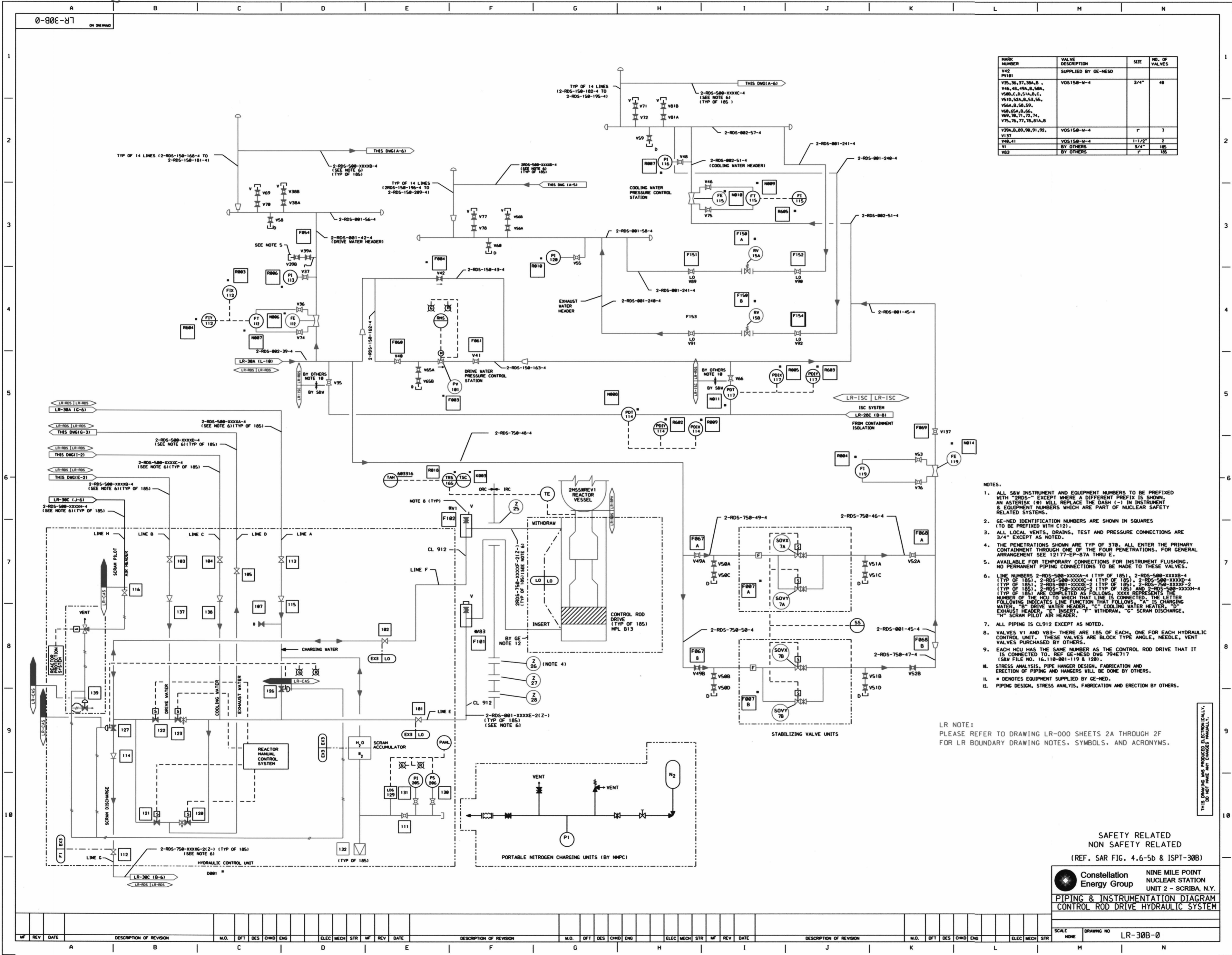


H110



MARK NUMBER	VALVE DESCRIPTION	SIZE	NO. OF VALVES
V42 PV181	SUPPLIED BY GE-NESD		
V35, 36, 37, 38A, B, V46, 48, 49A, B, 50A, 50B, C, D, 51A, B, C, V51D, 52A, B, 53, 55, V56A, B, 58, 59, V60, 65A, B, 66, V69, 70, 71, 72, 74, V75, 76, 77, 78, 81A, B	VOS150-W-4	3/4"	48
V99A, B, 99, 98, 91, 92, V137	VOS150-W-4	1"	7
V48, 41	VOS150-W-4	1-1/2"	2
V1	BY OTHERS	3/4"	185
V83	BY OTHERS	1"	185

- NOTES:
- ALL S&W INSTRUMENT AND EQUIPMENT NUMBERS TO BE PREFIXED WITH "2RDS-" EXCEPT WHERE A DIFFERENT PREFIX IS SHOWN. AN ASTERISK (*) WILL REPLACE THE DASH (-) IN INSTRUMENT & EQUIPMENT NUMBERS WHICH ARE PART OF NUCLEAR SAFETY RELATED SYSTEMS.
 - GE-NED IDENTIFICATION NUMBERS ARE SHOWN IN SQUARES (TO BE PREFIXED WITH C12).
 - ALL LOCAL VENTS, DRAINS, TEST AND PRESSURE CONNECTIONS ARE 3/4" EXCEPT AS NOTED.
 - THE PENETRATIONS SHOWN ARE TYP OF 37B. ALL ENTER THE PRIMARY CONTAINMENT THROUGH ONE OF THE FOUR PENETRATIONS. FOR GENERAL ARRANGEMENT SEE 12177-EP-87A THRU E.
 - AVAILABLE FOR TEMPORARY CONNECTIONS FOR INSTRUMENT FLUSHING. NO PERMANENT PIPING CONNECTIONS TO BE MADE TO THESE VALVES.
 - LINE NUMBERS 2-RDS-500-XXXXA-4 (TYP OF 185), 2-RDS-500-XXXXB-4 (TYP OF 185), 2-RDS-500-XXXXC-4 (TYP OF 185), 2-RDS-500-XXXXD-4 (TYP OF 185), 2-RDS-001-XXXXE-2 (TYP OF 185), 2-RDS-750-XXXXF-2 (TYP OF 185), 2-RDS-750-XXXXG-2 (TYP OF 185) AND 2-RDS-500-XXXXH-4 (TYP OF 185) ARE COMPLETED AS FOLLOWS: XXXX REPRESENTS THE NUMBER OF THE HCU TO WHICH THAT LINE IS CONNECTED. THE LETTER FOLLOWING INDICATES LINE FUNCTION THAT FOLLOWS: "A" IS CHARGING WATER, "B" DRIVE WATER HEADER, "C" COOLING WATER HEADER, "D" EXHAUST HEADER, "E" INSERT, "F" WITHDRAW, "G" SCRAM DISCHARGE, "H" SCRAM PILOT AIR HEADER.
 - ALL PIPING IS CL912 EXCEPT AS NOTED.
 - VALVES V1 AND V83- THERE ARE 185 OF EACH, ONE FOR EACH HYDRAULIC CONTROL UNIT. THESE VALVES ARE BLOCK TYPE ANGLE, NEEDLE, VENT VALVES PURCHASED BY OTHERS.
 - EACH HCU HAS THE SAME NUMBER AS THE CONTROL ROD DRIVE THAT IT IS CONNECTED TO. REF GE-NED DWG 794E717 (S&W FILE NO. 16,110-001-119 & 120).
 - STRESS ANALYSIS, PIPE HANGER DESIGN, FABRICATION AND ERECTION OF PIPING AND HANGERS WILL BE DONE BY OTHERS.
 - * DENOTES EQUIPMENT SUPPLIED BY GE-NED.
 - PIPING DESIGN, STRESS ANALYSIS, FABRICATION AND ERECTION BY OTHERS.

LR NOTE:
PLEASE REFER TO DRAWING LR-000 SHEETS 2A THROUGH 2F FOR LR BOUNDARY DRAWING NOTES, SYMBOLS, AND ACRONYMS.

SAFETY RELATED
NON SAFETY RELATED
(REF. SAR FIG. 4.6-5b & ISPT-30B)

Constellation Energy Group
NINE MILE POINT
NUCLEAR STATION
UNIT 2 - SCRIBA, N.Y.
PIPING & INSTRUMENTATION DIAGRAM
CONTROL ROD DRIVE HYDRAULIC SYSTEM

SCALE: NONE
DRAWING NO: LR-30B-0

D144