

TABLE 3.8.4.1-1

PRIMARY CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

<u>CIRCUIT BREAKER LOCATION</u>	<u>TYPE*</u>	<u>FRAME RATING/UL</u>	<u>TRIP SET POINT (Amperes)</u>	<u>RESPONSE TIME (Milli- seconds/ Cycles)</u>	<u>SYSTEMS OR EQUIPMENT POWERED</u>
a. Type 2 Molded Case Circuit Breakers					
1. 1B219022	HFB-M	150/30-100	270 530	NA	HV8311F031A RRP "A" DSCH VLV
2. 1B237043	HFB-M	150/30 50	270 300	NA	HV8311F023A Recirc. PP "A" Suction
3. 1B236052	HFB-M	150/30 50	270 310	NA	HVE111F009 RHR Pump Suction Shutoff
4. 1B236023	HFB-M	150/3	15 15	NA	HV12603 Containment Inst. Compressor Suct. Iso. Valve
5. 1B236011	HFB-M	150/30	230 230	NA	1V413A - Drywell Area Unit Cooler
6. 1B235033	HFB-M	150/30	230 230	NA	1B414A - Drywell Area Unit Cooler
7. 1B236021	HFB-M	150/30	230 230	NA	1V417A - Drywell Area Unit Cooler
8. 1B236032	HFB-M	150/30	230 230	NA	1V412A - Drywell Area Unit Cooler
9. 1B236042	HFB-M	150/30	230 230	NA	1V411A - Drywell Area Unit Cooler
10. 1B236043	HFB-M	150/30	230 230	NA	1V416A - Drywell Area Unit Cooler
11. 1B236082	HFB-M	150/30	230 230	NA	1V415A - Drywell Area Unit Cooler
12. 1B236102	HFB-M	150/3	7.5 7.5	NA	HVB211F001 - Reactor Head Vent Valve
13. 1B236053	HFB-M	150/5	45	NA	HVG331F001 - Reac. Wtr. Clean up inboard isolation
14. 1B237072	HFB-M	150/5	45 45	NA	⁸²¹ HVE221F016 - Main Stm. Line Drain Inbd. Iso.

TABLE 3.8.4.1-1 (Continued)
PRIMARY CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

<u>CIRCUIT BREAKER</u> <u>LOCATION</u>	<u>TYPE*</u>	<u>FRAME</u> <u>RATING/UL</u>	<u>TRIP</u> <u>SET POINT</u> <u>(Amperes)</u>	<u>RESPONSE</u> <u>TIME</u> <u>(Milli-</u> <u>seconds/</u> <u>Cycles)</u>	<u>SYSTEMS OR</u> <u>EQUIPMENT POWERED</u>
<u>Type 2 Molded Case Circuit Breakers (Continued)</u>					
15. 1B219023	HFB-M	150/10	80	NA	HVB311F032A - RRP "A" Dsch Byps Vlv
16. 1B237073	HFB-M	150/10	80 105	NA	HVE111F022 - Reac Heater Spray Shutoff Inboard
17. 1B237082	HFB-M	150/10	80 80	NA	HVE411F002 - HPCI Stm. Supply Inboard Iso.
18. 1B246011	HFB-M	150/ 30 50	230 300	NA	HVB311F023B - Reactor Recirc Pump Suction
19. 1B229022	HFB-M	150/ 30 100	230 530	NA	HVB311F031B - Reactor Recirc Pump Disch
20. 1B246022	HFB-M	150/5	40	NA	HVE511F007 - RCIC Inbrd Steam Line 150
21. 1B246051	HFB-M	150/30	230 230	NA	IV417B - Drywell Area Unit Clr Fan
22. 1B246061	HFB-M	150/30	230 230	NA	IV414B - Drywell Area Unit Clr Fan
23. 1B229023	HFB-M	150/10	80 80	NA	HVB311F032B - RRP "B" Dsch Byps Vlv
24. 1B246072	HFB-M	150/30	230 230	NA	IV415B - Drywell Area Unit Clr Fan
25. 1B246081	HFB-M	150/30	230 230	NA	IV416B - Drywell Area Unit Clr. Fan
26. 1B246091	HFB-M	150/30	230 230	NA	IV411B - Drywell Unit Clr. Fan
27. 1B246102	HFB-M	150/30	230 230	NA	IV413B - Drywell Area Unit Clr. Fan
28. 1B246103	HFB-M	150/30	230 230	NA	IV412B - Drywell Area Unit Clr. Fan

TABLE 3.8.4.1-1 (Continued)
PRIMARY CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

CIRCUIT BREAKER LOCATION	TYPE*	FRAME RATING/UL	TRIP SET POINT (Amperes)	RESPONSE TIME (Milli-seconds/ Cycles)		SYSTEMS OR EQUIPMENT POWERED
Type 2 Molded Case Circuit Breakers (Continued)						
29. 1B246112	HFB-M	150/3	7 7	NA		HVB211F002 - Reactor Head Vent Valve
30. 1B246113	HFB-M	150/3	7 7	NA	Head	HVB211F005 - Reactor Head Vent Valve
31. 1B246062	HFB-M	150/3	17.5 17.5	NA		HV11346 - RBCCW Containment Iso. Vlv.
32. 1B246012	HFB-M	150/3	17.5 17.5	NA		HV11345 - RBCCW Containment Iso. Vlv.
33. 1B253063	HFB-M	150/5	20.0 20.0	NA		IP402A - Drywell Floor Drain Sump "A" pp "A"
34. 1B253053	HFB-M	150/5	17.5 17.5	NA		HVG331F102 - Line Suction Inside Control Valve
35. 1B263043	HFB-M	150/3	17.5 17.5	NA		HVG331F100 - RWCU Loop "1A" Suction
36. 1B263053	HFB-M	150/3	17.5 17.5	NA		HVG331F106 - RWCU Loop "B" Suction
37. 1B263087	HFB-M	150/3	17.5 17.5	NA		HVG331F101 - RWCU Sys Vessel Drain Line Recirc.
38. 1B263071	HFB-M	150/5	20	NA		IP4023 - Drywell Floor Drain Sump "A" pp "B"
39. 1B253043	HFB-M	150/5	20	NA		IP403A - Drywell Floor Drain Sump "B" Pump "A"
40. 1B263072	HFB-M	150/5	20	NA		IP403B - Drywell Floor Drain Sump "B" pp "B"
41. 1B253021	HFB-M	150/50	390 390	NA		HVB211F011A Feedwater Inlet Shutoff Valve
42. 1B263023	HFB-M	150/50	390 390	NA		HVB211F011B - Feed- water Inlet Shutoff Valve

*HFB-M - Westinghouse Type HFB, magnetic only

TABLE 3.8.4.1-1 (Continued)

PRIMARY CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

<u>CIRCUIT BREAKER LOCATION</u>	<u>TYPE**</u>	<u>FRAME RATING/UL</u>	<u>RESPONSE TIME (Milli- seconds/ Cycles)</u>	<u>SYSTEMS OR EQUIPMENT POWERED</u>
b. <u>Type 3 Molded Case</u> ^{as} <u>Circuit Breakers</u>				
1. 1B236103	KB-TM	250/150	NA	IE440C - Containment Recomb Elect. Htr. Ass'y.
2. 1B246033	KB-TM	250/150	NA	IE440D - Containment Recomb Elect. Htr. Ass'y.
3. 1B226103	KB-TM	250/150	NA	IE440B - Containment Recomb Elect. Htr. Ass'y.
4. 1B216092	KB-TM	250/150	NA	IE440A - Containment Recomb. Elect. Htr. Ass'y.
5. 1B253041	KB-TM	150/15	NA	TB815 Pri Cont MSIV 150 Hoist
6. 1B263021	KB-TM	150/15	NA	TB816 Pri Cont MSIV 150 Hoist

**KB-TM - Westinghouse Type KB, Thermal-magnetic

