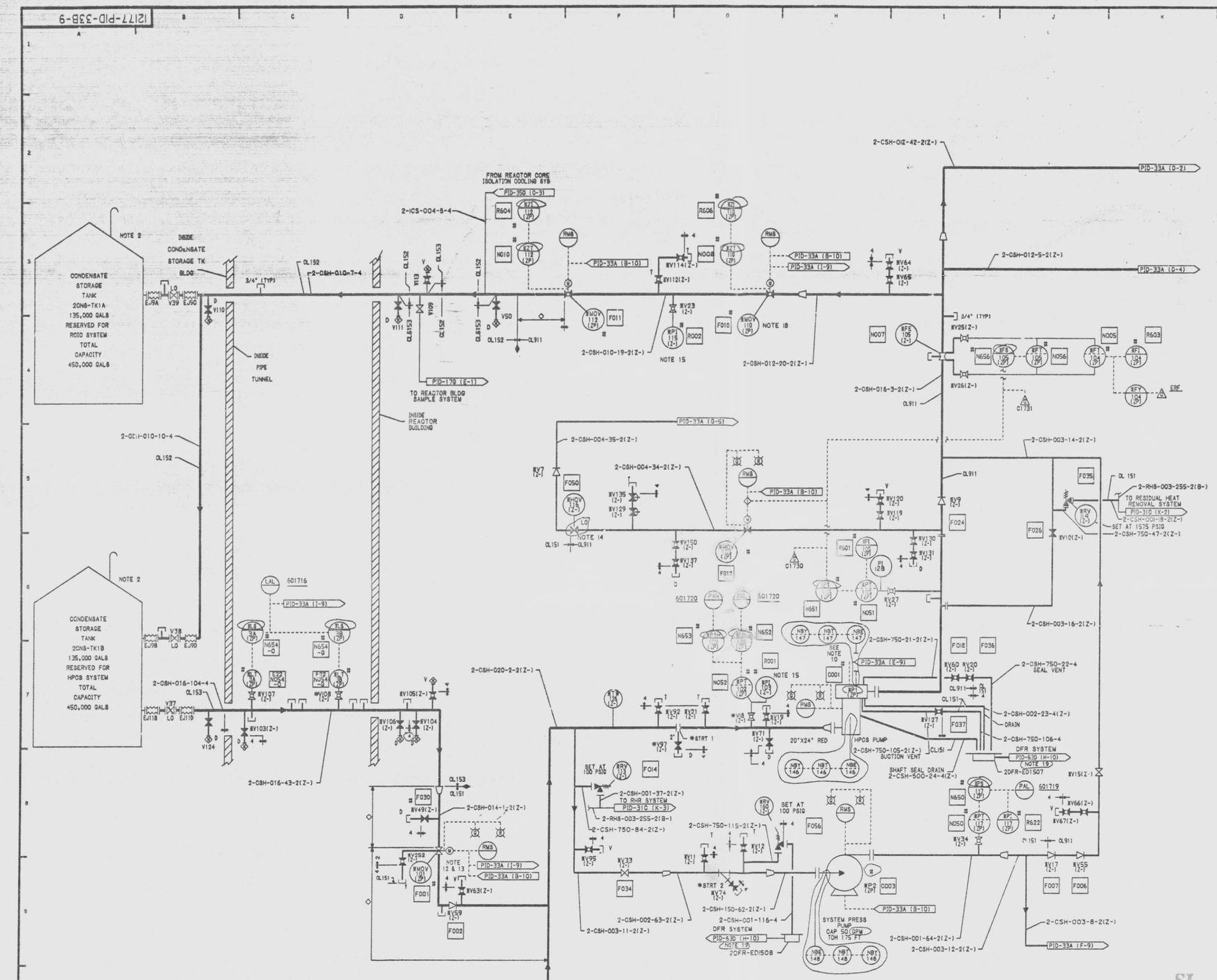
12177-PID-33B-9



MARK NUMBER	VALVE DESCRIPTION	SIZE	NO. OF VALVES
MOV101	DY GE	14"	1
MOV105	BY GE	4"	1
MOV110	BY GE	18"	1
MOV112	BY GE	18"	1
V7	VCW015-E-2K	4"	1
V8	VCW090-E-2RO	16"	1
V10,15	VCW090-F-2M	3"	2
V11,13,16,18,31,68, V98,99,127	VG8060-D-2	3/4"	9
V17	VCW090-D-2Z	3"	1
V20,23,26,29,27,34, V60,64,65,66,67,123, V114,119,120,130,131,137 V150,252	VG8150-F-2	3/4"	20
V33	VGR015-P-2K	3"	1
V37	VVF015-R-2R	18"	1
V38,39	VGF015-H-4R	18"	2
V49,71,74	VG8060-D-2	3/4"	3
V56	VCW090-D-2M	3"	1
V59	VCW015-E-2K	14"	1
V97	VG8060-D-2	3"	1
V103,104,106	VG8060-D-2	3/4"	3
V105,107,108	VG8060-E-2	3/4"	3
V93,109,110,111,124	VG8060-D-4	3/4"	5
V113	VG8060-E-4	3/4"	1
V119,135	VS8150-B-2	3/4"	2
V127	VG8060-D-2	3/4"	1

NOTES:

1. ALL INSTRUMENT AND EQUIP NUMBERS TO BE PREFIXED BY "2CSH-" EXCEPT WHERE A DIFFERENT PREFIX IS SHOWN. AN ASTERISK (*) WILL REPLACE THE DASH (-) IN THE PREFIX FOR EQUIPMENT OR INSTRUMENTS WHICH ARE A PART OF NUCLEAR SAFETY FEATURES SYSTEM.
2. SEE PID-4A FOR OTHER PIPING & INSTRUMENTATION ON CONDENSATE STORAGE TANK.
3. LEVEL SWITCH IS ULTRASONIC TYPE FOR ANNUNCIATION ONLY.
4. GE IDENTIFICATION NUMBERS ARE SHOWN IN SQUARES. (TO BE PREFIXED BY E22 UNLESS OTHERWISE PREFIXED)
5. ALL LOCAL VENTS, DRAINS, TEST CONN, PRESSURE CONN, FLOW TAPS SHALL BE 3/4".
6. ⟶ INDICATES A DISSIMILAR WELD AT PIPE CLASS CHANGE.
7. VALVE POSITIONS ARE SHOWN FOR NORMAL OPERATION OF THE PLANT. THE SYSTEM IS ON STANDBY, READY TO START ON "LOCA" SIGNALS.
8. ALL INSTRUMENT LINES INSIDE DR/WELL TO BE 3/4" CL1502. SCH160 UNLESS OTHERWISE NOTED.
9. LINES 1" AND SMALLER WHICH ARE PART OF THE REACTOR COOLANT PRESSURE BOUNDARY SHALL BE SAFETY CLASS 2.
10. FOR PUMP CAPACITY AND TDH, REFER TO HPCS PUMP PERFORMANCE CURVE VPF#3665-70-1.
11. LEVEL CONNECTIONS ARE 1" UNLESS OTHERWISE NOTED.
12. BONNET VENT CONNECTION ON VALVE 2CSH#MOV101 HAS A 3/4" NIPPLE AND CAP, PIPE CL151.
13. VALVE 2CSH#MOV101 HAS A WELDED PLUG AT THE BOTTOM DRAIN LOCATION.
14. VALVE 2CSH#HCV116 IS THROTTLED TO MAINTAIN FLOW OF 500 GPM.
15. THIS INSTRUMENT REQUIRES SEISMIC QUALIFICATION AND MAY BE PURCHASED, INSTALLED, TESTED AND CALIBRATED TO QA CAT II REQUIREMENTS.
16. ‡ DENOTES EQUIPMENT SUPPLIED BY GE-NED.
17. ⟶ DENOTES MINIMUM DISTANCE REQUIRED FOR INSTALLATION.
18. VALVE #MOV110 SHALL BE DE-ENERGIZED DURING NORMAL PLANT OPERATION TO PRECLUDE THE POSSIBILITY OF SPURIOUS ACTUATION DURING A CONTROL ROOM FIRE (APPENDIX R).
19. NO FLAG SHOWN ON CORRESPONDING DOCUMENT. COORDINATES PROVIDE INTERFACE LOCATION.

THIS DRAWING CREATED ELECTRONICALLY

07-141-91

SI APERTURE CARD

NUCLEAR SAFETY RELATED
QA CAT I, II

ISSUE	DESCRIPTION	CHKD	CORRECT
6	INCORPORATES ECN NO. CSH-612	JWR	MKA/TLO JTS; PSM/MS PSM RES; MED 5-16-87
5	INCORPORATED ECN CSH-027. WORK PREVIOUSLY INCORPORATED ON REVISION 4.	JWR	MKA/EGL JTS; PSM/MS MM RES; MED 4-10-87
4	INCORPORATES ECN NO'S CSH-404,609,024	EFC	MKA/MKA TLO PSW; MTS/HP PSM RES; PDV 11-10-86
3	INCORPORATES EDC NO. 2M00053	KAH	
2	ISSUED FOR COMPUTER DATA BASE UPDATE ONLY.	BAL MI NMPC	RWH JRB 2-12-88
1	INCORPORATES ECN NO. CSH-028	JWR	JAV/TLO JTS; PSM/MS PSM MM; KV 0-5-87

SEE DWG. MICROFILM FOR PREVIOUS ISSUES.

PCT ARCH CIVIL CONC STL L&P INST M.O. P.S. S.A. FAC ELEC LTG MAT'L

PIPING & INSTRUMENTATION DIAGRAM
HIGH PRESSURE CORE SPRAY SYSTEM

NINE MILE POINT NUCLEAR STATION-UNIT 2
NIAGARA MOHAWK POWER CORPORATION

STONE & WEBSTER ENGINEERING CORPORATION
CHERRY HILL, N.J.

DRAWING NUMBER 12177-PID-33B-9

DESIGNED BY E.BILBROUGH | DRAWN BY E.BILBROUGH | DESIGN CHKD BY E.F.CURRAN | CHKD BY E.F.CURRAN

REF DWG T.MADDEN
DATE 8-26-86

SCALE 0

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