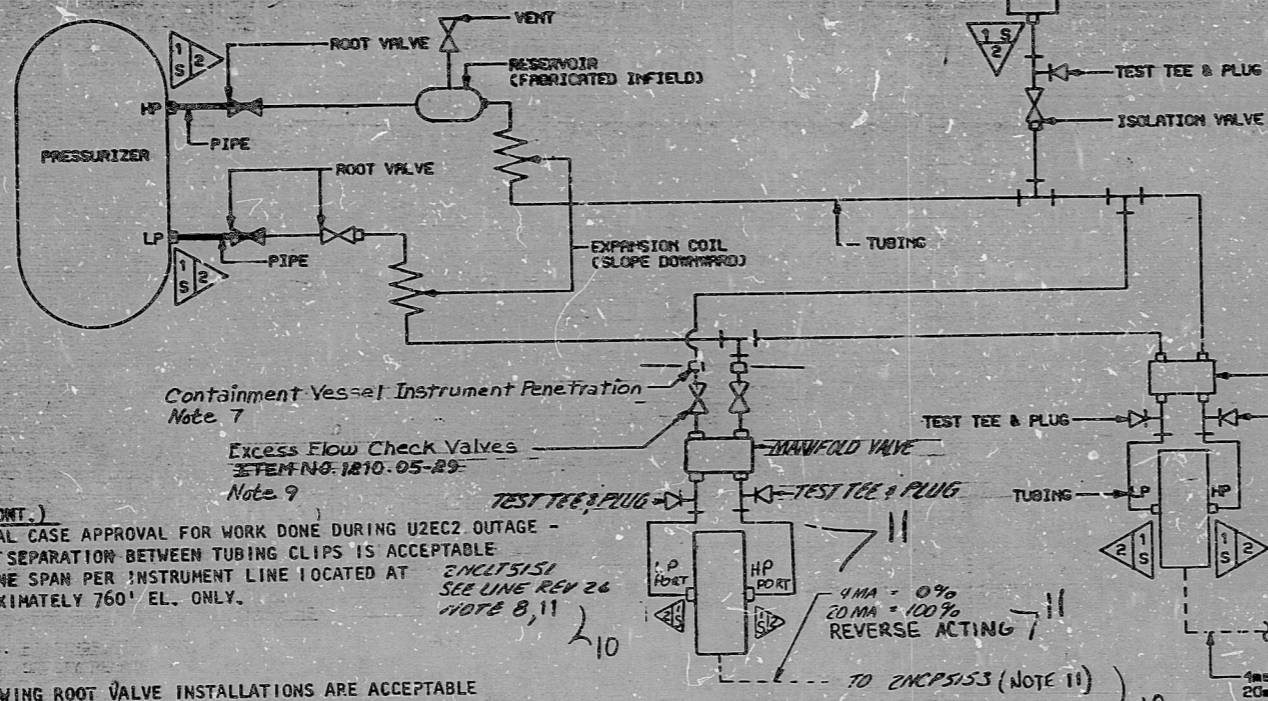


NOTE 7 (cont.)

10. HIGH PRESSURE ROOT VALVE FOR 2NCLT5150 MAY BE INSTALLED IN A VERTICAL POSITION.

11. INSTRUMENT IS SSS RELATED.



NOTE 9 (CONT.)

12. SPECIAL CASE APPROVAL FOR WORK DONE DURING U2EC2 OUTAGE - 4'-0" SEPARATION BETWEEN TUBING CLIPS IS ACCEPTABLE FOR ONE SPAN PER INSTRUMENT LINE LOCATED AT APPROXIMATELY 760' EL. ONLY.

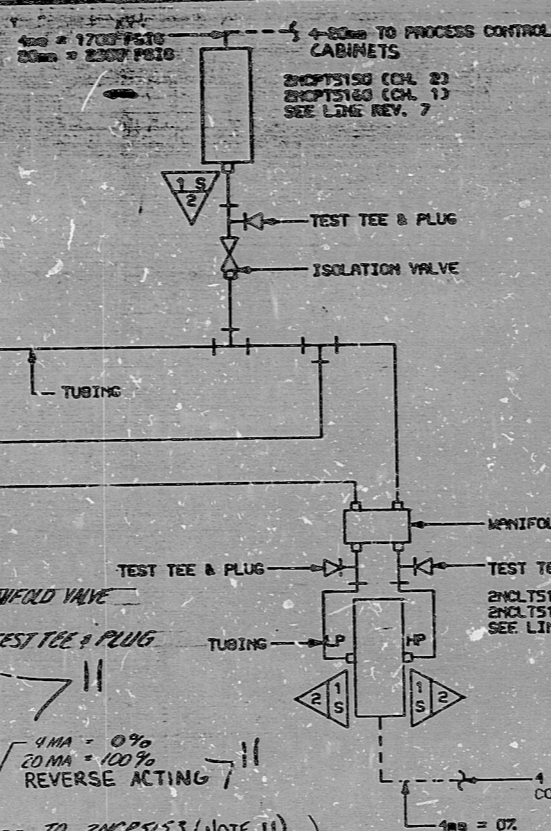
THE FOLLOWING ROOT VALVE INSTALLATIONS ARE ACCEPTABLE

INSTRUMENT	OUTLET OF RED. INS. TO 1st ROOT VALVE	OUTLET OF RED. INS. TO ELBOW	ELBOW TO ROOT VALVE	ROOT VALVE TO RESERVOIR	1st ROOT VALVE TO 2nd ROOT VALVE
2NCLT5150 HP	N/A	8"	6 1/2"	5 1/2"	N/A
2NCLT5150 LP	8 1/8"	N/A	N/A	N/A	4 5/8"
2NCLT5160 HP	N/A	8"	6"	5 1/2"	N/A
2NCLT5160 LP	8 1/2"	N/A	N/A	N/A	4 5/8"

FUNCTIONAL DESCRIPTION:

2NCLT5150 AND 2NCLT5160 MONITOR PRESSURIZER LEVEL. AND 2NCLT5150 AND 2NCLT5160 MONITOR PRESSURIZER PRESSURE. 2NCLT5150 PROVIDES A SIGNAL TO 2NCP5152, 2NCP5162, AND THE RCPS. 2NCLT5160 PROVIDES A SIGNAL TO 2NCP5160, 2NCP5162, 2NCCS5162, 2NCCR5161 AND THE RCPS. 2NCLT5150 PROVIDES A SIGNAL TO 2NCP5150 AND THE RCPS. AND 2NCLT5150 PROVIDES A SIGNAL TO 2NCP5160, 2NCP5161, 2NCP5163 AND THE RCPS. 2NCLT5151 MONITORS THE PRESSURIZER LEVEL AND SENDS A SIGNAL TO 2NCP5153 LOCATED IN THE SSF. 2NCLT5150 AND 2NCLT5160 PROVIDES SIGNALS TO 2NCCR5140 THROUGH PROCESS CONTROL CABINETS.

Rev. 5 as per VN# 21,805
Rev. 4 as per VN# 20,636



1. Fittings, tubing, piping, and valves shall be safety related.
 - a. NONE
 2. Instruments (to be safety related)
 - a. 2NCLT5151, 2NCP5153
- NOTES:
1. SLOPE IMPULSE LINE DOWNWARD FROM PROCESS TAP TO INSTRUMENT A MINIMUM OF 1/4" PER FOOT.
 2. FITTINGS, TUBINGS, AND VALVES DESIGNATED ON THIS DETAIL BY CLASSIFICATION 1: OF THE FITTINGS CLASSIFICATION LIST ARE SAFETY CLASS. SUBSTITUTES FROM OTHER CLASSIFICATIONS ARE NOT PERMITTED.
 3. LOCATE EXPANSION COILS BETWEEN THE LAST ROOT VALVE AND FIRST SUPPORT BRACKET.
 4. RESERVOIR TO BE LOCATED AT SAME ELEVATION AS TAP. USE SCH. 40S PIPE COUPLERS.
 5. ANY SET OF VERTICAL ALIGNED INSTRUMENT NOZZLES MAY BE USED FOR INSTRUMENT INSTALLATION.
 6. DUKE CLASS A 9000# 3/4" x 1/2" REDUCER IS TO BE INSTALLED AT THE INSTRUMENT TAP AND PIPING SPEC. 2501.2 IS TO BE USED AT OUTLET OF THE REDUCER.
 7. FOR PENETRATION DETAIL REFER TO MC-1499-H12.
 8. TRANSMITTER CONSISTS OF A D/P CELL LOCATED IN THE ANNULUS AND REMOTE ELECTRONICS LOCATED IN TRAIN "A" SWITCH GEAR ROOM.
 9. EXCESS FLOW CHECK VALVE SHOULD BE LOCATED AS CLOSE AS PRACTICAL TO THE CONTAINMENT VESSEL INSTRUMENT PENETRATION.

AS-BUILT
DATE 11-5-81

QA CONDITION 1
NUCLEAR SAFETY RELATED
(EXCEPT AS EXCLUDED ABOVE)

NO.	REVISIONS	DATE	CIVIL	ELEC.	MECH.	INSPECTED
9	REV. AS PER VN# 26,048					
8	REV. PER DS 04/25/85					
12	UPDATED TO REFLECT IMP. OF NSM-MG-20436/00. IMP. DATE 04/25/86. ME-VN-390					
11	REV. PER NSM #MG-2-0478. IMP. DATE - 5/3/85.					
10	NOTED: SSS RELATED INSTR.					

DUKE POWER COMPANY
MCGUIRE NUCLEAR STATION UNIT 2

INSTRUMENT DETAIL
PRESSURIZER LEVEL AND PRESSURE
(CHANNELS 1 & 2)

DESIGNED BY: DATE: 11-5-81
DRAWN BY: DATE: 11-5-81
CHECKED BY: DATE: 11-5-81
DWG. NO. MC-2499-NC4

5HT. 2

CL Hydro

FOR INFORMATION ONLY

SI
APERTURE
CARD

8904060283

PDR RIDS

