSW1A3/4B	LONG TIME 4800 Amps SHORT TIME 7200 Amps INSTANT N/A	< 12 Sec. < 0.50 Sec. N/A

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## CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

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TABLE 3.8-1 (continued)

## CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

EQUIP NO. - SYS/DESCRIPTION	DEVICE	LOCATION	TEST SETPOINT	RESPONSE TIME
6) CONTINUED: 200 AMP FUSE		XPN 547I	$\geq 3.75$ Milliohms	N/A
<del>XSW1B3 MAIN INCOMING</del>	BACKUP	<del>XSW1B3/4B</del>	<del>LONG TIME 9000 Amps</del>	<del>&lt; 12 Sec.</del>
			<del>SHORT TIME 9000 Amps</del>	<del>&lt; 0.50 Sec.</del>
			<del>INSTANT N/A</del>	<del>N/A</del>
<del>EMERGENCY FEED FROM</del>	BACKUP	<del>XSW1B3/3B</del>	<del>LONG TIME 4800 Amps</del>	<del>&lt; 12 Sec.</del>
<del>XSW1DB1</del>			<del>SHORT TIME 6000 Amps</del>	<del>&lt; 0.32 Sec.</del>
			<del>INSTANT N/A</del>	<del>N/A</del>
7) XFN00067C-AH	PRIMARY	XSW1C3/2D	LONG TIME 540 Amps	< 30 Sec.
CDRM CLNG. SYSTEM FAN C			SHORT TIME 2700 Amps	< 0.17 Sec.
			INSTANT <del>3375</del> 2025 Amps	< 0.09 Sec.
XSW1C3 MAIN INCOMING	BACKUP	XSW1C3/3B	LONG TIME 4800 Amps	< 12 Sec.
			SHORT TIME 7200 Amps	< 0.50 Sec.
			INSTANT N/A	N/A
BUS TIE TO XSW1A3	BACKUP	XSW1A3/1C	LONG TIME 3000 Amps	< 12 Sec.
			SHORT TIME 4500 Amps	< 0.32 Sec.
			INSTANT N/A	N/A
8) MFN0097B-AH	PRIMARY	XSW1DB1/6D	LONG TIME 525 Amps	< 30 Sec.
R.B. CLNG. UNIT FAN			SHORT TIME 1500 Amps	< 0.17 Sec.
XFN64B EMERGENCY MOTOR			INSTANT 2250 Amps	< 0.09 Sec.
XSW1DB1 MAIN INCOMING	BACKUP	XSW1DB1/4B	LONG TIME <del>9000</del> 6300 Amps	< 12 Sec.
			SHORT TIME 9000 Amps	< 0.50 Sec.
			INSTANT N/A	N/A
9) MFN0096B-AH	PRIMARY	XSW1DB1/7B	LONG TIME 1260 Amps	< 30 Sec.
R.B. CLNG. UNIT FAN			SHORT TIME 5400 Amps	< 0.17 Sec.
XFN64B NORMAL MOTOR			INSTANT <del>7200</del> 5400 Amps	< 0.09 Sec.

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO. -SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
9) CONTINUED:				
XSWIDB1 MAIN INCOMING	BACKUP	XSWIDB1/4B	LONG TIME <del>9000</del> <sup>6300</sup> Amps SHORT TIME 9000 Amps INSTANT N/A	< 12 Sec. ≤ 0.50 Sec. N/A
10) MFN0096C-AH R.B. CLNG. UNIT FAN XFN65A NORMAL MOTOR	PRIMARY	XSWIDA1/5B	LONG TIME 1260 Amps SHORT TIME 5400 Amps INSTANT <del>7200</del> <sup>5400</sup> Amps	< 30 Sec. ≤ 0.17 Sec. ≤ 0.09 Sec.
XSWIDA1 MAIN INCOMING	BACKUP	XSWIDA1/4B	LONG TIME <del>9000</del> <sup>6300</sup> Amps SHORT TIME 9000 Amps INSTANT N/A	< 12 Sec. ≤ 0.50 Sec. N/A
11) MFN0097C-AH R.B. CLNG. UNIT FAN XFN65A EMERGENCY MOTOR	PRIMARY	XSWIDA1/6C	LONG TIME 525 Amps SHORT TIME 1500 Amps INSTANT 2250 Amps	< 30 Sec. ≤ 0.17 Sec. ≤ 0.09 Sec.
XSWIDA1 MAIN INCOMING	BACKUP	XSWIDA1/4B	LONG TIME <del>9000</del> <sup>6300</sup> Amps SHORT TIME 9000 Amps INSTANT N/A	< 12 Sec. ≤ 0.50 Sec. N/A
12) MFN0096A-AH R.B. CLNG. UNIT FAN XFN64A NORMAL MOTOR	PRIMARY	XSWIDA1/6B	LONG TIME 1260 Amps SHORT TIME 5400 Amps INSTANT <del>7200</del> <sup>5400</sup> Amps	< 30 Sec. ≤ 0.17 Sec. ≤ 0.09 Sec.
XSWIDA1 MAIN INCOMING	BACKUP	XSWIDA1/4B	LONG TIME <del>9000</del> <sup>6300</sup> Amps SHORT TIME 9000 Amps INSTANT N/A	< 12 Sec. ≤ 0.17 Sec. N/A
13) MFN0097A-AH R.B. CLNG. UNIT FAN XFN64A EMERGENCY MOTOR	PRIMARY	XSWIDA1/5C	LONG TIME 525 Amps SHORT TIME 1500 Amps INSTANT 2250 Amps	< 30 Sec. ≤ 0.17 Sec. ≤ 0.09 Sec.

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TABLE 3.8-1 (continued)

## CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO. - SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
13) CONTINUED:				
XSWIDA1 MAIN INCOMING	BACKUP	XSWIDA1/4B	LONG TIME <del>9000</del> Amps SHORT TIME 9000 Amps INSTANT N/A	< 12 Sec. < 0.50 Sec. N/A
14) MFN0096D-AH R.B. CLNG. UNIT FAN XFN65B NORMAL MOTOR	PRIMARY	XSWIDB1/7C	LONG TIME 1260 Amps SHORT TIME 5400 Amps INSTANT <del>7200</del> Amps <del>5400</del> Amps	< 30 Sec. < 0.17 Sec. < 0.09 Sec.
XSWIDB1 MAIN INCOMING	BACKUP	XSWIDB1/4B	LONG TIME <del>9000</del> Amps SHORT TIME 9000 Amps INSTANT N/A	< 12 Sec. < 0.50 Sec. N/A
15) MFN0097D-AH R.B. CLNG. UNIT FAN XFN65B EMERGENCY MOTOR	PRIMARY	XSWIDB1/6C	LONG TIME 525 Amps SHORT TIME 1500 Amps INSTANT 2250 Amps	< 30 Sec. < 0.17 Sec. < 0.09 Sec.
XSWIDB1 MAIN INCOMING	BACKUP	XSWIDB1/4B	LONG TIME <del>9000</del> Amps SHORT TIME 9000 Amps INSTANT N/A	< 12 Sec. < 0.50 Sec. N/A
16) XHR0004A-IIR H <sub>2</sub> RECOMBINER PWR. PNL. TO RECOMBINER FEED	PRIMARY	XSWIDA2/5C	LONG TIME 315 Amps SHORT TIME N/A INSTANT 900 Amps	< 12 Sec. N/A < 0.09 Sec.
XSWIDA2 MAIN INCOMING	BACKUP	XSWIDA2/4B	LONG TIME 4800 Amps SHORT TIME 7200 Amps INSTANT N/A	< 12 Sec. < 0.50 Sec. N/A
17) XHR0004B-IIR H <sub>2</sub> RECOMBINER PWR. PNL. TO RECOMBINER FEED	PRIMARY	XSWIDB2/5C	LONG TIME 315 Amps SHORT TIME N/A INSTANT 900 Amps	< 12 Sec. N/A < 0.09 Sec.

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO. - SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
17) CONTINUED:				
XSWIDB2 MAIN INCOMING	BACKUP	XSWIDB2/4B	LONG TIME 4800 Amps SHORT TIME 7200 Amps INSTANT N/A	< 12 Sec. ≤ 0.50 Sec. N/A
440 Vac CDRM PWR. CAB. IAC, CONTROL BANK A,				
18) MECHANISM 1 -				
XCA1A-CR A59-Fu13	PRIMARY	XCA1A	> <sup>6</sup> <del>10</del> Milliohms	N/A
XCA1A-CR A59-Fu17	BACKUP	XCA1A	> <sup>6</sup> <del>10</del> Milliohms	N/A
XCA1A-CR A51-Fu1	PRIMARY	XCA1A	> 1.4 Milliohms	N/A
XCA1A-CR A57-Fu1	BACKUP	XCA1A	> 1.4 Milliohms	N/A
XCA1A-CR A59-Fu21	PRIMARY	XCA1A	> <sup>6</sup> <del>10</del> Milliohms	N/A
XCA1A-CR A61-Fu45	BACKUP	XCA1A	> <sup>6</sup> <del>10</del> Milliohms	N/A
19) MECHANISM 2 -				
XCA1A-CR A59-Fu14	PRIMARY	XCA1A	> <sup>6</sup> <del>10</del> Milliohms	N/A
XCA1A-CR A59-Fu18	BACKUP	XCA1A	> <sup>6</sup> <del>10</del> Milliohms	N/A
XCA1A-CR A51-Fu2	PRIMARY	XCA1A	> 1.4 Milliohms	N/A
XCA1A-CR A57-Fu2	BACKUP	XCA1A	> 1.4 Milliohms	N/A
XCA1A-CR A59-Fu22	PRIMARY	XCA1A	> <sup>6</sup> <del>10</del> Milliohms	N/A
XCA1A-CR A61-Fu46	BACKUP	XCA1A	> <sup>6</sup> <del>10</del> Milliohms	N/A

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO. - SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
CRDM PWR. CAB. 1AC, CONTINUED:				
20) MECHANISM 3 -				
XCA1A-CR A59-Fu15	PRIMARY	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1A-CR A59-Fu19	BACKUP	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1A-CR A52-Fu1	PRIMARY	XCA1A	$\geq 1.4$ Milliohms	N/A
XCA1A-CR A58-Fu1	BACKUP	XCA1A	$\geq 1.4$ Milliohms	N/A
XCA1A-CR A59-Fu23	PRIMARY	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1A-CR A61-Fu47	BACKUP	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
21) MECHANISM 4 -				
XCA1A-CR A59-Fu16	PRIMARY	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1A-CR A59-Fu20	BACKUP	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1A-CR A52-Fu2	PRIMARY	XCA1A	$\geq 1.4$ Milliohms	N/A
XCA1A-CR A58-Fu2	BACKUP	XCA1A	$\geq 1.4$ Milliohms	N/A
XCA1A-CR A59-Fu24	PRIMARY	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1A-CR A61-Fu48	BACKUP	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
440 Vac CRDM POWER CABINET 1AC, CONTROL BANK C, GROUP 1				
22) MECHANISM 1 -				
XCA1A-CR A60-Fu25	PRIMARY	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1A-CR A60-Fu29	BACKUP	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO. - SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
CROM PWR. CAB. 1AC, CONTINUED:				
XCA1A-CR A53-Fu1	PRIMARY	XCA1A	$\geq 1.4$ Milliohms	N/A
XCA1A-CR A57-Fu1	BACKUP	XCA1A	$\geq 1.4$ Milliohms	N/A
XCA1A-CR A60-Fu33	PRIMARY	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1A-CR A61-Fu45	BACKUP	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
23) MECHANISM 2 -				
XCA1A-CR A60-Fu26	PRIMARY	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1A-CR A60-Fu30	BACKUP	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1A-CR A53-Fu2	PRIMARY	XCA1A	$\geq 1.4$ Milliohms	N/A
XCA1A-CR A57-Fu2	BACKUP	XCA1A	$\geq 1.4$ Milliohms	N/A
XCA1A-CR A60-Fu34	PRIMARY	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1A-CR A61-Fu46	BACKUP	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
24) MECHANISMS 3 -				
XCA1A-CR A60-Fu27	PRIMARY	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1A-CR A60-Fu31	BACKUP	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1A-CR A54-Fu1	PRIMARY	XCA1A	$\geq 1.4$ Milliohms	N/A
XCA1A-CR A58-Fu1	BACKUP	XCA1A	$\geq 1.4$ Milliohms	N/A
XCA1A-CR A60-Fu35	PRIMARY	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1A-CR A61-Fu47	BACKUP	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO. - SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
CRDM PWR. CAB. 1AC, CONTINUED:				
25) MECHANISM 4 -				
XCA1A-CR A60-Fu28	PRIMARY	XCA1A	$\geq \frac{6}{10}$ Milliohms	N/A
XCA1A-CR A60-Fu32	BACKUP	XCA1A	$\geq \frac{6}{10}$ Milliohms	N/A
XCA1A-CR A54-Fu2	PRIMARY	XCA1A	$\geq 1.4$ Milliohms	N/A
XCA1A-CR A58-Fu2	BACKUP	XCA1A	$\geq 1.4$ Milliohms	N/A
XCA1A-CR A60-Fu36	PRIMARY	XCA1A	$\geq \frac{6}{10}$ Milliohms	N/A
XCA1A-CR A61-Fu48	BACKUP	XCA1A	$\geq \frac{6}{10}$ Milliohms	N/A
440 VAC CRDM POWER CABINET 1AC, SHUTDOWN BANK A, GROUP 1				
26) MECHANISM 1 -				
XCA1A-CR A61-Fu41	PRIMARY	XCA1A	$\geq \frac{6}{10}$ Milliohms	N/A
XCA1A-CR A60-Fu37	BACKUP	XCA1A	$\geq \frac{6}{10}$ Milliohms	N/A
XCA1A-CR A55-Fu1	PRIMARY	XCA1A	$\geq 1.4$ Milliohms	N/A
XCA1A-CR A57-Fu1	BACKUP	XCA1A	$\geq 1.4$ Milliohms	N/A
XCA1A-CR A61-Fu49	PRIMARY	XCA1A	$\geq \frac{6}{10}$ Milliohms	N/A
XCA1A-CR A61-Fu45	BACKUP	XCA1A	$\geq \frac{6}{10}$ Milliohms	N/A
27) MECHANISM 2 -				
XCA1A-CR A61-Fu42	PRIMARY	XCA1A	$\geq \frac{6}{10}$ Milliohms	N/A
XCA1A-CR A60-Fu38	BACKUP	XCA1A	$\geq \frac{6}{10}$ Milliohms	N/A

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TABLE 3.8-1 (continued)

## CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

EQUIP NO. - SYS/DESCRIPTION		DEVICE	LOCATION	TEST SETPOINT	RESPONSE TIME
CRDM PWR. CAB. 1AC, CONTINUED:					
XCA1A-CR	A55-Fu2	PRIMARY	XCA1A	$\geq 1.4$ Milliohms	N/A
XCA1A-CR	A57-Fu2	BACKUP	XCA1A	$\geq 1.4$ Milliohms	N/A
XCA1A-CR	A61-Fu50	PRIMARY	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1A-CR	A61-Fu46	BACKUP	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
28) MECHANISM 3 -					
XCA1A-CR	A61-Fu43	PRIMARY	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1A-CR	A60-Fu39	BACKUP	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1A-CR	A56-Fu1	PRIMARY	XCA1A	$\geq 1.4$ Milliohms	N/A
XCA1A-CR	A58-Fu1	BACKUP	XCA1A	$\geq 1.4$ Milliohms	N/A
XCA1A-CR	A61-Fu51	PRIMARY	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1A-CR	A61-Fu47	BACKUP	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
29) MECHANISMS 4 -					
XCA1A-CR	A61-Fu44	PRIMARY	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1A-CR	A60-Fu40	BACKUP	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1A-CR	A56-Fu2	PRIMARY	XCA1A	$\geq 1.4$ Milliohms	N/A
XCA1A-CR	A58-Fu2	BACKUP	XCA1A	$\geq 1.4$ Milliohms	N/A
XCA1A-CR	A61-Fu52	PRIMARY	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1A-CR	A61-Fu48	BACKUP	XCA1A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO. - SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
440 VAC CRDM POWER CABINET 2AC, SHUTDOWN BANK A, GROUP 2				
30) MECHANISM 1 -				
XCA2A-CR A59-Fu13	PRIMARY	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2A-CR A59-Fu17	BACKUP	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2A-CR A51-Fu1	PRIMARY	XCA2A	$\geq 1.4$ Milliohms	N/A
XCA2A-CR A57-Fu1	BACKUP	XCA2A	$\geq 1.4$ Milliohms	N/A
XCA2A-CR A59-Fu21	PRIMARY	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2A-CR A61-Fu45	BACKUP	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
31) MECHANISM 2 -				
XCA2A-CR A59-Fu14	PRIMARY	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2A-CR A59-Fu18	BACKUP	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2A-CR A51-Fu2	PRIMARY	XCA2A	$\geq 1.4$ Milliohms	N/A
XCA2A-CR A57-Fu2	BACKUP	XCA2A	$\geq 1.4$ Milliohms	N/A
XCA2A-CR A59-Fu15	PRIMARY	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2A-CR A59-Fu19	BACKUP	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
32) MECHANISM 3 -				
XCA2A-CR A59-Fu15	PRIMARY	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2A-CR A59-Fu19	BACKUP	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO.</u>	<u>-SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>	
CRDM PWR. CAB. 2 AC, CONTINUED:						
	XCA2A-CR	A52-Fu11	PRIMARY	XCA2A	$\geq 1.4$ Milliohms	N/A
	XCA2A-CR	A58-Fu1	BACKUP	XCA2A	$\geq 1.4$ Milliohms	N/A
	XCA2A-CR	A59-Fu23	PRIMARY	XCA2A	$\geq \overset{6}{10}$ Milliohms	N/A
	XCA2A-CR	A61-Fu47	BACKUP	XCA2A	$\geq \overset{6}{10}$ Milliohms	N/A
33)	MECHANISM 4 -					
	XCA2A-CR	A59-Fu16	PRIMARY	XCA2A	$\geq \overset{6}{10}$ Milliohms	N/A
	XCA2A-CR	A59-Fu20	BACKUP	XCA2A	$\geq \overset{6}{10}$ Milliohms	N/A
	XCA2A-CR	A52-Fu2	PRIMARY	XCA2A	$\geq 1.4$ Milliohms	N/A
	XCA2A-CR	A58-Fu2	BACKUP	XCA2A	$\geq 1.4$ Milliohms	N/A
	XCA2A-CR	A59-Fu24	PRIMARY	XCA2A	$\geq \overset{6}{10}$ Milliohms	N/A
	XCA2A-CR	A61-Fu45	BACKUP	XCA2A	$\geq \overset{6}{10}$ Milliohms	N/A
440 VAC CRDM POWER CABINET 2 AC, CONTROL BANK C, GROUP 2						
34)	MECHANISM 1-					
	XCA2A-CR	A60-F25	PRIMARY	XCA2A	$\geq \overset{6}{10}$ Milliohms	N/A
	XCA2A-CR	A60-Fu29	BACKUP	XCA2A	$\geq \overset{6}{10}$ Milliohms	N/A
	XCA2A-CR	A53-Fu1	PRIMARY	XCA2A	$\geq 1.4$ Milliohms	N/A
	XCA2A-CR	A57-Fu1	BACKUP	XCA2A	$\geq 1.4$ Milliohms	N/A

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO. - SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
CRDM PWR. CAB. 2 AC, CONTINUED:				
XCA2A-CR A60-Fu33	PRIMARY	XCA2A	$\geq \frac{6}{10}$ Milliohms	N/A
XCA2A-CR A61-Fu45	BACKUP	XCA2A	$\geq \frac{6}{10}$ Milliohms	N/A
35) MECHANISM 2 -				
XCA2A-CR A60-Fu26	PRIMARY	XCA2A	$\geq \frac{6}{10}$ Milliohms	N/A
XCA2A-CR A60-Fu30	BACKUP	XCA2A	$\geq \frac{6}{10}$ Milliohms	N/A
XCA2A-CR A53-Fu2	PRIMAPY	XCA2A	$\geq 1.4$ Milliohms	N/A
XCA2A-CR A57-Fu2	BACKU.	XCA2A	$\geq 1.4$ Milliohms	N/A
XCA2A-CR A60-Fu34	PRIMARY	XCA2A	$\geq \frac{6}{10}$ Milliohms	N/A
XCA2A-CR A60-Fu46	BACKUP	XCA2A	$\geq \frac{6}{10}$ Milliohms	N/A
36) MECHANISM 3 -				
XCA2A-CR A60-Fu27	PRIMARY	XCA2A	$\geq \frac{6}{10}$ Milliohms	N/A
XCA2A-CR A60-Fu31	BACKUP	XCA2A	$\geq \frac{6}{10}$ Milliohms	N/A
XCA2A-CR A54-Fu1	PRIMARY	XCA2A	$\geq 1.4$ Milliohms	N/A
XCA2A-CR A58-Fu1	BACKUP	XCA2A	$\geq 1.4$ Milliohms	N/A
XCA2A-CR A60-Fu35	PRIMARY	XCA2A	$\geq \frac{6}{10}$ Milliohms	N/A
XCA2A-CR A61-Fu47	BACKUP	XCA2A	$\geq \frac{6}{10}$ Milliohms	N/A

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO. - SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
CRDM POW. CAB. 2AC, CONTINUED:				
37) MECHANISM 4 -				
XCA2A-CR A60-Fu28	PRIMARY	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2A-CR A60-Fu32	BACKUP	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2A-CR A54-Fu2	PRIMARY	XCA2A	$\geq 1.4$ Milliohms	N/A
XCA2A-CR A58-Fu2	BACKUP	XCA2A	$\geq 1.4$ Milliohms	N/A
XCA2A-CR A60-Fu36	PRIMARY	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2A-CR A61-Fu48	BACKUP	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
440 VAC CRDM POWER CABINET 2AC, SHUTDOWN BANK A, GROUP 2				
38) MECHANISM 1 -				
XCA2A-CR A61-Fu41	PRIMARY	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2A-CR A60-Fu37	BACKUP	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2A-CR A55-Fu1	PRIMARY	XCA2A	$\geq 1.4$ Milliohms	N/A
XCA2A-CR A57-Fu2	BACKUP	XCA2A	$\geq 1.4$ Milliohms	N/A
XCA2A-CR A61-Fu49	PRIMARY	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2A-CR A61-Fu45	BACKUP	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
39) MECHANISM 2 -				
XCA2A-CR A61-Fu42	PRIMARY	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2A-CR A60-Fu38	BACKUP	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO.-SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
CRDM PWR. CAB. 2 AC, CONTINUED:				
XCA2A-CR A55-Fu2	PRIMARY	XCA2A	$\geq 1.4$ Milliohms	N/A
XCA2A-CR A57-Fu2	BACKUP	XCA2A	$\geq 1.4$ Milliohms	N/A
XCA2A-CR A61-Fu50	PRIMARY	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2A-CR A61-Fu46	BACKUP	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
40) MECHANISM 3 -				
XCA2A-CR A61-Fu43	PRIMARY	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2A-CR A60-Fu39	BACKUP	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2A-CR A56-Fu1	PRIMARY	XCA2A	$\geq 1.4$ Milliohms	N/A
XCA2A-CR A58-Fu1	BACKUP	XCA2A	$\geq 1.4$ Milliohms	N/A
XCA2A-CR A61-Fu51	PRIMARY	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2A-CR A61-Fu47	BACKUP	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
41) MECHANISM 4-				
XCA2A-CR A61-Fu44	PRIMARY	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2A-CR A60-Fu40	BACKUP	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2A-CR A56-Fu2	PRIMARY	XCA2A	$\geq 1.4$ Milliohms	N/A
XCA2A-CR A58-Fu2	BACKUP	XCA2A	$\geq 1.4$ Milliohms	N/A
XCA2A-CR A61-Fu52	PRIMARY	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2A-CR A61-Fu48	BACKUP	XCA2A	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO. -SYS/DESCRIPTION</u>		<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
440 VAC CRDM POWER CABINET 1BD, SHUTDOWN BANK B, GROUP 1					
42) MECHANISM 1 -					
XCA1B-CR	A59-Fu13	PRIMARY	XCA1B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1B-CR	A59-Fu17	BACKUP	XCA1B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1B-CR	A51-Fu1	PRIMARY	XCA1B	$\geq 1.4$ Milliohms	N/A
XCA1B-CR	A57-Fu1	BACKUP	XCA1B	$\geq 1.4$ Milliohms	N/A
XCA1B-CR	A59-Fu21	PRIMARY	XCA1B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1B-CR	A61-Fu45	BACKUP	XCA1B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
43) MECHANISM 2 -					
XCA1B-CR	A59-Fu14	PRIMARY	XCA1B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1B-CR	A59-Fu18	BACKUP	XCA1B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1B-CR	A51-Fu2	PRIMARY	XCA1B	$\geq 1.4$ Milliohms	N/A
XCA1B-CR	A57-Fu2	BACKUP	XCA1B	$\geq 1.4$ Milliohms	N/A
XCA1B-CR	A59-Fu22	PRIMARY	XCA1B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1B-CR	A61-Fu46	BACKUP	XCA1B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
44) MECHANISM 3 -					
XCA1B-CR	A59-Fu15	PRIMARY	XCA1B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1B-CR	A59-Fu19	BACKUP	XCA1B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO.-SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
CRDM PWR. CAB. 1BD, CONTINUED:				
XCA1B-CR A52-Fu1	PRIMARY	XCA1B	$\geq 1.4$ Milliohms	N/A
XCA1B-CR A58-Fu1	BACKUP	XCA1B	$\geq 1.4$ Milliohms	N/A
XCA1B-CR A59-Fu23	PRIMARY	XCA1B	$\geq \overset{6}{10}$ Milliohms	N/A
XCA1B-CR A61-Fu47	BACKUP	XCA1B	$\geq \overset{6}{10}$ Milliohms	N/A
45) MECHANISM 4 -				
XCA1B-CR A59-Fu16	PRIMARY	XCA1B	$\geq \overset{6}{10}$ Milliohms	N/A
XCA1B-CR A59-Fu20	BACKUP	XCA1B	$\geq \overset{6}{10}$ Milliohms	N/A
XCA1B-CR A52-Fu2	PRIMARY	XCA1B	$\geq 1.4$ Milliohms	N/A
XCA1B-CR A58-Fu2	BACKUP	XCA1B	$\geq 1.4$ Milliohms	N/A
XCA1B-CR A59-Fu24	PRIMARY	XCA1B	$\geq \overset{6}{10}$ Milliohms	N/A
XCA1B-CR A61-Fu48	BACKUP	XCA1B	$\geq \overset{6}{10}$ Milliohms	N/A
440 VAC CRDM POWER CABINET, CONTROL BANK D, GROUP 1				
46) MECHANISM 1 -				
XCA1B-CR A60-Fu25	PRIMARY	XCA1B	$\geq \overset{6}{10}$ Milliohms	N/A
XCA1B-CR A60-Fu29	BACKUP	XCA1B	$\geq \overset{6}{10}$ Milliohms	N/A
XCA1B-CR A53-Fu1	PRIMARY	XCA1B	$\geq 1.4$ Milliohms	N/A
XCA1B-CR A57-Fu1	BACKUP	XCA1B	$\geq 1.4$ Milliohms	N/A

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO. - SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
CRDM PWR. CAB. 1BD, CONTINUED:				
XCA1B-CR A60-Fu33	PRIMARY	XCA1B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1B-CR A61-Fu45	BACKUP	XCA1B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
47) MECHANISM 2 -				
XCA1B-CR A60-Fu26	PRIMARY	XCA1B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1B-CR A60-Fu30	BACKUP	XCA1B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1B-CR A53-Fu2	PRIMARY	XCA1B	$\geq 1.4$ Milliohms	N/A
XCA1B-CR A57-Fu2	BACKUP	XCA1B	$\geq 1.4$ Milliohms	N/A
XCA1B-CR A60-Fu34	PRIMARY	XCA1B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1B-CR A61-Fu46	BACKUP	XCA1B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
48) MECHANISM 3 -				
XCA1B-CR A60-Fu27	PRIMARY	XCA1B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1B-CR A60-Fu31	BACKUP	XCA1B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1B-CR A54-Fu1	PRIMARY	XCA1B	$\geq 1.4$ Milliohms	N/A
XCA1B-CR A58-Fu1	BACKUP	XCA1B	$\geq 1.4$ Milliohms	N/A
XCA1B-CR A60-Fu35	PRIMARY	XCA1B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA1B-CR A61-Fu47	BACKUP	XCA1B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO. - SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
CRDM PWR. CAB. 1BD, CONTINUED:				
49) MECHANISM 4 -				
XCA1B-CR A60-Fu28	PRIMARY	XCA1B	$\geq \frac{6}{10}$ Milliohms	N/A
XCA1B-CR A60-Fu32	BACKUP	XCA1B	$\geq \frac{6}{10}$ Milliohms	N/A
XCA1B-CR A54-Fu2	PRIMARY	XCA1B	$\geq 1.4$ Milliohms	N/A
XCA1B-CR A58-Fu2	BACKUP	XCA1B	$\geq 1.4$ Milliohms	N/A
XCA1B-CR A60-Fu36	PRIMARY	XCA1B	$\geq \frac{6}{10}$ Milliohms	N/A
XCA1B-CR A61-Fu48	BACKUP	XCA1B	$\geq \frac{6}{10}$ Milliohms	N/A
440 VAC CRDM POWER CABINET 1BD, SHUTDOWN BANK B, GROUP 1				
50) MECHANISM 1 -				
XCA1B-CR A61-Fu41	PRIMARY	XCA1B	$\geq \frac{6}{10}$ Milliohms	N/A
XCA1B-CR A60-Fu37	BACKUP	XCA1B	$\geq \frac{6}{10}$ Milliohms	N/A
XCA1B-CR A55-Fu1	PRIMARY	XCA1B	$\geq 1.4$ Milliohms	N/A
XCA1B-CR A57-Fu1	BACKUP	XCA1B	$\geq 1.4$ Milliohms	N/A
XCA1B-CR A61-Fu49	PRIMARY	XCA1B	$\geq \frac{6}{10}$ Milliohms	N/A
XCA1B-CR A61-Fu45	BACKUP	XCA1B	$\geq \frac{6}{10}$ Milliohms	N/A
51) MECHANISM 2 -				
XCA1B-CR A61-Fu42	PRIMARY	XCA1B	$\geq \frac{6}{10}$ Milliohms	N/A
XCA1B-CR A60-Fu38	BACKUP	XCA1B	$\geq \frac{6}{10}$ Milliohms	N/A

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO.-SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
CRDM PWR. CAB. 1BD, CONTINUED:				
XCA1B-CR A55-Fu2	PRIMARY	XCA1B	$\geq 1.4$ Milliohms	N/A
XCA1B-CR A57-Fu2	BACKUP	XCA1B	$\geq 1.4$ Milliohms	N/A
XCA1B-CR A61-Fu50	PRIMARY	XCA1B	$\geq \overset{6}{10}$ Milliohms	N/A
XCA1B-CR A61-Fu46	BACKUP	XCA1B	$\geq \overset{6}{10}$ Milliohms	N/A
52) MECHANISM 3 -				
XCA1B-CR A61-Fu43	PRIMARY	XCA1B	$\geq \overset{6}{10}$ Milliohms	N/A
XCA1B-CR A60-Fu39	BACKUP	XCA1B	$\geq \overset{6}{10}$ Milliohms	N/A
XCA1B-CR A56-Fu1	PRIMARY	XCA1B	$\geq 1.4$ Milliohms	N/A
XCA1B-CR A58-Fu1	BACKUP	XCA1B	$\geq 1.4$ Milliohms	N/A
XCA1B-CR A61-Fu51	PRIMARY	XCA1B	$\geq \overset{6}{10}$ Milliohms	N/A
XCA1B-CR A61-Fu47	BACKUP	XCA1B	$\geq \overset{6}{10}$ Milliohms	N/A
53) MECHANISM 4 -				
XCA1B-CR A61-Fu44	PRIMARY	XCA1B	$\geq \overset{6}{10}$ Milliohms	N/A
XCA1B-CR A60-Fu40	BACKUP	XCA1B	$\geq \overset{6}{10}$ Milliohms	N/A
XCA1B-CR A56-Fu2	PRIMARY	XCA1B	$\geq 1.4$ Milliohms	N/A
XCA1B-CR A58-Fu2	BACKUP	XCA1B	$\geq 1.4$ Milliohms	N/A
XCA1B-CR A61-Fu52	PRIMARY	XCA1B	$\geq \overset{6}{10}$ Milliohms	N/A
XCA1B-CR A61-Fu48	BACKUP	XCA1B	$\geq \overset{6}{10}$ Milliohms	N/A

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO. - SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
440 VAC CRDM POWER CABINET 2 BD, CONTROL BANK B, GROUP 2				
54) MECHANISM 1 -				
XCA2B-CR A59-Fu13	PRIMARY	XCA2B	$\geq \frac{6}{10}$ Milliohms	N/A
XCA2B-CR A59-Fu17	BACKUP	XCA2B	$\geq \frac{6}{10}$ Milliohms	N/A
XCA2B-CR A51-Fu1	PRIMARY	XCA2B	$\geq 1.4$ Milliohms	N/A
XCA2B-CR A57-Fu1	BACKUP	XCA2B	$\geq 1.4$ Milliohms	N/A
XCA2B-CR A59-Fu21	PRIMARY	XCA2B	$\geq \frac{6}{10}$ Milliohms	N/A
XCA2B-CR A61-Fu45	BACKUP	XCA2B	$\geq \frac{6}{10}$ Milliohms	N/A
55) MECHANISM 2 -				
XCA2B-CR A59-Fu14	PRIMARY	XCA2B	$\geq \frac{6}{10}$ Milliohms	N/A
XCA2B-CR A59-Fu18	BACKUP	XCA2B	$\geq \frac{6}{10}$ Milliohms	N/A
XCA2B-CR A51-Fu2	PRIMARY	XCA2B	$\geq 1.4$ Milliohms	N/A
XCA2B-CR A57-Fu2	BACKUP	XCA2B	$\geq 1.4$ Milliohms	N/A
XCA2B-CR A59-Fu22	PRIMARY	XCA2B	$\geq \frac{6}{10}$ Milliohms	N/A
XCA2B-CR A61-Fu46	BACKUP	XCA2B	$\geq \frac{6}{10}$ Milliohms	N/A
56) MECHANISM 3 -				
XCA2B-CR A59-Fu15	PRIMARY	XCA2B	$\geq \frac{6}{10}$ Milliohms	N/A
XCA2B-CR A59-Fu19	BACKUP	XCA2B	$\geq \frac{6}{10}$ Milliohms	N/A

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO.-SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
CRDM PWR. CAB. 2 BD, CONTINUED:				
XCA2B-CR A52-Fu1	PRIMARY	XCA2B	$\geq 1.4$ Milliohms	N/A
XCA2B-CR A58-Fu1	BACKUP	XCA2B	$\geq 1.4$ Milliohms	N/A
XCA2B-CR A59-Fu23	PRIMARY	XCA2B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2B-CR A61-Fu47	BACKUP	XCA2B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
57) MECHANISM 4 -				
XCA2B-CR A59-Fu16	PRIMARY	XCA2B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2B-CR A59-Fu20	BACKUP	XCA2B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2B-CR A52-Fu2	PRIMARY	XCA2B	$\geq 1.4$ Milliohms	N/A
XCA2B-CR A58-Fu2	BACKUP	XCA2B	$\geq 1.4$ Milliohms	N/A
XCA2B-CR A59-Fu24	PRIMARY	XCA2B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2B-CR A61-Fu48	BACKUP	XCA2B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
440 VAC CRDM POWER CABINET 2BD, CONTROL BANK D, GROUP 2				
58) MECHANISM 1 -				
XCA2B-CR A60-Fu25	PRIMARY	XCA2B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2B-CR A60-Fu29	BACKUP	XCA2B	$\geq \overset{6}{\cancel{10}}$ Milliohms	N/A
XCA2B-CR A53-Fu1	PRIMARY	XCA2B	$\geq 1.4$ Milliohms	N/A
XCA2B-CR A57-Fu1	BACKUP	XCA2B	$\geq 1.4$ Milliohms	N/A

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO.-SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
8 460 VAC MISC. CONTINUED: 87) PRESS. HTR. GROUP 43, 73, 74 -RC	PRIMARY	APN4102/7	270 Amps	≤ 75 Sec.
	BACKUP	APN4102/MN.	<sup>4000</sup> <del>1500</del> Amps	≤ <sup>1</sup> <del>200</del> Sec.
9 88) PRESS. HTR. GROUP 15, 16, 40 -RC	PRIMARY	APN4102/8	270 Amps	≤ 75 Sec.
	BACKUP	APN4102/MN.	<sup>4000</sup> <del>1500</del> Amps	≤ <sup>1</sup> <del>200</del> Sec.
90 89) PRESS. HTR. GROUP 46, 77, 78 -RC	PRIMARY	APN4102/9	270 Amps	≤ 75 Sec.
	BACKUP	APN4102/MN.	<sup>4000</sup> <del>1500</del> Amps	≤ <sup>1</sup> <del>200</del> Sec.
1 90) PRESS. HTR. GROUP 9, 10, 32 -RC	PRIMARY	APN4103/1	270 Amps	≤ 75 Sec.
	BACKUP	APN4103/MN.	<sup>3000</sup> <del>2400</del> Amps	≤ <sup>2</sup> <del>350</del> Sec.
2 91) PRESS. HTR. GROUP 11, 12, 35 -RC	PRIMARY	APN4103/2	270 Amps	≤ 75 Sec.
	BACKUP	APN4103/MN.	<sup>3000</sup> <del>2400</del> Amps	≤ <sup>2</sup> <del>350</del> Sec.
3 92) PRESS. HTR. GROUP 31, 59, 60 - RC	PRIMARY	APN4103/3	270 Amps	≤ 75 Sec.
	BACKUP	APN4103/MN.	<sup>3000</sup> <del>2400</del> Amps	≤ <sup>2</sup> <del>350</del> Sec.
4 93) PRESS. HTR. GROUP 36, 65, 66 -RC	PRIMARY	APN4103/4	270 Amps	≤ 75 Sec.
	BACKUP	APN4103/MN.	<sup>3000</sup> <del>2400</del> Amps	≤ <sup>2</sup> <del>350</del> Sec.
5 94) PRESS. HTR. GROUP 13, 14, 37 -RC	PRIMARY	APN4103/5	270 Amps	≤ 75 Sec.
	BACKUP	APN4103/MN.	<sup>3000</sup> <del>2400</del> Amps	≤ <sup>2</sup> <del>350</del> Sec.

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO.-SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
<sup>6</sup> 95) 460 VAC MISC. CONTINUED: PRESS. HTR. GROUP 33, 61, 62 -RC	PRIMARY	APN4103/6	270 Amps	≤ 75 Sec.
	BACKUP	APN4103/MN.	<sup>3000</sup> <del>2400</del> Amps	≤ <sup>2</sup> <del>250</del> Sec.
<sup>7</sup> 96) PRESS. HTR. GROUP 34, 63, 64 -RC	PRIMARY	APN4103/7	270 Amps	≤ 75 Sec.
	BACKUP	APN4103/MN.	<sup>3000</sup> <del>2400</del> Amps	≤ <sup>2</sup> <del>250</del> Sec.
<sup>8</sup> 97) 480 VAC MOTOR CONTROL CENTERS XFN0066A-AH, RB CHARCOAL CLEANUP UNIT FAN A	PRIMARY	XMC1A3X/10GK	1500 Amps	N/A
	BACKUP	XMC1A3X/10GK	210 Amps	≤ <sup>200</sup> <del>95</del> Sec.
<sup>9</sup> 98) XPP0138-ND/LEAK DETECTION SUMP PUMP	PRIMARY	XMC1A3X/41L	225 Amps	N/A
	BACKUP	XMC1A3X/41L	45 Amps	≤ 100 Sec.
<sup>100</sup> 99) XDO 0001-IC/TERM. BOX FOR INCORE NEUTRON DETECTOR DRIVES A,B,C,D,E	PRIMARY	XMC1A3X/3EG	45 Amps	≤ 100 Sec.
	BACKUP	XMC1A3X/3EG	45 Amps	≤ 100 Sec.
<sup>1</sup> 100) XVG9593A-CC/MOV REACT. COOL Pump A THERMAL Barrier	PRIMARY	XMC1A3X/9IM	33 Amps	N/A
	BACKUP	XMC1A3X/9IM	45 Amps	≤ <sup>100</sup> <del>30</del> Sec.

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO. - SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
<sup>1</sup> 480 VAC MISC. CONTINUED: <sup>2</sup> 101) XPP0149-SW/DRPI COOLING UNIT BSTR. PUMP	PRIMARY	XMC1A3X/11AD	225 Amps	N/A
	BACKUP	XMC1A3X/11AD	45 Amps	≤ 100 Sec.
<sup>3</sup> 102) XFN0068A-AH/SECONDARY COMPT. (LOOP A) CLG. FAN A	PRIMARY	XMC1A3X/11EH	720 Amps	N/A
	BACKUP	XMC1A3X/11EH	150 Amps	≤ 200 Sec.
<sup>4</sup> 103) XFN0069A-AH/SECONDARY COMPT. (LOOP B) CLG. FAN A	PRIMARY	XMC1A3X/10CF	720 Amps	N/A
	BACKUP	XMC1A3X/10CF	150 Amps	≤ 200 Sec.
<sup>5</sup> 104) XFN0070A-AH/SECONDARY COMPT. (LOOP C) CLG. FAN A	PRIMARY	XMC1A3X/9AD	720 Amps	N/A
	BACKUP	XMC1A3X/9AD	150 Amps	≤ 200 Sec.
<sup>6</sup> 105) XPP0051A-WL/R.C. DRAIN TANK - PUMP A	PRIMARY	XMC1A3X/6CG	720 Amps	N/A
	BACKUP	XMC1A3X/6CG	210 Amps	≤ 200 Sec.
<sup>7</sup> 106) XPP0059A-ND/INCORE INSTR. CHASE SUMP PUMP A	PRIMARY	XMC1A3X/4AD	225 Amps	N/A
	BACKUP	XMC1A3X/4AD	45 Amps	≤ 100 Sec.
<sup>8</sup> 107) XPP0115A-ND/R.B. SUMP PUMP A	PRIMARY	XMC1A3X/4EH	87 Amps	N/A
	BACKUP	XMC1A3X/4EH	45 Amps	≤ 100 Sec.

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO. -SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
9 480 VAC MCC*, CONTINUED: 108) XTF9003-EM/RECEPTACLE TRANSFORMER 3	PRIMARY	XMC1A3X/1AC	240 Amps	≤ 200 Sec.
	BACKUP	XMC1A3X/1AC	240 Amps	≤ 200 Sec.
110 109) XVG9576-CC/MOV, ISOLATION RCDT	PRIMARY	XMC1B2X/5IM	225 Amps	N/A
	BACKUP	<del>XMC1B2X/5IM</del> N/A	60 Amps	≤ 100 Sec.
1 110) XVG9583-CC/MOV, GATE EXCESS LETDOWN IIX	PRIMARY	XMC1B2X/3AE	225 Amps	N/A
	BACKUP	XMC1B2X/3AE	45 Amps	≤ 100 Sec.
2 112) XFN0007B-AII/REFUELING WATER SURFACE SUPPLY FAN B	PRIMARY	XMC1B3X/9AD	87 Amps	N/A
	BACKUP	XMC1B3X/9AD	45 Amps	≤ 100 Sec.
3 110) XFN0066B-AII/R.B. CHARCOAL CLEANUP UNIT FAN B	PRIMARY	XMC1B3X/10FJ	1,500 Amps	N/A
	BACKUP	XMC1B3X/10FJ	210 Amps	≤ 200 Sec.
4 112) XXP0059B-ND/INCORE INSTR. CHASE SUMP PUMP B	PRIMARY	XMC1B3X/3EH	225 Amps	N/A
	BACKUP	XMC1B3X/3EH	45 Amps	≤ 100 Sec.
5 114) XPP0115B-ND/R.B. SUMP PUMP B	PRIMARY	XMC1B3X/3IL	87 Amps	N/A
	BACKUP	XMC1B3X/3IL	45 Amps	≤ 100 Sec.

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO. -SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
6 480 VAC MCC, CONTINUED: 115) APN4005-EM/480 VAC POWER PNL.-FEEDER	PRIMARY	XMC1B3X/5CE	270 Amps	≤ 200 Sec.
	BACKUP	XMC1B3X/5CE	270 Amps	≤ 200 Sec.
7 115) XTF8009-EM/TRANSFORMER FOR LIGHTING PNL. 9 (NORMAL LTG.)	PRIMARY	XMC1B3X/5HJ	240 Amps	≤ 200 Sec.
	BACKUP	XMC1B3X/5HJ	240 Amps	≤ 200 Sec.
8 115) XFN0068B-AH/SECONDARY COMPT. (LOOP A) CLG FAN B	PRIMARY	XMC1B3Y/3AD	720 Amps	N/A
	BACKUP	XMC1B3Y/3AD	180 Amps	≤ 200 Sec.
9 115) XFN0069B-AH/SECONDARY COMPT. (LOOP B) CLG FAN B	PRIMARY	XMC1B3Y/3EH	720 Amps	N/A
	BACKUP	XMC1B3Y/3EH	180 Amps	≤ 200 Sec.
120 119) XFN0070B-AH/SECONDARY COMPT. (LOOP C) CLG. FAN B	PRIMARY	XMC1B3Y/3IL	720 Amps	N/A
	BACKUP	XMC1B3Y/3IL	180 Amps	≤ 200 Sec.
1 120) APN4012-EM/WELDING RECEPT. PWR. PNL.	PRIMARY	XMC1B3Y/7GL	600 Amps	≤ 300 Sec.
	BACKUP	XMC1B3Y/7GL	600 Amps	≤ 300 Sec.
2 120) APN4013-EM/WELDING RECEPT. PWR. PNL.	PRIMARY	XMC1B3Y/9GL	600 Amps	≤ 300 Sec.
	BACKUP	XMC1B3Y/9GL	600 Amps	≤ 300 Sec.

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO. -SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
<sup>3</sup> 12Z) 480 VAC MCC, CONTINUED: P.C. PUMP C HEATER-RC	PRIMARY	XMC1B3Y/5AD	225 Amps	N/A
	BACKUP	XMC1B3Y/5AD	45 Amps	≤ 100 Sec.
<sup>4</sup> 12X) R.C. PUMP C, OIL LIFT PMP -RC	PRIMARY	XMC1B3Y/5EH	450 Amps	N/A
	BACKUP	XMC1B3Y/5EH	75 Amps	≤ 100 Sec.
<sup>5</sup> 12X) XPP0051B-WL/R.C. DRAIN TANK PUMP B	PRIMARY	XMC1B3Y/8GK	720 Amps	N/A
	BACKUP	XMC1B3Y/8GK	210 Amps	<sup>200</sup> ≤ <del>95</del> Sec.
<sup>6</sup> 12X) XTF800B-EM/TRANSFORMER FOR LTG. PNL. 8, UNDERWATER LIGHTING	PRIMARY	XMC1B3Y/4HJ <sup>J</sup>	240 Amps	≤ 200 Sec.
	BACKUP	XMC1B3Y/4HJ	240 Amps	≤ 200 Sec.
<sup>7</sup> 12X) XVG9593B-CC/MOV, RC PUMP B THERMAL BARRIER	PRIMARY	XMC1B3Y/4AE	225 Amps	N/A
	BACKUP	XMC1B3Y/4AE	45 Amps	≤ 100 Sec.
<sup>8</sup> 12X) XFN0068C-AII/SECONDARY COMPT. (LOOP A) CLG FAN C	PRIMARY	XMC1C3X/8AE	1500 Amps	N/A
	BACKUP	XMC1C3X/8AE	210 Amps	≤ 200 Sec.
<sup>9</sup> 12X) R.C. PUMP B HEATER -RC	PRIMARY	XMC1C3X/5EH	225 Amps	N/A
	BACKUP	XMC1C3X/5EH	45 Amps	≤ 100 Sec.

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TABLE 3.8-1 (continued)

## CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO. -SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
<sup>1</sup> <del>129</del> 130 480 VAC MCC, CONTINUED: R.C. PUMP B OIL LIFT PUMP -RC	PRIMARY	XMC1C3X/6EH	450 Amps	N/A
	BACKUP	XMC1C3X/6EH	75 Amps	≤ 100 Sec.
<sup>1</sup> <del>130</del> XFN0069C-AH/SECONDARY COMPT. (LOOP B) CLG. FAN C	PRIMARY	XMC1C3X/2EH	720 Amps	N/A
	BACKUP	XMC1C3X/2EH	150 Amps	≤ 200 Sec.
<sup>2</sup> <del>131</del> XFN0070C-AH/SECONDARY COMPT. (LOOP C) CLG FAN C	PRIMARY	XMC1C3X/2IL	720 Amps	N/A
	BACKUP	XMC1C3X/2IL	150 Amps	≤ 200 Sec.
<sup>3</sup> <del>132</del> XTF8006-EM/TRANSFORMER FOR LTG. PNL. 6, NORMAL LIGHTING	PRIMARY	XMC1C3X/4CE	240 Amps	≤ 200 Sec.
	BACKUP	XMC1C3X/4CE	240 Amps	≤ 200 Sec.
<sup>4</sup> <del>133</del> XVG9593C-CC/MOV, R.C. PUMP C THERMAL BARRIER	PRIMARY	XMC1C3X/4IM	225 Amps	N/A
	BACKUP	XMC1C3X/4IM	45 Amps	≤ 100 Sec.
<sup>5</sup> <del>134</del> XFN0107-VL/CONTROL ROD POSIT. DATA CAB. CLG FAN	PRIMARY	XMC1C3X/2AD	450 Amps	N/A
	BACKUP	XMC1C3X/2AD	75 Amps	≤ 100 Sec.
<sup>6</sup> <del>135</del> R.C. PUMP A HEATER -RC	PRIMARY	XMC1C3X/5AD	225 Amps	N/A
	BACKUP	XMC1C3X/5AD	45 Amps	≤ 100 Sec.

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO. - SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
7 480 VAC MCC, CONTINUED: 138) R.C. PUMP A OIL LIFT PUMP -RC	PRIMARY	XMC1C3X/6AD	450 Amps	N/A
	BACKUP	XMC1C3X/6AD	75 Amps	≤ 100 Sec.
8 139) XFN0007A-AH/REFUELING WATER SURFACE SUPPLY FAN A	PRIMARY	XMC1C3X/3EH	87 Amps	N/A
	BACKUP	XMC1C3X/3EH	45 Amps	≤ 100 Sec.
139) XFN0008-AH/REFUELING WATER SURFACE EXHAUST FAN	PRIMARY	XMC1C3X/3IL	720 Amps	N/A
	BACKUP	XMC1C3X/3IL	150 Amps	≤ 200 Sec.
140) XVG9605-CC/MOV - R.B.	PRIMARY	XMC1DA2X/3IM	45 Amps	≤ 100 Sec.
	BACKUP	XMC1DA2X/3IM	45 Amps	≤ 100 Sec.
141) XVG8701A-RH/RHR LOOP 1 INLET ISOLATION VLV.	PRIMARY	XMC1DA2X/7FJ	225 Amps	N/A
	BACKUP	XMC1DA2X/7FJ	45 Amps	≤ 100 Sec.
142) XVG8808A-SI/ACCUMULATOR A ISOLATION VLV.	PRIMARY	XMC1DA2X/8AE	300 Amps	≤ 200 Sec.
	BACKUP	XMC1DA2X/8AE	300 Amps	≤ 200 Sec.

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO.-SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
480 VAC MCC, CONTINUED:				
143) XVG8808C-SI/ACCUMULATOR C ISOLATION VLV.	PRIMARY	XMC1DA2X/8F <del>8</del> <sup>J</sup>	300 Amps	≤ 200 sec.
	BACKUP	XMC1DA2X/8FJ	300 Amps	≤ 200 sec.
144) XVG8000B-RC/PRESS. RELIEF ISOLATION VLV.	PRIMARY	XMC1DA2X/6IM	225 Amps	N/A
	BACKUP	XMC1DA2X/6IM	45 Amps	≤ 100 sec.
145) XVG3108A-SW/R.B. Recirc. Unit A - Isolation Vlv.	PRIMARY	XMC1DA2Y/16IM	45 Amps	≤ 100 sec.
	BACKUP	XMC1DA2Y/16IM	45 Amps	≤ 100 sec.
146) XVG3108B-SW/R.B. Recirc. Unit B - Isolation Vlv.	PRIMARY	XMC1DA2Y/15CG	45 Amps	≤ 100 sec.
	BACKUP	XMC1DA2Y/15CG	45 Amps	≤ 100 sec.
147) XVG3109A-SW/R.B. Recirc. Unit A - Isolation Vlv.	PRIMARY	XMC1DA2Y/15HL	45 Amps	≤ 100 sec.
	BACKUP	XMC1DA2Y/15HL	45 Amps	≤ 100 sec.
148) XVG3109B-SW/R.B. Recirc. Unit B - Isolation Vlv.	PRIMARY	XMC1DA2Y/14CG	45 Amps	≤ 100 sec.
	BACKUP	XMC1DA2Y/14CG	45 Amps	≤ 100 sec.

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO. -SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
480 VAC MCC, CONTINUED:				
149) XVT8112-CS/SEAL WATER RETURN ISOLATION VLV.	PRIMARY	XMC1DA2Y/3IM	45 Amps	≤ 100 Sec.
	BACKUP	XMC1DA2Y/3IM	45 Amps	≤ 100 Sec.
150) XVG8701B-RH/RHR LOOP 3 INLET ISOLATION VLV.	PRIMARY	XMC1DA2Y/18IM	225 Amps	N/A
	BACKUP	XMC1DA2Y/18IM	45 Amps	≤ 100 Sec.
151) XVG8000C-RC/PRESS. RELIEF ISOLATION VLV.	PRIMARY	XMC1DB2X/8DH	225 Amps	N/A
	BACKUP	XMC1DB2X/8DH	45 Amps	≤ 100 Sec.
152) XVG3108C-SW/R.B. RECIRC UNIT C ISOLATION VLV.	PRIMARY	XMC1DB2Y/18IM	45 Amps	≤ 100 Sec.
	BACKUP	XMC1DB2Y/18IM	45 Amps	≤ 100 Sec.
153) XVG3108D-SW/R.B. RECIRC. UNIT D ISOLATION VLV.	PRIMARY	XMC1DB2Y/19IM	45 Amps	≤ 100 Sec.
	BACKUP	XMC1DB2Y/19IM	45 Amps	≤ 100 Sec.
154) XVG3109C-SW/R.B. RECIRC UNIT C ISOLATION VLV.	PRIMARY	XMC1DB2Y/20 IM	45 Amps	≤ 100 Sec.
	BACKUP	XMC1DB2Y/20IM	45 Amps	≤ 100 Sec.

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

<u>EQUIP NO. -SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
480 VAC MCC, CONTINUED:				
155) XVG 3109D-SW/R.B. RECIRC. UNIT D ISOLATION VLV.	PRIMARY	XMC1DB2Y/21IM	45 Amps	≤ 100 Sec.
	BACKUP	XMC1DB2Y/21IM	45 Amps	≤ 100 Sec.
156) XVG 8702A-RH/RHR LOOP 1 INLET ISOLATION VLV.	PRIMARY	XMC1DB2Y/4AE	225 Amps	N/A
	BACKUP	XMC1DB2Y/4AE	45 Amps	≤ 100 Sec.
157) XVG 8702B-RH/RHR LOOP 3 INLET ISOLATION VLV.	PRIMARY	XMC1DB2Y/4F <sup>J</sup> <del>8</del>	225 Amps	N/A
	BACKUP	XMC1DB2Y/4F <sup>J</sup> <del>8</del>	45 Amps	≤ 100 Sec.
158) XVG 8808B-SI/ACCUMULATOR B ISOLATION VLV.	PRIMARY	XMC1DB2Y/16IM	300 Amps	≤ 200 Sec.
	BACKUP	XMC1DB2Y/16IM	300 Amps	≤ 200 Sec.
159) XVG 8000A-RC/PRESS. RELIEF ISOLATION VLV.	PRIMARY	XMC1DB2Y/3IM	45 Amps	N/A
	BACKUP	XMC1DB2Y/3IM	45 Amps	≤ 100 Sec.
160) XVG 8095A-RC/REACTOR HEAD VENT VLV. TO PRESS. RELIEF TANK	PRIMARY	XMC1DA2X/5IM	225 Amps	N/A
	BACKUP	XMC1DA2X/5IM	45 Amps	≤ 100 Sec.

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TABLE 3.8-1 (continued)

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICE TEST SETPOINT CRITERIA

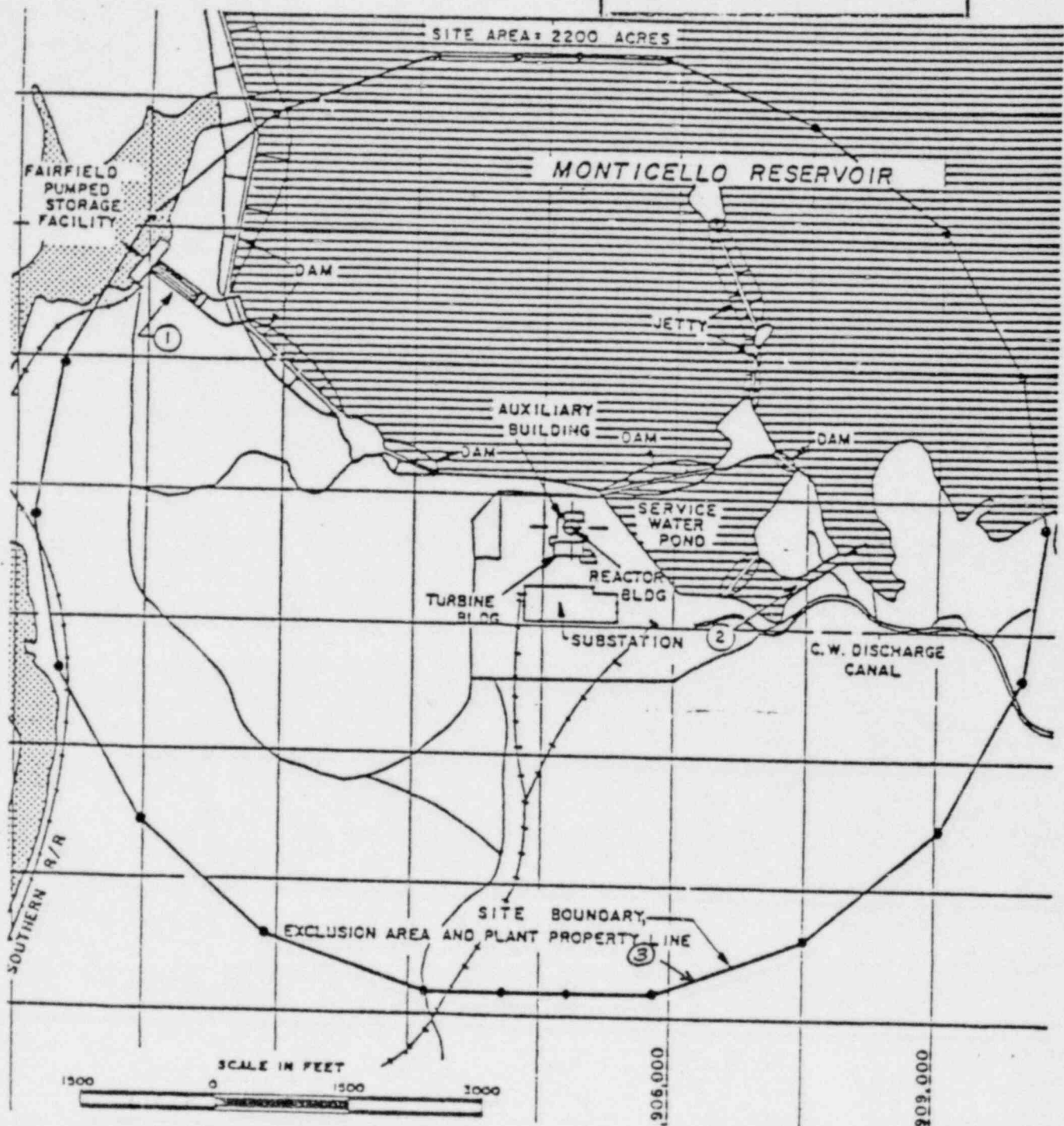
<u>EQUIP NO.-SYS/DESCRIPTION</u>	<u>DEVICE</u>	<u>LOCATION</u>	<u>TEST SETPOINT</u>	<u>RESPONSE TIME</u>
480 VAC MCC, CONTINUED:				
161) XVG 8095B-RC/REACTOR HEAD VENT VLV. TO PRESS. RELIEF TANK	PRIMARY	XMC1DB2Y/23FJ	45 Amps	$\leq$ 100 Sec.
	BACKUP	XMC1DB2Y/23FJ	60 Amps	$\leq$ 100 Sec.
162) XVG 8096A-RC/REACTOR HEAD VENT VLV. TO PRESS. RELIEF TANK	PRIMARY	XMC1DA2X/7AE	225 Amps	N/A
	BACKUP	XMC1DA2X/7AE	60 Amps	$\leq$ 100 Sec.
163) XVG 8096B-RC/REACTOR HEAD VENT VLV. TO PRESS. RELIEF TANK	PRIMARY	XMC1DB2Y/12IM	225 Amps	N/A
	BACKUP	XMC1DB2Y/12IM	60 Amps	$\leq$ 100 Sec.
164) XVG 7503-AC/CRDM COOLING WATER OUTLET VLV.	PRIMARY	XMC1DA2X/11IM	225 Amps	N/A
	BACKUP	XMC1DA2X/11IM	45 Amps	$\leq$ 100 Sec.
165) XVG 7502-AC/CRDM COOLING WATER INLET VLV.	PRIMARY	XMC1DB2X/7IM	225 Amps	N/A
	BACKUP	XMC1DB2X/7IM	45 Amps	$\leq$ 100 Sec.

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This schematic diagram illustrates the layout of a nuclear reactor facility. The central feature is the **REACTOR BUILDING**, a large circular structure. To its left is the **AUXILIARY BUILDING**, and to its right is the **FUEL HANDLING BUILDING**. Below the reactor building is the **INTERMEDIATE BUILDING**, which contains a **SAFETY AND RELIEF VALVES** section and a **STEAM TRAP**. To the left of the intermediate building is the **CONTROL BUILDING**. To the right of the intermediate building is the **DIESEL GENERATOR BUILDING**, which includes a **GENERATOR** and a **STEAM TRAP**. The diagram also shows various piping systems, including **STEAM** and **WATER** lines, and **SAFETY AND RELIEF VALVES**. A **REACTOR BUILDING** label is also present near the top right. The diagram is a technical drawing showing the spatial arrangement and functional components of the reactor system.

5-4

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LIQUID RELEASES:

- ① FAIRFIELD PUMPED STORAGE FACILITY PENSTOCKS
  - (A) LIQUID WASTE PROCESSING SYSTEM
  - (B) PROCESSED STEAM GENERATOR BLOWDOWN
- ② CIRCULATING WATER DISCHARGE CANAL
  - (A) UNPROCESSED STEAM GENERATOR BLOWDOWN
  - (B) TURBINE BUILDING FLOOR DRAINS

GASEOUS RELEASES:

- ③ SITE BOUNDARY FOR GASEOUS RELEASES

SUMMER - UNIT 1

SOUTH CAROLINA ELECTRIC & GAS CO.  
VIRGIL C. SUMMER NUCLEAR STATION

Location of Liquid  
Release Points

FIGURE 5.1-4