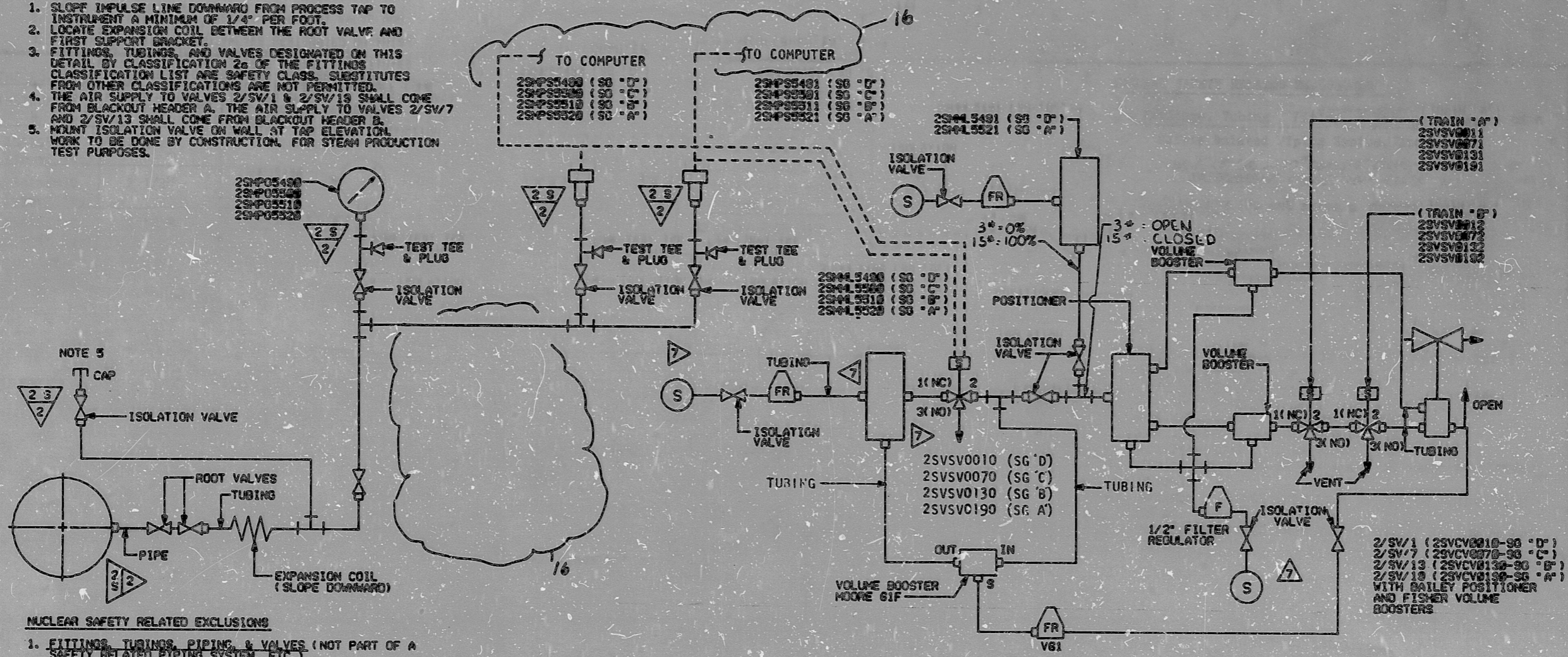


**NOTES:**

1. SLOPE IMPULSE LINE DOWNWARD FROM PROCESS TAP TO INSTRUMENT A MINIMUM OF 1/4" PER FOOT.
2. LOCATE EXPANSION COIL BETWEEN THE ROOT VALVE AND FIRST SUPPORT BRACKET.
3. FITTINGS, TUBINGS, AND VALVES DESIGNATED ON THIS DETAIL BY CLASSIFICATION 2a OF THE FITTINGS CLASSIFICATION LIST ARE SAFETY CLASS. SUBSTITUTES FROM OTHER CLASSIFICATIONS ARE NOT PERMITTED.
4. THE AIR SUPPLY TO VALVES 2/SV/1 & 2/SV/13 SHALL COME FROM BLACKOUT HEADER A. THE AIR SUPPLY TO VALVES 2/SV/7 AND 2/SV/13 SHALL COME FROM BLACKOUT HEADER B.
5. MOUNT ISOLATION VALVE ON WALL AT TAP ELEVATION. WORK TO BE DONE BY CONSTRUCTION FOR STEAM PRODUCTION TEST PURPOSES.



**NUCLEAR SAFETY RELATED EXCLUSIONS**

1. FITTINGS, TUBINGS, PIPING, & VALVES (NOT PART OF A SAFETY RELATED PIPING SYSTEM, ETC.)
  - a) CLASSIFICATION 7
2. INSTRUMENTS (DO NOT SERVE A SAFETY FUNCTION)

- a) 2SMPS5490, 2SMPS5491, 2SMPS5501, 2SMPS5511, 2SMPS5521, 2SMPL5490, 2SMPL5491, 2SMPL5500, 2SMPL5510, 2SMPL5520
- b) 2SMPS5490, 2SMPS5491, 2SMPS5501, 2SMPS5511, 2SMPS5521, 2SMPL5490, 2SMPL5491, 2SMPL5500, 2SMPL5510, 2SMPL5520
- c) 2SMPS5490, 2SMPS5491, 2SMPS5501, 2SMPS5511, 2SMPS5521, 2SMPL5490, 2SMPL5491, 2SMPL5500, 2SMPL5510, 2SMPL5520

**FUNCTIONAL DESCRIPTION:** ( FOR SG "D" APPLIES FOR ALL )

2SMPS5490 ENERGIZES 2SVSV0010 TO OPEN 2/SV/1 ON HIGH PRESSURE AND PROVIDES COMPUTER ALARM.

2SMPS5491 DE-ENERGIZES 2SVSV0010 TO CLOSE 2/SV/1 (EXCEPT WHEN INTERLOCKED) AND PROVIDES COMPUTER ALARM ON LOW PRESSURE.

2SMPL5490 IS USED TO CONTROL 2/SV/1 DURING COOLDOWN AND IS LEFT AT MAXIMUM OUTPUT DURING NORMAL OPERATION. 2SVSV0011 AND 2SVSV0012 ARE DE-ENERGIZED TO CLOSE 2/SV/1 ON A MAIN STEAM ISOLATION SIGNAL AND ARE MANUALLY ENERGIZED TO RESET. THE 61F VOLUME BOOSTER SUPPLIES AN INDICATION OF THE DEMAND SIGNAL TO THE POSITIONER. DE-ENERGIZING 2SVSV0011 OR 2SVSV0012 WILL INTERRUPT THE AIR SUPPLY TO THE VOLUME BOOSTER, THUS RETURNING A CORRECT VALVE CLOSE SIGNAL TO THE MANUAL LOADER INDICATOR.

2SMPL5491 IS USED TO CONTROL (S.G. "D" ONLY) 2SVSV0130 VALVE BY OPERATOR.

2SMPL5521 IS USED TO CONTROL (S.G. "A" ONLY) 2SVSV0190 VALVE BY OPERATOR.

**QA CONDITION 1**  
(EXCEPT AS EXCLUDED ABOVE)

**DUKE POWER COMPANY**  
MCGUIRE NUCLEAR STATION UNIT 2

**INSTRUMENT DETAILS**  
MAIN STEAM PORV CONTROL

NO.	REVISIONS	DRN	DATE	CHKD	DATE	APPR	DATE	CIVIL	ELEC.	MECH.	INSPECTED
16	NSM-MG-20691/01 IMP. D. 6-24-80	RSC	6/29/80	DVA	7/1/80	N/R	7/1/80				
15	REDRAWN PER DWG. RESTORATION	SKW	8/1/79	SES	8/1/79	N/R	8/1/79				
14	UPDATED PER NEN MC-2499/SM	SKW	8/1/78	SES	8/1/78	N/R	8/1/78				
	IMP. DATE 7/12/87										
	ORIG. PRELIMINARY			JAL		RWA	7-8	N/R	JRH	N/R	

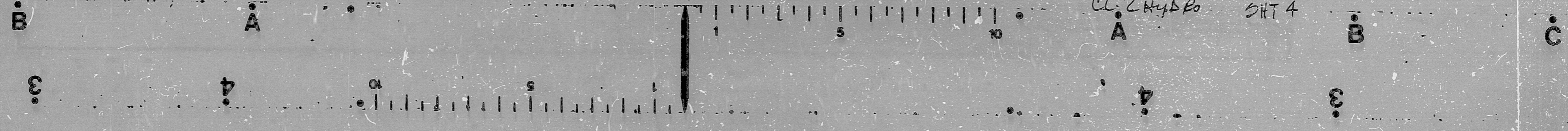
DESIGNED BY	DATE 7-8-77	IMP. BY	DATE 7-8-78
DRAWN BY	DATE 8-24-78	IMP. BY	DATE 7-8-78
CHECKED BY	DATE 8-24-78	APP. BY	DATE 7-8-78
DWG. NO.	MC-2499-SM3	REV.	16

**SI APERTURE CARD**

**FOR INFORMATION ONLY**

DUKANE-PARNELL, INC., CHARLOTTE 187 704-373-7788

CL. 2 Hyd. P. SH 4



PDR RIDS

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