#### U. S. NUCLEAR REGULATORY COMMISSION

### REGION V

Report Nos. 50-528/92-27, 50-529/92-27, and 50-530/92-27

Docket Nos. 50-528, 50-529, and 50-530

License Nos. NPF-41, NPF-51, and NPF-74

Licensee Arizona Public Service Company P. O. Box 53999, Station 9012 Phoenix, AZ 85072-3999

Facility Name Palo Verde Nuclear Generating Station Units 1, 2, and 3

Inspection July 19 through August 24, 1992

Conducted

Inspectors

J. Sloan, Senior Resident Inspector (Acting) J. Ringwald, Resident Inspector L. Tran, Resident Inspector (Rotational Assignment) B. Olson Project Inspector

Approved By

Wan Wong, Chief

9/24/92 Date Signed

Reactor Projects Section 2

# Inspection Summary:

Inspection on July 19 through August 24, 1992 (Report Numbers 50-528/92-27, 50-529/92-27, and 50-530/92-27)

<u>Areas Inspected:</u> Routine, onsite, regular and backshift inspection by the three resident inspectors and offsite inspection by one Region V inspector. Areas inspected included:

review of plant activities - Units 1, 2, and 3
engineered safety feature system walkdown - Unit 2
surveillance testing - Units 1, 2, and 3
plant maintenance - Units 1, 2, and 3
alarming dosimeter set incorrectly - Unit 1
helicopter landing in switchyard - Unit 2
simulator training - Unit 3
emergency procedures implementation - Unit 3
verification of plant records - Units 1, 2, and 3
followup on previously identified items - Units 1, 2, and 3
review of licensee event reports - Units 1 and 2

9210090147 920924 PDR ADOCK 05000528 0 PDR During this inspection the following Inspection Procedures were utilized: 41500, 61715, 61726, 62703, 71707, 71710, 92700, 92701, 92702 and TI 2515/115.

Results: Of the 11 areas inspected, one violation was identified regarding improperly setting an alarming dosimeter.

General Conclusions and Specific Findings:

Significant Safety Matters: None

Violations: One violation - Unit 1

Deviations: None

Open Items: iwo new items were opened, and six items were closed.

<u>Strengths Noted:</u> A six shift rotation for operations was implemented in Units 1 and 2 which should result in more personnel being available in the operations department.

<u>Weaknesses Noted:</u> Several examples of inattention to detail were observed, underscoring the need for continued emphasis for individuals to raise their performance standards.

# DETAILS

# 1. Persons Contacted

The below listed technical and supervisory personnel were among those contacted:

Arizona Public Service (APS)

| R. Adney,      | Plant Manager, Unit 3   |
|----------------|---|
| *J. Albers,    | Manager, Operations Radiation Protection                            |
| *J. Bergstedt, | Senior Tech. Specialist, Quality Audits and<br>Monitoring (QA&M)    |
| *T. Bradish,   | Manager, Licensing/Compliance                                       |
| *R. Flood,     | Plant Manager, Unit 2   |
| *R. Fullmer,   | Manager, QÃ&M   |
| *D. Gouge,     | General Manager, Plant Support                                      |
| S. Guthrie,    | Director, Quality Assurance/Control (QA/QC)                         |
| *K. Hamlin,    | Director, Nuclear Safety  |
| *P. Hughes,    | General Manager, Radiation Protection                               |
| *W. Ide,       | Plant Manager, Unic 1   |
| *M. Lantz.     | Supervisor, Dosimetry   |
| *J. Levine,    | Vice President, Nuclear Power Production                            |
| *D. Mauldin,   | Director, Site Maintenance & Mods                                   |
| *J. Napier,    | Engineer, Compliance  |
| *G. Overbeck,  | Director, Site Technical Support (STS)                              |
| *R. Roehler,   | Supervisor, Compliance  |
| *C. Russo,     | Manager, Quality Control  |
| *G. Shanker,   | Manager, Station Operating Experience Department                    |
| T. Shriver,    | Assistant Plant Manager, Unit 2                                     |
| R. Stevens,    | Director, Nuclear Licensing   |
|                | . 사실 전 E (166) 27일 7. 시작 27일 20일 20일 20일 20일 20일 20일 20일 20일 20일 20 |

### Site Representatives

| * | J. | Draper, | Site | Representative, | Southern California | Edison |
|---|----|---------|------|-----------------|---------------------|--------|
|   | R. | Henry,  | Site | Representative, | Salt River Project  |        |
|   | F. | Gowers, | Site | Representative, | El Paso Electric    |        |

Others \*T. Hillmer, Consultant, Nuclear Safety

\* Denotes personnel in attendance at the exit meeting held with the NRC resident inspectors on August 24, 1992.

The inspectors also talked with other licensee and contractor personnel during the course of the inspection.

# 2. Review of Plant Activities - Units 1, 2, and 3 (61715 and 71707)

#### Unit 1 а.

Unit 1 operated at essentially 100 percent throughout the reporting period. A Notification of Unusual Event (NUE) was declared on August 23, 1952, related to the loss of power to meteorological instrumentation due to an electrical storm on August 22, 1992. The licensee failed to recognize that the condition was reportable until August 23, 1992. Information related to this event has been passed to Region V emergency preparedness inspectors for followup.

b. Unit 2

Unit 2 operated at essentially 1' percent power throughout the reporting period. The Core Ope ing Limit Supervisory System (COLSS) was out-of-service on . Just 9, 1992, forcing a brief downpower to 97 percent power, and again on August 24, 1992, forcing a brief downpower to 99.7 percent power.

#### c. Unit 3

Unit 3 operated at essentially 100 percent power throughout the reporting period. On August 4, 1992, a part length control element assembly (PLCEA) dropped fully into the core. No cause of the drop was identified, and the PLCEA was uneventfully recovered. The licensee intends to continue troubleshooting during the upcoming refueling outage.

#### d. Plant Tour

The following plant areas at Units 1, 2, and 3 were toured by the inspector during the inspection:

- Auxiliary Building
- o Control Complex Building
- o Diesel Generator Building
- o Fuel Building
- Main Steam Support Structure
- o Radwaste Building
- o Technical Support Center
- o Turbine Building
- o Yard Area and Perimeter

The following areas were observed during the tours:

 Operating Logs and Records - Records were reviewed against technical specifications and administrative control procedure requirements.

During a review of Unit 3 night orders on August 18, 1092, the inspector noted that one night order stated that the only approved location for a magnetic sign (operator aid) depicting the reactor coolant system pressure-temperature curve, required by the new emergency operating procedures, was on control board 4, immediately above the start-up rate instruments. The night order stated that the potential for this magnetic sign to induce a problem in the control board instrumentation had been analyzed in an Engineering Evaluation Request (EER), and directed that the sign not be attached to any other location without obtaining the necessary engineering approval. The inspector noted that the sign was below, not above, the startup rate instrument. The licensee immediately moved the sign to the approved location. The inspector reviewed EER 92-RM-002 and determined that it addressed the acceptability of the approved location but did not identify other locations as unacceptable. The sign had been moved to the lower location because it did not make continuous contact with the control board in the upper location, and the operations staff was concerned that the sign was not as secure as it should be. The sign remains in the upper (approved) location pending further review by the licensee. The inspector concluded that this occurrence was an example of inattention to detail in that the sign was not sized for the approved location and the acceptability of the alternate location was not reviewed prior to moving the sign.

- (2) <u>Monitoring Instrumentation</u> Process instruments were observed for correlation between channels and for conformance with technical specifications requirements.
- (3) <u>Shift Staffing</u> Control room and shift staffing were observed for conformance with 10 CFR Fart 50.54.(k), technical specifications, and administrative procedures.

The licensee successfully implemented a six shift rotation for Operations in Units 1 and 2. Previously, a five shift rotation was used.

(4) Equipment Lineups - Various valves and electrical breakers were verified to be in the position or condition required by technical specifications and administrative procedures for the applicable plant mode.

The inspector performed a field verification of containment integrity in Unit 1 by selecting several containment penetrations and confirming that they were properly aligned in accordance with licensee procedures 41ST-1ZZ13, "Containment Integrity - Penetrations 4.6.1.1.a," and 41ST-1SI04, "Containment Spray Valve Verification - 4.6.2.1.a,c, and 4.6.2.2." The inspector noted that in Appendix A of procedure 41ST-1SI04, the location in which to verify the position of approximately 20 valves was not specified. The licensee revised procedure 41ST-1SI04 on August 25, 1992, to denote the location in which these valves are to be verified.

The inspector also noted that valve 1-SIA-UV-664, containment spray pump "A" recirculation valve, had conflicting position indications. Although the valve was required to be open, one local indication indicated that the valve was 45% open, a second local indication on the stem indicated that the valve was closed, and the remote indication in the control room indicated that the valve was open. The licensee initiated a

3

work request to repair the local position indications. The inspector determined that the incorrect local position indicator was of little safety significance, since the Emergency Operation Procedures (EOP) did not appear to require local operation of the valve. Additionally, the valve position was established via a surveillance test based on recirculation flow rate, and the valve was locked in its correct position.

- (5) Equipment Tagging Selected equipment, for which tagging requests had been initiated, was observed to verify that tags were in place and the equipment was in the condition specified.
- (6) <u>General Plant Equipment Conditions</u> Plant equipment was observed for indications of system leakage, improper lubrication, or other conditions that could prevent the systems from fulfilling their functional requirements.

During a walkdown of the control boards in the Unit 1 control room, the inspector identified an error on the reactor coolant pump bleed off system control board mimic. Specifically, flow arrows on the mimic were in the reverse direction. The mimic piece orientation was promptly corrected. During subsequent walkdowns of control boards, the inspector noted that mimic pieces were missing on either board 2 or 3 in all three units. The missing pieces did not appear to confuse the operators and work requests were written to repair the mimic pieces. The inspector concluded that the presence of these conditions without a work request to correct the conditions indicated inattention to detail on the part of the operators during control room board walkdowns.

(7) <u>Fire Protection</u> - Fire fighting equipment and controls were observed for conformance with technical specifications and administrative procedures.

A review of firewatch training was conducted during this inspection period. Firewatch qualification records were reviewed and Automated Control Access Device (ACAD) records were audited. No concerns were identified.

- (8) <u>Plant Chemistry</u> Chemical analysis results were reviewed for conformance with technical specifications and administrative control procedures.
- (9) <u>Security</u> Activities observed for conformance with regulatory requirements, implementation of the site security plan, and administrative procedures included vehicle and personnel access, and protected and vital area integrity.
- (10) <u>Plant Housekeeping</u> Plant conditions and material/equipment storage were observed to determine the general state of cleanliness and housekeeping.

work request to repair the local position indications. The inspector determined that the incorrect local position indicator was of little safety significance, since the Emergency Operation Procedures (EOP) did not appear to require local operation of the valve. Additionally, the valve position was established via a surveillance test based on recirculation flow rate, and the valve was locked in its correct position.

- (5) Equipment Tagging Selected equipment, for which tagging requests had been initiated, was observed to verify that tags were in place and the equipment was in the condition specified.
- (6) <u>General Plant Equipment Conditions</u> Plant equipment was observed for indications of system leakage, improper lubrication, or other conditions that could prevent the systems from fulfilling their functional requirements.

During a walkdown of the control boards in the Unit 1 control room, the inspector identified an error on the reactor coolant pump bleed off system control board mimic. Specifically, flow arrows on the mimic were in the reverse direction. The mimic piece orientation was promptly corrected. During subsequent walkdowns of control boards, the inspector noted that mimic pieces were missing on either board 2 or 3 in all three units. The missing pieces did not appear to confuse the operators and work requests were written to repair the mimic pieces. The inspector concluded that the presence of these conditions without a work request to correct the conditions indicated inattention to detail on the part of the operators during control room board walkdowns.

(7) <u>Fire Protection</u> - Fire fighting equipment and controls were observed for conformance with technical specifications and administrative procedures.

A review of firewatch training was conducted during this inspection period. Firewatch qualification records were reviewed and Automated Control Access Device (ACAD) records were audited. No concerns were identified.

- (8) <u>Plant Chemistry</u> Chemical analysis results were reviewed for conformance with technical specifications and administrative control procedures.
- (9) <u>Security</u> Activities observed for conformance with regulatory requirements, implementation of the site security plan, and administrative procedures included vehicle and personnel access, and protected and vital area integrity.
- (10) <u>Plant Housekeeping</u> Plant conditions and material/equipment storage were observed to determine the general state of cleanliness and housekeeping.

The licensee identified five improperly restrained items in the Fuel Building which appeared to be associated with outage preparation. These items were either properly restrained or removed form the Fuel Building. The inspector considered that the self-questioning which identified and corrected these housekeeping discrepancies was appropriate.

- (11) <u>Radiation Protection Controls</u> Areas observed included control point operation, records of licensee's surveys within the radiological controlled areas, posting of radiation and high radiation areas, compliance with radiation exposure permits, personnel monitoring devices being properly worn, and personnel frisking practices.
- (12) <u>Shift Turrover</u> Shift turnovers and special evolution briefings were observed for effectiveness and thoroughness.

No violations of NRC requirements or deviations were identified.

3. Engineered Safety Feature (ESF) System Walkdown - Unit 2 (71710)

A selected engineered safety feature system was walked down by the inspector to confirm that the system was aligned in accordance with plant procedures. During this inspection period the inspectors walked down accessible portions of the following system.

Unit 2

 Reactor Trip Breakers and Supplementary Protection Logic Assembly (SPLA)

No violations of NRC requirements or deviations were identified.

4. Surveillance Testing - Units 1, 2, and 3 (61726)

Selected surveillance tests required to be performed by the Technical Specifications (TS) were reviewed on a sampling basis to verify that: 1) The surveillance tests were correctly included on the facility schedule; 2) A technically adequate procedure existed for performance of the surveillance tests; 3) The surveillance tests had been performed at the frequency specified in the TS; and 4) Test results satisfied acceptance criteria or were properly dispositioned.

Specifically, portions of the following surveillances were observed by the inspector during this inspection period:

Unit 1

Procedure Description

36ST-1SE06 Log Power Functional Test

Unit 2

| Procedure                | Description   |
|--------------------------|---|
| 365T-95802<br>425T-25113 | PPS Bistable Trip Units Functional Test<br>Low Pressure Safety Injection System Alignment<br>Verification 4.5.2.8 |
| 74ST-9SQ05               | Effluent Surveillance Test of RU-37 and 38  |
| Unit 3                   |   |
| Procedure                | Description   |
| 36ST-9SB04               | PPS Functional Test - RPS/ESFAS Logic   |
|                          |   |

No violations of NRC requirements or deviations were identified.

# 5. Plant Maintenance - Units 1, 2, and 3 (62703)

During the inspection period, the inspector observed and reviewed selected documentation associated with maintenance and problem investigation activities listed below to verify compliance with regulatory requirements, compliance with administrative and maintenance procedures, required quality assurance/quality control department involvement, proper use of safety tags, proper equipment alignment and use of jumpers, personnel qualifications, and proper retesting. The inspector verified that reportability for these activities was correct.

The inspector witnessed portions of the following maintenance activities:

Unit 1

- o ECA chiller troubleshooting
- o Charging pump "E" repack and plunger replacement

#### Unit 2

- o Repair valve EWA-V-115
- Relay replacement in control element drive control system motor generator control cabinets
- u Reassemble Borg-Warner 4 inch safety injection check valve

On August 6, 1992, the inspector observed that Unit 2 work order 566731 contained two different pages each labeled with page numbers 5 and 6. The extra two pages had been added to the work order as a result of a change. A review of the procedural requirements for work order development revealed that no procedural guidance existed for work order page numbering. While no confusion was apparent in the performance of this work order, the inspector noted that duplicate page numbering could create confusion in lengthy, complex k orders. Section 3.8 of procedure 30DP-9WP02, "Work Order Development," which addresses amendments and changes to work orders, does not clearly specify how work order change page numbers are to be assigned. Steps 3.8.4 and 3.8.5 of 30DP-9WP02, which are duplicated, could be interpreted to suggest that pen and ink changes can only be made to non-quality work orders; however, this conflicts with step 3.8.2 which states that pen and ink changes can be made to quality and quality augmented work orders. Discussions with the Unit 2 Work Control Manager revealed that there is inconsistency on site with how work order changes and page numbering are handled. The inspector concluded that the procedural guidance for work order changes is not rigorous and could lead to confusion. This issue will be discussed at the next Work Control Forum. The licensee is also evaluating changing the SIMS computer program which generates work orders to control work order page numbers rigorously. In addition, the licensee is reviewing the procedural guidance and practice of work order changes and will revise the program as needed to minimize the likelihood of confusion.

On August 18, 1992, the inspector observed the reassembly of a four inch Borg-Warner check valve using work order 565750 in the Unit 2 mechanical maintenance shop. This valve was similar to the check valve that was improperly reassembled as described in NRC Inspection Report 50-528/529/530/92-23. The as-found internals stack height did not center the disk on the seat. Since the Plant Engineer wanted the valve to be reassembled with the disk centered, a work order change was required because the work order specified that the stack height be returned to the as-found measurement. The work control planner made a pen and ink change to permit a stack height which would center the valve but did not delete the previous requirement to leave the stack height at the as-found measurement. The inspector guestioned this contradiction, and the work control planner immediately deleted the original requirement. Additionally, the work order required the valve studs to be torgued in three passes of 9, 21, and 30 foot-pounds, and the inspector noted that this specific torque sequence was not followed. The inspector questioned the mechanic, and he immediately acknowledged the error in torguing the valve studs. The inspector further noted that this error did not appear to damage the valve, and the valve was being returned to the warehouse and would require disassembly and reassembly prior to installation in the plant. The inspector concluded that this error had minor safety significance. The inspector further concluded that the pen and ink change contradiction and the stud torque sequence errors represented inattention to detail on the part of the work control planner and the mechanic. The licensee counselled the individuals involved. A discussion of this event was held with all mechanics in the Unit 2 mechanical maintenance shop, and the Unit 1 and 3 mechanical maintenance departments were notified. A discussion of this event was also held with all Unit 2 work control planners.

#### Unit 3

Transfer of new fuel from storage racks to spent fuel pool.
 No violations of NRC requirements or deviations were identified.

# 6. Alarming Dosimeter Set Incorrectly - Unit 1 (71707)

On August 20, 1992, the NRC inspector was issued an alarming dosimeter by a shift radiological protection (RP) technician at the Unit 1 RP "island" as required by the Radiation Exposure Permit (REP) 1-92-0010-A for a high radiation area. The inspector observed the technician turn the dosimeter on, check the battery, reset the alarm setpoint switches from 1050 millirem to 50 millirem, then issue the dosimeter. NRC Inspection Report 50-528/90-28, paragraph 9, noted that Dositech alarming dosimeters require either the power to be cycled or the reset button pushed after the alarm setpoint is changed for the new alarm setpoint to be effective. Since these actions were not performed, the alarming dosimeter was issued to the inspector with an alarm setpoint of 1050 millirem rather than 50 millirem as required by the REP. This is an apparent violation of NRC requirements (Violation 528/92-27-01). The violation cited in Inspection Report 50-528/90-28 occurred slightly over two years before the latest violation described here.

The inspector questioned the technician immediately after the dosimeter was issued, and the technician acknowledged the incorrect setpoint. The inspector also discussed this issue with RP supervision and mana, ent. RP management determined that this alarming dosimeter was one of several which had just been returned from the calibration facility. These alarming dosimeters had been tested at very high doses and had been returned with the thousand millirem switch still set to one (a setting of 1XXX millirem). The RP technician noticed this incorrect setting when issuing the alarming dosimeter but did not remember to cycle power or push the reset button prior to issuing the alarming dosimeter. Immediate corrective actions included issuing Radiological Controls Problem Report 1-92-006; verifying that this technician had received the training associated with the corrective action associated with the previous violation; counselling the technician; checking and resetting all dosimeters to the most frequently used alarm setpoint of 50 millirem; and notifying Unit 2 and 3 RP. Longer term corrective actions are being considered and will be proposed in a report to RP management.

One apparent violation of NRC requirements was identified.

# 7. Helicopter Landing in Switchyard - Unit 2 (92700)

At approximately 7:50 PM (MST) on August 18, 1992, a Salt River Project (SRP) helicopter landed in the site switchyard. Earlier that day, Arizona Public Service Company (APS) requested that SR<sup>o</sup> troubleshoot and repair Unit 2 generator output breaker PL-928 which would not open. The use of a helicopter was not expected nor coordinated with APS personnel. APS has a lighted helicopter pad approximately 100 feet from the switchyar, fence, but the pilot chose to land inside the fence, using the helicopter landed approximately 150 feet from the nearest power lines. Following repairs to the breaker, the helicopter took off uneventfully. APS management promptly addressed its concern with SRP management regarding unnecessarily increasing the risk of the loss of offsite power sources. A meeting was held on August 24, 1992, to ensure that SRP management understood the sensitivity of activities which could endanger offsite power reliability. APS and SRP agreed that, in the future, helicopters would not land in the switchyard. APS intends to send a memorandum to SRP documenting preferred and alternate landing locations, and establishing appropriate communication channels for coordinating helicopter activities.

No violations of NRC requirements or deviations were identified.

### 8. Simulator Training - Unit 3 (41500)

A Unit 3 operating crew was observed during an evaluated simulator scenario on August 19, 1992. The inspector noted that overall communications among the crew members was excellent, with operators following up on other operators' actions when appropriate. Several brief tailboard discussions were conducted to keep all operators aware of plant status and procedural direction. The Emergency Operating Procedures, which were implemented on August 17, 1992, were effectively used during this event. The Shift Supervisor and Control Room Supervisor provided adequate oversight and direction to the crew. Evaluation activities following the scenario appeared to be objective and critical, with some weaknesses identified. In this scenario, which involved a forced shutdown which degraded to a trip condition, communications from the control room did not provide any indication to auxiliary operators that an event was in progress until well after the reactor trip and engineered safety features actuations. Additionally, the event classification could have been performed earlier in the event than it was.

The inspector concluded that the training was effective and that operations and training personnel appeared to perform as expected.

No violations of NRC requirements or deviations were identified.

#### 9. Emergency Procedures Implementation - Unit 3 (71797)

The licensee implemented a major revision to its emergency operating procedures on August 17, 1992. The inspector noted that the copy of the new procedures inside the Unit 3 control room did not have approval signatures, though they otherwise appeared to be identical to the properly approved procedures in the Controlled Procedure binders in the hallway outside the main control room area. The inspector also noted that page 92a in both the controlled copy and the control room copy of procedure 43EP-3R003, "Steam Generator Tube Rupture," had been reproduced askew such that a portion of the information on the page was missing. The licensee promptly corrected both these deficiencies. A similar check in Units 1 and 2 was performed with no discrepancies identified. At the exit meeting, the licensee stated that the copy in the control room binders was identical to the controlled copy except for the cover sheets.

The inspector concluded that these discrepancies represented a lack of attention to detail in the implementation of these important procedures, but that there was little safety significance involved.

No violations of NRC requirements or deviations were dentified.

# Verification of Plant Records - Units 1, 2, and 3 (Temporary Inspection 2515/115)

APS initiated a review of six logs for each of the 105 qualified auxiliary operators and compared the logs with security access records. The licensee issued Corrective Action Report (CAR) 92-0104 to document the results of their investigation. The purpose of the APS investigation was to determine the validity of the auxiliary operator logs.

The licensee's investigation included liscussions with the auxiliary operators who had been identified to have access discrepancies. Problems with the security system and records were investigated by the licensee. During the course of the NRC review of the results of the licensee's investigation and even after some disciplinary actions had been taken by APS. APS concluded that some of the security access data had not been interpreted properly and that a further review of those records would be needed. Therefore, the preliminary data and deviations previously noted by APS would be subject to further evaluation.

The licensee's Quality Assurance department expects to perform some verification activities related to this issue on a periodic basis. Such a program was not in place prior to the emergence of this issue elsewhere in the industry earlier this year.

The inspector concluded that the licensee had performed an effective review of the integrity of AO logkeeping on a one-time basis, and that observed deficiencies were being appropriately addressed. Additionally, the licensee had not established an effective periodic review program to identify future degradation of logkeeping integrity, but intends to begin periodically monitoring for such discrepancies as a result of the problems identified by CAR 92-0104.

This item remains open pending the licensee's evaluation of the security data which is expected to be completed by September 30, 1992 (Followup Item 50-529/92-27-02).

No violations of NRC requirements or deviations were identified.

# Followup on Previously Identified Items - Units 1, 2, and 3 (92701 and 92702)

# a. Unit 1

# (Closed) Followup Item (528/91-31-01): "Plant Review Board Administrative Procedure" - Unit 1 (92701)

This item in olved a revision required for procedure 02AC-0AP01, "Plant Review Board," as a result of organization changes at Palo Verde. A Technical Specification (TS) Amendment Request had been submitted for the organization changes, and the procedure required a revision to agree with TS. The inspector reviewed revision 0.01 to the procedure and confirmed that it agreed with Technical Specification Amendment Nos. 58, 45, and 31 for Palo Verde Units 1, 2, and 3. This item is closed.

b. Unit 3

# (Closed) Violation (530/91-47-01): "Procedural Violations During Crane Event" - Unit 3 (92702)

This violation described three examples of failure to follow procedures, identified during the NRC Augmented leam Inspection review of an event in which a mobile crane contacted offsite power lines for Unit 3, resulting in a partial loss of offsite power. The event was reviewed in detail in NRC Inspection Report 50-528/529/530/91-47 and is described in Licensee Event Report 530/91-10.

The first example of failure to follow procedures occurred when the crane was used within a boom's length of energized power lines without taking necessary precautions and without the assistance of an electrical checker and signalman. The second example occurred when the crane was used in the vicinity of high voltage lines without being grounded as specified in the licensee's Accident Prevention Manual. The third example occurred when operators failed to maintain sufficient formality in communications when receiving reports of the event and in subsequent communication, resulting in the wrong offsite power lines being deenergized and forced reactor coolant circulation being lost.

The corrective actions were reviewed during the review of LER 530/91-10. Supplement 1, and found to be adequate. Additional actions addressing root causes, identified in the licensee's response to the violation, were also reviewed and found to be appropriate and adequate. This item is closed on the basis of these reviews.

## c. Units 1, 2, and 3

### (Closed) Violation (528/529/530/91-47-02): "Inadequate Review and Implementation of Corrective Actions for Industry Events" (92702)

This violation occurred prior to a November 14, 1991, partial loss of power event in Unit 3, precipitated by a mobile crane coming into contact with offsite power lines. Prudent precautions from previous industry events had not been identified and implemented by the licensee to prevent this type of event. The event was reviewed in detail in NRC Inspection Report 50-528/529/530/91-47 and is described in Licensee Event Report 530/91-10.

The corrective actions were reviewed during the review of LER 530/91-10, Supplement 1, and found to be adequate. This item is closed on the basis of the prior review.

No violations of NRC requirements or deviations were identified.

### 12. Review of Licensee Event Reports (LER) - Units 1 and 2 (92700)

Through direct observations, discussion with licensee personnel, or review of the records, the following LERs were closed.

- a. Unit 1
  - 91-09 <u>Revision LO, "Reactor Trip and ESF Actuation Due to Number</u> 1 Steam Generator H' Level"
- b. Unit 2

### 92-01 Revision LO/L1, "Reactor Trip Due to Low Steam Generator Level"

No violations of NRC requirements or deviations were identified.

### 13. Exit Mesting (71707)

An exit meeting was held on August 24, 1992, with licensee management and resident inspectors during which the observations and conclusions in this report were generally discussed.

The licensee did not identify as proprietary any materials provided to or reviewed by the inspectors during the inspection.