



The following root valve installation is acceptable:

Instrument	Tap to 1st elbow	1st elbow to 2nd elbow	2nd elbow to valve
2KCFE6000 (HP)	1 3/4"	3 1/4"	1 3/4"
2KCFE6000 (LP)	1 3/4"	3 1/4"	5 1/2"

**NUCLEAR SAFETY RELATED EXCLUSIONS**

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

A) NONE

2. INSTRUMENTS (DO NOT SERVE A SAFETY FUNCTION)

- A) 2KCFE5990, 2KCFE5990 & 2KCFE5990
- B) 2KCFE6000, 2KCFE6000 & 2KCFE6000
- C) 2KCFE6010, 2KCFE6010 & 2KCFE6010
- D) 2KCFE6020, 2KCFE6020 & 2KCFE6020

**NOTES:**

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 6s of the Fittings Classification List are safety class. Substitutes from other classifications are not permitted.
3. Refer to MC-1499-MC12 for containment vessel instrument penetration detail.

FUNCTIONAL DESCRIPTION: (FOR PUMP "A," APPLIES TO OTHERS)

2KCFE5990 & 2KCFE6000 MONITOR OUTLET FLOW FROM THE RCP LOWER BEARING COOLER. 2KCFE5990 PROVIDES INPUTS TO THE COMPUTER AND 2KCFE6000 (LOCATED ON A.B. LOCAL PANEL). 2KCFE6000 PROVIDES ALARMS ON HIGH AND LOW FLOW.

**AS-BUILT**  
DATE 9-15-81

Rev. 4 As Per NCI 11,166

**QA CONDITION I**

**NUCLEAR SAFETY RELATED**  
(EXCEPT AS EXCLUDED ABOVE)

DUKE POWER COMPANY MCGUIRE NUCLEAR STATION UNIT 2	
INSTRUMENT DETAILS RCP LOWER BRG COOLER OUTLET FLOW	
NO.	REVISIONS
5	Added Stamps
4	Added Installation Chart
3	Added Notes
2	Rev. Slope Note
1	Rel. for Constr.
0000	PRELIMINARY
CHD	APPR
DATE	DATE
SCALE	DWG. NO. MC-2495-K030
REV	5

SI  
APERTURE  
CARD

FOR INFORMATION  
ONLY

SHT 3  
CL-3 HYDRO



PDR RIDS

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