



NO.	REFERENCE DRAWINGS	BECHTEL NO.	GE NO.
1	CRD CONTROL ROD DRIVE HYDRAULIC PART A	M-46	
2	CRD LEGEND	M-00	
3	CRD PUNCT. CONTROL DIAGRAM	M-CR-103C-F-8	729 E 618AD
4	OUTLINE HYDR. CONTR. UNIT	M-CR-1000-S-1	9120249
5	COMPRESSED AIR	M-15	
6	CRD HYD. SYSTEM P&ID	M-CR-1000-G-1	9210896
7	CRD HYD. SYST. DESIGN SPEC.	M-CR-1000-L-1	8211342
8	CRD HYD. SYST. PIPING ARRANG'T	M-CR-1000-C-1	751E458
9	CRD HYD. SYST. INSTALL. SPEC.	M-10	
10	REACTOR PROT. SYST. IED	M-CR-1000-F-1	7295611AD
11	DELETED		
12	FUEL POOL COOLING & CLEAN-UP	M-53	
13	GE CRD HYD SYSTEM P&ID	M-CR-1000-DL	1976582AL
14	PROCESS W&E PIPING & TUBING DESIGN	M-AG-1400-LL	22A2864
15	REACTOR MAN. CONTROL ELEM. DIAG.	M-CR-1050-E	791E406-TN
16	CRD HYD SYST ELEM. DIAG.	M-CR-1040-E	791E407-TN
17	REACTOR PROT SYST ELEM. DIAG.	M-CR-1020-E	791E414-TN

- NOTES:
- THIS IS A CLASS 1 SEISMIC SYSTEM EXCEPT AS NOTED.
 - THE GE MPL NUMBER FOR THIS SYSTEM IS CII
 - PROVIDE VENT VALVES WITH CAP ON DISCHARGE SIDE AT ALL SYSTEM HIGH POINTS
 - PROVIDE DRAIN VALVES WITH CAP ON DISCHARGE SIDE AT ALL SYSTEM LOW POINTS
 - ALL PIPING SHALL BE SLOPED CONTINUOUSLY 1/8" PER FOOT ALL HIGH POINTS SHALL BE LOCATED OUTSIDE THE PRIMARY CONTAINMENT
 - ALL INSTRUMENT PIPING & TUBING SHALL BE INSTALLED IN ACCORDANCE WITH REFERENCE 14.
 - ONLY ONE ALARM PROVIDED FOR LOW PRESSURE AND HIGH LEVEL WITH INPUTS FROM ALL HYDRAULIC CONTROL UNITS.
 - SUBCONTRACTOR SCOPE INCLUDES SUPPLY OF SYSTEM PIPING AND NON-ASTERISK (*) ITEMS OTHER THAN PIPING AND INSTALLATION OF SYSTEM PIPING AND ALL ITEMS EXCEPT AS INDICATED IN SPEC. 8031 M-110.
 - DRAINING OF CHARGING WATER HEADERS AT ACCUMULATOR TO BE ACCOMPLISHED BY TEMPORARY CONNECTION OF HOSE TO ACCUMULATOR DRAIN VALVE.
 - EACH PORTABLE NITROGEN CART SHALL INCLUDE ALL ITEMS SHOWN WITHIN THE DASHED LINE RELATED TO ONE NITROGEN BOTTLE, OTHER THAN THE OWNER FURNISHED AND INSTALLED NITROGEN BOTTLE 8001A OR 8001B.

POOR ORIGINAL

NUCLEAR ENERGY SERVICES
 DRN BY: [Signature]
 CKD BY: [Signature]
 GROUP A
 GROUP B
 GROUP C

ALL PIPING DESIGNATED BY [Symbol] IS ASME SECT. II (WB, IWC EXEMPT)
 THIS IS IS IS BASED ON P-10 8031-M-47 REV 9

USE THIS DOCUMENT FOR INSERVICE INSPECTION ONLY
 BACKGROUND MAY NOT BE CORRECT.

1	CLARIFY EXEMPTION NOTATION	SEE ABOVE
2	INITIAL ISSUE INCLUDING BECHTEL COMMENTS	SEE ABOVE
DATE	REVISION	BY
BECHTEL SAN FRANCISCO		
LIMERICK GENERATING STATION UNITS 1 & 2 PHILADELPHIA ELECTRIC COMPANY		
IS1 CONTROL ROD DRIVE HYDRAULIC - PART B		
JOB No.	DRAWING No.	REV.
8031	1/S1-M-47	2
82100408X0		

2. UPDATE AS NOTED PER M-47 REV 9

RIDS

8210040280

