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Palo Verde LOSP m40614 AIT

CATS

Information in this record was deleted
in accordance with the Freedom of Information
Act, exemptions 5
FOIA-2004-0207

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AIT status in ET-EDO bfg pkg (as of June 30)

Ongoing Augmented Inspection

- Palo Verde 1, 2, & 3 (Hodge) - Triple Unit Scram Due to LOOP (EN 40814 , 40815 & 40816)

Update 06/22/04: In response to the complete loss of all offsite power sources, the trip of all three units, and the demand failure of the Unit 2 Emergency Diesel Generator "A," at Palo Verde Nuclear Generating Station on June 14, 2004, an AIT was chartered.

Preliminary Issue List

NOTE: This is NOT an all-inclusive list.

- 230 kV Liberty Transmission Line, Tower#73, Phase "C" Insulator Failure
 - single phase to ground fault resulted in loss of offsite power and three unit trip

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- Auxiliary Relay, Liberty Transmission Line Fault Detection/Protection System Failure
 - inadequate design resulted in single failure vulnerability
- Unit 1 Atmospheric Dump Valve 185 Failure
- Unit 1 Letdown Heat Exchanger Isolation Failure
- Unit 1 and 3 General Electric Magne Blast Circuit Breaker Failures
 - complicated event recovery efforts by delaying the return of offsite power to ESF buses
 - licensee determined apparent cause as "breaker not cycled frequently enough"
 - AIT challenged licensee on apparent cause, raised concern regarding current functionality of breakers
- Unit 2 Train "A" Emergency Diesel Generator Failure
 - resulted in a loss of power to Train "A" ESF busses following loss of offsite power
 - apparent cause was diode failure in exciter rectifier circuit
- Unit 2, Train "E" Positive Displacement Charging Pump Trip
 - operator error resulted in suction line isolation and protective trip of pump
 - AIT identified that auxiliary operator was delayed approximately 10 minutes at the RCA access point even after the operator explained he was on a time critical mission
 - when RCA access delay was discussed with licensee, AIT determined that the licensee was unaware of delay
- Technical Support Center Emergency Diesel Generator Failure
 - apparent cause was test switch out of position
 - maintenance personnel failed to use restoration procedure six days prior to event following testing
 - some impact on emergency response organization which needed to use alternate TSC

EN 40814 (also 40815, 40816) Palo Verde

ALERT DECLARED - REACTOR TRIP DUE TO LOSS OF OFF SITE POWER

On June 14, 2004, at approximately 07:44 Mountain Standard Time (MST) all three units at the Palo Verde Nuclear Generating Station experienced automatic reactor trips coincident with a grid disturbance and loss of offsite power

PNO-IV-04-012A - Augmented Inspection Team (AIT) Dispatched to Palo Verde. June 14, 2004
PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE -- PNO- IV- 04- 012A This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by the Region IV, Arlington, Texas, staff on this date. Facility Palo Verde Nuclear Generating Station Units 1, 2, and 3 Arizona Public Service Company Phoenix, Arizona 85072 Dockets: 50- 528, 529, and 530 License Nos. NPF- 41, 51, and 74 Licensee Emergency Classification Notification of Unusual Event Alert Site Area Emergency General Emergency X Not Applicable SUBJECT: AUGMENTED INSPECTION TEAM (AIT) DISPATCHED TO PALO VERDE DESCRIPTION: An AIT was dispatched to Palo Verde on June 15, 2004, in response to the event documented in Preliminary Notification PNO- IV- 04- 012 for June 14, 2004, regarding loss of offsite power and the tripping of all three units of the Palo Verde Nuclear Generating Station. There was no impact to public health and safety associated with this event. However, the NRC evaluated the event using the guidance of Management Directive 8.3, "" NRC Incident Investigation Program."" Based on our evaluation of this significant operational event involving multiple failures of systems used to mitigate an actual event, and our preliminary risk assessment, it was decided that an Augmented Inspection Team (AIT) is the appropriate response. The AIT arrived on site today, and will conduct an entrance meeting with the licensee. The documentation of the inspection will be issued within 30 days of the completion of inspection activities. The state of Arizona has been informed. Region IV informed the offices of EDO, NRR, and PA. The information presented herein has been discussed with the licensee and is current as of 11: 00 a. m. MST on June 15, 2004. This preliminary notification is for information only. ADAMS ACCESSION NUMBER: ML041670656 [?] CONTACTS: Jeff Clark, 817- 860- 8185, jac@ nrc. gov

PNO-IV-04-012B - AUGMENTED INSPECTION TEAM (AIT) TO FINISH AT PALO VERDE. June 18, 2004 PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE -- PNO- IV- 04- 012B This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by the Region IV, Arlington, Texas, staff on this date. Facility Palo Verde Nuclear Generating Station Units 1, 2, and 3 Arizona Public Service Company Phoenix, Arizona 85072 Dockets: 50- 528, 529, and 530 License Nos. NPF- 41, 51, and 74 Licensee Emergency Classification Notification of Unusual Event Alert Site Area Emergency General Emergency X Not Applicable SUBJECT: AUGMENTED INSPECTION TEAM (AIT) TO FINISH AT PALO VERDE DESCRIPTION: The AIT dispatched to Palo Verde on June 15, 2004, is completing their review today and communicating issues with the licensee, Region IV, and the Office of Nuclear Reactor Regulation (NRR). The dispatching of the AIT was addressed in Preliminary Notification PNO- IV- 04- 012A. After a thorough review of the event and the licensee's assessments, and following discussion of issues with Region IV and NRR, the team will finish their inspection on June 19, 2004. The team turned over several operational and maintenance issues to the resident inspector staff for consideration of potential unit restart items, and for follow up inspection activities. The AIT will reconvene in Region IV next week to conduct further document reviews, and to commence report documentation. The documentation of the inspection should be issued

within 30 days. The state of Arizona has been informed. Region IV informed the offices of EDO, NRR, and PA. The information presented herein has been discussed with the licensee and is current as of 11: 30 a. m. MST on June 18, 2004. This preliminary notification is issued for information only. ADAMS ACCESSION NUMBER: ML041700613 [?] CONTACTS: Jeff Clark, 817- 860- 8185, jac@ nrc. gov