

A G E N D A

TECHNICAL GROUP MEETING

1800 4/22/79

1. Radioactive Releases
 - a. Identification and isolation of sources
 - b. Trending at outlet of condenser air ejector
 - c. Results of analysis from Make-Up Tank room (taken during level changes)
 - d. Possibility of water in Waste Gas Decay Tanks

2. Status of:
 - a. RCS Sample #4
 - b. Filter replacement
 - c. Storage provisions for filters
 - d. Auxiliary Building roof ventilation system
 - e. EPICOR (cap-gun 2)
 - f. Tank farm in Unit 2 spent fuel pool
 - g. Decontamination efforts/ADHR
 - h. Liquid Waste Processing
 - i. Hydrogen recombiner
 - j. Charcoal filters for ventilation systems for welding operations

3. Alternate pressurizer level measurement

4. Natural Circulation
 - a. Comments on charter and membership of Natural Circulation Advisory Group
 - b. Procedure for proceeding to natural circulation
 - c. Feeding via auxiliary feedwater line
 - d. Schedule for initiation of natural circulation
 - e. Criteria for cutoff of attempt to start natural circulation (first time; last time)

ACTION ITEMS

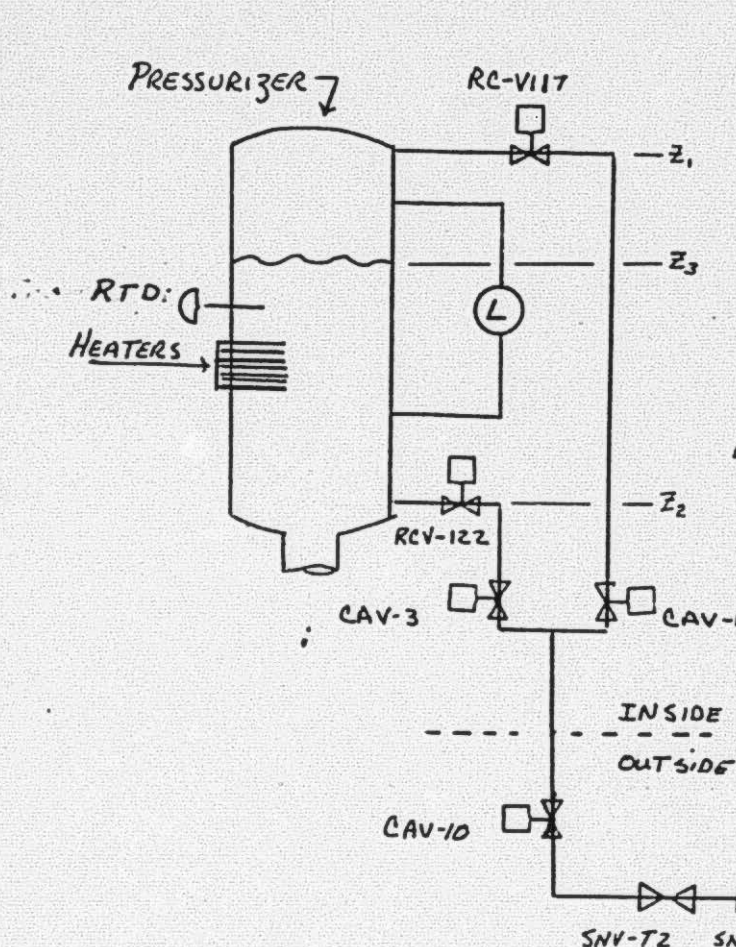
Task Management/Schedule Meeting

0900 4/22/79

	<u>Action</u>
1. Firm up schedule for proceeding to natural circulation; reach consensus on sequence of events ("A" OSTG solid first (?), etc.). Be prepared to discuss at 1800 meeting.	Arnold/ Cobean/ Wilson
2. Report analysis results from Make-Up Tank room (taken during level changes in M.U. Tank).	Rusche
3. Investigate possibility of water in Waste Gas Decay Tanks.	Wilson/ Cobean
4. Counts per minute on condenser air ejectors appear to be trending upward. Continue monitoring.	Herbein
5. Evaluate sample types, frequencies and locations.	Rusche
6. Check elevations on main steam line for possible location of water seal.	Wilson
7. Proceed with taking primary sample at 1000 Hrs. Confirm shipping arrangements to Lynchburg.	Herbein
8. Evaluate control power problem on fire detection sensors in filter systems.	Herbein
9. Resolve disposal problems for "A" and "B" filters.	Herbein/ Rusche
10. Resolve problems with use of service air system for breathing air at all locations.	Herbein
11. Need charcoal filters on portable ventilating systems for welding.	Cobean
12. Restore hydrogen recombiner to service.	Herbein
13. Resolve power supply problems in areas being de-conned by Westinghouse.	Herbein/ Westinghouse

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USE OF HEISE GAUGE FOR ALTERNATE PRESSURIZER LEVEL INDICATION



METHOD #1

FROM 1ST READING w/ CAV-1 OPEN:

$$P_{HEISE} = P_{STM} + \rho_{70} (Z_1 - Z_{HEISE})$$

FROM 2ND READING w/ CAV-3 OPEN:

$$P_{HEISE} = P_{STM} + \rho_{70} (Z_2 - Z_{HEISE}) + \rho_{550} (Z_3 - Z_2)$$

COMBINING THE TWO READINGS:

$$\Delta P_{HEISE} = \rho_{70} (Z_1 - Z_2) + \underbrace{\rho_{550} (Z_3 - Z_2)}_{PZR \text{ LEVEL}}$$

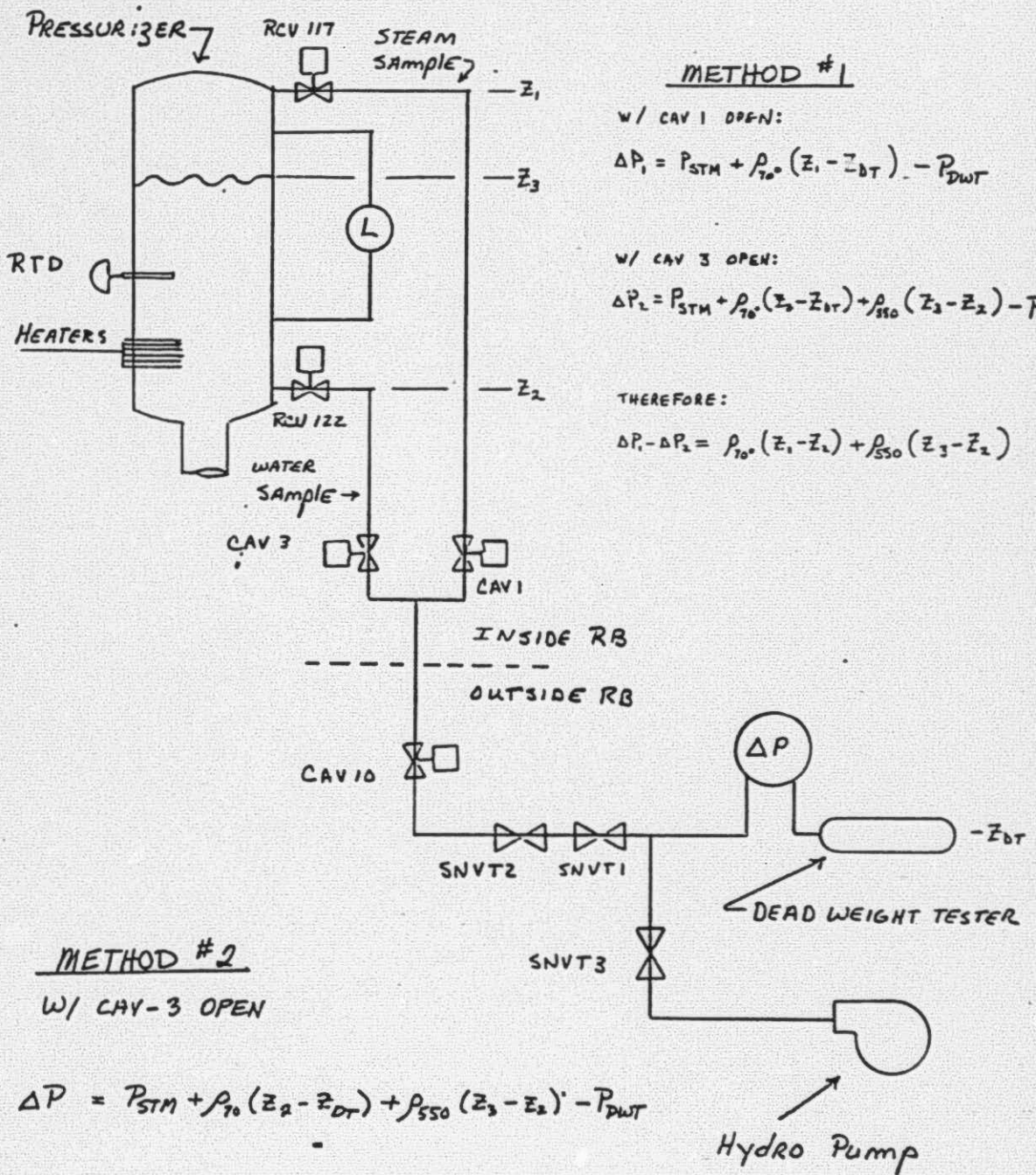
METHOD #2

WITH CAV-3 OPEN:

$$P_{HEISE} = P_{STM} + \rho_{70} (Z_2 - Z_{HEISE}) + \rho_{550} (Z_3 - Z_2)$$

P_{STM} = SATURATION PRESSURE FOR TEMPERATURE AT RTD

USE OF DEAD WEIGHT TESTER AND ΔP CELL FOR ALTERNATE PRESSURIZER LEVEL INDICATION



METHOD #1

W/ CAV 1 OPEN:

$$\Delta P_1 = P_{STM} + \rho_{70} (z_1 - z_{DT}) - P_{DWT}$$

W/ CAV 3 OPEN:

$$\Delta P_2 = P_{STM} + \rho_{70} (z_3 - z_{DT}) + \rho_{550} (z_3 - z_2) - P_{DWT}$$

THEREFORE:

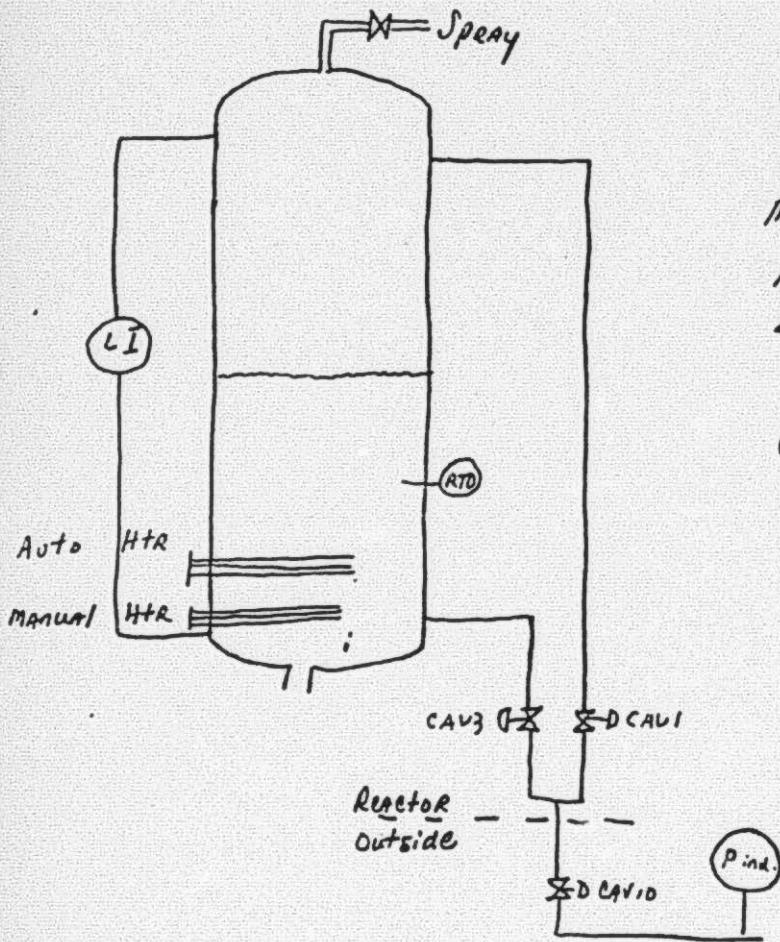
$$\Delta P_1 - \Delta P_2 = \rho_{70} (z_1 - z_2) + \rho_{550} (z_3 - z_2)$$

METHOD #2

W/ CAV-3 OPEN

$$\Delta P = P_{STM} + \rho_{70} (z_2 - z_{DT}) + \rho_{550} (z_3 - z_2) - P_{DWT}$$

MFR METHOD FOR PRESSURIZER LEVEL



$$Q = m C_p \Delta T$$

MEASURE Q (HEATER POWER) $\times \Delta T$

KNOW C_p

← CALCULATE M \times LEVEL

CAN ALSO CALCULATE LEVEL
FROM ΔP

1. SECURE SPRAY FLOW AND HEATERS
2. REACH STEADY STATE PRESSURE \times TEMP.
3. TURN ON MANUAL HEATERS
4. READ HEATER CURRENT \times VOLTAGE
5. READ RTD \times HEISE GAUGE

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