

# ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9005080229 DOC. DATE: 90/05/01 NOTARIZED: NO DOCKET #  
 FACIL: STN-50-528 Palo Verde Nuclear Station, Unit 1, Arizona Public 05000528  
 AUTH. NAME / AUTHOR AFFILIATION  
 BRADISH, T.R. Arizona Public Service Co. (formerly Arizona Nuclear Power  
 LEVINE, J.M. Arizona Public Service Co. (formerly Arizona Nuclear Power  
 RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: LER 90-001-01: on 900220, ESF actuation caused by radiation  
 monitor spike.

W/9 ltr.

DISTRIBUTION CODE: IE22T COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 8  
 TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

NOTES:

05000528

|           | RECIPIENT<br>ID CODE/NAME | COPIES<br>LTTR ENCL | RECIPIENT<br>ID CODE/NAME | COPIES<br>LTTR ENCL |
|-----------|---------------------------|---------------------|---------------------------|---------------------|
|           | PD5 LA                    | 1 1                 | PD5 PD                    | 1 1                 |
|           | PETERSON, S.              | 1 1                 | CHAN, T                   | 1 1                 |
| INTERNAL: | ACNW                      | 2 2                 | ACRS                      | 2 2                 |
|           | AEOD/DOA                  | 1 1                 | AEOD/DSP/TPAB             | 1 1                 |
|           | AEOD/ROAB/DSP             | 2 2                 | DEDRO                     | 1 1                 |
|           | NRR/DET/ECMB 9H           | 1 1                 | NRR/DET/EMEB9H3           | 1 1                 |
|           | NRR/DET/ESGB 8D           | 1 1                 | NRR/DLPQ/LHFB11           | 1 1                 |
|           | NRR/DLPQ/LPEB10           | 1 1                 | NRR/DOEA/OEAB11           | 1 1                 |
|           | NRR/DREP/PRPB11           | 2 2                 | NRR/DST/SELB 8D           | 1 1                 |
|           | NRR/DST/SICB 7E           | 1 1                 | NRR/DST/SPLB8D1           | 1 1                 |
|           | NRR/DST/SRXB 8E           | 1 1                 | <u>REG FILE 02</u>        | 1 1                 |
|           | RES/DSIR/EIB              | 1 1                 | RGN5 FILE 01              | 1 1                 |
| EXTERNAL: | EG&G STUART, V.A          | 4 4                 | L ST LOBBY WARD           | 1 1                 |
|           | LPDR                      | 1 1                 | NRC PDR                   | 1 1                 |
|           | NSIC MAYS, G              | 1 1                 | NSIC MURPHY, G.A          | 1 1                 |
|           | NUDOCS FULL TXT           | 1 1                 |                           |                     |
| NOTES:    |                           | 1 1                 |                           |                     |

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK,  
 ROOM P1-37 (EXT. 20079) TO ELIMINATE YOUR NAME FROM DISTRIBUTION  
 LISTS FOR DOCUMENTS YOU DON'T NEED!

FULL TEXT CONVERSION REQUIRED  
 TOTAL NUMBER OF COPIES REQUIRED: LTTR 39 ENCL 39

Ad 4



Arizona Public Service Company  
PALO VERDE NUCLEAR GENERATING STATION  
P.O. BOX 52034 • PHOENIX, ARIZONA 85072-2034

JAMES M. LEVINE  
VICE PRESIDENT  
NUCLEAR PRODUCTION

192-00655-JML/TRB/SBJ  
May 1, 1990

U. S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

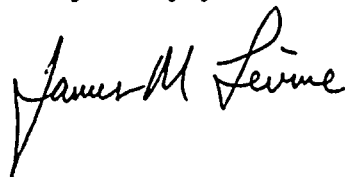
Dear Sirs:

Subject: Palo Verde Nuclear Generating Station (PVNGS)  
Unit 1  
Docket No. STN 50-528 (License No. NPF-41)  
Licensee Event Report 90-001-01  
File: 90-020-404

Attached please find Supplement 1 to Licensee Event Report (LER) No. 1-90-001 prepared and submitted pursuant to 10CFR50.73. In accordance with 10CFR50.73(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. R. Bradish, Compliance Manager at (602) 393-2521.

Very truly yours,



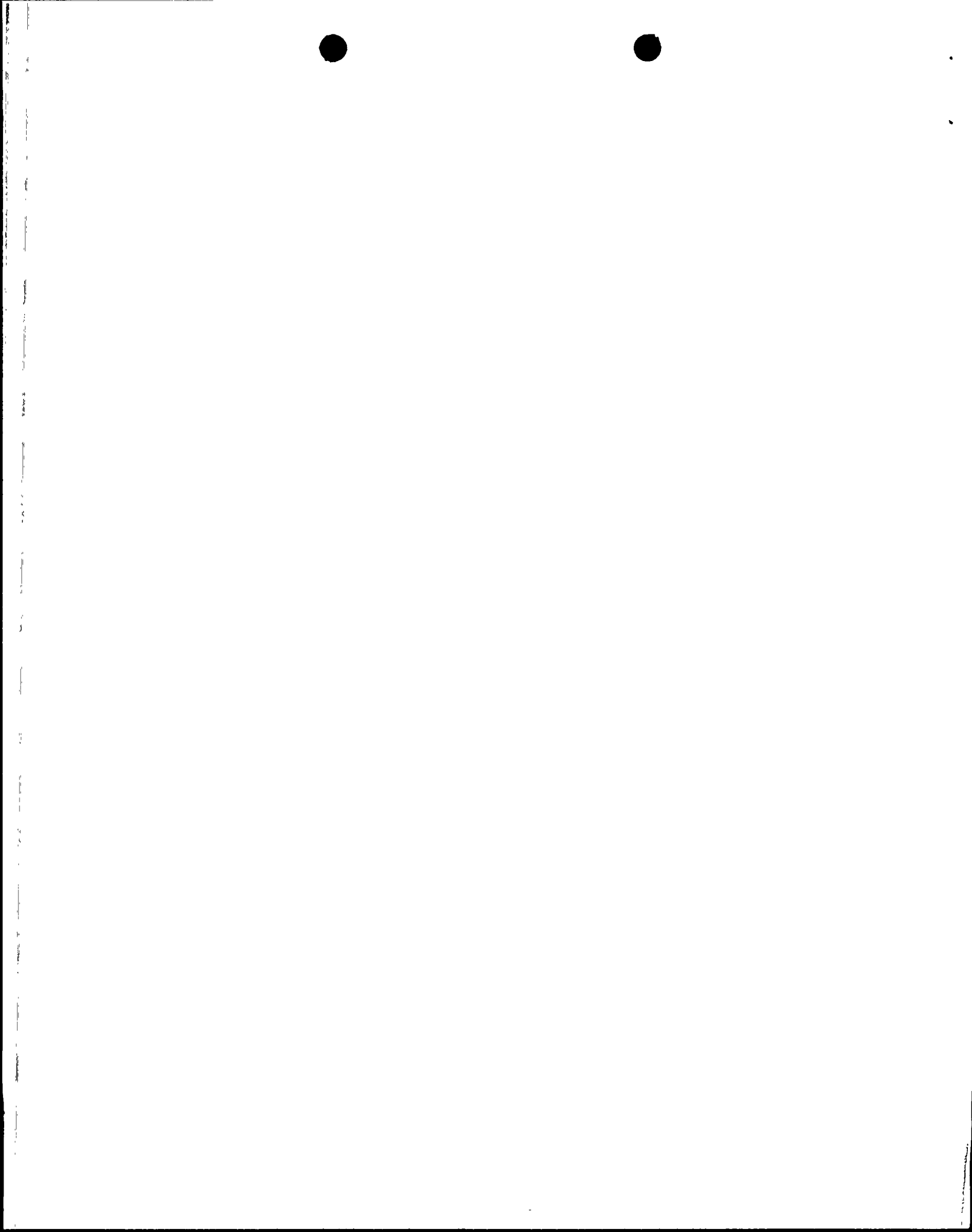
JML/TRB/SBJ/tlg

Attachment

cc: W. F. Conway (all with attachment)  
J. B. Martin  
D. H. Coe  
T. L. Chan  
A. C. Gehr  
J. R. Newman  
Inpo Records Center

9005080229 900501  
PDR ADCK 05000528  
S PDC





## LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

Palo Verde Unit 1

DOCKET NUMBER (2)

0 5 0 0 0 5 2 8

PAGE (3)

1 OF 07

TITLE (4)

## Engineered Safety Feature Actuation Caused By Radiation Monitor Spike

| 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) |  |  |
| 02                 | 20    | 90   | 90                | 001               | 01              | 05              | 01  | 90              | N/A                           | 0 5 0 0 0        |  |  |
|                    |       |  |                   |                   |                 |                 |     |                 | N/A                           | 0 5 0 0 0        |  |  |
| OPERATING MODE (9) |       | THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11) |                   |                   |                 |                 |     |                 |                               |                  |  |  |
| 5                  |       |  |                   |                   |                 |                 |     |                 |                               |                  |  |  |
| POWER LEVEL (10)   | 01010 |  | 20.402(b)         |                   | 20.405(c)       |                 | X   |                 | 50.73(a)(2)(iv)               |                  | 73.71(b)   |  |
|                    |       |  | 20.405(a)(1)(i)   |                   | 50.38(c)(1)     |                 |     |                 | 50.73(a)(2)(v)                |                  | 73.71(c)   |  |
|                    |       |  | 20.405(a)(1)(ii)  |                   | 50.38(c)(2)     |                 |     |                 | 50.73(a)(2)(vi)               |                  | X  |  |
|                    |       |  | 20.405(a)(1)(iii) |                   | 50.73(a)(2)(i)  |                 |     |                 | 50.73(a)(2)(vii)(A)           |                  | OTHER (Specify in Abstract below and in Text, NRC Form 368A) |  |
|                    |       |  | 20.405(a)(1)(iv)  |                   | 50.73(a)(2)(ii) |                 |     |                 | 50.73(a)(2)(viii)(B)          |                  | T.S. 3.3.3.8   |  |
|                    |       | 20.405(a)(1)(v)  |                   | 50.73(a)(2)(iii)  |                 |                 |     | 50.73(a)(2)(ix) |                               | ACTION 42.b      |  |  |

LICENSEE CONTACT FOR THIS LER (12)

| NAME                                  | TELEPHONE NUMBER      |
|---------------------------------------|-----------------------|
| AREA CODE                             |                       |
| Thomas R. Bradish, 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 NRC | CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NRC |
|-------|--------|-----------|--------------|-------------------|-------|--------|-----------|--------------|-------------------|
|       |        |           |              |                   |       |        |           |              |                   |
|       |        |           |              |                   |       |        |           |              |                   |
|       |        |           |              |                   |       |        |           |              |                   |

SUPPLEMENTAL REPORT EXPECTED (14)

| YES (If yes, complete EXPECTED SUBMISSION DATE) | NO | EXPECTED SUBMISSION DATE (15) | MONTH | DAY | YEAR |
|---|----|-------------------------------|-------|-----|------|
|   | X  |                               |       |     |      |

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

On February 20, 1990, Palo Verde Unit 1 was in Mode 5 (COLD SHUTDOWN) with the Reactor Coolant System at atmospheric pressure and approximately 92 degrees Fahrenheit. At approximately 0429 MST, the Fuel Building Exhaust Ventilation High Range Radiation Monitor (RU-146) was energized following completion of a modification. When RU-146 was energized, the Fuel Building Exhaust Ventilation Low Range Radiation Monitor (RU-145) indication increased. The indication increase initiated the Fuel Building Ventilation Actuation System (FBEVAS) and the Control Room Essential Filtration Actuation System (CREFAS) engineered safety features (ESF).

The cause of the indication increase was determined to be noise in the radiation monitor's common ground circuit. A temporary modification was performed to RU-146 to eliminate the circuit noise. The cause of the ESF actuations was cognitive personnel error in that FBEVAS train "B" was not bypassed prior to performing the modification. The individual has been counseled and this report will be distributed to maintenance personnel in Units 1, 2 and 3.

This report is also being submitted in accordance with Technical Specification 3.3.3.8 action 42(b) since the radiation monitors were out of service greater than 72 hours.

There have been no previous similar events.



EXPIRES: 4/30/92

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

|  |  |                |                      |                    |          |    |       |
|--|--|----------------|----------------------|--------------------|----------|----|-------|
| FACILITY NAME (1)<br><br>Palo Verde Unit 1 | DOCKET NUMBER (2)<br><br>0   5   0   0   0   5   2   8 | LER NUMBER (6) |                      |                    | PAGE (3) |    |       |
|  |  | YEAR           | SEQUENTIAL<br>NUMBER | REVISION<br>NUMBER |          |    |       |
|  |  | 9   0          | —   0   0   1        | —   0   1          | 0   2    | OF | 0   7 |

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

## I. DESCRIPTION OF WHAT OCCURRED:

## A. Initial Conditions:

On February 20, 1990, Palo Verde Unit 1 was in a refueling outage in Mode 5 (COLD SHUTDOWN) with the Reactor Coolant System (RCS)(AB) at approximately 92 degrees Fahrenheit and at atmospheric pressure.

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

Event Classification: Engineered safety feature actuation, and Special Report pursuant to ACTION 42.b of Technical Specification 3.3.3.8

At approximately 0429 MST on February 20, 1990, the Fuel Building Ventilation System High Range Radiation Monitor (RU-146)(IL)(MON)(VI) was energized following completion of a modification. When the circuit was energized, the Fuel Building Ventilation System Low Range Radiation Monitor (RU-145)(MON)(IL)(VI) indication unexpectedly increased approximately five decades and caused an actuation of the train "B" Fuel Building Essential Ventilation Actuation System (FBEVAS)(VG)(JE). The designed cross trips of the "A" train FBEVAS and Control Room Essential Filtration Actuation System (CREFAS)(VI)(JE) trains "A" and "B" occurred.

RU-145 and RU-146 work as a pair with the low range monitor (RU-145) normally operating and the high range monitor (RU-146) in standby. When the low range monitor reaches a predetermined setpoint, a FBEVAS "B" trip signal is generated. At another predetermined setpoint, the high range monitor starts, and the low range monitor goes to standby. The high range monitor provides tracking of radioactive effluents during postulated accident scenarios. The high range monitor must be declared inoperable when the low range monitor is inoperable.

Prior to the event, a plant design change was prepared to improve the performance of the Plant Ventilation System High Range Radiation Monitor (RU-144)(IL)(MON)(VL), the Condenser Evacuation System High Range Radiation Monitor (RU-142)(IL)(MON)(SH), and RU-146. An approved work authorization document (work order) was prepared to implement the design change in RU-146. The work order for the modification was reviewed by a Instrument and Controls (I&C) maintenance foreman (utility, non-licensed) prior to





LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

DOCKET NUMBER (2)

LER NUMBER (6)

PAGE (3)

Palo Verde Unit 1

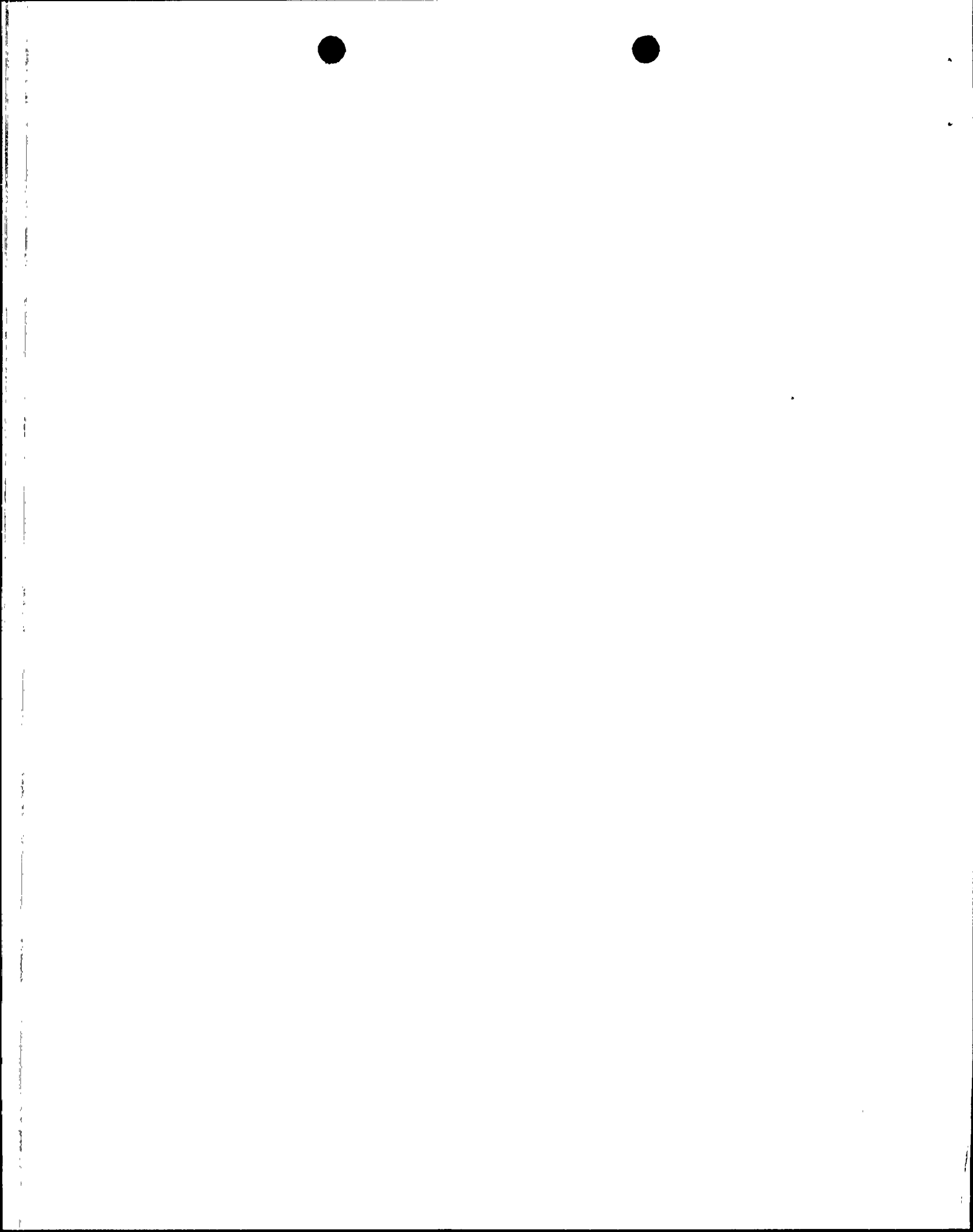
0 5 0 0 0 5 2 8 9 0 - 0 1 1 - 0 1 0 3 OF 0 7

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

implementation. The work order contained a step that placed FBEVAS "B" in bypass. The I&C foreman noted that the work order did not effect the operation of RU-145. Based on his knowledge of the radiation monitoring system and the work order, the I&C foreman elected not to have FBEVAS "B" placed in bypass. The change to the work order was documented in accordance with plant procedures in the work order.

The modification to RU-146 was completed. Upon restoration of power to RU-146, the indication of the operational RU-145 increased approximately five decades. This increase caused the initiation of FBEVAS train "B" which cross tripped FBEVAS train "A" and CREFAS trains "A" and "B". In response to these engineered safety feature actuations, Radiation Protection was contacted and surveys of the fuel building (ND) were initiated. No unusual radiological conditions were identified. A control room operator (utility, licensed) secured the normal control room ventilation fans (FAN)(VI) in accordance with the alarm response procedure at approximately 0442 MST on February 20, 1990. At approximately 0447 MST the control room operator completed equipment actuation verifications. All operable equipment responded as designed. FBEVAS train "B" was bypassed at approximately 0449 MST after it was confirmed that RU-145 was not providing a valid indication of radiological conditions. Subsequently, FBEVAS "A", CREFAS "A", and CREFAS "B" were reset. By approximately 0500 MST the normal fuel building and control building ventilation systems (VG)(VI) were returned to service and the control room essential filtration system (VG) and fuel building essential ventilation system (VI) were returned to standby readiness.

In response to the events described above, RU-145 was declared inoperable because of the erroneous indication. Pending implementation of the temporary modification, RU-145, and RU-146 remained inoperable. The Plant Ventilation System High Range Radiation Monitor (RU-144) also remained inoperable pending resolution of the erroneous indication on RU-145. RU-144 had been taken out of service at approximately 0051 MST to perform the same modification on the power supply as performed on RU-146. Therefore, this report is also being submitted in accordance with Technical Specification 3.3.3.8 Action 42(b) and 6.9.2 to report an event were the radiation monitors were out of service greater than 72 hours. Technical Specification 3.3.3.8 Action 42(b) 72 hour limit for returning RU-144 to service was exceeded at approximately 0051 MST on March 23, 1990. Technical Specification 3.3.3.8 Action 42(b) 72 hour time limit for



LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 500 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

|  |  |                |                   |                 |          |        |
|--|--|----------------|-------------------|-----------------|----------|--------|
| FACILITY NAME (1)<br><br>Palo Verde Unit 1 | DOCKET NUMBER (2)<br><br>0 5 0 0 0 5 2 8 | LER NUMBER (6) |                   |                 | PAGE (3) |        |
|  |  | YEAR           | SEQUENTIAL NUMBER | REVISION NUMBER |          |        |
|  |  | 9 0            | 0 0 1             | 0 1             | 0 4      | OF 0 7 |

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

returning RU-146 to service was exceeded at approximately 0226 MST on March 23, 1990. The Preplanned Alternate Sampling Program (PASP) was initiated in accordance with Technical Specification 3.3.3.8 ACTIONS.

A temporary modification was issued to eliminate the circuit noise in the RU-146 power supply. On February 23, 1990 at approximately 0307 MST RU-145 and RU-146 were declared operable after completion of the temporary modification.

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

Not applicable - no structures, systems, or components were inoperable at the start of the event which contributed to this event.

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

There were no component or system failures. However, the cause of the erroneous indication on RU-145 was noise generated in RU-146 and conducted through the common ground of the radiation monitor. The modification to the RU-146 power supply bypassed an inverter/rectifier in order to correct a low voltage condition at the radiation monitors flow transmitter. The inverter/rectifier contained a filter capacitor that had previously helped eliminate noise in the system. Therefore, after the modification, some circuit noise was not filtered and caused the radiation monitor erroneous indication.

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

Not applicable - There were no component failures.

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

Not applicable - no component failure with multiple functions were involved.



LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 500 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

|  |  |                |                   |                 |          |        |
|--|--|----------------|-------------------|-----------------|----------|--------|
| FACILITY NAME (1)<br><br>Palo Verde Unit 1 | DOCKET NUMBER (2)<br><br>0 5 0 0 0 5 2 8 | LER NUMBER (6) |                   |                 | PAGE (3) |        |
|  |  | YEAR           | SEQUENTIAL NUMBER | REVISION NUMBER |          |        |
|  |  | 9 0            | 0 0 1             | 0 1             | 0 5      | OF 0 7 |

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

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

Not applicable - No safety systems were inoperable because of this event. However, RU-146 was out of service for approximately 72 hours and 34 minutes, RU-145 was out of service for approximately 70 hours and 38 minutes, RU-144 was out of service approximately 87 hours and 29 minutes, and RU-143 was out of service approximately 11 hours. RU-145 and RU-146 were declared operable at approximately 0307 MST on February 23, 1990. RU-144 and RU-143 were declared operable at approximately 1620 MST on February 23, 1990.

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

Not applicable - There were no component or system failures or procedural errors.

- I. Cause of Event:

The cause of the radiation monitor high radiation indication was circuit noise as discussed in Section I.D.(SALP Code B). The design function of the inverter/rectifier was not to filter circuit noise. Therefore, the increase in circuit noise because of the modification was not anticipated.

The cause of the ESF actuation was cognitive personnel error (SALP Code A) in that FBEVAS Train "B" was not placed in bypass. An I&C maintenance foreman (utility, non-licensed) reviewed the modification work order in accordance with plant procedures prior to implementation. The work package contained a step that placed FBEVAS "B" in bypass. RU-145 provides an actuation signal to FBEVAS B. The I&C foreman noted that the work order did not effect the operation of RU-145. Based on his knowledge of the radiation monitoring system and the work instruction, the I&C foreman elected not to have FBEVAS "B" placed in bypass. This decision was documented in accordance with plant procedures in the work order. There were no procedural errors or unusual characteristics of the work location which contributed to the event.



LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 600 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

|  |  |                |                   |                 |          |        |
|--|--|----------------|-------------------|-----------------|----------|--------|
| FACILITY NAME (1)<br><br>Palo Verde Unit 1 | DOCKET NUMBER (2)<br><br>0 5 0 0 0 5 2 8 | LER NUMBER (6) |                   |                 | PAGE (3) |        |
|  |  | YEAR           | SEQUENTIAL NUMBER | REVISION NUMBER |          |        |
|  |  | 9 0            | 0 0 1             | 0 1             | 0 6      | OF 0 7 |

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

## J. Safety System Response:

FBEVAS and CREFAS responded to the spurious signal as designed. The fuel building normal ventilation was isolated and the normal air handling units (AHU) were stopped. Train "A" and "B" fuel building essential air ventilation units started to control any release from the building. The control room normal ventilation isolated and normal air handling units stopped. Train "A" and "B" control room essential filtration units started.

## K. Failed Component Information:

Not applicable - There were no component failures.

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

There were no safety consequences or implications resulting from the CREFAS and FBEVAS actuations. The Fuel Building Ventilation Monitor detects activity released into the fuel building ventilation. The radiation monitor performs the safety function of initiating an isolation of normal ventilation systems and activating essential ventilation system on a HIGH-HIGH alarm. As discussed in Section I.B, there was no indication of abnormal radiation levels at the time of the event. Additionally, the fuel building was surveyed and no abnormal radiation levels existed.

## III. CORRECTIVE ACTIONS:

## A. Immediate

The FBEVAS "B" channel was bypassed after it was verified that the initiation signal was not valid.

A temporary modification was performed to the circuit of RU-144 and RU-146 to prevent circuit noise from causing the radiation monitors to indicate erroneously.

## B. Action to Prevent Recurrence:

The I&C maintenance foreman has been counseled on the necessity of placing actuation logic in bypass while working on radiation monitors.





LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 600 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

DOCKET NUMBER (2)

LER NUMBER (6)

PAGE (3)

Palo Verde Unit 1

0 5 0 0 0 5 2 8

YEAR SEQUENTIAL  
NUMBER NUMBERREVISION  
NUMBER

9 0 — 0 0 1 — 0 1

0 7 OF 0 7

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

This report will be distributed to the appropriate Units 1, 2, and 3 maintenance personnel.

## IV. Previous Similar Event:

There have been no previous similar events reported pursuant to 10 CFR 50.73. There have been several previous events attributed to radiation monitor spiking due to noise in the circuit. However, none were directly the result of modifying the circuit. Therefore, recurrence control could not have prevented this event.

