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|-----------|----------|----------|--|----------------|------------|------------|--------|-----------|--------|------------|-------------|------------|----------------|----------|-----------|-----------|-------|----------|----------|----------|------|-------------|-----------------|----------|------|-------|----------|-------------|------------|--------------|
| | | • | | | | | | | l | LICE | EN | SEE | EVE | INT I | RE | POR | Т (І | LE | R) | • | | | | | | | | | | |
| FACILITY | NAME | (1) | | - | | | | | | | | | · · | | | | | <u> </u> | 1 | DOCK | ET | NUM | BER | (2) | | | | 1 | AGE | (3) |
| | | | | | Pale | <u>v c</u> | erc | le U | nit | 1 | - 12 | | | | | | | | | 0 | 5 | 0 | 0 | 0 | 5 | 2 | 2 8 | 1 | JF | 05 |
| TITLE (4) | O | ben | Αι | ixi | liary | B | bliu | ing | Doc | or Ca | aus | ses f | Fuel | Build | ing | g Ess | ent | ial | Filt | rat | ioi | n li | noj | per | ab | oilit | .y | | | |
| EV | ENTD | ATE (| 5) | | | | LERI | NUMBE | र (8) | | | R | EPORT D | ATE (7) | | | | | | отн | RF | ACIL | JULE | S INV | OLV | ED (I | 8) | | | |
| MONTH | 0. | 1 | YEAR | ۲Į. | YEAR | | SEC | QUENTIA | | NUM | SION BER | MONTH | I DAY | YE/ | AR | | , | FACIL | ITY NA | WES | | | | poc | KET | NUM | BERS | | | |
| | | | | 1 | | Ī | ┢ | | - | | | | 1 | | | <u> </u> | | | NA | | | | | 0 | 5 | 0 |) 0 | 0 | | |
| 018 | 01 | 9 | 916 | s | 916 | _ | 0 | | 3 - 18 | 01 | 1 | 019 | | 4 91 | 6 | | | | NA | | | | | 0 | 5 | 10 | 010 | 0 | Į | |
| OP | ERATI | VG | | न - | IIS REF | PORT | is su | IBMITTE | DPU | RSUANT | TTO | THE RE | QUIREMI | INTS OF | 10 0 | FR &: (Ch | ck on | e or r | nore o | f the l | foão | ning) | (11) | <u> </u> | | | | L | | |
| м | ODE (|)) | | ۱F | - <u> </u> | 20,4 | 02(b) | | | | ~ | 20. | 405(c) | | | | | 50.73 | (a)(2)(| N) | | | | T | 1 | 73. | 71(b) | | | |
| POWE | R | | | +- | -1 | 20.4 | 05(a)(| (1)(1) | | H | | 50. | 36(c)(1) | | | | | 50.73 | (a)(2)(| V) | | | | ┢── | | 73. | 71(c) | | | |
| | 10) | 410 | n I r | \mathbf{h} | -1 | 20.4 | 05(a)(| (1)(ii) | | ŀ | - | 50.1 | 36(c)(2) | | | 一分 | | 50.73 | (a)(2)(| vii) | | | | ⊢ | 1 | от | HER (S | pecify i | n Ab: | stract |
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| | 1 | , í | | 1 | | 20.4 | 05(a)(| 1VM | | ŀ | — | 50. | 73(a)(2)(i | ้่า | | H | | 50.73 | (a)(2)(| viii)(B | 9 | | | | | 366 | SA) | - | | |
| | 150 | et a so | 2013 1947 | 1 | -1 | 20.4 | 05(a)(| 11(v) | | ŀ | | 50. | 73(a)(2)(i | , n | | | | 50.73 | (a)(2)(| x) | , | | | | | | • | | | |
| | in an | | , | | | | | | | I | | ICENS | FCONT | ACT FOR | THI | SLER (12) | | | | ~~ | | | | Ļ | | | | | — | |
| NAME | | | | | | | | | | | | | | | • • • • • | ····· | | | | - 17 | FLE | PHO | NEN | IMB | FR | | | <u> </u> | — | |
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| Danie | G. | Mar | κs, | Se | ction | Le | ade | r, Nu | clea | ir Ke | gui | atory | Attair | S | | | | | | ſ | ~ 1 | | 1 | | | 10 | | 101 | 41 | <u>م ا م</u> |
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| | | | | | | | | COMPL | | | | K EAUN | COMPOR | | | e Descrit | | | S NCr | | (15) | | | | Toci | 000 | TADIE | | | |
| CAUSE | SYST | EM | CON | IPON | ENT | | TUI | JFAC- | T | O NPRE | BLE DS | k | - | | 5E | STSIEM | | JMPC | /11.2N | | | TUI | RER | ~ | T | DNP | RDS | | | |
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| | | | | | | | SUPP | LEMEN | TAL R | EPORT | EXP | ECTED (| ,14) | | | | | | ' | | E | XPE | CIE | D | | L | нис | DAT | ⊥ | TEAR |
| YES | (if yes, | compl | ioto E | XPE | TED S | UBMI | SSIO | N DATE |) | | | ł | | | | | | | | | St | JBM DATI | ISSIC E (15) | л) | | | [| | ļ | |
| ABSTRAC | T (Lim | t to 14 | 00 sp | 0005 | Lo., 4 | proxi | mately | y fifteen | single | space ty | pew | ntten line | 3) (16) | | | | | | | | | | | | | | نيىسىغى | * | | |
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On August 9, 1996, at approximately 1220 MST, Unit 1 was in Mode 1 (POWER OPERATIONS), operating at 100 percent power when APS engineering personnel determined that a condition which existed on August 2, 1996, had rendered both trains of the Fuel Building Essential Filtration system inoperable. Specifically, it was determined that on August 2, 1996, at approximately 0830 MST, maintenance workers propped open a door on the 100' elevation of the auxiliary building which created a flow path which could not be compensated for by the Fuel Building Essential Filtration units. This condition was corrected at approximately 0930 MST, August 2, 1996, but while the door was open, the Fuel Building Essential Filtration units would not have been able to maintain a measurable negative pressure under loss of coolant accident conditions as specified in the Updated Final Safety Analysis Report.

Calculations have demonstrated the offsite dose consequences would have remained within 10CFR100 limits under postulated LOCA conditions while the door was open. The cause of the condition was attributed to personnel error, and various corrective actions are under consideration at this time.

There have been no previous similar events reported pursuant to 10CFR50.73 within the past three years. See section 7 for additional information.

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| ę | | LICENSEE EVENT R | EPORT (LER) TEXT | CON. | TIN | IUA | | N | | | | |
|-------------|------|---|---|---|--|--|---|---|---|---|---------------|-------|
| FACILITY | NAME | | DOCKET NUMBER | | 1 | ER | NUMRE | R | | , | PAG | E |
| | Palo | Verde Unit 1 | | YEAR | | SEC | UENTIAL | | REVISIO NUMBER | 1 | | |
| | | | 0 5 0 0 0 5 2 8 | 9 6 | - | 0 | 0 3. | - | 0 1 | 0 2 | of | 0 5 |
| FEXT | 1. | EVENT CLASSIFICATION: | | | | | | | | | | |
| | | This LER (528/96-003-00) is both Trains A and B Fuel B would not have been able to Loss of Coolant Accident (Final Safety Analysis Repo | s being submitted to uilding Essential Fi o maintain a measura LOCA) conditions as rt (UFSAR). |) rep ltrai ble 1 spec: | ort tio neg ifi | a at: ed | cond units ive p in t | lit: (' re: he | ion i VG) (A ssure Upda | n whi HU) [,] unde ted | .ch r | |
| | | This condition is reportable or condition that alone con- function) and 10CFR50.73(a) caused two independent trans system). | le pursuant to 10CFR uld have prevented t)(2)(vii)(C) (a sing ins or channels to b | 350.7 The fu the ca pecome | 3(a ulf aus e i |)(2 il e (nor | 2)(v) Lment or co perab | (C) o: nd: le |) (ang f a sa ition in a | y eve afety whic sing | nt h le | |
| | , | This condition was initial Notification System as a 1- August 9, 1996) pursuant to evaluation revealed that th criteria, the ENS notificat determined to be reportable | Ly reported to the N -Hour Non-Emergency 5 10CFR50.72(b)(1)(i ne condition did not tion was not retract a under other 50.72 | RC vi event i)(B) meet ed be requi | ia c (c t eca ire | the ENS Al his use mer | e Eme 5 ID 1thou 5 rep e the nts. | rge 308 gh ort co | ency 360, subse ing ondit: | equen ion w | , t as | |
| | 2. | EVENT DESCRIPTION | | | | | | | | | | |
| | | On August 9, 1996, at appro OPERATIONS), operating at ((other utility personnel) of August 2, 1996, had rendered Filtration system inoperable | oximately 1220 MST, 100 percent power wh determined that a co ed both trains of th le. | Unit en Al onditi e Fue | 1 PS ion el | was eng wi Bu: | s in ginee nich Lldin | Moo rin ex: g l | de 1 ng pe: isted Issen | (POWE rsonn on tial | R el | |
| | | On August 2, 1996, at appro- (contractor personnel) were of the Auxiliary Building that it would be necessary electrical cable for their foreman and requested an op (contractor personnel) inst location and retrieve the technician noted a large by which stated that Shift Sup the door. Immediately below telephoned the foreman and informed the foreman of the | oximately 0800 MST, e preparing to begin (NF). While setting to prop open a door welder. One of the pen door permit. The tructed the technici door number. Arrivi lack-on-yellow sign pervisor permission ow the sign was the hich said "Stair Dow reported the door r e other postings. T | maint worl up, in d tecl he tech an tech in t was number wn." | ten k o th ord hni chn o r t t t r e r t h e r a e ch | and n f ler cia ic: tr he cen nu "A | te te the 1 techn to r ans r ians ' urn t door nter red t -131" techn "A-13 cian | chi 00 ic: ou et f of of a ic 31" di | nician 'ele ians te an urned orema the w the the the prop nd un ian and d not | ns vatio noted to t n ork door dor dor dor t also see | n he | |

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| | LICENSEE EVENT R | EPORT (LER) TEXT | CONTINUATION |
|--------------|--|---|--|
| ACILITY NAME | | DOCKET NUMBER | LER NUMBER PAGE |
| Pa | lo Verde Unit 1 | | NUMBER |
| | | 0 5 0 0 0 5 2 8 | 9 6 -0 0 3 -0 1 0 3 of 0 |
| EXT | The foreman reported to the (SRO) (utility, licensed) and looked up "A-131" in the co- Doors, Hatches and Floor P. HVAC, or HELB applicability an open door permit was not The technician, who by now was informed that an open of reiterated that there was a the door which stated that in order to prop open the of technician that the door nu procedure. After checking the door was incorrectly po- maintenance technicians ref Auxiliary building. At approximately 0930 MST, licensed) was performing ro- open with an electrical cal- | e Work Control Senio nd requested an Oper ontrolling procedure lugs) and found the y to door "A-131" and t needed. had arrived at the door permit was not a large black-on-yel the Shift Supervise door. The Work Cont umber was A-131 and the second time, th osted and did no fun- curned to work on the an Auxiliary Operator outine rounds and no ple routed through in out (utility, license | or Reactor Operator n Door Permit. The SRO e (40DP-92217, Control of re was no Security, Fire, nd informed the foreman that Work Control SRO's office, required. The technician llow sign in the center of or's permission was required trol SRO verified with the then rechecked the he Work Control SRO assumed ' rther research. The he 100' elevation of the tor (AO) (utility, non- oted door A-123 was propped it. The AO immediately ed), who directed the AO to |
| 3. | remove the cable and close ASSESSMENT OF THE SAFETY CO | the door. DNSEQUENCES AND IMPI | LICATIONS OF THE EVENT |
| • | Door A-123 opens to a stain 88' foot elevation of the A a non-ducted flow path from to the Fuel Building (ND). circumvented the Fuel Build measurable negative pressur Building during LOCA condit | way which opens int Auxiliary Building. n the 100' elevation This non-ducted fi ding Air Filtration re in the 88' elevat | to the pipe chase area of the This opening then serves as n of the Auxiliary Building low path could have units' ability to maintain a tion of the Auxiliary |
| | While door A-123 was open Essential Filtration units measurable negative pressur UFSAR. Section 9.4.2.2 of piping [BP/BQ] and equipment relation to ambient during Engineered Safety Features | (approximately 1.25 would not have been re under LOCA condit the UFSAR states: " nt shall be kept und emergency condition [ESF][JE] filtration | hours), the Fuel Building n able to maintain a tions as required by the "areas with safety injection der measurable pressure in ns by exhausting through on systems." |
| | Calculations completed by personnel) have demonstrate maintained in the Unit 1 A limitations of 10CFR100 wo | Design Engineering p ed that had a negat: uxiliary Building u uld not have been e: | personnel (other utility ive pressure not been nder LOCA conditions, the xceeded. |

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| FACILITY | NAME | | DOCKET | NUM | BER | T | | t | FR | NIIMP | FR | | | PAG | F. |
|----------|---------|---|---|---|---|--|---|--|--|--|--|--|---|-----------------|---------|
| | | | Booker | Non | | YE | AR | | SEC | UENTIA | | REVISIO | | | |
| | Palo | Verde Unit 1 | | | | L | | | | | | | | | |
| - | | | 0 5 0 0 | 0 | 5 2 8 | 9 | 6 | - | 0 | 03 | - | 0 1 | 0 4 | of | 0 5 |
| TEXT | | The loss of the Fuel Build minute increases in the cal the UFSAR but would not inc limits. | ing Essent Lculated r crease the | ial eci ca | Filtr rculat lculat | ati ion ed | on 16 dos | sy eak ses | sti agi bi | em w e as eyon | oul sp d 1 | d res ecifi 0CFR1 | ult i ed by 00 | .n 7 | |
| | `4. | CAUSE OF THE EVENT | | | | | | | | | | | | | |
| | | An investigation performed program revealed that the o code A). Specifically, the provided an incorrect door Also, Work Control personne when informed of the caution were cognitive and not the The investigation also reve identified contributed to the could be improved. There we | in accord cause of t responsi number wh el did not onary sign result of caled that the event were no un | lanc he ble qu a a th and | e with event contra- reques estion sted to proced e manna door n al wor | th was act tin or i ura er num k 1 | e P or or t. l e in ber oca | APS ma an eri Ti erro wh cino atio | con on ope fy hes or icl g s on | orren tenat en de the or o or o syste cha: | cti err do do ers def ors em | ve ac or (S. perm or nu onnel icien are ergon teris | tion ALP nicia it. nber errc cy. omics tics | n ors | |
| | , 5. | STRUCTURES, SYSTEMS AND COM | IPONENTS | | o cne j | Jer. | 501 | | <u> </u> | 5110. | L • | | | | |
| | | Door A-123, which was propp quality related, 3' by 7' b frame. | oed open a by 1.75" h | nd . oll | initia ow meta | ted al | tr doc | ne or o | eve wit | ent, ch a | is pr | a no essed | n- meta | 1 | |
| ν. | | The Fuel Building Heating A consists of normal and essed designed to maintain enviro comfort and safe operation The essential filtration sy handling accident, a LOCA of filtration system exhausts release of airborne radioad fuel handling accident. The negative pressure in the an building in the case of a I leakage is into this area of associated with Safety Inje prior to release. A tunned building with the fuel build The essential filtration un Actuation Signal (SIAS). | Ventilation ential HVA onmental of of equipm ystem functor of during through t through t trivity to be essenting the essention ceas below COCA. The of the aux ection system do the aux ection system do the aux ection system the essention system the essention system the aux ection system the essention system the aux ection system the aux ection system the essention system the aux ection system the essention system the aux ection system the aux ection system the essention system the aux ection system the aux ection system the essention system the aux ection system the aux ection system the | on all conditions the stion requires the still stemmission actu | nd Air ystems itions during ns onl uired fuel b e surra e surra e 100' gative ary bu pipin e 88' al fil ated u | Co su g n y i tes uil oun t s el g ele tra por | ndi The ita orm n tir dir yst evas lind evas itic | abl abl che ng cem ati sur co co Sa | oni orr pi ver arc al on mpo n un | ing mal i for j lant vent The of ensu of ensu of t its. ty I | (HV. HVA opf ess the tres the nje | AC) S C sys sonne erati a fu entia imizi case ates auxi that s lea are f auxil ction | ystem tem i on. el ng th of a liary air ks ilten iary | is ie :ed | · · · · |

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| • | LICENSEE EVENT R | EPORT (LER) TEXT | CONTINUATION | | | | | |
|------|---|---|--|--|--|--|--|--|
| Palo | Verde Unit 1 | DOCKET NUMBER | LER NUMBER PA | | | | | |
| | | 0 5 0 0 0 5 2 8 | 9 6 - 0 0 3 - 0 1 0 5 (| | | | | |
| | There were no systems or c event which contributed to or manually initiated safe result of the event. | omponents which wer the event. Likewi ty system responses | e inoperable prior to the se, there were no automatic and none were required as a | | | | | |
| 6. | CORRECTIVE ACTIONS TO PREV | ENT RECURRENCE | | | | | | |
| | The open door was secured b maintenance technicians' f | by Operations perso oreman was notified | nnel and the contract of the event. | | | | | |
| | A multi-discipline team con determined that modification Modification Work Order (DM install new door signage and signage clearly differentiate evaluation also determined numbers on the doors since documents. | nducted an evaluations were necessary MWO) 00769396 was in nd was completed on ates between the do that it was not app these numbers are | on of door design basis and to change door labeling. Desimplemented in all three units April 8, 1997. The new door or number and room number. ' propriate to remove the room referenced in engineering desi | | | | | |
| | As a result of the multi-d: procedure 40DP-92217, "Con- to update the design basis Ventilation, and Flooding) Revision 8 of the subject y | iscipline review and trol of Doors, Hatc functions (i.e., H of the doors and i procedure with an e | d door modifications, station hes, and Floor Plugs" was re- ELB, Security, Fire Protection ncorporated these changes in ffective date of April 17, 1 | | | | | |
| | Training on the procedure of currently underway for app learned from this event we October 17, 1996 such that that currently hold author on expectations for door co labeling scheme. | changes and expecta ropriate station pe re incorporated int new employees, con ization for unescor ontrol and how door | tions for door control is rsonnel. In addition, lesso o Site Access Training (SAT) tract personnel, and employ ted access, will receive tra s are labeled with the new | | | | | |
| 7: | PREVIOUS SIMILAR EVENTS | | • | | | | | |
| | There have been no previou which have resulted in the Filtration due to open doo occurrences where area num These other previous occur | s similar events re inoperability of t rs. However, there bers have been conf rences have been cc | ported pursuant to 10CFR50.7 he Fuel Building Essential have been previous used with door numbers. onsidered in the investigatic | | | | | |

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