



SOLENOID CHART

CONDITION	VLV 1-18		VLV 2-18	
	OPER	ISOL	OPER	ISOL
BOTH SUBLOOPS ISOLATED				
SUB. 1 CONTROL'G ACTUATOR LOCKED				
SUB. 1 CONTROL'G ACTUATOR SUB. 2 ISOLATED	X			
SUB. 2 CONTROL'G ACTUATOR SUB. 1 ISOLATED			X	

KEY- X MUST BE ENERGIZED
 O MUST BE DE-ENERGIZED
 N NORMALLY ENERGIZED BUT MAY BE DE-ENERGIZED

NOTE 7

FIELD PIPING CONNECTIONS

CON	FUNCTION	SAE FLO. SIZE	SIZE
1A	OPEN	1-1/4" 6000 PSI	1
2A	CLOSE	1-1/4" 6000 PSI	1
3A	PILOT	3/4" 3000 PSI	1/2
4A	ACT. DR.	1" 3000 PSI	3/4
5A	CIRC DR.	3/4" 3000 PSI	1/2

LINE LEGEND

— PRESSURE LINE
 — DRAIN, RETURN OR PILOT LINE

- STONE AND WEBSTER VALVE, LINE AND INSTRUMENT NUMBERS FOR HWY. 8" SHOWN THUS V2011A, FOR HWY. 5" SHOWN THUS V2011B.
- ALL VENDOR INSTRUMENT & EQUIPMENT NUMBERS IN THE RECIRCULATION LOOP MUST BE PREFIXED WITH "RCS-FNA" EXCEPT WHERE A DIFFERENT PREFIX IS SHOWN. ALL INSTRUMENT & EQUIPMENT NUMBERS IN THE RECIRCULATION LOOP MUST BE PREFIXED WITH "RCS-B" EXCEPT WHERE A DIFFERENT PREFIX IS SHOWN.
- SYMBOLS NOT PER S&W STANDARDS ARE PER ANSI Y32.18.
- HYDRAULIC FLUID - FRYOUEL EHC, AS MFD BY STAUFFER CHEMICAL ACCUM PRE-CHARGE WITH NITROGEN.
- LEGEND-
 A, Q, QD LETTER, NUMBER, OR COMBINATION IDENTIFIES A POINT.
 UNDERLINED LETTER-NUMBER COMBINATION IDENTIFIES FIELD PIPING CONNECTION.
- VENDOR COMPONENT IDENT. CODE (SEE SPEC. AMP2-P800A-B35) SUBLOOP NO. (C-CIRCUIT) ITEM NO. B/M LETTER TO DISTINGUISH IDENTICAL ITEMS.
- FIELD PIPING CONNECTION NO. IS SAME AS ON ASSEMBLY AND OUTLINE DWGS. SEE S&W FILE NO. 15-00P-5086.
- * INDICATES EQUIPMENT SUPPLIED BY DE-NEO.

*Rev 4
 290 in
 process in
 Solim Meadows
 Doc. Control*

SI
 APERTURE
 CARD

07-141-9L

PIPING & INSTRUMENTATION DIAGRAM
 REACTOR RECIRCULATION SYSTEM

NINE MILE POINT NUCLEAR STATION UNIT 2
 NIAGARA MOHAWK POWER CORPORATION
 STONE & WEBSTER ENGINEERING CORPORATION
 CHERRY HILL, N.J.

12177-PID-290-3

NO.	DESCRIPTION	CHKD	CORRECT	DATE	NO.	DESCRIPTION	CHKD	CORRECT	DATE	NO.	DESCRIPTION	CHKD	CORRECT	DATE
1	ISSUED FOR COMPUTER DATA BASE				2	ISSUED FOR COMPUTER DATA BASE				3	INCORPORATES EDC NO. 2464849			

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