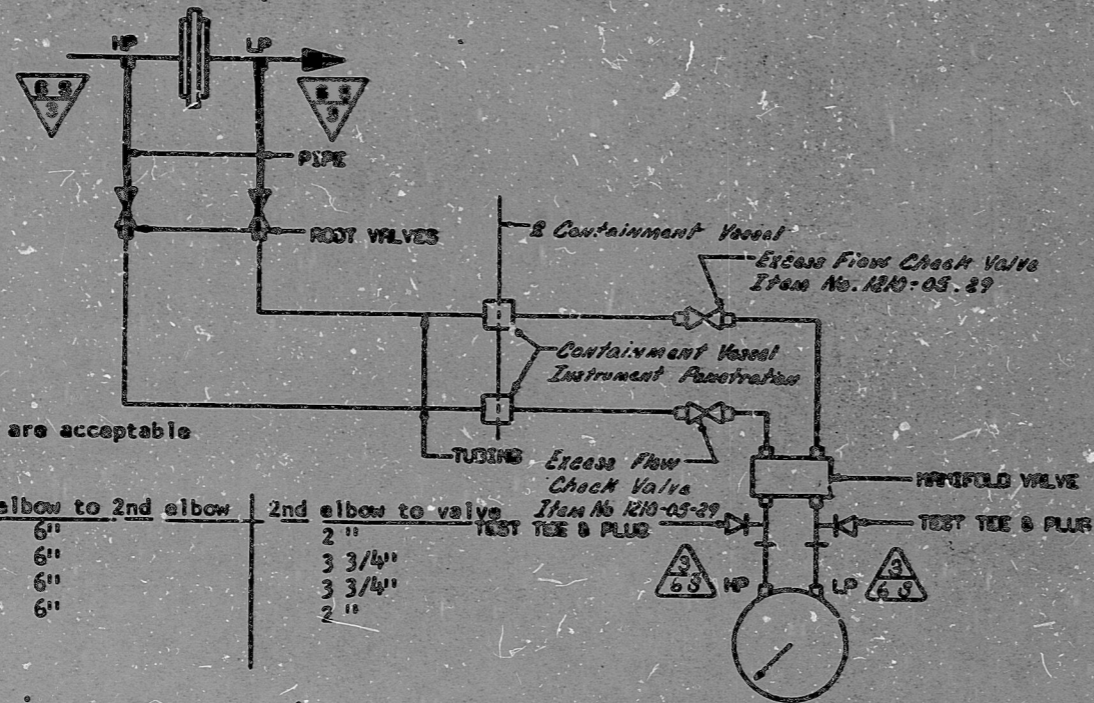


2KCFE5830 COOLER A3
 2KCFE5840 COOLER B3
 2KCFE5850 COOLER C3
 2KCFE5860 COOLER D3
 SEE LINE REV. 3



The following root valve installations are acceptable without the addition of supports:

	tap to 1st elbow	1st elbow to 2nd elbow	2nd elbow to valve
2KCFE5840 (HP)	4 3/4"	6"	2"
2KCFE5840 (LP)	3 3/4"	6"	3 3/4"
2KCFE5860 (HP)	3 3/4"	6"	3 3/4"
2KCFE5860 (LP)	1 1/2"	6"	2"

2KCFE5830 COOLER A3
 2KCFE5840 COOLER B3
 2KCFE5850 COOLER C3
 2KCFE5860 COOLER D3
 SEE LINE REV. 3 - 1

NUCLEAR SAFETY RELATED EXCLUSIONS

1. FITTINGS, TUBINGS, PIPING, & VALVES (NOT PART OF A SAFETY RELATED PIPING SYS, ETC.)

A) NONE

2. INSTRUMENTS (DO NOT SERVE A SAFETY FUNCTION)

- A) 2KCFE5830 & 2KCFE5830
- B) 2KCFE5840 & 2KCFE5840
- C) 2KCFE5850 & 2KCFE5850
- D) 2KCFE5860 & 2KCFE5860

1. MINIMUM SLOPE REQUIREMENTS CANNOT BE MET. SLOPE IMPULSE LINE DOWNWARD FROM PROCESS TAP TO A POINT BELOW INSTRUMENT, THRU WALL PENETRATION, THEN UP TO INSTRUMENT. VENT AT TEST TEES.

2. FITTINGS, TUBINGS, AND VALVES DESIGNATED ON THIS DETAIL BY CLASSIFICATION C6 OF THE FITTINGS CLASSIFICATION LIST ARE SAFETY CLASS. SUBSTITUTES FROM OTHER CLASSIFICATIONS ARE NOT PERMITTED.

3. REFER TO NC-2499-M12 FOR CONTAINMENT VESSEL INSTRUMENT PENETRATION DETAIL.

FUNCTIONAL DESCRIPTION: (FOR COOLER "A", APPLIES TO OTHERS)
 2KCFE5830 MONITORS COOLING WATER FLOW AND PROVIDES LOCAL INDICATION AND AN ALARM ON LOW FLOW.

AS - BUILT
DATE 9-15-81

Rev. 3 As Per NCI 10,360

NO.	REVISIONS	CHG	DATE	BY	CHKD	DATE	BY	SCALE
4	Added Stamps							
3	Added Installation Chart							
2	Rev. slope note.							
1	Rev. for design							

QA CONDITION I
NUCLEAR SAFETY RELATED
 (Except As Excluded Above)

DUKE POWER COMPANY
 MCQUIRE NUCLEAR STATION UNIT 2

INSTRUMENT DETAILS
 RV SUPPORT COOLERS FLOW

ENCLOSURE NO. 2499-M12
 INSTRUMENT PENETRATION DETAIL

SI
 APERTURE
 CARD

FOR INFORMATION
 ONLY

CL-5 Ryoko SATS

PDR RIDS

8904180 366

