CABLE SEPARATION ANALYSIS REPORT

SHOREHAM
NUCLEAR POWER STATION
UNIT NO. 1

LILCO
LONG ISLAND LIGHTING

Original
April 1983

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

1 PURPOSE

This analysis is made to demonstrate that sufficient separation exists between safety-related components of redundant systems located in the secondary containment, and necessary for shutdown such that a postulated event causing the disability of all cables in raceways in the designated area will not prevent plant safe shutdown. This report is based upon as-built drawings listed in Appendix B.

2 GENERAL METHOD OF ANALYSIS

The secondary containment is divided into "Affected Areas." All cables and raceways in each "Affected Area" are assumed to be disabled such as to render them unavailable for use in shutdown. A determination is then made whether shutdown can be achieved using the remaining shutdown equipment of other unaffected areas. The areas are chosen such as to maintain a minimum 20 ft separation, as required by 10CFR50 Appendix R, between safety-related components of redundant systems and the disabling event is fire.

3 ASSUMPTIONS

The following are the assumptions and design bases for the separation analysis:

1. It is assumed that:

   a. The reactor is operating at 100 percent power when the postulated event occurs.

   b. Only onsite power is available in achieving safe shutdown.

   c. The reactor is isolated from the main condenser.

   d. There is an automatic scram (or manual at the direction of the shift supervisor) to bring the plant to hot shutdown.

   e. Single failure is not considered.

2. As presented in the NRC review reminder[1], it is assumed that there is a 72 hour period in which to achieve cold shutdown. During this three day period, credit may be taken for manual system operation as well as for reasonable repairs, etc.

[1] Nuclear Regulatory Commission. "Review Reminder" from V. Benaroya to Auxiliary System Branch Staff Members, August 8, 1978.

4 SPECIFIC METHODS OF ANALYSIS

4.1 AFFECTED AREAS

In order to separate the secondary containment into conservative affected areas, overlapping segments are defined as described below.

The secondary containment is segmented as shown in Figure 4.1-1. There are distinct floor levels within the secondary containment, and vertical boundaries are established for the secondary containment areas at each floor elevation. Cable and raceways in each segment are assumed to be disabled and a determination made whether shutdown can be accomplished with the remaining equipment. Upon completion of the analysis of each area, the procedure is repeated with new segments which are rotated or indexed 22.5 degrees from the previously analyzed segments. This overlap operation assures that no sensitive interface boundaries exist.

Figure 4.1-1 illustrates the arrangement of the secondary containment areas, and Table 4.1-1 describes the area boundaries.

The analysis assumes that all shutdown components fed from floor-mounted equipment such as motor control centers, panels, or racks located in an affected area are disabled. This is accomplished by assuming either the power source (cable) disabled if the equipment is red from the top, or the entire equipment disabled if fed from the bottom. The analyses also assumes the loss of upstream motor control centers (MCCs) as a result of cable disablement occurring anywhere along the MCC cascade.

4.2 SHUTDOWN MODEL

In order to make a determination that shutdown is achievable with the cable and raceway in a given area disabled, it is necessary to develop a functional model for shutdown. This model is illustrated in Figures 4.2-1A, 4.2-1B, and 4.2-1C.

Paths to successful shutdown are shown in this model. All systems which can contribute to plant shutdown are identified. All auxiliary systems, such as ventilation, cooling water, control and instrumentation, as well as electrical power sources are included. In the analysis, however, credit is taken only for safety-related systems and equipment.

4.3 SHUTDOWN EQUIPMENT

Based on the protection sequence and use of safety-related systems only, the selection of shutdown systems is made as follows:

1. System B21 - Nuclear Boiler

   The seven ADS and all eleven safety-relief valves are required to operate only manually. Automatic initiation is not necessary and will not normally occur since no LOCA and therefore no high drywell pressure is assumed which is required for automatic initiation. The two head vent valves MOV083, and 084 are required not to operate "simultaneously" in order to prevent blowdown of the reactor vessel steam into the primary containment. Thus the valves are not needed for drywell safe shutdown but are required not to be operated.

   The SRV's may be utilized for a combination hot/cold shutdown operation. With the vessel at high pressure, the valves can provide sufficient pressure relieving capacity to enable the low head systems (LPCI and Core Spray) to provide core inventory. With the vessel at low pressure, the valves can provide extended core and/or suppression pool cooling by holding the valves open, enabling the low head systems to provide a suppression pool/reactor vessel circulation path. Cooling would be provided directly or indirectly via the RHR exchanger. The above modes are designated as the RHR/CS/SRV flow path in the separation analysis.

2. System B31 - Reactor Recirculation System

   The two pressure switches, PS023A and B, required for automatic RHR system operation are needed.

3. System C41 - Standby Liquid Control

   The Category I portions of this system should be available in case control rod insertion is not completed. It is essential that this system not operate unless it is actually required.

4. System C61 - Reactor Plant Remote Shutdown

   The eight Category I indicating transmitter circuits for RHR main flow (FT001), reactor vessel pressure (PT006), service water header pressure (PT011), suppression pool temperature (TT022A and B), and level

(LT026), and drywell pressure (PT012) and temperature (TT021) are required.

5. System E11 - Residual Heat Removal

All Category I components, except the following ten valves, are required: The two flow to suppression pool valves MOV042A and B are not required since the normally closed upstream valves are protected. The two head spray isolation valves MOV053 and 054 are not required for shutdown since cable failure resulting in both valves opening presents no problem since there is a check valve in series with these MOVs to prevent reactor blowdown. The four heat exchanger vent valves MOV055A and B and 056A and B are not required for shutdown even during the steam condensing mode since cable failure resulting in opening of these valves will drain a one inch line from the heat exchanger opening to the suppression pool, an acceptable event. The two hydrogen recombiner subsystem valves MOV057A and B are not required for a non-LOCA condition and failure of valve cabling will cause valves to open, an event which will not result in significant degrading of the RHR cooling system.

6. System E21 - Core Spray

All Category I components are required, except the two testable check valve bypass valves MOV081A and B, which are not required during shutdown. If these valves were to change state, there would be no adverse effect on system operation. Automatic initiation which is based on reactor water level is also required. Initiation signals based on reactor primary containment pressure are not required since there should be no high pressure condition without LOCA. Also, failure of the high drywell pressure initiation signal will not prevent injection nor cause the injection valves to open prematurely because a reactor pressure permissive in the control circuit of the injection valves will prevent valve opening on high reactor pressures. This permissive is considered a required component.

7. System E41 - High Pressure Coolant Injection

All Category I components are required, except the five items described below. One is the loop level pump P-050 which if lost will not adversely affect the system since the time prior to initiation and between operating cycles should be short enough to prevent significant draindown of the pump discharge piping. Another item is the inboard isolation bypass valve

MOV047 which is not required for shutdown and will not affect system operation in either the open or closed position. Also, the turbine exhaust vacuum breaker MOV049 is not required and is used only after a LOCA. Lastly, the condenser exhaust vacuum breaker PCV144 and steamline trap bypass valve LCV091 are not required for shutdown and will, in fact, fail in the closed position on loss of air due to loss of offsite power. Assuming availability of air, failure of the control circuit resulting in valve opening is not detrimental to system operation. Automatic initiation based on reactor water level is required. Initiation due to high drywell pressure is not required since there should be no such condition without LOCA. Also, failure of drywell pressure initiation signal will not prevent injection, and if premature injection occurs, it will not adversely affect reactor operation. Instrumentation to identify HPCI steamline break which can cause steamline isolation is required.

8. System E51 - Reactor Core Isolation Cooling

All Category I components are required, except those five corresponding to the E41 System (P-051, MOV047, MOV049, PCV144 and LCV091) and for the same reasons. Automatic initiation is also required.

9. System G33 - Reactor Water Cleanup

The containment isolation valves MOV033 and 034 are required to be closed to isolate the reactor from the remainder of the RWCU System. This isolation is necessary if standby liquid control system initiation is required.

10. System G41 - Fuel Pool Cooling and Cleanup

The two service water inlet valves, MOV032A and B, used for ultimate cooling water connection and the corresponding valves in the service water system, are required to be closed to prevent pumping service water to the spent fuel storage pool, an event which in time could cause flooding in the reactor building.

11. System M43 - Fire Protection

Only the Category I portion of this system is required to prevent inadvertent shutdown of the ventilation system or closure of motorized CO_2 dampers.

12. System M50 - RBSVS and Control Room A/C Chilled Water

All Category I components are required. Most instruments required to start the chilled water units and associated chilled water and condensate pumps are local to the chiller units.

13. System P41 - Service Water

All Category I components are required, except the two radiation monitoring system isolation valves MOV102A and B which are not needed during a non-LOCA condition. In addition, a failure causing the valves to open will not result in unacceptable conditions. Automatic initiation is also required.

14. System P42 - Reactor Building Closed Loop Cooling Water System

The three P-005A, B, and C RBCLCW circulating pumps and the two heat exchanger inlet isolation valves MOV042A and B are required to supply cooling to RHR pump seals. Valves separating Category I from Category II piping and Division I from Division II piping are not required based on the assumption of no seismic event and, therefore, no piping failure. Operation of selected components will be manual and no automatic initiation is required.

15. System P50 - Compressed Air

The MOV's and pressure switches used to supply and/or isolate the air to the SRV accumulators are required. All other components are Category II.

16. Systems R22, 23, 24, 35, 42, 43 - Electrical Distribution

All Class 1E electrical distribution and interconnecting cable is required.

17. System T46 - Standby Ventilation System

Only a portion of the fourteen unit coolers in the reactor building are required to maintain the ambient temperature around the components needed for shutdown. Manual operation only is required; automatic initiation is not needed. Ventilation equipment required for maintaining negative pressure in the reactor building secondary containment is not needed. The filtering equipment is not required since there is no LOCA/release of radiation.

18. System X41 - Miscellaneous Room HVAC

All Category I ventilation components are required in these miscellaneous areas.

19. System X60 - Diesel/Generator Ventilation

All Category I ventilation components in the D/G rooms are required.

20. System X61 - Control Room A-C

All Category I components are required, except the two air-operated valves AOV37A and B which isolate the redundant portions of ducts that will remain intact, assuming no seismic condition. These dampers will fail closed on loss of offsite power.

4.4 DEVELOPMENT OF SHUTDOWN EQUIPMENT BY AREA

The development of shutdown equipment by affected area is illustrated in the schematic diagram Figure 4.4-1.

The first step consists of developing a shutdown equipment list. This is accomplished by using the shutdown model developed, as described in Section 4.2, and identifying all systems with safety-related cable (Table 4.4-1). These are then compared to the model requirements as indicated in Section 4.3 to sort out the safety-related equipment for shutdown. The shutdown equipment list is contained in Table 4.4-2.

The second step is to incorporate the elementary diagram (ESK) information on the shutdown equipment list. Since a complete equipment versus ESK list already exists within the computerized Electrical Cable Schedule Information System (ECSIS), the shutdown equipment list is input to the computer, compared against the equipment versus ESK list, and sorted to get the shutdown equipment versus ESK list.

The third step is to identify the cables associated with each piece of shutdown equipment. This is accomplished by comparing the shutdown equipment versus ESK list generated in the previous step with the cable versus ESK list in the ECSIS.

Having identified, at this point, all shutdown equipment and its associated cable, it remains to identify the cable in each area and compare to the shutdown equipment in order to identify the disabled equipment.

The fourth step is to compile lists of cable trays and conduit by area, input to the computer, and compare against the cable versus

raceway list in the ECSIS thus creating the shutdown equipment cable versus area lists.

The fifth step is to compare the shutdown equipment versus cable list from step three against the cable versus area lists from step four to identify the shutdown equipment lost for each area.

The final step is to compare the unaffected shutdown equipment versus area lists against the shutdown model to determine the impact on safe shutdown capability.

5 RESULTS AND RECOMMENDATIONS

Appendix A presents the results of the separation analysis for the secondary containment.

The results are presented for each area investigated in the following format:

1. Systems Impacted (Divisions I, II, and III) - A listing of any system which computer analysis indicated had associated shutdown cable or cables in the area of interest.

2. System Functions Disabled - All safety systems and components previously identified as essential and listed in Tables 4.4-1 and 4.4-2 are evaluated for their importance in achieving a safe shutdown. Those components whose failure would not necessarily cause a system function loss are reviewed and, where no impact upon safe shutdown exists, are so noted under Disabled Function Evaluation below. As an example, in Section 008-07, Paragraph 1(C) identifies unit cooler 1T46*UC002A as a disabled 1T46, Division I, component. However, the loss of that cooler does not affect the remaining Division I cooler (1T46*UC003A) and Division I 1T46 RBSVS components which have the capability of providing cooling for the Division I equipment utilized for safe shutdown and identified in Paragraph 4, Shutdown Capability.

   Where an event damages extensive equipment in one train (Divisions I, II, or III), a statement such as "No credit taken for Division I system functions" is made, and the remaining statements generally refer to disabled functions in other Divisions. In such a case, the analysis has determined that no Division I system functions are required to achieve safe shutdown.

3. Disabled Function Evaluation - Identifies, at the system level, the importance to safe shutdown of any function that may be lost as a result of the event.

4. Shutdown Capability - Identifies whether redundant means of providing necessary safe shutdown functions are available (given the Disabled Functions in 3) and generally describes an available procedure for safe shutdown.

5. Further Action Recommended - Provides recommendations for required modifications which will further improve existing plant shutdown capability. These recommendations are not necessarily requisites to achieving shutdown but rather enhancements which would augment existing capabilities.

6. Action To Be Taken - Indicates specific action to be taken based on the recommendation, if any.

6 CONCLUSIONS

For the postulated event, with concurrent loss of offsite power, hot and cold shutdown can be accomplished in each case using only safety-related systems and equipment. This considers the extreme case where an event is assumed to disable all shutdown cable terminating in or routed through each affected area.

It was not necessary to take credit for separation by distance, covers on cable trays, fire suppression, etc, within the affected area nor for any nonsafety-related systems and equipment.

7 MAINTENANCE OF CABLE SEPARATION ANALYSIS REPORT

All new conduit design by LILCO, C/J, S&W etc shall be sent to S&W Boston for review to assure that the designed routing does not jeopardize the analysis.

Therefore, prior to installaiton S&W Boston shall approve routing of conduit and if there are any problems the reviewer will attempt to indicate an acceptable path.

When cable is added to any existing raceway of any kind, S&W shall be notified so they may assure that the report is still valid.

TABLE 4.1-1

SECONDARY CONTAINMENT AREA BOUNDARIES

Primary Segment		
Area	From	To
N1	0°	45°
N2	45°	90°
N3	90°	135°
N4	135°	180°
N5	180°	225°
N6	225°	270°
N7	270°	315°
N8	315°	0°

Boundary Overlap		
Area	From	To
01	22.5°	67.5°
02	67.5°	112.5°
03	112.5°	157.5°
04	157.5°	202.5°
05	202.5°	247.5°
06	247.5°	292.5°
07	292.5°	337.5°
08	337.5°	22.5°

Elevation	From	To
008	008	040
040	040	063
063	063	078
078	078	112
112	112	150
150	150	175
175	175	-

Segments are Numbered Elevation - Area
Example:
063-N6; Elevation 063 to 078, Area 225° to 270°
See Figure 4.1-1

TABLE 4.4-1

ALL SYSTEMS WITH CLASS 1E CABLES
SHOREHAM NUCLEAR POWER STATION
LONG ISLAND LIGHTING COMPANY

System No.	Description
B	
*B21	Nuclear Boiler
*B31	Reactor Recirculation
C	
C11	Control Rod Drive Hydraulic (CRDH) Control
*C41	Standby Liquid Control (SLC)
C51	Neutron Monitoring
*C61	Reactor Plant Remote Shutdown (RPRS)
C71	Reactor Protection (RPS)
D	
D11	Process Radiation Monitoring
D21	Area Radiation Monitoring
E	
*E11	Residual Heat Removal (RHR)
*E21	Core Spray (CS)
*E41	High Pressure Coolant Injection (HPCI)
E32	MSIV Leakage Control System
*E51	Reactor Core Isolation Cooling (RCIC)
G	
G11	Radwaste
*G33	Reactor Water Cleanup (RWC)
*G41	Fuel Pool Cooling and Cleanup (FPCC)
H	
*H11	Main Control Room Panels
*H21	Miscellaneous Local Panels and Racks
M	
M43 (Control Building)	Fire Protection
*M50	RBSVS and Control Room AC Chilled Water

TABLE 4.4-1 (Cont)

	System No.	Description
N		
	N11	Main Steam
	N21	Condensate and Feedwater
P		
	P21	Demineralized and Make-up Water
	*P41	Service Water
	*P42	Reactor Building Closed Loop Cooling Water (RBCLCW)
	*P50	Compressed Air
R		
	*R22	Metal Clad Switchgear
	*R23	Unit Substations
	*R24	Motor Control Centers (MCC)
	*R35	AC Control and Instrument Power
	R36	AC Uninterruptible (Vital) Power
	*R42	Battery Power (125 V DC)
	*R43	Diesel Emergency Power
	R81	Heat Tracing Power
T		
	T22	Reactor Building Superstructure
	T23 (N_2 to drywell floor seal)	Reactor Containment
	*T46	Standby Ventilation System
	T48	Primary Containment Atmospheric Control System
X		
	X40	Control Building Kitchen and Lavatory
	*X41	Miscellaneous Computer, Screen-well, Relay and Battery Room HVAC
	*X60	Diesel Generator Ventilation System
	*X61	Control Room Air-Conditioning System (CRAC)

TABLE 4.4-1 (Cont)

System No.	Description
Z	
Z93	Post-Accident Monitoring
Z97	Emergency Response Facility

NOTES:

* Safe Shutdown Systems.

TABLE 4.4-2
SHUTDOWN EQUIPMENT LIST

IDENTITY	DESCRIPTION	ESK	CKT NO.	PWR SC	PWR SC LOC	EQUIP LOC(1) EL-AZ
	AUTOMATIC DEPRESSURIZATION SYSTEM					
1B21*SV092AX/Y	ADS VLV 1B21*RV92A SOVA/B	1.61-236/7		1R42*PNLA2/B2	EL 40' RELAY RM	102-218
1B21*SV092BX/Y	ADS VLV 1B21*RV92B SOVA/B	1.61-236/7		1R42*PNLA2/B2	EL 40' RELAY RM	102-234
1B21*SV092CX	ADS VLV 1B21*RV92C SOVA	1.61-238		1R42*PNLA2	EL 40' RELAY RM	102-234
1B21*SV092DX	ADS VLV 1B21*RV92D SOVA	1.61-238		1R42*PNLA2	EL 40' RELAY RM	102-244
1B21*SV092EX/Y	ADS VLV 1B21*RV92E SOVA/B	1.61-236/7		1R42*PNLA2/B2	EL 40' RELAY RM	102-253
1B21*SV092FX	ADS VLV 1B21*RV92F SOVA	1.61-238		1R42*PNLA2	EL 40' RELAY RM	102-124
1B21*SV092GX	ADS VLV 1B21*RV92G SOVA	1.61-238		1R42*PNLA2	EL 40' RELAY RM	102-115
1B21*SV092HX/Y	ADS VLV 1B21*RV92H SOVA/B	1.61-236/7		1R42*PNLA2/B2	EL 40' RELAY RM	102-142
1B21*SV092JX/Y	ADS VLV 1B21*RV92J SOVA/B	1.61-236/7		1R42*PNLA2/B2	EL 40' RELAY RM	102-126
1B21*SV092KX/Y	ADS VLV 1B21*RV92K SOVA/B	1.61-236/7		1R42*PNLA2/B2	EL 40' RELAY RM	102-090
1B21*SV092LX/Y	ADS VLV 1B21*RV92L SOVA/B	1.61-236/7		1R42*PNLA2/B2	EL 40' RELAY RM	102-270
	CORE SPRAY SYSTEM					
	DIVISION 1					
1E21*P013A	CORE SPRAY PUMP	5E21A01	1E21A01	1R22*SWG101	EMER SWGR RM EL 25'	8-103
1E21*P049A	LOOP LEVEL PUMP	6E2101	1E21A02	1R24*MCC1117	R.B. EL 40'	8-101
1E21*MOV031A	PUMP SUCTION VV	6E2102	1E21A02	1R24*MCC1117	R.B. EL 40'	24-148
1E21*MOV033A	DISCHARGE VV	6E2103	1E21A04	1R24*MCC1113	R.B. EL 112'	104-115
1E21*MOV035A	RECIRC VV	6E2105	1E21A06	1R24*MCC1111	R.B. EL 40'	53-108
1E21*MOV034A	MIN FLOW VV	6E2106	1E21A07	1R24*MCC1117	R.B. EL 40'	14-098
1B21*PT158A	PRES INTLK 1B21-N097A(H21*P004)	1.61-272				78-079
1B21*PT158C	PRES INTLK 1B21-N097C(H21*P009)	1.61-272				78-102
1E21*PDS033A	CS D/P INTLK (H21*P001)					8-110
1E21*FIS002A	MIN FLOW (H21*P001)					8-110
	DIVISION 2					
1E21*P013B	CORE SPRAY PUMP	5E2102	1E21B01	1R22*SWG102	EMER SWGR RM EL 25'	8-257
1E21*P049B	KEEP FILLED PUMP	6E2101	1E21B02	1R24*MCC1127	R.B. EL 40'	8-259
1E21*MOV031B	PUMP SUCTION VV	6E2102	1E21B02	1R24*MCC1127	R.B. EL 40'	24-112
1E21*MOV033B	DISCHARGE VV	6E2103A	1E21B04	1R24*MCC1123	R.B. EL 112'	104-245
1E21*MOV035B	RECIRC VV	6E2105	1E21B06	1R24*MCC1121	R.B. EL 40'	53-253
1E21*MOV034B	MIN FLOW VV	6E2106	1E21B07	1R24*MCC1127	R.B. EL 40'	14-262
1B21*PT158B	PRES INTLK 1B21-N097B(H21*P005)	1.61-273				78-257
1B21*PT158D	PRES INTLK 1B21-N097D(H21*P010)	1.61-273				78-280
1E21*PDS033B	CS D/P INTLK (H21*P019)					8-248
1E21*FIS002B	MIN FLOW (H21*P019)					8-248
1E41*P074	VACUUM PUMP	11E4101	1E41N01	1R42*MCC0B1	R.B. EL 40'	8-170
1E41*P075	VACUUM TANK COND PUMP	11E4101A	1E41N02	1R42*MCC0B1	R.B. EL 40'	8-166
1E41*P127	AUX LO PUMP	11E4102	1E41N03	1R42*MCC0B1	R.B. EL 40'	8-160
1E41*MOV031	HPCI PUMP SUCT FM CON ST TK VV	11E4109	1E41N09	1R42*MCC0B1	R.B. EL 40'	20-220
1E41*MOV032	HPCI PUMP SUCT FM SUP POOL VV	11E4110	1E41N10	1R42*MCC0B1	R.B. EL 40'	24-210
1E41*MOV034	HPCI STEAM SUP OUTBRD ISO VV	11E4105	1E41N05	1R42*MCC0B2	R.B. EL 112'	64-161

Original
April 1982

IDENTITY	DESCRIPTION	ESK	CKT NO.	PWR SC	PWR SC LOC	EQUIP LOC(1) EL-AZ
1E41*MOV035	HPCI PUMP DISCHARGE VV	11E4106	1E41N06	1R42*MCC0B2	R.B. EL 112'	64-168
1E41*MOV036	MIN FLOW VV	11E4112	1E41N12	1R42*MCC0B1	R.B. EL 40'	18-197
1E41*MOV037	HPCI TEST BYPASS VV TO CST VV	11E4107	1E41N07	1R42*MCC0B1	R.B. EL 40'	18-195
1E41*MOV038	HPCI TEST BYPASS VV TO CST VV	11E4108	1E41N08	1R42*MCC0B1	R.B. EL 40'	18-205
1E41*MOV039	LUB OIL COOL VV	11E4114	1E41N13	1R42*MCC0B1	R.B. EL 40'	16-190
1E41*MOV041	STEAM SUPPLY INBRD ISOL VV	6E4102	1E41A01	1R24*MCC1118	R.B. EL 112'	66-188
1E41*MOV042	HPCI STEAM OUT BRD ISOL VV	11E4103	1E41B01	1R42*MCC0B2	R.B. EL 112'	66-192
1E41*MOV043	HPCI STEAM TO TUBINE SUPPLY VV	11E4104	1E41N04	1R42*MCC0B2	R.B. EL 112'	17-184
1E41*MOV044	HPCI TURBINE EXHAUST VV	11E4114	1E41N19	1R42*MCC0B1	R.B. EL 40'	20-187
1E41*SOV081	STM LN DRN VV (015-190)	1.61-267				15-190
1E41*SOV082	STM LN DRN VV (015-190)	1.61-267				15-190
1E41*SOV083	COND DISCH VV (009-184)	1.61-267				9-184
1E41*SOV095	COND DISCH VV (009-184)	1.61-267				12-185
1E41*FS003	HPCI PP DISCH (H21*P014)	1.61-264				8-167
1B21*LT154B	HL TRIP 1B21-N080B(H21*P004)	1.61-263				78-79
1B21*LT154D	HL TRIP 1B21-N080D(H21*P005)	1.61-263				78-297
1E41*PS021L	LO PP SUCT E41-N010(H21*P014)	1.61-263				8-167
1E41*PS026A	HI TURB EX E41-N017A(H21*P014)	1.61-263				8-167
1E41*PS026B	HI TURB EX E41-N017B(H21*P014)	1.61-263				8-167
1E41*PS025B	HI TURB EX E41-N012B(H21*P014)	1.61-263				8-167
1E41*PS025D	HI TURB EX E41-N012D(H21*P014)	1.61-263				8-167
1E41*PS023B	STM PRES L E41-N001B(H21*P036)	1.61-263				8-160
1E41*PS023D	STM PRES L E41-N001D(H21*P036)	1.61-263				8-160
1E41*PDS022B	HI STM D/P E41-N005 (H21*0026)	1.61-264				8-160
1E41*TE054B	HI AREA T E41-N028B(034-185)	1.61-241				25-189
1E41*TE055B	HI AREA T E41-N029B(034-210)	1.61-241				16-183
1E41*TE054A	HI AREA T E41-N028A(034-100)	1.61-241				25-203
1E41*TE055A	HI AREA T E41-N029A(034-200)	1.61-241				15-187
1E41*PDS022A	HI STM D/P E41-N004 (H21*P016)	1.61-264				8-157
1B21B-K32A	B21B-K32A(H11*P614)	1.61-264				CB/63-C12
1B21B-K32B	B21B-K32B(H11*P614)	1.61-264				MG/21-N12
1B31B-K31A	B31B-K31A(H11*P614)	1.61-207				MG/21-P12
1B31B-K31B	B31B-K31B(H11*P614)	1.61-208				8-178
1E41*PS025A	HI TURB EX E41-N012A(H21*P034)	1.61-264				8-178
1E41*PS025C	HI TURB EX E41-N012C(H21*P034)	1.61-264				8-157
1E41*PS023A	STM PRES L E41-N001A(H21*P016)	1.61-264				8-157
1E41*PS023C	STM PRES L E41-N001C(H21*P016)	1.61-264				8-157
1E41*LS092A	SUPR POOL LVL E41-N015A	1.61-263				27-135
1E41*LS092B	SUPR POOL LVL E41-N015B	1.61-263				27-325
1E41*LS093A	COND STRG TK-30 LVL E41-N002	1.61-263				YARD
1E41*LS093B	COND STRG TK-30 LVL E41-N003	1.61-263				YARD
1E41*TE56A	HPCI EQUIP AREA T E41-N030A					70-193
1E41*TE56B	HPCI EQUIP AREA T E41-N030B					68-196
VV	TURB STOP & LVL SW	1.61-264				
1E41*MOV043-LS6	HPCI STM TO TURBINE E41-F001	1.61-264				17-184
1E41*MOV043-LS8	HPCI STM TO TURBINE E41-F001	1.61-264				24-210
VV	RV LL (H21-P005)	1.61-264				78-257
VV	RV LL (H21-P005)	1.61-264				78-257

Original
April 1982

IDENTITY	DESCRIPTION	ESK	CKT NO.	PWR SC	PWR SC LOC	EQUIP LOC(1) EL-AZ
CKT	RV HL & TRIP(H21*P004)	1.61-264				78-79
CKT	MAN ISOL (H11*P601)	1.61-264				CB/63-C12
CKT TRIP SOL		1.61-200				63-208
	REACTOR CORE ISOLATION COOLING SYSTEM-RB					
	DIVISION 1					
1E51*P076	COND VACUUM PUMP	11E5101	1E51N11	1R42*MCC0A2	R.B. EL 112'	8-227
1E51*P077	COND CONDENSATE PUMP	11E5116	1E51N12	1R42*MCC0A2	R.B. EL 112'	8-230
1E51*MOV031	RC PUMP SUCT FROM CON TK VV	11E5108	1E51N01	1R42*MCC0A2	R.B. EL 112'	11-217
1E51*MOV032	RCIC PUMP SUCT SUP POOL VV	11E5106	1E51N02	1R42*MCC0A2	R.B. EL 112'	24-202
1E51*MOV034	RCIC PUMP DISCHARGE VV	11E5105	1E51N04	1R42*MCC0A1	R.B. EL 40'	16-200
1E51*MOV035	RCIC PUMP DISCHARGE VV	11E5104	1E51N05	1R42*MCC0A2	R.B. EL 112'	78-193
1E51*MOV036	MIN FLOW VV	11E5109	1E51N06	1R42*MCC0A2	R.B. EL 112'	20-234
1E51*MOV037	TEST BYPASS VV	11E5107	1E51N07	1R42*MCC0A1	R.B. EL 40'	20-201
1E51*MOV038	LUBE OIL COLL. VV	11E5110	1E51N08	1R42*MCC0A2	R.B. EL 112'	15-220
1E51*MOV041	RCIC STEAM SUP INBRD ISO VV	65ES102	1E51A01	1R24*MCC1128	R.B. EL 112'	87-180
1E51*MOV042	RCIC STEAM SUP TO TUR OI VV	11E5102	1E51B01	1R42*MCC0A2	R.B. EL 112'	88-180
1E51*MOV043	RCIC STEAM SUP TO TUR SUP VV	11E5103	1E51N09	1R42*MCC0A2	R.B. EL 112'	11-224
1E51*MOV044	RCIC TUR TRIP AND THROTTLE VV	11E5111	1E51N10	1R42*MCC0A2	R.B. EL 112'	11-222
1E51*MOV045	RCIC TUR EXH TO SUP POOL VV	11E5113	1E51N14	1R42*MCC0A1	R.B. EL 40'	31-217
1E51*MOV046	VAC PP DISCH VV	11E5114	1E51N15	1R42*MCC0A1	R.B. EL 40'	29-226
1E51*MOV048	BYPASS VV	11E5112	1E51B02	1R42*MCC0A2	R.B. EL 112'	86-180
1E51*AOV081	DRAIN POT DRAIN	1.61-211				09-245
1E51*AOV083	COND E-36 DRAIN	1.61-211				09-245
1E51*LCV095	COND E-38 DRAIN	1.61-211				09-245
1E51*PS023A	REAC PRS L E51-N019A(H21*P035)	1.61-207				40-100
1E51*PS023B	REAC PRS L E51-N019B(H21*P038)	1.61-208				40-170
1E51*PS023C	REAC PRS L E51-N019C(H21*P035)	1.61-207				40-100
1E51*PS023D	REAC PRS L E51-N019D(H21*P038)	1.61-208				40-170
1E51*PS025A	HI TURB EX E51-N012A(H21*P017)	1.61-207				8-205
1E51*PS025B	HI TURB EX E51-N012B(H21*P037)	1.61-208				8-175
1E51*PS025C	HI TURB EX E51-N012C(H21*P017)	1.61-207				8-205
1E51*PS025D	HI TURB EX E51-N012D(H21*P037)	1.61-208				8-175
1E51*PDS022A	HI STM D/P E51-N017 (H21*P035)	1.61-207				40-100
1E51*PDS022B	HI STM D/P E51-N018 (H21*P038)	1.61-208				40-170
1E51*TE053A	HI AREA T E51-N601A	1.61-242				20-204
1E51*TE053B	HI AREA T E51-N601B	1.61-242				27-219
1E51*TE054A	HI AREA T E51-N602A	1.61-242				72-194
1E51*TE054B	HI AREA T E51-N602B	1.61-242				69-197
1B21*LT154A	HI WTR LVL 1B21-N080A(H21*P004)	1.61-207				78-079
1B21*LT154C	HI WTR LVL 1B21-N080C(H21*P005)	1.61-208				78-257
1E51*PS021L	LO PP SUCT E51-N006 (H21*P017)	1.61-207				8-205
1E51*PS026A	HI TURB EX E51-N009A(H21*P017)	1.61-207				8-205
1E51*PS026B	HI TURB EX E51-N009B(H21*P017)	1.61-207				8-205
1E51*MOV043	INTLKS	1.61-207				11-224
1E51*FS003	MIN FLOW,,1E51*MOV36 (H21*P017)	1.61-208				8-205
1E51*MOV032	INTLKS	1.61-208				24-202
1E51*TE55A	HI AREA TEMP E51-N025A	1.61-240				65-190

Original
April 1982

IDENTITY	DESCRIPTION	ESK	CKT NO.	PWR SC	PWR SC LOC	EQUIP LOC(1) EL-AZ
1E51*TE55B	HI AREA TEMP E51-N025B	1.61-240				64-190
1E51*TE55C	HI AREA TEMP E51-N025C	1.61-240				69-190
1E51*TE55D	HI AREA TEMP E51-N025D	1.61-240				72-190
1E51*TE56A	HI AREA TEMP E51-N026A	1.61-240				65-187
1E51*TE56B	HI AREA TEMP E51-N026B	1.61-240				66-194
1E51*TE56C	HI AREA TEMP E51-N026C	1.61-240				65-185
1E51*TE56D	HI AREA TEMP E51-N026D	1.61-240				66-184
LS	RCIC TRIP CKT,H1/H2(C61*P-RSP)	1.61-208				63-208
LS4	RCIC TRIP CKT,TURB STP VV(P-RSP)	1.61-208				63-208
1E51*LS001	H1/H2 (C61*P-RSP)	1.61-208				63-208
CKT	RCIC INITIATE (H11*P602)	1.61-207				CB/63-C13
CKT	RCIC TRIP	1.61-207				
CKT	RCIC TRIP	1.61-211				63-208
	RHR SHUTDOWN COOLING SYSTEM & COOLING MODE					
	DIVISION 1					
1E11*P014A	RHR PUMP	5E1101	1E11A01	1R22*SWG101	EMER SWGR RM EL 25'	8-095
1E11*P014C	RHR PUMP	5E1103	1E11C01	1R22*SWG103	EMER SWGR RM EL 25'	8-080
1E11*MOV032A	RHR SHUTDOWN COOL INJECTION VV	6E1103	1E11A04	1R24*MCC1112	R.B. EL 112'	15-083
1E11*MOV032C	RHR SHUTDOWN COOL INJECTION VV	6E1134	1E11C04	1R24*MCC1113	R.B. EL 112'	18-064
1E11*MOV033A	RHR HX SHELL SIDE INLET VV	6E1116	1E11A16	1R24*MCC1119	R.B. EL 40'	25-105
1E11*MOV034A	RHR HX SHELL SIDE BYPASS VV	6E1120	1E11A17	1R24*MCC1112	R.B. EL 112'	28-073
1E11*MOV035A	RHR HX SHELL SIDE OUTLET VV	6E1115	1E11A18	1R24*MCC1117	R.B. EL 40'	31-087
1E11*MOV036A	RHR OUTBOARD VV	6E1126	1E11A19	1R24*MCC111X	R.B. EL 112'	73-092
1E11*MOV037A	RHR INBOARD VV	6E1125	1E11A07	1R24*MCC111X	R.B. EL 112'	73-083
1E11*MOV047	RHR SHUT COOL SUCT INB ISOS VV	6E1105	1E11N02	1R24*MCC1118	R.B. EL 112'	84-016
	DIVISION 2					
1E11*P014B	RHR PUMP	5E1102	1E11B01	1R22*SWG102	EMER SWGR RM EL 25'	8-265
1E11*P014D	RHR PUMP	5E1104	1E11D01	1R22*SWG103	EMER SWGR RM EL 25'	8-280
1E11*MOV032B	RHR SHUTDOWN COOL INJECTION VV	6E1104	1E11B04	1R24*MCC1122	R.B. EL 112'	15-277
1E11*MOV032D	RHR SHUTDOWN COOL INJECTION VV	6E1131	1E11D04	1R24*MCC1122	R.B. EL 112'	18-296
1E11*MOV033B	RHR HX SHELL SIDE INLET VV	6E1138	1E11B16	1R24*MCC1129	R.B. EL 40'	25-255
1E11*MOV034B	RHR HX SHELL SIDE BYPASS VV	6E1141	1E11B17	1R24*MCC1122	R.B. EL 112'	28-288
1E11*MOV035B	RHR HX SHELL SIDE OUTLET VV	6E1135	1E11B18	1R24*MCC1127	R.B. EL 40'	31-278
1E11*MOV036B	RHR OUTBOARD VV	6E1142	1E11B19	1R24*MCC112Y	R.B. EL 112'	73-265
1E11*MOV037B	RHR INBOARD VV	6E1143	1E11B07	1R24*MCC112Y	R.B. EL 112'	73-263
1E11*MOV048	RHR SHUT COOL SUCT OUB ISOL VV	11E1101	1E11N05	1R42*MCC082	R.B. EL 112'	73-096
1E11*MOV050	RHR CROSS HDR SHUTOFF VV	6E1124	1E11N01	1R24*MCC1128	R.B. EL 112'	66-281
	REACTOR RECIRCULATION SYS FOR RHR SHUTDOWN COOLING MODE					
	DIVISION 1					
1B31*MOV031A	RECIRC PUMP SUCT VV	6B3102	1B31A06	1R24*MCC1112	R.B. EL 112'	17-085
1B31*MOV032A	RECIRC PUMP DISCH VV	6B3103	1B31A07	1R24*MCC111X	R.B. EL 112'	14-082

Original
April 1982

IDENTITY	DESCRIPTION	ESK	CKT NO.	PWR SC	PWR SC LOC	EQUIP LOC(1) EL-AZ
	DIVISION 2					
1B31*MOV031B	RECIRC PUMP SUCT VV	6B3107	1B31B06	1R24*MCC1122	R.B. EL 112'	24-275
1B31*MOV032B	RECIRC PUMP DISCH VV	6B3103	1B31B07	1R24*MCC112Y	R.B. EL 112'	15-278
	RHR LOW PRESSURE COOLANT INJECTION MODE-RB					
	DIVISION 1					
1E11*P014A	RHR PUMP	5E1101	1E11A01	1R22*SWG101	EMER SWGR RM EL 25'	8-095
1E11*P014C	RHR PUMP	5E1103	1E11C01	1R22*SWG103	EMER SWGR RM EL 25'	8-080
1E11*MOV031A	RHR PUMP SUCTION VV	6E1101	1E11A03	1R24*MCC1113	R.B. EL 112'	24-085
1E11*MOV031C	RHR PUMP SUCTION VV	6E1101	1E11C03	1R24*MCC1113	R.B. EL 112'	24-069
1E11*MOV034A	RHR HX SHELL BYPASS VV	6E1120	1E11A17	1R24*MCC1112	R.B. EL 112'	28-073
1E11*MOV036A	RHR OUTBOARD VV	6E1126	1E11A19	1R24*MCC111X	R.B. EL 112'	73-092
1E11*MOV037A	RHR INBOARD VV	6E1125	1E11A07	1R24*MCC111X	R.B. EL 112'	73-083
	DIVISION 2					
1E11*P014B	RHR PUMP	5E1102	1E11B01	1R22*SWG102	EMER SWGR RM EL 25'	8-265
1E11*P014D	RHR PUMP	5E1104	1E11D01	1R22*SWG103	EMER SWGR RM EL 25'	8-280
1E11*MOV031B	RHR PUMP SUCTION VV	6E1129	1E11B03	1R24*MCC1122	R.B. EL 112'	24-275
1E11*MOV031D	RHR PUMP SUCTION VV	6E1102	1E11D03	1R24*MCC1122	R.B. EL 112'	24-291
1E11*MOV034B	RHR HX SHELL VV	6E1141	1E11B17	1R24*MCC1122	R.B. EL 112'	28-288
	RESIDUAL HEAT REMOVAL SYSTEM-RB					
	RHR-CONTAINMENT SPRAY					
	DIVISION 1					
1E11*MOV038A	CONT. SPRAY VV	6E1109	1E11A08	1R24*MCC1118	R.B. EL 112'	103-090
1E11*MOV039A	CONT. SPRAY VV	6E1111	1E11A09	1R24*MCC1118	R.B. EL 112'	103-090
1E11*MOV040A	RHR CORE SPRAY HD VV	6E1110	1E11A10	1R24*MCC1112	R.B. EL 112'	72-090
1E11*MOV041A	RHR CORE SPRAY HD VV	6E1113	1E11A11	1R24*MCC1111	R.B. EL 40'	51-105
1E11*MOV043A	RCIC SUCT VV	6E1118	1E11A13	1R24*MCC1119	R.B. EL 40'	17-090
1E11*MOV044A	CONT. SPRAY VV	6E1117	1E11A14	1R24*MCC1111	R.B. EL 40'	17-090
1E11*MOV045A	CONT. SPRAY MIN FLOW VV	6E1114	1E11A15	1R24*MCC111X	R.B. EL 112'	17-090
1E11*MOV049	HPCI STM LN VV	6E1123	1E11N08	1R24*MCC1117	R.B. EL 40'	66-180
1E11*MOV051	RHR-RW ISOL VV	11E1103	1E11N06	1R42*MCC0A1	R.B. EL 40'	63-285
1E11*MOV081A	CONT. SPRAY VV	6E1144	1E11A21	1R24*MCC1113	R.B. EL 112'	81
	DIVISION 2					
1E11*MOV038B	CONT. SPRAY VV	6E1133	1E11B08	1R24*MCC1128	R.B. EL 112'	103-275
1E11*MOV039B	CONT. SPRAY VV	6E1111	1E11B09	1R24*MCC1128	R.B. EL 112'	103-275
1E11*MOV045B	CONT. SPRAY MIN FLOW VV	6E1114	1E11B15	1R24*MCC112Y	R.B. EL 112'	17-275
1E11*MOV040B	RHR CORE SPRAY VV	6E1128	1E11B10	1R24*MCC1122	R.B. EL 112'	72
1E11*MOV041B	RHR CORE SPRAY VV	6E1136	1E11B11	1R24*MCC1121	R.B. EL 40'	40-260
1E11*MOV043B	RCIC SUCT VV	6E1139	1E11B13	1R24*MCC1129	R.B. EL 40'	17-275
1E11*MOV044B	CONT. SPRAY VV	6E1140	1E11B14	1R24*MCC1121	R.B. EL 40'	17-275
1E11*MOV052	RHR-RW ISOL VV	6E1107	1E11N03	1R24*MCC1121	R.B. EL 40'	73-285
1E11*MOV081B	CONT. SPRAY VV	6E1144A	1E11B21	1R24MCC112B	R.B. EL 112'	81

Original
April 1982

IDENTITY	DESCRIPTION	ESK	CKT NO.	PWR SC	PWR SC LOC	EQUIP LOC(1) EL-AZ
	RHR CONDENSING MODE-RB					
1E41*MOV041	STEAM SUPPLY INBOARD ISOL VLV	6E4102	1E41A01	1R24*MCC1118	R.B. EL 112'	66-188
	RHR INTERLOCKS & TRIPS					
	DIVISION 1					
1B31*PS023A	LP INTLK B31-N018A(M21*P006)	1.61-196				40-180
1B21*PT158C	PRES INTLK B21-N097C(H21*P009)	1.61-272				78-102
1B21*PT158A	PRES INTLK B21-N097A(H21*P004)	1.61-272				78-079
1B21*LT154A	LO WTR LVL B21-N080A(H21*P004)	1.61-27				78-079
1B21*LT154C	LO WTR LVL B21-N080C(H21*P005)	1.61-27				78-257
1B21*K83	B21-K83 (H11*P622)	1.61-219				CB/44-C12
1B21*K6A	B21-K6A (H11*P609)	1.61-196				CB/63-C13
1B21*K6C	B21-K6C (H11*P609)	1.61-196				CB/63-C13
1E11*PNS031A	PMP INTLK	1.61-220				24-085
1E11*PNS031C	PMP INTLK	1.61-220				24-069
1E11*PNS032A	PMP INTLK	1.61-220				14-082
1E11*PNS032C	PMP INTLK	1.61-220				18-064
1E11*PDS001A	MINFLOW (H21*P018)	1.61-219				8-075
1B21*TL157A	LL/HP B21-N091A(H21*P004)	1.61-272				78-079
1E11*PT165A	LL/HP E11-N091A(H21*P004)	1.61-219				78-079
1B21*LT157C	LL/HP B21-N091C(HP21*P004)	1.61-272				78-079
	DIVISION 2					
1B31*PS023C	LP INTLK B31-N018B(H21*P022)	1.61-196				40-353
1B21*PT158D	PRES INTLK B21-N097D(H21*P0010)	1.61-273				78-280
1B21*PT158B	PRES INTLK B21-N097B(H21*P005)	1.61-273				78-257
1B21*LT154B	LO WTR LVL B21-N080B(H21*P004)	1.61-155				78-079
1B21*LT154D	LO WTR LVL B21-N080D(H21*P005)	1.61-155				78-257
1B21*K84	B21-K84 (H11*P623)	1.61-196				CB/44-C12
1B21*K6B	B21-K6B (H11*P611)	1.61-193				CB/63-C13
1B21*K6D	B21-K6D (H11*P611)	1.61-193				CB/63-C13
1E11*PNS031B	PMP INTLK	1.61-233				24-275
1E11*PNS031D	PMP INTLK	1.61-223				24-291
1E11*PNS032B	PMP INTLK	1.61-223				15-278
1E11*PNS032D	PMP INTLK	1.61-223				18-296
1E11*PDS001B	MINFLOW (H21*P021)	1.61-219				8-287
CKT	MAN INITIATE	1.61-219				
1E11*PT165B	LL/HP E11-N091B(H21*P005)	1.61-219				78-257
	STANDBY LIQUID CONTROL SYSTEM					
	DIVISION 1					
1C41*P024A	SLC LIQUID CONT PUMP	6C4101	1C41A01	1R24*MCC1113	R.B. EL 112'	112-168

IDENTITY	DESCRIPTION	ESK	CKT NO.	PWR SC	PWR SC LOC	EQUIP LOC(1) EL-AZ
	DIVISION 2					
1C41*P024B	SLC LIQUID CONT PUMP	6C4101		1R24*MCC1123	R.B. EL 112'	112-166
INTER CKT	CO2 FIRE PROT CKT, DIESEL RM	11M4304		1R42*PNLA2, B2 & C1		CONTROL BUILDING EL 63'
INTER CKT	CO2 FIRE PROT CKT, BTY RM	11M4303		1R42*PNLA2, B2 & C1		CONTROL BUILDING EL 63'
INTER CKT	CO2 FIRE PROT CKT, EMER SWG RM	11M4305		1R42*PNLA2, B2 & C1		CONTROL BUILDING EL 63'
INTER CKT	CO2 FIRE PROT CKT, RELAY RM	11M4306		1R42*PNLA1	EMER SWGR RM EL 25'	CONTROL BUILDING EL 25'
	SERVICE WATER SYSTEM-PH/RB					
	DIVISION 1					
1P41*P003A	SERVICE WATER PUMP	5P4101	1P41A01	1R22*SWG101	EMER SWGR RM EL 25'	SCREENWELL EL 20'
1P41*MOV031A	SWP DISCH VV	6P4101	1P41A02	1R24*MCC1110	SCRW EL 20'-6"	SCREENWELL EL 20'
1P41*MOV032A	SW HEADER ISOL VV	6P4103	1P41A05	1R24*MCC1110	SCRW EL 20'-6"	SCREENWELL EL 20'
1P41*MOV033A	SW CROSS TIE VV	6P4108	1P41A03	1R24*MCC1119	R.B. EL 40'	30-030
1P41*MOV033C	SW CROSS TIE VV	6P4109	1P41C03	1R24*MCC1119	R.B. EL 40'	31-040
1P41*MOV034A	RHR HX DISCH VV	6P4110	1P41A08	1R24*MCC1112	R.B. EL 112'	27-091
1P41*MOV035A	TBCLCH ISOL VV	6P4104	1P41A06	1R24*MCC1110	SCRW EL 20'-6"	SCREENWELL EL 20'
1P41*MOV036A	VENT CHILL ISOL VV	6P4105	1P41A07	1R24*MCC1116	DIESEL GEN RM EL 22'	12-046
1P41*MOV037A	RBCLCW HX OUTLET VV	6P4107	1P41A09	1R24*MCC1112	R.B. EL 112'	23-290
1P41*MOV039A	ULT COOLING DRN VV	6P4102	1P41A04	1R24*MCC1119	R.B. EL 40'	34-046
1P41*MOV042A	SW TO FUEL POOL VV	6P4113	1P41A12	1R24*MCC1119	R.B. EL 40'	15-040
1P41*AOV016A	EMER DIESEL HX OUTLET VV	6P4123	1P41A24	1R35*PNLR1	RELAY RM EL 44'	CB/27-L13
	DIVISION 2					
1P41*P003B	SERVICE WATER PUMP	5P4102	1P41B01	1R22*SWG102	EMER SWGR RM EL 25'	SCREENWELL EL 20'
1P41*MOV031B	SWP DISCH VV	6P4119	1P41B02	1R24*MCC1120	SCRW EL 20'-6"	SCREENWELL EL 20'
1P41*MOV032B	SW HEADER ISOL VV	6P4121	1P41B05	1R24*MCC1120	SCRW EL 20'-6"	SCREENWELL EL 20'
1P41*MOV033B	SW CROSS TIE VV	6P4108	1P41B03	1R24*MCC1129	R.B. EL 40'	30-030
1P41*MOV033D	SW CROSS TIE VV	6P4109	1P41C03	1R24*MCC1129	R.B. EL 40'	31-040
1P41*MOV034B	RHR HX DISCH VV	6P4118	1P41B08	1R24*MCC1128	R.B. EL 112'	27-268
1P41*MOV035B	TBCLCW ISOL VV	6P4120	1P41B06	1R24*MCC1120	SCRW EL 20'-6"	SCREENWELL EL 20'
1P41*MOV036B	VENT CHILL ISOL VV	6P4105	1P41B07	1R24*MCC1126	DIESEL GEN RM EL 22'	12-046
1P41*MOV037B	RBCLCW HX OUTLET VV	6P4122	1P41B09	1R24*MCC1128	R.B. EL 112'	23-294
1P41*MOV039B	ULT COOLING DRN VV	6P4102	1P41B04	1R24*MCC1129	R.B. EL 40'	34-046
1P41*MOV042B	SW TO FUEL POOL VV	6P4113	1P41B12	1R24*MCC1129	R.B. EL 40'	15-040
1P41*MOV043	FUEL POOL DRN VV	6P4114	1P41N01	1R24*MCC1127	R.B. EL 40'	12-046
1P41*AOV16B	EMER DIESEL HX OUTLET VV	6P4123	1P41B24	1R35*PNLB1	RELAY RM EL 44'	CB/27-C13
	DIVISION 3					
1P41*P003C	SERVICE WATER PUMP	5P4103	1P41C01	1R22*SWG103	EMER SWGR RM EL 25'	SCREENWELL EL 20'
1P41*P003D	SERVICE WATER PUMP	5P4104	1P41D01	1R22*SWG103	EMER SWGR RM EL 25'	SCREENWELL EL 20'
1P41*MOV031C	SWP DISCH VV	6P4101	1P41C02	1R24*MCC1133	EMER SWGR RM EL 25'	SCREENWELL EL 20'
1P41*MOV031D	SWP DISCH VV	6P4117	1P41D02	1R24*MCC1133	EMER SWGR RM EL 25'	SCREENWELL EL 20'
1P41*MOV036C	VENT CHILL ISOL VV	6P4106	1P41C07	1R24*MCC1134	DIESEL GEN RM EL 22'	12-046
1P41*AOV016C	EMER DIESEL HX OUTLET VV	6P4124	1P41C24	1R35*PNL01	RELAY RM EL 25'	CB/27-C13

Original
April 1983

IDENTITY	DESCRIPTION	ESK	CKT NO.	PWR SC	PWR SC LOC	EQUIP LOC(1) EL-AZ
	EMERG SW TO FUEL POOL					
	DIVISION 1					
1G33*MOV033	RV DISCH	6G3308	1G33N12	1R24*MCC1113	EMER SWGR RM EL 25'	121-190
	DIVISION 2					
1G33*MOV034	RV DISCH VV	11G3301	1G33N13	1R42*MCC0B2	R.B. EL 112'	121-190
	REACTOR WATER CLEAN-UP SYSTEM					
	DIVISION 1					
1G41*MOV032A	SERVICE WTR INLET VV	6G4103	1G41A04	1R24*MCC1114	EMER SWGR RM EL 25'	162-147
	DIVISION 2					
1G41*MOV032B	SERVICE WTR INLET VV	6G4103	1G41B04	1R24*MCC1124	R.B. EL 150'	162-149
	RBCLCW SYSTEM-RB					
	DIVISION 1					
1P42*P005A	RBCLCW COOLING WATER PUMP	6P4201	1P42A01	1R24*MCC1112	R.B. EL 112'	150-NW
1P42*MOV042A	RBCLCW HX INLET VV	6P4214	1P42A10	1R24*MCC1112	R.B. EL 112'	30-349
	DIVISION 2					
1P42*P005B	RBCLCW COOLING WATER PUMP	6P4202	1P42B01	1R24*MCC1122	R.B. EL 112'	30-352
1P42*MOV042B	RBCLCW HX INLET VV	6P4218	1P42B10	1R24*MCC1128	R.B. EL 112'	150-NW
	DIVISION 3					
1P42*P005C	RBCLCW COOLING WATER PUMP	6P4203	1P42C01	1R24*MCC1131	R.B. EL 63'	150-NE
	EMERGENCY GENERATOR-EGR					
	DIVISION 1					
1R43*G101	EDG G101 PROT-GEN DIFF CKT	8R4301	1R43A03			DG RM/22-L15
1R43*G101	VR CT G-101 PROT	8R4301	1R43A04			DG RM/22-L15
1R43*G101	EMER DG 51/40/32 PROT	8R4301	1R43A05			DG RM/22-L15
1R43*G101	EMER DG 50N GND PROT	8R4301	1R43A28			DG RM/22-L15
1R43*G101	CURRENT TEST BCK AND RESIS BOX	8R4301	1R43A27			DG RM/22-L15
1R43*G101	GOVERNOR HYDRAULIC ACTUATOR	11R4302	1R43A23	1R42*PNLA1	EMER SWGR RM EL 25'	DG RM/22-L15
1R43*G101	EG-A CONT BOX AND MOT OP POT	8R4301	1R43A06		EMER SWGR RM EL 25'	DG RM/22-L15
1R43*G101	VR CT G-101 PROT	8R4301	1R43A25		EMER SWGR RM EL 25'	DG RM/22-L15
1R43*G101	VOLT REGULATOR	8R4305	1R43A26		EMER SWGR RM EL 25'	DG RM/22-L15
1R43*G101	START CIRCUIT	11R4301	1R43A12	1R42*PNLA1	EMER SWGR RM EL 25'	DG RM/22-L15
1R43*G101	START CIRCUIT	11R4301	1R43A22	1R42*PNLA1	EMER SWGR RM EL 25'	DG RM/22-L15
1R43*G101	START CIRCUIT	11R4302	1R43A23	1R42*PNLA1	EMER SWGR RM EL 25'	DG RM/22-L15
	DIVISION 2					
1R43*G102	EDG G102 PROT-GEN DIFF CKT	8R4302	1R43B03		EMER SWGR RM EL 25'	DG RM/22-C15
1R43*G102	EMER DG 51/40/32 PROT	8R4302	1R43B05		EMER SWGR RM EL 25'	DG RM/22-C15
1R43*G102	EMERG DG 50N GND PROT	8R4302	1R43B28		EMER SWGR RM EL 25'	DG RM/22-C15

IDENTITY	DESCRIPTION	ESK	CKT NO.	PWR SC	PWR SC LOC	EQUIP LOC(1) EL-AZ
1R43*G102	CURRENT TEST BCK AND RESIS BOX	8R4302	1R43B27		EMER SWGR RM EL 25'	DG RM/22-C15
1R43*G102	GOVERNOR HYDRAULIC ACTUATOR	11R4304	1R43B23	1R42*PNLB1	EMER SWGR RM EL 25'	DG RM/22-C15
1R43*G102	EG-A CONT BOX AND MOT OP POT	8R4302	1R43B06		EMER SWGR RM EL 25'	DG RM/22-C15
1R43*G102	VR CT G-102 PROT	8R4302	1R43B25		EMER SWGR RM EL 25'	DG RM/22-C15
1R43*G102	VOLT REGULATOR	8R4306	1R43B26		EMER SWGR RM EL 25'	DG RM/22-C15
1R43*G102	VR CT G-102 PROT	8R4302	1R43B04		EMER SWGR RM EL 25'	DG RM/22-C15
1R43*G102	START CIRCUIT	11R4303	1R43B12	1R42*PNLB1	EMER SWGR RM EL 25'	DG RM/22-C15
1R43*G102	START CIRCUIT	11R4303	1R43B22	1R42*PNLB1	EMER SWGR RM EL 25'	DG RM/22-C15
1R43*G102	START CIRCUIT	11R4304	1R43B23	1R42*PNLB1	EMER SWGR RM EL 25'	DG RM/22-C15
	DIVISION 3					
1R43*G103	EDG G103 PROT-GEN DIFF CKT	8R4303	1R43C03			DG RM/22-L15
1R43*G103	EMER DG 51/40/32 PROT	8R4303	1R43C05			DG RM/22-L15
1R43*G103	EMER DG 50N GND PROT	8R4303	1R43C28			DG RM/22-L15
1R43*G103	CURRENT TEST BCK AND RESIS BOX	8R4303	1R43C27			DG RM/22-L15
1R43*G103	GOVERNOR HYDRAULIC ACTUATOR	11R4306	1R43C23	1R42*PNLC1	EMER SWGR RM EL 25'	DG RM/22-L15
1R43*G103	EG-A CONT BOX AND MOT OP POT	8R4303	1R43C06		EMER SWGR RM EL 25'	DG RM/22-L15
1R43*G103	VR CT G-103 PROT	8R4303	1R43C25		EMER SWGR RM EL 25'	DG RM/22-L15
1R43*G103	VOLT REGULATOR	8R4307	1R43C26		EMER SWGR RM EL 25'	DG RM/22-L15
1R43*G103	VR CT G-103 PROT	8R4303	1R43C04		EMER SWGR RM EL 25'	DG RM/22-L15
1R43*G103	START CIRCUIT	11R4305	1R43C12	1R42*PNLC1	EMER SWGR RM EL 25'	DG RM/22-L15
1R43*G103	START CIRCUIT	11R4305	1R43C22	1R42*PNLC1	EMER SWGR RM EL 25'	DG RM/22-L15
1R43*G103	START CIRCUIT	11R4306	1R43C23	1R42*PNLC1	EMER SWGR RM EL 25'	DG RM/22-L15
	DIESEL FUEL TRANSFER SYS-EGB					
	DIVISION 1					
1R43*P201A	EG FUEL OIL TRANSFER PUMP	6R4304	1R43A09	1R24*MCC1116	DIESEL GEN RM EL 22'	YARD
1R43*P202A	EG FUEL OIL TRANSFER PUMP	6R4304	1R43A10	1R24*MCC1116	DIESEL GEN RM EL 22'	YARD
	DIVISION 2					
1R43*P201B	EG FUEL OIL TRANSFER PUMP	6R4305	1R43B09	1R24*MCC1126	DIESEL GEN RM EL 22'	YARD
1R43*P202B	EG FUEL OIL TRANSFER PUMP	6R4305	1R43B10	1R24*MCC1126	DIESEL GEN RM EL 22'	YARD
	DIVISION 3					
1R43*P201C	EG FUEL OIL TRANSFER PUMP	6R4306	1R43C09	1R24*MCC1134	DIESEL GEN RM EL 22'	YARD
1R43*P202C	EG FUEL OIL TRANSFER PUMP	6R4306	1R43C10	1R24*MCC1134	DIESEL GEN RM EL 22'	YARD
	HVAC SYSTEMS					
	CRAC/RBSVS CHILL WATER SYSTEM-CB					
	DIVISION 1					
1M50*P137A	CHILLED WATER PUMP	6M5001	1M50A08	1R24*MCC1116	DIESEL GEN RM EL 22'	CB/63-L12
1M50*P139A	COND WATER PUMP	6M5003	1M50A10	1R24*MCC1116	DIESEL GEN RM EL 22'	CB/63-L12
1M50*P231A	LUBE OIL PUMP	6M5011	1M50A14	1R24*MCC1116	DIESEL GEN RM EL 22'	CB/63-C16
1M50*WC003A	WATER CHILLER	5M5001	1M50A01	1R22*SWGR01	EMER SWGR RM EL 25'	CB/63-L12
1M50*WC003A	CHILLER CONTROLS	5M5001A	1M50A03	1R35*PNLR1	RELAY RM EL 44'	CB/63-L12
1M50*MOV031A	RETURN VV	6M5005	1M50A04	1R24*MCC1116	DIESEL GEN RM EL 22'	CB/71-L13

IDENTITY	DESCRIPTION	ESK	CKT NO.	PWR SC	PWR SC LOC	EQUIP LOC(1) EL-AZ
1M50*MOV032A	SUPPLY VV	6M5006	1M50A05	1R24*MCC1116	DIESEL GEN RM EL 22'	CB/75-L13
1M50*MOV033A	RET X-OVER VV	6M5007	1M50A06	1R24*MCC1116	DIESEL GEN RM EL 22'	CB/75-L13
1M50*MOV034A	SUP X-OVER VV	6M5008	1M50A07	1R24*MCC1116	DIESEL GEN RM EL 22'	CB/75-L13
1M50*AOV068A	ISOL BYPASS VV	6M5009	1M50A12	1R35*PNLR1	RELAY RM EL 44'	CB/71-L12
1M50*AOV069A	ISOL BYPASS VV	6M5010	1M50A13	1R35*PNLR1	RELAY RM EL 44'	CB/75-L12
	DIVISION 2					
1M50*P137B	CHILLED WATER PUMP	6M5001	1M50B08	1R24*MCC1126	DIESEL GEN RM EL 22'	CB/63-L13
1M50*P139B	COND WATER PUMP	6M5003	1M50B10	1R24*MCC1126	DIESEL GEN RM EL 22'	CB/63-L13

rwn

Original
April 1983

IDENTITY	DESCRIPTION	ESK	CKT NO.	PWR SC	PWR SC LOC	EQUIP LOC(1) EL-AZ
1M50*P231B	LUBE OIL PUMP	6M5011	1M50B14	1R24*MCC1126	DIESEL GEN RM EL 22'	CB/63-L13
1M50*WC003B	WATER CHILLER	5M5002	1M50B01	1R22*SWG102	EMER SWGR RM EL 25'	CB/63-L13
1M50*WC003B	CHILLER CONTROLS	5M5002A	1M50B03	1R35*PNLB1	EMER SWGR RM EL 25'	CB/63-L13
1M50*M0V031B	RETURN VV	6M5005	1M50B04	1R24*MCC1126	DIESEL GEN RM EL 22'	CB/71-L13
1M50*M0V032B	SUPPLY VV	6M5006	1M50B05	1R24*MCC1126	DIESEL GEN RM EL 22'	CB/75-L13
1M50*M0V033B	RET X-OVER VV	6M5007	1M50B06	1R24*MCC1126	DIESEL GEN RM EL 22'	CB/75-L13
1M50*M0V034B	SUP X-OVER VV	6M5008	1M50B07	1R24*MCC1126	DIESEL GEN RM EL 22'	CB/71-L13
1M50*A0V068B	ISOL BYPASS VV	6M5009	1M50B12	1R35*PNLB1	RELAY RM EL 44'	CB/71-L13
1M50*A0V069B	ISOL BYPASS VV	6M5010	1M50B13	1R35*PNLB1	RELAY RM EL 44'	CB/75-L13
	DIVISION 3					
1M50*P140A	COND WATER PUMP	6M5004	1M50A11	1R24*MCC1134	DIESEL GEN RM EL 22'	CB/63-L12
1M50*P140B	COND WATER PUMP	6M5004	1M50C14	1R24*MCC1134	DIESEL GEN RM EL 22'	CB/63-L13
1M50*P233A	LUBE OIL PUMP	6M5012	1M50C14	1R24*MCC1134	DIESEL GEN RM EL 22'	CB/63-L15
1M50*P233B	LUBE OIL PUMP	6M5012	1M50D14	1R24*MCC1134	DIESEL GEN RM EL 22'	CB/63-L12
1M50*WC004A	WATER CHILLER	5M5003	1M50C01	1R22*SWG103	EMER SWGR RM EL 25'	CB/63-L12
1M50*WC004B	WATER CHILLER	5M5004	1M50D01	1R22*SWG103	EMER SWGR RM EL 25'	CB/63-L13
1M50*WC004A	CHILLER CONTROLS	5M5003A	1M50C03	1R35*PNL01	RELAY RM EL 44'	CB/63-L12
1M50*WC004B	CHILLER CONTROLS	5M5004A	1M50D03	1R35*PNL01	RELAY RM EL 44'	CB/63-L13
	RBSVS SYSTEM-RB					
	DIVISION 1					
1T46*UC002A	UNIT COOLER	6T4619	1T46A13	1R24*MCC1118	R.B. EL 112'	8-332
1T46*UC003A	UNIT COOLER	6T4620	1T46A14	1R24*MCC1118	R.B. EL 112'	8-081
1T46*UC004A	REFUEL LVL UC	6T4621	1T46A15	1R24*MCC1112	R.B. EL 112'	218-060
1T46*UC005A	REFUEL LVL UC	6T4622	1T46A16	1R24*MCC1112	R.B. EL 112'	218-323
1T46*UC020A	RB MCC RM'A' UC	6T4625	1T46A23	1R24*MCC1118	R.B. EL 112'	112-080
1T46*UC021A	MG RM 111 UC	6T4626	1T46A33	1R24*MCC111W	R.B. EL 150'	150-022
CKT1T46A19	RBSVS/CRAC ACC SIGNAL	11T4601	1T46A19			CB/48-C14
CKT1T46A18	RBVS INITIAT SIGNAL	11T4602				CB/48-C14
	DIVISION 2					
1T46*UC002B	UNIT COOLER	6T4619	1T46B13	1R24*MCC1128	R.B. EL 112'	40-275
1T46*UC003B	UNIT COOLER	6T4620	1T46B14	1R24*MCC1128	R.B. EL 112'	40-085
1T46*UC004B	REFUEL LVL UC	6T4621	1T46B15	1R24*MCC1122	R.B. EL 112'	218-143
1T46*UC005B	REFUEL LVL UC	6T4622	1T46B16	1R24*MCC1122	R.B. EL 112'	218-240
1T46*UC020B	RB MCC RM'B' UC	6T4625	1T46B23	1R24*MCC1128	R.B. EL 112'	112-227
1T46*UC021B	MG RM 112 UC	6T4626	1T46B33	1R24*MCC112W	R.B. EL 40'	150-340
CKT1T46B19	RBSVS/CRAC ACC SIGNAL	11T4601	1T46B19			CB/48-C14
CKT1T46B18	RBSVS INITIAT SIGNAL	11T4603				CB/48-C14
	DIVISION 3					
1T46*UC022B	MG RM 113B UC	6T4627	1T46B34	1R24*MCC1131	R.B EL 160'	161-340
1T46*UC022A	MG RM 113A UC	6T4627	1T46B34	1R24*MCC1131	R.B EL 160'	161-022

Original
April 1983

IDENTITY	DESCRIPTION	ESK	CKT NO.	PWR SC	PWR SC LOC	EQUIP LOC(1) EL-AZ
CKT1T46N04	RBSVS INITIAT SIGNAL	11T4604				ESWG ROOM/ 25-K13
	RELAY/SWGR ROOM VENT SYSTEM-CB					
	DIVISION 1					
1X41*ACU014A	CHILL WT COOL	6X4125	1X41A01	1R24*MCC1116	DIESEL GEN RM EL 22'	HVAC/44-C14
1X41*MOD035A	CHILL WT COOL	6X4125	1X41A01	1R24*MCC1116	DIESEL GEN RM EL 22'	HVAC/53-C12
1X41*FN029A	RELAY RM EXHAUST FAN	6X4121	1X41A02	1R24*MCC1116	DIESEL GEN RM EL 22'	HVAC/44-C13
	DIVISION 2					
1X41*ACU014B	CHILL WT COOL	6X4125	1X41B01	1R24*MCC1126	DIESEL GEN RM EL 22'	HVAC/44-C13
1X41*MOD035B	CHILL WT COOL	6X4125	1X41B01	1R24*MCC1126	DIESEL GEN RM EL 22'	HVAC/53-C12
1X41*FN029B	RELAY RM EXHAUST FAN	6X4121	1X41B02	1R24*MCC1126	DIESEL GEN RM EL 22'	HVAC/44-C13
	CHILLER EQUIP RM VENT SYSTEM-CB					
	DIVISION 1					
1X41*FN039A	RBSV CHILL EQUIP RM FAN	6X4126	1X41A19	1R24*MCC1116	DIESEL GEN RM EL 22'	HVAC/63-C39
1X41*MOD031A	RBSV INTAKE DAMPER	6X4126	1X41A19	1R24*MCC1116	DIESEL GEN RM EL 22'	HVAC/63-L16
1X41*MOD032A	RBSV EXHAUST DAMPER	6X4126	1X41A19	1R24*MCC1116	DIESEL GEN RM EL 22'	HVAC/63-L16
	DIVISION 2					
1X41*FN039B	RBSV CHILL EQUIP RM FAN	6X4127	1X41B19	1R24*MCC1126	DIESEL GEN RM EL 22'	HVAC/63-C15
1X41*MOD031B	RBSV INTAKE DAMPER	6X4127	1X41B19	1R24*MCC1126	DIESEL GEN RM EL 22'	HVAC/63-L16
1X41*MOD032B	RBSV EXHAUST DAMPER	6X4127	1X41B19	1R24*MCC1126	DIESEL GEN RM EL 22'	HVAC/63-L16
	BATTERY ROOM VENT SYSTEM-CB					
	DIVISION 1					
1X41*FN072A	BTY RM VENT FAN	6X4128	1X41A03	1R24*MCC1115	EMER SWGR RM EL 25'	CB/30-K16
1X41*MOD039A	BTY RM DISCHARGE DAMPER	6X4128	1X41A03	1R24*MCC1115	EMER SWGR RM EL 25'	CB/27-K16
1X41*MOD040A	BTY RM EXHAUST DAMPER	6X4128	1X41A03	1R24*MCC1115	EMER SWGR RM EL 25'	CB/30-K16
1X41*MOD041A	BTY RM EXHAUST DAMPER	6X4128	1X41A03	1R24*MCC1115	EMER SWGR RM EL 25'	CB/26-K16
	DIVISION 2					
1X41*FN072B	BTY RM VENT FAN	6X4129	1X41B03	1R24*MCC1125	EMER SWGR RM EL 25'	CB/30-C16
1X41*MOD039B	BTY RM DISCHARGE DAMPER	6X4129	1X41B03	1R24*MCC1125	EMER SWGR RM EL 25'	CB/29-C16
1X41*MOD040B	BTY RM EXHAUST DAMPER	6X4129	1X41B03	1R24*MCC1125	EMER SWGR RM EL 25'	CB/30-C16
1X41*MOD041B	BTY RM EXHAUST DAMPER	6X4129	1X41B03	1R24*MCC1125	EMER SWGR RM EL 25'	CB/26-C16
	DIVISION 3					
1X41*FN072C	BTY RM VENT FAN	6X4130	1X41C03	1R24*MCC1133	EMER SWGR RM EL 25'	CB/39-K16
1X41*MOD039C	BTY RM DISCHARGE DAMPER	6X4130	1X41C03	1R24*MCC1133	EMER SWGR RM EL 25'	CB/37-K16
1X41*MOD040C	BTY RM EXHAUST DAMPER	6X4130	1X41C03	1R24*MCC1133	EMER SWGR RM EL 25'	CB/41-C16
1X41*MOD041C	BTY RM EXHAUST DAMPER	6X4130	1X41C03	1R24*MCC1133	EMER SWGR RM EL 25'	CB/35-K16

Original
April 1983

IDENTITY	DESCRIPTION	ESK	CKT NO.	PWR SC	PWR SC LOC	EQUIP LOC(1) EL-AZ
	EMERGENCY GEN ROOM VENT SYSTEM-EGB					
	DIVISION 1					
1X61*FN025A	FILTER BOOSTER FAN	6X6102	1X61A02	1R24*MCC1116	DIESEL GEN RM EL 22'	EGB/63-C12
1X60*FN028A	EMER VENT FAN	6X6002	1X60A02	1R24*MCC1116	DIESEL GEN RM EL 22'	EGB/22-L15
1X60*MOD31A	DAMPER	6X6002	1X60A02	1R24*MCC1116	DIESEL GEN RM EL 22'	EGB/38-L16
1X60*MOD32A	DAMPER	6X6002	1X60A02	1R24*MCC1116	DIESEL GEN RM EL 22'	EGB/34-L12
1X60*MOD032A	DAMPER					
	DIVISION 2					
1X60*FN025B	FILTER BOOSTER FAN	6X6102	1X60C02	1R24*MCC1126	DIESEL GEN RM EL 22'	EGB/63-C12
1X60*FN028B	EMER VENT FAN	6X6003	1X60B02	1R24*MCC1126	DIESEL GEN RM EL 22'	EGB/22-L15
1X60*MOD31B	DAMPER	6X6003	1X60BC2	1R24*MCC1126	DIESEL GEN RM EL 22'	EGB/38-L16
1X60*MOD32B	DAMPER	6X6003	1X60B02	1R24*MCC1126	DIESEL GEN RM EL 22'	EGB/CA12
1X60*MOD032B	DAMPER					
	DIVISION 3					
1X61*FN028C	EMER VENT FAN	6X6004	1X60C02	1R24*MCC1134	DIESEL GEN RM EL 22'	EDG/22-L15
1X60*MOD31C	DAMPER	6X6004	1X60C02	1R24*MCC1134	DIESEL GEN RM EL 22'	EDG/38-CA16
1X60*MOD32C	DAMPER	6X6004	1X60C02	1R24*MCC1134	DIESEL GEN RM EL 22'	EDG/34-CA12
1X60*MOD032C	DAMPER					
	SCREENWELL PUMP HOUSE VENT					
	DIVISION 1					
1X41*FN068A	PP HS FAN	6X4118	1X41A15	1R24*MCC1110		SCREENWELL EL 20'
	DIVISION 2					
1X41*FN068B	PP HS FAN	6X4119	1X41B15	1R24*MCC1120		SCREENWELL EL 20'
	CONTROL ROOM AIR CONDITIONING SYSTEM-CB					
	DIVISION 1					
1X61*M0V031A	CRAC ISOL VV	6X6104	1X61A05	1R24*MCC1115	EMER SWGR RM EL 25'	CB/78-C12
1X61*M0V032A	CRAC ISOL VV	6X6110	1X61A09	1R24*MCC1115	EMER SWGR RM EL 25'	CB/67-C16
1X61*A0V36A	CRAC NORM AIR INTAKE VV	6X6106	1X61A06	1R35*PNLR1	RELAY ROOM EL 44'	CB/66-C16
1X61*A0V88A	CRAC ISOL VV	6X6108	1X61A03	1R35*PNLR1	RELAY ROOM EL 44'	CB/73-C16
1X61*ACU007A	CRAC UNIT	6X6101	1X61A01	1R24*MCC1116	DIESEL GEN RM EL 22'	CB/71-C13
1X61*MOD34A	CRAC UNIT DAMPER	6X6101	1X61A01	1R24*MCC1116	DIESEL GEN RM EL 22'	CB/77-C16
1X61*TCV021A	CRAC-COOLING COIL VV	13X6101	1X61A10			CB/71-C13
CKT1X61A07	CRAC EMER INIT SIGN (PNL VX)	11X6101	1X61A07	1R42*PNLA2		CB/44-C12
1X61*TIC021A	CRAC ACU07A COOLING CONTROL	13X6101	1X61A10			CB/63-K12
1X61*TE021A	CRAC TEMP ELEMENT	13X6101	1X61A10			CB/67-12K
1X61*A0V039A	ISOL DAMPERS	6X6109	1X61A04	1R35*PNLR1	RELAY RM EL 44'	CB/77-C16
1X61*FN025A	FILTER BOOSTER FAN	6X6102	1X61A02	1R24*MCC1116	DIESEL GEN RM EL 22'	CB/63-C12
1X61*MOD033A	FILTER BOOSTER FAN DAMPER	6X6102	1X61A02	1R24*MCC1116	DIESEL GEN RM EL 22'	CB/77-C12

Original
April 1983

IDENTITY	DESCRIPTION	ESK	CKT NO.	PWR SC	PWR SC LOC	EQUIP LOC(1) EL-AZ
	DIVISION 2					
1X61*MOV031B	CRAC ISOL VV	6X6105	1X61B05	1R24*MCC1125	EMER SWGR RM EL 25'	CB/78-C12
1X61*MOV032B	CRAC ISOL VV	6X6111	1X61B09	1R24*MCC1125	EMER SWGR RM EL 25'	CB/70-C16
1X61*AOV36B	CRAC NORM AIR INTAKE VV	6X6106	1X61B06	1R35*PNLB1	RELAY ROOM EL 44'	CB/70-C16
1X61*AOV38B	CRAC ISOL VV	6X6108	1X61B03	1R35*PNLB1	RELAY ROOM EL 44'	CB/73-C16
1X61*ACU07B	CRAC UNIT	6X6101	1X61B01	1R24*MCC1126	DIESEL GEN RM EL 22'	CB/71-C13
1X61*MOD34B	CRAC UNIT DAMPER	6X6101	1X61B01	1R24*MCC1126	DIESEL GEN RM EL 22'	CB/77-C16
1X61*TCV021B	CRAC-COOLING COIL VV	13X6102	1X61B10			CB/71-C13
CKT1X61B07	CRAC EMER INIT SIGN (PNL VX1)	11X6102	1X61B07	1R42*PNLB2		CB/44-C12
1X61*TIC021B	CRAC ACU70B COOLING CONTROL	13X6102	1X61B10			CB/63-K12
1X61*TE021B	CRAC TEMP ELEMENT	13X6101	1X61B10			CB/67-K12
1X61*AOV039B	ISOL DAMPERS	6X6109	1X61B04	1R35*PNLB1	RELAY RM EL 44'	
1X61*FN025B	FILTER BOOSTER FAN	6X6102	1X61B02	1R24*MCC1126	DIESEL GEN RM EL 22'	CB/63-C12
1X61*MOD033B	FILTER BOOSTER FAN DAMPER	6X6102	1X61B02	1R24*MCC1126	DIESEL GEN RM EL 22'	CB/74-C12
	COMPRESSED AIR SYSTEM					
	DIVISION 1					
1P50*MOV104	INSTR AIR TO SUPPR CHAMBER VV	6P5012	1P50N05	1R24*MCC111Z	R.B. EL 78'	30-250
1P50*MOV103A	INST. NITROGEN OUTBRD ISOL VV	6P5014	1P50A12	1R24*MCC1112	R.B. EL 112'	90-250
1P50*MOV105A	INST. NITROGEN INBRD ISOL VV	6P5016	1P50A13	1R24*MCC1113	R.B. EL 112'	75-220
1P50*MOV113A	INST. NITROGEN NORMAL SUP VV	6P5018	1P50A14	1R24*MCC1112	R.B. EL 112'	90-250
1P50*MOV114A	INST. NITROGEN EMERG SUP VV	6P5020	1P50A15	1R24*MCC1118	R.B. EL 112'	90-250
1P50*PS113A	SERVICE AIR HEADER A NORMAL SUP	1.61-273				151-170
1P50*PS105A	SERVICE AIR HEADER A PRESSURE	1.61-272				151-155
	DIVISION 2					
1P50*MOV106	INSTR AIR TO SUPPR CHAMBER VV	6P5013	1P50N07	1R24*MCC1129	R.B. EL 40'	30-250
1P50*MOV103B	INST. NITROGEN OUTBRD ISOL VV	6P5015	1P50B12	1R24*MCC1122	R.B. EL 40'	90-070
1P50*MOV105B	INST. NITROGEN INBRD ISOL VV	6P5017	1P50B13	1R24*MCC1122	R.B. EL 112'	89-255
1P50*MOV113B	INST. NITROGEN NORMAL SUP VV	6P5019	1P50B14	1R24*MCC1123	R.B. EL 112'	151-220
1P50*MOV114B	INST. NITROGEN EMERG SUP VV	6P5015	1P50B15	1R24*MCC1123	R.B. EL 112'	89-070
1P50*PS113B	SERVICE AIR HEADER B NORMAL SUP	1.61-273				151-220
1P50*PS105B	SERVICE AIR HEADER B PRESSURE	1.61-272				151-220
	SWGR MCC PNLS-CR/RB/PH					
	DIVISION 1					
1R22*SWG101	4160V-HVN RHR SW CS SWG111	FE1B				EL 25'
ACB 101-1	EMER BUS NORM SUPPLY	5R2209	1R22A01	1R22*SWG101	EMER SWGR RM EL 25'	EL 25'
ACB 101-2	EMER BUS RES SUPPLY	5R2210	1R22A02	1R22*SWG101	EMER SWGR RM EL 25'	EL 25'
BUS 101 SEQ	PROGRAM CKT SW RHR CS HVN	5R2217	1R22A03	1R22*SWG101	EMER SWGR RM EL 25'	EL 25'
BUS	4160 REL & MET CKT	CR1205	1R22A04	1R22*SWG101	EMER SWGR RM EL 25'	EL 25'
	DIVISION 2					
1R22*SWG102	4160V-HVN RHR SW CS SWG112	FE-1C			EMER SWGR RM EL 25'	EL 25'
ACB 102-1	EMER BUS NORM SUPPLY	5R2211	1R22B01	1R22*SWG102	EMER SWGR RM EL 25'	EL 25'
ACB 102-2	EMER BUS RES SUPPLY	5R2212	1R22B02	1R22*SWG102	EMER SWGR RM EL 25'	EL 25'
BUS 102 SEQ	PROGRAM CKT SW RHR CS	5R2218	1R22B03	1R22*SWG102	EMER SWGR RM EL 25'	EL 25'

IDENTITY	DESCRIPTION	ESK	CKT NO.	PWR SC	PWR SC LOC	EQUIP LOC(1) EL-AZ
BUS 102	4160 REL & MET CKT	8R2206	1R22B04	1R22*SWG102	EMER SWGR RM EL 25'	EL 25'
	DIVISION 3					
1R22*SWG103	4160V-HVN RHR SW SWG113	FE-1B		1R42*PNLC1	EMER SWGR RM EL 25'	EL 25'
ACB 103-1	EMER BUS NORM SUPPLY	5R2213	1R22C01	1R22*SWG103	EMER SWGR RM EL 25'	EL 25'
ACB 103-2	EMER BUS RES SUPPLY	5R2214	1R22C02	1R22*SWG103	EMER SWGR RM EL 25'	EL 25'
BUS 103 SEQ	PROGRAM CKT SW HVN	5R2219	1R22C03	1R22*SWG103	EMER SWGR RM EL 25'	EL 25'
BUS 103	4160 REL & MET CKT	8R2207	1R22C04	1R22*SWG103	EMER SWGR RM EL 25'	EL 25'
	DIVISION 1					
ACB 101-4	FEEDER TO EMERG BUSS 111	5R2303	1R23A01	1R22*SWG101	EMER SWGR RM EL 25'	EL 25'
1R23*T-101	TRANSFORMER	FE-1B		1R22*SWG101	EMER SWGR RM EL 25'	EL 25'
1R23*SWG111	480V 1R24*MCC1110-9&PNLR1				EMER SWGR RM EL 25'	EL 25'
1JB*701	1R24*MCC1111/9	FE-1E		1R23*SWG111	EMER SWGR RM EL 25'	EL 25'
1JB*703	1R24*MCC1117/4/Y/Z	FE-1E		1R23*SWG111	EMER SWGR RM EL 25'	EL 25'
1JB*300	1JB*701/3	FE-1E		1R23*SWG111	EMER SWGR RM EL 25'	EL 25'
1JB*702	1R24*MCC1113/8	FE-1E		1R23*SWG111	EMER SWGR RM EL 25'	EL 25'
	DIVISION 2					
ACB 102-4	FEEDER TO EMERG BUSS 112	5R2304	1R23B01	1R22*SWG102	EMER SWGR RM EL 25'	EL 25'
1R23*T102	TRANSFORMER	FE-1B		1R22*SWG102	EMER SWGR RM EL 25'	EL 25'
1R23*SWG112	480V 1R24*MCC1120-9&PNLB1				EMER SWGR RM EL 25'	EL 25'
1JB*706	1R24*MCC1127/4/X/	FE-1E		1R23*SWG112	EMER SWGR RM EL 25'	EL 25'
1JB*704	1R24*MCC1121/9	FE-1E		1R23*SWG112	EMER SWGR RM EL 25'	EL 25'
1JB*301	1JB*704/6,1R24*MCC112C	FE-1E		1R23*SWG112	EMER SWGR RM EL 25'	EL 25'
1JB*705	1R24*MCC1123/8	FE-1E		1R23*SWG112	EMER SWGR RM EL 25'	EL 25'
	DIVISION 3					
ACB 103-5	FEEDER TO EMERG BUS 113	5R2305	1R23C01	1R22*SWG103	EMER SWGR RM EL 25'	EL 25'
1R23*SWG113	480V 1R24*MCC1131-4&PNL01				EMER SWGR RM EL 25'	EL 25'
1R23*T103	TRANSFORMER	FE-1B		1R22*SWG103	EMER SWGR RM EL 25'	EL 25'
	DIVISION 1					
1R24*MCC1110	480V -P41,X41	FE-1Z		1R23*SWG111	EMER SWGR RM EL 25'	SCREENWELL
1R24*MCC1111	480V-E11,E21,E51,P41,N11,D11,G11	FE-1K		1R23*SWG111	EMER SWGR RM EL 25'	R.B. EL 40'
1R24*MCC1112	480V -B31,E11,P41,P42,P50,R35, T46	FE-1H		1R23*SWG111	EMER SWGR RM EL 25'	R.B. EL 112'
1R24*MCC1113	480V -B21,C41,E11,E21,P42,P50, T46,G33,T48	FE-1H		1R23*SWG111	EMER SWGR RM EL 25'	R.B. EL 112'
1R24*MCC1114	480 -B21,G41	FE-1K		1R24*MCC111Y	EMER SWGR RM EL 25'	R.B. EL 150'
1R24*MCC1115	480 -R35,R42,X41,X61,C71,R36	FE-1W		1R23*SWG111	EMER SWGR RM EL 25'	EL 25'
1R24*MCC1116	480 -M50,P41,R35,R43,X41,X60, X61,D11	FE-1X		1R23*SWG111	EMER SWGR RM EL 25'	DIESEL GEN RM
1R24*MCC1117	480V -E11,E21,N11,G41	FE-1K		1R23*SWG111	EMER SWGR RM EL 25'	R.B. EL 40'
1R24*MCC1118	480V -B21,E11,E41,P50,T46,T23, G33,T48	FE-1H		1R23*SWG111	EMER SWGR RM EL 25'	R.B. EL 112'
1R24*MCC1119	480V -E11,P41,P42	FE-1K		1R23*SWG111	EMER SWGR RM EL 25'	R.B. EL 40'
1R24*MCC111W	480V-P41,T46,G11	FE-1AS		1R24*MCC1112	EMER SWGR RM EL 25'	R.B. EL 150'
1R24*MCC111Y	480V-P42,E32	FE-1K		1R24*SWG111	EMER SWGR RM EL 25'	R.B. EL 78'

Original
April 1983

IDENTITY	DESCRIPTION	ESK	CKT NO.	PWR SC	PWR SC LOC	EQUIP LOC(1) EL-AZ
1R24*MCC111X	480V -B31, E11	FE-1K		1R24*TRS111X	R.B. EL 112'	R.B. EL 112'6"
1R24*MCC111Z	480V -P50	FE-1K		1R24*MCC111Y	R.B. EL 78'	R.B. EL 112'6"
1R24*TRS111X	TRANSFER SWITCH	FE-1E		1R24*MG113A/111	R.B. EL 150'	R.B. EL 150'
1R24*MG111	MOTOR GENERATOR	FE-1E		1R23*SWG111	EMER SWGR RM EL 25'	R.B. EL 150'
1R24#PNL-111		FE-1E				
1R24#PNL-113A		FE-1E				
	DIVISION 2*					
1R24*MCC1120	480V -P41,X41	FE-1Z		1R23*SWG112	EMER SWGR RM EL 25'	SCREENWELL
1R24*MCC1121	480V -C61,E11,E21	FE-1M		1R23*SWG112	EMER SWGR RM EL 25'	R.B. EL 40'
1R24*MCC1122	480V -B31,C61,E11,P42,P50,T46	FE-1J		1R23*SWG112	EMER SWGR RM EL 25'	R.B. EL 112'
1R24*MCC1123	480V -C41,E21,P50,	FE-1J		1R23*SWG112	EMER SWGR RM EL 25'	R.B. EL 112'

*MCC associated systems with shutdown components

Original
April 1983

IDENTITY	DESCRIPTION	ESK	CKT NO.	PWR SC	PWR SC LOC	EQUIP LOC(1) EL-AZ
1R24*MCC1124	480V - C61, G41, D11	FE-1M		1R24*MCC1124	EMER SWGR RM EL 25'	R.B. EL 150'
1R24*MCC1125	480V -R35,R42,X41,X61,C71	FE-1W		1R23*SWG-112	EMER SWGR RM EL 25'	EMER SWGR ROOM
1R24*MCC1126	480V -M50,P41,R35,R43,X41, X60,X61	FE-1X		1R23*SWG-112	EMER SWGR RM EL 25'	DIESEL GEN ROOM
1R24*MCC1127	480V -C61,E11,E21,P41	FE-1M		1R23*SWG-112	EMER SWGR RM EL 25'	R.B. EL 40'
1R24*MCC1128	480V -C61,E11,E51,P41,P42,T46	FE-1J		1R23*SWG-112	EMER SWGR RM EL 25'	R.B. EL 112'
1R24*MCC1129	480V -E11,P41,P50,	FE-1M		1R23*SWG-112	EMER SWGR RM EL 25'	R.B. EL 40'
1R24*TRS112Y	TRANSFER SWITCH	FE-1E		1R24*MG113B/ 112		R.B. EL 150'
1R24*MCC112W	480V -T46	FE-1AS		1R24*MCC1122	R.B. EL 112'	R.B. EL 150'
1R24*MCC112X	480V	FE-1M		1R23*SWG-112	R.B. EL150'	R.B. EL 78'
1R24*MCC112Y	480V - C61,E11	FE-1M		1R24*TRS112Y	R.B. EL 112'	R.B. EL 112'
1R24*MG112	MOTOR GENERATOR	FE-1E		1R23*SWG-112	EMER SWGR RM EL 25'	R.B. EL 150'
1R24*PNL-04	480V -C61	FE-1M		1R24*MCC112Y	R.B. EL 112'	R.B. EL 112'
	DIVISION 3					
1R24*MCC1131	480V -P42,T46	FE-1J		1R23*SWG-113	EMER SWGR RM EL 25'	R.B. EL 160'
1R24*MCC1133	480V -P41,R35,R42,R43,X41	FE-1W		1R23*SWG-113	EMER SWGR RM EL 25'	EMER SWGR ROOM
1R24*MCC1134	480V -M50,P41,R35,R43,X60	FE-1X		1R23*SWG-113	EMER SWGR RM EL 25'	DIESEL GEN ROOM
1R24*MG113A	MOTOR GENERATOR	FE-1E		1R23*SWG-113	EMER SWGR RM EL 25'	R.B. EL 150'
1R24*MG113B	MOTOR GENERATOR	FE-1E		1R23*SWG-113	EMER SWGR RM EL 25'	R.B. EL 150'
1JB*113S		FE-1E				
	DIVISION 1					
1R35*PNL-R1, R2,R3	120V -B21,C61,E11,M50,P41,P42, R24,R43,T46,X41	FE-1AZ, FE-1BA, FE-1BB	1R35A02	1R35*T-R1, R2,R3	EMER SWGR RM EL 25'	
1R35*T-R1	480V/120V XFMR PNL-R1	FE-1W		1R24*MCC1115	EMER SWGR RM EL 25'	EMER SWGR RM EL 25'
1R35*T-R2	TRANSFORMER -PNL-R2	FE-1H		1R24*MCC1112	R.B. EL 112'	R.B. EL 112'
1R35*T-R3	TRANSFORMER -PNL-R3	FE-1X		1R24*MCC1116	DIESEL GEN RM EL 22'	DIESEL GEN ROOM EL 20'
	DIVISION 2					
1R35*PNL-B1 B2,B3	120V -B21,C61,E11,M50,P41,P42,R43, T46,X41	FE-1AZ, FE-1BB	1R35B02	1R35*T-B1, B2,B3	EMER SWGR RM EL 25'	
1R35*T-B1	480V/120V XFMR PNL-B1	FE-1W		1R24*MCC1125	EMER SWGR RM EL 25'	EMER SWGR ROOM EL 25'
1R35*T-B2	TRANSFORMER PNL-B2	FE-1J		1R24*MCC1122	R.B. EL 112'	R.B. EL 112'
1R35*T-B3	TRANSFORMER PNL-B3	FE-1X		1R24*MCC1126	DIESEL GEN RM EL 25'	DIESEL GEN ROOM
	DIVISION 3					
1R35*T-01	480V/120V XFMR PNL-01	FE-1W		1R24*MCC1133	EMER SWGR RM EL 25'	EMER SWGR ROOM EL 25'
1R35*PNL-01, 02	120V -C61,M50,P41,R43,X41	FE-1BA, FE-1BB	1R35C02	1R35*T-01,02	EMER SWGR RM EL 25'	
1R35*T-02	TRANSFORMER PNL-02	FE-1X		1R24*MCC1134	DIESEL GEN RM EL 22'	DIESEL GEN ROOM
	DIVISION 1					
1R42*BC-A1	125DC -1R42*SWG-A1 BAT CH	FE-1AT		1R24*MCC1115	EMER SWGR RM EL 25'	EMER SWGR ROOM EL-25'
1R42*PNL-A1	125DC -SWG-101&111 DG	FE-1AT		1R42*SWG-A1	EMER SWGR RM EL 25'	EMER SWGR ROOM
1R42*BA-A1	125DC -1R42*SWG-A1 BAT	FE-1AT				BATT ROOM
1R42*SWG-A1	125DC -PNL-A1&A2	FE-1AT		1R42*BA-A1	BATT ROOM	EMER SWGR ROOM EL-25'

IDENTITY	DESCRIPTION	ESK	CKT NO.	PWR SC	PWR SC LOC	EQUIP LOC(1) EL-AZ
1R42*PNL-A2	125DC -ADS & GE LOGIC	FE-1AY		1R42*SWG-A1	EMER SWGR RM EL 25'	EMER SWGR ROOM
1R42*MCC-0A1,2	125 VDC MCC	FE-1AK		1R42*SWG-A1	EMER SWGR RM EL 25'	R.B. EL 40' & 112'
1H11*PNL-VC1	125 VDC PNL- FEED	11R4202		1R42*PNL-A2	RELAY RM EL 44'	CONTROL ROOM EL-63'
1H11*PNL-VC2	125 VDC PNL- FEED	11R4201		1R42*PNL-A2	RELAY RM EL 44'	CONTROL ROOM EL-63'
	DIVISION 2					
1R42*BC-B1	125DC -1R42*SWG-B1 BAT CH	FE-1AU		1R24*MCC1125	EMER SWGR RM EL 25'	EMER SWGR ROOM
1R42*PNL-B1	125DC -SWG 102 & 112 & DG	FE-1AU		1R42*SWG-B1	EMER SWGR RM EL 25'	EMER SWGR ROOM
1R42*BA-B1	125DC -1R42*SWG-B1 BAT	FE-1AU		NA		BATT ROOM
1R42*SWG-B1	125 DC -PNL-B1 & B2	FE-1AU		1R42*BA-B1	BATT ROOM	EMER SWGR ROOM
1R42*PNL-B2	125DC -ADS & GE LOGIC	FE-1AY		1R42*SWG-B1	EMER SWGR RM EL 25'	EMER SWGR ROOM
1H11*PNL-VC1	125DC -PNL- FEED	11R4202		1R42*PNL-B2	RELAY ROOM EL 44'	CONTROL ROOM EL -63'
1H11*PNL-VC2	125DC -PNL- FEED	11R4201		1R42*PNL-B2	RELAY ROOM EL 44'	CONTROL ROOM EL -63'
	DIVISION 3					
1R42*BC-C1	125DC -1R42*SWGC1 BAT CH	FE-1AV		1R24*MCC1133	EMER SWGR RM EL 25'	EMER SWGR ROOM
1R42*PNL-C1	125DC -SWG 103 & DG	FE-1AV		1R42*SWG-C1	EMER SWGR RM EL 25'	EMER SWGR ROOM
1R42*PNL-C4	125DC -SWG 113	FE-1AV		1R42*SWG-C1	EMER SWGR RM EL 25'	EMER SWGR ROOM
1R42*BA-C1	125 DC -1R42*SW-C1 BAT	FE-1AV		NA		BATT ROOM
1R42*SWG-C1	125DC -PNL-C1 & C4	FE-1AV		1R42*BA-C1	BATT ROOM	EMER SWGR ROOM
1H11*PNL-VC1	125DC -PNL- FEED	11R4202		1R42*PNL-C1	RELAY ROOM EL 44'	CONTROL ROOM EL -63'
1H11*PNL-VC2	125DC -PNL- FEED	11R4201		1R42*PNL-C1	RELAY ROOM EL 44'	CONTROL ROOM EL -63'
1R42*MCC-0A1,2	125DC -C61,E11,E51	FE-1AK		1R42*SWG-A1	EMER SWGR RM EL 25'	R.B. EL 40' & 112'
1R42*MCC-0B1,2	125DC -C61,E11,E41,G33	FE-1AK		1R42*SWG-B1	EMER SWGR RM EL 25'	R.B. EL 40' & 112'

(1) THE EQUIPMENT IN THE REACTOR BUILDING IS LOCATED BY ELEVATION (FT.) AND AZIMUTH(DEGREES): EXAMPLE- 112-230 I.E. REACTOR BUILDING, ELEVATION 112 FT. AND 230 DEGREES. THE EQUIPMENT OUTSIDE THE REACTOR BUILDING IS LOCATED BY AREA, ELEVATION, LINE AND COLUMN: EXAMPLE- CB/63-C13 I.E. CONTROL BUILDING, ELEVATION 63 FT., LINE C AND COLUMN 13.

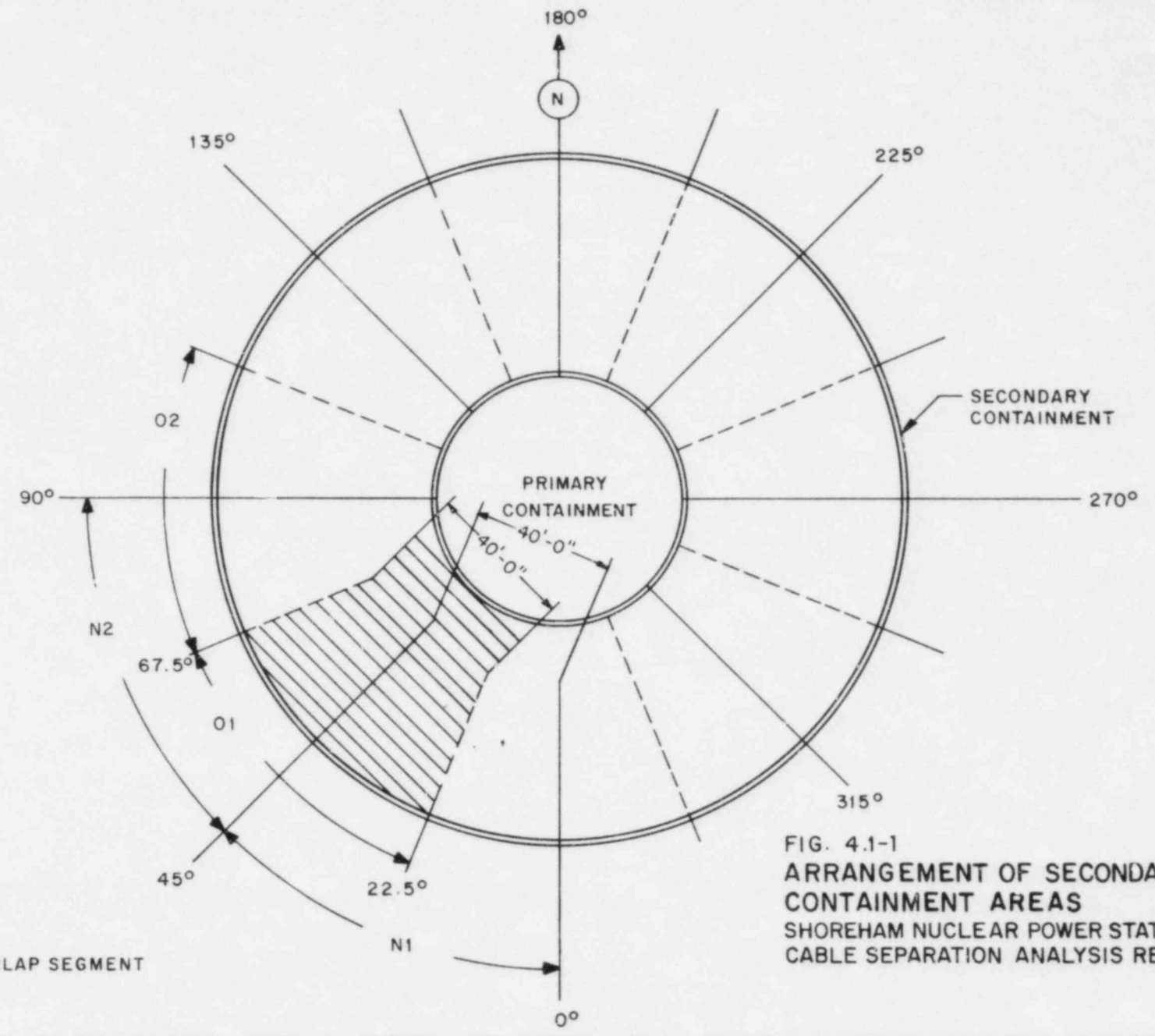
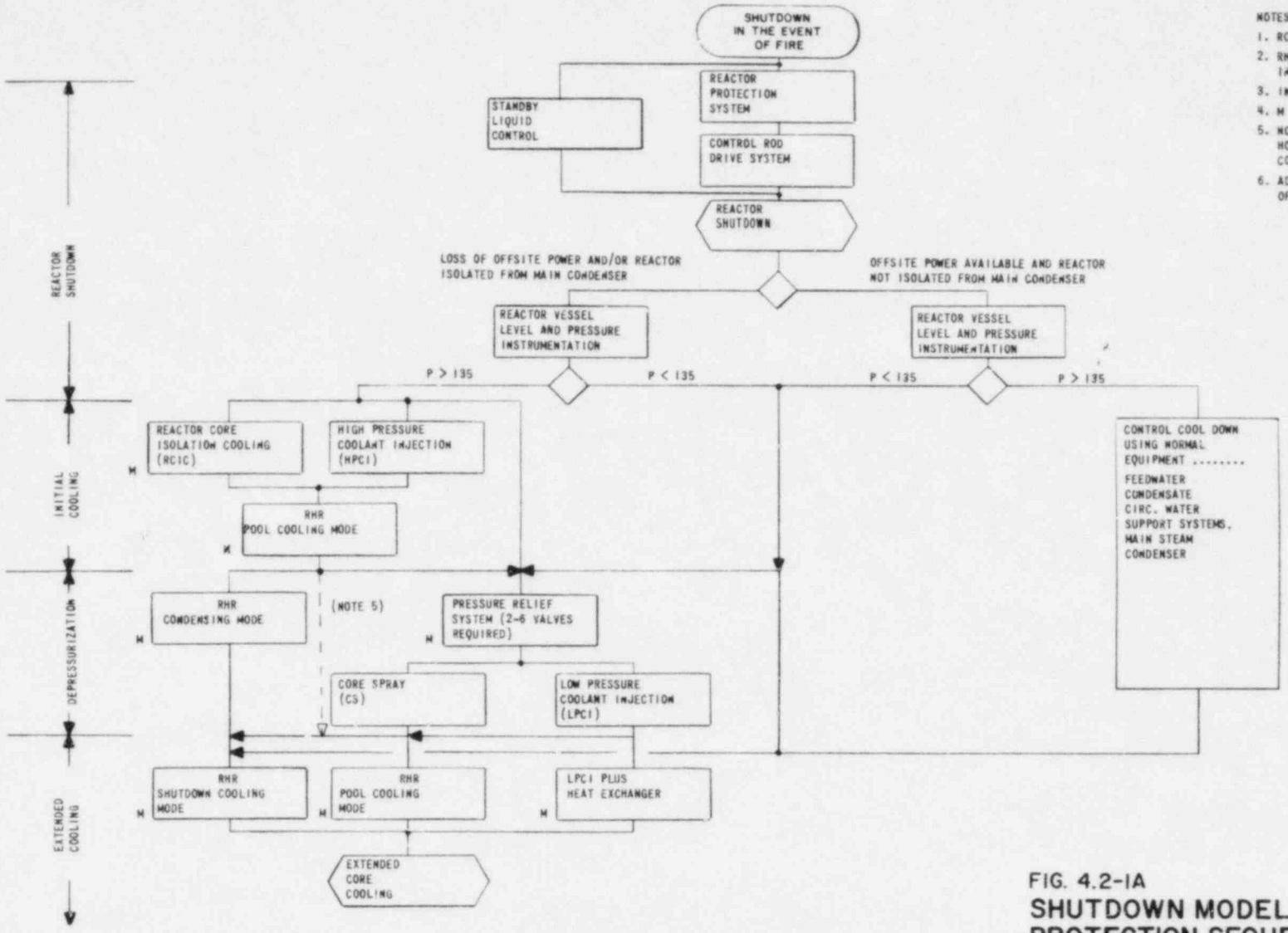


FIG. 4.1-1
ARRANGEMENT OF SECONDARY CONTAINMENT AREAS
SHOREHAM NUCLEAR POWER STATION-UNIT 1
CABLE SEPARATION ANALYSIS REPORT



NOTES:

1. RCIC IS AUTO START , MANUAL RESET.
2. RHR CONDENSING MODE REQUIRES NON-SAFETY INSTRUMENT AIR.
3. INSTRUMENTATION NOT SHOWN.
4. M - MANUAL.
5. NO FORCED COOLDOWN CAPABILITY THIS PATH HOWEVER PLANT REMAINS SAFE IN HOT SHUTDOWN CONDITION AND WILL EVENTUALLY DEPRESSURIZE.
6. ADDITIONAL FLEXIBILITY EXISTS IN THAT PATHS OF MANY OPERATIONS MAY BE RETRACED.

FIG. 4.2-1A

SHUTDOWN MODEL PROTECTION SEQUENCE FOR SHUTDOWN

SHOREHAM NUCLEAR POWER STATION-UNIT 1
CABLE SEPARATION ANALYSIS REPORT

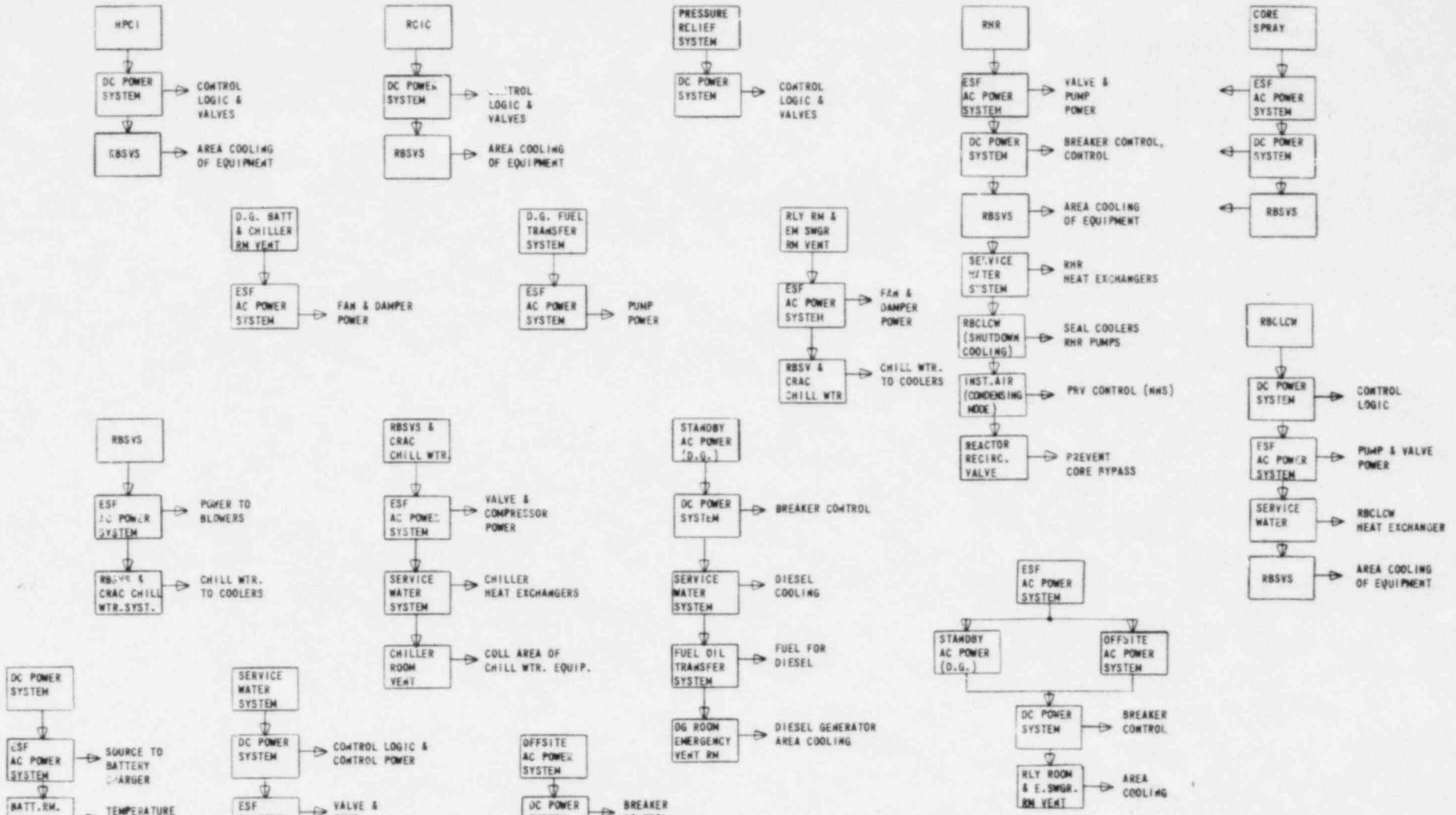


FIG. 4.2-1B

SHUTDOWN MODEL
SHUTDOWN SYSTEMS (IE)
SHOREHAM NUCLEAR POWER STATION-UNIT 1
CABLE SEPARATION ANALYSIS REPORT

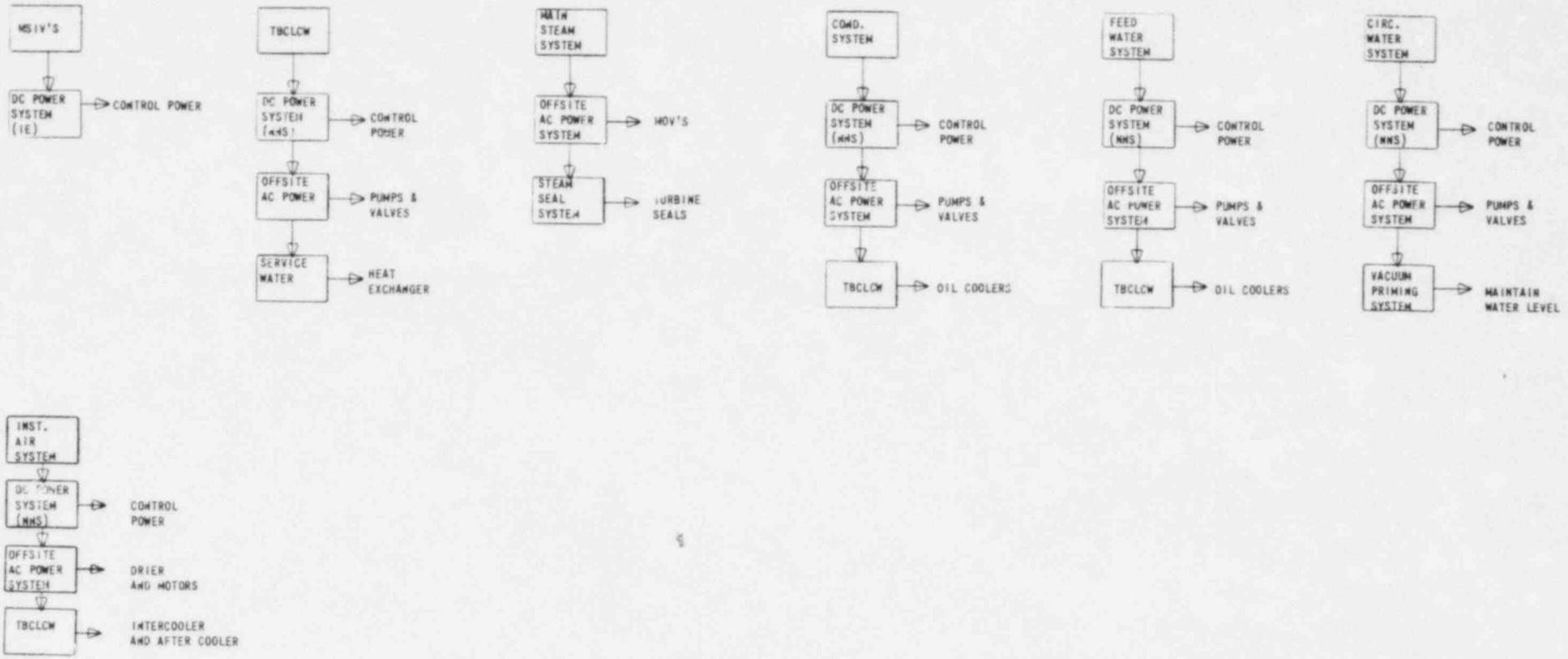


FIG. 4.2-1C
SHUTDOWN MODEL
SHUTDOWN SYSTEMS (NNS)
SHOREHAM NUCLEAR POWER STATION-UNIT 1
CABLE SEPARATION ANALYSIS REPORT

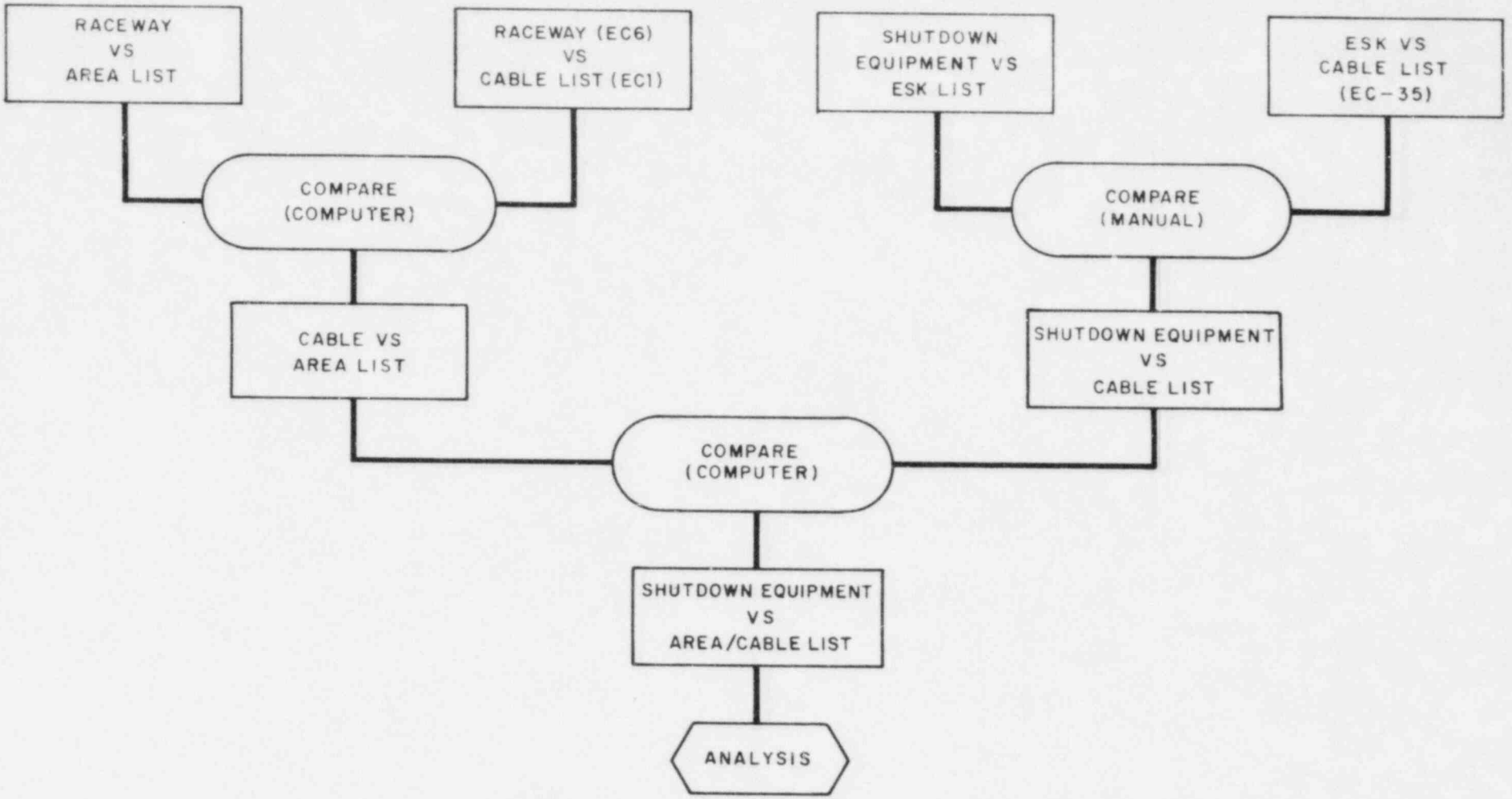


FIGURE 4.4-1
DEVELOPMENT OF SHUTDOWN EQUIPMENT BY AREA
SHOREHAM NUCLEAR POWER STATION-UNIT 1
CABLE SEPARATION ANALYSIS REPORT

APPENDIX A

CABLE SEPARATION ANALYSIS RESULTS

SECONDARY CONTAINMENT

Original
April 1983

SEGMENT 008-N1
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems: E11, E21, G41, P41, P42, P50, T46

   (B) Division II System: P41

   (C) Division III Systems: None

2. SYSTEMS FUNCTIONS DISABLED:

   (A) No credit taken for Division I systems functions, other than the RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

   (B) Division II SW (P41) system fuel pool supply valve 1P41*MOV042B, ultimate cooling drain valves 1P41*MOV039B and 43, and cross tie valves 1P41*MOV033B and D.

3. DISABLED FUNCTION EVALUATIONS:

   (A) Remaining Division II systems and Division III systems are available.

   (B) Division II SW (P41) system supply, ultimate cooling drain, and cross tie valves are not necessary since Division II RHR (E11) system is available.

4. SHUTDOWN CAPABILITY:

   Hot shutdown is achievable using Division II HPCI (E41) system.

   Cold shutdown is achievable using Division II and III RHR (E11) systems.

5. FURTHER ACTION RECOMMENDED:

   None

Original
April 1983

SEGMENT 008-N2
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems : E11, E21, G41, P41, P42, P50, T46

   (B) Division II Systems : None

   (C) Division III Systems: None

2. SYSTEMS FUNCTIONS DISABLED:

   No credit taken for Division I systems functions, other than the RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

3. DISABLED FUNCTION EVALUATION:

   Division II and III systems are available.

4. SHUTDOWN CAPABILITY:

   Hot shutdown is achievable using Division II HPCI (E41) system.

   Cold shutdown is achievable using Division II and III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 008-N3
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: B21, B31, C41, C61, E11, E21, E51, (Division I components only), G33, G41, P41, P42, P50, T46

(B) Division II System: E41 (Division I and II components)

(C) Division III Systems: E11(C), P42(C), T46(A,B)

2. SYSTEMS FUNCTIONS DISABLED:

(A) No credit taken for Division I and III systems functions.

(B) Division II HPCI (E41) system.

(C) Division I RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

3. DISABLED FUNCTION EVALUATION:

(A) Remaining Division II systems are available.

(B) Division I RHR (E11) system valve 1E11*MOV047 can be manually operated or Division II RHR/CS/SRV circulation/suppression pool cooling flow path is available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division II RHR/CS/SRV flow path.

Cold shutdown is achievable using Division II RHR with (E11) manual operation of valve 1E11*MOV047, or Division II RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

6. ACTION TO BE TAKEN

None

SEGMENT 008-N4
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: B21, B31, C41, C61, E11, E21, E51, (Division I and II components) G33, G41, P41, P50, T46

(B) Division II System: E41 (Division I and II components)

(C) Division III Systems: P42(C), T46(A,B)

2. SYSTEMS FUNCTIONS DISABLED:

(A) No credit taken for Division I or III systems functions.

(B) Division I RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

(C) No credit taken for Division II HPCI (E41) systems functions.

3. DISABLED FUNCTION EVALUATION:

(A) Remaining Division II systems are available.

(B) Division I RHR (E11) system valve 1E11*MOV047 can be manually operated or Division II RHR/CS/SRV circulation/suppression pool cooling flow path is available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division II RHR/CS/SRV flow path.

Cold shutdown is achievable using Division II RHR system with manual operation of valve 1E11*MOV047 or Division II RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

The reduction of fire hazard in the vicinity of the HPCI and RCIC pumps and surrounding raceways may make available the HPCI system as alternative to using the RHR/CS/SRV flow path.

Original
April 1983

6. ACTION TO BE TAKEN

To reduce the fire hazard in the HPCI/RCIC area, the following will be provided:

(A) Additional water spray and cable tray bottoms on selected horizontal "Red" trays.

(B) Curbs around the HPCI and RCIC turbines.

(C) Additional local smoke detection.

(D) A partial fire barrier between vertical cable trays and the adjacent RCIC turbine.

SEGMENT 008-N5
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I System: B21, E11, B31, C61, E51 (Division I and II components) P50

(B) Division II Systems: B21, B31, C41, C61, E11, E21, E41 (Division I and II components) G41, P41, P42, P50, T46

(C) Division III Systems: C61, E11(C), P41(C), P42(C), T46(A,B)

2. SYSTEMS FUNCTIONS DISABLED:

(A) No credit taken for Division I RCIC (E51) and Reactor Plant Remote Shutdown (C61) systems.

(B) RHR (E11) system components shutdown cooling outboard isolation valve 1E11*MOV047, 1E11*MOV036B and 1E11*MOV037B.

(C) No credit taken for ADS(B21) valves 1B21*SOV092C, D, F.

(D) No credit taken for RWC (B31) components 1B31*PS023A,B and 1B31*MOV032B.

(E) Division (I) compressed air (P50) valve 1P50*MOV014.

(F) No credit taken for Division II and III systems functions, including the RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

(G) Division II Reactor Low Water Level switch 1B21*LIS027C.

3. DISABLED FUNCTION EVALUATION:

(A) Remaining Division I systems are available.

(B) Division (I) compressed air (P50) valve 1P50*MOV104 is not required.

(C) The loss of Division (I) RHR (E11) valves 1E11*MOV036B and 37B will not affect shutdown.

Original
April 1983

(D) Division I and II RHR system valves 1E11*MOV047 and 1E11*MOV048 can be manually operated, or Division I RHR/CS/SRV flow path is available.

(E) The affected electrical components will not cause the spurious opening of RHR (E11) system valves 1E11*MOV047 and 048.

(F) Division II reactor low water level switch 1B21*L1SO27C is one out of two Division II sensors, and the redundant Division I sensors remain functional.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division I RHR/CS/SRV flow path.

Cold shutdown is achievable using Division I RHR system with manual operation of valves or the Division I RHR/CS/SRV flow path can be used.

5. FURTHER ACTION RECOMMENDED:

The reduction of fire hazard in the vicinity of the HPCI and RCIC pumps and surrounding raceways may make available the RCIC or HPCI systems as alternative to using the RHR/CS/SRV flow path.

6. ACTION TO BE TAKEN

To reduce the fire hazard in the HPCI/RCIC area, the following will be provided:

(A) Additional water spray and cable tray bottoms on selected horizontal "Red" trays.

(B) Curbs around the HPCI and RCIC turbines.

(C) Additional local smoke detection.

(D) A partial fire barrier between vertical cable trays and the adjacent RCIC turbine.

SEGMENT 008-N6
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I System: E51 (Division I and II components), P50

(B) Division II Systems: B21, B31, C41, C61, C71, E11, E21, E41 (Division II components only), G33, G41, P41, P42, P50, T46

(C) Division III System: E11(D)

2. SYSTEMS FUNCTIONS DISABLED:

(A) No credit taken for Division I RCIC (E51) system.

(B) Division I compressed air (P50) system valve 1P50*MOV104

(C) No credit taken for Division II and III (D) systems functions.

(D) Division II RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

(A) Division I systems are available.

(B) Division I compressed air (P50) system valve 1P50*MOV104 is not required.

(C) Division II RHR (E11) system valve 1E11*MOV048 can be manually operated, or Division I RHR/CS/SRV circulation/suppression pool cooling flow path is available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division I RHR/CS/SRV flow path.

Cold shutdown is achievable using Division I RHR (E11) system with manual operation of valve 1E11*MOV048, or Division I RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 008-N7
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A)	Division I Systems:	E51 (Division I components only)
(B)	Division II Systems:	B21, C61, E11, E21, E41 (Division II components only), G41, P41, P42, P50
(C)	Division III System:	E11(D)

2. SYSTEMS FUNCTIONS DISABLED:

(A) No credit taken for Division I HPCI (E51) system.

(B) No credit taken for Division II systems functions, other than the RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

(C) No credit taken for Division III(D) systems functions.

3. DISABLED FUNCTION EVALUATION:

Remaining Division I and III(C) systems are available.

4. SHUTDOWN CAPABILITY:

Hot shutdown ia achievable using the Division I RHR/CS/PRV flow path.

Cold shutdown is achievable using Division I or II RHR (E11) system.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 008-N8
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: E51 (Division I components only) P41, T46

(B) Division II Systems: B21, C61, E11, E21, E41, (Division II components only) G41, P41, P42, P50, T46

(C) Division III Systems: None

2. SYSTEMS FUNCTIONS DISABLED:

(A) Division I RCIC (E51) pump discharge valve 1E51*MOV034 RBSVS (T46) system unit cooler 1T46*UC002A and service water (P41) system valve 1P41*MOV037A.

(B) No credit taken for Division II systems functions, other than RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

(A) Remaining Division I systems and Division III systems are available, except Division I (E51) RCIC system.

(B) Division I RHR (E11) system shutdown cooling mode using the Division II RBCLCW (P42) system is unavailable; however, the Division I RHR/CS/SRV circulation/suppression pool cooling flow path is available.

(C) Division I RBSVS (T46) unit cooler 1T46*UC002A impacts Division II equipment.

(D) Service water (P41) system valve 1P41*MOV037 is not required.

4. SHUTDOWN CAPABILITY:

Hot and cold shutdown are achievable using Division I RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

Original
April 1983

SEGMENT 008-01
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems: E11, E21, G41, P41, P42, P50, T46

   (B) Division II System: P41

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   (A) No credit taken for Division I system functions, other than the RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047, and the RCIC (E51) system.

   (B) Division II SW (P41) system fuel pool supply valve 1P41*MOV042B, ultimate cooling drain valves 1P41*MOV039B and 43, and cross tie valves 1P41*MOV033B and D.

3. DISABLED FUNCTION EVALUATION:

   (A) Division II systems except SW (P41) system are available.

   (B) Division II SW (P41) system supply , ultimate cooling drain and cross tie valves are not necessary since Division II RHR (E11) system is available.

   (C) Division III ystems are available.

4. SHUTDOWN CAPABILITY:

   Hot shutdown is achievable using Division 1 RCIC (E51) system.

   Cold shutdown is achievable using Division II and III RHR (E11) systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 008-02
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: B31, C61, E11, E21 (Division I component only) E51, G41, P41, P42, P50, T46

(B) Division II Systems: None

(C) Division III System: E11(C)

2. SYSTEMS' FUNCTIONS DISABLED:

No credit taken for Division I and III(C) systems' functions, other than RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

3. DISABLED FUNCTION EVALUATION:

Division II and III (D) system are available.

4. SHUTDOWN CAPABILITY:

Hot and cold shutdown are achievable using Division II and III (D) systems.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 008-03
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems: B21, B31, C41, C61, E11, E21, E51 (Division I component only) G33, G41, P41, P42, P50, T46

   (B) Division II System: E41 (Division I and II components)

   (C) Division III Systems: E11(C), P42(C), T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

   (A) No credit taken for Division I and III systems' functions.

   (B) No credit taken for Division II HPCI (E41) system.

   (C) Division I RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

3. DISABLED FUNCTION EVALUATION:

   (A) Division II systems are available except Division II HPCI (E41) system.

   (B) Division I RHR system valve 1E11*MOV047 can be manually operated or Division II RHR/CS/SRV circulation/suppression pool cooling flow path is available.

4. SHUTDOWN CAPABILITY:

   Hot shutdown is achievable using Division II RHR/CS/SRV flow path.

   Cold shutdown is achievable using Division II RHR with manual operation of valve 1E11*MOV047, or Division II RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 008-04
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I System: B21, C61, E11, E51, (Division I and II components) P50

(B) Division II System: E41 (Division I and II components)

(C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I systems other than RHR (E11) shutdown cooling valve 1E11*MOV047.

(B) No credit taken for Division II HPCI (E41) system.

3. DISABLED FUNCTION EVALUATION:

(A) Division II systems are available, except HPCI (E41) system.

(B) Division III systems are available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using the Division II RHR/CS/SRV flow path.

Cold shutdown is achievable using Division II RHR system.

5. FURTHER ACTION RECOMMENDED:

The reduction of fire hazard in the vicinity of the HPCI and RCIC pumps and surrounding raceways may make available the HPCI system as alternative to using the RHR/CS/SRV flow path.

6. ACTION TO BE TAKEN:

To reduce the fire hazard in the HPCI/RCIC area, the following will be provided:

(A) Additional water spray, cable tray bottoms on selected horizontal "Red" trays.

(B) Curbs around the HPCI and RCIC turbines.

(C) Additional local smoke detection.

(D) A partial fire barrier between vertical cable trays and the adjacent RCIC turbine.

SEGMENT 008-05
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I System: E51 (Division I components only)

(B) Division II Systems: B21, B31, C41, C61, C71, E11, E21, E41 (Division I and II components) G33, G41, P41, P42, P50, T46

(C) Division III Systems: C61(D), E11(D), P41(D), P42(C), T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I RCIC (E51) system.

(B) No credit taken for Division II and III system functions.

(C) Division II RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

(A) Division I systems are available, except RCIC (E51) system.

(B) Division II RHR (E11) system valve 1E11*MOV048 can be manually operated or Division I RHR/CS/SRV circulation/suppression pool cooling flow path is available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using the Division I RHR/CS/SRV flow path.

Cold shutdown is achievable using the Division I RHR (E11) system with manual operation of valve 1E11*MOV048, or Division I RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 008-06
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I System: E51 (Division I component only) P50

(B) Division II Systems: B21, C61, E11, E21, E41, (Division II components only) G33, G41, P41, P42, 0

(C) Division III System: E11 (D)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I RCIC (E51) and compressed air (P50) system valve 1P50*MOV104.

(B) No credit taken for Division II system functions.

(C) Division II RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

(A) Division I (P50) system valve 1P50*MOV104 is not required.

(B) Division II RHR (E11) system valve 1E11*MOV048 can be manually operated or Division I RHR/CS/PRV flow path can be used.

(C) Remaining Division I systems and Division III (C) systems are available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division I RHR/CS/PRV flow path.

Cold shutdown is achievable using Division I RHR (E11) system, with manual operation of valve 1E11*MOV048 or the Division I RHR/CS/PRV circulation/suppression pool cooling flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 008-07
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: E51 (Division I components only) P41, T46

(B) Division II Systems: C61, E11, E21, E41 (Division II components only), G41, P41, P42, P50

(C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

(A) Division I SW(P41) system affected components result in the loss of Division I RBCLCW (P42) system.

(B) Division I RBSVS (T46) system unit cooler 1T46*UC002A.

(C) No credit for RHR (E41) system valve 1E51*MOV034.

(D) No credit taken for Division II system functions, other than RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

(A) Remaining Division I systems and Division III systems are available.

(B) Division I RHR (E11) system shutdown cooling mode using the Division II RBCLCW system is unavailable; however, the RHR/CS/SRV circulation/suppression pool cooling flow path is available.

(C) Division I RBSVS (T46) system unit cooler 1T46*UC002A impacts Division II equipment.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division I RHR/CS/SRV flow path.

Cold shutdown is achievable using Division I RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 008-08
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: E11, E21, G41, P41, P42, P50, T46

(B) Division II Systems: C61, E11, E21, G41, P41, P42, P50

(C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

(A) Divisions I and II RHR (E11) system heat exchanger inlet and outlet valves 1E11*MOV033A, 033B, 035A and 035B.

(B) Direct cooling of fuel pool by both Division I and II of SW (P41) systems.

(C) RHR (E11) system emergency cooling backup from SW (P41) system for both Divisions I and II.

(D) Cross tie valves 1P41*MOV033A,B,C, and D of Divisions I and II SW (P41) systems.

(E) SW (P41) and RBCLCW (P42) systems' sides of the RBCLCW system heat exchangers for both Divisions I and II.

(F) Division I RBSVS (T46) system unit cooler 1T46*UC002A.

(G) Division II compressed air (P50) system valve 1P50*MOV106.

(H) Division I and II RHR branch valves.

(I) No credit taken for reactor plant remote shutdown (C61) systems.

3. DISABLED FUNCTION EVALUATION:

(A) Divisions I and II RHR (E11) system heat exchanger inlet valves 1E11*MOV033A and B are physically located outside this segment and could be manually operated in order to use the RHR system heat exchangers.

(B) Fuel pool cooling can be affected by intermittent use of Division I RHR system.

(C) SW ultimate cooling not required for shutdown.

(D) Cross-connection of Divisions I and II of SW (P41) systems is not necessary since both the SW divisions are separately available.

(E) RBCLCW (P42) is not required for alternative RHR/CS/RPV flow path.

(F) Division I RHR shutdown cooling mode is unavailable; however, Division I or II RHR/CS/SRV circulation/suppression pool cooling flow paths are available.

(G) Division I RBSVS system unit cooler 1T46*UC002A impacts Division II equipment.

(H) Division II P50 system valve 1P50*MOV106 will not prevent operation of the P50 system for plant shutdown.

(I) Division I and II RHR branch valves will fail in acceptable position and not jeoparidize system operation.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using the Division I RCIC or Division II HPCI systems.

Cold shutdown is achievable using Divisions I or II RHR/CS/SRV flow paths with the RHR (E11) system used in suppression pool cooling, and manual operation of valves 1E11*MOV33A, 033B, 035A, and 035B.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 040-N1
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: E11, E21, G41, P41, P50

(B) Division II System: B31, E11

(C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I systems' functions, other than RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

(B) No credit taken for Division II systems' functions, other than RHR (E11) and HPCI (E41).

(C) Division II RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048

(D) Division II Reactor Water Recirculation RWR (B31) System pressure switch 1B31*PS023B is a low pressure interlock for the Division II RHR (E11) system.

3. DISABLED FUNCTION EVALUATION:

(A) Division II RHR (E11) System valve 1E11*MOV048 may be manually operated on RHR/CS/PRV circulation/suppression pool cooling path is available.

(B) Division II RWR (B31) low pressure interlock 1B31*PS023B may prevent operation of RHR shutdown cooling outboard isolation valve 1E11*MOV048.

(C) Remaining Division II systems are available.

(D) Division III systems are available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division II HPCI (E41) System.

Cold shutdown is achievable using Division II RHR (E11) System with manual operation of RHR (E11) System valve 1E11*MOV048 or the Division II RHR/CS/PRV Flowpath.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 040-N2
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems: B21, B31, E11, P42

   (B) Division II Systems: T46

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   (A) No credit taken for Division I systems' functions.

   (B) Division I RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

   (C) Division II RBSVS (T46) system unit cooler IT46*UC003B

3. DISABLED FUNCTION EVALUATION:

   (A) Division I RHR (E11) system valve 1E11*MOV047 can be manually operated or Division II RHR/S/SRV circulation/suppression pool cooling flow path is available.

   (B) Division II RBSVS System Unit cooler IT46*UC003B affects Division I equipment.

   (C) Division II systems are available.

4. SHUTDOWN CAPABILITY:

   Hot shutdown is achievable using HPCI (E41) System.

   Cold shutdown is achievable using Division II RHR (E11) system with manual operation of valve 1E11*MOV047, or Division II RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 040-N3
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: B21, B31, C41, C61, E11, E21, E51 (Division I components only) G33, G41, P41, P42, P50, T46,

(B) Division II Systems: E41 (Division I components only)

(C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I systems' functions.

(B) Division I RHR (E11) system shutdown cooling inboard isolat on valve 1E11*MOV047.

(C) No credit taken for Division II HPCI (E41) system functions.

3. DISABLED FUNCTION EVALUATION:

(A) Division I RHR (E11) system valve 1E11*MOV047 can be manually operated or Division II RHR/CS/SRV circulation/suppression pool cooling path is available.

(B) Remaining Division II and Division III systems are available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division II RHR/CS/RPV flow path.

Cold shutdown is achievable using Division II RHR (E11) system with manual operation of valve 1E11*MOV047 or Division II RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 040-N4
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: B21, B31, C41, C61, C71, E11, E21, E51 (Division I and II components) G33, G41, P41, P42, P50, T46

(B) Division II Systems: E41 (Division I components only), T46

(C) Division III Systems: P42 (C), T46 (A, B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I and III systems' functions.

(B) Division I RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047 and HPCI steam supply valve 1E11*MOV049.

(C) No credit taken for Division II HPCI (E41) system.

(D) Division II RBSVS (T46) system unit cooler 1T46*UC003B.

3. DISABLED FUNCTION EVALUATION:

(A) Division II systems are available, except the HPCI (E11) system. Division I RHR (E11) system valve (E11)*MOV049 is not required for safe shutdown.

(B) Division II RBSVS (T46) unit cooler 1T46*UC003B affects Division I equipment.

(C) Division I RHR system valve 1E11*MOV047 can be manually operated, or Division II RHR/CS/SRV circulation/suppression pool cooling flow path is available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division II RHR/CS/SRV flow path.

Cold shutdown is achievable using Division II RHR (E11) system with manual operation of valve 1E11*MOV047, or Division II RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 040-N5
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: B21, C61, E11, E51 (Division I and II components) P50

(B) Division II Systems: B21, B31, C41, C61, C71, E11, E21, E41 (Division I and II components) G41, P41, P42, P50, T46

(C) Division III Systems: C61, P41(D), P42(C), T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division II or III systems functions.

(B) Division II Service Air (P50) valves 1P50*MOV103B, 114B, 113B, and 106.

(C) No credit taken for Division I ADS (B21) valves, Reactor Plant Remote shutdown (C61) RCIC (E51) and compressed air (P50) systems functions.

(D) Division I RHR (E11) system shutdown cooling pump suction valves 1E11*MOV032A,B,C,D, inboard isolation valve 1E11*MOV047, HPCI steam supply valve 1E11*MOV049, and 1E11*MOV031A, 031C, and 040A valves.

(E) Division II RHR (E11) outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

(A) Division I RHR (E11) system valve 1E11*MOV047 can be manually operated, or Division II RHR/CS/SRV flow path is available also with manual operation of required valves. Division I E21 (CS) also available for RPV makeup.

(B) Affected Division I RHR (E11) valve 1E11*MOV047 is in series with Division II RHR (E11) valve 1E11*MOV048 which has been shown not to open spuriously.

(C) Division II service air (P50) valves 1P50*MOV114B be manually operated; valve 1P50*MOV103B will fail open position allowing the system to remain functional; valves 1P50*MOV113B and 1P50*MOV106 are not required.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division I CS/SRV flow path for vessel makeup.

Cold shutdown is achievable using Division I RHR with manual operation of required valves, or Division I CS/SRV flow path for RPV makeup with RHR in pool cooling via manual valve operation. Division II P50 system can be used for long term SRV operation.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 040-N6
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I System: E51 (Div. II components only)
C61

(B) Division II Systems: B21, B31, C41, C61, C71, E11, E21, E41 (Div. II components only), G33, G41, P41, P42, P50, T46

(C) Division III Systems: C61, P41(D), P42(C), T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Divisions II and III systems' functions.

(B) Division II RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

(C) Division I RCIC (E51) system temperature element 1E51*TE054B.

3. DISABLED FUNCTION EVALUATION:

(A) Division I systems are available, except Division I RCIC system.

(B) RHR system can be manually operated, or Division I RHR/CS/SRV flow path is available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division I RHR/CS/SRV flow path.

Cold shutdown is achievable using Division I RHR with manual operation of valve 1E11*MOV048 or Division I RHR/CS/SRV circulation/suppression pool cooling flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 040-N7
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: None

(B) Division II Systems: B21, B31, C61, E11, P41, T46

(C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division II systems functions.

(B) Division II RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

(A) Division II RHR (E11) system valve 1E11*MOV048 can be manually operated or Division I RHR/CS/PRV circulation suppression cooling flow path is available.

(B) Division I and III systems are available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division I RCIC (E51) system.

Cold shutdown is achievable using Division I RHR (E11) system with manual operation of valve 1E11*MOV048 or the Division I RHR/CS/PRV flow path can be used.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 040-N8
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: None

(B) Division II System: B31, C61, E11, E21, G41, P41, P42, P50

(C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division II systems' functions, other than HPCI (E41) system.

(B) Division II Reactor Water Recirculation RWR (B31) system pressure switch 1B31*PS023B is a low pressure interlock for the Division II RHR (E11) system.

(C) Division II RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

(A) Division I and III systems, and Division II HPCI (E41) system are available.

(B) Division II RWR (B31) system low pressure interlock 1B31*PS023B may prevent operation of RHR shutdown cooling outboard isolation valve 1E11*MOV048.

(C) Division II RHR(E11) system valve 1E11*MOV048 can be manually operated or Division I RHR/CS/SRV circulation/suppression pool cooling flow path is available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division I RCIC (E51) or Division II HPCI (E41) systems.

Cold shutdown is achievable using the Division I RHR (E11) system with manual operation of valve 1E11*MOV048, or the Division I or III RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 040-01
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems: B21, E11, E21, G41, P41, P42, P50

   (B) Division II Systems: None

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   (A) No credit taken for Division I systems' functions.

   (B) Division I RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

3. DISABLED FUNCTION EVALUATION:

   (A) Division I RHR (E11) system valve 1E11*MOV047 can be manually operated or Division II RHR/CS/SRV circulation/suppression pool cooling flow path is available.

   (B) Division II and III systems are available.

4. SHUTDOWN CAPABILITY:

   Hot shutdown is achievable using Division II HPCI (E41) system.

   Cold shutdown is achievable using Division II RHR (E11) system with manual operation of valve 1E11*MOV047 or the Division II or III RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 040-02
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: B21, B31, E11, E21, G41, P41, P42, P50

(B) Division II System: T46

(C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I system's functions.

(B) Division I RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

(C) Division II RBSVS (T46) system unit cooler 1T46*UC003B.

3. DISABLED FUNCTION EVALUATION:

(A) Division I RHR (E11) system valve 1E11*MOV047 can be manually operated or Division II RHR/CS/SRV circulation/suppression pool cooling flow path is available.

(B) Division II RBSVS systems unit cooler 1T46*UC003B affects Division I equipment.

(C) Division II and III system are available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division II HPCI (E41) system.

Cold shutdown is achievable using Division II RHR (E11) system with manual operation of valve 1E11*MOV047 or Division II or III RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 040-03
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: B21, B31, C41, C61, E11, E21, E51, (Division I components only) G33, G41, P41, P42, P50, T46

(B) Division II Systems: E41 (Division I components only), T46

(C) Division III Systems: P42(C), T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I and III systems' functions.

(B) Division I RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047 and HPCI steam supply valve 1E11*MOV049.

(C) No credit taken for Division II HPCI (E41) system.

(D) Division II RBSVS (T46) system unit cooler 1T46*UC003B.

3. DISABLED FUNCTION EVALUATION:

(A) Division II systems are available, except the HPCI (E41) system, thus RHR valve 1E11*MOV049 is not required for safe shutdown.

(B) Division II RBSVS (T46) system unit cooler 1T46*UC003B affects Division I equipment.

(C) Division I RHR system valve 1E11*MOV047 can be manually operated, or Division II RHR/CS/SRV circulation/suppression pool cooling flow path is available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division II RHR/CS/SRV flow path.

Cold shutdown is achievable using Division II RHR (E11) system with manual operation of valve 1E11*MOV047, or Division II RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 040-04
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: B21, B31, C41, C61, E11, E21, E51, (Division I and II components) G33, P41, P42, P50, T46

(B) Division II Systems: E41 (Division I components only), T46

(C) Division III Systems: P42(C)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I systems' functions.

(B) Division I RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047 and HPCI steam supply valve 1E11*MOV049.

(C) Division II HPCI (E41) system pressure switches 1E41*PS025A&C and RBSVS (T46) system unit cooler 1T46*UC003B.

(D) No credit taken for Division III systems' function.

3. DISABLED FUNCTION EVALUATION:

(A) Division II systems are available, except the HPCI (E41) system, thus RHR valve 1E11*MOV049 is not required for safe shutdown.

(B) Division I RHR system valve 1E11*MOV047 can be manually operated, or Division II RHR/CS/SRV circulation/suppression pool cooling flow path is available.

(C) Division II RBSVS system unit cooler 1T46*UC003C affects Division I equipment.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division II RHR/CS/SRV flow path.

Cold shutdown is achievable using Division 1I RHR (E11) system and manual operation of valve 1E11*MOV047, or Division II RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 040-05
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: B21, C61, E11, E51 (Division I and II components), P50

(B) Division II Systems: B21, B31, C41, C61, C71, E11, E21, E41 (Division II components only), G33, G41, P41, P42, P50, T46

(C) Division III Systems: C61, P41(D), P42(C), T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division II and III systems' functions.

(B) Division II RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

(C) No credit taken for Division I RCIC (E51) system functions and Division I RHR (E11) HPCI steam supply valve 1E11*MOV049 and 1E11*MOV047, 031A, 032A, 040A, 031C, and 032C.

(D) Division II Service Air (P50) valves 1P50*MOV114B and 103B.

3. DISABLED FUNCTION EVALUATION:

(A) RHR valve 1E11*MOV049 is not required for shutdown.

(B) RHR valve 1E11*MOV047 can be manually operated or Division I CS/SRV flow path is available with manual operation of necessary RHR valves.

(C) Remaining Division I systems are available.

(D) Division I RHR (E11) valve 1E11*MOV047 is in series with affected 1E11*MOV048 valve and will not open spuriously.

(E) Remaining Division I P50 and B21 components are available.

(F) Division II RHR system valves can be manually operated, or Division I CS/SRV circulation/suppression pool cooling flow path is available.

(G) Division II compressed air (P50) system valve 1P50*MOV114B can be manually operated. Valve

1P50*MOV103B will fail in the open position enabling Division II (P50) system to remain available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division I CS/SRV flow path.

Cold shutdown is achievable using Division I RHR system and manual operation of required valves, or Division I CS/SRV flow path, available with RHR in pool cooling via manual valve operation.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 040-06
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: None

(B) Division II Systems: B21, B31, C61, E11, E21, G41, P41, P50, T46

(C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division II systems' functions.

(B) Division II RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

(A) Division II RHR (E11) system valve 1E11*MOV048 can be manually operated or Division I RHR/CS/SRV circulation/suppression pool cooling flow path is available.

(B) Division I and III systems are available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division I RCIC (E51) system.

Cold shutdown is achievable using Division I RHR (E11) system with manual operation of valve 1E41*MOV048 or Division I or III RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 040-07
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems: None

   (B) Division II Systems: B21, B31, C61, E11, E21, G41, P41, P50

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   (A) No credit taken for Division II systems' functions.

   (B) Division II RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

   (A) Division II RHR (E11) system valve 1E11*MOV048 can be operated manually or Division I RHR/CS/SRV circulation supression pool cooling is available.

   (B) Division I and III systems are available.

4. SHUTDOWN CAPABILITY:

   Hot shutdown is achievable using Division I RCIC (E51) system.

   Cold shutdown is achievable using Division I RHR (E11) system with manual operation of valve 1E11*MOV048 or Division I or II RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 040-08
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: E11, E21, G41, P41, P42, P50

(B) Division II Systems: B31, C61, E11, E21, G41, P41, P42, P50

(C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I system functions other than RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047 and the RCIC (E51) system.

(B) No credit taken for Division II system functions other than the HPCI (E41) system and the unaffected Compressed Air (P50) components.

(C) Division II RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

(D) Division II RWR (B31) system pressure switch 1B31*PS023B is a low pressure interlock for the Division II RHR system.

(E) Division II (P50) valves 1P50*MOV104 and 1P50*MOV106.

3. DISABLED FUNCTION EVALUATION:

(A) Division I RCIC (E51) and Division II HPCI (E41) systems are available.

(B) Division II RHR (E11) system valve 1E11*MOV048 can be manually operated or Division I or III RHR/CS/SRV circulation/suppression pool cooling flow path is available.

(C) Division III systems are available.

(D) Remaining Division II (P50) components are available.

(E) 1P50*MOV104 and 1P50*MOV106 valves are not required for shutdown.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division I RCIC (E51) or Division II HPCI (E41) systems.

Cold shutdown is achievable using Division I or III RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 063-N1
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I System: E11

(B) Division II Systems: None

(C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

Division I RHR (E11) system drain valve 1E11*MOV051.

3. DISABLED FUNCTION EVALUATION:

Division I RHR (E11) system drain valve 1E11*MOV051 is in series with Division II RHR (E11) system drain valve 1E11*MOV052, and therefore Division I RHR (E11) system remains available.

4. SHUTDOWN CAPABILITY:

Hot and cold shutdown are achievable using Division I, II, and III systems.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 063-N2
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems: B21, B31, E11, P42

   (B) Division II Systems: None

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   (A) No credit taken for Division I systems' functions.

   (B) Division I RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

3. DISABLED FUNCTION EVALUATION:

   (A) Division II and III systems are available.

   (B) Division I RHR (E11) system valve 1E11*MOV047 can be manually operated or Division II RHR/CS/SRV circulation/suppression pool cooling flow path is available.

4. SHUTDOWN CAPABILITY:

   Hot shutdown is achievable using Division II HPCI (E41) system.

   Cold shutdown is achievable using Division II and III RHR (E11) system with manual operation of Division I RHR (E11) valve 1E11*MOV047 or Division II RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 063-N3
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A)	Division I Systems:	B31, C41, E11, E21, C61, E51 (Division I components only), G33, G41, P41, P42, P50, T46
(B)	Division II System:	E11, E41 (Division I and II components)
(C)	Division III Systems:	P42(C), T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I systems' functions.

(B) Division I RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV047.

(C) Division II RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

(D) No credit taken for Division II HPCI (E41) system.

3. DISABLED FUNCTION EVALUATION:

(A) Division II systems are available, except HPCI (E11) system.

(B) RHR (E11) system valves 1E11*MOV048 and 1E11*MOV047 can be manually operated, or Division II RHR/CS/SRV circulation/suppression pool cooling flow path is available.

(C) Division I RHR (E11) system valve 1E11*MOV047 is in series with affected 1E11*MOV048 and will not open spuriously.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division II RHR/CS/SRV flow path.

Cold shutdown is achievable using Division II RHR (E11) system with manual operation of valves, or Division II RHR/CS/SRV circulation/suppression pool cooling flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 063-N4
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: B21, B31, C41, C61, E11, E21, E51 (Division I and II components), G33, G41, P41, P42, P50, T46

(B) Division II Systems: B21, C41, C61, E11, E21, E41 (Division I and II components), G33, P41, P42, P50, T46

(C) Division III Systems: P42(C), T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I and III systems' functions.

(B) Division I and II RHR (E11) system shutdown cooling inboard and outboard isolation valves 1E11*MOV047 and 1E11*MOV048.

(C) Portions of Division II RBSVS (1T46), SW (P41) and compressed air (P50) systems.

(D) No credit taken for Division II HPCI (E41) system.

3. DISABLED FUNCTION EVALUATION:

(A) Remaining essential Division II systems or portions thereof are available.

(B) RHR system valves 1E11*MOV047 and 1E11*MOV048 can be manually operated, or Division II RHR/CS/SRV circulation/suppression pool cooling flow path is available.

(C) The affected electrical components will not cause spurious opening of RHR (E11) systems valves 1E11*MOV047 and 048.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using the Division II RHR/CS/SRV flow path.

Cold shutdown is achievable using Division II RHR system with manual operation of valves 1E11*MOV047 and 1E11*MOV048, or the Division II RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 063-N5
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: E11, E51 (Division I and II components)

(B) Division II Systems: B21, B31, E11, E21, E32, E41 (Division I and II components), C41, C61, G33, G41, P41, P42, P50, T46

(C) Division III Systems: C61, P41(D), P42(C), T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I RCIC (E51) and RHR (E11) systems other than system shutdown cooling outboard isolation valve 1E11*MOV047.

(B) Division I RHR (E11) system HPCI steam supply valve 1E11*MOV049.

(C) Division II RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

(D) No credit taken for Division II and III systems' functions.

3. DISABLED FUNCTION EVALUATION:

(A) Division I systems are available, except the RCIC (E51) and RHR (E11) systems.

(B) Division II RHR (E11) system valve 1E11*MOV048 can be manually operated, or Division I RHR/CS/SRV circulation/suppression pool cooling flow path is available.

(C) Division I RHR (E11) valve 1E11*MOV049 not required for safe shutdown.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division I RHR/CS/SRV flow path.

Cold shutdown is achievable using Division I RHR (E11) system and manual operation of valve 1E11*MOV048, or Division I RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

Note on the Remote Shutdown Panel

A separate analysis was performed to consider a fire in or near the Remote Shutdown Panel 1C61*PNL-RSP which is located in this segment. A fire occurring in or near the remote shutdown panel, of the severity necessary to cause destruction of the remote shutdown panel and transfer switches, is an extremely unlikely event. The panel, including transfer switches, is located in the reactor building at el 63 ft-0 in. It is located in its own separate cubicle which provides a fully enclosed space protected by a 3 hour rated fire barrier. The cubicle contains both area and panel mounted early warning smoke detectors which sound early warning alarms in the control room. An independent halon fire suppression system is provided for the remote shutdown panel cubicle. It is automatically actuated by ionization detectors with actuation alarmed in the main control room. In addition, portable extinguishers are located just outside the cubicle and two water hose racks are located within 50 ft of the cubicle affording 100 percent coverage with 100 percent overlap. The remote shutdown panel itself contains only low energy control circuits. The panel is designed such that its circuits are deenergized when it is not in use.

If a fire is postulated in the remote shutdown panel, but the transfer switches are not involved, there would be no effect on controls in the main control room. The operator would retain the capability to utilize all shutdown equipment from the main control room. A fire involving the remote shutdown panel controls and the transfer switches would not preclude a safe shutdown from the main control room. Sufficient redundant or diverse equipment, not having controls at the remote shutdown panel, are available in the main control room to accomplish safe shutdown should the operator not be able to use any or all equipment having controls located at the remote shutdown panel.

SEGMENT 063-N6
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I System: E51 (Division II components only)

(B) Division II Systems: B21, B31, C41, C61, E11, E21, E41 (Division II components only), G33, G41, P41, P42, P50, T46

(C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division II systems' functions.

(B) Division II RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

(C) No credit taken for Division I RCIC (E51) system.

3. DISABLED FUNCTION EVALUATION:

(A) Division I and III systems are available, except Division I RCIC (E51) system.

(B) Division II RHR (E11) system valve 1E11*MOV048 can be manually operated, or Division I RHR/CS/SRV circulation/suppression pool cooling flow path is available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division I RHR/CS/SRV flow path.

Cold shutdown is achievable using Division I RHR (E11) system with manual operation of valve 1E11*MOV048, or Division I RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 063-N7
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I System: E11

   (B) Division II Systems: B21, B31, C61, E11

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   (A) Division I RHR (E11) system drain valve 1E11*MOV051.

   (B) No credit taken for Division II systems' functions.

   (C) Division II RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

   (A) Division I and III systems are available.

   (B) Division I RHR (E11) system drain valve 1E11*MOV051 is in series with affected Division II RHR (E11) system drain valve 1E11*MOV052 on the Division I RHR flow path. Division I RHR flow path remains available with manual valve operations.

   (C) Division I E21 (CS) remains available. RHR pool cooling available via manual valve operation.

4. SHUTDOWN CAPABILITY:

   Hot shutdown is achievable using Division I RCIC (E51) system.

   Cold shutdown is achievable using Division I and III (RHR (E11) systems with manual operation of Division II RHR (E11) valves 1E11*MOV048, 052 and 051 or the Division I RHR/CS/SRV flow path with manual operation of required valves.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 063-N8
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I System: E11

   (B) Division II Systems: None

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   Division I RHR (E11) system drain valve 1E11*MOV051.

3. DISABLED FUNCTION EVALUATION:

   (A) Division I RHR (E11) system drain valve 1E11*MOV051 is in series with unaffected Division II RHR (E11) system drain valve 1E11*MOV052, therefore Division I RHR (E11) system is available.

   (B) Divisions I, II, and III are available.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using Division I, II, and III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 063-01
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems: B21, B31, E11, P42

   (B) Division II Systems: None

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   (A) No credit taken for Division I systems' functions.

   (B) Division I RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

3. DISABLED FUNCTION EVALUATION:

   (A) Division II and III systems are available.

   (B) Division I RHR (E11) system valve 1E11*MOV047 can be manually operated or Division II RHR/CS/SRV circulation/suppression pool cooling flow path is available.

4. SHUTDOWN CAPABILITY:

   Hot shutdown is achievable using Division II HPCI (E41) system.

   Cold shutdown is achievable using Division I and II RHR system with manual operation of Division I RHR (E11) system valve 1E11*MOV047 or Division II RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 063-02
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I System: E11

   (B) Division II System: E11

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   (A) No credit taken for Division I systems' functions, other than RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

   (B) Division II RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

   (A) Remaining Division II systems and Division III systems are available.

   (B) Division II RHR (E11) system valve 1E11*MOV048 can be manually operated, or Division II RHR/CS/SRV circulation/suppression pool cooling flow path is available.

4. SHUTDOWN CAPABILITY:

   Hot shutdown is achievable using Division II HPCI (E41) system.

   Cold shutdown is achievable using Division II RHR (E11) with manual operation of valve 1E11*MOV048, or Division II RHR/CS/SRV circulation/suppression pool cooling flow path.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 063-03
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: B21, B31, C41, C61, E11, E21, E51 (Division I components only), G33, G41, P41, P42, P50, T46

(B) Division II Systems: E11, E41 (Division I and II)

(C) Division III Systems: P42(C), T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I and III systems' functions.

(B) Division I and II RHR (E11) system shutdown cooling isolation valves 1E11*MOV047 and 1E11*MOV048.

(C) Division II HPCI (E41) system.

3. DISABLED FUNCTION EVALUATION:

(A) Division II systems are available, except HPCI (E41) system.

(B) Division I and II RHR (E11) system valves 1E11*MOV047 and 1E11*MOV048 can be manually operated, or Division II RHR/CS/SRV circulation/suppression pool cooling flow path is available.

(C) The affected electrical components will not cause spurious opening of RHR (E11) system valves 1E11*MOV047 and 048.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using the Division II RHR/CS/SRV flow path.

Cold shutdown is achievable using the Division II RHR (E11) system with manual operation of valves 1E11*MOV047 and 1E11*MOV048, or Division II RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 063-04
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: E11, E51 (Division I and II components)

(B) Division II Systems: E11, E41 (Division I and II components)

(C) Division III Systems: P42(C), T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) Division I RHR (E11) system HPCI steam supply valve 1E11*MOV049.

(B) No credit taken for Division I RCIC (E51) and Division II HPCI (E41) systems.

(C) Division II RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

(D) No credit taken for Division III RBCLCW (P42) and RBVS (T46) systems

3. DISABLED FUNCTION EVALUATION:

(A) Division I is available, except RCIC (E51) system.

(B) Division I RHR (E11) steam supply valve 1E11*MOV049 is not required for shutdown.

(C) Division II RHR (E11) system valve 1E11*MOV048 can be manually operated, or Division I RHR/CS/SRV circulation/suppression pool cooling flow path is available.

(D) Remaining Division III systems are available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division I RHR/CS/SRV circulation/suppression pool cooling flow path.

Cold shutdown is achievable using the Division I RHR (E11) system with manual operation of valve 1E11*MOV048, or Division I RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 063-05
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I System: E51 (Division II components only)

(B) Division II Systems: B21, B31, C41, C61, C71, E11, E21, E41 (Division II components only), G33, G41, P41, P42, P50, T46

(C) Division III Systems: C61, P41(C), P42(C), T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) Division I RCIC (E51) system level switch 1B21*LIS027C, temperature element 1E51*TE054B, and steam supply inboard isolation valve 1E51*MOV041.

(B) No credit taken for Division II and III systems' functions.

(C) Division II RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

(A) Division I systems are available, except RCIC (E51) system.

(B) Division II RHR (E11) system valve 1E11*MOV048 can be manually operated, or Division I RHR/CS/SRV circulation/suppression pool cooling flow path is available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division I RHR/CS/SRV flow path.

Cold shutdown is achievable using Division I RHR (E11) system with manual operation of valve 1E11*MOV048, or the Division I RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

Note on the Remote Shutdown Panel

A separate analysis was performed to consider a fire in or near the Remote Shutdown Panel 1C61*PNL-RSP which is located in this segment. A fire occurring in or near the remote shutdown panel, of the severity necessary to cause destruction of the remote shutdown panel and transfer switches, is an extremely unlikely event. The panel, including transfer switches, is located in the reactor building at el 63 ft-0 in. It is located in its own separate cubicle which provides a fully enclosed space protected by a 3 hour rated fire barrier. The cubicle contains both area and panel mounted early warning smoke detectors which sound early warning alarms in the control room. An independent halon fire suppression system is provided for the remote shutdown panel cubicle. It is automatically actuated by ionization detectors with actuation alarmed in the main control room. In addition, portable extinguishers are located just outside the cubicle and two water hose racks are located within 50 ft of the cubicle affording 100 percent coverage with 100 percent overlap. The remote shutdown panel itself contains only low energy control circuits. The panel is designed such that its circuits are deenergized when it is not in use.

If a fire is postulated in the remote shutdown panel, but the transfer switches are not involved, there would be no effect on controls in the main control room. The operator would retain the capability to utilize all shutdown equipment from the main control room. A fire involving the remote shutdown panel controls and the transfer switches would not preclude a safe shutdown from the main control room. Sufficient redundant or diverse equipment, not having controls at the remote shutdown panel, are available in the main control room to accomplish safe shutdown should the operator not be able to use any or all equipment having controls located at the remote shutdown panel.

SEGMENT 063-06
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I System: E11

   (B) Division II Systems: B31, C61, E11

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   (A) Division I RHR (E11) system drain valve 1E11*MOV051.

   (B) No credit taken for Division II systems' functions, other than RHR (E11) system shutdown cooling isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

   (A) Division I RHR (E11) system valves 1E11*MOV051 and 1E11*MOV052 are in series on Division I RHR flow path; therefore, Division I RHR (E11) system remains available with manual operation of valves.

   (B) Division I and III systems are available.

4. SHUTDOWN CAPABILITY:

   Hot shutdown is achievable using Division I RCIC (E51) or Division II HPCI (E41) systems.

   Cold shutdown is achievable using Division I RHR with manual operation of valves 1E11*MOV051 or 053.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 063-07
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I System: E11

   (B) Division II Systems: B21, B31, C61, E11

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   (A) Division I RHR (E11) system drain valve 1E11*MOV051.

   (B) No credit taken for Division II systems' functions.

   (C) Division II RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

   (A) Division I RHR (E11) system drain valve 1E11*MOV051 is in series with affected Division II (E11) RHR system drain valve 1E11*MOV052 on the Division I flow path. Therefore, Division I RHR system remains available.

   (B) Division I and III systems are available.

   (C) Division II RHR (E11) system valve 1E11*MOV048 can be manually operated.

4. SHUTDOWN CAPABILITY:

   Hot shutdown is achievable using Division I RCIC (E51) system.

   Cold shutdown is achievable using Division I and III systems with manual operation of Division II RHR (E11) valves 1E11*MOV048, 051 and/or 052.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 063-08
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I System: E11

   (B) Division II Systems: None

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   Division I RHR (E11) system drain valve 1E11*MOV051.

3. DISABLED FUNCTION EVALUATION:

   Division I RHR (E11) system drain valve 1E11*MOV051 is in series with unaffected Division II RHR (E11) system drain valve 1E11*MOV052, therefore Division I RHR (E11) system remains available.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using Division I, II, and III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 078-N1
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems: B31, C61, E11, G33, P42, P50

   (B) Division II Systems: None

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   (A) No credit taken for Division I systems' functions, other than RCIC(E51) system.

   (B) RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

3. DISABLED FUNCTION EVALUATION:

   (A) Division I RCIC (E51) system is available.

   (B) Division II and III systems are available.

   (C) Division I RHR system valve 1E11*MOV047 can be manually operated, or Division II RHR/CS/SRV circulation/suppression pool cooling flow path is available.

4. SHUTDOWN CAPABILITY:

   Hot shutdown is achievable using Division I RCIC (E51) system.

   Cold shutdown is achievable using Division II and III systems and with manual operation of RHR system valve 1E11*MOV047, or Division II RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 078-N2
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A)	Division I Systems:	B21, B31, C41, C61, E11, E21, E51 (Division I components only) G33, P41, P42, P50, T46,
(B)	Division II System:	E41 (Division I components only)
(C)	Division III Systems:	None

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I systems' functions.

(B) Division I RHR (E11) system shutdown cooling inboard valve 1E11*MOV047.

(C) No credit taken for Division II HPCI (E41) system.

3. DISABLED FUNCTION EVALUATION:

(A) Division II systems are available, except the HPCI (E41) system.

(B) Division I RHR (E11) system valve 1E11*MOV047 can be manually operated, or Division II RHR/CS/SRV circulation/suppression pool cooling flow path is available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division II RHR/CS/SRV flow path.

Cold shutdown is achievable using Division II RHR (E11) systems with manual operation of RHR valve 1E11*MOV047, or Division II RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 078-N3
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: B21, B31, C41, C61, E11, E21, E51 (Division I components only) G33, G41, P41, P42, P50, T46

(B) Division II System: E41 (Division I components only)

(C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I systems' functions.

(B) Division I RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

(C) No credit taken for Division II HPCI (E41) system.

3. DISABLED FUNCTION EVALUATION:

(A) Division II and III systems are available, except Division II HPCI (E41) system.

(B) Division I RHR system valve 1E11*MOV047 can be manually operated or Division II RHR/CS/SRV circulation/suppression pool cooling flow path is available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division II RHR/CS/SRV flow path.

Cold shutdown is achievable using Division II RHR (E11) system with manual operation of valve 1E11*MOV047, or Division II RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 078-N4
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A)	Division I Systems:	B21, B31, C41, C61, E11, E21, E51 (Division I components only), G33, G41, P41, P42, P50, T46
(B)	Division II Systems:	C41, E41 (Division I components only)
(C)	Division III System:	P42(C), T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I and III systems' functions.

(B) RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

(C) Division II Standby Liquid Control system SLC (C41) pump 1C41*P024B.

(D) No credit taken for Division II HPCI (E41) system.

3. DISABLED FUNCTION EVALUATION:

(A) Division II systems are available, except the HPCI (E41) and SLC (C41) systems.

(B) Division I RHR (E11) system valve 1E11*MOV047 can be manually operated, or Division II RHR/CS/SRV circulation/suppression pool cooling flow path is available.

(C) Division II Standby Liquid Control SLC (C41) system is not required for normal shutdown.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division II RHR/CS/SRV flow path.

Cold shutdown is achievable using Division II RHR (E11) system with manual operation of valve 1E11*MOV047, or Division II RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 078-N5
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A)	Division I Systems:	E51 (Division I and II components), T46
(B)	Division II Systems:	B21, B31, C41, C61, E11, E21, E32, E41, (Division II components only), G33, G41, P41, P42, P50, T46
(C)	Division III System:	P42(C), T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division II systems' functions.

(B) Division II RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

(C) No credit taken for Division I RCIC (E51) system, and RBSVS (T46) automatic isolation circuit.

(D) No credit taken for Division III RBCLCW (P42) and RBSVS (T46) systems.

3. DISABLED FUNCTION EVALUATION:

(A) Division I systems are available, except RCIC (E51) system.

(B) Division II RHR (E11) system valve 1E11*MOV048 can be manually operated, or Division I RHR/CS/SRV circulation/suppression pool cooling flow path is available.

(C) Division I RBSVS (T46) auto isolation is not required for normal shutdown.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division I RHR/CS/SRV flow path.

Cold shutdown is achievable using Division I RHR (E11) System with manual operation of valve 1E11*MOV048, or Division I RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 078-N6
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: E51 (Division II components only)

(B) Division II Systems: B21, B31, C41, C61, E11, E21, E32, E41 (Division II components only), G33, G41, P41, P42, P50, T46

(C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division II systems functions.

(B) Division II RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

(C) No credit taken for Division I RCIC (E51) system.

3. DISABLED FUNCTION EVALUATION:

(A) Division I and III systems are available, except Division I RCIC system.

(B) RHR (E11) system valve 1E11*MOV048 can be manually operated, or Division I RHR/CS/SRV circulation/suppression pool cooling flow path is available.

(C) Remaining Division I RBSVS T46 coolers available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division I RHR/CS/SRV flow path.

Cold shutdown is achievable using Division I RHR (E11) System with manual operation of valve 1E11*MOV048, or Division I RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 078-N7
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I System: E51 (Division II components only)

(B) Division II Systems: B21, B31, C41, C61, G33, E11, E21, E41 (Division II components only), G33, P41, P42, P50, T46

(C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I RCIC (E51) system.

(B) No credit taken for Division II systems' functions.

(C) Division 1 RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

(A) Remaining Division I and Division III systems are available.

(B) RHR (E11) System valve 1E11*MOV048 can be manually operated or Division I RHR/CS/PRV flow path is available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using remaining Division I systems or RHR/CS/SRV flow path.

Cold shutdown is achievable using Division I RHR system with manual operation of value 1E11*MOV048 or the Division I RHR/CS/PRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 078-N8
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I System: E51 (Division II components only)

   (B) Division II Systems: B21, B31, G33

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   (A) No credit taken for Division I RCIC system functions.

   (B) No credit taken for Division II systems's functions, other than HPCI (E41) system and RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION

   (A) Division I systems are available, except RCIC (E51) system.

   (B) Division II HPIC (E41) system is available.

   (C) Division III systems are available.

4. SHUTDOWN CAPABILITY:

   Hot shutdown is achievable using Division II HPCI (E41) system.

   Cold Shutdown is achievable using Division I, II, or III RHR systems.

5. FURTHER ACTION RECOMMENDED:

   None

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 078-01
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: B21, B31, C61, E11, G33, P42, P50

(B) Division II System: E41 (Division I components only)

(C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I systems' functions, other than RCIC (E51) system.

(B) Division I RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

(C) No credit taken for Division II HPCI (E41) system.

3. DISABLED FUNCTION EVALUATION:

(A) Division I RCIC (E51) system is available.

(B) RHR (E11) system valve 1E11*MOV047 can be manually operated, or Division II RHR/CS/SRV circulation/suppression pool cooling flow path is available.

(C) Division II and III systems are available, except Division II HPCI (E41) system.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division I RCIC (E51) system.

Cold shutdown is achievable using Divisions II and III systems with manual operation of RHR (E11) system valve 1E11*MOV047, or Division II RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 078-02
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: B21, B31, C41, C61, E11, E21, E51, (Division I components only), G33, P41, P42, P50, T46

(B) Division II System: E41 (Division I components only)

(C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I systems' functions.

(B) No credit taken for Division II HPCI (E41) system.

(C) Division I RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

3. DISABLED FUNCTION EVALUATION:

(A) Division II and III systems are available, except Division II HPCI (E41) system.

(B) RHR (E11) system valve 1E11*MOV047 can be manually operated, or Division II RHR/CS/SRV circulation/suppression pool cooling flow path is available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division II, RHR/CS/SRV flow path.

Cold shutdown is achievable using Division II RHR (E11) system with manual operation of valve 1E11*MOV047, or Division II RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 078-03
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: B21, B31, C41, C61, E11, E21, E51 (Division I components only), G33, G41, P41, P42, P50, T46

(B) Division II System: E41 (Division I components only)

(C) Division III System: P42(C), T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I and III systems' functions.

(B) No credit taken for Division II HPCI (E41) system.

(C) Division I RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

3. DISABLED FUNCTION EVALUATION:

(A) Division II systems are available, except HPCI (E41) system.

(B) RHR (E11) system valve 1E11*MOV047 can be manually operated, or Division II RHR/CS/SRV circulation/suppression pool cooling flow path is available.

(C) Division III RBCLCW system not available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division II RHR/CS/SRV flow path.

Cold shutdown is achievable using Division II RHR (E11) system with manual operation of valve 1E11*MOV047, or Division II RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 078-04
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: C41, E11, E21, E51 (Division I components only), G41, P41, T46

(B) Division II System: C41

(C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I systems.

(B) Division I and II Standby Liquid Control SLC (C41) system pumps 1C41*P024A and B.

3. DISABLED FUNCTION EVALUATION:

(A) Remaining Division II systems and Division III systems are available.

(B) Division II Standby Liquid Control SLC (C41) system is not required for normal shutdown.

4. SHUTDOWN CAPABILITY:

Hot and cold shutdown are achievable using remaining Division II and Division III systems.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 078-05
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A)	Division I Systems:	E51 (Division I and II components), T46
(B)	Division II Systems:	B21, B31, C41, C61, E11, E21, E32, E41, (Division II components only), G33, G41, P41, P42, P50, T46,
(C)	Division III System:	P42(C), T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I RCIC (E51) system and RBSVS auto isolation circuit.

(B) No credit taken for Division II and III systems' functions.

(C) Division II(E11) RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

(A) Division I systems are available, except RCIC (E51) system.

(B) Division II RHR (E11) system valve 1E11*MOV048 can be manually operated, or Division I RHR/CS/SRV circulation/suppression pool cooling flow path is available.

(C) Division I RBSVS auto isolation is not required for normal shutdown.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division I RHR/CS/ SRV flow path.

Cold shutdown is achievable using Division I RHR (E11) system with manual operation of valve 1E11*MOV048, or Division I RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 078-06
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A)	Division I Systems:	E51 (Division II components only)
(B)	Division II Systems:	B21, B31, C41, C61, E11, E21, E41 (Division II components), G33, P41, P42, P50, T46
(C)	Division III Systems:	None

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I RCIC (E51) system.

(B) No credit taken for Division II systems' functions.

(C) Division II RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

(A) Division I and III systems are available, except Division I RCIC (E51) system.

(B) Division II RHR (E11) system valve 1E11*MOV048 can be manually operated, or Division I RHR/CS/SRV circulation/suppression pool cooling flow path is available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division I and III RHR/CS/SRV flow path.

Cold shutdown is achievable using Division I RHR (E11) system with manual operation of valve 1E11*MOV048, or Division I RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 078-07
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I System: E51 (Division II components only)

(B) Division II Systems: B21, B31, C61, E11, G33, P50

(C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I RCIC (E51) system.

(B) No credit taken for Division II systems' functions, other than HPCI (E41) system.

(C) Division II RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

(A) Division I and III systems are available, except Division I RCIC (E51) system.

(B) Division II HPCI (E41) system is available.

(C) Division II RHR (E11) system valve 1E11*MOV048 can be manually operated or Division I RHR/CS/SRV circulation/suppression pool cooling flow path is available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division II HPCI (E41) system.

Cold shutdown is achievable using Division I RHR (E11) system with manual operation of valve 1E11*MOV048 or Division I RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 078-08
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems: None

   (B) Division II System: None

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   None

3. DISABLED FUNCTION EVALUATION:

   Divisions I, II, and III systems are available.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using Divisions I, II, and III systems.

5. FURTHER ACTION RECOMMENDED:

   None

Original
April 1983

SEGMENT 112-N1
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: B31,C61,E11,P41,P42,P50,T46

(B) Division II Systems: B31,C61,E11, P42,P50, T46

(C) Division III Systems: P42(C), T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I Reactor Water Recirculation RWR (B31), RHR (E11), RBSVS (T46), Service Water (P41) RBCLCW(P42) and Compressed Air (P50) systems functions.

(B) No credit taken for Division II Reactor Water Recirculation RWR (B31), RHR (E11), RBSVS (T46), RBCLCW(P42) and Reactor Plant Shutdown (C61) systems functions.

(C) Division II Compressed Air (P50) system valve 1P50*MOV103B

(D) No credit taken for Division III RBCLCW (P42) and RBSVS (T46) systems functions.

3. DISABLED FUNCTION EVALUATION:

(A) Remaining Division I, II, and III systems are available.

(B) Division I or II CS (E21) system available.

(C) Division II valves 1P50*MOV103B would fail in the open position enabling this division to remain functional.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division II HPCI (E41) system.

Cold shutdown is achievable using Division II CS/PRV flow path and Division II RHR in pool cooling via manual valve operation.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 112-N2
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: B31, C41, C61, E11, E21, G33, P41, P42, P50, T46

(B) Division II Systems: E41 (Division I components only)

(C) Division III Systems: P42(C), T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I systems' functions, other than the RCIC (E51) system.

(B) Division I RHR (E11) system shutdown cooling isolation valve 1E11*MOV047.

(C) No credit taken for Division II HPCI (E41) system.

(D) No credit taken for Division III systems' functions.

3. DISABLED FUNCTION EVALUATION:

(A) Division I RCIC (E51) system is available.

(B) Division I RHR (E11) system valve 1E11*MOV047 may be manually operated or Division II RHR/CS/SRV circulation/suppression pool cooling flow path is available.

(C) Division II systems are available, except HPCI (E41) system.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division I RCIC (E51) system.

Cold shutdown is achievable using Division II RHR/CS/SRV flow path or Division II RHR (E11) System with manual operation of valve 1E11*MOV047.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 112-N3
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A)	Division I Systems:	B31, C41, C61, E11, E21, E51 (Division I components only), G33, G41, P41, 42, P50, T46
(B)	Division II Systems:	E41 (Division I components only)
(C)	Division III Systems:	P42(C), T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I and III systems functions.

(B) Division I RHR (E11) system valve 1E11*MOV047.

3. DISABLED FUNCTION EVALUATION:

(A) Division I RHR(E11) system valve can be manually operated or the Division II RHR/CS/PRV circulation/suppression pool flow path is available.

(B) Division II systems are available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division II RHR/CS/PRV flow path.

Cold shutdown is achievable using Division II RHR(E11) system with manual operation of valve 1E11*MOV047 or the Division II RHR/CS/PRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 112-N4
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: B31, C41, C61, E11, E21, G41, P41, P42, P50, T46

(B) Division II Systems: C41, C61, G41, T46

(C) Division III Systems: P42(C), T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I and III systems' functions, other than Division I RHR (E11) system shutdown cooling inboard isolation valves 1E11*MOV047 and remaining RBSVS (T46) components.

(B) Division II SLC (C41) system pump 1C41*P024B.

(C) Division II fuel pool cooling (G41) system valve 1G41*MOV032B.

(D) Division II RBSVS (T46) system unit cooler for MCC room, 1T46*UC020B.

(E) No credit taken for Division III (P42) and RBSVS (T46) systems.

3. DISABLED FUNCTION EVALUATION:

(A) Division II systems are available except as noted.

(B) Division I and II SLC (C41) systems are not required for normal shutdown.

(C) Division I and II emergency fuel pool cooling (G41) systems are not required for normal shutdown; affected G41 valves are in series with unaffected Division II P41 valves and the Division I P41 valves which would not open inadvertently.

(D) Division I RBSVS (T46) system that is redundant to the disabled Division II component is available to cool MCC room.

4. SHUTDOWN CAPABILITY:

Hot and cold shutdown are achievable using remaining Division I and II systems.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 112-N5
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems: P42

   (B) Division II Systems: C41, C61, E11, E21, G33, G41, P41, P42, P50, T46

   (C) Division III System: P42(C), T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

   (A) No credit taken for Division II systems' functions.

   (B) No credit taken for Division III RBCLCW (P42) and RBSVC (T46) systems functions.

3. DISABLED FUNCTION EVALUATION:

   Division I systems are available.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using Division I systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 112-N6
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: E51 (Division II components)

(B) Division II Systems: C41, C61, E11, E21, E41 (Division II components), G33, G41, P41, P42, P50, T46

(C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I RCIC(E51) valve 1E51*MOV041.

(B) No credit taken for Division II systems' functions.

(C) RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

(A) Remaining Division I and Division III systems are available.

(B) Division II RHR system (E11) valve 1E11*MOV048 can be manually operated, or Division I RHR/CS/SRV circulation/suppression pool cooling flow path is available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division I RHR/CS/PRV flow path.

Cold shutdown is achievable using Division I RHR (E11) system with manual operation of valve 1E11*MOV048, or Division I RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 112-N7
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A)	Division I Systems:	E51 (Divisiion II components only)
(B)	Division II Systems:	B31, C41, C61, E11, E21, G33, P41, P42, P50, T46
(C)	Division III Systems:	None

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I RCIC (E51) system.

(B) No credit taken for Division II systems' functions, other than RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048 and the HPCI (E41) system.

3. DISABLED FUNCTION EVALUATION:

(A) Remaining Division I systems and Division III systems are available.

(B) Division II HPCI (E41) system is available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using the Division II HPCI (E41) system.

Cold shutdown is achievable using remaining Division I systems.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 112-N8
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I System: T46

   (B) Division II Systems: C61, E11, G33, P42, P50, T46

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   (A) No credit taken for Division I RBSVS (T46) system functions.

   (B) No credit taken for Division II systems' functions.

3. DISABLED FUNCTION EVALUATION:

   Remaining Division I and Division III systems are available.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using remaining Division I, and II systems, and Division III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 112-01
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A)	Division I Systems:	B31, C61, E11, P41, P42, P50, T46
(B)	Division II Systems:	None
(C)	Division III Systems:	P42(C), T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

No credit taken for Division I or III systems' functions, other than Division I RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

3. DISABLED FUNCTION EVALUATION:

Division II systems are available.

4. SHUTDOWN CAPABILITY:

Hot and cold shutdown are achievable using Division II systems.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 112-02
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A)	Division I Systems:	B31, C41, C61, E11, E21, E51 (Division I components only), G33, G41, P41, P42, P50, T46
(B)	Division II System:	E41(Division I components only)
(C)	Division III Systems:	P42(C), T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I systems' functions.

(B) Division I RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

(C) No credit taken for Division II HPCI (E41) system.

(D) No credit taken for Division III systems' functions.

3. DISABLED FUNCTION EVALUATION:

(A) Remaining Division II systems are available.

(B) Division I RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047 can be manually operated or Division II RHR/CS/SRV circulation/suppression pool cooling flow path is available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division II RHR/CS/SRV flow path.

Cold shutdown is achievable using Division II RHR (E11) system with manual operation of valve 1E11*MOV047, or Division II RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 112-03
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: B31, C41, C61, E11, E21, G41, P41, P42, P50, T46

(B) Division II System: C41, C61, G41

(C) Division III Systems: P42(C), T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I and III systems' functions, other than the RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047 and the RCIC (E51) system.

(B) No credit taken for Division II Fuel Pool Cooling and Cleanup (G41) and Standby Liquid Control SLC (C41) systems' functions.

(C) Fuel Pool Cooling and Cleanup (G41) valves are not required since they are in series with unaffected P41 valves.

(D) The standby liquid control (C41) pump is not required.

3. DISABLED FUNCTION EVALUATION:

(A) Division I RCIC system is available.

(B) Remaining Division II systems are available.

4. SHUTDOWN CAPABILITY:

Hot and cold shutdown are achievable using remaining Division II systems.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 112-04
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: C41, G41, P42

(B) Division II Systems: C41, C61, G41, P42, T46

(C) Division III Systems: P42(C), T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) Division I SLC (C41) system pump 1C41*P024A.

(B) Division I, II, and III RBCLCW (P42) system pump 1P42*P005A, B, and C.

(C) No credit taken for Division II and III systems' functions, other than the RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

(D) Division I Fuel Pool Cooling and Cleanup (G41) System's valves.

3. DISABLED FUNCTION EVALUATION:

(A) Division I systems are available, except as noted.

(B) Division I SLC (C41) system is not required for normal shutdown.

(C) Loss of all three RBCLCW system pumps for the RHR pump seal coolers is acceptable, because the Division I RHR/CS/SRV circulation/suppression pool cooling flow path is available. However, the exposure of these pump motor cables is minimal and the risk is slight.

(D) Division I Fuel Pool Cooling and Cleanup (G41) system valves are not required since isolation is maintained by in-series unaffected Service Water (P41) system valves.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division I RCIC (E51) system.

Cold shutdown is achievable using Division I RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 112-05
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: P42

(B) Division II Systems: C41, C61, E11, E21, G33, G41, P41, P42, P50, T46

(C) Division III System: P42(C), T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) Division I systems are available, except RBCLCW (P42) systems.

(B) No credit taken for Division II systems' functions, other than the RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048, and the HPCI (E41) system.

(C) Division III systems are available except unit cooler 1T46*UC022A and 22B, and RBCLCW (P42) system pump P42*P005C.

3. DISABLED FUNCTION EVALUATION:

(A) Remaining Divisions I and III systems are available.

(B) Division II HPCI (E41) system is available.

(C) Division I, II, and III RBCLCW (P42) system pumps 1P42*P005A, B, and C, respectively, are not available. Their loss eliminates the use of Division I RHR/CS/SRV flow path; however, and alternative RHR/CS/PRV flow path can be used.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division II HPCI (E41) system.

Cold shutdown is achievable using remaining systems or Division I RHR/CS/PRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 112-06
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A)	Division I System:	E51 (Division II components only)
(B)	Division II Systems:	B31, C41, C61, E11, E21, E41 (Division II components), G33, P41, P42 P50, T46,
(C)	Division III Systems:	None

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I RCIC (E51) system.

(B) No credit taken for Division II systems' functions.

(C) Division II RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

(A) Remaining Division I and III systems are available.

(B) Division I RHR (E11) system valve 1E11*MOV048 can be manually operated, or Division I and III RHR/CS/SRV circulation/suppression pool cooling flow paths are available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Divisions I and III RHR/CS/SRV flow path.

Cold shutdown is achievable using Division I and III RHR (E11) system with manual operation of valve 1E11*MOV048 or Division I and III RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 112-07
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I System: T46

(B) Division II Systems: C61, E11, G33, P42, P50, T46

(C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

(A) Division I RBSVS (T46) system unit coolers 1T46*UC004A, 005A, and 021A.

(B) No credit taken for Division II systems' functions, other than RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048, and remaining RBSVS (T46) system functions.

3. DISABLED FUNCTION EVALUATION:

(A) Remaining Division I systems and Division I RBSVS unit coolers are available.

(B) Remaining Division II RBSVS (T46) coolers are available.

4. SHUTDOWN CAPABILITY:

Hot and cold shutdown are achievable using remaining Division I and III systems.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 112-08
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: B31, C61, E11, P41, P42, P50, T46

(B) Division II Systems: B31, E11, C61, P42, P50, T46

(C) Division III Systems: T46(A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit is taken for Division I systems functions.

(B) Division II Reactor Recirculation (B31) Reactor Plant Remote Shutdown (C61) RHR (E11) components 1E11*MOV031B, 031D, 032B, 032D, 034B, 036B, 040B, 045 and 037B, RBSVS (T46) automatic isolation circuit and unit cooler 1T46*UC021B, 004B, 005B, and RBCLCW (P42) component 1P42*P005B.

(C) Division II (P50) system component 1P50*MOV103B.

(D) No credit is taken for Division III systems functions.

3. DISABLED FUNCTION EVALUATION:

(A) Remaining Division I and II systems are available.

(B) Division II RBSVS (T46) automatic isolation and Unit Cooler 1T46*UC021B, 004B, 005B and (C61) system is not needed for shutdown.

(C) Necessary Division II RHR (E11) valves can be manually operated.

(D) Division II RBCLCW (P42) component 1P42*P005B is not required since CS/PRV flow path is available.

(E) Division I or II CS (E21) system is available.

(F) Division II compressed air (P50) system component 1P50*MOV103B will fail in the open position allowing the system to function.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division II HPCI (E41) system.

Cold shutdown is achievable using the Division II CS/PRV flow path can be used with RHR for pool cooling via manual valve operation, as required.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 150-N1
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: B31, C61, E11, P41, P42, P50, T46

(B) Division II Systems: C61, E11, P42, P50, T46

(C) Division III Systems: P42(C), T46(A, B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I systems functions except RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047, the RCIC (E51) and CS (E21) systems' functions.

(B) No credit taken for Division III systems functions.

(C) No credit taken for Division II RBSVS (T46) unit coolers 1T46*UC021B, 004B, and 005B, Reactor Plant Shutdown (C61) system, RHR (E11) system valves 1E11*MOV036B, 045B, 037B, 031D, 032B, 040B, 031B, 034B, RBCLCW(P42) and Compressed Air (P50) valve 1P50*MOV103B.

(D) No credit taken for Division II RHR (E11) except for system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

(A) Division I RCIC (E51) is available.

(B) Remaining Division II systems are available. Necessary Division II RHR (E11) valves can be manually operated.

(C) Division I or II CS (E21) system is available.

(D) Division II Compressed Air (P50) valve 1P50*MOV103B will fail in the open position allowing the system to remain available.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using Division I RCIC (E51) or Division II HPCI (E41) systems.

Cold shutdown is achievable using the Division II CS/PRV flow path with Division II RHR used for pool cooling via manual operation.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 150-N2
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: None

(B) Division II Systems: None

(C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

None

3. DISABLED FUNCTION EVALUATION:

No effect on shutdown.

4. SHUTDOWN CAPABILITY:

Hot and cold shutdown are achievable using Division I, II, and III systems.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 150-N3
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I System: G41

   (B) Division II Systems: None

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   Division I Fuel Pool Cooling and Cleanup (G41) system valve 1G41*MOV032A.

3. DISABLED FUNCTION EVALUATION:

   (A) Division I Fuel Pool Cooling and Cleanup (G41) system valve 1G41*MOV032A is in series with Service Water (P41) system valve 1P41*MOV042A; therefore, there is no impact on either system.

   (B) Division I, II, and III systems are available.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using Division I, II, and III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 150-N4
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: E11, E21, G41, P41, P42, P50

(B) Division II Systems: G41, P42

(C) Division III System: P42 (C)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I system function other than RC1C(E51) system and RHR(E11) system shutdown outboard valve 1E11*MOV047.

(B) Division II and III RBCLCW (P42) system pumps 1P42*P005B and C, respectively.

(C) Division II Fuel Pool Cooling (G41) system valve 1G41*MOV032B.

3. DISABLED FUNCTION EVALUATION:

(A) Loss of all three RBCLCW (P42) system pumps for the RHR pump seal coolers is acceptable, because the Division II RHR/CS/SRV circulation/suppression pool cooling flow path is available. However, the exposure of these pump motor cables is minimal and the risk of common damage is slight.

(B) Loss of Division I and II Fuel Pool Cooling (G41) systems valves are not required for normal shutdown and will not prevent operation of the system. They are in series with unaffected Service Water (P41) system valves. Division I Service Water (P41) valve will remain closed wile Division II valve is unaffected.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using the Division I RCIC (E51) system or the Division II HPCI (E41) system.

Cold shutdown is achievable using the Division II RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 150-N5
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: P42

(B) Division II Systems: C61, E11, E21, G41, P41, P42, P50, T46

(C) Division III System: P42 (C)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) Division I and III RBCLCW (P42) system pumps 1P42*P005B and C, respectively.

(B) No credit taken for Division II system functions other than RHR (E11) valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

(A) Loss of all three RBCLCW (P42) system pumps for the RHR pump seal coolers is acceptable, because the Division I RHR/CS/SRV circulation/suppression pool cooling flow path is available. However, the exposure of these pump motor cables is minimal and the risk of common damage is slight.

(B) Division II Fuel Pool Cooling (G41) system valve has no impact due to in-series Service Water (P41) system valve which will remain closed upon failure.

(C) Division I and III RBSVS (T46) are available.

4. SHUTDOWN CAPABILITY:

Hot and cold shutdown are achievable using Division I or II RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 150-N6
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems: None

   (B) Division II Systems: C61, E11, E21, G41, P41, P50

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   No credit taken for Division II system functions.

3. DISABLED FUNCTION EVALUATION:

   Division I and III systems are available.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using Division I and III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 150-N7
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems: None

   (B) Division II Systems: None

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   None

3. DISABLED FUNCTION EVALUATION:

   No effect on shutdown.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using Division I, II, and III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 150-N8
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I System: T46

   (B) Division II Systems: C61, E11, P42, P50, T46

   (C) Division III Systems: T46 (B)

2. SYSTEMS' FUNCTIONS DISABLED:

   (A) Division I RBSVS (T46) system unit coolers 1T46*UC004A and 005A.

   (B) No credit taken for Division II system functions, other than RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048 and remaining RBSVS (T46) unit coolers.

   (C) Division III RBSVS (T46) systems unit cooler 1T46*VC022B is not required since other T46 components are available.

3. DISABLED FUNCTION EVALUATION:

   (A) Remaining Division I and III systems and remaining T46 unit coolers are available.

   (B) Remaining Division II RBSVS (T46) coolers available.

   (C) Division III RBSVS (T46) systems unit cooler 1T46*VC022B is not required since other T46 components are available.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using remaining Division I, II and III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 150-01
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems: T46

   (B) Division II Systems: None

   (C) Division III Systems: P42 (C), T46 (A, B)

2. SYSTEMS' FUNCTIONS DISABLED:

   (A) No credit taken for Division I systems' functions, other than the RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

   (B) No credit taken for Division III systems' functions.

3. DISABLED FUNCTION EVALUATION:

   Division II systems are available.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using Division II systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 150-02
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems: None

   (B) Division II Systems: None

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   None

3. DISABLED FUNCTION EVALUATION:

   No effect on shutdown.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using Division I, II, and III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 150-03
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I System: E11, E21, G41, P41, P50

   (B) Division II System: G41

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   (A) No credit taken for Division I systems functions other than Division I RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047 and RCIC (E51) system.

   (B) Division II Fuel Pool Cooling (G41) system valve 1G41*MOV032B.

3. DISABLED FUNCTION EVALUATION:

   Division I and II Fuel Pool Cooling (G41) systems are not required for normal shutdown. G41 system valves are in series with unaffected Division I (P41) system valves which will fail in the closed position enabling the system to remain functional.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using remaining Division I and II, and Division III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 150-04
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I System: P42

   (B) Division II Systems: G41, P42

   (C) Division III System: P42 (C)

2. SYSTEMS' FUNCTIONS DISABLED:

   (A) Division I, II, and III RBCLCW (P42) system pumps 1P42*P005A, B, and C, respectively

   (B) Division II Fuel Pool Cooling (G41) system valve 1G41*MOV032B.

3. DISABLED FUNCTION EVALUATION:

   (A) Loss of all three RBCLCW system pumps for the RHR pump seal coolers is acceptable, because the Division I or II RHR/CS/SRV circulation/suppression pool cooling flow path is available. The exposure of these pump motor cables is minimal and the risk of common damage is slight.

   (B) Division II Fuel Pool Cooling (G41) system valve 1G41*MOV032B is not required due to the in-series unaffected Service Water (P41) system valve.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using the Division I or II RHR/CS/SRV flow path.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 150-05
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: None

(B) Division II Systems: C61, E11, E21, G41, P41, P50 T46

(C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

No credit taken for Division II systems' functions, other than the RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

Division I and III systems are available.

4. SHUTDOWN CAPABILITY:

Hot and cold shutdown are achievable using Division I and III systems.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 150-06
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems: None

   (B) Division II Systems: None

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   None

3. DISABLED FUNCTION EVALUATION:

   No effect on shutdown.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using Division I, II, and III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 150-07
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems: None

   (B) Division II Systems: None

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   None

3. DISABLED FUNCTION EVALUATION:

   No effect on shutdown.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using Division I, II, and III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 150-08
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

(A) Division I Systems: B31, C61, E11, P41, P42, P50 T46

(B) Division II Systems: C61, E11, P42, P50, T46

(C) Division III Systems: P42 (C), T46 (A,B)

2. SYSTEMS' FUNCTIONS DISABLED:

(A) No credit taken for Division I systems other than RCIC (E55) and RHR (E11) valve 1E11*MOV047

(B) No credit taken for Division III systems' functions.

(C) No credit taken for Division II RBSVS (T46) unit cooler 1T46*UC021B, 005B, 004B, RBCLW (P42) and Reactor Plant Remote Shutdown (C61) systems' functions.

(D) Division II RHR (E11) components 1E11*MOV031B, 031D, 032B, 032D, 034B, 036B, 037B, 040B, and 045B.

(E) Division II Compressed Air (P50) valve 1P50*MOV103B.

3. DISABLED FUNCTION EVALUATION:

(A) Division I RCIC (E51) system is available.

(B) Division II HPCI (E41), and the remainder of RBSVS (T46) is available.

(C) Necessary Division II RHR (E11) valves can be manually operated.

(D) Division I or II CS is available for RPV makeup.

(E) Division II system valve 1P50*MOV103B will fail in the open position allowing the system to remain functional.

4. SHUTDOWN CAPABILITY:

Hot shutdown is achievable using either Division II HPCI (E41) or Division I RCIC (E51) systems.

Cold shutdown is achievable using the Division II CS/PRV flow path with RHR operated in pool cooling and valves operated manually as required.

5. FURTHER ACTION RECOMMENDED:

None

SEGMENT 175-N1
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I System: T46

   (B) Division II Systems: None

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   No credit taken for Division I systems' functions, other than the RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV047.

3. DISABLED FUNCTION EVALUATION:

   Division II and III systems are available.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using Division II and III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 175-N2
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I System: T46

   (B) Division II Systems: None

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   No credit taken for Division I systems functions, other than the RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

3. DISABLED FUNCTION EVALUATION:

   Division II and III systems are available.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using Division II and III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 175-N3
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems: None

   (B) Division II System: T46

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   No credit taken for Division II systems functions, other than the RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

   Division I and III systems are available.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using the Division I and III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 175-N4
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems: C61

   (B) Division II System: E41 (Division I components only), T46

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   (A) No credit taken for Division I Reactor Plant remote shutdown (C61) system.

   (B) No credit taken for Division II systems functions, other than the RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

   Remaining Division I and II systems, and Division III system are available.

4. SHUTDOWN CAPABILITY:

   Hot shutdown is achievable using Division I RCIC (E51) system.

   Cold shutdown is achievable using remaining Division I and II systems, and Division III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 175-N5
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems: None

   (B) Division II System: T46

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   No credit taken for Division II systems functions, other than the RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

   Division I and III systems are available.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using Division I and III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 175-N6
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems: None

   (B) Division II System: T46

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   No credit taken for Division II systems functions, other than the RHR (E11) system shutdown cooling [illegible]rd isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

   Division I and III systems are available.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using Division I and III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 175-N7
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I System: T46

   (B) Division II Systems: None

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   No credit taken for Division I systems functions, other than the RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

3. DISABLED FUNCTION EVALUATION:

   Division II and III systems are available.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using Division II and III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 175-N8
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I System: T46

   (B) Division II Systems: None

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   No credit taken for Division I systems functions, other than the RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

3. DISABLED FUNCTION EVALUATION:

   Division II and III systems are available.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using Division II and III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 175-01
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I System: T46

   (B) Division II Systems: None

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   No credit taken for Division I systems functions, other than the RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

3. DISABLED FUNCTION EVALUATION:

   Division II and III systems are available.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using Division II and III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 175-02
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems: None

   (B) Division II Systems: None

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   None

3. DISABLED FUNCTION EVALUATION:

   Division I, II, and III systems are available.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using Division I, II, and III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 175-03
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems: C61

   (B) Division II System: E41 (Division 1 components only), T46

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   (A) No credit taken for Division I Reactor Plant Remote Shutdown (C61) system.

   (B) No credit taken for Division II systems functions, other than the RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

   Remaining Division I and II Systems and Division III systems are available.

4. SHUTDOWN CAPABILITY:

   Hot shutdown is achievable using Division I RCIC (E51) system.

   Cold shutdown is achievable using the remaining Division I and II systems and Division III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 175-04
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems: C61

   (B) Division II System: E41 (Division I components only), T46

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   (A) No credit for Division I Reactor Plant Remote Shutdown (C61) system.

   (B) No credit taken for Division II systems functions, other than the RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

   Remaining Division I and II systems and Division III systems are available.

4. SHUTDOWN CAPABILITY:

   Hot shutdown is achievable using Division I RCIC (E51) system.

   Cold shutdown is achievable using remaining Division I and II systems, and Division III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 175-05
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems: None

   (B) Division II System: T46

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   No credit taken for Division II systems functions, other than the RHR (E11) system shutdown cooling outboard isolation valve 1E11*MOV048.

3. DISABLED FUNCTION EVALUATION:

   Division I and III systems are available.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using Division I and III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 175-06
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I Systems: None

   (B) Division II Systems: None

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   None

3. DISABLED FUNCTION EVALUATION:

   No effect on shutdown.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using Division I, II, and III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 175-07
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I System: T46

   (B) Division II Systems: None

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   No credit taken for Division I systems functions, other than the RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

3. DISABLED FUNCTION EVALUATION:

   Division II and III systems are available.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using Division II and III systems.

5. FURTHER ACTION RECOMMENDED:

   None

SEGMENT 175-08
CABLE SEPARATION ANALYSIS
SECONDARY CONTAINMENT

1. SYSTEMS IMPACTED:

   (A) Division I System: T46

   (B) Division II Systems: None

   (C) Division III Systems: None

2. SYSTEMS' FUNCTIONS DISABLED:

   No credit taken for Division I systems' functions, other than the RHR (E11) system shutdown cooling inboard isolation valve 1E11*MOV047.

3. DISABLED FUNCTION EVALUATION:

   Division II and III systems are available.

4. SHUTDOWN CAPABILITY:

   Hot and cold shutdown are achievable using Division II and III systems.

5. FURTHER ACTION RECOMMENDED:

   None

APPENDIX B

DRAWINGS

Original
April 1983

ELEV. 8'

Drawing Number	Print Revision	Title
SK-C/J-C-FE46A-1	31	Conduit Plan Elev. 8' Northside Reactor
SK-C/J-C-FE46A-2	10	Conduit Sections & Details North Reactor Bldg. Elev. 8'
SK-C/J-C-FE46A-3	9	Conduit Sections, Details & Partial Plan Elev. 8' North
SK-C/J-C-FE46A-4	15	Conduit Sections Elev. 8' North Reactor Bldg.
SK-C/J-C-FE46A-5	2	Conduit Sections & Details Elev. 8' North Reactor Bldg.
SK-C/J-C-FE46A-6	11	Conduit Sections & Plan View Elev. 8' North Reactor Bldg.
SK-C/J-C-FE46A-7	3	Conduit Sections Elev. 8' North Reactor Bldg.
SK-C/J-C-FE46A-8	7	Conduit Sections Elev. 8' North Reactor Bldg.
SK-C/J-C-FE46A-9	5	Conduit Support Details Elev. 8' North Reactor Bldg.
SK-C/J-C-FE46A-10	2	Conduit Layout Elev. 8' Column 7
SK-C/J-C-FE46A-11	-	Conduit Layout Elev. 8' Column 8
SK-C/J-C-FE46A-12	-	Conduit Layout Elev. 8' Column 9
SK-C/J-C-FE46A-13	0	Conduit Sections & Details Elev. 8'
SK-C/J-C-FE46A-14	1	Conduit Sections & Details Elev. 8' North Reactor Bldg.
SK-C/J-C-FE46A-15	1	Conduit Sections & Details Elev. 8' North
SK-C/J-C-FE46A-16	-	Conduit Sections & Details Elev. 8' Northeast Side Reactor Bldg.
SK-C/J-C-FE46A-17	-	Conduit Sections & Details Elev. 8' Reactor Bldg.

Drawing Number	Print Revision	Title
SK-C/J-C-FE46A-18	-	Conduit Sections & Details Elev. 8' Reactor Bldg.
SK-C/J-C-FE46A-19	-	Conduit Sections & Details Elev. 8' North Reactor Bldg.
SK-C/J-C-FE46AA-1	25	Conduit Plan & Sections Elev. 8' RCIC Northeast
SK-C/J-C-FE46AA-2	14	Conduit Supports & Sections Elev. 8' RCIC Area
SK-C/J-C-FE46AA-3	13	Conduit Supports & Sections Elev. 8' RCIC Area
SK-C/J-C-FE46AA-4	6	Conduit Supports & Sections Elev. 8' RCIC Area
SK-C/J-C-FE46AA-5	13	Conduit Sections & Details Elev. 8' Northside
SK-C/J-C-FE46AA-6	3	Conduit Sections & Details Elev. 8' North
SK-C/J-C-FE46AA-7	3	Conduit Sections & Details Elev. 8' Reactor Bldg.
SK-C/J-C-FE46AA-8	4	Conduit Supports, Sections & Details Elev. 8' Reactor Bldg.
SK-C/J-C-FE46AA-9	1	Conduit Sections & Details Elev. 8'
SK-C/J-C-FE46AA-10	2	Conduit Sections & Details Elev. 8' Northside Reactor Bldg.
SK-C/J-C-FE46AA-11	-	Conduit Sections & Details Elev. 8' Northeast Side Reactor Bldg.
SK-C/J-C-FE46AA-12	-	Conduit Sections & Details Elev. 8' Northeast Side Reactor Bldg.
SK-C/J-C-FE46AAA-1	25	Conduit Plan Elev. 8' North Reactor
SK-C/J-C-FE46AAA-2	5	Conduit Sections & Details Elev. 8' North Reactor Bldg.
SK-C/J-C-FE46AAA-3	1	Conduit Details Elev. 8' North Reactor Bldg.

Drawing Number	Print Revision	Title
SK-C/J-C-FE46AAA-4	2	Conduit Sections & Details Elev. 8' North Reactor Bldg.
SK-C/J-C-FE46AAA-5	4	Conduit Sections & Details Elev. 8' North Reactor Bldg.
SK-C/J-C-FE46AAA-6	1	Conduit Sections & Details Elev. 8' North Reactor Bldg.
SK-C/J-C-FE46AAA-7	1	Conduit Supports, Sections & Details Elev. 8' Reactor Bldg.
SK-C/J-C-FE46AAA-8	2	Conduit Supports, Sections & Details Elev. 8' North Reactor Bldg.
SK-C/J-C-FE46AAA-9	2	Conduit Sections & Details Elev. 8' North Reactor Bldg.
SK-C/J-C-FE46AAA-10	0	Conduit Sections & Details Elev. 8' Secondary Containment
SK-C/J-C-FE46AAA-11	1	Conduit Sections, Details & Views Elev. 8' Secondary Containment
SK-C/J-C-FE46AAA-12	3	Conduit Sections & Details Elev. 8' North Reactor Bldg.
SK-C/J-C-FE46AAA-13	1	Conduit Supports, Sections & Details Elev. 8' Reactor Bldg.
SK-C/J-C-FE46AAA-14	1	Conduit Sections & Details Elev. 8' Reactor Bldg.
SK-C/J-C-FE46AAA-15	1	Conduit Supports, Sections & Details Elev. 8' Reactor Bldg.
SK-C/J-C-FE46B-1	30	Conduit Plan & Sections Elev. 8' South Reactor Bldg.
SK-C/J-C-FE46B-2	2	Conduit Sections & Details Elev. 8' South Reactor Bldg.
SK-C/J-C-FE46B-3	1	Conduit Sections & Details Elev. 8' South Reactor Bldg.
SK-C/J-C-FE46B-4	-	Conduit Sections & Details Elev. 8' South Reactor Bldg.
SK-C/J-C-FE46B-5	2	Conduit Sections & Details Elev. 8' South Reactor Bldg.

Drawing Number	Print Revision	Title
SK-C/J-C-FE46B-6	11	Conduit Sections & Details Elev. 8' South Reactor Bldg.
SK-C/J-C-FE46B-7	3	Conduit Sections & Details Elev. 8' South Reactor Bldg.
SK-C/J-C-FE46B-8	3	Conduit Sections & Details Elev. 8' South Reactor Bldg.
SK-C/J-C-FE46B-9	1	Conduit Sections & Details Elev. 8' South Reactor Bldg.
SK-C/J-C-FE46B-10	5	Conduit Sections & Details Elev. 8' South Reactor Bldg.
SK-C/J-C-FE46B-11	1	Conduit Sections Plan Elev. 8' South Reactor Bldg.
SK-C/J-C-FE46B-12	VOID	Conduit Sections & Details Elev. 8'
SK-C/J-C-FE46B-13	1	Conduit Sections & Details Elev. 8' South Reactor Bldg.
SK-C/J-C-FE46B-14	2	Conduit Sections Plan Elev. 8' South Reactor Bldg.
SK-C/J-C-FE46BB-1	14	Conduit Sections Plan Elev. 8' South Reactor Bldg.
SK-C/J-C-FE46BB-2	3	Conduit Sections & Details Elev. 8' South Reactor Bldg.
SK-C/J-C-FE46BB-3	1	Conduit Sections & Details Elev. 8' South Reactor Bldg.
SK-C/J-C-FE46BB-4	3	Conduit Sections & Details Elev. 8' South Reactor Bldg.
SK-C/J-C-FE46BB-5	2	Conduit Sections & Details Elev. 8' South Reactor Bldg.
SK-C/J-C-FE46BB-6	4	Conduit Support Details Elev. 8' Reactor Bldg.
SK-C/J-C-FE46X-1	38	Conduit Plan Elev. 8' West Reactor Bldg.
SK-C/J-C-FE46X-2	9	Conduit Sections & Details Elev. 8' West Reactor Bldg.

Drawing Number	Print Revision	Title
SK-C/J-C-FE46X-3	11	Conduit Sections & Elev. Views Elev. 8' West Reactor Bldg.
SK-C/J-C-FE46X-4	5	Conduit Sections Elev. 8' West Reactor Bldg.
SK-C/J-C-FE46X-5	4	Conduit Sections Elev. 8' Reactor Bldg.
SK-C/J-C-FE46X-6	6	Conduit Sections & Details Elev. 8' West Reactor Bldg.
SK-C/J-C-FE46X-7	0	Conduit Sections & Details Elev. 8' West Reactor Bldg.
SK-C/J-C-FE46X-8	3	Conduit Sections & Details Elev. 8' West Reactor Bldg.
SK-C/J-C-FE46X-9	VOID	Conduit Sections & Details Elev. 8' West Reactor Bldg.
SK-C/J-C-FE46X-10	1	Conduit Sections & Details Elev. 8' West Reactor Bldg.
SK-C/J-C-FE46X-11	1	Conduit Sections & Details Elev. 8' West Reactor Bldg.
SK-C/J-C-FE46X-12	3	Conduit Sections & Details Elev. 8' Reactor Bldg.
SK-C/J-C-FE46X-13	2	Conduit Sections & Details Elev. 8' West Reactor Bldg.
SK-C/J-C-FE46X-14	1	Conduit Sections & Details Elev. 8' Reactor Bldg.
SK-C/J-C-FE46X-15	1	Conduit Sections & Details Elev. 8' North Reactor Bldg.
SK-C/J-C-FE46X-16	1	Conduit Layout Column 11 Elev. 8'
SK-C/J-C-FE46X-17	0	Conduit Layout Column 12 Elev. 8'
SK-C/J-C-FE46X-18	0	Conduit Layout Column 10 Elev. 8'
SK-C/J-C-FE46X-19	1	Conduit Sections & Details Elev. 8' West Reactor Bldg.
SK-C/J-C-FE46X-20	1	Conduit Sections & Details Elev. 8' West Reactor Bldg.

Drawing Number	Print Revision	Title
SK-C/J-C-FE46X-21	-	Conduit Sections & Details Elev. 8' West Reactor Bldg.
SK-C/J-C-FE46X-22	1	Conduit Sections & Details Elev. 8' West Reactor Bldg.
SK-C/J-C-FE46X-23	-	Conduit Sections & Details Elev. 8' West Reactor Bldg.
SK-C/J-C-FE46X-24	0	Conduit Sections & Details Elev. 8' Reactor Bldg.
SK-C/J-C-FE46X-25	-	Sections & Details Elev. 8' West Reactor Bldg.
SK-C/J-C-FE46XX-1	22	Conduit Plan Elev. 8' West Reactor Bldg.
SK-C/J-C-FE46XX-2	2	Conduit Sections & Details Elev. 8' West Reactor Bldg.
SK-C/J-C-FE46XX-3	5	Conduit Sections & Details Elev. 8' Reactor Bldg.
SK-C/J-C-FE46XX-4	3	Conduit Support Sections & Details Elev. 8' Reactor Bldg.
SK-C/J-C-FE46XX-5	1	Conduit Support Sections & Details Elev. 8' Reactor Bldg.
SK-C/J-C-FE46XX-6	5	Conduit Sections & Details Elev. 8' West Reactor Bldg.
SK-C/J-C-FE46XX-7	3	Conduit Sections & Details Elev. 8' West Reactor Bldg.
SK-C/J-C-FE46XX-8	1	Conduit Sections & Details Elev. 8' Reactor Bldg.
SK-C/J-C-FE46XX-9	3	Conduit Sections & Details Elev. 8' Southwest Pilaster
SK-C/J-C-FE46XX-10	-	Conduit Sections & Details Elev. 8' Reactor Bldg.
SK-C/J-C-FE46XX-11	-	Conduit Sections & Details Elev. 8' Southwest Pilaster
SK-C/J-C-FE46Y-1	38	Plan & Sections Elev. 8' East

Drawing Number	Print Revision	Title
SK-C/J-C-FE46Y-2	7	Conduit Sections & Elev. Views East Reactor Bldg.
SK-C/J-C-FE46Y-3	-	Conduit Sections Elev. 8' East Reactor Bldg.
SK-C/J-C-FE46Y-4	11	Conduit Sections Elev. 8' East Reactor Bldg.
SK-C/J-C-FE46Y-5	9	Conduit Sections Elev. 8' East Reactor Bldg.
SK-C/J-C-FE46Y-6	-	No Title
SK-C/J-C-FE46Y-7	3	Conduit Sections & Details Elev. 8' East Reactor Bldg.
SK-C/J-C-FE46Y-8	8	Reactor Index Elev. 8'
SK-C/J-C-FE46Y-9	4	Conduit Sections & Details Elev. 8' East Reactor Bldg.
SK-C/J-C-FE46Y-10	1	Conduit Sections & Details Elev. 8' East Reactor Bldg.
SK-C/J-C-FE46Y-11	0	Sections & Details Elev. 8' East Reactor Bldg.
SK-C/J-C-FE46Y-12	-	Conduit Layout Elev. 8' Column 4
SK-C/J-C-FE46Y-13	0	Conduit Layout Elev. 8' Column 5
SK-C/J-C-FE46Y-14	1	Conduit Layout Elev. 8' Column 6
SK-C/J-C-FE46Y-15	-	Conduit Sections & Details Elev. 8' East Reactor Bldg.
SK-C/J-C-FE46Y-16	4	Conduit Sections & Details Elev. 8' Reactor Bldg.
SK-C/J-C-FE46YY-1	27	Conduit Plan Elev. 8' East Reactor Bldg.
SK-C/J-C-FE46YY-2	6	Conduit Sections & Details Elev. 8' East
SK-C/J-C-FE46YY-3	6	Conduit Sections Elev. 8' East Reactor Bldg.

Drawing Number	Print Revision	Title
SK-C/J-C-FE46YY-4	5	Conduit Plan Elev. 8' East Reactor Bldg.
SK-C/J-C-FE46YY-5	4	Sections & Details Elev. 8' East Reactor Bldg.
SK-C/J-C-FE46YY-6	0	Conduit Sections & Details Elev. 8' East Reactor Bldg.
SK-C/J-C-FE46YY-7	3	Conduit Support Sections & Details Elev. 8' Reactor Bldg.
SK-C/J-C-FE46YY-8	1	Sections & Details Elev. 8' East Reactor Bldg.
SK-C/J-C-FE46YY-9	?	Sections & Details Elev. 8' East
SK-C/J-C-FE46YY-10	1	Conduit Support Details Elev. 8' East Reactor Bldg.
SK-C/J-C-FE46YY-11	3	Conduit Support Details & Views Elev. 8' North
SK-C/J-C-FE46YY-12	1	Conduit Sections & Details Elev. 8' Reactor Bldg.
SK-C/J-C-FE46YY-13	1	Conduit Sections & Details Elev. 8' Reactor Bldg.
SK-C/J-C-FE46YY-14	0	Conduit Sections & Details Elev. 8' Reactor Bldg.

ELEV. 40'

Drawing Number	Print Revision	Title
SK-C/J-C-FE46C-1	44	Plan & Sections Elev. 40' North
SK-C/J-C-FE46C-2	2	Sections & Details Elev. 40' North
SK-C/J-C-FE46C-3	1	Conduit Sections Elev. 40' North
SK-C/J-C-FE46C-4	7	Part Plan Elev. 40' Northeast
SK-C/J-C-FE46C-5	1	Conduit Sections & Details Elev. 40' North Reactor Bldg.
SK-C/J-C-FE46C-6	4	Sections & Details Elev. 40' North Side
SK-C/J-C-FE46C-7	2	Conduit Sections & Details North
SK-C/J-C-FE46C-8	1	Conduit Sections & Details North
SK-C/J-C-FE46C-9	8	Conduit Support Sections & Details Elev. 40' Reactor Bldg.
SK-C/J-C-FE46C-10	6	Conduit Support Sections & Details Elev. 40' Reactor Bldg.
SK-C/J-C-FE46C-11	5	Conduit Support Sections & Details Elev. 40' Reactor Bldg.
SK-C/J-C-FE46C-12	1	Conduit Support Sections & Details Elev. 40' Reactor Bldg.
SK-C/J-C-FE46C-13	8	Conduit Support Sections & Details Elev. 40'
SK-C/J-C-FE46C-14	-	Conduit Layout Elev. 40' Column 6
SK-C/J-C-FE46C-15	-	
SK-C/J-C-FE46C-16	-	Conduit Layout Elev. 40' Column 8
SK-C/J-C-FE46C-17	0	Conduit Layout Elev. 40' Column 9
SK-C/J-C-FE46C-18	-	Conduit Layout Elev. 40' Column 10
SK-C/J-C-FE46C-19	-	Conduit Layout Elev. 40' Column 11
SK-C/J-C-FE46C-20	3	Conduit Sections & Details

Drawing Number	Print Revision	Title
SK-C/J-C-FE46C-21	1	Conduit Sections & Details Elev. 40' North Reactor Bldg.
SK-C/J-C-FE46C-22	3	Conduit Support Details Elev. 40' North Reactor Bldg.
SK-C/J-C-FE46C-23	2	Conduit Sections & Details Elev. 40' Reactor Bldg.
SK-C/J-C-FE46C-24	-	Conduit Support Sections & Details Elev. 40' Reactor Bldg.
SK-C/J-C-FE46C-25	-	Conduit Support & Bracing Details Elev. 40' Reactor Bldg.
SK-C/J-C-FE46C-26	-	Conduit Support & Bracing Details Elev. 40' Reactor Bldg.
SK-C/J-C-FE46C-27	2	Conduit Support & Bracing Details Elev. 40' Reactor Bldg.
SK-C/J-C-FE46C-28	-	Conduit Sections & Views Elev. 40' North Reactor Bldg.
SK-C/J-C-FE46CC-1	7	Conduit Plan Elev. 40' North Reactor Bldg.
SK-C/J-C-FE46CC-2	1	Conduit Sections & Details Elev. 40' North Reactor Bldg.
SK-C/J-C-FE46CC-3	1	Conduit Support Sections & Details Elev. 40' Reactor Bldg.
SK-C/J-C-FE46CC-4	1	Conduit Support Sections & Details Elev. 40' Reactor Bldg.
SK-C/J-C-FE46CC-5	0	Conduit Support Sections & Details Elev. 40' North Reactor Bldg.
SK-C/J-C-FE46CC-6	3	Conduit Sections & Details Elev. 40' North Reactor Bldg.
SK-C/J-C-FE46CC-7	-	Conduit Support Sections & Details Elev. 40' Reactor Bldg.
SK-C/J-C-FE46D-1	52	Plan & Sections Elev. 40' South
SK-C/J-C-FE46D-2	7	Sections Elev. 40' South
SK-C/J-C-FE46D-3	5	Sections & Details Elev. 40' South

Drawing Number	Print Revision	Title
SK-C/J-C-FE46D-4	12	Enlarged Plan Sections & Details Elev. 40' South
SK-C/J-C-FE46D-5	7	Sections & Details Elev. 40' South
SK-C/J-C-FE46D-6	6	Details Elev. 40'
SK-C/J-C-FE46D-7	14	Sections & Details Elev. 40'
SK-C/J-C-FE46D-8	7	Enlarged Plan Sections & Details Elev. 40' South Column 4
SK-C/J-C-FE46D-9	0	Enlarged Plan Sections & Details Elev. 40' South Column 4
SK-C/J-C-FE46D-10	0	Conduit Sections & Details Elev. 40' South Side Reactor Bldg.
SK-C/J-C-FE46D-11	9	Plan & Sections Elev. 40'
SK-C/J-C-FE46D-12	13	Sections & Details Elev 40' South
SK-C/J-C-FE46D-13	6	Conduit Support Sections & Details Elev. 40' Reactor Bldg.
SK-C/J-C-FE46D-14	3	Conduit Support Sections & Details Elev. 40' Reactor Bldg.
SK-C/J-C-FE46D-15	4	Conduit Sections Elev. 40' South Side
SK-C/J-C-FE46D-16	2	Conduit Sections & Details Elev. 40' South Reactor Bldg.
SK-C/J-C-FE46D-17	2	Conduit Layout Elev. 40' Column 1
SK-C/J-C-FE46D-18	0	Conduit Layout Elev. 40' Column 2
SK-C/J-C-FE46D-19	2	Conduit Layout Elev. 40' Column 3
SK-C/J-C-FE46D-20	0	Conduit Layout Elev. 40' Column 4
SK-C/J-C-FE46D-21	-	Conduit Layout Elev. 40' Column 5
SK-C/J-C-FE46D-22	2	Conduit Layout Elev. 40' Column 12
SK-C/J-C-FE46D-23	3	Strip Plate Details Elev. 40' Primary Containment

Drawing Number	Print Revision	Title
SK-C/J-C-FE46D-24	7	Conduit Sections & Details Elev. 40' Reactor Bldg.
SK-C/J-C-FE46D-25	1	Conduit Sections & Details Elev. 40' Reactor Bldg.
SK-C/J-C-FE46D-26	4	Conduit Sections & Details Elev. 40' South Side Reactor Bldg.
SK-C/J-C-FE46D-27	4	Part Plan, Sections & Details Elev. 40' South Reactor Bldg.
SK-C/J-C-FE46D-28	2	Conduit Sections & Details Elev. 40' South Reactor Bldg.
SK-C/J-C-FE46D-29	-	No Title
SK-C/J-C-FE46D-30	1	Conduit Sections & Details Elev. 40' South Side Reactor Bldg.

ELEV. 63'

Drawing Number	Print Revision	Title
SK-C/J-C-FE46AC-1	3	Conduit Plan & Sections Suppression Chamber
SK-C/J-C-FE46AC-2	2	Conduit Part Plan & Sections Suppression Chamber
SK-C/J-C-FE46AC-3	1	Part Plan & Sections Suppression Chamber
SK-C/J-C-FE46AC-4	1	Conduit Part Plan & Sections Suppression Chamber
SK-C/J-C-FE46AC-5	1	Conduit Part Plan & Sections Suppression Chamber
SK-C/J-C-FE46E-1	30	Conduit Plan Elev. 63' Northeast Side
SK-C/J-C-FE46E-2	2	Sections & Details Elev. 63'
SK-C/J-C-FE46E-3	26	Conduit Plan Elev. 63' Northwest Reactor Bldg.
SK-C/J-C-FE46E-4	4	Conduit Sections & Details Elev. 63' Northwest Reactor Bldg.
SK-C/J-C-FE46E-5	2	Conduit Sections & Details Elev. 63' Northwest Reactor Bldg.
SK-C/J-C-FE46E-6	10	Conduit Plan & Sections Elev. 63' North CRD Unit
SK-C/J-C-FE46E-7	4	Conduit Sections & Details
SK-C/J-C-FE46E-8	5	Conduit Sections & Details Elev. 63' North Reactor Bldg.
SK-C/J-C-FE46E-9	6	Conduit Sections & Details Elev. 63' Northeast Reactor Bldg.
SK-C/J-C-FE46E-10	4	Conduit Sections & Details Elev. 63' North Reactor Bldg.
SK-C/J-C-FE46E-11	1	Conduit Support Details Excess Flow Valves Pl "E"

Drawing Number	Print Revision	Title
SK-C/J-C-FE46E-12	9	Conduit Plan & Section Elev. 63' Northeast Side
SK-C/J-C-FE46E-13	7	Conduit Sections & Details Elev. 63' Northwest Reactor Bldg.
SK-C/J-C-FE46E-14	3	Conduit Sections & Details Elev. 63' Northwest Reactor Bldg.
SK-C/J-C-FE46E-15	3	Ambient Temperature Elements Plan Sections & Details Elev. 63'
SK-C/J-C-FE46E-16	6	Conduit Plan & Sections Elev. 63' Northeast Side
SK-C/J-C-FE46E-17	3	Conduit Sections & Details Elev. 63' Northwest Reactor Bldg.
SK-C/J-C-FE46E-18	7	Conduit Sections & Details Elev. 63' Northeast Reactor Bldg.
SK-C/J-C-FE46E-19	5	Ambient Temperature Elements Sections & Details Elev. 63'
SK-C/J-C-FE46E-20	9	Conduit Plan E32 System
SK-C/J-C-FE46E-21	7	Conduit Sections Elev. 63' E32 System
SK-C/J-C-FE46E-22	4	Conduit Sections & Details Elev. 63' E32 System
SK-C/J-C-FE46E-23	5	Conduit Support Details Elev. 63' North Reactor Bldg.
SK-C/J-C-FE46E-24	3	Conduit Sections & Details Elev. 63' North
SK-C/J-C-FE46E-25	3	Conduit Sections & Support Details Elev. 63' West Reactor Bldg.
SK-C/J-C-FE46E-26	4	Conduit Sections & Details Elev. 63' West Reactor Bldg.
SK-C/J-C-FE46E-27	3	Conduit Sections & Support Details Elev. 63' West Reactor Bldg.
SK-C/J-C-FE46E-28	3	Conduit Supports, Sections & Details Elev. 63' North Reactor Bldg.

Drawing Number	Print Revision	Title
SK-C/J-C-FE46E-29	4	Conduit Sections & Details Elev. 63' E32 System
SK-C/J-C-FE46E-30	VOID	
SK-C/J-C-FE46E-31	1	Conduit Details Elev. 63'
SK-C/J-C-FE46E-32	3	Conduit Sections & Support Details Elev. 63' East Reactor Bldg.
SK-C/J-C-FE46E-33	6	Conduit Support, Sections & Details Elev. 63' East & West
SK-C/J-C-FE46E-34	8	Conduit Sections & Details Elev. 63' Reactor Bldg.
SK-C/J-C-FE46E-35	1	Conduit Support Details Excess Flow Waves Northeast
SK-C/J-C-FE46E-36	3	Erlarged Plan, Sections & Details Sep Reduct & Doc Elev. 63' Reactor Bldg.
SK-C/J-C-FE46E-37	2	Conduit Support Sections & Details Elev. 63'
SK-C/J-C-FE46E-38	1	Conduit Support Sections Excess Flow Valves
SK-C/J-C-FE46E-39	1	Conduit Support Sections
SK-C/J-C-FE46E-40	2	Conduit Support Sections & Details Elev. 63'
SK-C/J-C-FE46E-41	2	Conduit Sections & Details Elev. 63' Northeast Side Reactor Bldg.
SK-C/J-C-FE46E-42	0	Conduit Sections & Details Elev. 63' Northwest Reactor Bldg.
SK-C/J-C-FE46E-43	3	Conduit Sections & Details Elev. 63' Northwest Reactor Bldg.
SK-C/J-C-FE46E-44	-	Conduit Sections & Details Elev. 63' Northwest Reactor Bldg.
SK-C/J-C-FE46E-45	-	Conduit Supports & Sections Elev. 63' North

Drawing Number	Print Revision	Title
SK-C/J-C-FE46E-46	1	Conduit Plan Elev. 63' East Mech Room
SK-C/J-C-FE46E-47	0	Conduit Sections & Details Elev. 63' Northwest Reactor Bldg.
SK-C/J-C-FE46E-48	-	Conduit Support Details Elev. 63' Northwest Reactor Bldg.
SK-C/J-C-FE46E-49	0	
SK-C/J-C-FE46E-50	0	Conduit Support Details Elev. 63' Reactor Bldg.
SK-C/J-C-FE46F-1	VOID	Conduit Plans & Sections Elev. 63' South Reactor Bldg.
SK-C/J-C-FE46F-2	2	Conduit Plans & Sections Elev. 63' South Reactor Bldg.
SK-C/J-C-FE46F-3	3	Conduit Supports & Details Elev. 63' East Reactor Bldg.
SK-C/J-C-FE46F-4	2	Conduit Partial Plan & Details Excess Flow Valves Plate 'G' Elev. 63' Southeast
SK-C/J-C-FE46F-5	1	Conduit & Misc Details Elev. 63' South
SK-C/J-C-FE46F-6	5	Sections & Details Elev. 63' South Reactor Bldg.
SK-C/J-C-FE46F-7	11	Conduit Plan Elev. 63' South Reactor Bldg.
SK-C/J-C-FE46F-8	3	Conduit Support Details Elev. 63' Reactor Bldg.
SK-C/J-C-FE46F-9	2	Conduit Supports & Details East
SK-C/J-C-FE46F-10	3	Conduit Sections Southwest
SK-C/J-C-FE46F-11	1	Sections & Details Green Conduit System
SK-C/J-C-FE46F-12	0	Sections & Details South
SK-C/J-C-FE46F-13	0	Conduit Sections & Details West

Drawing Number	Print Revision	Title
SK-C/J-C-FE46F-14	0	Views & Details South
SK-C/J-C-FE46F-15	1	Conduit Sections & Support Details East
SK-C/J-C-FE46F-16	1	Conduit Plan West Mech Room

ELEV. 78'

Drawing Number	Print Revision	Title
SK-C/J-C-FE46G-1	25	Conduit Plan Elev 78'-7" North Reactor Bldg.
SK-C/J-C-FE46G-2	15	Conduit Sections & Details Elev. 78'-7" Reactor Bldg.
SK-C/J-C-FE46G-3	7	Blue & Red Conduit Steam Tunnel Secondary Containment
SK-C/J-C-FE46G-4	11	Conduit Sections, Details & Views Steam Tunnel Secondary Containment
SK-C/J-C-FE46G-5	10	Conduit Layout Elev. 78'-7" East 1H21-PNL-05 & PNL10 & Dagon Valves Plan, Sections & Details
SK-C/J-C-FE46G-6	5	Conduit Sections & Details Steam Tunnel Secondary Containment
SK-C/J-C-FE46G-7	11	Conduit Sections & Details Elev. 78'-7" Reactor Bldg.
SK-C/J-C-FE46G-8	6	Conduit Sections & Details Elev. 78'-7" Reactor Bldg.
SK-C/J-C-FE46G-9	17	Conduit Sections & Details Elev. 78'-7"
SK-C/J-C-FE46G-10	16	Conduit Layout Plan Elev. 78'-7" West Reactor Bldg.
SK-C/J-C-FE46G-11	4	Conduit Sections & Details Steam Tunnel Secondary Containment
SK-C/J-C-FE46G-12	12	Conduit Sections & Details Elev. 78'-7" North Reactor Bldg.
SK-C/J-C-FE46G-13	1	Conduit Sections & Details Elev. 78'-7" Reactor Bldg.
SK-C/J-C-FE46G-14	8	Conduit Sections & Details Elev. 78'-7" Reactor Bldg.
SK-C/J-C-FE46G-15	3	Conduit Supports & Details Steam Tunnel Secondary Containment

Drawing Number	Print Revision	Title
SK-C/J-C-FE46G-16	8	Nonsafety-Related Conduit Plan Steam Tunnel Secondary Containment
SK-C/J-C-FE46G-17	7	Conduit Sections & Details Steam Tunnel Secondary Containment
SK-C/J-C-FE46G-18	2	Steam Tunnel Sections & Details
SK-C/J-C-FE46G-19	5	Conduit Sections & Details in Views Steam Tunnel Secondary Containment
SK-C/J-C-FE46G-20	4	Conduit Sections & Details Steam Tunnel Secondary Containment
SK-C/J-C-FE46G-21	-	Diagramatic Conduit Plan Steam Tunnel Secondary Containment
SK-C/J-C-FE46G-22	VOID	Enlarged Plan Elev. 78'-7" Northwest Reactor Bldg.
SK-C/J-C-FE46G-23	8	Conduit Sections & Details Steam Tunnel Secondary Containment
SK-C/J-C-FE46G-24	2	Conduit Sections & Details Steam Tunnel Secondary Containment
SK-C/J-C-FE46G-25	3	Conduit Sections & Details Steam Tunnel Secondary Containment
SK-C/J-C-FE46G-26	6	Column 11 Sections & Details Elev. 78'-7" West Side
SK-C/J-C-FE46G-27	3	Red & Blue Conduit Steam Tunnel Secondary Containment
SK-C/J-C-FE46G-28	2	Conduit Sections, Details & Views Steam Tunnel Secondary Containment
SK-C/J-C-FE46G-29	1	Conduit Sections, Details & Views Steam Tunnel Secondary Containment
SK-C/J-C-FE46G-30	2	Conduit Sections, Details & Views Steam Tunnel Secondary Containment
SK-C/J-C-FE46G-31	1	Conduit Sections, Details & Views Steam Tunnel Secondary Containment
SK-C/J-C-FE46G-32	2	Conduit Sections & Details Elev. 78'-7" Reactor Bldg.

Drawing Number	Print Revision	Title
SK-C/J-C-FE46G-33	3	Conduit Sections & Details Elev. 78'-7" Reactor Bldg.
SK-C/J-C-FE46G-34	3	Conduit Sections & Details Elev. 78'-7" Reactor Bldg.
SK-C/J-C-FE46G-35	0	Conduit Sections & Details Steam Tunnel Secondary Containment
SK-C/J-C-FE46G-36	1	Conduit Sections, Details & Views Steam Tunnel Secondary Containment
SK-C/J-C-FE46G-37	1	Conduit Support Sections & Details Steam Tunnel
SK-C/J-C-FE46G-38	0	Conduit Sections & Details Steam Tunnel Secondary Containment
SK-C/J-C-FE46G-39	0	Conduit Sections & Details Steam Tunnel Secondary Containment
SK-C/J-C-FE46G-40	0	Conduit Sections & Details Steam Tunnel Secondary Containment
SK-C/J-C-FE46G-41	5	Tip Room Plan & Sections Elev. 78'-7" Reactor Bldg.
SK-C/J-C-FE46G-42	1	Wall Elev. Sections & Details Elev. 78'-7" Reactor Bldg.
SK-C/J-C-FE46G-43	2	Tip Room Sections & Details Elev. 78'-7" Reactor Bldg.
SK-C/J-C-FE46G-44		Conduit Sections & Details Elev. 78'-7" Tip Room
SK-C/J-C-FE46G-45	0	Conduit Details Elev. 78'-7"
SK-C/J-C-FE46G-46	2	Conduit Sections & Details Elev. 78'-7" Tip Room
SK-C/J-C-FE46G-47	-	Column No. 6 Sections & Details Elev. 78'-7" to Elev. 112'-9"
SK-C/J-C-FE46H-1	45	Conduit Plan Elev. 78'-7" South Reactor Bldg. (VOID)
SK-C/J-C-FE46H-2	28	

Drawing Number	Print Revision	Title
SK-C/J-C-FE46H-3	3	Conduit Elev. & Sections Elev. 78'-7" East Reactor Bldg.
SK-C/J-C-FE46H-4	2	Conduit Plan & Sections Elev. 96' & Above West Side Reactor Bldg.
SK-C/J-C-FE46H-5	1	Conduit Sections Elev 78' West Side Reactor Bldg.
SK-C/J-C-FE46H-6	2	Conduit Support Sections Elev. 78'-7" South (VOID)
SK-C/J-C-FE46H-7	10	Conduit Supports, Sections & Details Elev. 78'-7" South
SK-C/J-C-FE46H-8	VOID	Part Plan Southwest Green Conduit System Elev. 96' (VOID)
SK-C/J-C-FE46H-9	3	Sections & Details Green Conduit System
SK-C/J-C-FE46H-10	0	Conduit Sections & Details Elev. 78'-7" South Reactor Bldg.
SK-C/J-C-FE46H-11	6	Conduit Sections & Details Elev. 78'-7" East Reactor Bldg.
SK-C/J-C-FE46H-12	2	Sections & Details Elev. 78' South Side Reactor Bldg.
SK-C/J-C-FE46H-13	8	Conduit Sections & Details Elev. 78' Reactor Bldg.
SK-C/J-C-FE46H-14	5	Conduit Supports & Details Elev. 78'-7" East Reactor Bldg.
SK-C/J-C-FE46H-15	9	Conduit Sections & Details Elev. 78' West Side Reactor Bldg.
SK-C/J-C-FE46H-16	1	Conduit Sections & Details Elev. 78' South Reactor Bldg.
SK-C/J-C-FE46H-17	5	Conduit Details Elev. 78' South Reactor Bldg.
SK-C/J-C-FE46H-18	8	Conduit Supports, Plans & Sections Elev. 78' South
SK-C/J-C-FE46H-19	1	Conduit Sections & Details Elev. 96' & Above

Drawing Number	Print Revision	Title
SK-C/J-C-FE46H-20	0	Conduit Sections & Details Elev. 96' & Above
SK-C/J-C-FE46H-21	5	Conduit Sections & Details Elev. 78' East Side
SK-C/J-C-FE46H-22	VOID	Column 1 Sections & Details Elev. 78'-7" Southwest (VOID)
SK-C/J-C-FE46H-23	VOID	Conduit Partial Plan Underside Elev. 112'-9" (VOID)
SK-C/J-C-FE46H-24	2	Column 2 Sections & Details Elev. 78'-7" Reactor Bldg.
SK-C/J-C-FE46H-25	2	Conduit Sections & Details Elev. 78'-7" Reactor Bldg.
SK-C/J-C-FE46H-26	8	Conduit Sections & Details Elev. 78'-7" Reactor Bldg.
SK-C/J-C-FE46H-27	0	Conduit Support Sections & Details Elev. 96' Southwest Side Reactor Bldg.
SK-C/J-C-FE46H-28	3	Conduit Sections & Details Elev. 78'
SK-C/J-C-FE46H-29		Not Used
SK-C/J-C-FE46H-30	2	Sections & Details Elev. 78' Reactor Bldg.
SK-C/J-C-FE46H-31	2	Conduit Sections & Details Elev. 78'-7" Reactor Bldg.
SK-C/J-C-FE46H-32	-	Sections & Details Elev. 78' West Side Reactor Bldg.
SK-C/J-C-FE46H-33	0	Conduit Support Details Elev. 78'-7" West
SK-C/J-C-FE46H-34	2	Column 12 Sections & Details Elev. 78' Southwest Side
SK-C/J-C-FE46H-35	0	Conduit Support Sections & Details West Side Reactor Bldg.
SK-C/J-C-FE46H-36	4	Column 4 Sections & Details From Elev. 78' to Elev. 112'

Drawing Number	Print Revision	Title
SK-C/J-C-FE46H-37	1	Conduit Sections & Details Elev. 78' Southwest Reactor Bldg.
SK-C/J-C-FE46H-38	0	Secondary Wall Section Elev. 78'-7" North Reactor Bldg.
SK-C/J-C-FE46H-39	1	Conduit Sections & Details Reactor Bldg.
SK-C/J-C-FE46H-40		Not Used
SK-C/J-C-FE46H-41	-	Conduit Elev. Secondary Wall Elev. 78'-7" Southeast Reactor Bldg.
SK-C/J-C-FE46H-42	3	Conduit Sections & Details Pilaster Wall Elev. 78' East Side Reactor Bldg.
SK-C/J-C-FE46H-43	0	Column 1 Sections & Details Elev. 78' Southwest Side
SK-C/J-C-FE46P-1	17	RPS - Conduit Layout East Side Plans Sections & Details
SK-C/J-C-FE46P-2	VOID	RPS - Conduit Layout East Side Plans Sections & Details
SK-C/J-C-FE46P-3	32	RPS - Conduit Layout West Plan Sections & Details Elev. 78'-7"
SK-C/J-C-FE46P-4	VOID	RPS - Conduit Layout West Side Plan, Sections & Details
SK-C/J-C-FE46P-5	11	Conduit Sections & Details Elev. 78' Reactor Bldg.
SK-C/J-C-FE46P-6	3	RPS Conduit Plan Steam Tunnel Secondary Containment
SK-C/J-C-FE46P-7	2	RPS Sections & Details Steam Tunnel Secondary Containment
SK-C/J-C-FE46P-8	15	Conduit Sections & Details Elev. 78'-7" Reactor Bldg.
SK-C/J-C-FE46P-9	VOID	RPS - Conduit Sections & Details Elev. 78'

Drawing Number	Print Revision	Title
SK-C/J-C-FE46P-10	9	RPS - Conduit Sections & Details Elev. 78' West Side
SK-C/J-C-FE46P-11	4	RPS - Conduit Sections & Details Elev. 78'-7" West
SK-C/J-C-FE46P-12	2	RPS - Conduit Sections & Details Steam Tunnel Secondary Containment
SK-C/J-C-FE46P-13	VOID	West Side Tray Riser Bank Elev. 78' Reactor Bldg.
SK-C/J-C-FE46P-14	2	Conduit in Blue Tray Riser Plans Elev. 8' to 175'-9"
SK-C/J-C-FE46P-15	11	Conduit in Blue Tray Riser Plans Sections & Details Elev. 8' to 175'-9"
SK-C/J-C-FE46P-16	1	Conduit Sections & Details Elev. 78', 112', 150' Reactor Bldg.
SK-C/J-C-FE46P-17		Not Used
SK-C/J-C-FE46P-18		Not Used
SK-C/J-C-FE46P-19	3	RPS - Conduit Sections & Details Elev. 78'-7" Reactor Bldg.
SK-C/J-C-FE46P-20	15	Conduit Plans East Riser Bank Reactor Bldg.
SK-C/J-C-FE46P-21	5	Conduit Plans East Riser Bank Reactor Bldg.
SK-C/J-C-FE46P-22	2	Conduit Plans East Riser Bank Reactor Bldg.
SK-C/J-C-FE46P-23	9	Conduit Plans Northwest Riser Bank Reactor Bldg.
SK-C/J-C-FE46P-24	8	Conduit Plans Northwest Riser Bank Reactor Bldg.
SK-C/J-C-FE46P-25	1	Conduit Plans Northwest Riser Bank Reactor Bldg.
SK-C/J-C-FE46P-26	11	West Riser Bank Elev. 8'-0" to 74'-8" Reactor Bldg.

Drawing Number	Print Revision	Title
SK-C/J-C-FE46P-27	9	West Riser Bank Elev. 81' to 165'-2" Reactor Bldg.
SK-C/J-C-FE46P-28	12	East Riser Bank Elev. 8' to 78' Reactor Bldg.
SK-C/J-C-FE46P-29	4	East Riser Bank Elev. 81' to 165'-2" Reactor Bldg.
SK-C/J-C-FE46P-30	0	West Riser Bank Sections & Details Elev. 8' to 40' Reactor Bldg.
SK-C/J-C-FE46P-31	-	West Riser Bank Sections & Details Reactor Bldg.
SK-C/J-C-FE46P-32	-	Northwest Riser Banks Sections & Details
SK-C/J-C-FE46P-33	-	Northwest Riser Banks Sections & Details
SK-C/J-C-FE46P-34	0	West Riser Bank Sections & Details Elev. 8' to 40' Reactor Bldg.
SK-C/J-C-FE46P-35	-	Sections & Details Northeast Riser Banks Elev. 40' to 63'
SK-C/J-C-FE46P-36	-	Northeast Riser Banks Sections & Details Elev. 40' to 63'
SK-C/J-C-FE46P-37	-	Northeast Riser Banks Sections & Details Elev. 63' to 78'-7"
SK-C/J-C-FE46P-38	-	Northeast Riser Banks Sections & Details Elev. 63' to 78'-7"
SK-C/J-C-FE46P-39	-	Northeast Riser Banks Sections & Details Elev. 63' to 78'-7"
SK-C/J-C-FE46P-40	-	Conduit Sections & Details Elev. 78'-7" Reactor Bldg.
SK-C/J-C-FE46P-41	0	Northwest Riser Banks Sections & Details Elev. 81' to 108'-2"
SK-C/J-C-FE46P-42	-	Northwest Riser Bank Sections & Details Elev. 81' to 108'-2"
SK-C/J-C-FE46P-43	-	Northwest Riser Bank Sections & Details Elev. 94' to 111'-6"

Drawing Number	Print Revision	Title
SK-C/J-C-FE46P-44	-	Northwest Riser Bank Sections & Details Elev. 81' to 108'-2"
SK-C/J-C-FE46P-45	0	Northeast Riser Bank Sections & Details Elev. 8' to 40'
SK-C/J-C-FE46P-46	-	Northwest Riser Bank Sections & Details Elev. 158'-4" to 175'-0"
SK-C/J-C-FE46P-47	0	Northeast Riser Bank Sections & Details Elev. 8' to 40'
SK-C/J-C-FE46P-48	-	Northwest Riser Bank Elev. 114'-10" to 122'-10"
SK-C/J-C-FE46P-49	0	Northwest Riser Bank Elev. 114'-10" to 130'-10" Reactor Bldg.
SK-C/J-C-FE46P-50	-	Northwest Riser Bank Sections & Details Elev. 158'-4" to 175'-0"
SK-C/J-C-FE46P-51	0	Northwest Riser Bank Sections & Details Reactor Bldg.
SK-C/J-C-FE46P-52	-	Northeast Riser Bank Sections & Details Elev. 8' to 40'-0"
SK-C/J-C-FE46P-53	-	Northwest Riser Bank Sections & Details Reactor Bldg.
SK-C/J-C-FE46P-54	0	Northeast Riser Bank Sections & Details Elev. 78'-7" to 95'-3"
SK-C/J-C-FE46P-55		
SK-C/J-C-FE46P-56	0	East Riser Bank Sections & Details Elev. 81' to 165'-2" Reactor Bldg.
SK-C/J-C-FE46P-57	-	Northwest Riser Bank Sections & Details Reactor Bldg.
SK-C/J-C-FE46P-58	-	Northwest Riser Bank Sections & Details Reactor Bldg.
SK-C/J-C-FE46P-59	-	Northwest Riser Bank Sections & Details Elev. 112' to 160'-0"
SK-C/J-C-FE46P-60	0	Northeast Riser Bank Sections & Details Reactor Bldg.

Drawing Number	Print Revision	Title
SK-C/J-C-FE46P-61	-	Northeast Riser Bank Sections & Details Elev. 95' to 112'-9"
SK-C/J-C-FE46P-62	0	Northeast Riser Bank Sections & Details Reactor Bldg.
SK-C/J-C-FE46P-63	-	Northeast Riser Bank Sections & Details Elev. 78'-7" to 95'-3" Reactor Bldg.
SK-C/J-C-FE46P-64	-	Northeast Riser Bank Sections & Details Reactor Bldg.
SK-C/J-C-FE46P-65	-	Northeast Riser Bank Sections & Details Reactor Bldg.
SK-C/J-C-FE46P-66	-	Northeast Riser Bank Sections & Details Reactor Bldg.
SK-C/J-C-FE46P-67	0	East Riser Bank Sections & Details Elev. 154' to 175' Reactor Bldg.
SK-C/J-C-FE46P-68	0	Northeast Riser Bank Conduit Supports & Details Elev. 154' to 175' Reactor Bldg.
SK-C/J-C-FE46P-69	-	Northwest Riser Bank Sections & Details Reactor Bldg.
SK-C/J-C-FE46P-70	-	Northwest Riser Bank Sections & Details Reactor Bldg.
SK-C/J-C-FE46T-1	4	Conduit Partial Plans Elev. 126'-9" East
SK-C/J-C-FE46T-2	2	Conduit Supports Elev. 126'-9" East
SK-C/J-C-FE46T-3	1	Conduit Supports Elev. 126'-9" East
SK-C/J-C-FE46T-4	29	Conduit Plan Elev. 95'-3"
SK-C/J-C-FE46T-5	3	Conduit Sections, Details, & Views Elev. 95'-3" & 101'-6"
SK-C/J-C-FE46T-6	3	Conduit Sections, Details & Views Elev. 126'-9"
SK-C/J-C-FE46T-7	4	Conduit Supports Elev. 126'-9" East

Drawing Number	Print Revision	Title
SK-C/J-C-FE46T-8	-	Conduit Plan Elev. 126'-9" East
SK-C/J-C-FE46T-9	5	Conduit Support, Sections & Details Elev. 95'-3" Reactor Bldg.
SK-C/J-C-FE46T-10	2	Conduit Sections & Details Elev. 126'-9" East
SK-C/J-C-FE46T-11	1	Conduit Sections & Details Reactor Bldg.
SK-C/J-C-FE46T-12	1	Conduit Support, Sections & Details Elev. 95'-3" Reactor Bldg.
SK-C/J-C-FE46T-13	6	Sections & Details Elev. 95'-3" & 101'-6" Reactor Bldg.
SK-C/J-C-FE46T-14	2	Conduit Pla lev. 101'-6"
SK-C/J-C-FE46T-15	0	Sections & Details Elev. 95'-3" & 101'-6"
SK-C/J-C-FE46T-16	3	Section Secondary Wall Elev. 95'-3" & 101'-6" Reactor Bldg.
SK-C/J-C-FE46T-17	2	Conduit Sections & Details Elev. 95' Reactor Bldg.
SK-C/J-C-FE46Z-1	1	RPS - Conduit Plan & Details- HCU Elev. 78'-7" East Reactor Bldg.
SK-C/J-C-FE46Z-2	1	Conduit Plan & Details - HCU Elev. 78'-7" West Reactor Bldg.
SK-C/J-C-FE46Z-3	1	Conduit Sections & Details - HCU Elev. 78'-7" West Reactor Bldg.
SK-C/J-C-FE46Z-4	-	RPS - Conduit Sections & Details HCU Elev. 78' East Reactor Bldg.
SK-C/J-C-FE46Z-5	-	RPS - Conduit Sections & Details HCU Elev. 78'-7" East & West Reactor Bldg.
SK-C/J-C-FE46Z-6	2	Conduit Sections & Details - HCU Elev. 78'-7" Wes Reactor Bldg.
SK-C/J-C-FE46Z-7	-	Conduit Sections Elev. 78' East Side

Drawing Number	Print Revision	Title
SK-C/J-C-FE46Z-8	-	Conduit Sections & Details - HCU Elev. 78'-7" Reactor Bldg.
SK-C/J-C-FE46Z-9	-	Conduit Sections & Views - HCU Elev. 78'-7" Reactor Bldg.

ELEV. 112'

Drawing Number	Print Revision	Title
SK-C/J-C-FE46J-1	11	Conduit Index Drawing Plan & Sections Elev. 112'-9"
SK-C/J-C-FE46J-2	4	Conduit Index Drawing Conduit Support Details
SK-C/J-C-FE46J-3	5	Conduit Index Drawing Tray & Conduit Support Details
SK-C/J-C-FE46J-4	9	Conduit Layout Plan Sections & Details West Reactor Bldg.
SK-C/J-C-FE46J-5	4	Conduit Layout Sections & Details West Reactor Bldg.
SK-C/J-C-FE46J-6		VOID
SK-C/J-C-FE46J-7	2	Conduit Layout Plan & Section North
SK-C/J-C-FE46J-8	2	Conduit Layout Sections & Details 1R24-MCC11D2 & 1R24-MCC12D2 Elev. 112'-9" North Reactor Bldg.
SK-C/J-C-FE46J-9	1	Conduit Layout North Plan
SK-C/J-C-FE46J-10	2	Conduit Layout Plan & Sections North
SK-C/J-C-FE46J-11	1	Conduit Layout Sections North
SK-C/J-C-FE46J-12	-	Conduit Layout Plan North
SK-C/J-C-FE46J-13	10	Conduit Layout Plan Sections & Details Fire Sep Reduct Doc North Reactor Bldg.
SK-C/J-C-FE46J-14	-	Conduit Sections & Details
SK-C/J-C-FE46J-15	11	Standby Liquid Control System Sep Reduct Doc System Elev. 112'-9"
SK-C/J-C-FE46J-16		VOID

Drawing Number	Print Revision	Title
SK-C/J-C-FE46J-17		Conduit Layouts Plan, Sections & Details East
SK-C/J-C-FE46J-18	11	Conduit Layout Plan & Supports West
SK-C/J-C-FE46J-19	5	Conduit Sections & Views
SK-C/J-C-FE46J-20	1	Enlarged Plans & Sections
SK-C/J-C-FE46J-21	2	Conduit Sections Northeast
SK-C/J-C-FE46J-22	3	Conduit Layout Plan & Supports Sep Reduct Doc Elev. 112'-9" West
SK-C/J-C-FE46J-23	33	Plan Drawing Sep Reduct Doc Elev. 112'-9" North
SK-C/J-C-FE46J-24	5	Conduit Sections & Views
SK-C/J-C-FE46J-25	7	Conduit Support Details SH-1
SK-C/J-C-FE46J-26	2	Conduit Support Details Elev. 112'-9" SH-2
SK-C/J-C-FE46J-27	3	Sections & Details Elev. 112'-9" West
SK-C/J-C-FE46J-28	3	Conduit Sections & Supports Details Elev. 112'-9" North Reactor Bldg.
SK-C/J-C-FE46J-29	3	Conduit Support Sections Elev. 112'-9" North Reactor Bldg.
SK-C/J-C-FE46J-30	5	Sections & Details Elev. 112'-9" West
SK-C/J-C-FE46J-31	14	Conduit Sections & Support Details Elev. 112'-9" North Reactor Bldg.
SK-C/J-C-FE46J-32	2	Conduit Sections & Support Details Elev. 112'-9" North Reactor Bldg.
SK-C/J-C-FE46J-33	3	Conduit Sections & Details
SK-C/J-C-FE46J-34	3	Conduit Layout Plan Supports West
SK-C/J-C-FE46J-35	2	Conduit Layout Sections Conduit Support East

Drawing Number	Print Revision	Title
SK-C/J-C-FE46J-36	1	Conduit Layout Sections & Conduit Support East
SK-C/J-C-FE46J-37	1	Enlarged Plan North Standby Vent System Elev. 133'-3" Reactor Bldg.
SK-C/J-C-FE46J-38	2	Standby Vent System Conduit Sections North
SK-C/J-C-FE46J-39	2	Conduit Support Details Elev. 112'-9" North
SK-C/J-C-FE46J-40	1	Conduit Layout Elev. 112'-9" North Reactor Bldg. Sections
SK-C/J-C-FE46J-41	5	Conduit Sections & Details
SK-C/J-C-FE46J-42	2	Conduit Supports Sections & Details Elev. 112'-9" East Reactor Bldg.
SK-C/J-C-FE46J-43	1	Detail Sheet
SK-C/J-C-FE46J-44	3	MCC Room East Elev. View Elev. 112'-9" Reactor Bldg.
SK-C/J-C-FE46J-45	7	Enlarged Plan and Sections
SK-C/J-C-FE46J-46	3	Conduit Support Details Elev. 112'-9" North Reactor Bldg.
SK-C/J-C-FE46J-47	1	Conduit Support Sections & Details Elev. 112'-9" North Reactor Bldg.
SK-C/J-C-FE46J-48	2	MCC Room West Elev. View Elev. 112'-9" Reactor Bldg.
SK-C/J-C-FE46J-49	VOID	Sections & Details North Pump Room
SK-C/J-C-FE46J-50	2	Sections and Details
SK-C/J-C-FE46J-51	4	Sections & Details Elev. 112'-9" East
SK-C/J-C-FE46J-52	7	Sections & Views Elev. 112'-9" East
SK-C/J-C-FE46J-53	8	Sections & Details Elev. 112'-9" North Reactor Bldg.

Drawing Number	Print Revision	Title
SK-C/J-C-FE46J-54	3	Conduit Support Details Elev. 112'-9" North Reactor Bldg.
SK-C/J-C-FE46J-55	6	Conduit Support Sections & Views Elev. 112'-9" Reactor Bldg.
SK-C/J-C-FE46J-56	4	Sections & Details Elev. 112'-9" East Reactor Bldg.
SK-C/J-C-FE46J-57	0	Conduit Support, Sections & Details Elev. 112'-9" North Reactor Bldg.
SK-C/J-C-FE46J-58	2	Conduit Sections & Details Elev. 112'-9" North Reactor Bldg.
SK-C/J-C-FE46J-59	5	Conduit Sections & Details Elev. 112'-9" North Reactor Bldg.
SK-C/J-C-FE46J-60	2	Conduit Support, Sections & Details Elev. 112'-9" North Reactor Bldg.
SK-C/J-C-FE46J-61	11	Sep Reduct Doc Standby Vent System Enlarged Plan Elev. 124' North Reactor Bldg.
SK-C/J-C-FE46J-62	1	Conduit Support & Details Elev. 112'-9" North
SK-C/J-C-FE46J-63	3	Conduit Support & Details Elev. 112'-9" North Reactor Bldg.
SK-C/J-C-FE46J-64	2	Sections & Views Elev. 112'-9" Reactor Bldg.
SK-C/J-C-FE46J-65	1	Conduit Sections & Details MCC Room Elev. 112'-9" West
SK-C/J-C-FE46J-66	3	Conduit Supports, Sections & Details Elev. 112'-9" North Reactor Bldg.
SK-C/J-C-FE46J-67	2	Conduit Supports, Sections & Views Elev. 112'-9" West Reactor Bldg.
SK-C/J-C-FE46J-68	2	Conduit Supports & Details 1T46 Elev. 112'-9" North Reactor Bldg.
SK-C/J-C-FE46J-69	4	Conduit Supports & Details Elev. 112'-9" North

Drawing Number	Print Revision	Title
SK-C/J-C-FE46J-70	3	Conduit Supports & Sections Elev. 112'-9" North Reactor Bldg.
SK-C/J-C-FE46J-71	4	Sections & Views Elev. 112'-9" North Reactor Bldg.
SK-C/J-C-FE46J-72	3	Conduit Supports & Sections Elev. 112'-9" North Reactor Bldg.
SK-C/J-C-FE46J-73	5	Conduit Sections & Details Elev. 112'-9" North Reactor Bldg.
SK-C/J-C-FE46J-74	2	Conduit Sections & Details Elev. 112'-9" North Reactor Bldg.
SK-C/J-C-FE46J-75	5	Conduit Support Details Elev. 112'-9" North Reactor Bldg.
SK-C/J-C-FE46J-76	3	Conduit Supports, Details & Views Elev. 112'-9" North Reactor Bldg.
SK-C/J-C-FE46J-77		Drawing Never Issued
SK-C/J-C-FE46J-78	2	Conduit Supports & Details Elev. 112'-9" Reactor Bldg.
SK-C/J-C-FE46J-79	1	Conduit Supports, Details & Views
SK-C/J-C-FE46J-80	4	Conduit Supports & Details 1R-71Z Elev. 112'-9" Northwest Reactor Bldg.
SK-C/J-C-FE46J-81	3	Conduit Supports & Details Elev. 112'-9" North Reactor Bldg.
SK-C/J-C-FE46J-82	1	Conduit Supports & Details Elev. 112'-9"
SK-C/J-C-FE46J-83	0	Conduit Supports & Details Elev. 112'-9" East Reactor Bldg.
SK-C/J-C-FE46J-84	1	Conduit Sections & Details Elev. 112'-9" MCC Room
SK-C/J-C-FE46J-85	1	Conduit Sections & Details Elev. 112'-9" West Reactor Bldg. MCC Room
SK-C/J-C-FE46J-86	0	Conduit Supports & Details Elev. 112'-9" East Reactor Bldg.

Drawing Number	Print Revision	Title
SK-C/J-C-FE46J-87	0	Conduit Supports & Details Elev. 112'-9" North Reactor Bldg.
SK-C/J-C-FE46J-88	1	Sections & Conduit Support Details Elev. 112'-9" MCC Room East Reactor Bldg.
SK-C/J-C-FE46J-89	0	Conduit Supports, Sections & Details Elev. 112'-9" North Reactor Bldg.
SK-C/J-C-FE46J-90	0	Conduit Support, Sections & Details Elev. 112'-9"
SK-C/J-C-FE46J-91	1	Conduit Supports & Details Elev. 112'-9" North Reactor Bldg.
SK-C/J-C-FE46J-92	0	Details Elev. 112'-9" North
SK-C/J-C-FE46K-1	7	Conduit Plan & Sections Elev. 112'-9" Reactor Bldg. Southeast Pump Room
SK-C/J-C-FE46K-2	34	Plan Drawing South Side
SK-C/J-C-FE46K-3	3	Conduit Layout Sections & Details Elev. 112' Reactor Bldg. South Side
SK-C/J-C-FE46K-4	0	Conduit Layout Plan Sections & Details Elev. 112' RWCU Pumphouse South Side Reactor Bldg.
SK-C/J-C-FE46K-5	3	Conduit Section Elev. 112' Reactor Bldg. Southeast Pumphouse
SK-C/J-C-FE46K-6	4	Sections, Details & Supports Elev. 112' Southside Reactor Bldg.
SK-C/J-C-FE46K-7	2	Conduit Sections & Views Elev. 112' South Side Reactor Bldg.
SK-C/J-C-FE46K-8	1	Conduit Supports & Details Reactor Bldg. Southeast Pump Room
SK-C/J-C-FE46K-9	1	Conduit Supports & Details Elev. 112' Reactor Bldg. Southeast Pump Room

Drawing Number	Print Revision	Title
SK-C/J-C-FE46K-10	0	Conduit Supports, Sections & Details Elev. 112'-9" South Side Reactor Bldg.
SK-C/J-C-FE46K-11	3	Conduit Supports, Sections & Details Elev. 112'-9" South Side Reactor Bldg.
SK-C/J-C-FE46K-12	10	Enlarged Plan Elev. 135' & Grove Reactor Bldg.
SK-C/J-C-FE46K-13	0	Conduit Layout Sections & Details Elev. 112' South Side Reactor Bldg.
SK-C/J-C-FE46K-14	4	Conduit Supports, Sections & Details Elev. 112' South Side Reactor Bldg.
SK-C/J-C-FE46K-15	3	Conduit Supports, Sections & Details Elev. 112' Reactor Bldg.
SK-C/J-C-FE46K-16	2	Conduit Supports, Sections & Details Elev. 112' South Side Reactor Bldg.
SK-C/J-C-FE46K-17	4	Conduit Supports & Details Elev. 112' Reactor Bldg.
SK-C/J-C-FE46K-18	2	Conduit Sections Elev. 112' South Side Reactor Bldg.
SK-C/J-C-FE46K-19	2	Conduit Supports, Sections & Details Elev. 112' South Side Reactor Bldg.
SK-C/J-C-FE46K-20	5	Sections & Details
SK-C/J-C-FE46K-21	3	Conduit Supports & Sections Elev. 112' South Side Reactor Bldg.
SK-C/J-C-FE46K-22	5	Conduit Supports & Details Elev. 112' South Side Reactor Bldg.
SK-C/J-C-FE46K-23	3	Conduit Supports, Sections & Details Elev. 112' South Side Reactor Bldg.
SK-C/J-C-FE46K-24	0	Tray Support Details Elev. 112'-9" South Side
SK-C/J-C-FE46K-25	0	Tray Support Details Elev. 112'-9" South Side

Drawing Number	Print Revision	Title
SK-C/J-C-FE46K-26	0	Conduit Sections & Details Elev. 112' & 126' South
SK-C/J-C-FE46K-27	1	Conduit Supports & Details Elev. 112'-9" & 126' South
SK-C/J-C-FE46K-28	3	Conduit Sections & Views Elev. 112' South Side
SK-C/J-C-FE46K-29	1	Secondary Wall Southwest Quadrant Elev. 112' Reactor Bldg.
SK-C/J-C-FE46K-30	1	Conduit Supports & Details Elev. 112' Reactor Bldg.
SK-C/J-C-FE46K-31	4	Conduit Supports & Details
SK-C/J-C-FE46K-32	-	Conduit Supports, Sections & Details
SK-C/J-C-FE46K-33	1	Conduit Supports & Details

ELEV. 150', 159'

Drawing Number	Print Revision	Title
SK-C/J-C-FE46L-1	16	Conduit Plan Elev. 150' North Reactor Bldg.
SK-C/J-C-FE46L-2	6	Conduit Layout Plan Details Elev. 159' Reactor Bldg.
SK-C/J-C-FE46L-3	10	Conduit Sections Elev. 150' Reactor Bldg.
SK-C/J-C-FE46L-4	0	Sections & Details Elev. 150'
SK-C/J-C-FE46L-5	3	Conduit Layout Sections A-A & B-B Elev. 150' & 159' Reactor Bldg.
SK-C/J-C-FE46L-6	8	Conduit Sections Elev. 150' North Reactor Bldg.
SK-C/J-C-FE46L-7	3	Conduit Layout Plan Elev. 150' North Reactor Bldg.
SK-C/J-C-FE46L-8	8	Conduit Layout Plan, Elev. & Details Elev. 150' North Reactor Bldg.
SK-C/J-C-FE46L-9	9	Conduit Sections & Details Elev. 159' Reactor Bldg.
SK-C/J-C-FE46L-10	7	Conduit Layout Plan Elev. 150' South
SK-C/J-C-FE46L-11		Not Used
SK-C/J-C-FE46L-12	6	Conduit Support Sections Elev. 150' North Side Reactor Bldg.
SK-C/J-C-FE46L-13	3	Conduit Support Section Elev. 150' North Side Reactor Bldg.
SK-C/J-C-FE46L-14	0	Conduit Sections & Details Elev. 150' North Reactor Bldg.
SK-C/J-C-FE46L-15	0	Conduit Supports & Sections Elev. 150' Reactor Bldg.
SK-C/J-C-FE46L-16	7	Conduit Supports & Details Elev. 150' North Side Reactor Bldg.

Drawing Number	Print Revision	Title
SK-C/J-C-FE46L-17	2	Conduit Sections & Details Elev. 150' South Reactor Bldg.
SK-C/J-C-FE46L-18	4	Conduit Layout Sections & Views Elev. 150' North Reactor Bldg.
SK-C/J-C-FE46L-19	1	Conduit Sections & Details Elev. 150' West Side Reactor Bldg.
SK-C/J-C-FE46L-20	1	Conduit Supports & Sections Elev. 150' North Side Reactor Bldg.
SK-C/J-C-FE46L-21	0	Conduit Supports & Sections Elev. 150' North Side Reactor Bldg.
SK-C/J-C-FE46L-22	Not Listed	Conduit Supports & Details Elev. 150' North Side Reactor Bldg.
SK-C/J-C-FE46L-23	Not Listed	Conduit Supports & Sections Elev. 150' North Side Reactor Bldg.
SK-C/J-C-FE46L-24	1	Conduit Layout Sections C-C, D-D, E-E Elev. 159' Reactor Bldg.
SK-C/J-C-FE46L-25	1	Conduit Layout Plan Elev. 150' & 159' Reactor Bldg.
SK-C/J-C-FE46L-26	1	Conduit Supports & Details Elev. 150' & 159' Reactor Bldg.
SK-C/J-C-FE46L-27	1	Conduit Supports & Details Elev. 150' & 159' Reactor Bldg.
SK-C/J-C-FE46L-28	Not Listed	Conduit Supports & Details Elev. 150' Reactor Bldg.
SK-C/J-C-FE46L-29	3	Conduit Supports, Sections & Details Elev. 150' North Side Reactor Bldg.
SK-C/J-C-FE46L-30	Not Listed	Conduit Supports & Details Elev. 150' Reactor Bldg.
SK-C/J-C-FE46L-31	Not Listed	Conduit Supports & Details Elev. 150' North Reactor Bldg.
SK-C/J-C-FE46L-32	0	Conduit Supports, Sections & Details Elev. 150' North Side Reactor Bldg.
SK-C/J-C-FE46L-33	Not Listed	Conduit Supports, Details & Sections Elev. 150' North Reactor Bldg.

Drawing Number	Print Revision	Title
SK-C/J-C-FE46L-34	0	Conduit Supports, Sections & Details Elev. 150'-9" South Reactor Bldg.
SK-C/J-C-FE46B-15	17	Conduit Plan M.G. Rooms Elev. 150'-9" South Reactor Bldg.
SK-C/J-C-FE46B-16	11	Conduit Plan M.G. Rooms Elev. 161' Reactor Bldg.
SK-C/J-C-FE46B-17	9	Elev. M.G. Rooms North Wall Looking South
SK-C/J-C-FE46B-18	6	West Wall Looking East, East Wall Looking West, Elev. 150' Reactor Bldg.
SK-C/J-C-FE46B-19	0	Conduit Supports & Details Elev. 150' South Side Reactor Bldg.
SK-C/J-C-FE46B-20	1	Conduit Supports, Sections & Details for M.G. Rooms Elev. 150' South
SK-C/J-C-FE46B-21	2	Conduit Supports, Sections & Details Elev. 150' Reactor Bldg.
SK-C/J-C-FE46B-22	3	Conduit Supports, Sections & Details Elev. 150' Reactor Bldg.
SK-C/J-C-FE46B-23	6	Conduit Supports, Sections & Details Elev. 150' Reactor Bldg.
SK-C/J-C-FE46B-24	1	Conduit Supports & Details M.G. Room Elev. 150' Reactor Bldg.
SK-C/J-C-FE46B-25	1	Conduit Support Elev. 150' & 161' Reactor Bldg.
SK-C/J-C-FE46B-26	3	Conduit Supports & Details Elev. 150' Reactor Bldg.
SK-C/J-C-FE46B-27	12	Secondary Wall M.G. Set Rooms Elev. 150'
SK-C/J-C-FE46B-28	1	Conduit Supports & Details M.G. Room Elev. 150' Reactor Bldg.
SK-C/J-C-FE46B-29	2	Conduit Supports & Details Elev. 150' Reactor Bldg.

Drawing Number	Print Revision	Title
SK-C/J-C-FE46B-30	5	Conduit Supports & Details Elev. 161' Reactor Bldg.
SK-C/J-C-FE46B-31	1	Conduit Supports & Details Elev. 161' Reactor Bldg.
SK-C/J-C-FE46B-32	5	Conduit Section M.G. Rooms Elev. 161' Reactor Bldg.
SK-C/J-C-FE46B-33	1	Conduit Supports & Details Elev. 161' Reactor Bldg.
SK-C/J-C-FE46B-34	2	Conduit Supports & Details Elev. 150' Reactor Bldg.
SK-C/J-C-FE46B-35	0	Grnd Conduit Supports & Details Elev. 150' Reactor Bldg.
SK-C/J-C-FE46B-36	1	Conduit Sections & Details Elev. 150' M.G. Set Rooms
SK-C/J-C-FE46B-37	1	Conduit Sections & Details Elev. 160' Reactor Bldg.
SK-C/J-C-FE46B-38	3	Conduit Supports Elev. 150'-9" & 161' Reactor Bldg.

ELEV. 175'

Drawing Number	Print Revision	Title
SK-C/J-C-FE46M-1	2	Conduit Index Drawing Elev. 175'-9" North
SK-C/J-C-FE46M-2	1	Conduit Plan Elev. 203'-1" - 229'-6" North Reactor Bldg.
SK-C/J-C-FE46M-3	8	Conduit Plan Elev. 175'-9" North Reactor Bldg.
SK-C/J-C-FE46M-4	10	Conduit Elevation Reactor Bldg. Secondary Containment Development Az 72° to 144°
SK-C/J-C-FE46M-5	7	Conduit Elevation Reactor Bldg. Secondary Containment Development Az 144° to 216°
SK-C/J-C-FE46M-6	1	Sections & Details Elev. 205'-1" North Reactor Bldg.
SK-C/J-C-FE46M-7	1	Conduit Supports & Details Elev. 203'-1" & Above Reactor Bldg.
SK-C/J-C-FE46M-8	4	Conduit Supports, Sections & Details Elev. 175'-9" - 203'-1" Az 90°-180°
SK-C/J-C-FE46M-9	2	Sections & Details Elev. 175'-9" North Reactor Bldg.
SK-C/J-C-FE46M-10	0	Elevator Structure & Details Elev. 175'-9" Reactor Bldg.
SK-C/J-C-FE46M-11	0	Elevator Structure & Details Elev. 175'-9" Reactor Bldg.
SK-C/J-C-FE46M-12		VOID
SK-C/J-C-FE46M-13	1	Elevator Structure & Details Elev. 175'-9" Reactor Bldg.
SK-C/J-C-FE46M-14	2	Conduit Supports & Details Elev. 175'-9" Reactor Bldg.
SK-C/J-C-FE46M-15	2	Conduit Elevation Secondary Containment Development Az 216°-288° Reactor Bldg.

Drawing Number	Print Revision	Title
SK-C/J-C-FE46M-16	0	Conduit Elevations High Bay Area Elev. 219'-6" Truss No. 2 North Side
SK-C/J-C-FE46M-17	0	Conduit Elevations High Bay Area Elev. 219'-6" Truss No. 3 North Side
SK-C/J-C-FE46M-18	0	Conduit Supports & Details Elev. 203'-1" & Above Reactor Bldg.
SK-C/J-C-FE46M-19	-	Conduit Supports & Details Elev. 203'-1" & Above Reactor Bldg.
SK-C/J-C-FE46M-20	-	Conduit Supports & Details Elev. 203'-1" & Above Reactor Bldg.
SK-C/J-C-FE46M-21	-	Conduit Supports & Details Elev. 203'-1" & Above Reactor Bldg.
SK-C/J-C-FE46M-22	1	Conduit Supports & Details Elev. 175'-9" & Above Reactor Bldg.
SK-C/J-C-FE46N-1		Conduit Index Drawing Elev. 175'-9"
SK-C/J-C-FE46N-2	1	Conduit Plan Elev. 203'-1" to 229'-6" South Reactor Bldg.
SK-C/J-C-FE46N-3	9	Conduit Plan Elev. 175'-9" South Reactor Bldg.
SK-C/J-C-FE46N-4	7	Conduit Elev. Secondary Containment Development Az 288° to 0° Reactor Bldg.
SK-C/J-C-FE46N-5	9	Conduit Elev. Secondary Containment Development Az 0° to 72° Reactor Bldg.
SK-C/J-C-FE46N-6	1	Conduit Supports & Details Elev. 203'-1" - 229'-6" South Reactor Bldg.
SK-C/J-C-FE46N-7	2	Conduit Supports & Details Elev. 175'-9" South Reactor Bldg.
SK-C/J-C-FE46N-8	2	Conduit Supports & Details Elev. 175'-9" to 229'-6" South Reactor Bldg.

Drawing Number	Print Revision	Title
SK-C/J-C-FE46N-9	2	Conduit Supports & Details Elev. 175'-9" South Reactor Bldg.
SK-C/J-C-FE46N-10	0	Conduit Supports & Details Elev. 179'-9" South Reactor Bldg.
SK-C/J-C-FE46N-11	-	Conduit Supports & Junction Box Details & Views
SK-C/J-C-FE46N-12	-	Conduit Elevations High Bay Area Elev. 219'-6" Truss No. 1 Center Reactor Bldg.
SK-C/J-C-FE46N-13	-	Conduit Elevations High Bay Area Elev. 219'-6" Truss No. 3 South Side Reactor Bldg.
SK-C/J-C-FE46N-14	-	Conduit Elevations High Bay Area Elev. 219'-6" Truss No. 2 South Side Reactor Bldg.
SK-C/J-C-FE46N-15	-	Conduit Supports & Details Elev. 203'-1" & Above Reactor Bldg.
SK-C/J-C-FE46N-16	-	Lighting Plan High Bay Area Elev. 219'-6" Reactor Bldg.
SK-C/J-C-FE46MN-1	-	Conduit Plan & Sections Elev. 175'-9" Unit Coolers
SK-C/J-C-FE46MN-2	-	Conduit Sections & Details Elev. 175'-9" to Unit Coolers
SK-C/J-C-FE46MN-3	-	Conduit Sections & Details
SK-C/J-C-FE46U-1	31	Drywell West Plan & Sections
SK-C/J-C-FE46U-2	23	East Plan & Sections
SK-C/J-C-FE46U-3	9	Drywell West Details
SK-C/J-C-FE46U-4	4	Drywell East Support Details
SK-C/J-C-FE46U-5	2	Under Vessel Wiring Plan Elev. 78'
SK-C/J-C-FE46U-6	2	Under Vessel Wiring Sections Elev. 78'
SK-C/J-C-FE46U-7	16	Drywell West Support Details

Drawing Number	Print Revision	Title
SK-C/J-C-FE46U-8	6	Conduit Elev. & Details Elev. 68'-0" to 72'-3"
SK-C/J-C-FE46U-9	7	Supports & Details Drywell West
SK-C/J-C-FE46U-10	11	Elevations & Details Drywell East
SK-C/J-C-FE46U-11	5	Part Plan Recirc Pump "A" Elev. 76'-4 1/2" & Below
SK-C/J-C-FE46U-12	13	Conduit Layout Part Plans Drywell East Elev. 76'-4 1/2" & Below
SK-C/J-C-FE46U-14	7	Conduit Layout Part Plans & Details Drywell East Elev. 76'-4 1/2" & Below
SK-C/J-C-FE46U-16	4	Conduit Sections & Details Drywell Northeast Elev. 76'-4 1/2" & Below
SK-C/J-C-FE46U-17	4	Conduit Layout Part Plan Drywell South Elev. 76'-4 1/2" & Below
SK-C/J-C-FE46U-18	1	Conduit Sections & Details Drywell East
SK-C/J-C-FE46V-1	26	Drywell West Plan Elev. 76' to 86'
SK-C/J-C-FE46V-2	20	Plan & Sections Elev. 76' to 86' East Drywell
SK-C/J-C-FE46V-3	21	Plan & Sections Elev. 86' to 96' West Drywell
SK-C/J-C-FE46V-4	12	Plan & Sections Elev. 86' to 96' West Drywell
SK-C/J-C-FE46V-5	13	West Drywell Layout
SK-C/J-C-FE46V-6	15	East Drywell Sections & Details
SK-C/J-C-FE46V-7	14	East Drywell Supports & Details
SK-C/J-C-FE46V-8	6	East Drywell Supports & Details
SK-C/J-C-FE46V-9	11	West Drywell Supports & Details
SK-C/J-C-FE46V-10	8	Details Elev. 86' to 96'
SK-C/J-C-FE46V-11	8	West Sections & Details

Drawing Number	Print Revision	Title
SK-C/J-C-FE46V-12	7	Conduit Elev's. & Details Drywell
SK-C/J-C-FE46V-13	8	Liner Dev. & Sections Drywell Elev. 76'-4 1/2' to 96'-11 1/2" West
SK-C/J-C-FE46V-14	3	Conduit Layout & Elev. Drywell West
SK-C/J-C-FE46V-16	4	Liner Dev. Drywell East Elev. 76'-4 1/2' to 96'-11 1/2"
SK-C/J-C-FE46V-18	0	Conduit Sections & Details Drywell East
SK-C/J-C-FE46W-1	28	Drywell West Plan Elev. 96' to 120'
SK-C/J-C-FE46W-2	22	Drywell East Sections Elev. 96' to 120'
SK-C/J-C-FE46W-3	17	Drywell West Plan & Supports Elev. 120'
SK-C/J-C-FE46W-4	15	Drywell East Plan & Supports Elev. 120'
SK-C/J-C-FE46W-5	2	Drywell West Supports & Details
SK-C/J-C-FE46W-6	9	Drywell East Supports & Details
SK-C/J-C-FE46W-7	7	Drywell West Supports & Details
SK-C/J-C-FE46W-8	VOID	Conduit Elev's. & Details Drywell VOID
SK-C/J-C-FE46W-9	17	Conduit Elev's. Biological Shield Wall Drywell West Elev. 120'-0" to 143'-8"
SK-C/J-C-FE46W-10	VOID	Liner Dev. Drywell Southeast (VOID)
SK-C/J-C-FE46W-11	10	Conduit Elev Biological Shield Wall Drywell West Elev. 90' to 120'
SK-C/J-C-FE46W-12	11	Conduit Elev & Details East Elev. 90' to 120'
SK-C/J-C-FE46W-13	10	Drywell West Elev. 90' to 120'
SK-C/J-C-FE46W-14	4	Drywell East Elev. 90' to 120'

Drawing Number	Print Revision	Title
SK-C/J-C-FE46W-16	13	Liner Dev. Drywell East Elev. 120' & Above
SK-C/J-C-FE46W-18	-	Conduit Sections & Details Drywell East