APPENDIX A

A.1 HOT SHUTDOWN CABLE DISCREPANCIES FOR DRESDEN UNITS 2 AND 3

This Appendix documents the cable discrepancies identified using the methodology described in Section 4.0 for each Dresden Units 2&3 fire area and their resolutions. This Appendix provides the technical documentation that supports the fire area by fire area safe hot shutdown analysis described in Section 4.0.

The resolutions to the cable discrepancies are listed on pages A-3 through A-7 and are referenced by number under the resolution column in Tables A-1 through A-10.

A.2 Instructions on Usage of Cable Documentation

The following method is used for identifying cable discrepancies in the Dresden Station, Units 2&3.

1. Select item number and determine cable service from F-drawing.

2. Determine fire zone number from F-drawing.

3. From Table 2.1-1, determine equivalent area/zone and shutdown path.

4. Using cable item number or cable service, find the cable numbers in the cable charts.

   a. If the cable in the cable chart is shaded, then the equipment serviced by the cable is either necessary for, or associated with, safe shutdown for that fire area/zone and is therefore considered a discrepancy.

   b. If the cable is not shaded, the equipment serviced by this cable is neither necessary for, nor associated with, safe shutdown.

5. If a cable is a discrepancy, it is identified in this Appendix in the applicable fire area. The resolution for the cable of concern is identified.

A.3 Resolution of Cable Discrepancies

The following resolutions of cable discrepancies are referenced in the resolution column of Tables A-1 through A-10.

1. Target rock (mechanical function) and safety valves are available for RPV pressure control.

2. The unaffected unit's Division 1 equipment and power will be used via normally open crossties in the service water and condensate transfer piping. A normally closed valve in Fire Zone 8.2.6.C will be opened to establish a crosstie for the CRD pumps. All valves will be manually opened or provided with an alternate feed from the other unit (see Subsection 6.2.3.2).

3. A new breaker has been added in the 2/3 diesel generator room to prevent a fault in one unit's bus duct from affecting power to the other unit from the 2/3 diesel generator (see Subsection 6.2.3.1.1). The unaffected unit's pumps will be used to provide water to the affected unit's isolation condenser and reactor vessel (see Note 2).

4. An alternate control and power source has been provided from the opposite unit in case these normally open valves (MO1301-1 and MO1301-4) were to spuriously close (see Subsection 6.2.1.4 and 6.2.2.4).

5. Valves MO2(3)-1301-2, MO2(3)-1301-3, MO2(3)-1301-10, MO2(3)-4102 and MO2(3)-4399-74 will be manually handwheel operated if they were to close.

6. AO2(3)-1301-17 and AO2(3)-1301-20 fail in the closed position. Also, manual operation of AO2(3)-1301-16 is possible.

7. Isolation and local control capability is provided in the 2/3 diesel generator room for the 2/3 diesel generator and its auxiliaries (Fire Area RB2/3). 125-Vdc for excitation is available from the unaffected unit.

8. The LPCI and core spray circuits are associated with the 4-kV power distribution. However, since the opposite unit's power train is utilized, faults in these cables will not affect safe shutdown.

9. 2/3 diesel generator auxiliaries can be controlled and fed from the unaffected unit (see Subsection 6.2.3.1.2). Transfer switches ensure isolation of each unit's feed from the other.

10. The primary containment isolation, process radiation monitoring, and main steam isolation circuits are associated with the isolation condenser valves. However, the drywell valves will be controlled from the alternate power source by isolating the automatic circuitry. The power train to the remaining valves will be de-energized and the valves will be operated manually. A detailed circuits analysis shows that only control room faults can spuriously open the MSIVs (see Subsections 6.2.1.4 and 6.2.2.4).

11. The required circuit breaker control circuits can be isolated by local isolation switches and then operated locally at the switchgear (see Subsections 6.2.1.2 and 6.2.2.2).

12. The control logic for the 2/3 diesel generator feed breakers to SWGR 23-1 and 33-1 has been modified so that the operator can manually configure them to feed both buses simultaneously (see Subsection 6.2.3.1.6).

13. Deleted.

14. The LPCI and core spray circuits are associated with the 4-kV power distribution. However, since the diesel generator and all necessary breaker controls will be isolated and operated locally, faults on these circuits will not affect safe shutdown (see Subsections 6.2.1.2 and 6.2.2.2).

15. Unit 2 cables to the 2/3 diesel generator and its auxiliaries, and the bus duct from the 2/3 diesel generator to SWGR 23-1, pass through the corner of Fire Zone 1.1.1.2 nearest to the 2/3 diesel generator room. These cables and bus duct are protected by a one-hour fire wrap (see Subsection 6.3.3.2).

16. This cable affects the feed to MCC 28-1. The 2/3 diesel generator fuel oil transfer pump, 2/3 diesel generator vent fan, and valves MO2-1301-1 and MO2-1301-4 can be fed from MCC 38-1 independent of this area. Transfer switches have been provided so that faults do not affect the alternate feeds (see Subsection 6.2.3.1.3). The local control station for MCC 38-1 has been moved to Fire Area RB2/3.

17. The 2/3 diesel generator cooling water pump can be fed from MCC 38-3 independent of this area. A transfer switch has been provided so that faults do not affect the alternate feed (see Subsection 6.2.3.1.4).

18. Fire protection is provided such that the Unit 3 service water pumps are available for a fire in the area of the Unit 2 service water pumps and vice versa.

19. Fire protection is provided such that a single fire will disable only one diesel generator cooling water pump (see Subsection 6.3.5).

20. The loads normally required to be fed from this MCC (28-2) are condensate transfer pump 2A and 125-Vdc battery charger 2A, 250-V Battery Charger 2, 120-Vac panel 902-52A, and 120/240-Vac instrument bus 902-50. If the corresponding Division II feed to condensate transfer pump 2B is also unavailable, the makeup water to the isolation

condenser will be taken from the service water system. The 125-Vdc loads will be fed from reserve sources which originate in Unit 3. All 250-Vdc valves are assumed to be manually operated; credit is taken for visual monitoring of local reactor instrumentation in the reactor building. Valves 2-1301-17 and 2-1301-20, which are fed from 902-50, fail closed.

21. While in hot shutdown, it is necessary to prevent the electromatic relief valves from spuriously opening to preserve the reactor vessel coolant inventory. For fires external to the main control room, an AUTO BLOWDOWN INHIBIT switch at the MCB will prevent spurious blowdown. If the fire is in the MCR, it may be necessary to trip all of the power feeds to the blowdown logic. This is covered by procedures. Excessive reactor pressure will be controlled by the mechanically actuated target rock or safety valves.

22. 2/3 diesel generator cooling water pump can be fed from MCC 28-3 independent of this area. A transfer switch has been provided so that faults do not affect the alternate feeds (see Subsections 6.2.3.1.2 and 6.2.3.1.4).

23. These cables are protected by a 1-hour barrier, automatic suppression and detection within TB-II (see Subsection 6.3.4.4).

24. A modification moved this control station to the 2/3 diesel generator room (RB2/3). The cable will no longer enter the turbine building (see Subsection 6.2.3.1.3).

25. Spurious operation of the CO_2 systems cannot harm the diesels. The associated circuits of concern are interlocks that stop the affected diesel generator room ventilation fan upon activation of the CO_2 system. A local bypass switch on the diesel generator control panel will restore normal vent fan operation (see Subsection 6.2.3.1.2). If the CO_2 has spuriously discharged, supplied-air breathing apparatus will be needed by personnel entering the diesel generator room.

26. A fault could affect automatic start of 2/3 diesel generator. Manual operation of the diesel is proposed, therefore, this is of no consequence. A spurious UV signal could trip the bus tie between 4-kV buses 23 and 23-1. This is of no consequence in the zones in which this can happen. A fuse isolates this circuit from other 125-Vdc circuits at the switchgear (see Subsection 6.2.3.1.2).

27. The unit dedicated diesels are independent of this fire area. Diesel operation procedures require disabling of breakers to the RAT, which is the source of this circuit association.

28. Cable for all other level recorders is independent of this fire area.

29. 480-V breakers can be manually operated by an operator.

30. Both normally open tie breakers 3938 and 3839 must spuriously close for them to be considered. Only a single spurious operation is assumed (see GL 85-01).

31. An isolation switch in the turbine building prevents a fire in the crib house from affecting the diesel generator 3 fuel oil transfer pump.

32. The risers containing these cables are protected by a 1-hour fire wrap and suppression and detection in the immediate area.

33. Local instruments will be used to monitor system functions.

34. The separation of the redundant transmitters that feed these instruments is discussed in sections 3.6 (Unit 2) and 4.5 (Unit 3) of the Exemption Requests.

35. Level and pressure indication is provided by instruments 640-106A&B, 640-25A&B, and 640-29A&B.

36. A single spurious signal will cause only one solenoid (either ac or dc) of a valve to fail to perform its function. As a result, for a given fire, one MSIV on each steamline could fail to close. But, the redundant valve on each steamline would isolate the line.

37. The switchgear whose control circuits are fed from this panel will be manually configured.

38. CT will be shorted at generator.

39. Fuses will be installed in the auxiliary relay circuit.

40. The fire pump can be started locally. It will continue to run independent of all cables. This water is used for isolation condenser makeup, which is not needed until 20 minutes after the initiation of the isolation condenser. This allows more than enough time to start the fire pump.

41. For the CRD discharge valves, 480 VAC power can be removed and valves manually operated locally.

42. Isolation condenser makeup pump day tanks 2/3-5215A and 2/3-5215B can be manually refilled if fuel oil pump 2-5203 or its power cables are damaged in a fire.

43. The isolation condenser makeup pumps can be started and operated locally.

44. Clean Demineralizer Tank depletion can be determined by monitoring Isolation Condenser Makeup Pump flow.

TABLE A-1

FIRE AREA RB2-I

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
243	Electromatic Relief Valve 2-203-3B	25069	P*	1.3.2	1
		23938	P*	1.3.2	1
244	Electromatic Relief Valve 2-203-3C	23905	P*	1.3.2	1
		23941	P*	1.3.2	1
245	Electromatic Relief Valve 2-203-3D	23906	P*	1.3.2	1
		23944	P*	1.3.2	1
246	Electromatic Relief Valve 2-203-3E	23940	P*	1.3.2	1
		23947	P*	1.3.2	1
242	Target Rock Valve 2-203-3A	25061	P*	1.3.2	1
		23935	P*	1.3.2	1
2267	Main Steam Isolation Valve AO2-203-1A	26342	C	1.3.2	36
		26345	C	1.3.2	36
2268	Main Steam Isolation Valve AO2-203-1B	26356	C	1.3.2	36
		26359	C	1.3.2	36
2269	Main Steam Isolation Valve AO2-203-1C	26370	C	1.3.2	36
		26373	C	1.3.2	36
2270	Main Steam Isolation Valve AO2-203-1D	26384	C	1.3.2	36
		26387	C	1.3.2	36

*Energizes Valve

TABLE A-2

FIRE AREA RB2-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
243	Electromatic Relief Valve 2-203-3B	23901	C*	1.1.2.2 1.1.2.3	1
		23938	C*	1.1.2.2 1.1.2.3	1
244	Electromatic Relief Valve 2-203-3C	23905	C*	1.1.2.2	1
		23917	C*	1.1.2.2 1.1.2.3	1
		23941	C*	1.1.2.2 1.1.2.3	1
245	Electromatic Relief Valve 2-203-3D	23906	C*	1.1.2.2	1
		25055	C*	1.1.2.2 1.1.2.3	1
		23944	C*	1.1.2.2 1.1.2.3	1
246	Electromatic Relief Valve 2-203-3E	23902	C*	1.1.2.2 1.1.2.3	1
		23940	C*	1.1.2.2	1
		23947	C*	1.1.2.2 1.1.2.3	1
242	Target Rock Valve 2-203-3A	25061	C*	1.1.2.2	1
		25062	C*	1.1.2.2 1.1.2.3	1
		23935	C*	1.1.2.2 1.1.2.3	1
22	4160-V Buses 23 & 23-1 Main Feed Breakers 152-2302 & 152-2329	20627	P	1.1.2.2 1.1.2.3	2,3,7,9
		20628	P	1.1.2.2 1.1.2.3	2,3,7,9
		20629	P	1.1.2.2 1.1.2.3	2,3,7,9
		20630	C	1.1.2.2 1.1.2.3	2,3,7,9
		20851	C	1.1.2.2 1.1.2.3	2,3,7,9
		20850	C	1.1.2.2 1.1.2.3	2,3,7,9

TABLE A-2

FIRE AREA RB2-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
23	4160-V Bus 23-1 2/3 DG Feed Breaker 152-2333	20441	C	1.1.2.2 1.1.2.3	2,3,7,9,12
		20853	C	1.1.2.2 1.1.2.3	2,3,7,9,12
		20857	C	1.1.2.2 1.1.2.3	2,3,7,9,12
		20855	C	1.1.2.2 1.1.2.3	2,3,7,9,12
		Bus	P	1.1.2.2	2,3,7,9,12
		20360	C	1.1.2.2 1.1.2.3	2,3,7,9,12
		20449	C	1.1.2.2 1.1.2.3	2,3,7,9,12
		30419	C	1.1.2.2 1.1.2.3	2,3,7,9,12
		20445	C	1.1.2.2	2,3,7,9,12
		67577	C	1.1.2.2 1.1.2.3	2,3,7,9,12

TABLE A-2

FIRE AREA RB2-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
212	480V SWGR 28 tie to 29	21390	P	1.1.2.3 1.1.2.4	42
		21391	P	1.1.2.3 1.1.2.4	42
		21392	P	1.1.2.3 1.1.2.4	42
		21393	P	1.1.2.3 1.1.2.4	42
		21394	P	1.1.2.3 1.1.2.4	42
		21395	P	1.1.2.3 1.1.2.4	42
		21089	C	1.1.2.3 1.1.2.4	42
		20021	C	1.1.2.3 1.1.2.4	42
		21022	C	1.1.2.3 1.1.2.4	42
		21492	C	1.1.2.3 1.1.2.4	42
		21494	C	1.1.2.3 1.1.2.4	42
		21396	C	1.1.2.3 1.1.2.4	42
209	480V MCC 29-2	69715	P	1.1.2.2 1.1.2.3	42
		69717	P	1.1.2.2 1.1.2.3	42
		69718	P	1.1.2.2 1.1.2.3	42
		69719	P	1.1.2.2 1.1.2.3	42
222	250Vdc MCC 2A	24179	P	1.1.2.3 1.1.2.4	5
		24180	P	1.1.2.3 1.1.2.4	5
		24181	P	1.1.2.3 1.1.2.4	5
		24182	P	1.1.2.3 1.1.2.4	5

TABLE A-2

FIRE AREA RB2-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
223	250Vdc MCC 2B	34080	P	1.1.2.3 1.1.2.4	5
		34081	P	1.1.2.3 1.1.2.4	5
		34082	P	1.1.2.3 1.1.2.4	5
		34085	P	1.1.2.3 1.1.2.4	5
		34089	P	1.1.2.3 1.1.2.4	5
		34090	P	1.1.2.3 1.1.2.4	5
		34091	P	1.1.2.3 1.1.2.4	5
		34092	P	1.1.2.3 1.1.2.4	5
233	Isolation Condenser Valve MO2-1301-1	22559	C	1.1.2.2	4
		77650	C	1.1.2.1	4
		77651	C	1.1.2.1	4
		67594	P	1.1.2.2	4
		67595	C	1.1.2.2	4
234	Isolation Condenser Valve MO2-1301-2	23774	P	1.1.2.3 1.1.2.4	5
		23775	P	1.1.2.3 1.1.2.4	5
		23776	C	1.1.2.3 1.1.2.4	5
		23777	C	1.1.2.3 1.1.2.4	5
		23778	C	1.1.2.3 1.1.2.4	5

TABLE A-2

FIRE AREA RB2-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
235	Isolation Condenser Valve MO2-1301-3	23754	P	1.1.2.3 1.1.2.4	5
		23755	P	1.1.2.3 1.1.2.4	5
		23756	C	1.1.2.3 1.1.2.4	5
		23757	C	1.1.2.3 1.1.2.4	5
		23758	C	1.1.2.3 1.1.2.4	5
236	Isolation Condenser Valve MO2-1301-4	22576	C	1.1.2.2	4
		67593	P	1.1.2.2	4
		67592	C	1.1.2.2	4
		77650	C	1.1.2.1	4
		77651	C	1.1.2.1	4
		77692	C	1.1.2.1	4
237	Isolation Condenser Valve MO2-1301-10	65841	C	1.1.2.2 1.1.2.3 1.1.2.4	5
		65843	C	1.1.2.3 1.1.2.4	5
		65844	C	1.1.2.3 1.1.2.4	5
		65845	P	1.1.2.3 1.1.2.4	5
		65530	C	1.1.2.2	5
238 239	Isolation Condenser Valves AO2-1301-17&20	26273	C	1.1.2.2 1.1.2.3 1.1.2.4	6
		26274	C	1.1.2.2 1.1.2.3 1.1.2.4	6
		26275	C	1.1.2.3 1.1.2.4	6
		26276	C	1.1.2.3 1.1.2.4	6

TABLE A-2

FIRE AREA RB2-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
240	Isolation Condenser Valve MO2-4102	65846	P	1.1.2.3 1.1.2.4	5
		65847	C	1.1.2.3 1.1.2.4	5
		65529	C	1.1.2.2	5
		65842	C	1.1.2.2 1.1.2.3 1.1.2.4	5
33	4160 V Bus 33-1 2/3 DG Feed Brkr 152-3333	20857	C	1.1.2.2 1.1.2.3	2,3,7,9
		20360	C	1.1.2.2 1.1.2.3	2,3,7,9
		20449	C	1.1.2.2 1.1.2.3	2,3,7,9
		30419	C	1.1.2.2 1.1.2.3	2,3,7,9
		20445	C	1.1.2.2	2,3,7,9
3201	2/3 DG Control, Metering, & Excitation	20361	C	1.1.2.2	7
		20359	C	1.1.2.2 1.1.2.3	7
		20449	C	1.1.2.2 1.1.2.3	7
		20360	C	1.1.2.2 1.1.2.3	7
		20446	C	1.1.2.2	7
		20356	C	1.1.2.2 1.1.2.3	7
		20448	C	1.1.2.2	7
		20447	C	1.1.2.2	7
		20445	C	1.1.2.2	7
		28485	C	1.1.2.2 1.1.2.3	7
		20853	C	1.1.2.2 1.1.2.3	7

TABLE A-2

FIRE AREA RB2-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3201	Isolation Condenser	29435	C	1.1.2.3 1.1.2.4	5
	Supply Isolation Vlv.	80072	C	1.1.2.4	5
	MO2-4399-74	80073	P	1.1.2.4	5
		80074	P	1.1.2.4	5
		20441	C	1.1.2.2 1.1.2.3	7
		67545	C	1.1.2.2 1.1.2.3 1.1.2.4	7
		22842	C	1.1.2.2 1.1.2.3	7
		67128	C	1.1.2.2 1.1.2.3	7
		67554	C	1.1.2.2 1.1.2.3	
		67555	C	1.1.2.2 1.1.2.3	7
		67577	C	1.1.2.2 1.1.2.3	7
3204	2/3 DG Fuel Oil Transfer Pump 2/3-5203	67573	P	1.1.2.2 1.1.2.3	9
		67572	C	1.1.2.2 1.1.2.3	9
		68395	C	1.1.2.2 1.1.2.3	9
3202	2/3 DG Room Supply Fan 2/3-5790	67575	P	1.1.2.2 1.1.2.3	9
		67574	C	1.1.2.2 1.1.2.3	9
		68395	C	1.2.2.2 1.2.2.3	9

TABLE A-2

FIRE AREA RB2-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3203	2/3 DG Cooling Water Pump 2/3-3903B	22395	C	1.1.2.2	9
		68395	C	1.1.2.2 1.1.2.3	9
2007	LPCI, Sys. 1, Ckt. A (Note 7)	22696	C	1.1.2.1 11.2.2 1.1.2.2	8,2,3,7,9
		20825	C	1.1.2.2 1.1.2.3	8,2,3,7,9
				1.1.2.3	
		22733	C	1.1.2.2 1.1.2.3	8,2,3,7,9
		20227	C	1.1.2.2 1.1.2.3	8.2.3.7.9
		20813	C	1.1.2.2 1.1.2.3	8,2,3,7,9
		20826	C	1.1.2.2	8,2,3,7,9
		22547	C	1.1.2.2 1.1.2.3	8,2,3,7,9
		65134	C	1.1.2.2 1.1.2.3	8,2,3,7,9
		67201	C	1.1.2.2	8,2,3,7,9
		67203	C	1.1.2.3	8,2,3,7,9
		20284	C	1.1.2.2 1.1.2.3	8,2,3,7,9
		20226	C	1.1.2.2 1.1.2.3	8,2,3,7,9
		65102	C	1.1.2.3	8,2,3,7,9
		65103	C	1.1.2.3	8,2,3,7,9

TABLE A-2

FIRE AREA RB2-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2009	LPCI, Sys. II, Ckt. A (Note 9)	23977	C	11.2.1 1.1.2.2 1.1.2.3	8,2,3,7,9
		23810	C	1.1.2.3	8,2,3,7,9
		23954	C	11.2.1 1.1.2.2 1.1.2.3	8,2,3,7,9
		22743	C	1.1.2.3	8,2,3,7,9
		20224	C	1.1.2.3	8,2,3,7,9
		22738	C	1.1.2.3	8,2,3,7,9
		22950	C	1.1.2.3	8,2,3,7,9
		23958	C	1.1.2.3	8,2,3,7,9
		65106	C	1.1.2.3	8,2,3,7,9
		65107	C	1.1.2.3	8,2,3,7,9
		22724	C	1.1.2.3	8,2,3,7,9
		20225	C	1.1.2.3	8,2,3,7,9
		65135	C	1.1.2.2 1.1.2.3	8,2,3,7,9
		67228	C	1.1.2.2	8,2,3,7,9
		67230	C	1.1.2.2	8,2,3,7,9
2011	Core Spray Sys. I (Note 11)	22811	C	1.1.2.2 1.1.2.3	8,2,3,7,9
		65134	C	1.1.2.2 1.1.2.3	8,2,3,7,9
		67201	C	1.1.2.2	8,2,3,7,9
		67203	C	1.1.2.3	8,2,3,7,9
		22809	C	1.1.2.2 1.1.2.3	8,2,3,7,9
		22812	C	11.2.2 1.1.2.2	8,2,3,7,9
		65102	C	1.1.2.3	8,2,3,7,9
		65103	C	1.1.2.3	8,2,3,7,9

TABLE A-2

FIRE AREA RB2-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2012	Core Spray, Sys. II (Note 12)	20287	C	1.1.2.3	8,2,3,7,9
		65106	C	1.1.2.3	8,2,3,7,9
		65107	C	1.1.2.3	8,2,3,7,9
		22810	C	1.1.2.3	8,2,3,7,9
		22819	C	11.2.1	8,2,3,7,9
				1.1.2.2	
				1.1.2.3	
		23977	C	11.2.1	8,2,3,7,9
				1.1.2.2	
				1.1.2.3	
2017	PCIS, Ckt. A (Note 17)	26277	C	1.1.2.2	10
		26281	C	1.1.2.3	10
		26279	C	1.1.2.3	10
2018	PCIS, Ckt. B (Note 18)	26283	C	1.1.2.3	10
		26280	C	1.1.2.3	10
		26278	C	1.1.2.2	10
				1.1.2.3	
2022	Main Steam Isolation Ckt. Inbd Ckt. A (Note 22)	26342	C	1.1.2.2	10
		26356	C	1.1.2.2	10
		26370	C	1.1.2.2	10
		26384	C	1.1.2.2	10
2023	Main Steam Isolation Ckt. Inbd Ckt. B (Note 23)	26345	C	1.1.2.2	10
		26359	C	1.1.2.2	10
		26373	C	1.1.2.2	10
		26387	C	1.1.2.2	10
2024	PCIS Sensor & Trip Logic, Ckt. A (Note 24)	26312	C	1.1.2.3	10
		26320	C	1.1.2.3	10
		23764	C	11.2.1	10
				1.1.2.2	
		24146	C	11.2.1	10
		24011	C	11.2.1	10
				1.1.2.2	
		24148	C	11.2.1	10

TABLE A-2

FIRE AREA RB2-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2025	PCIS Sensor & Trip Logic, Ckt. B (Note 25)	26313	C	1.1.2.3	10
		26321	C	1.1.2.3	10
		23824	C	11.2.1 1.1.2.2	10
		24147	C	11.2.1	10
		24012	C	11.2.1 1.1.2.2	10
		24149	C	11.2.1	10
2027	Auto Blowdown Part 1 (Note 27)	25050	C	1.1.2.2 1.1.2.3	21
2028	Auto Blowdown Part 2, Ckt. A (Note 28)	23916	C	1.1.2.3	21
2029	Auto Blowdown, Part 2 Ckt. B (Note 29)	23916	C	1.1.2.3	21
2036	PCIS Main Steam Isol. Ckt. A Outbd (Note 36)	20687	P	1.1.2.2 1.1.2.3	10
2039 3039	Fire Protection CO_2 System (Note 39)	20703	C	1.1.2.2	25
2267	Main Steam Isolation Valve AO2-203-1A	26342	C	1.1.2.2	36
		26345	C	1.1.2.2	36
2268	Main Steam Isolation Valve AO2-203-1B	26356	C	1.1.2.2	36
		26359	C	1.1.2.2	36
2269	Main Steam Isolation Valve AO2-203-1C	26370	C	1.1.2.2	36
		26373	C	1.1.2.2	36
2270	Main Steam Isolation Valve AO2-203-1D	26384	C	1.1.2.2	36
		26387	C	1.1.2.2	36

TABLE A-3

FIRE AREA RB3-1

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
342	Target Rock Valve	33668	C*	1.4.1	1
	3-203-3A	33935	C*	1.4.1	1
343	Electromatic Relief	33938	C*	1.4.1	1
	Valve 3-203-3B	33669	C*	1.4.1	1
344	Electromatic Relief	33670	C*	1.4.1	1
	Valve 3-230-3C	33941	C*	1.4.1	1
345	Electromatic Relief	33671	C*	1.4.1	1
	Valve 3-203-3D	33944	C*	1.4.1	1
346	Electromatic Relief	33672	C*	1.4.1	1
	Valve 3-203-3E	33947	C*	1.4.1	1
3367	Main Steam	36345	C	1.4.1	36
	Isolation Valve	36342	C	1.4.1	36
	AO3-203-1A				
3368	Main Steam	36359	C	1.4.1	36
	Isolation Valve	36356	C	1.4.1	36
	AO3-203-1B				
3369	Main Steam	36373	C	1.4.1	36
	Isolation Valve	36370	C	1.4.1	36
	AO3-203-1C				
3370	Main Steam	36387	C	1.4.1	36
	Isolation Valve	36384	C	1.4.1	36
	AO3-203-1D				

*Energizes Valve

TABLE A-4

FIRE AREA RB3-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
342	Target Rock Valve 3-203-3A	33654	C*	1.1.1.3	1
		33668	C*	1.1.1.2 1.1.1.3	1
		33673	C*	1.1.1.3	1
		33935	C*	1.1.1.2 1.1.1.3	1
		34839	C*	1.1.1.3	1
		30272	P	1.1.1.3 1.1.1.4	1
		30275	P	1.1.1.3 1.1.1.4	1
		30280	P	1.1.1.3	1
		30281	P	1.1.1.3	1
343	Electromatic Relief Valve 3-203-3B	33657	C*	1.1.1.3	1
		34845	C*	1.1.1.3	1
		33938	C*	1.1.1.2 1.1.1.3	1
		34840	C*	1.1.1.3	1
		33669	C*	1.1.1.2 1.1.1.3	1
		30272	P	1.1.1.3 1.1.1.4	1
		30275	P	1.1.1.3 1.1.1.4	1
		30280	P	1.1.1.3	1
		30281	P	1.1.1.3	1

*Energizes Valve

TABLE A-4

FIRE AREA RB3-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
344	Electromatic Relief Valve 3-203-3C	33661	C*	1.1.1.3	1
		33670	C*	1.1.1.2	1
				1.1.1.3	
		34849	C*	1.1.1.3	1
		33941	C*	1.1.1.2	1
				1.1.1.3	
		34844	C*	1.1.1.3	1
		30272	P	1.1.1.3	1
				1.1.1.4	
		30275	P	1.1.1.3	1
				1.1.1.4	
		30280	P	1.1.1.3	1
		30281	P	1.1.1.3	1
345	Electromatic Relief Valve 3-203-3D	33662	C*	1.1.1.3	1
		33671	C*	1.1.1.2	1
				1.1.1.3	
		33674	C*	1.1.1.3	1
		33944	C*	1.1.1.2	1
				1.1.1.3	
		34845	C*	1.1.1.3	1
		30272	P	1.1.1.3	1
				1.1.1.4	
		30275	P	1.1.1.3	1
				1.1.1.4	
		30280	P	1.1.1.3	1
		30281	P	1.1.1.3	1

*Energizes Valve

TABLE A-4

FIRE AREA RB3-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
346	Electromatic	33667	C*	1.1.1.3	1
	Relief Valve	33672	C*	1.1.1.2	1
	3-203-3E			1.1.1.3	
		33674	C*	1.1.1.3	1
		34849	C*	1.1.1.3	
		33947	C*	1.1.1.2	1
				1.1.1.3	
		30272	P	1.1.1.3	1
				1.1.1.4	
		30275	P	1.1.1.3	1
				1.1.1.4	
		30280	P	1.1.1.3	1
		30281	P	1.1.1.3	1
23	4160-V Bus 23-1	20857	C	1.1.1.2	2,3,7,9
	2/3 DG Feed Brkr			1.1.1.3	
	152-2333	30419	C	1.1.1.2	2,3,7,9,15
				1.1.1.3	
		Bus	P	1.1.1.2	2,3,7,9,15
		20360	C	1.1.1.2	15
		20449	C	1.1.1.2	15
		20445	C	1.1.1.2	2,3,7,9
		67577	C	1.1.1.2	2,3,7,9
				1.1.1.3	
322	250Vdc MCC 3A	34179	P	1.1.1.4	5
		34180	P	1.1.1.4	5
		34181	P	1.1.1.4	5
		34182	P	1.1.1.4	5

TABLE A-4

FIRE AREA RB3-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
323	250Vdc MCC 3A	24080	P	1.1.1.3 1.1.1.4	5
		24081	P	1.1.1.3 1.1.1.4	5
		24082	P	1.1.1.3 1.1.1.4	5
		24085	P	1.1.1.3 1.1.1.4	5
		24089	P	1.1.1.3 1.1.1.4	5
		24090	P	1.1.1.3 1.1.1.4	5
		24091	P	1.1.1.3 1.1.1.4	5
		24092	P	1.1.1.3 1.1.1.4	5
333	Isolation Condenser Valve MO3-1301-1	32555	P	1.1.1.2	4
		32557	C	1.1.1.2	4
		32559	C	1.1.1.2 1.1.1.3 1.1.1.4	4
		69995	P	1.1.1.1	4
		69996	P	1.1.1.2	4
		77658	C	1.1.1.2	4
		67566	P	1.1.1.2 1.1.1.3	4
		67567	P	1.1.1.2 1.1.1.3	4
		77652	P	1.1.1.2	4
		77653	P	1.1.1.2	4
		77659	C	1.1.1.2	4
334	Isolation Condenser Valve MO3-1301-2	33774	P	1.1.1.4	5
		33775	P	1.1.1.4	5
		33776	C	1.1.1.4	5
		33777	C	1.1.1.4	5
		33778	C	1.1.1.3 1.1.1.4	5

TABLE A-4

FIRE AREA RB3-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
335	Isolation Condenser Valve MO3-1301-3	33754	P	1.1.1.3 1.1.1.4	5
		33755	P	1.1.1.3 1.1.1.4	5
		33756	C	1.1.1.3 1.1.1.4	5
		33757	C	1.1.1.3 1.1.1.4	5
		33758	C	1.1.1.3 1.1.1.4	5
336	Isolation Condenser Valve MO3-1301-4	32572	P	1.1.1.2	4
		32574	C	1.1.1.2	4
		32576	C	1.1.1.2 1.1.1.3	4
		77694	P	1.1.1.2	4
		77655	P	1.1.1.2	4
		77654	C	1.1.1.2	4
		77693	C	1.1.1.2	4
		67571	C	1.1.1.2 1.1.1.3	4
		77658	C	1.1.1.2	4
		67567	P	1.1.1.2 1.1.1.3	4
		67566	P	1.1.1.2 1.1.1.3	4
		69997	C	1.1.1.1	4
		69999	C	1.1.1.1	4
337	Isolation Condenser Valve MO3-1301-10	75816	C	1.1.1.2 1.1.1.3 1.1.1.4	5 5
		75818	C	1.1.1.4	5
		75819	P	1.1.1.4	5
		75821	C	1.1.1.4	5
		75331	C	1.1.1.2	5
		75826	C	1.1.1.2	5
338	Isolation Condenser	36273	C	1.1.1.3	6

TABLE A-4

FIRE AREA RB3-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
339	Valves			1.1.1.4	
	AO3-1301-17&20	36274	C	1.1.1.3	6
				1.1.1.4	
		36275	C	1.1.1.3	6
				1.1.1.4	
		36276	C	1.1.1.3	6
				1.1.1.4	
340	Isolation Condenser	75820	P	1.1.1.4	5
	Valve MO3-4102	75822	C	1.1.1.4	5
		75816	C	1.1.1.2	5
				1.1.1.3	
				1.1.1.4	
		75332	C	1.1.1.2	5
		75827	C	1.1.1.2	5

TABLE A-4

FIRE AREA RB3-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3201	2/3 DG Control, Metering, & Excitation (Note 49)	20361	C	1.1.1.2	15
		34175	P	1.1.1.2 1.1.1.3	15
		30359	C	1.1.1.2 1.1.1.3	15
		20359	C	1.1.1.2	15
		20449	C	1.1.1.2	15
		20360	C	1.1.1.2	15
		30433	C	1.1.1.2 1.1.1.3	15
		20446	C	1.1.1.2	15
		20356	C	1.1.1.2	15
		20448	C	1.1.1.2	15
		20447	C	1.1.1.2	15
		20445	C	1.1.1.2	15
		38485	C	1.1.1.2 1.1.1.3	15
		77352	C	1.1.1.2 1.1.1.3	15
		67545	C	1.1.1.2	15
		67554	C	1.1.1.2 1.1.1.3	15
		67555	C	1.1.1.2 1.1.1.3	15
		67577	C	1.1.1.2 1.1.1.3	15

TABLE A-4

FIRE AREA RB3-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3204	2/3 DG Fuel Oil Transfer Pump 2/3-5203	32711	P	1.1.1.2	15
		32712	C	1.1.1.2	15
		67573	P	1.1.1.2 1.1.1.3	15
		67572	C	1.1.1.2 1.1.1.3	15
		33793	C	1.1.1.2 1.1.1.3 1.1.1.4	15
		33794	P	1.1.1.2 1.1.1.3 1.1.1.4 1.3.1	15
		33795	P	1.1.1.2 1.1.1.3 1.1.1.4 1.3.1	15
		33796	C	1.1.1.2 1.1.1.3 1.1.1.4 1.3.1	15
		33797	C	1.1.1.3 1.1.1.4	15
		77524	C	1.1.1.2 1.1.1.3	9

TABLE A-4

FIRE AREA RB3-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3202	2/3 DG Room Supply Fan 2/3-5790	32988	P	1.1.1.2	15
		32989	C	1.1.1.2	15
		22993	C	1.1.1.2	15
	Fan 2/3-5790	67575	P	1.1.1.2 1.1.1.3	15
		67574	C	1.1.1.2	15
		75524	C	1.1.1.2 1.1.1.3	9

TABLE A-4

FIRE AREA RB3-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3203	2/3 DG Cooling Water Pump 2/3-3903B	22395	C	1.1.1.2	15
		32395	C	1.1.1.2	15
		33792	C	1.1.1.3 1.1.1.4	15
		33789	P	1.1.1.2 1.1.1.3 1.1.1.4 1.3.1	15
		33790	P	1.1.1.2 1.1.1.3 1.1.1.4 1.3.1	15
		75524	C	1.1.1.2 1.1.1.3	15
		33791	C	1.1.1.2 1.1.1.3 1.1.1.4 1.3.1	15
	Isolation Condenser Supply Isolation Vlv. MO3-4399-74	39435	C	1.1.1.3 1.1.1.4	5
		80064	C	1.1.1.4	5
		80070	P	1.1.1.4	5
		80071	P	1.1.1.4	5

TABLE A-4

FIRE AREA RB3-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3007	LPCI, Sys. I, Ckt. A (Note 7)	30226	C	1.1.1.3	2,3,7,9
		30284	C	1.1.1.3	2,3,7,9
		75124	C	1.1.1.3	2,3,7,9
		75125	C	1.1.1.3	2,3,7,9
		30825	C	1.1.1.3	2,3,7,9
		32547	C	1.1.1.3	2,3,7,9
		30813	C	1.1.1.3	2,3,7,9
		32696	C	1.1.1.1	2,3,7,9
				11.1.2	
				1.1.1.2	
				1.1.1.3	
		30228	C	1.1.1.3	2,3,7,9
		32733	C	1.1.1.3	2,3,7,9
		75197	C	1.1.1.2	2,3,7,9
				1.1.1.3	
		75851	C	1.1.1.2	2,3,7,9
		75853	C	1.1.1.2	2,3,7,9
3009	LPCI. Sys. II, Ckt. A (Note)	30225	C	1.1.1.2	8,2,3,7,9
				1.1.1.3	
		32724	C	1.1.1.2	8,2,3,7,9
				1.1.1.3	
		75128	C	1.1.1.3	8,2,3,7,9
		75129	C	1.1.1.3	8,2,3,7,9
		33958	C	1.1.1.3	8,2,3,7,9
		32950	C	1.1.1.3	8,2,3,7,9
		33954	C	11.1.1	8,2,3,7,9
				1.1.1.2	
		30224	C	1.1.1.2	8,2,3,7,9
				1.1.1.3	
		32738	C	1.1.1.3	8,2,3,7,9
		32743	C	1.1.1.3	8,2,3,7,9
		32810	C	1.1.1.3	8,2,3,7,9
		33977	C	11.1.1	8,2,3,7,9
				1.1.1.2	
		75198	C	1.1.1.2	8,2,3,7,9
				1.1.1.3	
		75875	C	1.1.1.2	8,2,3,7,9
		75877	C	1.1.1.2	8,2,3,7,9

TABLE A-4

FIRE AREA RB3-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3011	Core Spray, Sys. I (Note 11)	32811	C	1.1.1.3	8,2,3,7,9
		75124	C	1.1.1.3	8,2,3,7,9
		75125	C	1.1.1.3	8,2,3,7,9
		32809	C	1.1.1.3	8,2,3,7,9
		75197	C	1.1.1.2	8,2,3,7,9
		75851	C	1.1.1.2	8,2,3,7,9
		75853	C	1.1.1.2	8,2,3,7,9
				1.1.1.3	
		32812	C	11.1.2	8,2,3,7,9
				1.1.1.2	
				1.1.1.3	
3012	Core Spray, Sys. II (Note 12)	30287	C	1.1.1.2	8,2,3,7,9
				1.1.1.3	
		75128	C	1.1.1.3	8,2,3,7,9
		75129	C	1.1.1.3	8,2,3,7,9
		32810	C	1.1.1.3	8,2,3,7,9
		32819	C	11.1.1	8,2,3,7,9
				1.1.1.2	
		33977	C	11.1.1	8,2,3,7,9
				1.1.1.2	
		75198	C	1.1.1.2	8,2,3,7,9
				1.1.1.3	
		75875	C	1.1.1.2	8,2,3,7,9
		75877	C	1.1.1.2	8,2,3,7,9
3017	PCIS Ckt. A (Note 17)	36277	C	1.1.1.2	10
				1.1.1.3	
		36279	C	1.1.1.3	10
		36281	C	1.1.1.3	10
3018	PCIS, Ckt. B (Note 18)	36278	C	1.1.1.2	10
		36280	C	1.1.1.3	10
		36283	C	1.1.1.3	10
3022	Main Steam Isolation Ckt. A Inbd	36342	C	1.1.1.2	10
				1.1.1.3	
		36356	C	1.1.1.2	10
				1.1.1.3	
		36370	C	1.1.1.2	10
				1.1.1.3	
		36384	C	1.1.1.2	10
				1.1.1.3	

TABLE A-4

FIRE AREA RB3-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3023	Main Steam Isolation Ckt. B Inbd (Note 23)	36345	C	1.1.1.2 1.1.1.3	10
		36359	C	1.1.1.2 1.1.1.3	10
		36373	C	1.1.1.2 1.1.1.3	10
		36387	C	1.1.1.2 1.1.1.3	10
3024	PCIS Sensor & Trip System Ckt. A (Note 24)	33764	C	11.1.2 1.1.1.2	10
		34146	C	1.1.1.1 11.1.1 11.1.2	10 10
		34011	C	11.1.2 1.1.1.2	
		34148	C	1.1.1.1 11.1.1 11.1.2	10
3025	PCIS Sensor & Trip System Ckt. B (Note 25)	33824	C	11.1.2 1.1.1.2	10
		34147	C	1.1.1.1 11.1.1 11.1.2	10
		34012	C	1.1.1.2	10
		34149	C	1.1.1.1	10
3027	Auto Blowdown Part I Ckt. A (Note 27)	35050	C	1.1.1.3	21
		33934	C	1.1.1.3	21
3028	Auto Blowdown Part 2 Ckt. A (Note 28)	33934	C	1.1.1.3	21
3029	Auto Blowdown Part 2 Ckt. B (Note 29)	33916	C	1.1.1.3	21
3367	Main Steam Isolation Valve AO3-203-1A	36345	C	1.1.1.2 1.1.1.3	36
		36342	C	1.1.1.2 1.1.1.3	36

TABLE A-4

FIRE AREA RB3-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3368	Main Steam Isolation Valve AO3-203-1B	36345	C	1.1.1.2 1.1.1.3	36
		36342	C	1.1.1.2 1.1.1.3	36
3369	Main Steam Isolation Valve AO3-203-1C	36345	C	1.1.1.2 1.1.1.3	36
		36342	C	1.1.1.2 1.1.1.3	36
3370	Main Steam Isolation Valve AO3-203-1D	36345	C	1.1.1.2 1.1.1.3	36
		36342	C	1.1.1.2 1.1.1.3	36

TABLE A-5

FIRE AREA RB2/3

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
233	Isolation Condenser Valve MO2-1301-1	77656	C	9.0.C	4
		77657	P	9.0.C	4
236	Isolation Condenser Valve MO2-1301-4	77656	C	9.0.C	4
		77657	P	9.0.C	4
		77691	C	9.0.C	4
333	Isolation Condenser Valve MO3-1301-1	67566	P	9.0.C	4
		67567	P	9.0.C	4
336	Isolation Condenser Valve MO3-1301-4	67571	C	9.0.C	4
		67567	P	9.0.C	4
		67566	P	9.0.C	4
2039 3039	Fire Protection CO_2 System (Note 39)	20703	C	9.0.C	25

TABLE A-6

FIRE AREA TB-I

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
243	Electromatic Relief Valve 2-203-3B	23901	C*	8.2.5.A 8.2.6.A 8.2.6.B	1
		25069	C*	8.2.5.A 8.2.6.A 8.2.6.B	1
		20271	P	7.0.A.1 8.2.5.A 8.2.6.A	1
		23927	P	7.0.A.1 8.2.5.A 8.2.6.A	1
		23904	P	7.0.A.1 8.2.5.A 8.2.6.A	1
244	Electromatic Relief Valve 2-203-3C	23905	P	8.2.5.A 8.2.6.A 8.2.6.B	1
		23917	C*	8.2.5.A 8.2.6.A 8.2.6.B	1
		20272	P	7.0.A.1 8.2.5.A 8.2.6.A	1
		23927	P	7.0.A.1 8.2.5.A 8.2.6.A	1
		23904	P	7.0.A.1 8.2.5.A 8.2.6.A	1

Energizes Valve

TABLE A-6

FIRE AREA TB-I

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
245	Electromatic Relief Valve 2-203-3D	23906	C*	8.2.5.A 8.2.6.A 8.2.6.B	1
		25055	C*	8.2.5.A 8.2.6.A 8.2.6.B	1
		20272	P	7.0.A.1 8.2.5.A 8.2.6.A	1
		23927	P	7.0.A.1 8.2.5.A 8.2.6.A	1
		23904	P	7.0.A.1 8.2.5.A 8.2.6.A	1
246	Electromatic Relief Valve 2-2303-3E	23902	C*	8.2.5.A 8.2.6.A 8.2.6.B	1
		23940	C*	8.2.5.A 8.2.6.A 8.2.6.B	1
		20272	P	7.0.A.1 8.2.5.A 8.2.6.A	1
		23927	P	7.0.A.1 8.2.5.A 8.2.6.A	1
		23904	P	7.0.A.1 8.2.5.A 8.2.6.A	1
242	Target Rock Valve 2-203-3A	25061	C*	8.2.5.A 8.2.6.A 8.2.6.B	1
		25062	C*	8.2.5.A 8.2.6.A	1

TABLE A-6

FIRE AREA TB-I

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
242				8.2.6.B	
		20271	P	7.0.A.1	1
				8.2.5.A	
				8.2.6.A	
		23927	P	7.0.A.1	1
				8.2.5.A	
				8.2.6.A	
		23904	P	7.0.A.1	1
				8.2.5.A	
				8.2.6.A	
22	Brkrs 152-2302 and 152-2329	20627	P	8.2.5.A	2,3,7,9
				8.2.6.A	
				8.2.6.B	
		20628	P	8.2.5.A	2,3,7,9
				8.2.6.A	
				8.2.6.B	
		20629	P	8.2.5.A	2,3,7,9
				8.2.6.A	
				8.2.6.B	
		20630	C	8.2.5.A	2,3,7,9
				8.2.6.A	
				8.2.6.B	
		20631	C	8.2.5.A	2,3,7,9
				8.2.6.A	
		20632	C	8.2.5.A	2,3,7,9
				8.2.6.A	
		20851	C	8.2.5.A	2,3,7,9
				8.2.6.A	
				8.2.6.B	
		20850	C	8.2.5.A	2,3,7,9
				8.2.6.A	
				8.2.6.B	
		20680	C	8.2.6.A	2,3,7,9
23	Brkr 152-2333	20441	C	8.2.5.A	2,3,7,9,12
				8.2.6.A	
				8.2.6.B	
		20853	C	8.2.5.A	2,3,7,9,12
				8.2.6.A	
				8.2.6.B	

TABLE A-6

FIRE AREA TB-I

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
23		20855	C	8.2.5.A 8.2.6.A 8.2.6.B	2,3,7,9, 12
		20626	C	8.2.5.A 8.2.6.A	2,3,7,9, 12
		20445	C	8.2.5.A 8.2.6.A 8.2.6.B	2,3,7,9, 12
232	DG2 Fuel Oil Transfer Pump 2-5203	22202	P	8.2.5.A 9.0A	42
		22203	C	8.2.5.A 9.0A	42
		22718	C	8.2.5.A	42
		66009	C	8.2.5.A	42
212	480V SWGR 28 tie to 29	21494	C	8.2.6.A 8.2.5.A	42
		21396	C	8.2.6.A 8.2.5.A	42
219	480V MCC 29-2	69715	P	8.2.5.A	42
		69717	P	8.2.5.A	42
		69718	P	8.2.5.A	42
		69719	P	8.2.5.A	42
233	Isolation Condenser Valve MO2-1301-1	22559	C	8.2.5.A 8.2.6.A 8.2.6.B	4
234	Isolation Condenser Valve MO2-1301-2	23778	C	7.0.A.1 8.2.6.A 8.2.6.B	5
235	Isolation Condenser Valve MO2-1301-3	23758	C	7.0.A.1 8.2.6.A 8.2.6.B	5
236	Isolation Condenser Valve MO2-1301-4	22576	C	8.2.5.A 8.2.6.A 8.2.6.B	4

TABLE A-6

FIRE AREA TB-I

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
237	Isolation Condenser Valve MO2-1301-10	65128	C	8.2.5.A 8.2.6.A 8.2.6.B	5
238 239	Isolation Condenser Valves AO2-1301-17&20	26273	C	8.2.5.A 8.2.6.A 8.2.6.B	6
		26274	C	8.2.5.A 8.2.6.A 8.2.6.B	6
		67258	C	7.0.A.1	6
		26275	C	7.0.A.1 8.2.6.A 8.2.6.B	6
		26276	C	7.0.A.1 8.2.6.A 8.2.6.B	6
240	Isolation Condenser Valve MO2-4102	65129	C	8.2.5.A 8.2.6.A 8.2.6.B	5
	Isolation Condenser Supply Isolation Vlv. MO3-4399-74	29435	C	8.2.6.A 8.2.6.B	5

TABLE A-6

FIRE AREA TB-I

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3201	2/3 DG Control, Metering, & Excitation (Note 49)	20446	C	8.2.5.A 8.2.6.A 8.2.6.B	7
		20448	C	8.2.5.A 8.2.6.A 8.2.6.B	7
		20447	C	8.2.5.A 8.2.6.A 8.2.6.B	7
		20445	C	8.2.5.A 8.2.6.A 8.2.6.B	7
		22842	C	8.2.5.A 8.2.6.A 8.2.6.B	7
		28485	C	8.2.5.A 8.2.6.A 8.2.6.B	7
		20853	C	8.2.5.A 8.2.6.A 8.2.6.B	7
		20441	C	8.2.5.A 8.2.6.A 8.2.6.B	7
3203	2/3 DG Cooling Water Pump 2/3 - 3903B	22394	P	8.2.5.A 8.2.6.A	9
		22395	C	8.2.6.A 8.2.6.B	9
3205	Diesel Fire Pump 2/3-4101	23729	C	8.2.5.A	40

TABLE A-6

FIRE AREA TB-I

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2007	LPCI, Sys. I, Ckt. A (Note 7)	22951	P	7.0.A.1	8,2,3,7,9
				8.2.5.A	
				8.2.6.A	
		22696	C	8.2.5.A	8,2,3,7,9
				8.2.6.A	
				8.2.6.B	
		20825		8.2.5.A	8,2,3,7,9
				8.2.6.A	
				8.2.6.B	
		22733	C	8.2.5.A	8,2,3,7,9
				8.2.6.A	
				8.2.6.B	
		20228	C	8.2.5.A	8,2,3,7,9
				8.2.6.A	
				8.2.6.B	
		20813	C	8.2.5.A	8,2,3,7,9
				8.2.6.A	
				8.2.6.B	
		22547	C	8.2.5.A	8,2,3,7,9
				8.2.6.A	
				8.2.6.B	
		67201	C	8.2.5.A	8,2,3,7,9
				8.2.6.A	
		67203	C	8.2.5.A	8,2,3,7,9
				8.2.6.A	
		20284	C	8.2.5.A	8,2,3,7,9
				8.2.6.A	
				8.2.6.B	
		20226	C	8.2.5.A	8,2,3,7,9
				8.2.6.A	
				8.2.6.B	
		20830	C	8.2.5.A	8,2,3,7,9
		20723	P	8.2.1.A	8,2,3,7,9
				8.2.2.A	
				8.2.5.A	
				8.2.6.A	
		65142	C	8.2.5.A	8,2,3,7,9
				8.2.6.A	
				8.2.6.B	

TABLE A-6

FIRE AREA TB-I

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2009	LPCI, Sys. II, Ckt. A (Note 9)	22952	P	7.0.A.1 8.2.5.A 8.2.6.A	8,2,3,7,9
		23977	C	7.0.A.1 8.2.5.A 8.2.6.A 8.2.6.B	8,2,3,7,9
		22810	C	7.0.A.1 8.2.5.A 8.2.6.A 8.2.6.B	8,2,3,7,9
		23954	C	7.0.A.1 8.2.5.A 8.2.6.A 8.2.6.B	8,2,3,7,9
		22743	C	7.0.A.1 8.2.5.A 8.2.6.A 8.2.6.B	8,2,3,7,9
		20819	C	8.2.5.A 8.2.6.A	8,2,3,7,9
		20840	C	8.2.5.A	8,2,3,7,9
		20224	C	7.0.A.1 8.2.5.A 8.2.6.A 8.2.6.B	8,2,3,7,9
		22738	C	7.0.A.1 8.2.5.A 8.2.6.A 8.2.6.B	8,2,3,7,9
		22950	C	7.0.A.1 8.2.5.A 8.2.6.A 8.2.6.B	8,2,3,7,9
		23958	C	7.0.A.1 8.2.5.A 8.2.6.A 8.2.6.B	8,2,3,7,9

TABLE A-6

FIRE AREA TB-I

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2009		67230	C	8.2.6.B	8,2,3,7,9
		65144	P	7.0.A.1	8,2,3,7,9
		22724	C	7.0.A.1 8.2.5.A 8.2.6.A 8.2.6.B	8,2,3,7,9
		20225	C	7.0.A.1 8.2.5.A 8.2.6.A 8.2.6.B	8,2,3,7,9
		69065	C	7.0.A.1 8.2.6.A 8.2.6.B	8,2,3,7,9
2011	Core Spray, Sys. I (Note 11)	22951	P	7.0.A.1 8.2.5.A 8.2.6.A	8,2,3,7,9
		22811	C	8.2.5.A 8.2.6.A 8.2.6.B	8,2,3,7,9
		67201	C	8.2.5.A 8.2.6.A	8,2,3,7,9
		67203	C	8.2.5.A 8.2.6.A	8,2,3,7,9
		22809	C	8.2.5.A 8.2.6.A 8.2.6.B	8,2,3,7,9
		22812	C	8.2.5.A 8.2.6.A 8.2.6.B	8,2,3,7,9
		20809	P	8.2.2.A 8.2.5.A 8.2.5.B 8.2.6.A	8,2,3,7,9
		65142	C	8.2.5.A 8.2.6.A 8.2.6.B	8,2,3,7,9

TABLE A-6

FIRE AREA TB-I

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2012	Core Spray, Sys. II (Note 12)	22952	P	7.0.A.1 8.2.5.A 8.2.6.A	8,2,3,7,9
		20287	C	7.0.A.1 8.2.5.A 8.2.6.A 8.2.6.B	8,2,3,7,9
		67230	C	8.2.6.B	8,2,3,7,9
		65149	C	8.2.5.A 8.2.6.A 8.2.6.B	8,2,3,7,9
		22810	C	7.0.A.1 8.2.5.A 8.2.6.A 8.2.6.B	8,2,3,7,9
		22819	C	7.0.A.1 8.2.5.A 8.2.6.A 8.2.6.B	8,2,3,7,9
		23977	C	7.0.A.1 8.2.5.A 8.2.6.A 8.2.6.B	8,2,3,7,9
		67228	C	8.2.6.B	8,2,3,7,9
2017	PCIS,Ckt.A (Note 17)	26277	C	8.2.5.A 8.2.6.A 8.2.6.B	10
		26281	C	7.0.A.1 8.2.6.A 8.2.6.B	10
		26279	C	7.0.A.1 8.2.6.A 8.2.6.B	10
		24176	P	7.0.A.1 8.2.5.A 8.2.6.A	10
		24211	P	7.0.A.1	10

TABLE A-6

FIRE AREA TB-I

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2018	PCIS, Ckt. B (Note 18)	26283	C	7.0.A.1 8.2.6.A 8.2.6.B	10
		26280	C	7.0.A.1 8.2.6.A 8.2.6.B	10
		26278	C	7.0.A.1 8.2.6.A 8.2.6.B	10
		24211	P	7.0.A.1	10
2020	Process Radiation Monitoring System, Ckt. A (Note 20)	24176	P	7.0.A.1 8.2.5.A 8.2.6.A	10
2021	Process Radiation Monitoring System, Ckt. A (Note 21)	24211	P	7.0.A.1	10
2022	Main Steam Isolation Ckt. Inboard Ckt. A (Note 22)	26342	C	8.2.5.A 8.2.6.A 8.2.6.B	10
		26356	C	8.2.5.A 8.2.6.A 8.2.6.B	10
		26370	C	8.2.5.A 8.2.6.A 8.2.6.B	10
		26384	C	8.2.5.A 8.2.6.A 8.2.6.B	10
		24176	P	7.0.1.A 8.2.5.A 8.2.6.A	10
2023	Main Steam Isolation Ckt. Inboard Ckt. B (Note 23)	26345	C	8.2.5.A 8.2.6.A 8.2.6.B	10
		26359	C	8.2.5.A 8.2.6.A	10

TABLE A-6

FIRE AREA TB-I

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2023				8.2.6.B	10
		26373	C	8.2.5.A 8.2.6.A 8.2.6.B	
		26387	C	8.2.5.A 8.2.6.A 8.2.6.B	10
2024	PCIS Sensor & Trip Logic, Ckt. A (Note 24)	26323	C	8.2.6.A 8.2.6.B	10
		26320	C	8.2.6.A 8.2.6.B	10
		24013	C	8.2.6.A 8.2.6.B	10
		23840	C	8.2.6.A 8.2.6.B	10
		23785	C	8.2.5.A 8.2.6.B	10
		23784	C	8.2.5.A 8.2.6.B	10
		23782	C	8.2.5.A 8.2.6.B	10
		23780	C	8.2.5.A 8.2.6.B	10
		24000	C	8.2.6.A 8.2.6.B	10
		23834	C	8.2.5.A 8.2.6.B	10
		23829	C	8.2.5.A 8.2.6.B	10
		23828	C	8.2.5.A 8.2.6.B	10
		23786	C	8.2.5.A 8.2.6.B	10
		24020	C	8.2.6.A 8.2.6.B	10
		23764	C	8.2.6.A 8.2.6.B	10
		24011	C	8.2.6.A 8.2.6.B	10

TABLE A-6

FIRE AREA TB-I

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2025	PCIS Sensor & Trip Logic, Ckt. B (Note 25)	26313	C	8.2.6.A 8.2.6.B	10
		26321	C	8.2.6.A 8.2.6.B	10
		24014	C	8.2.5.A 8.2.6.B	10
		23841	C	8.2.6.A 8.2.6.B	10
		23768	C	8.2.5.A 8.2.6.B	10
		23767	C	8.2.5.A 8.2.6.B	10
		23766	C	8.2.5.A 8.2.6.B	10
		23765	C	8.2.5.A 8.2.6.B	10
		24001	C	8.2.6.A 8.2.6.B	10
		23773	C	8.2.5.A 8.2.6.B	10
		23771	C	8.2.5.A 8.2.6.B	10
		23770	C	8.2.5.A 8.2.6.B	10
		23769	C	8.2.5.A 8.2.6.B	10
		24021	C	8.2.5.A 8.2.6.B	10
		23824	C	8.2.6.A 8.2.6.B	10
		24012	C	8.2.6.A 8.2.6.B	10
2027	Auto Blowdown, Part 1 (Note 27)	23927	P	7.0.A.1 8.2.5.A 8.2.6.A	21
		23904	P	7.0.A.1 8.2.5.A 8.2.6.A	21

TABLE A-6

FIRE AREA TB-I

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2027 (Cont'd)		25050	C	8.2.5.A 8.2.6.A 8.2.6.B	21
2028	Auto Blowdown, Part 2, Ckt. A (Note 28)	22952	P	7.0.A.1 8.2.5.A 8.2.6.A	21
		23904	P	7.0.A.1 8.2.5.A 8.2.6.A	21
		23927	P	7.0.A.1 8.2.5.A 8.2.6.A	21
		23916	C	7.0.A.1 8.2.5.A 8.2.6.A 8.2.6.B	21
2029	Auto Blowdown Part 2, Ckt.B (Note 29)	23916	C	7.0.A.1 8.2.5.A 8.2.6.A 8.2.6.B	21
		22952	P	7.0.A.1 8.2.5.A 8.2.6.A	21
2036	PCIS Main Steam Isol. Ckt. A-Outbd (Note 36)	20687	P	7.0.A.1 8.2.6.A 8.2.6.B	10
		26349	C	7.0.A.1 8.2.5.A 8.2.6.A 8.2.6.B	10
		26350	C	8.2.5.A	10
		67256	C	7.0.A.1	10
		26362	C	7.0.A.1 8.2.5.A 8.2.6.A 8.2.6.B	10
		26364	C	8.2.5.A	10
		26376	C	7.0.A.1	10

TABLE A-6

FIRE AREA TB-I

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2036				8.2.5.A	
				8.2.6.A	
				8.2.6.B	
		26378	C	8.2.5.A	10
		67257	C	7.0.A.1	10
		26390	C	7.0.A.1	10
				8.2.5.A	
				8.2.6.A	
				8.2.6.B	
		26392	C	8.2.5.A	10
		26386	C	8.2.5.A	10
		26372	C	8.2.5.A	10
		26375	C	8.2.5.A	10
		26389	C	8.2.5.A	10
		24211	P	7.0.A.1	10
2037	PCIS Main Steam Isolation Ckt. B Outbd (Note 37)	26348	C	7.0.A.1	10
				8.2.5.A	
				8.2.6.A	
				8.2.6.B	
		26379	C	8.2.5.A	10
		67256	C	7.0.A.1	10
		26363	C	7.0.A.1	10
				8.2.5.A	
				8.2.6.A	
				8.2.6.B	
		26344	C	8.2.5.A	10
		26377	C	7.0.A.1	10
				8.2.5.A	
				8.2.6.A	
				8.2.6.B	
		26393	C	8.2.5.A	10
		67257	C	7.0.A.1	10
		26391	C	7.0.A.1	10
				8.2.5.A	
				8.2.6.A	
				8.2.6.B	
		26347	C	8.2.5.A	10
		26358	C	8.2.5.A	10
		26386	C	8.2.5.A	10
		26372	C	8.2.5.A	10

TABLE A-6

FIRE AREA TB-I

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2037 (Cont'd)		26394	C	8.2.5.B	10
		26389	C	8.2.5.A	10
		26375	C	8.2.5.A	10
		26380	C	8.2.5.A	10
2039 3039	Fire Protection CO_2 System (Note 39)	24172	P	7.0.A.1 8.2.6.A 8.2.6.B	25
		20702	C	8.2.5.A	25
		65829	C	8.2.5.A	25
		25009	C	8.2.5.A	25
		25010	C	8.2.5.A	25
		25020	C	8.2.6.A	25
		25029	C	8.2.6.B	25
		25030	C	8.2.6.B	25
		35035	C	8.2.6.B	25
		25015	C	8.2.5.A 8.2.6.A	25
		25004	C	8.2.5.A	25
		25044	C	8.2.6.B	25
		25035	C	8.2.6.B	25
		35024	C	8.2.6.B	25
		35034	C	8.2.6.B	25
2267	Main Steam Isolation Valve AO2-203-1A	26342	C	8.2.5.A 8.2.6.A 8.2.6.B	36
		26345	C	8.2.5.A 8.2.6.A 8.2.6.B	36
2268	Main Steam Isolation Valve AO2-203-1B	26356	C	8.2.5.A 8.2.6.A 8.2.6.B	36
		26359	C	8.2.5.A 8.2.6.A 8.2.6.B	36
2269	Main Steam Isolation Valve AO2-203-1C	26370	C	8.2.5.A 8.2.6.A 8.2.6.B	36

TABLE A-6

FIRE AREA TB-I

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
		26373	C	8.2.5.A 8.2.6.A 8.2.6.B	36
2270	Main Steam Isolation Valve AO2-203-1D	26384	C	8.2.5.A 8.2.6.A 8.2.6.B	36
		26387	C	8.2.5.A 8.2.6.A 8.2.6.B	36
2271	Main Steam Isolation Valve AO2-203-2A	26349	C	7.0.A.1 8.2.5.A 8.2.6.A 8.2.6.B	36
		26375	C	8.2.5.A	36
		26350	C	8.2.5.A	36
		67256	C	7.0.A.1	36
		26348	C	7.0.A.1 8.2.5.A 8.2.6.A 8.2.6.B	36
		26380	C	8.2.5.A	36
		26379	C	8.2.5.A	36
2272	Main Steam Isolation Valve AO2-203-2B	26389	C	8.2.5.A	36
		26364	C	8.2.5.A	36
		67256	C	7.0.A.1	36
		26363	C	7.0.A.1 8.2.5.A 8.2.6.A 8.2.6.B	36
		26367	C	8.2.5.A	36
		26344	C	8.2.5.A	36
		26362	C	7.0.A.1 8.2.5.A 8.2.6.A 8.2.6.B	36

TABLE A-6

FIRE AREA TB-I

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2273	Main Steam Isolation Valve AO2-203-2C	26376	C	7.0.A.1 8.2.5.A 8.2.6.A 8.2.6.B	36
		26372	C	8.2.5.A	36
		26378	C	8.2.5.A	36
		67257	C	7.0.A.1	36
		26377	C	7.0.A.1 8.2.5.A 8.2.6.A 8.2.6.B	36
		26394	C	8.2.5.A	36
		26393	C	8.2.5.A	36
		67267	C	7.0.A.1 8.2.5.B 8.2.6.A 8.2.6.B	36
2274	Main Steam Isolation Valve AO2-203-2D	23690	C	7.0.A.1 8.2.5.A 8.2.6.A 8.2.6.B	36
		26386	C	8.2.5.A	36
		26392	C	8.2.5.A	36
		67257	C	7.0.A.1	36
		26391	C	7.0.A.1 8.2.5.A 8.2.6.A 8.2.6.B	36
		26358	C	8.2.5.A	36
		26347	C	8.2.5.A	36
32	4160-V Buses 33, 33-1, 34, 34-1, Main Feed Breakers 152-3310 and 152-3323	30632	C	8.2.5.A 8.2.6.A	32
		30850	C	8.2.5.A 8.2.6.A	32

TABLE A-6

FIRE AREA TB-I

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
33	4160-V Bus 33-1 2/3 DG Feed Brkr 152-3333	30855	C	8.2.5.A 8.2.6.A	32
		30626	C	8.2.5.A 8.2.6.A	32
		20999	C	8.2.5.A 8.2.6.A	32
		20445	C	8.2.5.A 8.2.6.A 8.2.6.B	32
310	480-V Transformers 38&39 Buses 38&39 Main Brkrs 152-3325 (Note 52)	30866	C	8.2.5.A 8.2.6.A	32
		30867	C	8.2.5.A 8.2.6.A	32
310	480-V Transformers 38&39 Buses 38&39 Main Brkrs 252-MF38 (Note 54)	31350	C	8.2.5.A 8.2.6.A	32
312	480-V Transformers 38&39 Buses 38&39 Main Breakers 252-3938 Control Cables (Note 55)	31494	C	8.2.5.A 8.2.6.A	32
312	480-V Transformers 38&39 Buses 38&39 Main Breakers 252-3839 Control Cables (Note 55)	31350	C	8.2.5.A 8.2.6.A	32
323	250 Vdc MCC 2B	34080	P	8.2.6.A	5
		34081	P	8.2.6.A	5
		34082	P	8.2.6.A	5
		34085	P	8.2.6.A	5
		34089	P	8.2.6.A	5
		34090	P	8.2.6.A	5
		34091	P	8.2.6.A	5
		34092	P	8.2.6.A	5

TABLE A-6

FIRE AREA TB-I

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3027	Auto Blowdown Part I Ckt. A (Note 27)	35054	C	8.2.5.A 8.2.6.A	32
		32604	C	8.2.5.A 8.2.6.A	32 32
3028	Auto Blowdown Part II, Ckt. A (Note 28)	33920	C	8.2.5.A 8.2.6.A	32
3007	LPCI Sys. I Ckt. A (Note 7)	30227	C	8.2.5.A 8.2.6.A	32
		30828	C	8.2.5.A 8.2.6.A	32
		30815	C	8.2.5.A 8.2.6.A	32
		30820	C	8.2.5.A 8.2.6.A	32
		32606	P	8.2.5.A 8.2.6.A	32
		32747	C	8.2.5.A 8.2.6.A	32
		79055	C	8.2.5.A 8.2.6.A 8.2.6.B	32
3009	LPCI Sys. II Ckt. A (Note 9)	79065	C	8.2.6.A 8.2.6.B	8 8
3011	Core Spray Sys. I (Note 11)	30864	C	8.2.5.A 8.2.6.A	32
		32606	P	8.2.5.A 8.2.6.A	32
3027	Auto Breakdown Part I, Ckt. A (Note 27)	35054	C	8.2.5.A 8.2.6.A	21
		32604	C	8.2.5.A 8.2.6.A	21
3028	Auto Breakdown Part II, Ckt. A (Note 28)	33920	C	8.2.5.A 8.2.6.A	21
		32614	C	8.2.5.A 8.2.6.A	21

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FIRE AREA TB-I

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3375	CRD Discharge Valve MO2-0301-2A	69409	P	8.2.2.A 8.2.5.B 8.2.5.A	41
3376	CRD Discharge Valve MO2-0301-2A	69410	C	8.2.2.A 8.2.5.B 8.2.5.A	41
3377	CRD Discharge Valve MO2-0301-2A	69411	C	8.2.5.A	41
3378	CRD Discharge Valve MO2-0301-2B	69412	C	8.2.5.A	41
3379	CRD Discharge Valve MO2-0301-2B	69413	P	8.2.2.A 8.2.5.A 8.2.5.B	41

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FIRE AREA TB-I

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3380	CRD Discharge Valve MO2-0301-2B	69414	C	8.2.2.A 8.2.5.B 8.2.6.A	41
	Isolation Condenser Makeup Pump 2/3-43122A	69906	C	8.2.5.A 8.2.6.A	43
		69907	C	8.2.5.A 8.2.6.A	43
		69916	C	8.2.5.A 8.2.6.A	43
		69917	C	8.2.5.A 8.2.6.A	43
	Isolation Condenser Makeup Pump 2/3-43123B	69908	C	8.2.5.A 8.2.6.A	43
		69909	C	8.2.5.A 8.2.6.A	43
		69918	C	8.2.5.A 8.2.6.A	43
		69919	C	8.2.5.A 8.2.6.A	43
	Clean Demineralized Tank Transmitter 2/3-3441-201	79517	C	8.2.5.A	44

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FIRE AREA TB-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
226	RB 125 Vdc Dist. Pnl. 2	24196	P	8.2.5.C	37
		24197	P	8.2.5.C	37
233	250 Vdc MCC 2B	34080	P	8.2.6.C	5
		34081	P	8.2.6.C	5
		34082	P	8.2.6.C	5
		34085	P	8.2.6.C	5
		34089	P	8.2.6.C	5
		34090	P	8.2.6.C	5
		34091	P	8.2.6.C	5
		34092	P	8.2.6.C	5
323	250 Vdc MCC 3B	24080	P	8.2.6.C	5
		24081	P	8.2.6.C	5
		24082	P	8.2.6.C	5
		24085	P	8.2.6.C	5
		24089	P	8.2.6.C	5
		24090	P	8.2.6.C	5
		24091	P	8.2.6.C	5
		24092	P	8.2.6.C	5
342	Target Rock Valve 3-203-3A	33673	C*	8.2.5.C 8.2.6.C	1
		34839	C*	8.2.5.C 8.2.6.C	1
343	Electromatic Relief Valve 3-203-3B	34845	C*	8.2.5.C 8.2.6.C	1
		34840	C*	8.2.5.C 8.2.6.C	1
344	Electromatic Relief Valve 3-203-3C	34849	C*	8.2.5.C 8.2.6.C	1
		34844	C*	8.2.5.C 8.2.6.C	1
345	Electromatic Relief Valve 3-203-3D	33674	C*	8.2.5.C 8.2.6.C	1
		34845	C*	8.2.5.C 8.2.6.C	1

* Energizes Valve

TABLE A-7

FIRE AREA TB-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
346	Electromatic Relief Valve 3-203-3E	33674	C*	8.2.5.C 8.2.6.C	1
		34849	C*	8.2.5.C 8.2.6.C	1
213	480-V Transformers 28&29 Buses SES 28 & 29 Main Brkr 252-MF 29 (Note 53)	21400	C	8.2.6.C	11
		21401	C	8.2.6.C	
215	480-V MCC 28-1	21358	C	8.2.5.C	16
219	480-V MCC 29-2	69715	P	8.2.5.C	42
		69717	P	8.2.5.C	42
		69718	P	8.2.5.C	42
		69719	P	8.2.5.C	42

* Energizes Valve

TABLE A-7

FIRE AREA TB-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
226	RB 125V DC	24196	P	8.2.5.C	37
	Dist. Pnl 2	24197	P	8.2.5.C	37
234	Isolation Condenser Valve MO2-1301-2	23778	C	8.2.6.C	5
235	Isolation Condenser Valve MO2-1301-3	23758	C	8.2.6.C	5
237	Isolation Condenser	65530	C	8.2.5.C	5
	Valve MO2-1301-10	65128	C	8.2.5.C	5
240	Isolation Condenser	65529	C	8.2.5.C	5
	Valve MO2-4102	65129	C	8.2.5.C	5
3201	2/3 DG Control, Metering, & Excitation	38485	C	8.2.5.C	23
3202	2/3 DG Room Supply Fan 2/3-5790	22993	C	8.2.5.C	7
3203	2/3 DG Cooling Water	33789	P	8.2.6.C	23
	Pump	32395	C	8.2.5.C	23
	2/3-3903B				
2009	LPCI, Sys. II, Ckt. A	23954	C	8.2.6.C	14
	(Note 9)	22743	C	8.2.6.C	14
		22738	C	8.2.6.C	14
		22950	C	8.2.6.C	14
		22724	C	8.2.6.C	14
2012	Core Spray, Sys. II (Note 12)	22819	C	8.2.6.C	14
2017	PCIS, Ckt. A (Note 17)	26281	C	8.2.6.C	10
2018	PCIS Ckt. B (Note 18)	26283	C	8.2.6.C	10
2024	PCIS Sensor & Trip	24013	C	8.2.6.C	10
	Logic, Ckt. A	24020	C	8.2.6.C	10
	(Note 24)	23764	C	8.2.6.C	10
		24011	C	8.2.6.C	10
2025	PCIS Sensor & Trip	24014	C	8.2.6.C	10
	Logic, Ckt. B	24021	C	8.2.6.C	10
	(Note 25)	23824	C	8.2.6.C	10
		24012	C	8.2.6.C	10

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FIRE AREA TB-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2036	PCIS Main Steam Isol. Ckt. A - Outboard (Note 36)	20687	P	8.2.6.C	10
2039	Fire Protection CO_2 System (Note 39)	35029	C	8.2.5.C	25
3039		25004	C	8.2.5.C	25
		25024	C	8.2.5.C 8.2.6.C	25
		35024	C	8.2.5.C	25
		35025	C	8.2.5.C 8.2.6.C	25
		24172	P	8.2.5.C 8.2.6.C	25
		20702	C	8.2.5.C	25
		20703	C	8.2.5.C	25
		65829	C	8.2.5.C	25
		25039	C	8.2.6.C	25
		35040	C	8.2.5.C 8.2.6.C	25
		25044	C	8.2.6.C	25
		35034	C	8.2.5.C 8.2.6.C	25
		25035	C	8.2.6.C	25
		35004	C	8.2.5.C	25
		34172	P	8.2.5.C	25
		20704	C	8.2.5.C	25
2273	Main Steam Isolation Valve AO2-203-2C	67267	C	8.2.5.C 8.2.6.C	36
326	RB 125-Vdc Dist Pnl. 3 Feed	34196	P	8.2.5.C	23
		34197	P	8.2.5.C	23
32	4160-V Buses 33, 33-1 Main Feed Brkrs. 152-3310 and 152-3323 (Note 45)	30627	P	8.2.5.C	23
		30628	P	8.2.5.C	23
		30629	P	8.2.5.C	23
		30630	C	8.2.5.C	11
		30851	C	8.2.5.C	11
		30850	C	8.2.5.C 8.2.6.C	11
33	4160-V Bus 33-1 2/3 DG Feed Breaker 152-3333	30855	C	8.2.5.C 8.2.6.C	11

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FIRE AREA TB-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
310	480-V Transformers 38&39-Buses 38&39 Main Brkrs 152-3325 (Note 52)	30866	C	8.2.5.C 8.2.6.C	11
		30867	C	8.2.5.C 8.2.6.C	11
310	480-V Transformers 38&39-Buses 38&39 Main Brkrs. 152-MF 38 (Note 54)	31350	C	8.2.5.C 8.2.6.C	11

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FIRE AREA TB-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
312	480-V Transformers 38&39 - Buses 38&39 Main Breakers 252-3839 Control Cables (Note 55)	31350	C	8.2.5.C 8.2.6.C	30
317	480-V MCC 38-3	31371	P	8.2.5.C 8.2.6.C	23
		31372	P	8.2.5.C 8.2.6.C	23
		31373	P	8.2.5.C 8.2.6.C	23
		31374	C	8.2.5.C 8.2.6.C	23
333	Isolation Condenser Valve MO3-1301-1	32559	C	8.2.5.C 8.2.6.C	4
336	Isolation Condenser Valve MO3-1301-4	32576	C	8.2.5.C 8.2.6.C	4
338 339	Isolation Condenser Valves AO3-1301-17&20	36273	C	8.2.5.C 8.2.6.C	6
		36274	C	8.2.5.C 8.2.6.C	6
3007	LPCI, Sys. I Ckt. A (Note 7)	30226	C	8.2.5.C 8.2.6.C	14
		30284	C	8.2.5.C 8.2.6.C	14
		75851	C	8.2.5.C	14
		75142	C	8.2.5.C	14
		30825	C	8.2.5.C 8.2.6.C	14
		32547	C	8.2.5.C 8.2.6.C	14
		30813	C	8.2.5.C 8.2.6.C	14
		32696	C	8.2.5.C	14
		75853	C	8.2.5.C	14

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FIRE AREA TB-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3007 (Cont'd)				8.2.6.C	
		30228	C	8.2.5.C	14
				8.2.6.C	
		32733	C	8.2.5.C	14
				8.2.6.C	
3011	Core Spray Sys. I (Note 11)	32811	C	8.2.5.C	14
				8.2.6.C	
		75142	C	8.2.5.C	14
				8.2.6.C	
		75851	C	8.2.5.C	14
				8.2.6.C	
		32809	C	8.2.5.C	14
				8.2.6.C	
		32812	C	8.2.5.C	14
				8.2.6.C	
		75853	C	8.2.5.C	14
3017	PCIS, Ckt. A (Note 17)	36277	C	8.2.5.C	10
				8.2.6.C	
		36279	C	8.2.5.C	10
				8.2.6.C	
3018	PCIS Ckt. B (Note 18)	36280	C	8.2.5.C	10
				8.2.6.C	
3022	Main Steam Isolation Ckt A Inbd (Note 22)	36342	C	8.2.5.C	10
				8.2.6.C	
		36356	C	8.2.5.C	10
				8.2.6.C	
		36370	C	8.2.5.C	10
				8.2.6.C	
		36384	C	8.2.5.C	10
				8.2.6.C	
		34085	P	8.2.6.C	10
3023	Main Steam Isolation Ckt. B Inboard (Note 23)	36345	C	8.2.5.C	10
				8.2.6.C	
		36359	C	8.2.5.C	10
				8.2.6.C	
		36373	C	8.2.5.C	10
				8.2.6.C	

TABLE A-7

FIRE AREA TB-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3023 (Cont'd)		36387	C	8.2.5.C 8.2.6.C	10
3024	Sensor & Trip System, Ckt. A (Note 24)	34013	C	8.2.5.C 8.2.6.C	10
		33840	C	8.2.5.C	10
		34000	C	8.2.5.C 8.2.6.C	10
		33764	C	8.2.5.C 8.2.6.C	10
		34020	C	8.2.5.C 8.2.6.C	10
		34011	C	8.2.5.C 8.2.6.C	10
3025	PCIS Sensor & Trip System, Ckt. B (Note 25)	34014	C	8.2.6.C	10
		33841	C	8.2.5.C	10
		34001	C	8.2.5.C 8.2.6.C	10
		34021	C	8.2.5.C 8.2.6.C	10
		33824	C	8.2.5.C 8.2.6.C	10
3027	Auto Blowdown, Part 1, Ckt. A	35050	C	8.2.5.C 8.2.6.C	21
		33934	C	8.2.5.C 8.2.6.C	21
3028	Auto Blowdown, Part 2, Ckt. A (Note 28)	33934	C	8.2.5.C 8.2.6.C	21
3062	4-kV SWGR Bus 33-1 UV Relay (Note 62)	77430	C	8.2.5.C	26
		77402	C	8.2.5.C	26
3367	Main Steam Isolation Valve AO3-203-1A	36345	C	8.2.5.C 8.2.6.C	36
		36342	C	8.2.5.C 8.2.6.C	36
3368	Main Steam Isolation Valve AO3-203-1B	36359	C	8.2.5.C 8.2.6.C	36
		36356	C	8.2.5.C 8.2.6.C	36

TABLE A-7

FIRE AREA TB-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3369	Main Steam Isolation Valve AO3-203-1C	36373	C	8.2.5.C 8.2.6.C	36
		36370	C	8.2.5.C 8.2.6.C	36
3370	Main Steam Isolation Valve AO3-203-1D	36387	C	8.2.5.C 8.2.6.C	36
		36384	C	8.2.5.C 8.2.6.C	36

TABLE A-7

FIRE AREA TB-II

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3381	CRD Discharge Valve MO2-0301-2B	69413	C	8.2.6.C	41
3382	CRD Discharge Valve MO2-0301-2B	69414	P	8.2.6.C	41

TABLE A-8

FIRE AREA TB-III

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
322	250Vdc MCC 3A	34179	P	1.1.1.4	5
		34180	P	1.1.1.4	5
		34181	P	1.1.1.4	5
		34182	P	1.1.1.4	5
323	250Vdc MCC 3B	24080	P	1.1.1.3	5
				1.1.1.4	
		24081	P	1.1.1.3	5
				1.1.1.4	
		24082	P	1.1.1.3	5
				1.1.1.4	
		24085	P	1.1.1.3	5
				1.1.1.4	
		24089	P	1.1.1.3	5
				1.1.1.4	
		24091	P	1.1.1.3	5
				1.1.1.4	
		24092	P	1.1.1.3	5
				1.1.1.4	
342	Target Rock Valve 3-203-3A	33673	C*	8.2.4	1
		34839	C*	8.2.4	1
		30280	P	6.1	1
				8.2.6.D	
				8.2.6.E	
		30281	P	6.1	1
				8.2.6.D	
				8.2.6.E	
343	Electromatic Relief Valve 3-203-3B	34845	C*	8.2.4	1
		34840	C*	8.2.4	1
		30280	P	6.1	1
				8.2.6.D	
		30281		8.2.6.E	
			P	6.1	1
				8.2.6.D	
				8.2.6.E	

* Energizes Valve

TABLE A-8

FIRE AREA TB-III

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
344	Electromatic Relief Valve 3-203-3C	34849	C*	8.2.4	1
		34844	C*	8.2.4	1
		30280	P	6.1 8.2.6.D 8.2.6.E	1
		30281	P	6.1 8.2.6.D 8.2.6.E	1
345	Electromatic Relief Valve 3-203-3D	33674	C*	8.2.4	1
		34845	C*	8.2.4	1
		30280	P	6.1 8.2.6.D 8.2.6.E	1
		30281	P	6.1 8.2.6.D 8.2.6.E	1
346	Electromatic Relief Valve 3-203-3E	33674	C*	8.2.4	1
		34849	C*	8.2.4	1
		30280	P	6.1 8.2.6.D 8.2.6.E	1
		30281	P	6.1 8.2.6.D 8.2.6.E	1
333	Isolation Condenser Valve MO3-1301-1	32559	C	8.2.4	4
334	Isolation Condenser Valve MO3-1301-2	33778	C	8.2.4 8.2.5.E 8.2.6.D	5
335	Isolation Condenser Valve MO3-1301-3	33758	C	8.2.4 8.2.5.E 8.2.6.D	5
336	Isolation Condenser Valve MO3-1301-4	32576	C	8.2.4	4

* Energizes Valve

TABLE A-8

FIRE AREA TB-III

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
337	Isolation Condenser Valve MO3-1301-10	75331	C	8.2.4 8.2.5.E	5
		75826	C	8.2.4	5
338	Isolation Condenser	36273	C	8.2.4	6
339	Valves	36274	C	8.2.4	6
	AO3-1301-17&20	36275	C	8.2.4 8.2.5.E 8.2.5.D	6
		36276	C	8.2.4 8.2.5.E 8.2.6.D	6
340	Isolation Condenser Valve MO3-4102	75332	C	8.2.4 8.2.5.E	5
		75827	C	8.2.4	5
	Isolation Condenser Supply Isolation Vlv. MO3-4399-74	39435	C	8.2.6.A 8.2.6.B 8.2.4	5

TABLE A-8

FIRE AREA TB-III

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2039		34172	P	6.1	25
2039 3039	Fire Protection CO_2 System (Note 39)	34172	P	6.1 8.2.5.E 8.2.6.E	25
		24172	P	8.2.5.E	25
		35000	C	8.2.5.E	25
		20702	C	8.2.5.E	25
		20704	C	8.2.5.E	25
		20701	C	8.2.5.E	25
		20703	C	8.2.5.E	25
		25045	C	8.2.6.D	25
		35009	C	8.2.5.E	25
		35010	C	8.2.5.E	25
		35014	C	8.2.5.E 8.2.6.E	25
		35019	C	8.2.6.E	25
		35040	C	8.2.6.D	25
		25044	C	8.2.6.D	25
		25024	C	8.2.5.E	25
		35015	C	8.2.5.E 8.2.6.E	25
		35004	C	8.2.5.E	25
		35025	C	8.2.5.E	25
		35034	C	8.2.5.E	25
		25004	C	8.2.6.E	25
3201	2/3 DG Control (Note 49)	38485	C	8.2.5.E 8.2.6.E	2,3,7,9
3203	2/3 DG Cooling Water Pump 2/3 3903B	32394	P	8.2.4 8.2.5.E 8.2.6.E	7,22
		32395	C	8.2.5.E 8.2.6.E	7
		33792	C	8.2.4 8.2.5.E 8.2.6.D	7

TABLE A-8

FIRE AREA TB-III

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3007	LPCI Sys. I Ckt. A (Note 7)	32951	P	6.1	8,2,3,7,9
				8.2.4	
				8.2.5.E	
				8.2.6.E	
		30226	C	8.2.4	8,2,3,7,9
		30284	C	8.2.4	8,2,3,7,9
		75142	C	8.2.4	8,2,3,7,9
		75194	P	8.2.4	8,2,3,7,9
				8.2.5.E	
				8.2.6.E	
		30825	C	8.2.4	8,2,3,7,9
		32547	C	8.2.4	8,2,3,7,9
		30227	C	8.2.4	8,2,3,7,9
		30828	C	8.2.4	8,2,3,7,9
		30813	C	8.2.4	8,2,3,7,9
		32606	P	8.2.4	8,2,3,7,9
		32696	C	8.2.4	8,2,3,7,9
		30228	C	8.2.4	8,2,3,7,9
		30830	C	8.2.4	8,2,3,7,9
				8.2.5.E	
				8.2.6.E	
		30815	C	8.2.4	8,2,3,7,9
		32733	C	8.2.4	8,2,3,7,9
		30820	C	8.2.4	8,2,3,7,9
		32747	C	8.2.4	8,2,3,7,9

TABLE A-8

FIRE AREA TB-III

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3009	LPCI Sys. II Ckt. A (Note 9)	32952	P	6.1 8.2.4 8.2.5.E 8.2.6.D 8.2.6.E	8,2,3,7,9
		30225	C	8.2.4 8.2.5.E	8,2,3,7,9
		32724	C	8.2.4 8.2.5.E	8,2,3,7,9
		75875	C	8.2.4 8.2.5.E	8,2,3,7,9
		75149	C	8.2.4	8,2,3,7,9
		75144	P	6.1 8.2.5.E 8.2.6.E	8,2,3,7,9

TABLE A-8

FIRE AREA TB-III

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3009 (Cont'd)		75872	C	8.2.4 8.2.5.E	8,2,3,7,9
		33958	C	8.2.4 8.2.5.E 8.2.6.D	8,2,3,7,9
		33950	C	8.2.4 8.2.5.E 8.2.6.D	8,2,3,7,9
		32738	C	8.2.4 8.2.5.E 8.2.6.D	8,2,3,7,9
		33954	C	8.2.4 8.2.5.E	8,2,3,7,9
		32743	C	8.2.4 8.2.5.E 8.2.6.D	8,2,3,7,9
		32810	C	8.2.4 8.2.5.E 8.2.6.D	8,2,3,7,9
		33977	C	8.2.4 8.2.5.E	8,2,3,7,9
		30224	C	8.2.4 8.2.5.E	8,2,3,7,9
		30840	C	8.2.4 8.2.5.E 8.2.6.E	8,2,3,7,9
		75149	C	8.2.4	8,2,3,7,9

TABLE A-8

FIRE AREA TB-III

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3011	Core Spray, Sys. I (Note 11)	32951	P	6.1 8.2.4 8.2.5.E 8.2.6.E	8,2,3,7,9
		30864	C	8.2.4	8,2,3,7,9
		32811	C	8.2.4	8,2,3,7,9
		32606	P	8.2.4	8,2,3,7,9
		75142	C	8.2.4	8,2,3,7,9
		32809	C	8.2.4	8,2,3,7,9
		32812	C	8.2.4	8,2,3,7,9
		75194	P	8.2.4 8.2.5.E 8.2.6.E	8,2,3,7,9
3012	Core Spray, Sys. II (Note 12)	32952	P	6.1 8.2.4 8.2.5.E 8.2.6.D 8.2.6.E	8,2,3,7,9
		30287	C	8.2.4 8.2.5.E	8,2,3,7,9
		75875	C	8.2.4 8.2.5.E	8,2,3,7,9
		75877	C	8.2.4 8.2.5.E	8,2,3,7,9
		32810	C	8.2.4 8.2.5.E 8.2.6.D	8,2,3,7,9
		32819	C	8.2.4 8.2.5.E	8,2,3,7,9
		33977	C	8.2.4 8.2.5.E	8,2,3,7,9
		75144	P	6.1 8.2.4 8.2.5.E	8,2,3,7,9
		75149	C	8.2.4	8,2,3,7,9

TABLE A-8

FIRE AREA TB-III

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3017	PCIS Ckt. A (Note 17)	34176	P	6.1 8.2.4 8.2.5.E 8.2.6.E	10
		36277	C	8.2.4	10
		36279	C	8.2.4	10
		36281	C	8.2.4 8.2.5.E 8.2.6.D	10
3018	PCIS Ckt. B (Note 18)	34211	P	6.1 8.2.4 8.2.5.E 8.2.6.D 8.2.6.E	10
		36278	C	8.2.4 8.2.5.E	10
		36280	C	8.2.4	10
		36283	C	8.2.4 8.2.5.E 8.2.6.D	10
3020	Process Radiation Monitoring System Ckt. A (Note 20)	34176	P	6.1 8.2.4 8.2.5.E 8.2.6.E	10
3021	Process Radiation Monitoring System Ckt. B (Note 21)	34211	P	6.1 8.2.4 8.2.5.E 8.2.6.D 8.2.6.E	10

TABLE A-8

FIRE AREA TB-III

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3022	Main Steam Isolation Ckt. A Inbd (Note 22)	34176	P	6.1 8.2.4 8.2.5.E 8.2.6.E	10
		36342	C	8.2.4	10
		36356	C	8.2.4	10
		36370	C	8.2.4	10
		36384	C	8.2.4	10
		34085	C	6.1 8.2.6.D 8.2.6.E	10
3023	Main Steam Isolation Ckt. B Inbd (Note 23)	36345	C	8.2.4	10
		36359	C	8.2.4	10
		36373	C	8.2.4	10
		36387	C	8.2.4	10
3024	PCIS Sensor & Trip System Ckt. A (Note 24)	33840	C	8.2.4 8.2.5.D 8.2.6.D	10
		33780	C	8.2.5.E 8.2.6.D	10
		33781	C	8.2.5.E 8.2.6.D	10
		33784	C	8.2.5.E 8.2.6.D	10
		33785	C	8.2.6.E	10

TABLE A-8

FIRE AREA TB-III

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3024				8.2.6.D	
(Cont'd)		34000	C	8.2.4	10
		33786	C	8.2.5.E	10
				8.2.6.D	
		33828	C	8.2.5.E	10
				8.2.6.D	
		33829	C	8.2.5.E	10
				8.2.6.D	
		33834	C	8.2.5.E	10
				8.2.6.D	
		34013	C	8.2.4	10
		34020	C	8.2.4	10
		33764	C	8.2.4	10
		34011	C	8.2.4	10
3025	Sensor & Trip System	33841	C	8.2.5.D	10
	Ckt. B (Note 25)			8.2.6.D	
				8.2.4	
		34001	C	8.2.5.D	10
				8.2.6.D	
				8.2.4	
		34014	C	8.2.4	10
		33769	C	8.2.5.E	10
				8.2.6.D	
		33770	C	8.2.5.E	10
				8.2.6.D	
		33771	C	8.2.5.E	10
				8.2.6.D	
		33773	C	8.2.5.E	10
				8.2.6.D	
		34021	C	8.2.4	10
		33824	C	8.2.4	10
3027	Auto Blowdown	33927	P	6.1	21
	Part 1 Ckt. A			8.2.4	
	(Note 27)			8.2.5.E	
				8.2.6.E	
		33934	C	8.2.4	21
		35050	C	8.2.4	21
		35054	C	8.2.4	21
		32604	C	8.2.4	21

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FIRE AREA TB-III

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3028	Auto Blowdown Part II Ckt. A (Note 28)	33927	PR	6.1 8.2.5.E 8.2.6.E 8.2.4	21
		32952	PM	6.1 8.2.6.D 8.2.6.E 8.2.5.E 8.2.4	21
		33934	C	8.2.4	21
		33920	C	8.2.4	21
		32614	C	8.2.4	21
3029	Auto Blowdown Part II Ckt. B (Note 29)	32952	PM	6.1 8.2.4 8.2.6.D 8.2.6.E 8.2.5.E	21
		33916	C	8.2.4 8.2.5.E 8.2.6.D	21
3036	PCIS Main Steam Isolation Ckt. A Outbd (Note 36)	34211	P	6.1 8.2.4 8.2.5.E 8.2.6.D 8.2.6.E	10
		36349	C	8.2.4 8.2.5.E 8.2.6.D	10
		36350	C	8.2.5.E	10
		36362	C	8.2.4 8.2.5.E 8.2.6.D	10
		36364	C	8.2.5.E	10
		36376	C	8.2.4 8.2.5.E 8.2.6.D	10
		36378	C	8.2.5.E	10
		36390	C	8.2.4	10

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FIRE AREA TB-III

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3036 (Cont'd)				8.2.5.E	
				8.2.6.D	
		36392	C	8.2.5.E	10
		36375	C	8.2.5.E	10
		36389	C	8.2.5.E	10
		36372	C	8.2.5.E	10
		36386	C	8.2.5.E	10
3037	PCIS Main Steam Isolation Ckt. B Outbd (Note 37)	36379	C	8.2.5.E	10
		36344	C	8.2.5.E	10
		36393	C	8.2.5.E	10
		36347	C	8.2.5.E	10
		36380	C	8.2.5.E	10
		36375	C	8.2.5.E	10
		36348	C	8.2.4	10
				8.2.5.E	
				8.2.6.D	
		36363	C	8.2.4	10
				8.2.5.E	
				8.2.5.D	
		36367	C	8.2.5.E	10
		36389	C	8.2.5.E	10
		36377	C	8.2.4	10
				8.2.5.E	
				8.2.6.D	
		36394	C	8.2.5.E	10
		36372	C	8.2.5.E	10
		36391	C	8.2.4	10
				8.2.5.E	
				8.2.6.D	
		36358	C	8.2.5.E	10
3204	Diesel Generator 2/3 Fuel Oil Transfer Pump 2/3-5203	33797	C	8.2.4	7, 9
				8.2.5.E	
				8.2.6.D	
3367	Main Steam Isolation Valve AO3-203-1A	36345	C	8.2.4	36
		36342	C	8.2.4	36

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FIRE AREA TB-III

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3368	3368	Main Steam	36359	C	36
		Isolation Valve	36356	C	36
		AO3-203-1B			
3369	Main Steam	36373	C	8.2.4	36
	Isolation Valve	36370	C	8.2.4	36
	AO3-203-1C				
3370	Main Steam	36387	C	8.2.4	36
	Isolation Valve	36384	C	8.2.4	
	AO3-203-1D				
3371	Main Steam	36350	C	8.2.5.E	36
	Isolation Valve	36349	C	8.2.4	36
	AO3-203-2A			8.2.5.E	
				8.2.6.D	
		36379	C	8.2.5.E	36
		36375	C	8.2.5.E	36
		36348	C	8.2.4	36
				8.2.5.E	
				8.2.6.D	
		36380	C	8.2.5.E	36
3372	Main Steam	36363	C	8.2.4	36
	Isolation Valve			8.2.5.E	
	AO3-203-2B			8.2.6.D	
		36367	C	8.2.5.E	36
		36389	C	8.2.5.E	36
		36344	C	8.2.5.E	36
		36362	C	8.2.4	36
				8.2.5.E	
				8.2.6.D	
		36364	C	8.2.5.E	36
3373	Main Steam	36394	C	8.2.5.E	36
	Isolation Valve	36377	C	8.2.4	36
	AO3-203-2C			8.2.5.E	
				8.2.6.D	
		36393	C	8.2.5.E	36
		36376	C	8.2.4	36
				8.2.5.E	

TABLE A-8

FIRE AREA TB-III

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3373 (Cont'd)				8.2.6.D	
		36372	C	8.2.5.E	36
		36378	C	8.2.5.E	36
3374	Main Steam Isolation Valve AO3-203-2D	36390	C	8.2.4 8.2.5.E 8.2.6.D	36
		36386	C	8.2.5.E	36
		36392	C	8.2.5.E	36
		36391	C	8.2.4 8.2.5.E 8.2.6.D	36
		36358	C	8.2.5.E	36
		36347	C	8.2.5.E	36
3383	CRD Discharge Valve MO3-0301-2A	79409	P	8.2.2.B 8.2.5.D 8.2.5.E 8.2.6.E	41
3384	CRD Discharge Valve MO3-0301-2A	79410	C	8.2.2.B 8.2.5.D 8.2.5.E 8.2.6.E	41
3385	CRD Discharge Valve MO3-0301-2A	79411	C	8.2.6.E 8.2.5.E 8.2.4	41
3386	CRD Discharge Valve MO3-0301-2B	79412	P	8.2.5.B 8.2.5.D 8.2.5.E	41
3387	CRD Discharge Valve MO3-0301-2B	79413	C	8.2.2.B 8.2.5.D 8.2.6.E	41
3388	CRD Discharge Valve MO3-0301-2B	79414	C	8.2.6.E 8.2.5.E 8.2.4	41

TABLE A-9

FIRE AREA TB-IV

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
There are no cable discrepancies in this fire area.					

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
342	Target Rock Valve	33673	C*	6.2	1
	3-203-3A	34839	C*	2.0	1
343	Electromatic Relief	34845	C*	2.0	1
	Valve 3-203-3B	34840	C*	2.0	1
344	Electromatic Relief	34849	C*	2.0	1
	Valve 3-203-3C	34844	C*	2.0	1
345	Electromatic Relief	33674	C*	6.2	1
	Valve	34845	C*	2.0	1
	3-203-3D				
346	Electromatic Relief	33674	C*	6.2	1
	Valve 3-203-3E	34849	C*	2.0	1
243	Electromatic Relief	66964	C*	2.0	1
	Valve			6.2	
	2-203-3B	23901	C*	2.0	1
				6.2	
		25066	C*	2.0	1
				6.2	
		25069	C*	2.0	1
				6.2	
		20271	P	2.0	1
				6.2	
		23927	P	6.2	1
		23904	P	6.2	1
		66966	C*	6.2	1
244	Electromatic Relief	23905	C*	2.0	1
	Valve			6.2	
	2-203-3C	23917	C*	2.0	1
				6.2	
		23943	C*	2.0	1
				6.2	
		20272	P	2.0	1
				6.2	
		23927	P	6.2	1
		23904	P	6.2	1
		66965	C*	2.0	1
				6.2	
		66967	C*	6.2	1

* Energizes Valve

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
245	Electromatic Relief Valve 2-203-3D	23906	C*	2.0 6.2	1
		25055	C*	2.0 6.2	1
		25074	C*	2.0 6.2	1
		20272	P	2.0 6.2	1
		23927	P	6.2	1
		23904	P	6.2	1
246	Electromatic Relief Valve 2-203-3D	23902	C*	2.0 6.2	1
		23940	C*	2.0 6.2	1
		25073	C*	2.0 6.2	1
		20272	P	2.0 6.2	1
		23927	P	6.2	1
		23904	P	6.2	1
242	Target Rock Valve 2-203-3A	25061	C*	2.0 6.2	1
		25062	C*	2.0 6.2	1
		25065	C*	2.0 6.2	1
		25271	P	2.0 6.2	1
		23927	P	6.2	1
		23904	P	6.2	1
22	4160-V Bus 23&23-1 Main Feed Breakers 152-2302 and 152-2329 (Note 45)	20631	C	2.0 6.2	11
		20632	C	2.0 6.2	11
		20850	C	2.0 6.2	11

* Energizes Valve

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
23	4160-V Bus 23-1	20441	C	2.0	11,12
	2/3 DG Feed Brkr			6.2	
	152-2333 (Note 48)	20853	C	2.0	11,12
				6.2	
		30999	C	2.0	11,12
				6.2	
		20855	C	2.0	11,12
				6.2	
		20626	C	2.0	11,12
				6.2	
		20442	C	2.0	11,12
				6.2	
		20445	C	2.0	11,12
				6.2	
210	480-V Transformers	20866	C	2.0	11
	28&29 Buses 28&29			6.2	
	Main Brkrs 152-2327	20867	C	2.0	11
	(Note 52)			6.2	
210	480-V Transformers	21396	C	2.0	11
	28&29 Buses 28&29	21498	C	2.0	11
	Main Brkrs 252-MF28			6.2	
	(Note 54)	21499	C	2.0	11
				6.2	
213	480-V Transformers	21400	C	2.0	11
	28&29 Buses 28&29	21401	C	2.0	11
	Main Brkrs 252-MF29				
	(Note 53)				
212	480-V Transformers	21494	C	2.0	11
	28&29 Buses 28&29				
	Main Brkrs 252-2928				
212	480-V Transformers	21396	C	2.0	11
	28&29 Buses 28&29				
	Main Brkr 252-2829				
233	Isolation Condenser	22559	C	2.0	4
	Valve MO2-1301-1			6.2	
		24135	C	2.0	4
				6.2	

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
234	Isolation Condenser Valve MO2-1301-2	24122	C	2.0 6.2	5
		23778	C	2.0	5
235	Isolation Condenser Valve MO2-1301-3	23758	C	2.0	5
		24123	C	2.0 6.2	5
236	Isolation Condenser Valve MO2-1301-4	22576	C	2.0 6.2	4
		24136	C	2.0 6.2	4
237	Isolation Condenser Valve MO2-1301-10	65128	C	2.0 6.2	5
238 239	Isolation Condenser Valves AO2-1301-17&20 (Note 26)	22848	P	2.0 6.2	6
		26273	C	2.0 6.2	6
		24098	C	6.2	6
		24118	C	2.0 6.2	6
		24119	C	2.0 6.2	6
		26274	C	2.0 6.2	6
		67258	C	2.0	6
		24068	C	2.0 6.2	6
		26275	C	2.0	6
		26276	C	2.0	6
		67252	C	2.0 6.2	6
		27196	P	2.0 6.2	6
240	Isolation Condenser Valve MO2-4102	65129	C	2.0 6.2	5
251	Service Water Pump 2A-3901	20660	C	2.0 6.2	11
		20661	C	2.0 6.2	11

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
249	CRD Pump 2A-302-3	20683	C	2.0	11
		20684	C	2.0	11
	Isolation Condenser Supply Isolation Vlv. MO2-4399-74	29435	C	2.0 6.2	5
3201	2/3 DG Control, Excitation, and Metering (Note 49)	20446	C	2.0 6.2	7,39
		20448	C	2.0 6.2	7
		20447	C	2.0 6.2	7
		20445	C	2.0 6.2	7
		32482	C	2.0	7
		20853	C	2.0 6.2	38
		20441	C	2.0 6.2	38
		20442	C	2.0 6.2	7
		22842	C	6.2	7

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2007	LPCI, Sys. I, Ckt. A	22951	P	6.2	14
	(Note 7)	20221	P	6.2	14
		20828	C	2.0	14
				6.2	
		22696	C	6.2	14
		20825	C	6.2	14
		22747	C	2.0	14
				6.2	
		22730	C	6.2	14
		20820	C	2.0	14
				6.2	
		22733	C	6.2	14
		20200	C	6.2	14
		20210	C	6.2	14
		20815	C	2.0	14
				6.2	
		20830	C	6.2	14
		20228	C	6.2	14
		20813	C	6.2	14
		20227	C	2.0	14
				6.2	
		22547	C	6.2	14
		20286	C	6.2	14
		65142	C	6.2	14
		65108	C	6.2	14
		20284	C	6.2	14
		20226	C	6.2	14
		22606	C	2.0	14
				6.2	
		69051	C	6.2	14
		69055	C	6.2	14
		65110	P	6.2	14
		65194	P	6.2	14

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2009	LPCI, Sys. II, Ckt. A (Note 9)	22952	P	2.0 6.2	14
		20222	P	6.2	14
		23969	P	6.2	14
		22673	C	2.0 6.2	14
		23977	C	2.0 6.2	14
		22810	C	2.0 6.2	14
		23954	C	2.0 6.2	14
		22726	C	6.2	14
		22745	C	2.0 6.2	14
		22749	C	6.2	14
		22743	C	2.0 6.2	14
		20252	C	6.2	14
		20260	C	6.2	14
		20819	C	2.0 6.2	14
		20840	C	6.2	14
		20224	C	2.0 6.2	14
		22731	C	2.0 6.2	14
		22738	C	2.0 6.2	14
		20223	C	2.0 6.2	14
		22950	C	2.0 6.2	14
		23958	C	2.0 6.2	14
		20285	C	6.2	14
		65127	C	6.2	14
		69065	C	2.0 6.2	14

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2009 (cont'd)		65111	P	6.2	14
		65144	P	2.0 6.2	14
		22724	C	2.0 6.2	14
		20225	C	2.0 6.2	14
		20960	P	2.0 6.2	14
2011	Core Spray, Sys. I (Note 11)	20221	P	6.2	14
		22606	P	2.0 6.2	14
		22811	C	6.2	14
		65142	C	6.2	14
		65108	C	6.2	14
		22809	C	6.2	14
		22812	C	6.2	14
		22808	C	6.2	14
		20864	C	2.0 6.2	14
		65110	P	6.2	14
		65194	P	6.2	14

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2012	Core Spray, Sys. II	20222	P	6.2	14
	(Note 12)	20287	C	2.0	14
				6.2	
		65149	C	6.2	14
		22952	C	2.0	14
				6.2	
		22810	C	2.0	14
				6.2	
		22819	C	2.0	14
				6.2	
		23977	C	2.0	14
				6.2	
		22816	C	6.2	14
		20863	C	2.0	14
				6.2	
		20960	P	2.0	14
				6.2	
		23969	P	6.2	14
		65127	C	6.2	14
		65111	P	2.0	14
				6.2	
		65144	P	2.0	14
				6.2	

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2017	PCIS, Ckt. A (Note 17)	22409	P	2.0	10
		24086	C	2.0	10
				6.2	
		24096	C	2.0	10
				6.2	
		25187	C	2.0	10
		24176	P	2.0	10
				6.2	
		26277	C	2.0	10
				6.2	
		24113	C	2.0	10
				6.2	
		26281	C	2.0	10
		24110	C	2.0	10
				6.2	
		26279	C	2.0	10
		24211	P	2.0	10
		24098	C	6.2	10
2018	PCIS, Ckt. B (Note 18)	22409	P	2.0	10
		24115	C	2.0	10
				6.2	
		26283	C	2.0	10
		24111	C	2.0	10
				6.2	
		26280	C	2.0	10
		24099	C	6.2	10
		24097	C	2.0	10
				6.2	
		26278	C	2.0	10
		24211	P	2.0	10

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2019	PCIS, Reset Ckt. (Note 19)	22482	P	2.0 6.2	10
		22472	P	2.0 6.2	10
		24047	C	2.0 6.2	10
		24048	C	2.0 6.2	10
		22481	C	2.0 6.2	10
		22798	C	2.0	10
		22477	C	2.0 6.2	10
		22799	C	2.0	10
		27291	P	2.0 6.2	10
		23412	C	2.0	10
2020	Process Radiation Monitoring System, Ckt. A (Note 20)	25187	P	2.0	10
		24176	P	2.0 6.2	10
		24086	P	2.0 6.2	10
2021	Process Radiation Monitoring System, Ckt. B (Note 21)	22409	P	2.0	10
		24211	P	2.0	10

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2022	Main Steam Isolation Ckt. Inbd Ckt. A (Note 22)	24086	P	2.0 6.2	10
		24025	C	2.0 6.2	10
		26342	C	2.0 6.2	10
		67250	C	2.0 6.2	10
		26356	C	2.0 6.2	10
		26370	C	2.0 6.2	10
		67251	C	2.0 6.2	10
		26384	C	2.0 6.2	10
		22470	C	2.0 6.2	10
		26354	C	2.0	10
		25187	P	2.0	10
		24176	P	2.0 6.2	10

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2023	Main Steam Isolation Ckt. Inbd Ckt. B (Note 23)	22848	P	2.0 6.2	10
		26345	C	2.0 6.2	10
		67250	C	2.0 6.2	10
		26359	C	2.0 6.2	10
		67251	C	2.0 6.2	10
		26373	C	2.0 6.2	10
		26387	C	2.0 6.2	10
		22488	P	2.0 6.2	10
		26368	P	2.0	10
		24058	P	2.0 6.2	10
		22849	P	2.0 6.2	10
		22470	C	2.0 6.2	10
		26354	C	2.0	10
2024	PCIS Sensor & Trip Logic, Ckt. A (Note 24)	26312	C	2.0	10
		26320	C	2.0	10
		24013	C	2.0	10
		23840	C	2.0	10
		24000	C	2.0	10
		24020	C	2.0	10
		23764	C	2.0	10
		24011	C	2.0	10
		67316	C	2.0 6.2	10
		24050	C	2.0	10
		24051	C	2.0	10
		27239	P	2.0 6.2	10

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2025	PCIS Sensor & Trip Logic, Ckt. B (Note 25)	26313	C	2.0	10
		26321	C	2.0	10
		24014	C	2.0	10
				6.2	
		23841	C	2.0	10
		24001	C	2.0	10
		27196	C	2.0	10
				6.2	
		24021	C	2.0	10
				6.2	
		23824	C	2.0	10
		24012	C	2.0	10
		67317	C	2.0	10
				6.2	
		24052	C	2.0	10
		24053	C	2.0	10
		27241	P	2.0	10
				6.2	
2027	Auto Blowdown, Part 1 (Note 27)	23927	P	6.2	21
		23904	P	6.2	21
		25050	C	2.0	21
				6.2	
		25054	C	2.0	21
				6.2	
		22816	C	6.2	21
		22604	C	2.0	
				6.2	

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FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2028	Auto Blowdown, Part 2, Ckt. A (Note 28)	20273	P	6.2	21
		22952	P	2.0 6.2	21
		23969	P	6.2	21
		20222	P	6.2	21
		20960	P	2.0 6.2	21
		23904	P	6.2	21
		23927	P	6.2	21
		25053	C	6.2	21
		23920	C	2.0 6.2	21
		22816	C	6.2	21
		20738	C	6.2	21
		23916	C	2.0 6.2	21
2029	Auto Blowdown, Part 2, Ckt. B (Note 29)	23969	P	6.2	21
		20222	P	6.2	21
		20960	P	2.0 6.2	21
		23916	C	2.0 6.2	21
		20738	C	6.2	21
		22952	P	2.0 6.2	21
		22808	C	6.2	21
		22614	C	2.0 6.2	21

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2036	PCIS Main Steam Isol. Ckt. A Outbd. (Note 36)	22409	P	2.0	10
		20687	P	2.0	10
		26355	C	2.0	10
		22471	C	2.0	10
		24029	C	2.0	10
				6.2	
		26349	C	2.0	10
		67256	C	2.0	10
		26362	C	2.0	10
		26376	C	2.0	10
		67257	C	2.0	10
		26390	C	2.0	10
		24211	P	2.0	10
2037	PCIS Main Steam Isol. Ckt. B Outbd (Note 37)	22848	P	2.0	10
				6.2	
		22849	P	2.0	10
				6.2	
		22488	P	2.0	10
				6.2	
		24058	P	2.0	10
				6.2	
		26368	P	2.0	10
		24066	C	2.0	10
				6.2	
		26305	C	2.0	10
		22489	C	2.0	10
		26348	C	2.0	10
		67256	C	2.0	10
		26363	C	2.0	10
		26377	C	2.0	10
		67257	C	2.0	10
		26391	C	2.0	10
2061	4-kv SWGR Bus 23 UV Relay (Note 61)	67536	P	2.0	26
		24213	P	2.0	26
2062	4-kv SWGR Bus 23-1 UV Relay (Note 62)	67431	C	6.2	26
		24213	P	2.0	26

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
2267	Main Steam Isolation Valve AO2-203-1A	26242	C	2.0 6.2	36
		26345	C	2.0 6.2	36
		67250	C	2.0 6.2	36
2268	Main Steam Isolation Valve AO2-203-1B	26356	C	2.0 6.2	36
		26359	C	2.0 6.2	36
2269	Main Steam Isolation Valve AO2-203-1C	26370	C	2.0 6.2	36
		26373	C	2.0 6.2	36
		67251	C	2.0 6.2	36
2270	Main Steam Isolation Valve AO2-203-1D	67251	C	2.0 6.2	36
		26384	C	2.0 6.2	36
		26387	C	2.0 6.2	36
2271	Main Steam Isolation Valve AO2-203-2A	26349	C	2.0	36
		67256	C	2.0	36
		26348	C	2.0	36
2272	Main Steam Isolation Valve AO2-203-2B	67256	C	2.0	36
		26363	C	2.0	36
		26362	C	2.0	36
2273	Main Steam Isolation Valve AO2-203-2C	26376	C	2.0	36
		67257	C	2.0	36
		26377	C	2.0	36
		67267	C	2.0 6.2	36
2274	Main Steam Isolation Valve AO2-203-2D	26390	C	2.0	36
		67257	C	2.0	36
		26391	C	2.0	36

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
32	4160-V Buses 33, 33-1, 34, 34-1 Main Feed Breakers 152-3310 and 152-3323 (Note 45)	30631	C	2.0 6.2	11
		30632	C	2.0	11
		30850	C	2.0	11
33	4160-V Bus 33-1 2/3 DG Feed Breaker 152-3333 (Note 48)	30626	C	2.0	11,12
		30855	C	2.0	11,12
		20999	C	2.0 6.2	11,12
		67440	C	2.0 6.2	11,12
		20445	C	2.0 6.2	11,12
310	480-V Transformers 38&39 Buses 38&39 Main Brkrs 152-3325 (Note 52)	30866	C	2.0	11
310	480-V Transformers 38&39 Buses 38&39 Main Brkrs 252-MF38 (Note 54)	30867	C	2.0	11
		31350	C	2.0	11
313	480-V Transformers 38&39 Buses 38&39 Main Brkrs 252-MF39 (Note 53)	31400	C	2.0 6.2	11
		31401	C	2.0 6.2	11
312	480-V Transformers 38&39 Buses 38&39 Brkrs 252-3938 (Note 55)	31494	C	2.0	11
312	480-V Transformers 38&39 Buses 38&39 Main Brkrs 252-3839 (Note 55)	31396	C	2.0 6.2	11
		31350	C	2.0	11
313	480 V-Transformers 38&39 Buses 38&39 Main Breakers 152-3426 (Note 51)	30940	C	2.0 6.2	11
		30941	C	2.0 6.2	11

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
333	Isolation Condenser Valve MO3-1301-1	32559	C	2.0	4
		34135	C	2.0	4
				6.2	
334	Isolation Condenser Valve MO3-1301-2	33778	C	2.0	5
				6.2	
		34122	C	2.0	5
				6.2	
335	Isolation Condenser Valve MO3-1301-3	33758	C	2.0	5
				6.2	
		34123	C	2.0	5
				6.2	
336	Isolation Condenser Valve MO3-1301-4	32576	C	2.0	4
		34136	C	2.0	4
				6.2	
337	Isolation Condenser Valve MO3-1301-10	75826	C	2.0	5
				6.2	
338	Isolation Condenser	34098	C	6.2	6
339	Valves AO3-1301-17&20	34118	C	2.0	6
				6.2	
		36273	C	2.0	6
		36274	C	2.0	6
		36275	C	2.0	6
				6.2	
		36276	C	2.0	6
				6.2	
		32848	P	2.0	6
				6.2	
		34119	C	2.0	6
				6.2	
		75803	C	2.0	6
				6.2	
		75809	C	2.0	6
				6.2	
		34068	C	2.0	6
				6.2	
340	Isolation Condenser Valve MO3-4102	75827	C	2.0	5
				6.2	

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
351	Service Water Pump 3A-3901	30660	C	2.0 6.2	11
		30661	C	2.0 6.2	11
349	CRD Pump 3A-302-3	30683	C	2.0 6.2	11
		30684	C	2.0 6.2	11

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3007	LPCI, Sys. I Ckt. A	32951	P	6.2	14
	(Note 7)	30221	P	6.2	14
		32606	P	2.0	14
				6.2	
		30226	C	6.2	14
	Isolation Condenser	39435	C	2.0	5
	Supply Isolation Vlv.	30284	C	6.2	14
	MO3-4399-74	75142	C	6.2	14
		80075	C	6.2	14
		30286	C	6.2	14
		30825	C	6.2	14
		32547	C	6.2	14
		30227	C	2.0	14
				6.2	
		30828	C	2.0	14
				6.2	
		30813	C	6.2	14
		32696	C	2.0	14
				6.2	
		30805	C	6.2	14
		30228	C	6.2	14
		30830	C	6.2	14
		30815	C	2.0	14
				6.2	
		30200	C	6.2	14
		30210	C	6.2	14
		32733	C	6.2	14
		32730	C	6.2	14
		30820	C	2.0	14
				6.2	
		32747	C	2.0	14
				6.0	
		79055	C	6.2	14
		75194	P	6.2	14

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3009	LPCI, Sys. II, Ckt. A (Note 9)	32952	P	6.2	14
		30222	P	6.2	14
		30960	P	2.0	14
				6.2	
		30225	C	6.2	14
		32724	C	6.2	14
		75149	C	6.2	14
		80076	C	6.2	14
		30285	C	6.2	14
		33958	C	6.2	14
		32950	C	2.0	14
				6.2	
		30223	C	6.2	14
		75144	P	6.2	14
		32731	C	2.0	14
				6.2	
		32738	C	6.2	14
		32726	C	6.2	14
		30224	C	6.2	14
		30840	C	6.2	14
		30819	C	2.0	14
				6.2	
		30252	C	6.2	14
		30260	C	6.2	14
		32743	C	6.2	14
		32749	C	6.2	14
		32745	C	2.0	14
				6.2	
		33954	C	6.2	14
		32810	C	2.0	14
				6.2	
		33977	C	6.2	14
		32673	C	2.0	14
				6.2	
		33969	P	6.2	14
		79065	C	6.2	14

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3011	Core Spray, Sys. I (Note 11)	32951	P	6.2	14
		32811	C	2.0	14
				6.2	
		75142	C	6.2	14
		80075	C	6.2	14
		32809	C	6.2	14
		32812	C	6.2	14
		32808	C	6.2	14
		30864	C	2.0	14
				6.2	
		30221	P	6.2	14
		32606	P	2.0	14
				6.2	
		75194	P	6.2	14
3012	Core Spray, Sys. II (Note 12)	32952	P	6.2	14
		30960	P	2.0	14
				6.2	
		30222	P	6.2	14
		33969	P	6.2	14
		30287	C	2.0	14
				6.2	
		75149	C	6.2	14
		80076	C	6.2	14
		32810	C	2.0	14
				6.2	
		32819	C	6.2	14
		32816	C	6.2	14
		33977	C	6.2	14
		30863	C	2.0	14
				6.2	
		75144	P	6.2	14

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3017	PCIS, Ckt. A (Note 17)	34176	P	2.0 6.2	10
		34086	P	2.0	10
		35187	P	2.0	10
		34096	C	2.0 6.2	10
		36277	C	2.0	10
		34098	C	6.2	10
		34110	C	2.0 6.2	10
		36279	C	2.0	10
		34113	C	2.0 6.2	10
		36281	C	2.0 6.2	10
3018	PCIS Ckt. B (Note 18)	34211	P	2.0 6.2	10
		32409	P	2.0 6.2	10
		34097	C	2.0 6.2	10
		36278	C	2.0 6.2	10
		34099	C	6.2	10
		34111	C	2.0 6.2	10
		36280	C	2.0	10
		34115	C	2.0 6.2	10
		36283	C	2.0 6.2	10

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3019	PCIS Reset Ckt. (Note 19)	32472	P	2.0 6.2	10
		32482	P	2.0	10
		32481	C	2.0	10
		32798	C	2.0 6.2	10
		34047	C	2.0 6.2	10
		34048	C	2.0 6.2	10
		32477	C	2.0	10
		32799	C	2.0 6.2	10
		37291	P	2.0 6.2	10
3020	Process Radiation Monitoring System Ckt. A (Note 20)	34086	P	2.0	10
		35187	P	2.0	10
		34176	P	2.0 6.2	10
		77360	C	2.0 6.2	10
3021	Process Radiation Monitoring System Ckt. B (Note 21)	34211	P	2.0 6.2	10
		32409	P	2.0 6.2	10
		77361	C	2.0 6.2	10

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3022	Main Steam Isolation Ckt. A Inbd (Note 22)	34176	P	2.0	10
				6.2	
		34086	P	2.0	10
		35187	P	2.0	10
		34025	C	2.0	10
				6.2	
		32470	C	2.0	10
		36354	C	2.0	10
		36342	C	2.0	10
		36356	C	2.0	10
		36370	C	2.0	10
		36384	C	2.0	10
		75800	C	2.0	10
		75801	C	2.0	10
3023	Main Steam Isolation Ckt. B Inbd (Note 23)	32848	P	2.0	10
				6.2	
		34058	C	2.0	10
				6.2	
		32488	C	2.0	10
		36368	C	2.0	10
		36345	C	2.0	10
		36359	C	2.0	10
		36373	C	2.0	10
		32849	P	2.0	10
				6.2	
		36387	C	2.0	10
		75800	C	2.0	10
		75801	C	2.0	10

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3024	Sensor & Trip System Ckt. A (Note 24)	37239	P	2.0	10
				6.2	
		34013	C	2.0	10
		33840	C	2.0	10
				6.2	
		34000	C	2.0	10
		33764	C	2.0	10
				6.2	
		34020	C	2.0	10
		34011	C	2.0	10
		77316	C	2.0	10
				6.2	
		34050	C	2.0	10
		34051	C	2.0	10
3025	Sensor & Trip System Ckt. B (Note 25)	37241	P	2.0	10
				6.2	
		37196	P	2.0	10
				6.2	
		79070	C	2.0	10
		34014	C	2.0	10
		33841	C	2.0	10
		34001	C	2.0	10
		34021	C	2.0	10
		33824	C	2.0	10
		34012	C	2.0	10
		77317	C	2.0	10
				6.2	
		34052	C	2.0	10
		34053	C	2.0	10
3027	Auto Blowdown Part I Ckt. A (Note 27)	33927	P	6.2	21
		35050	C	6.2	21
		35054	C	2.0	21
				6.2	
		33934	C	6.2	21
		32816	C	6.2	21
		32604	C	2.0	21
				6.2	

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3028	Auto Blowdown Part II	33927	PM	6.2	21
	Ckt. A (Note 28)	30273	PR	6.2	21
		32952	PR	6.2	21
		33969	PR	6.2	21
		30222	PR	6.2	21
		30960	PR	2.0	21
				6.2	
		35053	C	6.2	21
		33920	C	2.0	21
				6.2	
		33934	C	6.2	21
		32816	C	6.2	21
		32808	C	6.2	21
		32614	C	2.0	21
				6.2	
3029	Auto Blowdown Part II	32952	P	6.2	21
	Ckt. B (Note 29)	33969	P	6.2	21
		30222	P	6.2	21
		30960	P	2.0	21
				6.2	
		33916	C	2.0	21
				6.2	
		30738	C	6.2	21

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3036	PCIS Main Steam Isolation Ckt. A Outbd (Note 36)	32409	P	2.0 6.2	10
		34211	P	2.0 6.2	10
		34029	C	2.0 6.2	10
		32471	C	2.0 6.2	10
		36355	C	2.0 6.2	10
		36349	C	2.0 6.2	10
		75806	C	2.0 6.2	10
		36362	C	2.0 6.2	10
		36376	C	2.0 6.2	10
		75807	C	2.0 6.2	10
		36390	C	2.0 6.2	10

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3037	PCIS Main Steam Isol. Ckt. B Outbd (Note 37)	75806	C	2.0 6.2	10
		75807	C	2.0 6.2	10
		34066	C	2.0 6.2	10
		32489	C	2.0 6.2	10
		36305	C	2.0 6.2	10
		36348	C	2.0 6.2	10
		36363	C	2.0 6.2	10
		36377	C	2.0 6.2	10
		36391	C	2.0 6.2	10
		32848	P	2.0 6.2	10
		32849	P	2.0 6.2	10
		34058	P	2.0 6.2	10
		32488	P	2.0	10
		36368	P	2.0	10
3062	4-kV SWGR Bus 33-1 UV Relay (Note 62)	77430	C	6.2	26
3203	Diesel Generator 2/3	33792	C	6.2	7
	Cooling Water Pump 2/3-3903B	35393	C	6.2	7
3204	Diesel Generator 2/3 Fuel Oil Transfer Pump 2/3-5203	33797	C	6.2	7
3205	Diesel Fire Pump 2/3-4101	23729	C	6.2	40

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3367	Main Steam Isolation Valve AO3-203-1A	36345	C	2.0	36
		36342	C	2.0	36
		75800	C	2.0	36
		32848	P	2.0	36
				6.2	
		34058	P	2.0	36
				6.2	
		32488	P	2.0	36
		36368	P	2.0	36
		34086	P	2.0	36
		34025	C	2.0	36
				6.2	
		36354	C	2.0	36
		32470	C	2.0	36
3368	Main Steam Isolation Valve AO3-203-1B	36359	C	2.0	36
		75801	C	2.0	36
		36356	C	2.0	36
		32848	P	2.0	36
				6.2	
		34058	P	2.0	36
				6.2	
		32488	P	2.0	36
		36368	P	2.0	36
		34086	P	2.0	36
		34025	C	2.0	36
				6.2	
		36354	C	2.0	36
		32470	C	2.0	36

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3369	Main Steam Isolation Valve AO3-203-IC	36373	C	2.0	36
		36369	C	2.0	36
				6.2	
		75801	C	2.0	36
		36370	C	2.0	36
		32848	P	2.0	36
				6.2	
		34058	P	2.0	36
				6.2	
		32488	P	2.0	36
		36368	P	2.0	36
		34086	P	2.0	36
		34025	C	2.0	36
				6.2	
		36354	C	2.0	36
		32470	C	2.0	36
3370	Main Steam Isolation Valve AO3-203-1D	78501	C	2.0	36
		36387	C	2.0	36
		36384	C	2.0	36
		32848	P	2.0	36
				6.2	
		34058	P	2.0	36
				6.2	
		32488	P	2.0	36
		36368	P	2.0	36
		34086	P	2.0	36
		34025	C	2.0	36
				6.2	
		36354	C	2.0	36
		32470	C	2.0	36

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3371	Main Steam Isolation Valve AO3-203-2A	36349	C	2.0 6.2	36
		75806	C	2.0 6.2	36
		36348	C	2.0 6.2	36
		34066	C	2.0 6.2	36
		32489	C	2.0 6.2	36
		32848	P	2.0 6.2	36
		32409	P	2.0 6.2	36
		34029	C	2.0 6.2	36
		36355	C	2.0 6.2	36
		32471	C	2.0 6.2	36
		36305	C	2.0 6.2	36

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3372	Main Steam Isolation Valve AO3-203-2B	36363	C	2.0 6.2	36
		75806	C	2.0 6.2	36
		36362	C	2.0 6.2	36
		34066	C	2.0 6.2	36
		32489	C	2.0 6.2	36
		36305	C	2.0 6.2	36
		32848	P	2.0 6.2	36
		32409	P	2.0 6.2	36
		34029	C	2.0 6.2	36
		36355	C	2.0 6.2	36
		32471	C	2.0 6.2	36

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3373	Main Steam Isolation Valve AO3-203-2C	36377	C	2.0 6.2	36
		75807	C	2.0 6.2	36
		36376	C	2.0 6.2	36
		34066	C	2.0 6.2	36
		32489	C	2.0 6.2	36
		36305	C	2.0 6.2	36
		32848	P	2.0 6.2	36
		32409	P	2.0 6.2	36
		34029	C	2.0 6.2	36
		36355	C	2.0 6.2	36
		32471	C	2.0 6.2	36

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3374	Main Steam Isolation Valve AO3-203-2D	36390	C	2.0 6.2	36
		75807	C	2.0 6.2	36
		36391	C	2.0 6.2	36
		34066	C	2.0 6.2	36
		32489	C	2.0 6.2	36
		36305	C	2.0 6.2	36
		32848	P	2.0 6.2	36
		32409	P	2.0 6.2	36
		34029	C	2.0 6.2	36
		36355	C	2.0 6.2	36
		32471	C	2.0 6.2	36

TABLE A-10

FIRE AREA TB-V

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
3389	CRD Discharge Valve MO3-0301-2A	79411	C	6.2 2.0	41
3390	CRD Discharge Valve MO3-0301-2B	79414	C	6.2 2.0	41
3391	CRD Discharge Valve MO2-0301-2A	69411	C	6.2 2.0	41
3392	CRD Discharge Valve MO2-0301-2B	69412	C	6.2 2.0	41
	Isolation Condenser Makeup Pump 2/3-43122A	69906 69907	C C	2.0 2.0	43 43
	Isolation Condenser Makeup Pump 2/3-43123A	69908 69909	C C	2.0 2.0	43 43

TABLE A-11

FIRE AREA CRIB HOUSE

Item No.	Equipment	Cable Discrepancy	Cable Type	Location of Cable by Zone(s)	Resolution
251	Service Water Pump 2A-3901	20659	P	11.3	18
		20664	C	11.3	18
		24060	C	11.3	18
252	Service Water Pump 2B-3901	20766	P	11.3	18
		20769	C	11.3	18
		24060	P	11.3	18
230	2 DG Cooling Water Pump 2-3903B	22288	P	11.3	19
3203	2/3 DG Cooling Water Pump 2/3-3903B	22394	P	11.3	19
		32394	P	11.3	19
		77436	P	11.3	19
		67680	P	11.3	19
		67681	P	11.3	19
3205	Diesel Fire Pump 2/3-4101	23729	C	11.3	40
		23734	C	11.3	40
		23735	C	11.3	40
		23732	P	11.3	40
		23730	P	11.3	40
		23727	P	11.3	40
		23733	P	11.3	40
351	Service Water Pump 3A-3901	30659	P	11.3	18
		30663	C	11.3	18
352	Service Water Pump 3B-3901	30766	P	11.3	18
		30769	C	11.3	18
332	3 DG Fuel Oil Transfer Pump 3-5203	23742	C	11.3	31
		23741	C	11.3	31
		23739	C	11.3	31
		23569	C	11.3	31
		23571	C	11.3	31
330	3 DG Cooling Water Pump 3-39038	32288	P	11.3	19

APPENDIX B

B.1 POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNITS 2 AND 3

This Appendix lists all valves identified using the methodology in Section 5.0. Where spurious operation could affect safe shutdown systems or cause loss of reactor inventory, the justification for no action or the prefire or postfire action taken is stated. The valves for which a prefire or postfire action was deemed necessary are also listed in Table 5.1-1 of the report.

B.2 Notes to Tables B-1 and B-2

Note 1

Valves identified with an * do not appear on the Hot and/or Cold Shutdown Equipment Lists.

Note 2

The following valve operator acronyms apply:

AO	-	pneumatic operator
MO	-	electric motor operator
PCV	-	pressure control valve
TCV	-	temperature control valve
SO	-	solenoid valve

Note 3

The following system acronyms apply:

CS	-	core spray
CRD	-	control rod drive
DG	-	diesel generator
DO	-	diesel oil
FP	-	fire protection
FPC	-	fuel pool cooling
HPCI	-	high pressure core injection
IC	-	isolation condensation
LPCI	-	low pressure core injection
MS	-	main steam
RBCW	-	reactor building cooling water
RF	-	reactor feedwater
RWCU	-	reactor water cleanup
SC	-	shutdown cooling
SW	-	service water

Note 4

This failure mode is not a credible event since leakage through the mechanical check valve is required. This event need not be considered.

Note 5

Spurious operation of greater than one normally closed valve in a series combination in a branch line is not considered a credible failure mode except for high/low pressure systems. See Note 8.

Note 6

This failure mode impacts cold shutdown only. Manually operated or electrical repairs are permissible. Cold shutdown repairs procedures address potential failures.

Note 7

This air-operated valve involved in this failure mode is a testable air-operated check valve. This valve performs its check valve function no matter what the position of the air operator. Therefore, this failure mode is not credible since it is dependent on the loss of this check valve function.

Note 8

The only Dresden 2&3 high-low pressure interface is the reactor coolant system/shutdown cooling system pump suction lines. FSAR Section 10.4 states that the design pressure of the shutdown cooling system is 1,250 psig. The valves, pump casings, and primary sides of the heat exchangers are designed to ASME B&PV Section III, Class C requirements. The piping is designed to ASA B16.5 requirements.

The two 16-inch inboard pump suction containment isolation valves 1001-1A and 1001-1B are normally closed ac motor-operated valves on ESF Division I from 480-Vac reactor building MCC 28-1. The three outboard pumps suction valves 1001-2A, 1001-2B, and 1001-2C are normally closed dc motor-operated valves on ESF Division II from 250-Vdc reactor building MCC-2, Bus A.

Based on the design pressure, failure of the high-low interface is not considered to be a problem.

Note 9

An ADS inhibit switch has been added in panel 902-3 (903-3) to prevent spurious blowdown from a fire outside of Fire Area TB-V (Control Room & AEER). See Subsections 6.2.1.8 and 6.2.2.8. For a fire in Fire Area TB-V, spurious blowdown is prevented by removing power to the ADS logic by opening circuit breakers at the 125-Vdc turbine building main bus 2A-1 (3A-1) distribution panel and at the 125-Vdc turbine building reserve bus 2B-1 (3B-1) distribution panel. To prevent spurious operation of any single pressure relief valve for a fire in Fire Areas RB2-I, RB2-II, TB-I, TB-III, TB-V, RB3-I or RB3-II, 125-Vdc power to these valves is removed by either tripping breakers or pulling fuses.

Note 10

A modification is being made to defeat spurious operation of the inboard isolation condenser valves. See Subsections 6.2.1.4 and 6.2.2.4.

Note 11

This valve will be manually opened by handwheel operation. A procedure has been implemented. See Section 7.3.

Note 12

LPCI/CCSW Division I is not reviewed in the Associated Circuits Analysis. Therefore, it is not reviewed for fire damage because no credit is taken for this system in regard to safe shutdown capability.

Note 13

LPCI Injection mode is not postulated for safe hot shutdown. Cold shutdown is covered by procedures. Also see Note 6.

Note 14

Closure does not create a condition adverse to safe shutdown. The valve is designed to fail open therefore remaining open also does not create a condition adverse to safe shutdown.

Note 15

Safe shutdown mode is through the heat exchanger.

Note 16

Cables for these valves are independent of all areas for which the HPCI/LPCI method is postulated for shutdown.

Note 17

No power operator shown for this valve.

Note 18

Water will go either to the suppression pool or will be confined in CS piping. A flow path to the reactor will be available upon opening of CS valve MO 1402-25B coupled with a decrease in reactor pressure allowing flow through check valve AO 1402-9B. See Note 5.

Note 19

A spurious signal will cause only one solenoid (either ac or dc) of a valve to fail to perform its function. As a result, for a given fire, one MSIV on each steamline could fail to close. However, the redundant valve on each steamline would isolate the line (see FPPDP, Volume 6, Section X.7)

Note 20

RWCU drain valves PCV 2(3)-1220, MO 2(3)-1201-11, and MO 2(3)-1201-12 are used to reject water from the primary system during plant startup and shutdown. They are normally closed during plant operation except when the RWCU system is inoperable (UFSAR, p 10.3.2.-1). In each drain line there are two normally closed valves in series. RWCU system relief valve provides protection against high pressure. PCV-1220 is a fail closed valve.

Note 21

Should MO 2(3)-0302-8 or both AO 2(3)-0302-6A and AO 2(3)-0302-6B close, makeup water from the CRD pump via CRD cooling line to the RPV could be disrupted. The AO valves close on loss of air (i.e., loss of normal power). Makeup water is still available to the RPV from the CRD pumps via the charging water line and scram inlet valves CV 2(3)-0305-126 (typical of 177). These valves open for scram and fail open on loss of power or instrument air. Instructions are included in shutdown procedures to ensure that AO 0302-6A or AO 0302-6B and MO 0302-8 are open or another RPV makeup water source is available before resetting the scram system.

Note 22

Spurious operations of AO 2(3)-1904-5-7 and AO 2(3)-1904-5-14 is possible only at panels 2252-39 (Unit 2 valves) and 2253-39 (Unit 3). These panels are located in the reactor building, elevation 589-feet 0-inches, Fire Zones 1.1.2.5A (Unit 2) and 1.1.1.5A (Unit 3). No credit is taken for the isolation condenser method at shutdown in these fire zones.

Note 23

The scram discharge volume vent and drains are air-operated fail-closed valves. They close on the same signal that opens the scram valves. The backup scram valves also cause these valves to close. There are two valves in series in each vent and drain line. The scram system is a highly reliable system.

Note 24

If the RWCU system does not automatically isolate, normally open valve 1201-2 will be closed and normally closed valve 1201-3 will be verified closed or manually closed or, in

the event of a fire in Fire Areas RB2-II and RB3-II, air will be removed to valve 2(3)-1217 to ensure RWCU isolation.

Note 25

Valves AO (3)-1301-17 and AO (3)-1301-20 fail in the closed position. If they do not close, manual valve 2(3)-1301-16 can be closed.

Note 26

The piping classification changes from S&L Class B (high pressure) to S&L Class L (low pressure) at MO2 (3)-220-4. The low pressure piping consists of 2" and 2-1/2" piping routed to the condenser. Near the condenser, the 2-1/2" piping discharges into an 18" line which then drains to the condenser. Based on maximum steam conditions of 1250 psig at 575°F and S&L Standard MES-2.5, pressure-temperature ratings for piping, the 2" (Schedule 80) and 2-1/2" (Schedule 40) piping specified per PDT "L" can withstand the above steam conditions. The 18" (standard weight) line cannot withstand the above conditions. However, the pressure of the fluid as it discharges from the 2-1/2" line into the 18" line decreases to an acceptable level.

Note 27

This valve was permanently de-energized for non-Appendix R concerns.

Note 28

If the HPCI pump is not delivering water to the reactor, verify closed MO2(3)-2301-5 or trip the HPCI turbine.

Note 29

CRD pump discharge valves MO-0301-2A and 2B could spuriously position to an undesired condition. Manual valve operational capability should be available.

TABLE B-1

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 2

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
*AO-2-203-1A and *AO-2-203-2A	MS	M12	Spurious opening will result in loss of reactor coolant through main steamline.	Note 19
*AO-2-203-1B and *AO-2-203-2B	MS	M12	Spurious opening will result in loss of reactor coolant through main steamline.	Note 19
*AO-2-203-1C and *AO-2-203-2C	MS	M12	Spurious opening will result in loss of reactor coolant through main steamline.	Note 19
*AO-2-203-1D and *AO-2-203-2D	MS	M12	Spurious opening will result in loss of reactor coolant through main steamline.	Note 19
*MO-2-220-1 and *MO-2-220-2	MS	M12	Spurious opening will result in loss of reactor coolant through drains and restrictive orifices RD-2-220-91A, B, C, and D to main steamline and through RO-2-220-75 to condenser.	Note 5
*MO-2-220-1, *MO-2-220-2 and *MO-2-220-3	MS	M12	Spurious opening of these three valves combinations result in loss of reactor coolant through drains to main steamline.	Note 5

TABLE B-1

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 2

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
*MO-2-220-1, *MO-2-220-2 and *MO-2-220-4	MS	M12	Spurious opening of these three valves result in loss of reactor coolant through drains to main condenser.	Note 26
Target Rock Valve 2-203-3A or Electromatic Relief Valves 2-203-3B or 2-203-3C or 2-203-3D or 2-203-3E	MS	M-12 (Sht. 1)	Spurious opening will vent RPV inventory to suppression pool.	Note 9
Check valves and isolation valves such as *MO-2-3205A *MO-2-3205B	RF	M-14	For opening of isolation valves, leakage through check valves is lost to condenser.	Note 4

TABLE B-1

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 2

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
MO2-1201-1 and MO2-1201-2 or MO2-1201-1A and MO2-1201-2 or MO2-1201-1 and MO2-1201-3 and MO2-1201-4 or MO2-1201-1A and MO2-1201-3 and MO2-1201-4	RWCU	M-30	Failure in open position may cause pressure to build up in low pressure piping downstream of PCV-2-1217 (with RO) and fluid loss to condenser and/or equipment drains via the relief valves.	Note 24
PCV-2-1217				
*PCV2-1220 and *MO-2-1201-11	RWCU	M-30	Opening would vent to condenser.	Notes 20, 24

TABLE B-1

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 2

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
*PCV-2-1220 and *MO-2-1201-12	RWCU	M-30	Opening would vent to waste tank.	Notes 20, 24
*AO-2-1402-9A and *MO-2-1402-25A	CS	M-27	Spurious opening of both valves will subject the class 300 core spray piping to and from the associated core spray pump to RPV pressure. Elevated pressures could result in the relief valves opening to the RB equipment drain tanks.	Note 7
*AO-2-1402-9B and *MO-2-1402-25B	CS	M-27	Spurious opening of both valves will subject the class 300 core spray piping to and from the associated core spray pump to RPV pressure. Elevated pressures could result in the relief valves opening to the RB equipment drain tanks.	Note 7
MO-2-1301-1 or MO-2-1301-2	IC	M-28	Spurious closure will isolate RPV from isolation condenser. Note: MO-2-1301-1 is in drywell and inaccessible.	Notes 10 & 11
MO-2-1301-3	IC	M-28	Failure to open prevents condensed steam from returning from isolation condenser coil to RPV. This defeats natural circulation path.	Note 11

TABLE B-1

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 2

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
MO-2-1301-4	IC	M-28	Spurious closure defeats natural circulation path for isolation condenser. Note that this valve is located in drywell and is therefore inaccessible.	Note 10
MO-2-1301-10 or MO-2-4102	IC	M-28	Spurious closure isolates makeup to isolation condenser from service water system.	Note 11
MO-2-4399-74	IC	M-39	Spurious closure isolates makeup to isolation condenser from the clean demineralized water storage tank.	Note 11
AO2-1301-17 AO2-1301-20	IC	M-28	Spurious failure in open position would allow loss of rector inventory.	Note 25
*MO-2-3906	FP	M-23	Spurious closure isolates service water from isolation condenser. Defeats makeup.	Note 27
MO-2-3901 and *MO-2-3902	SW	M-22	Spurious opening diverts service water to main condenser hotwell. Reduces isolation condenser makeup capacity or shutdown cooling heat removal.	Note 5
*TCV-2-3901	SW	M-22	Fails open. Diverts service water from isolation condenser makeup or shutdown cooling heat removal.	Note 14
*MO-2-0302-8 or *AO-2-0302-6A and AO-2-0302-6B	CRD	M-34	Spurious closure prevents RPV makeup from cooling water line during shutdown with isolation condenser.	Note 21

TABLE B-1

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 2

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
MO-2-1001-1A and MO-2-1001-1B	SC	M-32	Spurious closure isolates shutdown cooling system from RPV.	Notes 6 & 8
MO-2-1001-2A, MO-2-1001-2B and MO-2-1001-2C	SC	M-32	Spurious closure isolates shutdown cooling system from RPV	Notes 6 & 8
MO-2-1001-4A, MO-2-1001-4B and MO-2-1001-4C	SC	M-32	Spurious closure isolates shutdown cooling system from RPV.	Note 6
MO-2-1001-5A, and MO-2-1001-5B	SC	M-32	Spurious closure isolates shutdown cooling system from RPV.	Note 6
*AO-2-1501-25A and *AO-2-1501-25B	LPCI	M-29 (Sht. 1)	Spurious closure isolates shutdown cooling system from RPV. Note that these valves are inaccessible in that they are in the drywell.	Note 5
MO-2-1501-22A, MO-2-1501-38A and MO-2-1501-20A (Note 1)	LPCI	M-29 (Sht. 1)	Spurious opening diverts shutdown cooling flow from RPV to wetwell.	Notes 5 & 6

TABLE B-1

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 2

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
MO-2-1501-22A, MO-2-1501-21A, MO-2-1501-18A and MO-2-1501-19A	LPCI	M-29 (Sht. 1)	Spurious opening diverts shutdown cooling flow from RPV to torus spray header.	Notes 5 & 6
MO-2-1501-22A, MO-2-1501-21A, MO-2-1501-27A and MO-2-1501-28A	LPCI	M-29 (Sht. 1)	Spurious opening diverts shutdown cooling from RPV to drywell spray header.	Notes 5 & 6
MO-2-0202-4A (N.O.) and MO-2-0202-5A (N.O.)	Rx Recirc.	M-26 (Sht. 2)	Spurious opening provides a flow path for shutdown cooling which bypasses RPV and defeats system. Note that these valves are in the drywell and are inaccessible.	Notes 5 & 6
MO-2-3701	RBCCW	M-20	Spurious closure blocks the cooling water for the shutdown cooling pumps.	Note 6
MO-2-3704	RBCCW	M-20	Spurious closure blocks cooling water to the shutdown cooling heat exchanger.	Note 6
TCV-2-3904A, TCV-2-3904B and TCV-2-3904C	SW	M-22	Spurious closure blocks service water flow to the RBCCWS heat exchangers which remove decay heat via the shutdown cooling system.	Note 6

TABLE B-1

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 2

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
*2-5772-101 (isolation damper) 2/3-5772-101	DG Ventilation	M-974 M-273	Spurious closure of exhaust isolation damper will cause heat load to be trapped in diesel generator room. High temperatures may prevent 72 hours of operation.	Note 16
*SO-3-5201	3 DO Transfer	M-41 (Sht. 2)	Spurious failure to close while filling day tank (3-5202) would overflow diesel oil to drains. This would reduce fuel oil supply for emergency power from Unit 3 diesel.	Note 16
MO-2-2301-6	HPCI	M-51	Spurious closure will isolate the HPCI pumps from condensate storage tank 2/38-3303.	Note 16
MO-2-2301-9	HPCI	M-51	Failure of this valve in the closed position will isolate the HPCI injection flow from the RPV.	Note 16
MO-2-2301-8	HPCI	M-51	Failure of this valve in the closed position will isolate the flow path for HPCI injection into RPV.	Note 16
*AO-2-2301-7	HPCI	M-51	Spurious opening could result in loss of reactor coolant.	Note 7
MO-2-2301-35 and MO-2-2301-36	HPCI	M-51	Spurious opening of these valves will divert HPCI pump suction from the CST to the suppression pool.	Note 5
MO-2-2301-14	HPCI	M-51	Spurious opening of valve diverts HPCI flow to wetwell thus reducing HPCI injection flow into RPV.	Note 16

TABLE B-1

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 2

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
MO-2-2301-10 And MO-2-2301-15	HPCI	M-51	Spurious opening of these valves would divert HPCI injection flow from the RPV to CST 2/3B-3303.	Note 5
*PCV-2-2301-46	HPCI	M-51	Spurious closure will isolate the HPCI turbine gland seal condenser and lube oil cooler coolant flow from HPCI pump discharge.	Note 17
*MO-2-2301-48	HPCI	M-51	Spurious closure will isolate the HPCI turbine gland seal condenser and lube oil cooler coolant flow.	Note 11
MO-2-2301-3	HPCI	M-51	Failure of this valve in the closed position will isolate the HPCI turbine from the RPV steam supply.	Note 16
			Spurious opening of this valve would result in loss of reactor inventory to the suppression pool.	Note 28
MO-2-2301-4 or MO-2-2301-5	HPCI	M-51	Failure of these valves in the closed position will isolate the HPCI turbine from the RPV steam supply. Note: MO-2-2301-5 is located in the drywell and is inaccessible.	Note 16
MO-2-1501-5A	LPCI	M-29 (Sht. 1)	Spurious valve closure will isolate LPCI pump 2A-1502 suction from the suppression pool reducing the pool cooling flow.	Note 12

TABLE B-1

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 2

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
MO-2-1501-5B	LPCI	M-29 (Sht. 1)	Spurious valve closure will isolate LPCI pump 2B-1502 suction from the suppression pool reducing the pool cooling flow.	Note 12
MO-2-1501-20A, MO-2-1501-38A and MO-2-1501-21A	LPCI	M-29 (Sht. 1)	Spurious opening of these valves would divert LPCI pool coolant return flow from the torus spray header to the torus full flow test line.	Note 5
MO-2-1501-22A, *AO-2-1501-25A and MO-2-1501-21A	LPCI	M-29 (Sht. 1)	Spurious opening could result in loss of reactor inventory	Note 7
MO-2-1501-27A and MO-2-1501-28A	LPCI	M-29 (Sht. 1)	Spurious opening of these valves would divert LPCI pool coolant return flow from the wetwell to the drywell spray ring header thus reducing pool cooling flow.	Note 5
MO-2-1501-22A, MO-2-1501-38A and MO-2-1501-20A	SC & LPCI	M-32 M-29 (Sht. 1)	Spurious opening of these valves would allow shutdown cooling flow to enter the wetwell through the torus full flow test line.	Note 5

TABLE B-1

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 2

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
MO-2-1501-22A, MO-2-1501-21A, MO-2-1501-18A and MO-2-1501-19A	SC & LPCI	M-32 M-29 (Sht. 1)	Spurious opening of these valves would allow shutdown cooling flow to enter the wetwell through the torus spray header.	Note 5
MO-2-1501-32B and MO-2-1501-32A	LPCI	M-29 (Sht. 1)	Spurious closure of these valves will isolate LPCI "A" pump from LPCI "B" wetwell injection thus eliminating a possible wetwell injection path.	Note 6
MO-2-1501-11A	LPCI	M-29 (Sht. 1)	Spurious closure will divert all LPCI pump discharge through containment cooling heat exchangers 2A-1503.	Note 6
*MO-2-1402-4A	CS	M-27	Spurious opening of this valve would divert LPCI pool coolant flow to the core spray/RPV injection piping therefore reducing the LPCI return flow to the suppression pool.	Note 12
MO-2-1501-13A	LPCI	M-29 (Sht. 1)	Failure of this valve in the open position will direct LPCI pump discharge to wetwell therefore bypassing heat exchanger 2A-1503. This failure will result in a reduction in the LPCI heat removal capability.	Note 6
MO-2-1501-3A	SW	M-29 (Sht. 1)	Failure of this valve to open would isolate service water flow from the containment cooling heat exchanger. This failure would defeat the heat removal capability to the LPCI pool cooling system.	Note 6

TABLE B-1

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 2

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
MO-2-1501-5C	LPCI	M-29 (Sht. 1)	Spurious valve closure will isolate LPCI pump 2C-1502 suction from the suppression pool.	Note 16
MO-2-1501-5D	LPCI	M-29 (Sht. 1)	Spurious valve closure will isolate LPCI pump 2D-1502 suction from the suppression pool.	Note 16
MO-2-1501-18B and MO-2-1501-19B	LPCI	M-29 (Sht. 1)	Spurious opening of these valves would divert LPCI pool coolant return flow from the torus full flow test line to the torus spray header.	Note 5
MO-2-1501-38B, MO-2-1501-20B and MO-2-1501-21B	LPCI	M-29 (Sht. 1)	Spurious opening of these valves would divert LPCI pool coolant return flow from the torus spray header to the torus full flow test line.	Note 5
MO-2-1501-21B, MO-2-1501-22B and *AO-2-1501-25B	LPCI	M-29 (Sht. 1)	Spurious opening could result in loss of reactor inventory.	Note 7
MO-2-1501-27B and MO-2-1501-28B	LPCI	M-29 (Sht. 1)	Spurious opening of these valves would divert LPCI pool coolant return flow from wetwell to the drywell spray ring header.	Note 5
MO-2-1501-22B, MO-2-1501-38B and MO-2-1501-20B	SC & LPCI	M-32 M-29 (Sht. 1)	Spurious opening of these valves would allow shutdown cooling flow to enter the wetwell through the torus full flow test line.	Note 5

TABLE B-1

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 2

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
MO-2-1501-22B, MO-2-1501-21B, MO-2-1501-18B and MO-2-1501-19B	SC & LPCI	M-32 M-29 (Sht. 1)	Spurious opening of these valves would allow shutdown cooling flow to enter the wetwell through the torus spray header.	Note 5
MO-2-1501-32B and MO-2-1501-32A	LPCI	M-29 (Sht. 1)	Spurious closure of these valves will isolate LPCI "A" wetwell injection.	Note 6
MO-2-1501-11B	LPCI	M-29 (Sht. 1)	Spurious closure will divert all LPCI pump discharge through containment cooling heat exchanger 2-B-1503.	Note 15
*MO-2-1402-4B	CS	M-27	Spurious opening of this valve would divert LPCI pool coolant flow to the core spray/RPV injection piping therefore reducing the LPCI return flow to the suppression pool.	Note 18
MO-2-1501-13B	LPCI	M-29 (Sht. 1)	Failure of this valve in the open position will direct LPCI pump discharge to the wetwell therefore bypassing heat exchanger 2B-1503. This failure will result in a reduction in the LPCI heat removal capability.	Note 16
MO-2-1501-3B	SW	M-29 (Sht. 1)	Failure of this valve to open would isolate the service water return from the containment cooling heat exchanger. This failure would completely defeat the heat removal capability of the LPCI system.	Note 16

TABLE B-1

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 2

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
MO-2-1501-5A	LPCI	M-29 (Sht. 1)	Spurious valve closure will isolate LPCI pump 2A-1502 suction from the suppression pool therefore reducing RPV injection flow.	Note 12
MO-2-1501-5B	LPCI	M-29 (Sht. 1)	Spurious valve closure will isolate LPCI pump 2B-1502 suction for the suppression pool therefore reducing RPV injection flow.	Note 12
MO-2-1501-18A, MO-2-1501-19A, MO-2-1501-20A, MO-2-1501-21A and MO-2-1501-38A	LPCI	M-29 (Sht. 1)	Spurious opening of these valves would divert LPCI injection flow from the RPV to the wetwell therefore reducing RPV injection flow.	Note 5
MO-2-1501-27A and MO-2-1501-28A	LPCI	M-29 (Sht. 1)	Spurious opening of these valves would divert LPCI injection flow from the RPV to the drywell spray ring header therefore reducing RPV injection flow.	Note 5
MO-2-1501-11A	LPCI	M-29 (Sht. 1)	Spurious closure will divert all LPCI pump discharge through containment cooling heat exchanger 2A-1503.	Note 12
MO-2-1501-32A and MO-2-1501-32B	LPCI	M-29 (Sht. 1)	Spurious closure of these valves will isolate LPCI "A" from LPCI "B" RPV injection piping thus eliminating a possible RPV injection path.	Note 13

TABLE B-1

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 2

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
*MO-2-1402-4A MO-2-1501-20A and MO-2-1501-38A	CS & LPCI	M-27 M-29 (Sht. 1)	Spurious opening of the valve would divert LPCI RPV injection flow to the core spray piping thus reducing the injection to the RPV.	Note 5
MO-2-1501-13A	LPCI	M-29 (Sht. 1)	Failure of this valve in the open position will divert LPCI pump discharge from RPV to the wetwell therefore bypassing heat exchanger 2A-1503. This failure will result in a reduction in the RPV injection flow.	Note 13
MO-2-1501-3A	SW	M-29 (Sht. 1)	Failure of this valve to open will isolate the shutdown service water from the containment cooling heat exchanger. This failure would defeat the heat removal capability of the LPCI system.	Note 12
MO-2-1501-5C	LPCI	M-29 (Sht. 1)	Spurious valve closure will isolate LPCI pump 2C-1502 suction from the suppression pool therefore reducing RPV injection flow.	Note 13
MO-2-1501-5D	LPCI	M-29 (Sht. 1)	Spurious valve closure will isolate LPCI pump 2D-1502 suction from the suppression pool therefore reducing RPV injection flow.	Note 13

TABLE B-1

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 2

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
MO-2-1501-18B, MO-2-1501-19B, MO-2-1501-20B, MO-2-1501-21B and MO-2-1501-38B	LPCI	M-29 (Sht. 1)	Spurious opening of these valves would divert LPCI injection flow from the RPV to the wetwell therefore reducing RPV injection flow.	Note 5
MO-2-1501-27B and MO-2-1501-28B	LPCI	M-29 (Sht. 1)	Spurious opening of these valves would divert LPCI injection flow from the RPV to drywell spray ring header therefore reducing RPV injection flow.	Note 5
MO-2-1501-11B	LPCI	M-29 (Sht. 1)	Spurious closure will divert all LPCI pump discharge through containment cooling heat exchanger 2B-1503.	Note 15
*MO-2-1402-4B, MO-2-1501-20B and MO-2-1501-38B	CS & LPCI	M-27 M-29 (Sht. 1)	Spurious opening of these valves would divert LPCI RPV injection flow to the core spray piping therefore reducing the injection flow to the RPV.	Note 5
MO-2-1501-32A and MO-2-1501-32B	LPCI	M-29 (Sht. 1)	Spurious closure of these valves will isolate LPCI "B" pumps from LPCI "A" RPV injection piping thus eliminating a possible RPV injection path.	
MO-2-1501-13B	LPCI	M-29 (Sht. 1)	Failure of this valve in the open position will divert LPCI pump discharge from RPV to wetwell therefore bypassing heat exchanger 2B-1503. This failure will result in a reduction in the RPV injection flow.	Note 16

TABLE B-1

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 2

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
MO-2-1501-3B	SW	M-29 (Sht. 1)	Failure of this valve in the closed position will isolate the service water flow from the containment cooling heat exchanger. This will defeat the heat removal capabilities of the LPCI system.	Note 16
SO-2-220-47 and SO-2-220-46	Head Vent	M-26 (Sht. 1)	Spurious opening of head vent valves could result in loss of inventory.	Note 5
MO-2-1501-22B, MO-2-1501-38B and MO-2-1501-20B	LPCI	M-29 (Sht. 1)	Spurious opening diverts shutdown cooling flow from RPV to wetwell.	Notes 5 & 6
MO-2-1501-22B, MO-2-1501-21B, MO-2-1501-18B and MO-2-1501-19B	LPCI	M-29 (Sht. 1)	Spurious opening diverts shutdown cooling from RPV to drywell spray header.	Notes 5 & 6
MO-2-1501-22B, MO-2-1501-21B, MO-2-1501-27B, and MO-2-1501-28B	LPCI	M-29 (Sht. 1)	Spurious opening diverts shutdown cooling from RPV to drywell spray header.	Note 13

TABLE B-1

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 2

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
AO-3-1904-5-7	FPC	M-50	Spurious opening of the valve could divert part of the isolation condenser makeup water to the fuel pool cooling and cleanup piping.	Note 22
AO-3-1905-5-14	FPC	M-50	Spurious opening of the valve could divert part of the isolation condenser makeup water to the fuel pool cooling and cleanup piping.	Note 22
MO-3-3905 and TCV-2-3902	SW	M-22	Spurious opening diverts isolation condenser makeup or shutdown cooling heat removal water to the circulating water discharge header.	Note 5
MO-3-3901 and MO-3-3902	SW	M-355	Spurious operation of these valves could divert Unit 2 service water to the Unit 3 condenser.	Note 5
MO-2-1904-5-7	FPC	M-50	Spurious opening of the valve could divert part of the isolation condenser makeup water to the fuel pool cooling and cleanup piping. (This assumes that check valve 2-1999-101 is drawn backwards on the P&ID.)	Note 22
MO-2-1904-5-14	FPC	M-50	Spurious opening of the valve could divert part of the isolation condenser makeup water to the fuel pool cooling and cleanup piping. (This assumes that check valve 2-1999-101 is drawn backwards on the P&ID.)	Note 22

TABLE B-1

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 2

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
AO-2-0302-158A(B) AO-2-0302-157A(B) AO-2-0302-160A(B) AO-2-0302-161A(B)	CRD	M-34	Simultaneous opening of the two valves in a scram discharge volume drain or vent line could result in loss of reactor inventory.	Note 23
MO2-0301-2A(B)	CRD	M-34	Spurious closure of these valves could result in loss of RPV make-up capability.	Note 29

TABLE B-2

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 3

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
*AO-3-203-1A and *AO-3-203-2A	MS	M-345 (Shts. 1&2)	Spurious opening will result in loss of reactor coolant through main steamline.	Note 19
*AO-3-203-1B and *AO-3-203-2B	MS	M-345 (Shts. 1&2)	Spurious opening will result in loss of reactor coolant through main steamline.	Note 19
*AO-3-203-1C and *AO-3-203-2C	MS	M-345 (Shts. 1&2)	Spurious opening will result in loss of reactor coolant through main steamline.	Note 19
*AO-3-203-1D and *AO-3-203-2D	MS	M-345 (Shts. 1&2)	Spurious opening will result in loss of reactor coolant through main steamline.	Note 19
*MO-3-220-1 and *MO-3-220-2	MS	M-345 (Shts. 1&2)	Spurious opening will result in loss of reactor coolant through drains and restrictive orifices RO-3-220-91A, B, C and D to main steamline and through RO-3-220-95 to condenser.	Note 20
*MO-3-220-1, *MO-3-220-2 and *MO-3-220-3	MS	M-345 (Shts. 1&2)	Spurious opening of these four valves combination results in loss of reactor coolant through drains to main steamline.	Note 5

TABLE B-2

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 3

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
*MO-3-220-1, *MO-3-220-2 and *MO-3-220-4	MS	M-345 (Shts. 1&2)	Spurious opening of these three valves results in loss of reactor coolant through drains to main condenser.	Note 26
Target Rock Valve 3-203-3A or Electromatic Relief Valves 3-203-3B or 3-203-3C or 3-203-3D or 3-203-3E	MS	M-345 (Sht. 1)	Spurious opening will vent RPV inventory to suppression pool.	Note 9
Check Valves & (MO and/or AO) Isolation Valves such as *MO-3-3205A and *MO-3-3205B	RF	M-347	For opening of isolation valves, leakage through check valves is lost to condenser.	Note 4

TABLE B-2

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 3

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
*AO-3-1402-9A and *AO-3-1402-25A	CS	M-358	Spurious opening of both valves will subject the class 300 core spray piping to and from the associated core spray pump to the RPV pressure. Elevated pressures could result in the relief valves opening to the RB equipment drain tanks.	Note 7
*AO-3-1402-9B and *MO-3-1402-25B	CS	M-358	Spurious opening of both valves will subject the class 300 core spray piping to and from the associated core spray pump to the RPV pressure. Elevated pressures could result in the relief valves opening to the RB equipment drain tanks.	Note 7

TABLE B-2

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 3

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
MO-3-1201-1 and MO-3-1201-2 or MO-3-1201-1A and MO-3-1201-2 or MO-3-1201-1 and MO-3-1201-3 and MO-3-1201-4 or MO-3-1201-1A and MO-3-1201-3 and MO-3-1201-4 PCV-3-1217	RWCU	M-361	Failure in the open position may cause system pressure to build in low pressure piping downstream of PCV-3-1217 and fluid inventory may be lost to the condenser and/or the RB equipment drains via the relief valves.	Note 24
*PCV-3-1220 and *MO-3-1201-11	RWCU	M-361	Opening will vent system inventory to condenser or waste tank.	Note 20

TABLE B-2

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 3

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
*PCV-3-1220 and *MO-3-1201-12	RWCU	M-361	Opening would vent to condenser or waste tank.	Note 20
MO-3-1301-1 or MO-3-1301-2	IC	M-359	Spurious closure will isolate RPV from isolation condenser. Note: MO-3-1301-1 is in the drywell and is inaccessible.	Notes 10 & 11
MO-3-1301-3	IC	M-359	Failure to open prevents the condensed steam from returning from the isolation condenser coil to the RPV. This defeats the natural circulation path.	Note 11
MO-3-1301-4	IC	M-359	Spurious closure defeats the natural circulation path for the isolation condenser. Note: This valve is located in the drywell and is therefore inaccessible.	Note 10
MO-3-1301-10 or MO-3-4102	IC	M-359	Spurious closure isolates makeup to isolation condenser from the service water system.	Note 11
MO-3-4399-74	IC	M-369	Spurious closure isolates condenser makeup from the clean demineralized water storage tank.	Note 11
AO-3-1301-17 AO-3-1301-20	IC	M-359	Spurious failure in the open position would allow reactor loss of reactor inventory.	Note 25
*MO-2-3906	FP	M-23	Spurious closure isolates service water from isolation condenser. Defeats makeup.	Note 27

TABLE B-2

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 3

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
MO-2-3901 and *MO-2-3902	SW	M-22	Spurious opening diverts service water flow to main condenser hotwell which reduces isolation condenser makeup capacity or the shutdown cooling heat removal capacity.	Note 5
TCV-2-3901	SW	M-22	Fails open. Diverts service water from the isolation condenser makeup or the shutdown	Note 14
*MO-3-0302-8 or *AO-3-0302-6A and AO-3-0302-6B	CRD	M-365	Spurious closure prevents RPV makeup from cooling water line during shutdown with the isolation condenser	Note 21
MO-3-1001-1A and MO-3-1001-1B	SC	M-363	Failure of these valves to open isolates the shutdown cooling system from the RPV.	Notes 6 & 8
MO-3-1001-2A, MO-3-1001-2B, and MO-3-1001-2C	SC	M-363	Failure of these valves to open isolates the shutdown cooling system from the RPV.	Notes 6 & 8
MO-3-1001-4A, MO-3-1001-4B and MO-3-1001-4C	SC	M-363	Failure of these valves to open isolates the shutdown cooling system from the RPV.	Note 6

TABLE B-2

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 3

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
MO-3-1001-5A and MO-3-1001-5B	SC	M-363	Failure of these valves to open isolates the shutdown cooling system from the RPV.	Note 6
*AO-3-1501-25A and *AO-3-1501-25B	LPCI	M-360 (Sht. 1)	Spurious closure isolates the shutdown cooling system from the RPV. Both valves are inaccessible since they are located in the drywell.	Notes 5 & 7
MO-3-1501-22A, MO-3-1501-38A and MO-3-1501-20A	LPCI	M-360 (Sht. 1)	Spurious opening diverts shutdown cooling flow from RPV to wetwell.	Notes 6 & 6
MO-3-1501-22A, MO-3-1501-21A, MO-3-1501-18A and MO-3-1501-19A	LPCI	M-360 (Sht. 1)	Spurious opening diverts shutdown cooling flow from RPV injection piping to torus spray heater.	Notes 5 & 6
MO-3-1501-22A, MO-3-1501-21A, MO-3-1501-27A and MO-3-1501-28A	LPCI	M-360 (Sht. 1)	Spurious opening diverts shutdown cooling flow from RPV to the drywell spray header.	Notes 5 & 6

TABLE B-2

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 3

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
MO-3-0202-4A (N.O.) and MO-3-0202-5A (N.O.)	Rx Recirc.	M-357 (Sht. 1)	Spurious opening provides a flow path for the shutdown cooling flow which bypasses the RPV and defeats the system. Note: These valves are located in the drywell and are inaccessible.	Note 5 & 6
MO-3-3701	RBCCW	M-353	Spurious closure blocks the cooling water flow for the shutdown cooling pumps.	Note 6
MO-3-3704	RBCCW	M-353	Spurious closure blocks cooling water flow to the shutdown cooling heat exchangers.	Note 6
TCV-3-3904A and TCV-3-3904B	SW	M-355	Spurious closure blocks service water flow to the RBCCWS heat exchanger which removes decay heat via the shutdown cooling system.	Note 6
3-5772-101 (Isolation Damper)	DG Ventilation	M-974	Spurious closure of exhaust isolation damper will cause the heat load to be trapped in the diesel generator cubicle. High temperature may prevent 72-hour operation.	Note 16
*S0-3-5201 (Sht. 2)	DO Transfer	M-41	Spurious failure to close while filling day tank (3-5202) would overflow diesel oil to drains. This would reduce fuel oil supply for emergency power.	Note 16
MO-3-2301-6	HPCI	M-374	Spurious closure will isolate the HPCI pumps from condensate storage tank 2/3B-3303.	Note 16
MO-3-2301-9	HPCI	M-374	Spurious closure will isolate the HPCI injection from the RPV.	Note 16

TABLE B-2

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 3

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
MO-3-2301-8	HPCI	M-374	Failure of this valve to open will isolate HPCI injection from the RPV.	Note 16
*AO-3-2301-7	HPCI	M-374	Spurious opening could result in loss of reactor coolant.	Note 7
MO-3-2301-35 and MO-3-2301-36	HPCI	M-374	Failure of these valves to open prevents the HPCI pumps from draining water from the suppression pool.	Note 5
MO-3-2301-14	HPCI	M-374	Spurious opening of valve will divert HPCI injection flow to the wetwell thus reducing HPCI injection into RPV.	Note 16
MO-3-2301-10 and MO-3-2301-15	HPCI	M-374	Spurious opening of these valves would divert part of HPCI injection flow from RPV to CST 2/3B-3303.	Note 5
*PCV-3-2301-46	HPCI	M-374	Spurious closure will isolate the HPCI turbine gland seal condenser and lube oil cooler coolant flow from the HPCI pump discharge.	Note 17
*MO-3-2301-48	HPCI	M-374	Spurious closure will isolate the HPCI turbine gland seal condenser and lube oil cooler coolant flow and will isolate the HPCI suction from the condenser hotwell.	Note 11

TABLE B-2

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 3

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
MO-3-2301-3	HPCI	M-374	Failure of this valve in the closed position will isolate the RPB steam supply to the HPCI turbine.	Note 16
			Spurious opening of this valve would result in loss of reactor inventory to the suppression pool.	Note 28
MO-3-2301-4 or MO-3-2301-5	HPCI	M-374	Failure of these valves in the closed position will isolate the HPCI turbine from the RPV steam supply. Note: MO-3-2301 is located in the drywell and is inaccessible.	Note 16
MO-3-1501-5A	LPCI	M-360 (Sht. 1)	Spurious valve closure will isolate LPCI pump 3A-1502 suction from the suppression pool reducing the pool cooling flow.	Note 12
MO-3-1501-5B	LPCI	M-360 (Sht. 1)	Spurious valve closure will isolate LPCI pump 3B-1502 suction from the suppression pool reducing the pool flow.	Note 12
MO-3-1501-18A and MO-3-1501-19A	LPCI	M-360 (Sht. 1)	Spurious opening of these valves would divert LPCI pool coolant return flow from the torus full flow test line to the torus spray header.	Note 5
MO-3-1501-20A, MO-3-1501-38A and MO-3-1501-21A	LPCI	M-360 (Sht. 1)	Spurious opening of these valves would divert LPCI pool coolant return flow from the torus spray header to the torus full flow test line.	Note 5

TABLE B-2

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 3

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
MO-3-1501-22A, *AO-3-1501-25A and MO-3-1501-21A	LPCI	M-360 (Sht. 1)	Spurious opening could result in loss of reactor inventory.	Note 7
MO-3-1501-27A and MO-3-1501-28A	LPCI	M-360 (Sht. 1)	Spurious opening of these valves would divert LPCI pool coolant return flow from the wetwell to the drywell spray ring header thus reducing pool cooling flow.	Note 5
MO-3-1501-22A MO-3-1501-38A and MO-3-1501-20	SC & LPCI	M-363 M-360 (Sht. 1)	Spurious opening of these valves would allow shutdown cooling flow to enter the wetwell through the torus fuel flow test line.	Note 5
MO-3-1501-22A, MO-3-1501-21A, MO-3-1501-18A and MO-3-1501-19A	SC & LPCI	M-363 M-360 (Sht. 1)	Spurious opening of these valves would allow shutdown cooling flow to enter the wetwell through the torus spray header.	Note 5
MO-3-1501-32B and MO-3-1501-32A	LPCI	M-360 (Sht. 1)	Spurious closure of these valves will isolate LPCI "A" pump from LPCI "B" wetwell injection eliminating a possible injection path.	Note 6
MO-3-1501-11A	LPCI	M-360 (Sht. 1)	Spurious closure will divert all LPCI pump discharge through containment cooling heat exchanger 3A-1503.	Note 6

TABLE B-2

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 3

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
*MO-3-1402-4A	CS	M-358	Spurious opening of valve would divert LPCI pool cooling return flow to the core spray/RPV injection piping.	Notes 5, 12
MO-3-1501-13A	LPCI	M-360	Failure of this valve in the open position would direct LPCI pump discharge directly to the wetwell thus bypassing heat exchanger 3B-1503. The end result is a reduction in the LPCI heat removal capacity.	Note 6
MO-3-1501-3A	SW	M-360 (Sht. 1)	Failure of this valve in the closed position would isolate the service water return from the containment cooling heat exchanger. This failure would completely detect the heat removal capability of the LPCI system.	Note 6
MO-3-1501-5C	LPCI	M-360 (Sht. 1)	Spurious valve closure will isolate LPCI pump 3C-1502 suction from suppression pool.	Note 16
MO-3-1501-5D	LPCI	M-360 (Sht. 1)	Spurious valve closure will isolate LPCI pump 3D-1502 suction from suppression pool.	Note 16
MO-3-1501-18B and MO-3-1501-19B	LPCI	M-360 (Sht. 1)	Spurious opening of these valves would divert LPCI pool coolant return flow from the torus fuel flow test line to the torus spray header.	Note 5
MO-3-1501-38B, MO-3-1501-20B and MO-3-1501-21B	LPCI	M-360 (Sht. 1)	Spurious opening of these valves would divert LPCI pool coolant return flow from the torus spray header to the torus fuel flow test line.	Note 5

TABLE B-2

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 3

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
MO-3-1501-21B, MO-3-1501-22B and *AO-3-1501-25B	LPCI	M-360 (Sht. 1)	Spurious opening could result in loss of reactor inventory.	Note 7
MO-3-1501-27B and MO-3-1501-28B	LPCI	M-360 (Sht. 1)	Spurious opening of these valves would divert LPCI pool coolant return flow from the wetwell to the drywell spray ring header.	Note 5
MO-3-1501-22B, MO-3-1501-38B and MO-3-1501-20B	SC & LPCI	M-363 M-360 (Sht. 1)	Spurious opening of these valves would allow shutdown cooling flow to enter the wetwell through the torus fuel flow test line.	Note 5
MO-3-1501-22B, MO-3-1501-21B, MO-3-1501-18B and MO-3-1501-19B	SP & LPCI	M-363 M-360 (Sht. 1)	Spurious opening of these valves would allow shutdown cooling flow to enter the wetwell through the torus spray header.	Note 5
MO-3-1501-32B and MO-3-1501-32A	LPCI	M-360 (Sht. 1)	Spurious closure of these valves will isolate LPCI "B" pump from LPCI "A" wetwell injection	Note 6
MO-3-1501-11B	LPCI	M-360 (Sht. 1)	Spurious closure will divert all LPCI pump discharge through containment cooling heat exchanger 3-B-1503.	Note 15

TABLE B-2

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 3

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
*MO-3-1402-4B	CS	M-358	Spurious opening of valve would divert LPCI pool cooling return flow to the core spray/RPV injection piping.	Note 18
MO-3-1501-13B	LPCI	M-360 (Sht. 1)	Failure of these valve in the open position would divert LPCI pump discharge directly to the wetwell thus bypassing heat exchanger 3A-1503. This failure would result in a reduction in the LPCI heat removal capability.	Note 16
MO-3-1501-3B	SW	M-360 (Sht. 1)	Spurious closure of this valve would isolate the service water flow from the containment cooling heat exchanger. This failure would completely defeat the heat removal capability of the LPCI cooling system.	Note 16
MO-3-1501-5A	LPCI	M-360 (Sht. 1)	Spurious valve closure will isolate LPCI pump 3A-1502 suction from the suppression pool therefore reducing RPV injection flow.	Note 12
MO-3-1501-5B	LPCI	M-360 (Sht. 1)	Spurious valve closure will isolate LPCI pump 3B-1502 suction from the suppression pool therefore reducing RPV injection flow.	Note 12

TABLE B-2

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 3

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
MO-3-1501-18A, MO-3-1501-19A, MO-3-1501-20A, MO-3-1501-21A and MO-3-1501-38A	LPCI	M-360 (Sht. 1)	Spurious opening of these valves would divert LPCI injection flow from the RPV to the wetwell therefore reducing RPV injection flow.	Note 5
MO-3-1501-27A and MO-3-1501-28A	LPCI	M-360 (Sht. 1)	Spurious opening of these valves would divert LPCI injection flow from the RPV to the drywell spray ring header therefore reducing RPV injection flow.	Note 5
MO-3-1501-11A	LPCI	M-360 (Sht. 1)	Spurious closure will divert all LPCI pump discharge through containment cooling heat exchanger 3A-1503.	Note 12
MO-3-1501-32A and MO-3-1501-32B	LPCI	M-360 (Sht. 1)	Spurious closure of these valves will isolate LPCI "A" pumps from LPCI "B" RPV injection piping thus eliminating a possible injection path.	Note 13
*MO-3-1402-4A, MO-3-1501-38A and MO-3-1501-20A	LPCI & CS	M-360 (Sht. 1) M-358	Spurious opening of valves would divert LPCI RPV injection flow to the core spray piping thus reducing RPV injection flow.	Note 5
MO-3-1501-13A	LPCI	M-360 (Sht. 1)	Failure of this valve in the open position would direct LPCI pump discharge directly to the wetwell. The end result being a reduction in the RPV injection flow.	Note 13

TABLE B-2

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 3

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
MO-3-1501-3A	SW	M-360 (Sht. 1)	Failure of this valve in the closed position would isolate the service water return from the containment cooling heat exchanger. This failure would completely defect the heat removal capability of the LPCI system.	Note 12
MO-3-1501-5C	LPCI	M-360 (Sht. 1)	Spurious valve closure will isolate LPCI pump 3C-1502 suction from the suppression pool therefore reducing RPV injection flow.	Note 13
MO-3-1501-5D	LPCI	M-360 (Sht. 1)	Spurious valve closure will isolate LPCI pump 3D-1502 suction from the suppression pool therefore reducing RPV injection flow.	Note 13
MO-3-1501-18B, MO-3-1501-19B, MO-3-1501-20B, MO-3-1501-21B and MO-3-1501-38B	LPCI	M-360 (Sht. 1)	Spurious opening of these valves would divert LPCI injection flow from the RPV to the wetwell therefore reducing RPV injection flow.	Note 5
MO-3-1501-27B and MO-3-1501-28B	LPCI	M-360 (Sht. 1)	Spurious opening of these valves would divert LPCI injection flow from the RPV to the drywell spray ring header therefore reducing RPV injection flow.	Note 5
MO-3-1501-11B	LPCI	M-360 (Sht. 1)	Spurious closing will divert all LPCI pump discharge through containment cooling heat exchanger 3B-1503.	Note 15

TABLE B-2

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 3

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
MO-3-1501-32A and MO-3-1501-32B	LPCI	M-360 (Sht. 1)	Spurious closure will isolate LPCI "B" pumps from LPCI "A" RPV injection piping thus eliminating a possible injection path.	Note 13
MO-3-1402-4B, MO-3-1501-20B and MO-3-1501-38B	LPCI & CS	M-360 (Sht. 1) M-358	Spurious opening of valves would divert LPCI RPV injection to the core spray injection piping.	Note 5
MO-3-1501-13B	LPCI	M-360 (Sht. 1)	Failure of this valve in the open position would divert LPCI pump discharge to the wetwell. This failure would result in a reduction in the LPCI RPV injection flow.	Note 16
MO-3-1501-3B	SW	M-360 (Sht. 1)	Spurious closure of this valve would isolate the service water flow from the containment cooling heat exchanger. This failure would completely defeat the heat removal capability of the LPCI system.	Note 16
SO-3-220-47 and SO-3-220-46	Head Vent	M-357 (Sht. 1)	Spurious opening of head vent valves could result in loss of inventory.	Note 5
MO-3-1501-22B, MO-3-1501-38B and MO-3-1501-20B	LPCI	M-360 (Sht. 1)	Spurious opening diverts shutdown cooling flow from RPV to wetwell.	Notes 5 & 6

TABLE B-2

POTENTIAL SPURIOUS COMPONENT OPERATIONS THAT COULD AFFECT SAFE SHUTDOWN - DRESDEN UNIT 3

Potential Spurious Component[1,2]	System[3]	Mechanical/Electrical Drawings	Concern With Malfunction	Resolution
MO-3-1501-22B, MO-3-1501-21B, MO-3-1501-18B and MO-3-1501-19B	LPCI	M-360 (Sht. 1)	Spurious opening diverts shutdown cooling from RPV to drywell spray header.	Notes 5 & 6
AO-3-0301-156 A(B) AO-3-0301-157 A(B) AO-3-0301-160 A(B) AO-3-0301-161 A(B)	CRD	M-365	Simultaneous spurious opening of two valves in a scram discharge volume drain or vent line could result in loss of reactor inventory	Note 23
MO3-0301-2A(B)	CRD	M-365	Spurious closure of these valves could result in loss of RPV make-up capability.	Note 29

DRESDEN 2 & 3

FIRE PROTECTION REPORT

Inspection Report Nos. 50-237/96012 and 50-249/96012

Page	Title
III.20-1	Inspection Report Nos. 50-237/96012, 50-249/96012, 50-254/96016, and 50-265/96016 dated November 14, 1996.
III.20-22	December 12, 1996 ComEd letter from E. S. Kraft to NRC, response to apparent violation contained in Inspection Report Nos. 50-237/96012, 50-249/96012, 50-254/96016 and 50-265/96016.
III.20-31	December 20, 1996 ComEd letter from J. B. Hosmer to NRC, supplemental response to apparent violation contained in Inspection Report Nos. 50-237/96012, 50-249/96012, 50-254/96016, and 50-265/96016.
III.20-36	March 6, 1997 ComEd letter from J. B. Hosmer to NRC, regarding protection of motor operated valves during postulated hot shorts.
III.20-38	December 30, 1997 Exercise of Enforcement Discretion (NRC Inspection Reports 50-237/96012 (DRS); 50-249/96012 (DRS); 50-254/96016 (DRS); and 50-265/96016 (DRS))

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
801 WARRENVILLE ROAD
LISLE, ILLINOIS 60532-4351

December 30, 1997

EAs 96-388, 96-389,
and 96-390

Mr. O. Kingsley
President, Nuclear Generation Group
and Chief Nuclear Officer
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 300
Downers Grove, IL 60515

SUBJECT: EXERCISE OF ENFORCEMENT DISCRETION
(NRC INSPECTION REPORTS 50-237/96012(DRS); 50-249/96012(DRS);
50-254/96016(DRS); AND 50-265/96016(DRS))

Dear Mr. Kingsley:

This refers to a fire protection inspection conducted from July 8 through October 17, 1996, at the Commonwealth Edison Company's (ComEd) Dresden and Quad Cities nuclear stations. An apparent violation was identified during the inspection. This apparent violation concerned the failure to protect motor operated valves (MOVs) from the effects of hot shorts during a postulated control room fire. The report documenting the inspection was sent to ComEd by letter dated November 14, 1996.

During May 1996, employees at the Quad Cities Station learned of the potential inability to reposition MOVs following a postulated control room fire, and subsequently notified personnel at the Dresden Station. On July 8, 1996, ComEd notified the NRC in a report made pursuant to 10 CFR 50.72. ComEd issued a Licensee Event Report on August 6, 1996. Based on the information provided in the ComEd reports, information developed during the inspection, and provided by ComEd on December 12 and 20, 1996, in response to the inspection report, the NRC has determined that a violation of NRC requirements occurred. The violation concerned the failure of ComEd to provide adequate protection to ensure operation of equipment for systems necessary to achieve and maintain hot shutdown conditions, or to maintain a dedicated safe shutdown capability.

In its December 1996 submittals, ComEd agreed with the violation; however, ComEd indicated that the issue with "hot shorts" was not a part of the original design basis. ComEd asserted that its safe shutdown analyses satisfied the requirements of 10 CFR Part 50, Appendix R, and the consideration within those analyses of the consequence of a spurious valve actuation due to fire was limited to mispositioning a valve to an undesired position, and did not include possible mechanical damage to the valve.

The NRC disagrees with the ComEd position. Consistent in NRC requirements and guidance to the industry has been the requirement for licensees to demonstrate that fire induced failures from "hot shorts" will not prevent operation, or cause maloperation of the alternative or dedicated shutdown method. This guidance was communicated in Generic Letter 81-12, "Fire Protection Rule" and Generic Letter 86-10, "Implementation of Fire Protection Requirements." This issue involved MOVs that were potentially unable to perform the post-fire, safe shutdown functions in accordance with 10 CFR Part 50, Appendix R, Section III.G, because the control circuits were susceptible to fire induced "hot shorts." This design issue is a violation of 10 CFR Part 50, Appendix R, and represents a failure to ensure that a redundant train of safe shutdown equipment would remain free from fire damage and available to maintain a unit in "hot shutdown." The violation is safety significant because the potential existed for each unit to not be able to achieve a safe shutdown condition for a control room fire.

This matter was considered for escalated enforcement and a possible civil penalty. However, after consultation with the Director, Office of Enforcement, I have been authorized to neither issue a Notice of Violation, nor propose a civil penalty in this case, in accordance with Section VII.B.3 of the General Statement of Policy and Procedures for NRC Enforcement Actions, "Enforcement Policy," NUREG-1600. This decision was made after considering that this issue was discovered by the ComEd staff, and would not have likely been identified by routine efforts. The initial evaluation performed by the ComEd staff of NRC Information Notice (IN) 92-18, "Potential for Loss of Remote Shutdown Capability During a Control Room Fire," determined that an unanalyzed condition did not exist, and the installed MOV thermo-overloads provided adequate protection at both the Dresden and Quad Cities stations. However, during May 1996, ComEd identified that MOVs were susceptible to "hot short" induced mechanical damage. ComEd's understanding of Appendix R requirements, and reliance on a 1992 recommendation from the Nuclear Management and Resources Council (NUMARC), which was not endorsed by the NRC, may have caused confusion during the ComEd evaluation of IN 92-18. The NRC, therefore, has credited ComEd with the identification of the violation. The NRC also considered that ComEd's corrective actions, following identification of the issue during May 1996 were appropriate. These corrective actions included modifications for all affected equipment. The NRC also considered that this issue was not reasonably linked to current performance. The exercise of enforcement discretion recognizes ComEd's efforts in identifying and correcting a significant design problem.

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken, plans to correct the violation and prevent recurrence, and the date when full compliance was achieved is already adequately addressed on the docket in Inspection Reports 50-237/96012(DRS), 50-249/96012(DRS), 50-254/96016(DRS) and 50-265/96016(DRS), and your responses dated December 12 and 20, 1996. Therefore, you are not required to respond to this letter unless the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, your correspondence should be sent to the U. S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555, with a copy to the Regional Administrator,

NRC Region III, 801 Warrenville Road, Lisle, IL 60532-4351, and a copy to the NRC Resident Inspector at the Dresden and Quad Cities Stations.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter will be placed in the NRC Public Document Room (PDR).

Sincerely,

A. Bill Beach
Regional Administrator

Docket Nos. 50-237; 50-249;
50-254; and 50-265
License Nos. DPR-19; DPR-25;
DPR-29; and DPR-30

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