

NUCLEAR SAFETY RELATED
EQUIPMENT IS SHOWN ON THIS DRAWING

DRAWING RELEASE RECORD					DRAWING RELEASE RECORD					SCALE	PROJECT NUMBER	SARGENT & LUNDY
REV	DATE	PREPARED	APPROVED	PURPOSE	REV	DATE	PREPARED	APPROVED	PURPOSE			

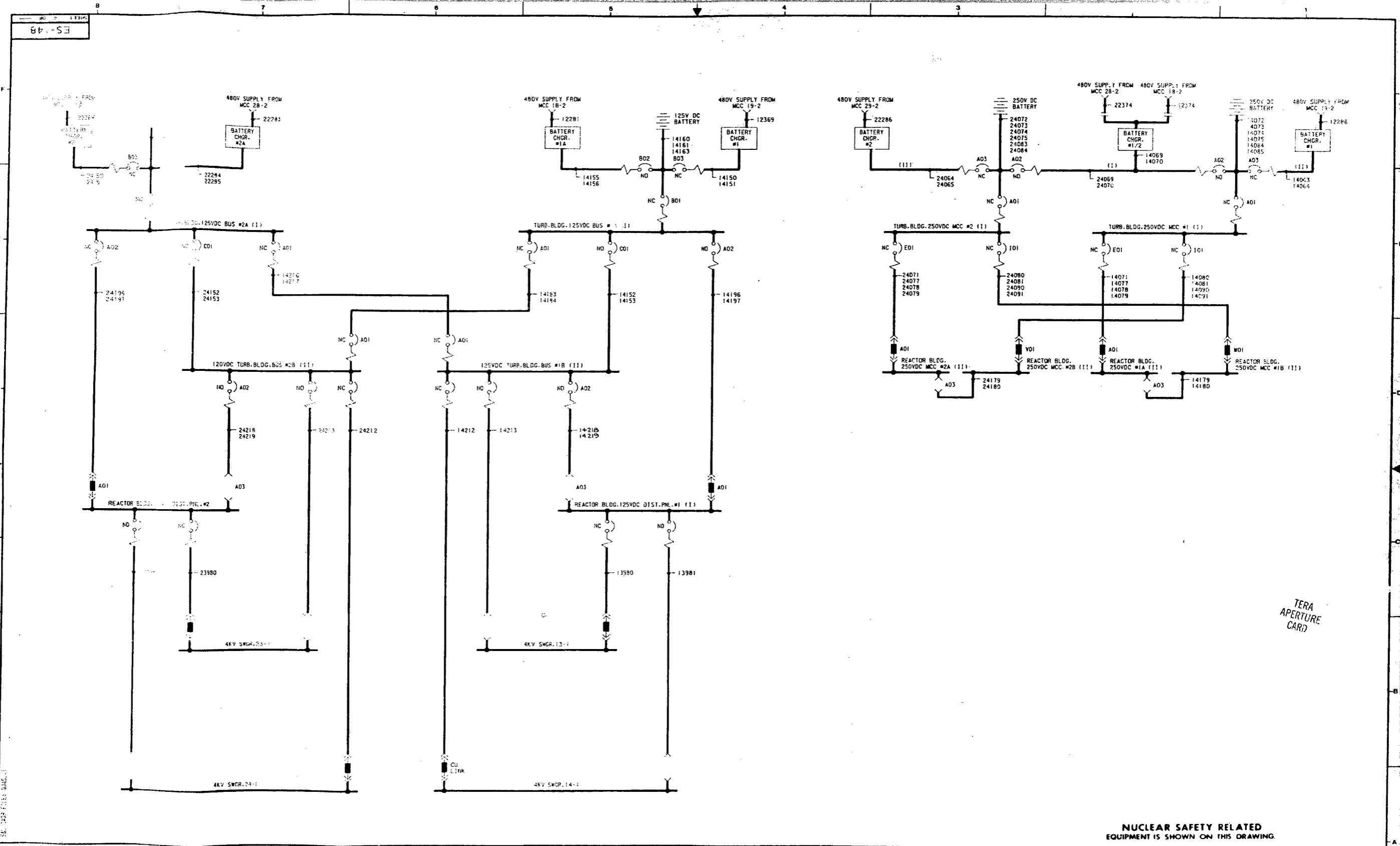
SINGLE LINE DIAGRAM
 EMERGENCY POWER DISTRIBUTION SYSTEM
 2000-10115 NUCLEAR POWER PLANT
 UNIT 1 & 2
 ENGINEERING DEPARTMENT
 CHICAGO, ILLINOIS

DRAWING NO.
ES-148

SARGENT & LUNDY
 ENGINEERS
 CHICAGO, ILLINOIS

22"
 17"
 11"
 8.5"
 8.5"
 11"
 17"
 22"

22"
 17"
 11"
 8.5"
 8.5"
 11"
 17"
 22"



TERA APERTURE CARD

NUCLEAR SAFETY RELATED EQUIPMENT IS SHOWN ON THIS DRAWING.

DRAWING RELEASE RECORD				DRAWING RELEASE RECORD				SCALE		PROJECT NUMBER		SARGENT & LUNDY	
REV	DATE	BY	APP'D	REV	DATE	BY	APP'D	SCALE	PROJECT NUMBER	DRAWING NO.	REV.	SHEET	
										ES-148	D	1	

61-53

TABLE 1-2-1
QUAD CITIES 2 ALTERNATE SAFE HOT SHUTDOWN EQUIPMENT LIST

NO.	LOCATION	RCIC SYSTEM (SEE NOTE 2)	RHR SYSTEM (SEE NOTE 3) LPC MODE TORUS COOLING MODE	DIESEL GENERATORS (SEE NOTE 4)		INSTRUMENT RACKS (SEE NOTE 4)		ELECTRONIC RELIEF VALVES (SEE NOTE 4)		MECHANICAL SAFETY VALVES (SEE NOTE 4)	
				2-6601	1/2-6601	2202-5	2202-6	2-0203-3A	2-0203-3B	2-0203-4A	THRU 4H, 2-0203-3A
1.1.1	REACTOR BUILDING - BASEMENT FLOOR		X(DIV. 11)	X	OR X	X	OR X	X			
1.1.2	REACTOR BUILDING - GROUND FLOOR			X	OR X	X	OR X	X			X
1.1.3	REACTOR BUILDING - MEZZANINE FLOOR		X(DIV. 11)	X	OR X	USE INSTRUMENT RACKS 2202-1, 2202-6 & 2202-5B	X	OR X			X
1.1.4	REACTOR BUILDING - MAIN FLOOR	X		X	OR X	X	OR X	X			
1.1.5	REACTOR BUILDING - REACTOR FLOOR	X		X	OR X	CONTROL ROOM	X	OR X			
1.1.6	REACTOR BUILDING - REACTOR FLOOR	X		X	OR X	X	OR X	X			X
1.1.7	REACTOR BUILDING - RTBELL FLOOR			X	OR X						
1.1.8	REACTOR BUILDING - CONTROL ROOM FLOOR PLAN EL. 554'-0" - 555'-0"	X		X	OR X						
1.1.9	REACTOR BUILDING - CONTROL ROOM FLOOR PLAN EL. 623'-0"	X		X	OR X						
1.1.10	REACTOR BUILDING - CONTROL ROOM FLOOR PLAN EL. 600'-0"	X		X	OR X						
1.1.11	REACTOR BUILDING - REMOTE SAFETY PANELS ROOM	X		X	OR X						X
1.1.12	REACTOR BUILDING - REMOTE SAFETY PANELS ROOM	X		X	OR X						X
1.1.13	REACTOR BUILDING - ELECTRIC EQUIPMENT AND COMPUTER ROOM	X		X	OR X						X
1.1.14	REACTOR BUILDING - ELECTRIC EQUIPMENT AND COMPUTER ROOM	X		X	OR X						X
1.1.15	REACTOR BUILDING - BATTERY ROOM	X		X	OR X						X
1.1.16	REACTOR BUILDING - CLEAN & DIRTY OIL ROOM	X		X	OR X	CONTROL ROOM	X	OR X			X
1.1.17	REACTOR BUILDING - CLEAN & DIRTY OIL ROOM	X		X	OR X	CONTROL ROOM	X	OR X			X
1.1.18	TURBINE BUILDING - BASEMENT FLOOR	X		X	OR X	X	OR X	X			X
1.1.19	TURBINE BUILDING - BASEMENT FLOOR	X		X	OR X	X	OR X	X			X
1.1.20	TURBINE BUILDING - MEZZANINE FLOOR	X	X(DIV. 11)	X	OR X	X	OR X	X			X
1.1.21	TURBINE BUILDING - MEZZANINE FLOOR	X	X(DIV. 11)	X	OR X	X	OR X	X			X
1.1.22	TURBINE BUILDING - MAIN FLOOR	X		X	OR X	CONTROL ROOM	X	OR X			X
1.1.23	TURBINE BUILDING - MAIN FLOOR	X		X	OR X	CONTROL ROOM	X	OR X			X
1.1.24	TURBINE BUILDING - 480V SWITCHGEAR EL. 647'-6"	X		X	OR X	CONTROL ROOM	X	OR X			X
1.1.25	TURBINE BUILDING - FAN FLOOR	X		X	OR X	CONTROL ROOM	X	OR X			X
1.1.26	TURBINE BUILDING - FAN FLOOR	X		X	OR X	CONTROL ROOM	X	OR X			X
1.1.27	DIESEL - GENERATOR AREA EL. 555'-0"	X		X	OR X	CONTROL ROOM	X	OR X			X
1.1.28	TURBINE BUILDING - RESIDUAL HEAT REMOVAL SERVICE WATER AND DIESEL - GENERATOR COOLING UNIT 2 FLOOR EL. 547'-0"	X		X	OR X	CONTROL ROOM	X	OR X			X
1.1.29	TURBINE BUILDING - HP-01 UNIT 2 FLOOR EL. 554'-0"	X	X	X	OR X	CONTROL ROOM	X	OR X			X
1.1.30	REACTOR BUILDING UNIT 2 SOUTHWEST CORNER ROOM FLOOR EL. 554'-0"	X	X(DIV. 11)	X	OR X	CONTROL ROOM	X	OR X			X
1.1.31	REACTOR BUILDING UNIT 2 SOUTHWEST CORNER ROOM FLOOR EL. 554'-0"	X	X(DIV. 11)	X	OR X	CONTROL ROOM	X	OR X			X
1.1.32	REACTOR BUILDING UNIT 2 NORTHWEST CORNER ROOM FLOOR EL. 554'-0"	X	X(DIV. 11)	X	OR X	CONTROL ROOM	X	OR X			X
1.1.33	REACTOR BUILDING UNIT 2 NORTHWEST CORNER ROOM FLOOR EL. 554'-0"	X	X(DIV. 11)	X	OR X	CONTROL ROOM	X	OR X			X
1.1.34	REACTOR BUILDING UNIT 2 NORTHEAST CORNER ROOM FLOOR EL. 554'-0"	X	X(DIV. 11)	X	OR X	CONTROL ROOM	X	OR X			X

NOTE 1:
ALL EQUIPMENT DESIGNATED BY AN X FOR LOCATION LISTED ABOVE IS REQUIRED FOR SHUTDOWN.

NOTE 2:
RCIC INCLUDES FOLLOWING EQUIPMENT:
RCIC PUMP 2-1302
RCIC TURBINE 2-1303
VACUUM PUMP
RCIC CONDENSATE PUMP
BAROMETRIC CONDENSER
RCIC ROOM EMERGENCY COOLER 2-5748B
* * * USE DIVISION ASSOCIATED WITH UNAFFECTED DIESEL GENERATOR

NOTE 3:
RHR INCLUDES FOLLOWING EQUIPMENT:
RHR PUMPS (ONE DIVISION SUFFICIENT FOR SAFE SHUTDOWN)
RHR ROOM COOLERS
RHR SERV. WTR PUMPS
RHR SERV. WTR PMP CUB COOLERS

NOTE 4:
DIESEL GENERATORS INCLUDE FOLLOWING EQUIPMENT:
DG COOLING WATER PUMPS
DG F.G. WTR PMP CUB COOLERS
DG ROOM VENTILATION FANS
DG FUEL OIL TRANSFER PUMPS

TABLE 1-2-2
QUAD CITIES UNIT 2
ALTERNATE SAFE HOT SHUTDOWN VALVE LIST

VALVE	DESCRIPTION
W1-1301-22	CONDENSATE STORAGE ISOLATION ISOLATION VALVE
W1-1301-25	SUPPRESSION POOL SUCTION ISOLATION VALVE
W1-1301-26	SUPPRESSION POOL SUCTION ISOLATION VALVE
W1-1301-48	INJECTION LINE ISOLATION VALVE
W2-1301-49	INJECTION LINE ISOLATION VALVE
W2-1301-16	STEAM SUPPLY ISOLATION VALVE
W2-1301-17	STEAM SUPPLY ISOLATION VALVE
W2-1301-61	STEAM SUPPLY SHUTDOWN VALVE
W2-1301-60	TEST RETURN TO SUPP. POOL ISOLATION VALVE
W2-1301-53	TEST RETURN TO SUPP. POOL ISOLATION VALVE
W2-1301-62	COOLING WATER SHUTDOWN VALVE
RHR-1001-17A-B-C-D	RHR PUMP SUCTION ISOLATION VALVES
W2-1001-16A & B	RHR HX BYPASS VALVES
W2-1001-19A & B	RHR HX DISCHARGE ISOLATION VALVES
W2-1001-34A & B	RHR RETURN TO SUPP. POOL ISOLATION VALVES
W2-1001-36A & B	RHR RETURN TO SUPP. POOL ISOLATION VALVES
W2-1001-37A & B	RHR RETURN TO SUPP. POOL ISOLATION VALVES
W2-1001-29A & B	RHR LPCI INJECTION ISOLATION VALVES
W2-1001-29B & B	RHR LPCI INJECTION ISOLATION VALVES
W2-1001-18A & B	RHR PUMP MINIFLOW BYPASS VALVES
W2-1001-23A & B	RHR CONT. SPRAY DISCHARGE ISOLATION VALVES
W2-1001-26A & B	RHR CONT. SPRAY DISCHARGE ISOLATION VALVES
W2-1001-44A & B	RHR SW PUMP DISCHARGE ISOLATION VALVES
W2-1001-106A & B	RHR SW HX BYPASS ISOLATION VALVES
W2-1001-107A & B	RHR SW HX BYPASS ISOLATION VALVES
W2-1001-105A & B	RHR SW HX DISCHARGE ISOLATION VALVES
W2-1001-5A & B	RHR SW HX DISCHARGE ISOLATION VALVES

TERA APERTURE CARD

NUCLEAR SAFETY RELATED
EQUIPMENT IS SHOWN ON THIS DRAWING

DRAWING RELEASE RECORD						DRAWING RELEASE RECORD						SCALE NONE PROJECT NUMBER 6401	SHUTDOWN EQUIPMENT LIST: QUAD CITIES NUCLEAR POWER STATION UNIT 1 & 2 COMMONWEALTH EDISON COMPANY CHICAGO, ILLINOIS.	SARGENT & LUNDY ENGINEERS CHICAGO	DRAWING NO ES-149	REV O	
REV.	DATE HELD	PREPARED	REVIEWED	APPROVED	PURPOSE	REV.	DATE HELD	PREPARED	REVIEWED	APPROVED	PURPOSE						
						0	8-19-81				FOR CECCO USE						

22"

17"

22"

