

# ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8811300284      DOC. DATE: 88/11/17      NOTARIZED: NO      DOCKET #  
 FACIL: STN-50-529 Palo Verde Nuclear Station, Unit 2, Arizona Public Service      05000529  
 AUTH. NAME      AUTHOR AFFILIATION  
 SHRIVER, T.D.      Arizona Nuclear Power Project (formerly Arizona Public Service)  
 HAYNES, J.G.      Arizona Nuclear Power Project (formerly Arizona Public Service)  
 RECIP. NAME      RECIPIENT AFFILIATION

SUBJECT: LER 88-009-01: on 880913, condenser evacuation effluent  
 monitor sample filter improperly assembled.      W/8      ltr.

DISTRIBUTION CODE: IE22D      COPIES RECEIVED: LTR 1 ENCL 1      SIZE: 5  
 TITLE: 50.73 Licensee Event Report (LER), Incident Rpt, etc.

NOTES: Standardized plant.

05000529

	RECIPIENT ID CODE/NAME	COPIES	LTR	ENCL	RECIPIENT ID CODE/NAME	COPIES	LTR	ENCL
	PD5 LA	1	1		PD5 PD	1	1	
	CHAN, T	1	1		DAVIS, M	1	1	
INTERNAL:	ACRS MICHELSON	1	1		ACRS MOELLER	2	2	
	ACRS WYLIE	1	1		AEOD/DOA	1	1	
	AEOD/DSP/TPAB	1	1		ARM/DCTS/DAB	1	1	
	DEDRO	1	1		NRR/DEST/ADS 7E	1	0	
	NRR/DEST/CEB 8H	1	1		NRR/DEST/ESB 8D	1	1	
	NRR/DEST/ICSB 7	1	1		NRR/DEST/MEB 9H	1	1	
	NRR/DEST/MTB 9H	1	1		NRR/DEST/PSB 8D	1	1	
	NRR/DEST/RSB 8E	1	1		NRR/DEST/SGB 8D	1	1	
	NRR/DLPQ/HFB 10	1	1		NRR/DLPQ/QAB 10	1	1	
	NRR/DOEA/EAB 11	1	1		NRR/DREP/RAB 10	1	1	
	NRR/DREP/RPB 10	2	2		NRR/DRIS/SIB 9A	1	1	
	NUDOCS-ABSTRACT	1	1		<del>REG FILE</del> 02	1	1	
	RES/DSIR/EIB	1	1		RES/DSR/PRAB	1	1	
	RGN5 FILE 01	1	1					
EXTERNAL:	EG&G WILLIAMS, S	4	4		FORD BLDG HOY, A	1	1	
	H ST LOBBY WARD	1	1		LPDR	1	1	
	NRC PDR	1	1		NSIC HARRIS, J	1	1	
	NSIC MAYS, G	1	1					
NOTES:		1	1					

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE!      CONTACT THE DOCUMENT CONTROL DESK,  
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TOTAL NUMBER OF COPIES REQUIRED: LTR 44      ENCL 43

*A104*

RIDS ADDS



LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Palo Verde Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 5 2 9	PAGE (3) 1 OF 0 4
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TITLE (4)  
Condenser Evacuation Effluent Monitor Sample Filter Improperly Assembled

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES		
0 9	1 3	8 8	8 8	0 0 9	0 1	1 1	1 7	8 8	N/A		
									DOCKET NUMBER(S) 0 5 0 0 0		
									N/A		
									0 5 0 0 0		

OPERATING MODE (9) 1

POWER LEVEL (10) 1 0 0

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)

20.402(b)	20.406(c)	50.73(a)(2)(iv)	73.71(b)
20.406(a)(1)(i)	50.36(e)(1)	50.73(a)(2)(v)	73.71(c)
20.406(a)(1)(ii)	50.36(e)(2)	50.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
20.406(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
20.406(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(vii)(B)	
20.406(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
Timothy D. Shriver, Compliance Manager	6 0 2 3 9 3 1 - 2 5 1 2 1 1

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRPDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRPDS

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)  NO

EXPECTED SUBMISSION DATE (15)

MONTH	DAY	YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

At the time of the event, Palo Verde Unit 2 was in Mode 1 (POWER OPERATION) at approximately 100 percent power. On September 20, 1988, at approximately 0005 MST, a Chemistry Effluent Technician discovered that the particulate and charcoal filters on the low range Condenser Evacuation Effluent Monitor (RU-141) were improperly installed. With the filters improperly installed, Surveillance Requirement 4.11.2.1.2 could not be performed. Therefore, the plant operated in a condition contrary to Technical Specification 3.11.2.1 and 3.3.3.8.

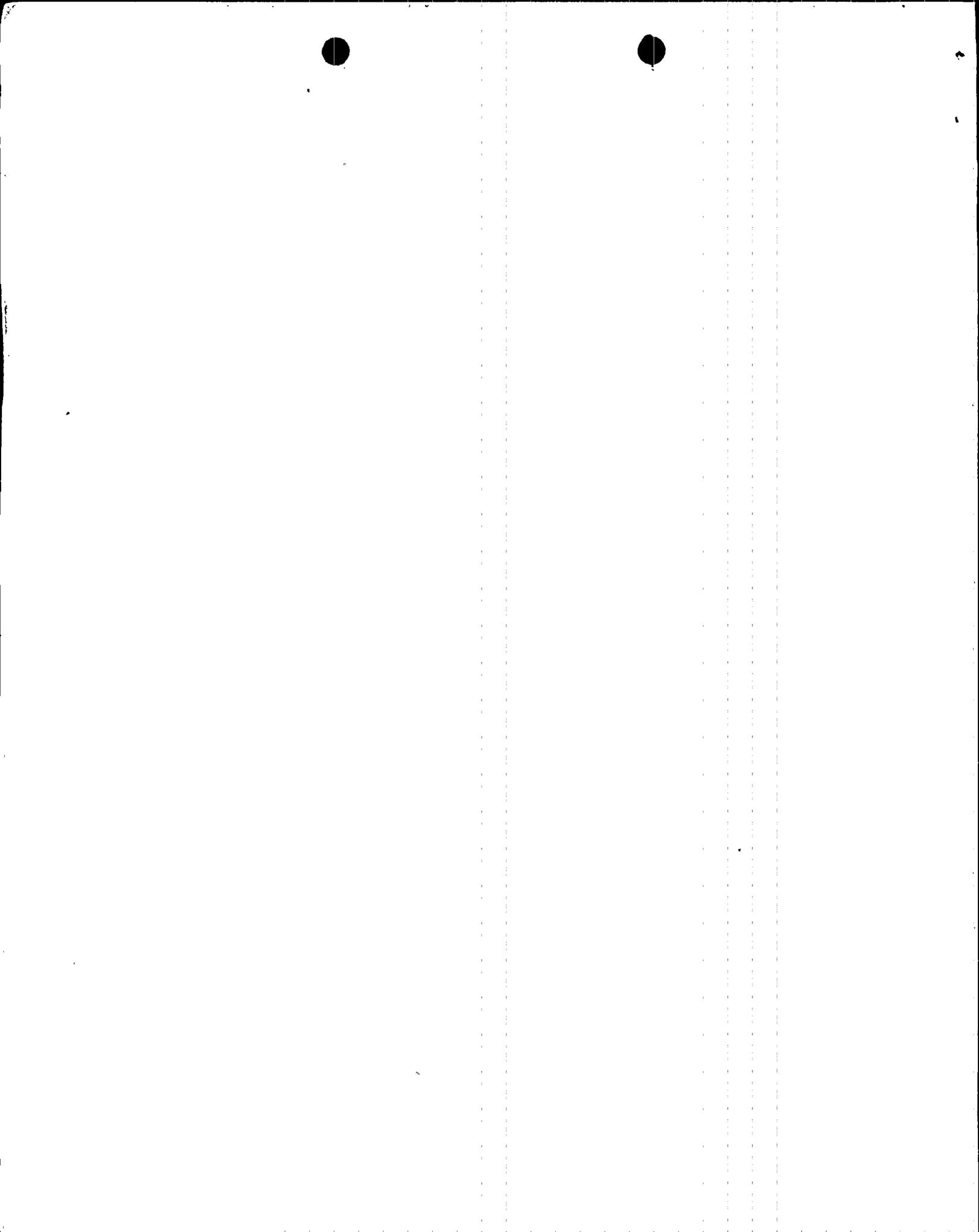
An investigation determined that the root cause of this event is a cognitive personnel error on the part of a Chemistry Effluent Technician in that he improperly installed the filter assembly on September 13, 1988 at approximately 0230 MST. The technician did not install a new filter assembly to the original configuration during periodic filter replacement. The procedure for periodically replacing the filter assembly did not specify the proper configuration.

As immediate corrective action, new particulate and charcoal filters were assembled and reinstalled. As corrective action to prevent recurrence, the technician has been counseled. Additionally, the fittings on the filter assembly have been modified to prevent improper installation.

No previous similar events have been reported pursuant to 10CFR50.73.

8811300284 881117  
PDR ADOCK 05000529  
S FDC

TCZ 1/1



LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

I. DESCRIPTION OF WHAT OCCURRED:

A. Initial Conditions:

On September 13, 1988, at approximately 0230 MST, Palo Verde Unit 2 was in Mode 1 (POWER OPERATION) at approximately 100 percent power.

B. Reportable Event Description (Including Dates and Approximate Times of Major Occurrences):

Event Classification: Operation Prohibited by the Plant's Technical Specifications

On September 20, 1988 at approximately 0005 MST, a Chemistry Effluent Technician (contractor, non-licensed) discovered that the particulate and charcoal filters (FLT) on the low range Condenser Evacuation Effluent Monitor (IL)(RU-141) were improperly installed. The technician was performing a routine sample collection in accordance with an approved procedure: 75RP-9ZZ64, "RMS Sample Collection." The particulate filter was found improperly installed downstream of the charcoal filter cartridge. With the filters in this configuration, the particulate filter was inoperable and the Surveillance Requirement 4.11.2.1.2 could not be performed for the particulate sample. Specifically, the gross alpha and Strontium-89 and -90 activities could not be accurately determined. The technician immediately replaced the particulate and charcoal filters. The particulate and charcoal filters were analyzed to the extent practical.

An investigation of this event determined that a Chemistry Effluent Technician (utility, non-licensed) improperly installed the filter assembly on September 13, 1988 at approximately 0230 MST. The technician was performing a filter change out in accordance with an approved procedure, 75RP-9ZZ64. The technician removed the filter assembly and replaced the charcoal and particulate filters in the filter assembly. The technician traced the flow path through the moisture separator to determine the proper filter assembly orientation. The technician mistakenly believed that the moisture separator was upstream of the filter assembly and as a result installed the particulate filter end of the filter assembly towards the moisture separator. The actual flow path is through the particulate filter, charcoal filter, the noble gas monitor and then the sample pump.

Following the improper installation of the filter assembly, the particulate filter for RU-141 was inoperable. Therefore, the Limiting Condition for Operator 3.11.2.1 could not be verified. At approximately 0330 MST on September 13, 1988, the 1 hour interval to implement Technical Specification 3.3.3.8 ACTION 40 expired.



LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

J. Safety System Response:

There were no safety system responses and none were necessary.

K. Failed Component Information:

Not applicable - no component failures were involved.

II. ASSESSMENT OF THE SAFETY CONSEQUENCES AND IMPLICATIONS OF THIS EVENT:

There were no safety consequences or implications resulting from this event as this event had no impact on the safe operation of the plant or the health and safety of the public. The filters were analyzed to the extent practical and the results were normal. Additionally, the low range monitor (RU-141) would still have alarmed and actuated the high range monitor (RU-142).

The main steam radiation monitor (IL)(RI) did not indicate any abnormal readings during the event.

III. CORRECTIVE ACTIONS:

A. Immediate:

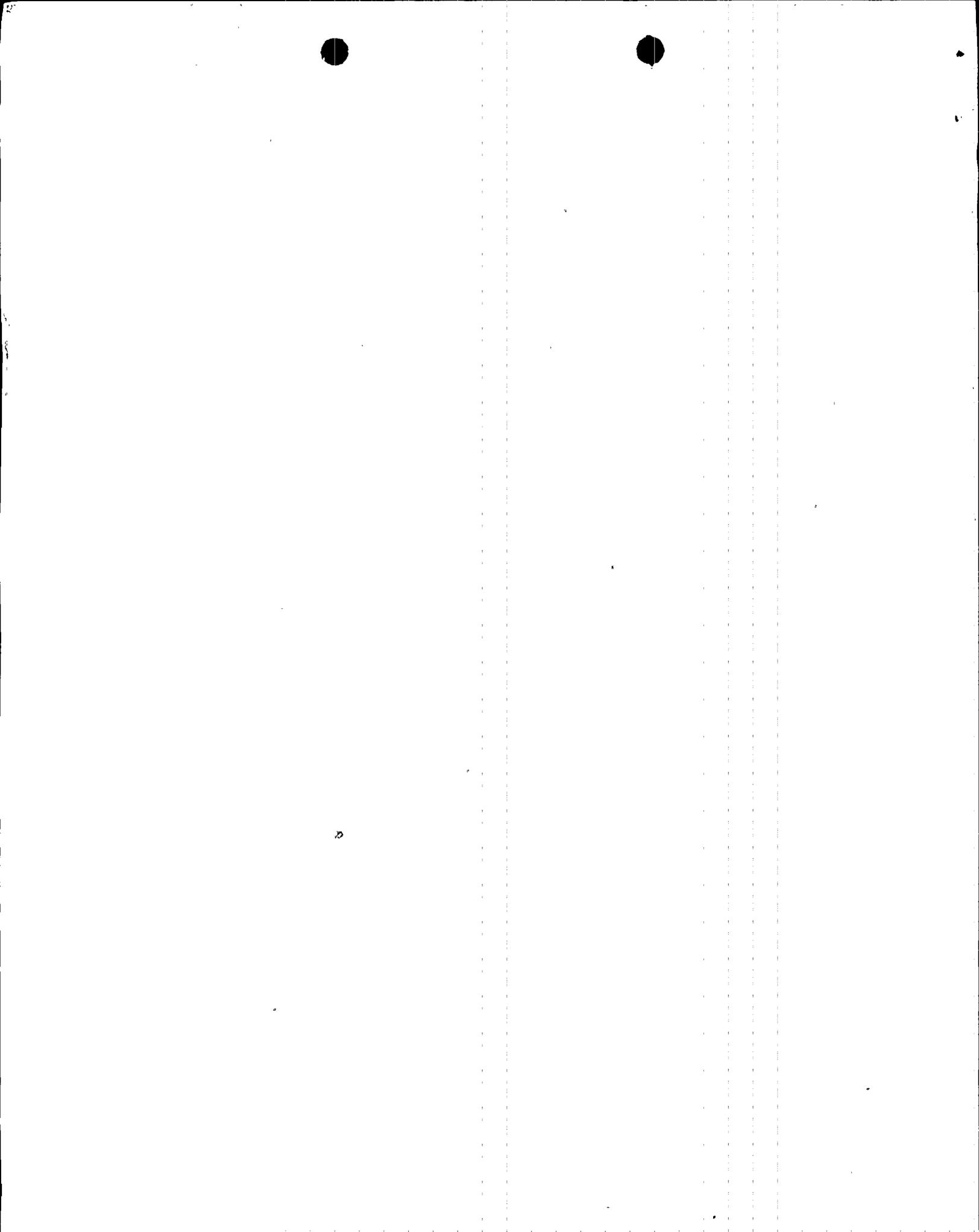
As immediate corrective action, new particulate and charcoal filters were assembled and reinstalled.

B. Action to Prevent Recurrence:

As corrective action to prevent recurrence, the technician has been counseled. Additionally, the fittings on the filter assembly have been modified to prevent improper installation in Units 2 and 3. Unit 1 will also be modified to prevent improper installation.

IV. PREVIOUS SIMILAR EVENTS:

No similar events have been reported.



LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
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TEXT If more space is required, use additional NRC Form 366A's (17)

- C. Status of structures, systems, or components that were inoperable at the start of the event that contributed to the event:

Other than the particulate filter for the effluent monitor RU-141 discussed in Section I.B, no structures, systems, or components were inoperable which contributed to this event.

- D. Cause of each component or system failure, if known:

Not applicable - no component or system failures were involved.

- E. Failure mode, mechanism, and effect of each failed component, if known:

Not applicable - no component failures were involved

- F. For failures of components with multiple functions, list of systems or secondary functions, that were also affected:

Not applicable - no component failures were involved.

- G. For a failure that rendered a train of a safety system inoperable, estimated time elapsed from the discovery of the failure until the train was returned to service:

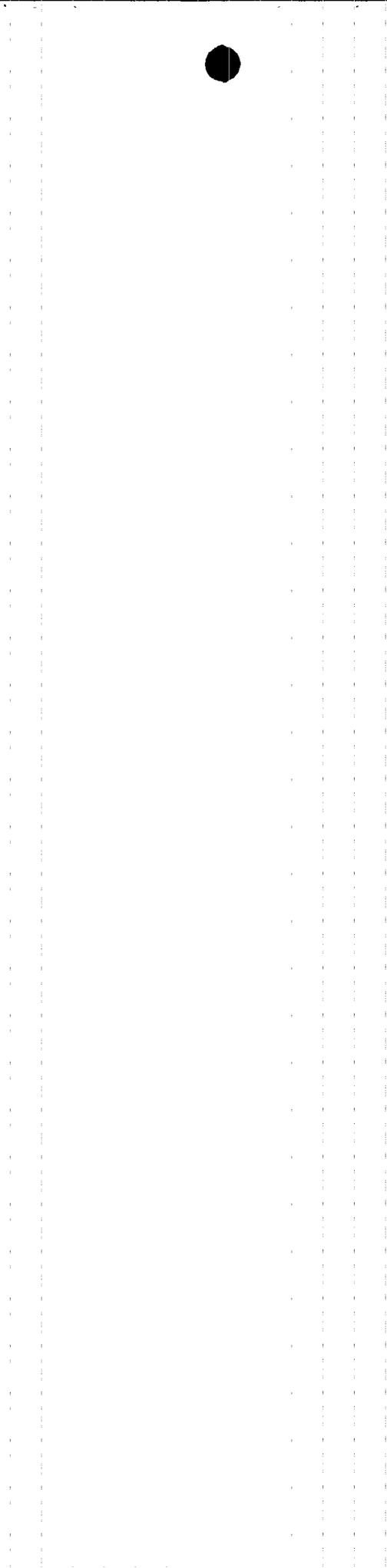
Not applicable - no failures were involved. However, upon discovery of the misaligned filter assembly, new filters and the filter assembly were immediately installed.

- H. Method of discovery of each component or system failure or procedural error:

Not applicable - no component or system failures or procedural errors were involved. However, during the investigation of this event, the procedure was verified to have not specified the direction of the filter assembly. The procedure did not address this concern since the technicians were believed to have sufficient knowledge to reassemble the filters and install the assembly.

- I. Cause of Event:

The root cause of this event is a cognitive personnel error on the part of the Chemistry Effluent Technician (utility, non-licensed) in that he improperly installed the filter assembly. The technician did not install the filter assembly to the original configuration. The technician did not trace the sample flow lines back to the skid inlet or forward to the noble gas monitor and sample pump to ensure the correct flow path. No unusual characteristics of the work location contributed to this event.





## Arizona Nuclear Power Project

P.O. BOX 52034 • PHOENIX, ARIZONA 85072-2034

192-00431-JGH/TDS/JJN

November 17, 1988

U. S. Nuclear Regulatory Commission  
NRC Document Control Desk  
Washington, D.C. 20555

Dear Sirs:

Subject: Palo Verde Nuclear Generating Station (PVNGS)  
Unit 2  
Docket No. STN 50-529 (License NPF-51)  
Licensee Event Report 88-009-01  
File: 88-020-404

Attached please find Supplement No. 1 to Licensee Event Report (LER) No. 88-009-00 prepared and submitted pursuant to the requirements of 10CFR 50.73. In accordance with 10CFR 50.73(d), we are herewith forwarding a copy of this report to the Regional Administrator of the Region V Office.

If you have any questions, please contact T. D. Shriver, Compliance Manager at (602) 393-2521.

Very truly yours,

J. G. Haynes  
Vice President  
Nuclear Production

JGH/TDS/JJN/kj

Attachment

cc: D. B. Karner (all w/a)  
E. E. Van Brunt, Jr.  
J. B. Martin  
T. J. Polich  
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INPO Records Center

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