

TENNESSEE VALLEY AUTHORITY  
CHATTANOOGA, TENNESSEE  
37401



May 24, 1974



Mr. John F. O'Leary, Director  
Directorate of Licensing  
Office of Regulation  
U.S. Atomic Energy Commission  
Washington, DC 20545

Dear Mr. O'Leary:

TENNESSEE VALLEY AUTHORITY - BROWNS FERRY NUCLEAR PLANT UNIT 1 -  
DOCKET NO. 50-259 - FACILITY OPERATING LICENSE DPR-33 - ABNORMAL  
OCCURRENCE REPORT BFAO-7432W

The enclosed report is to provide details concerning failure to  
monitor gaseous effluent from unit 2 turbine roof exhausts and is  
submitted in accordance with Appendix A to Regulatory Guide 1.16,  
Revision 1, October 1973. This event occurred on Browns Ferry  
Nuclear Plant unit 1 on May 14, 1974.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

E. F. Thomas  
Director of Power Production

Enclosure

CC (Enclosure):

Mr. Norman C. Moseley, Director  
Region II Regulatory Operations Office, USAEC  
230 Peachtree Street, NW., Suite 818  
Atlanta, Georgia 30303

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## ABNORMAL OCCURRENCE REPORT

Report No.: BFAO-7432W  
Report Date: May 24, 1974  
Occurrence Date: May 14, 1974  
Facility: Browns Ferry Nuclear Plant unit 1

### Identification of Occurrence

Failure to monitor gaseous effluent from unit 2 turbine roof exhausts.

### Conditions Prior to Occurrence

Unit 1 was in its startup test program and unit 2 was being readied for initial fuel loading. Unit 1 was in the cold shutdown condition at the time of discovery.

### Description of Occurrence

The turbine roof exhaust on unit 2 is required to be monitored for gaseous release activity when exhaust fans are operated. This monitoring was not done between April 8th and May 14th for an accumulated operating period of 16-1/2 days. The two continuous air monitors (CAM) in use on unit 2 were found incorrectly assembled, allowing the sample to bypass the radiation monitors (see sketch).

### Analysis of Occurrence

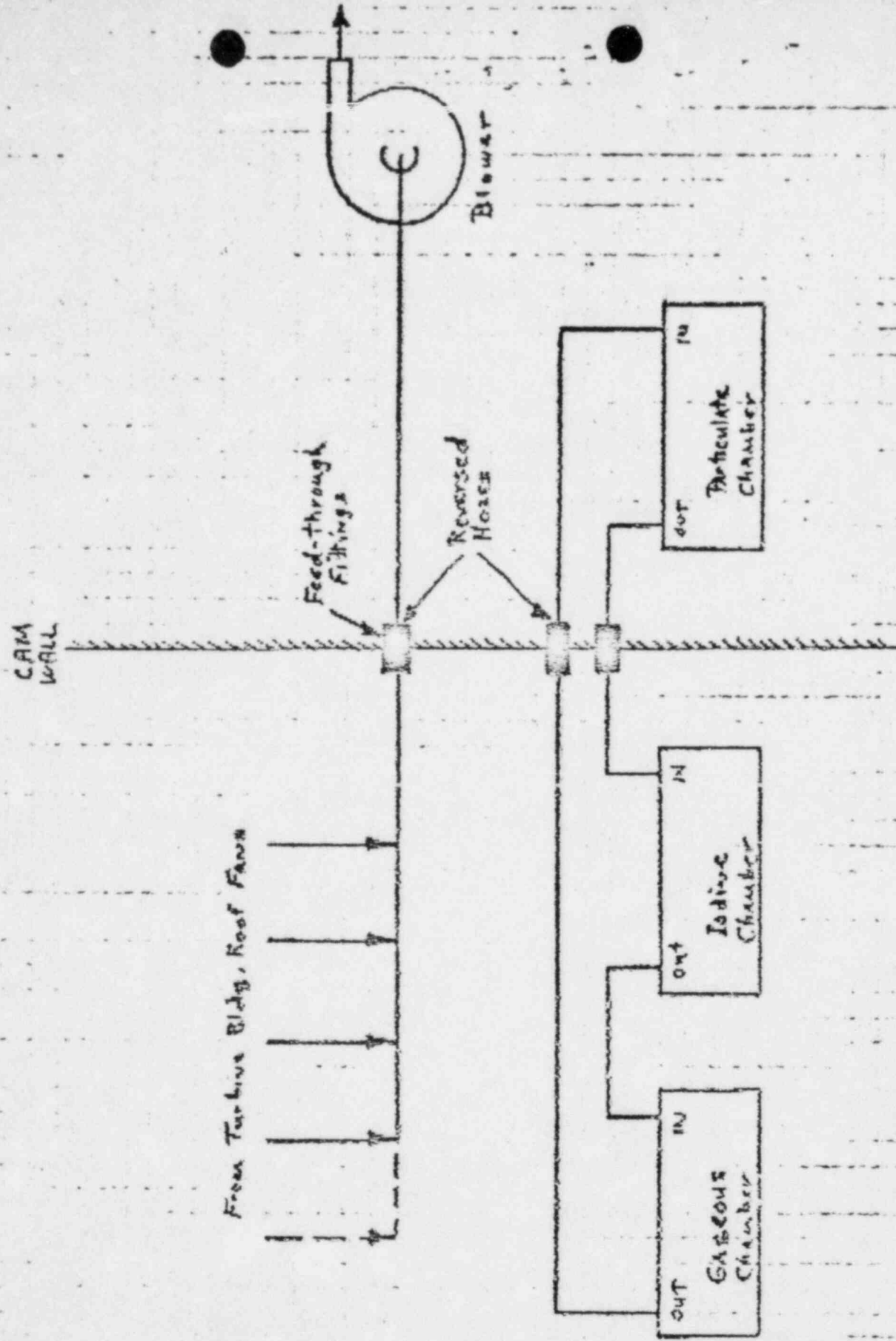
The two CAM's were installed on January 23, 1974, to allow preoperational testing of the unit 2 turbine roof exhaust fans which were operated for short periods on April 8, April 16 through 23, May 7 through 12, and May 14. During this time, the unit 1 turbine roof exhaust fans were not operated. Since the measured unit 1 release rate was <0.15 percent of the technical specification limit during the time unit 2 turbine roof exhaust fans were operated and since no significant airborne activity occurred in the unit 1 turbine building during periods of fan operation, there is reasonable assurance that the release through unit 2 turbine room roof exhausts did not appreciably change the total site release rate.

### Corrective Action

All other CAM's of this type were inspected and found correctly assembled. The CAM manufacturer was notified of the problem. Instructions will be revised to verify correct assembly before initial installation and after any CAM modification or repair that may affect the hose assembly.

### Failure Data

CAM's: 2-RM-90-249 and 2-RM-90-251  
Manufacturer: Nuclear Measurements Corporation  
Model: AM-33IF(BF)



Nuclear Measurements Corp. - As Found Internal Hose Connections

DRG 5/1/73