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ACCESSION NBR:8809290171 DOC.DATE: 88/09/23 NOTARIZED: NO DOCKET #
FACIL:STN-50-529 Palo Verde Nuclear Station, Unit 2, Arizona Publi 05000529
AUTH.NAME AUTHOR AFFILIATION
SHRIVER,T.D. Arizona Nuclear Power Project (formerly Arizona Public Serv
RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 88-013-00:on 880824,loss of power to alternate plant vent effluent radiation monitor.W/880923 ltr.

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 LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL
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	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/NAS	1	1	AEOD/DSP/ROAB	2	2
	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
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	NUDOCS-ABSTRACT	1	1	REG FILE 02	1	1
	RES TELFORD,J	1	1	RES/DSIR DEPY	1	1
	RES/DSIR/EIB	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
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NRC Form 366 (9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Palo Verde Unit 2	0 5 0 0 0 5 2 9	1 OF 0 4

TITLE (4)
Loss of Power to Alternate Plant Vent Effluent Radiation Monitor

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	DOCKET NUMBER(S)
0 8	2 4	8 8	8 8	0 1 3	0 0	0 9	2 3	8 8	N/A	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)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

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

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE) X NO

EXPECTED SUBMISSION DATE (15): MONTH | DAY | YEAR

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

On August 24, 1988, at approximately 2030 MST, Palo Verde Unit 2 was in Mode 1 (POWER OPERATION) at approximately 100 percent power when a Chemistry Effluent Technician (contractor, non-licensed) discovered that the pre-planned alternate sampling system (IL) for the plant vent was inoperable. The circuit breaker, which supplies the electrical power (EC), had opened and deenergized the alternate system. With the alternate sampling inoperable, Unit 2 operated in a condition contrary to TS 3.3.3.8. At approximately 2035 MST, the normal plant vent high and low range effluent monitors (RU-143 and RU-144) were restored to service. No safety system responses occurred and none were necessary.

The root cause of the event was temporary and permanent electrical loads in excess of circuit capacity. In response, the circuit breaker supplying the electrical power opened and caused the loss of electrical power to the alternate sampling system.

An Engineering Evaluation Request has been issued to evaluate the feasibility of supplying alternate power to these loads.

No similar events have occurred.

8809290171 880923
PDR ADOCK 05000529
S PNU

I. DESCRIPTION OF WHAT OCCURRED:

A. Initial Conditions:

On August 24, 1988, at approximately 2030 MST, Palo Verde Unit 2 was in Mode 1 (POWER OPERATION) at approximately 100 percent power.

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

Event Classification: Condition Prohibited by the Plant's Technical Specifications (TS)

On August 24, 1988, at approximately 2030 MST, a Chemistry Effluent Technician (contractor, non-licensed) discovered that the pre-planned alternate sampling system (IL) for the plant vent (VL) was inoperable. The circuit breaker, which supplies the electrical power (EC), had opened and deenergized the alternate system. With the alternate sampling system inoperable, Unit 2 operated in a condition contrary to TS 3.3.3.8.

Prior to the event, on August 24, 1988 at approximately 0846 MST, the normal plant vent low and high range effluent monitors (RU-143 and RU-144)(IL) were declared inoperable to perform the "Radiation Monitoring Quarterly Functional Test", 36ST-9SQ04. Appropriate actions were initiated in accordance with approved procedures. These actions included the installation of the pre-planned alternate sampling system on a portable cart within one hour in accordance with TS 3.3.3.8 Action 37 and 40. The alternate sampling system taps into the plant vent and utilizes a particulate and charcoal cartridge for sample collection with an in-line flow gauge and sampling pump. The alternate sampling system is electrically powered from a local outlet.

Following the installation of the alternate sampling system, the process and sample flow rates were verified every four hours pursuant to TS 3.3.3.8 ACTION 36. On August 24, 1988, at approximately 1900 MST, a process and alternate sampling system flow check was performed. At this time, the alternate sampling system was energized and operable.

At approximately 2010 MST, 36ST-9SQ04 was satisfactorily completed. At approximately 2020 MST, the "Radiation Monitoring System Daily Surveillance Test", 75ST-9ZZ07, was also successfully completed. Prior to returning RU-143 to service, at approximately 2030 MST, the Chemistry Effluent Technician went to install the new particulate and iodine filter in RU-143 and discovered that the alternate sampling system was deenergized. At approximately 2035 MST, the new particulate and iodine filter were installed and RU-143 and 144 were returned to service.

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

As stated in Section I.B, the Plant Vent Radiation Monitors, RU-143 and 144 were inoperable for the performance of the Quarterly Functional Surveillance Test. No other structures, systems, or components were inoperable at the start of the event that contributed to the event.

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

Not applicable - no component or system failures were involved. However, as stated in Section I.B, electrical power to the alternate sampling system was interrupted when the circuit breaker opened.

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

Not applicable - no failures were involved.

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

Not applicable - no components failures were involved.

G. For 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, the alternate sampling system was discovered inoperable on August 24, 1988 at approximately 2030 MST. RU-143 and 144 was restored to service at approximately 2035 MST. The total elapsed time was approximately five minutes.

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

Not applicable - no components or system failures or procedural errors were involved.

I. Cause of Event:

The root cause of the event was temporary and permanent electrical loads in excess of the circuit capacity. In response, the circuit breaker opened and caused a loss of electrical power to the alternate sampling system. Without electrical power, the sampling pump can not draw a sample from the plant vent.

An informal review of the local outlets available to power the alternate sampling system has determined that the circuits are near capacity loading. Therefore, the selection of the power source will be evaluated in an Engineering Evaluation Request and ultimately will be included in procedural controls.

J. Safety System Response:

Not applicable - no safety system responses occurred or were necessary.

K. Failed Component Information:

Not applicable - no component failures were involved.

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

No adverse safety consequences or implications resulted from this event. The alternate system was determined to be operable 80 minutes prior to the discovery of the loss of power. Upon discovery of the loss of power, RU-143 and 144 were returned to service within approximately five minutes. The TS 3.3.3.8 ACTION 40 permits 1 hour to install the alternate sampling system. Additionally, the only radiation release in progress was the normal ventilation of the Auxiliary and Radwaste Buildings (NF)(NE). No significant levels of radiation were measured before or after the event.

III. CORRECTIVE ACTIONS:

A. Immediate:

The normal plant vent radiation monitors RU-143 and -144 were restored to service. Therefore, the actions statements for the alternate sampling system operability were exited.

B. Action to Prevent Recurrence:

An Engineering Evaluation Request has been issued to evaluate the feasibility of supplying alternate power to these loads. If additional information is identified that would significantly affect the reader's perception of the appropriate corrective actions, a supplement to this report will be issued.

IV. PREVIOUS SIMILAR EVENTS:

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

Arizona Nuclear Power Project
P.O. BOX 52034 • PHOENIX, ARIZONA 85072-2034

192-00412-JGH/TDS/JJN
September 23, 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 No. NPF-51)
Licensee Event Report 88-013-00
File: 88-020-404

Attached please find Licensee Event Report (LER) No. 88-013-00 prepared and submitted pursuant to 10CFR 50.73. In accordance with 10CFR 50.73(d), we are herewith forwarding a copy of the LER 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
M. J. Davis
A. C. Gehr
INPO Records Center

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