

REV. 0

DATE 5/8/79

EMERGENCY PROCEDURE EP- 35

TITLE: LOSS OF INSTRUMENT AIR AND SERVICE AIR

APPROVALS: PORC(Vice-Chairman) N.H. Williams DATE 5/9/79

UNIT SUPT.: AA Kinder DATE 5/9/79

B&W BO Reed DATE 5/11/79 HRC W.D. Thompson DATE 5/14/79

ALARA Ch. ... DATE ...

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LOSS OF INSTRUMENT AIR AND SERVICE AIR1.0 SYMPTOMS

- 1.1 Instrument Air (IA) Compressor Trouble Alarm
- 1.2 Service Air (SA) Compressor Trouble Alarm and *LOSS OF HEADER PRESSURE ALARM*
- 1.3 Low readings on the Instrument Air and Service Air Receiver Pressure Indicators on Panel 17.

2.0 IMMEDIATE ACTIONS

## 2.1 Automatic Actions

- 2.1.1 The SA and IA Compressor(s) in AUTO will start when SA and IA pressure respectively drop to 90 psig.
- 2.1.2 SA-V358 closes at 70 psig, isolating the SA distribution system from the SA compressors and the entire IA system. This may secure breathing air if in use.

## 2.2 Manual Actions

- 2.2.1 Verify running or start all SA and IA compressors.
- 2.2.2 If IA and/or SA pressure continues to drop with all compressors running, direct personnel using breathing air to immediately evacuate the area where breathing air is required and secure using breathing air.
- 2.2.3 If IA and/or SA pressure decreases to 60 psig with all compressors running, shut MU-V378 to secure seal injection flow to the RCPs.

3.0 FOLLOW-UP ACTIONS

- 3.1 Attempt to locate and isolate the leak in the air system.

CAUTION: Do not isolate breathing air from any supply until use of breathing air has been discontinued..

NOTE: Refer to the Attachment for a simplified diagram of the SA and IA systems.

- 3.1.1 Initially shut SA-V357 and SA-V362 to determine which major components the leak is in. Re-open the valves as possible without reconnecting the leaking components with intact components.
- 3.1.2 Continue to attempt to locate and isolate the leak.

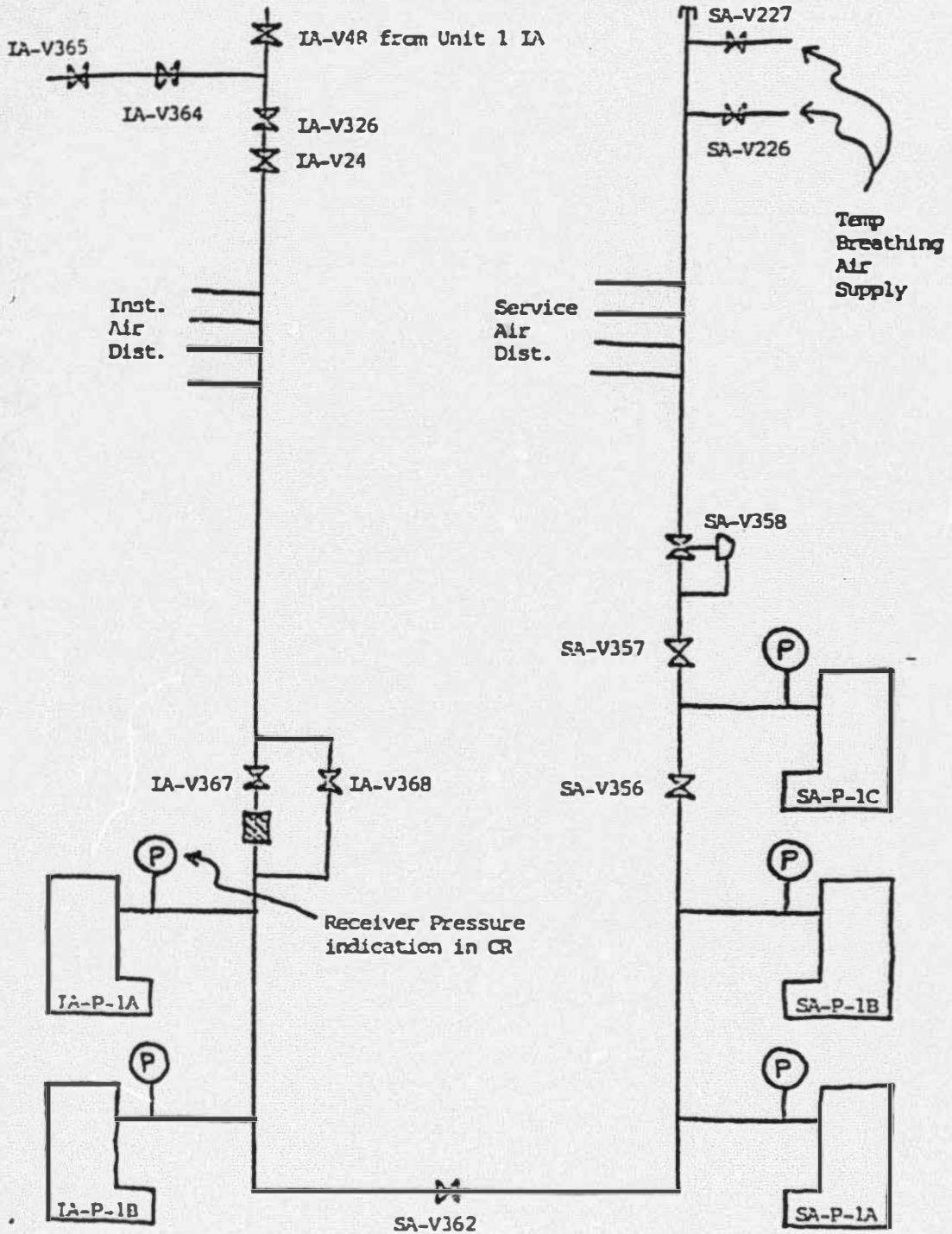
3.2 If IA pressure remains below 60 psig:

- 3.2.1 Shut MU-V376 to secure letdown flow. Go to the CLOSE position for MU-V18 to ensure it is shut to secure make-up flow.

NOTE: The plant is now operating with no seal injection, make-up or letdown. Do not perform any operations which would result in the need for letdown. With the manually operated valves, MU-V100, 105 and 149, open, some letdown may be possible by opening MU-V376. This should be verified at the earliest convenient time after loss of IA or SA. If necessary, all MU/HPI pumps can be secured to completely stop make-up. MU-V16A or B can be used if necessary for make-up.

- 3.2.2 Trip the Reactor Building Normal Cooling Water pumps (RB-P-1A and RB-P-1B).
- 3.2.3 Trip the Control Building River Water Booster pumps (NR-P-2A and NR-P-2B).
- 3.2.4 Manually OPEN VA-V4A, B and/or C to the running Condenser Vacuum pumps.
- 3.2.5 Manually position the turbine bypass valves to the condenser as necessary (MS-V25A/B, MS-V26A/B).
- 3.2.6 Manually OPEN the Feedwater and Main Steam Penetration Cooling valves (AH-V91, 92, 93, 94) if necessary to control Reactor Building concrete temperatures.
- 3.2.7 Initiate Reactor Building Emergency Cooling per 2104-5.1 section 4.5 if required for Reactor Building cooling.

- 3.3 If IA pressure cannot be restored and the leak is not in the IA distribution system, consideration should be given to supplying IA from the Unit 1 IA system per 2104-2.3 section 4.4.1. This requires both Unit Superintendent's approval prior to cross-connect.



IA and SA Systems