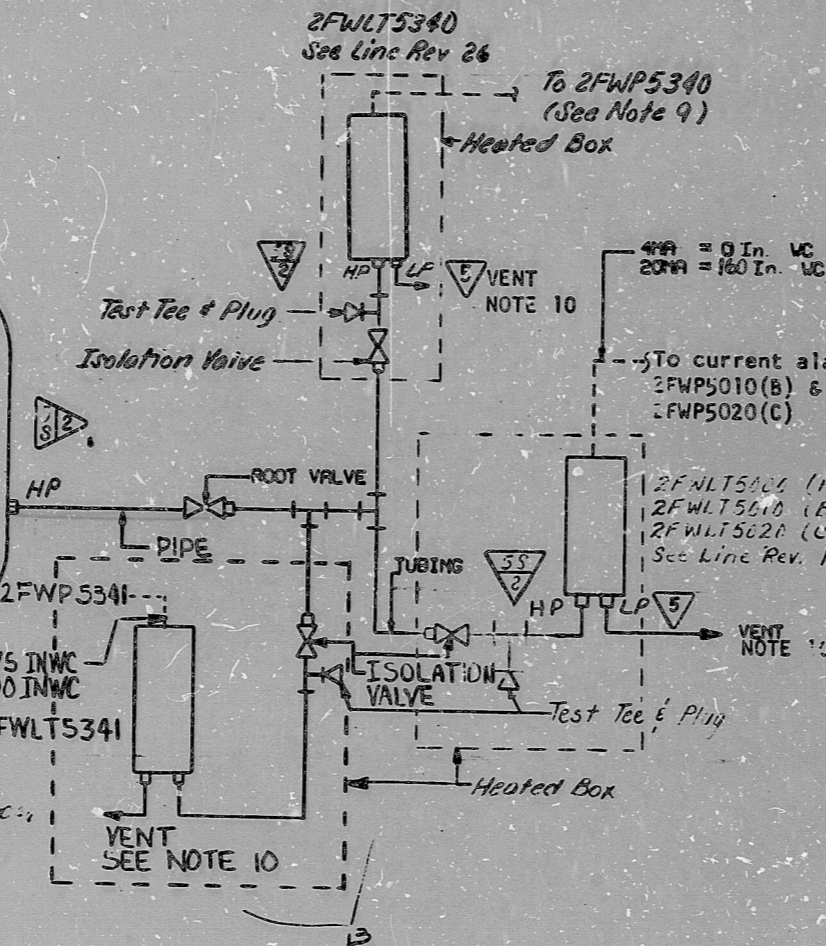


INSTRUMENT REDUNDANCY
2FWLT5000, 2FWLT5010, & 2FWLT5020.



REV. 11 AS PER VN#23,946
REV. 5 AS PER VN#17,423 & 17,737

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) 2FWTT5030, 2FWTT5120, 2FWTT5280
- b) 2FWLT5340
- c) 2FWLT5341

NOTES:

1. Tubing to be protected from freezing.
2. Slope imprise line downward from process tap to instrument a minimum of 1/4" per foot.
3. Fittings, tubings, and valves designated on this detail by classification 5S of the fittings classification on list are safety class. Substitutes from other classifications are not permitted.
4. Instrument cabinet item no. MC-1366.02-39
5. Instrument cabinet to be strip heated.
6. Instrument cabinet item number MC-1366.02-00-46.
7. Instruments & instrument lines must meet minimum physical separation requirements stated on ICS-A -11, appendix A.
8. Instruments to be located in heated cabinet (Item no. MC-1366.02-00-46) mounted on tank base.
9. 2FWLT5340 range 4 ma = 0 INWC
20 ma = 500 INWC
10. Vent lines to be run up the missile shield wall to a point approximately one foot above the wall and then turned down.
11. Root nipple not to exceed 12" in length.

QA CONDITION I

NUCLEAR SAFETY RELATED
(Except as Excluded Above)

FUNCTIONAL DESCRIPTION:

2FWLT5000, 2FWLT5010 And 2FWLT5020 Monitor refueling water storage tank level and provides alarms on low level and alarms on low-low level. Signals are also provided to 2FWP5000, 2FWP5020 and 2FWP5010. 2FWLT5340 provides a wide range signal to 2FWP5340 which provides remote indication. 2FWLT5000, 2FWLT5010 and 2FWLT5020 also provide an alarm at Automatic Switch-over. 2FWLT5341 provides a narrow range signal to 2FWP5341, ANNUNCIATOR ALARMS ON MAKE-UP AND HI LEVELS AND OAC ALARM ON HI LEVEL.

REFERENCE DRAWING:

MCM-1201.04-137 (72-3533) Refueling Water Storage Tank O/L

NO.	REVISIONS	DWN	CHD	APPR	DATE	CIVIL	ELC.	MESH	INSPECTED
14	REV PER SPR # 0651 & 1278								
13	REV. PER NSM MG 20492								
	REV O IMP. DATE 6/22/87								
12	PER VN# ME-VN-170 & K/N								
	REV AS NOTED (IPE-2FW-3)								

Duke Power Company
MCGUIRE NUCLEAR STATION UNIT 2

INSTRUMENT DETAILS
REFUELING WATER STORAGE
TANK LEVEL TRANSMITTER

DESIGNED	DATE	INSPECTED	DATE
DRAWN	DATE	INSPECTED	DATE
CHECKED	DATE	APPROVED	DATE

FOR INFORMATION ONLY

CL 2 Hydro SH 2

SI APERTURE CARD



PDR RIDS

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