

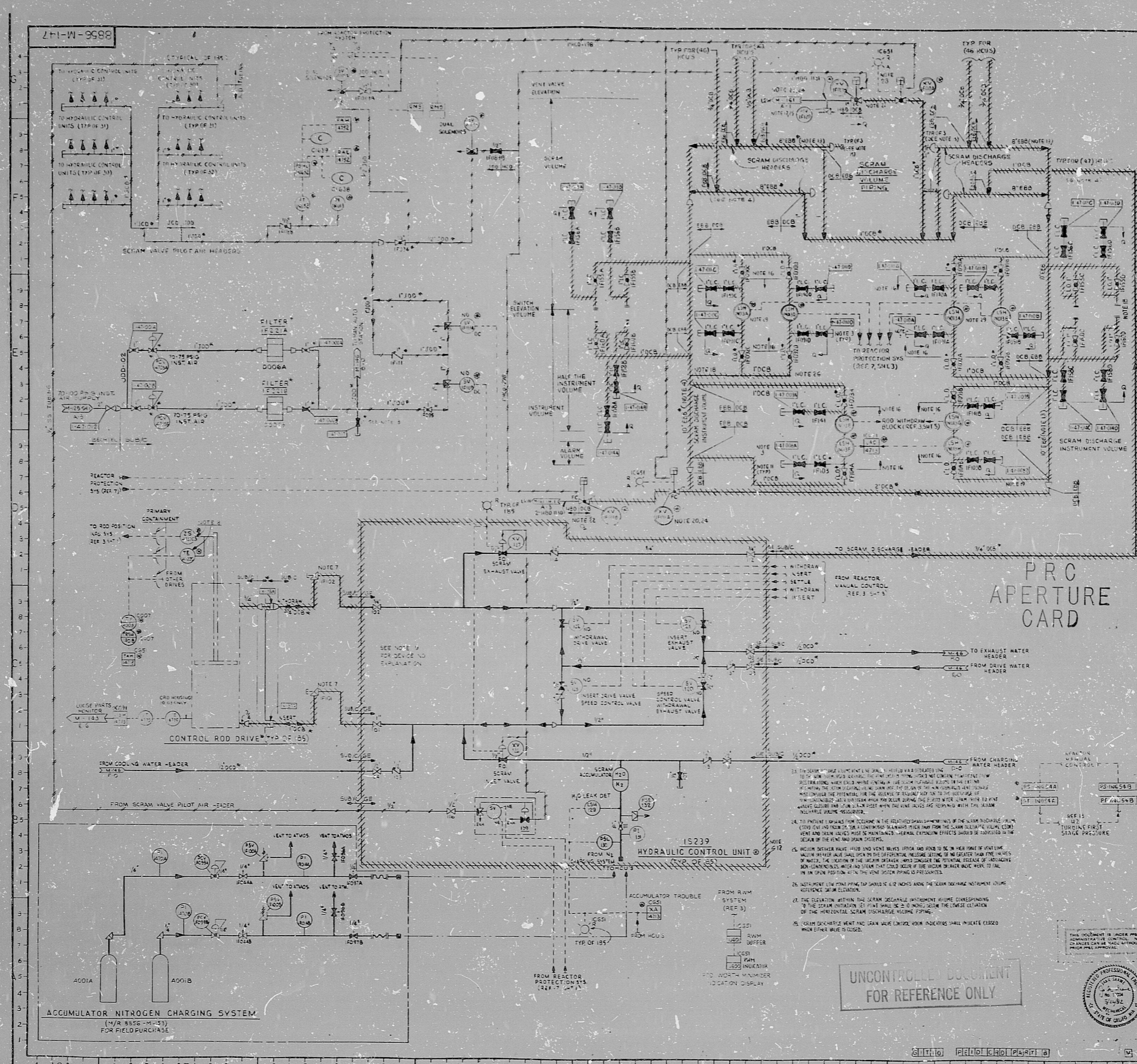
17"

11"

8.5"

11"

17"



SIZE E

NO.	REFERENCE DRAWINGS	REVISION	PL. NO.	SE. NO.
1	P&ID CONTROL ROD DRIVE PART-B		E-106151	
2	P&ID LEGEND		E-106105	
3	SCRAM VALVE CONTROL DIAGRAM		E-106145	
4	NUCLEAR BOILER		E-106146	
5	CRD AND SYSTEM PROTECTION SYSTEM		E-106147	
6	CRD AND SYSTEM PROTECTION SYSTEM		E-106148	
7	REACTOR PROTECT. SYS. ED		E-106149	
8	FIELD CLEANING AND CLEAN JESS		E-106150	
9	CRD AND SYSTEM PROTECTION SYSTEM		E-106151	
10	CRD AND SYSTEM PROTECTION SYSTEM		E-106152	
11	CRD AND SYSTEM PROTECTION SYSTEM		E-106153	
12	CRD AND SYSTEM PROTECTION SYSTEM		E-106154	
13	CRD AND SYSTEM PROTECTION SYSTEM		E-106155	

- NOTES:
1. THE GE MPL NUMBER FOR THIS SYSTEM IS C12.
 2. PROVIDE VENT VALVES WITH SCRD CAP AT ALL SYSTEM HIGH POINTS.
 3. PROVIDE DRAIN VALVES WITH SCRD CAP AT ALL SYSTEM LOW POINTS.
 4. ALL PIPING SHALL BE PITCHED CONTINUOUSLY FROM HIGH POINTS TO LOW POINTS WITH A MINIMUM SLOPE OF 1/8" PER FOOT, UNLESS OTHERWISE NOTED IN REF. TO ALL HIGH POINTS SHALL BE LOCATED OUTSIDE THE PRIMARY CONTAINMENT.
 5. REFER TO LEVEL INSTRUMENT DIAGRAMS FOR EXACT SWITCH ELEVATION.
 6. ACROSS IMPLEMENTATION LATER.
 7. 3/8" DIA. TYPE NEEDLE VENT VALVE (ANGLE PATTERN).
 8. CONTROL ROD 25 IS TYPICAL OF HRS EACH.
 9. DEVICE NUMBERS SHOWN INSIDE HCU ARE THOSE SHOWN ON GE P&ID AND ARE LISTED IN THE REMARK COLUMN OF THE INSTRUMENT INDEX FOR CROSS REFERENCE TO BECHTEL TAG NO'S.
 10. MISCELLANEOUS VALVE NUMBERS USE 1-47-001 THRU 1-47-012.
 11. VALVES 1-47-B, G, I, O, T, U, V, W, X, Y, Z PURCHASED BY BECHTEL, INSTALLED BY NISCO.
 12. HYDRAULIC CONTROL UNIT VALVE NUMBERS SHALL HAVE A SUFFIX OF XXXX; THE SUFFIX INDICATING THE HCU LOCATION OF THE VALVE.
 13. FOR NISCO INSPECTION IDENTIFICATION PURPOSES, LINE NO. 106106 IS ASSIGNED TO THIS VENDOR SUPPLIED PIPING. (SEE DRAWINGS 8856-151-106106 AND 8856-151-106107).
 14. FOR A LIST OF 3 AND NUM 4 PARTS CONTAINED WITHIN THE HCU REFER TO THE SEE MPL 702.
 15. BOND CHANGE CONNECTIONS SHALL BE FITTED AT THE CAP END OF EACH 3/8" DIA. SCRAM DISCHARGE HEADERS FOR FLOODING.
 16. LINE 106106 IS ASSIGNED TO THIS VENDOR SUPPLIED PIPING. THE VENDOR SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF THIS PIPING. THE VENDOR SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF THIS PIPING. THE VENDOR SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF THIS PIPING.
 17. INSTRUMENT INDEX SHALL BE USED TO IDENTIFY THE INSTRUMENT INDEX.
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 19. THE INSTRUMENT INDEX SHALL BE USED TO IDENTIFY THE INSTRUMENT INDEX.
 20. SCRAM DISCHARGE HEADERS SHALL BE USED TO IDENTIFY THE INSTRUMENT INDEX.
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 22. SCRAM DISCHARGE HEADERS SHALL BE USED TO IDENTIFY THE INSTRUMENT INDEX.

NO.	DESCRIPTION	DATE	BY	CHKD.
1	ISSUED FOR REVIEW	10/1/82	J. W. B.	
2	REVISED PER CHANGE LIST NO. 1	10/1/82	J. W. B.	
3	REVISED PER CHANGE LIST NO. 2	10/1/82	J. W. B.	
4	REVISED PER CHANGE LIST NO. 3	10/1/82	J. W. B.	
5	REVISED PER CHANGE LIST NO. 4	10/1/82	J. W. B.	
6	REVISED PER CHANGE LIST NO. 5	10/1/82	J. W. B.	
7	REVISED PER CHANGE LIST NO. 6	10/1/82	J. W. B.	
8	REVISED PER CHANGE LIST NO. 7	10/1/82	J. W. B.	
9	REVISED PER CHANGE LIST NO. 8	10/1/82	J. W. B.	
10	REVISED PER CHANGE LIST NO. 9	10/1/82	J. W. B.	
11	REVISED PER CHANGE LIST NO. 10	10/1/82	J. W. B.	
12	REVISED PER CHANGE LIST NO. 11	10/1/82	J. W. B.	
13	REVISED PER CHANGE LIST NO. 12	10/1/82	J. W. B.	
14	REVISED PER CHANGE LIST NO. 13	10/1/82	J. W. B.	
15	REVISED PER CHANGE LIST NO. 14	10/1/82	J. W. B.	
16	REVISED PER CHANGE LIST NO. 15	10/1/82	J. W. B.	
17	REVISED PER CHANGE LIST NO. 16	10/1/82	J. W. B.	
18	REVISED PER CHANGE LIST NO. 17	10/1/82	J. W. B.	
19	REVISED PER CHANGE LIST NO. 18	10/1/82	J. W. B.	
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100	REVISED PER CHANGE LIST NO. 99	10/1/82	J. W. B.	

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PENNSYLVANIA POWER & LIGHT COMPANY
 ALLIANTEC POWER SERVICES
 PENNSYLVANIA STEAM ELECTRIC STATION - UNIT 1, UNIT 2
 BECHTEL - SAN FRANCISCO

**P & I D UNIT 1
 CONTROL ROD DRIVE PART-B**

JOB NO.	8856	DRAWING NO.	M-147	REV.	17
			E-106252		

SIZE E

8.5"

11"

17"

RIDS

8305250348

