UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

April 18, 2002

Gregg R. Overbeck, Senior Vice
President, Nuclear
Arizona Public Service Company
P.O. Box 52034
Phoenix, Arizona 85072-2034

SUBJECT: INTEGRATED NRC RESIDENT INSPECTION REPORT 50-528/02-02; 50-529/02-02; 50-530/02-02 and INDEPENDENT SPENT FUEL STORAGE INSTALLATION INSPECTION REPORT 72-44/02-01

Dear Mr. Overbeck:

On March 23, 2002, the NRC completed an inspection at your Palo Verde Nuclear Generating Station, Units 1, 2, and 3, facility. The enclosed report documents the inspection findings which were discussed on March 21, 2002, with you and other members of your staff as described in Section 4OA6.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, no findings of significance were identified.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

/RA/

Linda Joy Smith, Chief
Project Branch D
Division of Reactor Projects

Dockets: 50-528
50-529
50-530
72-44
Licenses: NPF-41
NPF-51
NPF-74

Enclosure:
NRC Inspection Report
50-528/02-02; 50-529/02-02; 50-530/02-02; 72-44/02-01

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RIV:RI:DRP/D	RI:DRP/D	SRI:DRP/D	C:DRS/PSB	C:DRS/EMB
NLSalgado	GXWarnick	JHMoorman	GMGood	CSMarschall
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C:DRP/D				
LJSmith				
/RA/				
04/18/02				

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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Dockets:	50-528 50-529 50-530 72-44
Licenses:	NPF-41 NPF-51 NPF-74
Report No:	50-528/02-02 50-529/02-02 50-530/02-02 72-44/02-01
Licensee:	Arizona Public Service Company
Facility:	Palo Verde Nuclear Generating Station, Units 1, 2, and 3
Location:	5951 S. Wintersburg Road Tonopah, Arizona
Dates:	December 30, 2001 through March 23, 2002
Inspectors:	J. H. Moorman, III, Senior Resident Inspector N. L. Salgado, Resident Inspector G. G. Warnick, Resident Inspector R. P. Mullikin, Senior Reactor Inspector J. S. Dodson, Health Physicist J. V. Everett, Senior Health Physicist
Approved By:	Linda Joy Smith, Chief, Project Branch D Division of Reactor Projects

SUMMARY OF FINDINGS

Palo Verde Nuclear Generating Station, Units 1, 2, and 3
NRC Inspection Report 50-528/02-02; 50-529/02-02; 50-530/02-02, 72-44/02-01

IR 05000528-02-02, IR 05000529-02-02, IR 05000530-02-02, IR 072000044/02-01 on 12/30/01-3/23/02, Arizona Public Service Company, Palo Verde Nuclear Generating Station; Units 1, 2, and 3. Integrated resident and regional report. No findings identified.

The report covered a 12-week period of resident inspection, and announced inspections by a senior reactor inspector, a senior health physicist, and a health physicist. The significance of most findings is indicated by their color (Green, White, Yellow, or Red) using IMC 609 "Significance Determination Process" (SDP). Findings for which the SDP does not apply are indicated by "No Color" or by the severity level of the applicable violation. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/index.html.

A. Inspector Identified Findings

No findings of significance were identified.

B. Licensee Identified Violations

One violation of very low significance, which was identified by the licensee, has been reviewed by the inspectors. Corrective actions taken or planned by the licensee appear reasonable. This violation is listed in Section 4OA7 of this report.

Report Details

Summary of Plant Status

Unit 1 operated at full power until February 23, 2002, when power was reduced to 90 percent for steam generator cleanup. This unit was returned to full power on February 23, and remained at that power level for the duration of this inspection period.

Unit 2 operated at full power until March 16, 2002, when the reactor was shut down for the tenth refueling outage. The unit was in Mode 6 at the end the inspection period. All inspection report input addressing the outage will be in Inspection Report 50-528, -529,-530/02-03.

Unit 3 operated at full power for the duration of this inspection period.

1. REACTOR SAFETY
Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity
[REACTOR - R]

1R02 Evaluations of Changes, Tests, or Experiments (71111.02)

a. Inspection Scope

The inspectors reviewed a selected sample of 10 licensee-performed 10 CFR 50.59 evaluations to verify that the licensee had appropriately considered the conditions under which the licensee may make changes to the facility or procedures or conduct tests or experiments without prior NRC approval.

The inspectors reviewed an additional 15 licensee-performed 10 CFR 50.59 screenings, in which the licensee determined that evaluations were not required, to ensure that the licensee's exclusion of a full evaluation was consistent with the requirements of 10 CFR 50.59.

The inspectors evaluated the effectiveness of the licensee's corrective action process to identify and correct problems concerning their performance associated with 10 CFR 50.59 requirements. In this effort, the inspectors reviewed three condition report/disposition requests (CRDRs) and the subsequent corrective actions pertaining to licensee-identified problems and errors in the performance of licensing basis impact evaluations to ensure that problems and deficiencies were being identified and that appropriate corrective actions were being taken.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (71111.04)

.1 Partial Walkdown Inspections

a. Inspection Scope

The inspectors completed a partial walkdown of the systems listed below to verify proper equipment alignment. This inspection included a review of the applicable plant procedures, plant drawings, outstanding modifications, work orders and condition report/disposition requests. The inspectors verified the following: all valves were properly aligned, there was no leakage that could affect operability; electrical power was available as required; major system components were properly labeled, lubricated, and cooled; and, hangers and supports were correctly installed and functional.

- January 16, 2002 - High pressure safety injection system Train B (Unit 3)
- February 27, 2002 - Emergency diesel generator Train A (Unit 2)
- March 15, 2002 - Auxiliary feedwater Train B (Unit 1)

b. Findings

No findings of significance were identified.

.2 Complete Walkdown of the High Pressure Safety Injection (HPSI) System

a. Inspection Scope

On February 19, 2002, the inspectors completed walkdowns of the Unit 1, 2, and 3 HPSI system. The inspectors verified the system was capable of performing required safety functions, that the licensee properly performed mechanical and electrical system alignments and system valves did not exhibit leakage that would adversely impact function. The inspectors also checked major system components for correct labeling and lubrication, that hangers and supports were correctly installed and functional and essential support systems were operational.

The inspectors reviewed the following documents to determine correct system alignment:

- Procedure 40ST-9SI07, "High Pressure Safety Injection System Alignment Verification," Revision 6

- Procedure 40OP-9SI02, "Recovery from Shutdown Cooling to Normal Operating Lineup," Appendix B, "Auxiliary Building Train A SI Valve Verification List," Appendix C, "Train A SI Electrical Verification List," Appendix D, "Auxiliary Building Train B SI Valve Verification List," Appendix E, "Train B SI Electrical Verification List," Appendix F, "Control Room SI Train A Verification List," Appendix G, "Control Room SI Train B Verification List," Revision 39

- Drawing 01-M-SIP-001, "Safety Injection and Shutdown Cooling System," Revision 25

- Drawing 03-M-SIP-002, "Safety Injection and Shutdown Cooling System," Revision 19

The inspectors also reviewed selected HPSI CRDRs, outstanding corrective maintenance requests, the System Health Report (Third Quarter, 2001), temporary modifications, and outstanding design issues.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

a. Inspection Scope

The inspectors conducted tours of the areas listed below that are important to reactor safety and referenced in the Prefire Strategies Manual to evaluate conditions related to licensee control of transient combustibles and ignition sources; the material condition, operational status, and operational lineup of fire protection systems, equipment and features; and the fire barriers used to prevent fire damage from propagation of potential fires.

- February 1, 2002, Control building - all accessible elevations (Unit 1)
- February 12, 2002, Auxiliary building 120-foot and 140-foot elevations (Unit 3)
- March 4, 2002, Control building 100-foot elevation (Unit 2)
- March 20, 2002, Containment building - all accessible elevations (Unit 2)

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalifications (71111.11)

a. Inspection Scope

On January 30, 2002, the inspectors observed evaluated simulator scenarios for two on-shift crews conducted at the beginning of Cycle 02-01, Week 4. The inspectors evaluated the simulator scenario, the crew performance, and the evaluator critique sessions conducted following the completion of the simulator scenarios. The inspectors verified that the examinations were in conformance with NUREG 1021, “Operator Licensing Examiner Standards,” ES-604, “Dynamic Simulator Requalification Examination,” and management expectations.

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation (71111.12)

a. Inspection Scope

The inspectors evaluated the following equipment failures to verify that licensee personnel properly implemented the requirements of 10 CFR 50.65, “Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants”:

- Safety injection Tank 1A vent Valve 1JSIAHV0607 failed to open when venting during the performance of Procedure 40OP-9SI03, "Safety Injection Tank Operations," Revision 22, as reported in CRDR 2438736 (Unit 1).

- Train B safety injection pumps recirculation to refueling water tank combined miniflow isolation Valve 2JSIBUV0659 close stroke time outside reference range as reported in CRDR 2441805 (Unit 2).

- Steam generator high rate blowdown Valve JSCNHV0019C failed to indicate fully open while performing high rate blowdowns as reported in CRDR 2458764 (Unit 3).

- During the performance of 73ST-9SG01, MSIV-180 failed to stroke to its 10 percent exercise closed position using the Train B hydraulics as reported in CRDR 2458945 (Unit 2).

- During full power operation it was discovered that the main generator excitation trip and the main generator voltage regulator trip were disabled as reported in CRDR 2462111 (Unit 2).

- Condenser Shell A lost vacuum due to problems with air removal pump suction Valve ARN-UV-25 as reported in CRDR 2464691 (Unit 1).

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation (71111.13)

a. Inspection Scope

Throughout this inspection period the inspectors reviewed daily and weekly work schedules to determine when risk-significant activities were scheduled. The inspectors reviewed risk evaluations and overall plant configuration control for selected activities to verify compliance with Procedure 30DP-9MT03, “Assessment and Management of Risk When Performing Maintenance in Modes 1 - 4,” Revision 4. The inspectors discussed

emergent work issues with work control personnel and reviewed the potential risk impact of these activities to verify that the work was adequately planned, controlled, and executed. The inspectors verified that plant configurations allowed by the Plant Configuration Risk Indicator Matrix were consistent with actual plant conditions during maintenance. The specific activities reviewed were associated with planned and emergent maintenance on:

- January 2, 2002, scheduled online outage for emergency diesel generator, essential spray pond, essential chilled water, essential cooling water, and containment spray Train B (Unit 1)

- January 15, 2002, scheduled auxiliary feedwater valve maintenance (Unit 3)

- January 23, 2002, emergent performance of Procedure 73ST-9SI03, "Leak Test of SI/RCS Pressure Isolation Valves," Revision 22 (Unit 3)

- January 31, 2002, both gas turbine generators declared out of service with ambient temperature less than 32 degrees F (Unit 1, Unit 2, and Unit 3)

- February 20, 2002, safety injection Tank 2A vent valve replacement per Work Order 2468272 (Unit 1)

- February 27, 2002, scheduled online outage for emergency diesel generator, essential spray pond, essential chilled water, essential cooling water, and containment spray Train B (Unit 2)

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors evaluated the operability determinations listed below for technical adequacy and assessed the impact of the condition on continued plant operation. Additionally, the inspectors reviewed TS entries, CRDRs, and equipment issues to verify that operability of plant structures, systems, and components was maintained or that TS actions were properly entered.

- Entry into LCO 3.2.1 Condition B and Condition B of 3.2.4 with core operating limit supervisory system out of service (CRDR 2457102) (Unit 3).

- Operability Determination 2455833, Revision 0, assessment of containment sump operability with transient materials in the Unit 3 containment (CRDR 2455830) (Unit 3).

- Operability Determination 2459819, Revision 1, assessment of nonconforming condition discovered during the equipment root cause of failure analysis for the main steam/feed isolation system failure on July 13, 2001 (Unit 2).

- Operability of main steam isolation Valve (MSIV-180) and the applicability of Technical Specification 3.7.2 with main steam isolation Valve 180 Train B hydraulics unavailable (CRDR 2458945) (Unit 2).

- Operability Determination 2468938, Revision 0, assessment of safety injection tank operability with vent Valve SIAHV605 inoperable (Unit 1).

- Entry into LCO 3.8.1 Condition G when Palo Verde switchyard voltage dropped below 524.5 Kilovolts on February 27, 2002, due to Western Systems Coordinating Council grid disturbance (Unit 1).

b. Findings

No findings of significance were identified.

1R16 Operator Workarounds (71111.16)

a. Inspection Scope

The inspectors interviewed operators and reviewed the Control Room Deficiency Log in Units 1, 2, and 3, to determine the number of operator workarounds that existed and to assess the cumulative effect of the workarounds on the ability of operators to respond in a correct and timely manner to plant transients and accidents.

b. Findings

No findings of significance were identified.

1R19 Postmaintenance Testing (71111.19)

a. Inspection Scope

The inspectors observed and/or evaluated the results from the following postmaintenance tests to determine whether the test adequately confirmed equipment operability. The inspectors also verified that postmaintenance tests satisfied the requirements of Procedure 30DP-9WP04, “Post-maintenance Testing Development,” Revision 13.

- Various Work Orders Emergency diesel generator Train B online outage (Unit 1)

- Work Order 2418806 Replacement of emergency diesel generator Train A 4R and 4L liners, pistons, and heads (Unit 1)

- Work Order 2468272 Replacement of safety injection Tank 2A vent Valve SIA-HV-605 (Unit 1)
- Work Order 2472116 Performance of Procedure 73ST-9XI14, "Train B HPSI Injection and Miscellaneous SI Valves - Inservice Test," Revision 16, as the retest for Valves SIB-HV-696 and SIB-HV-694 (Unit 2)
- Work Order 2428971 Performance of Procedure 36ST-9SB14, "Supplementary Protection System Channel Calibration," Revision 12, as the retest for replacement of a power supply in Channel D of the Supplementary Protection System on February 28, 2002 (Unit 3)
- Work Order 2464994 Performance of Procedure 73ST-9SI10, "HPSI Pumps Miniflow - Inservice Test," Revision 22, as the retest following removal of temporary modification (T-Mod) 2464992 (Unit 1)

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors observed the performance of and/or reviewed documentation for the following surveillance tests. Applicable test data was reviewed to verify whether they met Technical Specifications, Updated Final Safety Analysis Report, and licensee procedure requirements. Also, the inspectors verified that the testing effectively demonstrated that the systems were operationally ready, capable of performing their intended safety functions, and that identified problems were entered into the corrective action program for resolution.

January 10, 2002	Procedure 73ST-9SI10, "HPSI Pumps Miniflow - Inservice Test," Revision 21 (Unit 3)
January 14, 2002	Procedure 73ST-9AF02, "AFA-P01 - Inservice Test," Revision 21 (Unit 3)
February 26, 2002	Procedure 73ST-9SG01, "MSIVs - Inservice Test," Revision 12 (Unit 2)
March 7, 2002	Procedure 73ST-9ZZ18, "Main Steam and Pressurizer Safety Valve Set Pressure Verification," Revision 16 (Unit 2)

March 13, 2002 Procedure 40ST-9DG01, "Diesel Generator A Test," Revision 15 (Unit 2)

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

The inspectors evaluated the following T-Mods and associated 10 CFR 50.59 screening. The inspectors reviewed these against the system design-basis documentation and verified that the modification did not adversely affect system operability or availability. Additionally, the inspectors verified that the installation was consistent with applicable modification documents and conducted with adequate configuration control. The inspectors observed the installation of and/or reviewed documentation for the following T-Mods:

- T-Mod 2316480, "Disable NCW Flow Trip to CH523" (Unit 1)
- T-Mod 2414710, modify ex-core LAS-1 circuit card Channel A by replacing resistors and potentiometers in an attempt to stabilize the test circuit voltages (Unit 3)

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness (EP)

1EP6 Drill Evaluations (71114.06)

.1 Emergency Preparedness Drill

a. Inspection Scope

On January 24, 2002, the licensee conducted an emergency preparedness drill. Prior to the drill, the inspectors reviewed the scenario to determine whether it was of appropriate scope to be included in the performance indicator statistics as intended by the licensee. During the drill the inspectors observed performance of the operations crew in the simulator, as well as licensee performance in the technical support center. The inspectors observed activities involving event classification, notification, and protective action recommendations. The inspectors' observations were compared with licensee-identified findings to determine the adequacy of the licensee's exercise evaluation process.

b. Findings

No findings of significance were identified.

.2 Emergency Preparedness Exercise

a. Inspection Scope

On February 21, 2002, the licensee conducted an emergency preparedness exercise. Prior to the exercise, the inspectors reviewed the scenario to determine whether it was of appropriate scope to be included in the performance indicator statistics as intended by the licensee. During the exercise the inspectors observed performance of the operations crew in the simulator, as well as licensee performance in the technical support center, operations support center, and the emergency operations facility. The inspectors observed activities involving event classification, notification, and protective action recommendations. The inspectors' observations were compared with licensee-identified findings to determine the adequacy of the licensee's exercise evaluation process.

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY
Cornerstone: Occupational Radiation Safety [OS]

2OS2 As-low-as-reasonably-achievable (ALARA) Planning and Controls (71121.02)

a. Inspection Scope

The inspector interviewed radiation workers and radiation protection personnel involved in high dose rate and high exposure jobs in the radiologically controlled areas during normal operations. Field observations of selected work areas within the radiologically controlled areas were conducted. The following items were reviewed and compared with regulatory requirements to determine whether the licensee had an adequate program to maintain occupational exposure ALARA:

- ALARA program procedures
- Processes used to estimate and track exposures
- Plant collective exposure history for the past 3 years, current exposure trends, and 3-year rolling average dose information
- Twelve Radiation Exposure Permit (REP) packages (0-1260A, 1-1007A, 1-3000A, 1-3306C, 1-3502C, 1-3508C, 2-3000B, 2-3002D, 3-3005E, 9-1010A, 9-1213A, and

9-1019A) for work activities that had resulted in the highest personnel collective exposures during the inspection period

- Two jobs (REP 9-1010A, Unit 2 Charging Pump Maintenance, and REP 9-1019A, Decon of Reactor Coolant Pump impeller) were observed, and tours were conducted in various areas of the plant
- Use of engineering controls to achieve dose reductions including design change packages (Unit 3 LPSI hanger modifications and Unit 3 pressurizer spray line) and two temporary shielding packages (TSP F-100-08 and F-100-11)
- Exposures of selected work groups (radiation protection, nuclear engineering, refueling and mechanical maintenance)
- Hot spot tracking and reduction program
- Plant-related source term data, including source term control strategy
- Radiological work planning
- ALARA Committee meeting minutes (10/19/2001, 12/21/2001, and 1/8/2002)
- Selected corrective action documents involving the ALARA program and radiation worker practice deficiencies (Condition Report/disposition Requests: CRDRs 2425516, 2431823, 2432010, 2432485, 2433525, 2435009, 2435577, 2438427, 2441491, and 2459075)
- Declared pregnant worker dose monitoring controls

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES (OA)

4OA1 Performance Indicator Verification (71151)

.1 Mitigating Systems Cornerstone

a. Inspection Scope

The inspectors reviewed a sample of unit logs, maintenance rule unavailability tracking data and technical specification component condition records from June 2001 to December 2001 to verify the accuracy and completeness of data used to calculate and report the HPSI system unavailablity performance indicator.

b. Findings

No findings of significance were identified. The performance indicator in the licensee response band (Green).

2. Initiating Events Cornerstone

a. Inspection Scope

The inspectors reviewed unit logs, plant thermal performance record, monthly operating reports, and licensee event reports from January 2001 to December 2001 to verify the accuracy and completeness of data used to calculate and report the following performance indicators:

- Unplanned scrams per 7,000 critical hours
- Scrams with loss of normal heat removal
- Unplanned power changes per 7,000 critical hours

b. Findings

No findings of significance were identified. The performance indicators all remained in the licensee response band (Green).

4OA3 Event Followup (71153)

.1 (Closed) Licensee Event Report (LER) 50-530/2001-001-00: Automatic Reactor Trip Due to Unforeseen Problems Controlling ASI.

On May 19, 2001, Unit 3 was at approximately 19 percent power when the reactor automatically tripped on an axial shape index (ASI) auxiliary trip signal from the core protection calculator. This event was documented in Inspection Report 50-528,-529, -530/01-004. The inspectors reviewed the LER and no new findings of significance were identified. The cause of this event has been addressed and corrected through the licensee's corrective action program and documented in CRDR 2391251. This LER is closed.

4OA5 Onsite Fabrication of Components and Construction of an Independent Spent Fuel Storage Installation (ISFSI) (60853)

a. Inspection Scope

The inspectors observed the concrete pouring of the first of eight planned storage casks for the ISFSI and the concrete pouring of sections of the ISFSI pad. The inspectors reviewed the following documents as part of this inspection:

- Nuclear Assurance Corporation (NAC) Calculation Package #12407-2001 “VCC Tip-Over Analysis for the Palo Verde Spent Fuel Storage Project,” approved 2/12/02

- Calculation AO-CC-ZD-0002 “ISFSI Cask Storage Pad Design,” Revision 0
- FSAR-UMS® Universal Storage System, Amendment 2
- Nuclear Assurance Evaluation Reports ER 02-0033, ER 02-0021, 02-0030, ER 02-0035
- NAC Procedure PI-EDS-02 “10CFR72.48 Related Determinations for NAC-MPC and NAC-UMS Projects,” Revision 4
- NAC Memo to File from Ken Hoedeman dated 2/7/02: Subject “ASTM C94 Concrete Discharge Time Limits Position Document”
- Supplier Procedure # 03316-007 “ISFSI Concrete Testing and Inspection Procedure,” Revision 1

b. Findings

No findings of significance were identified.

4OA6 Management Meetings

Exit Meeting Summary

The health physics inspector presented inspection results to Mr. Gregg Overbeck, Senior Vice President, and other members of licensee management at an exit meeting on February 8, 2002. The licensee acknowledged the inspection findings presented.

The senior inspector presented inspection results to Mr. D. Mauldin, Senior Vice President, Engineering and Support, and other members of the licensee staff on February 14, 2002. Additional inspection of the Independent Spent Fuel Storage Facility was conducted by the resident inspectors. Results from this inspection were presented to Mr. Brian Hansen, ISFSI Manager, and other members of licensee staff at an exit meeting on March 20, 2002. The licensee acknowledged the inspection findings presented.

The reactor inspector presented inspection results to Mr. D. Mauldin, Vice President, Engineering and Support, and other members of the licensee staff on March 1, 2002. The licensee acknowledged the inspection findings presented.

The resident inspectors presented inspection results to Mr. W. Ide, Vice President - Nuclear Production, and other members of licensee management on March 21, 2002. The licensee acknowledged the inspection findings presented.

No proprietary information was identified during any of the inspections.

4OA7 Licensee Identified Violations

The following finding of very low significance was identified by the licensee and is a violation of NRC requirements which met the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as a noncited violation.

NCV Tracking Number	Requirement Licensee Failed to Meet
50-530/0202-01	Technical Specification 5.7.1.b states, in part, that any individual or group of individuals permitted to enter a high radiation area shall be provided with a radiation monitoring device that continuously integrates the radiation dose rate in an area. On October 14, 2001, the licensee identified that between October 9 and October 11, 2001, eight individuals used a nonfunctioning electronic dosimeter and entered high radiation areas. The cause of the electronic dosimeter problem was a vendor related firmware problem. The failure to wear a radiation monitoring device that continuously integrated the radiation dose rate in a high radiation area is a violation of Technical Specification 5.7.1. These events are described in the licensee's corrective action program, reference CRDR 2432485. These events are being treated as a noncited violation. The safety significance of this finding was determined to be very low (Green) by the Occupational Radiation Safety Significance Determination Process because having a nonfunctioning radiation monitoring device has a credible impact on worker safety, the occurrence involved personnel dosimetry related to measuring worker dose, and there was no overexposure or unintended dose as a result of this nonfunctioning dosimeter.

If the Palo Verde Nuclear Generating Station contests this noncited violation, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator Region IV; the Director, Office of Enforcement, U. S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Palo Verde Nuclear Generating Station.

ATTACHMENT

KEY POINTS OF CONTACT

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J. Bungard, Section Leader, Dosimetry
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J. Gaffney, Director, Radiation Protection
T. Gray, Department Leader, Radiation Protection
B. Hansen, ISFSI Manager
D. Hautala, Senior Engineer, Regulatory Affairs
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M. Sontag, Department Leader, Regulatory Affairs/Quality Assurance
G. Walker, Project Manager
T. Weber, Section Leader, Regulatory Affairs
R. Wilferd, Section Leader, Engineering
M. Winsor, Director, Nuclear Engineering

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

50-530/0202-01	NCV	Failure to wear a radiation monitoring device that continuously integrated the radiation dose rate in a high radiation area (Section 4OA7).

Closed

50-530/0202-01	NCV	Failure to wear a radiation monitoring device that continuously integrated the radiation dose rate in a high radiation area (Section 4OA7).
50-530/01-01-00	LER	Automatic Reactor Trip Due to Unforeseen Problems Controlling ASI (Section 4OA3.1).

DOCUMENTS REVIEWED

The following documents were selected and reviewed by the inspectors to accomplish the objectives and scope of the inspection and to support any findings:

PROCEDURES

PROCEDURE	TITLE	REVISION
30DP-9WP02	Work Document Development and Control	29
40DP-9OP26	Operability Determination	10
40ST-9SI07	High Pressure Safety Injection System Alignment Verification	6
72ST-9RX03	DNBR/LHR/AZTILT/ASI with COLSS Out of Service	7
90DP-OIP10	Condition Reporting	11
93DP-0LC07	10 CFR 50.59 Screenings and Evaluations	4
93DP-0LC07	10 CFR 50.59 and 72.48 Screenings and Evaluations	5

Work Orders

2389898	2389162	2414022	2420047
2417090	2413767	2443825	2389140

CONDITION REPORT/DISPOSITION REQUESTS (CRDRs)

2459772
2393796
2413146
2453050
2405660

P&IDs
01-M-AFP-001, Auxiliary Feedwater System, Revision 32

Miscellaneous

Letter 162-02186-PFC/HAT, Subject: EER No. 87-SG-184, November 24, 1987

Letter 167-01985-CRS/GLP, Subject: 50.59 Analysis/Technical Specification Interpretation of MSIV Hydraulic Train Inoperability, February 11, 1988

10 CFR 50.59 EVALUATIONS

01-00083	01-00089	E-01-0001	E-01-0002
E-01-0003	E-01-0004	E-01-0005	E-0100006
E-02-0001	E-01-0008		

10 CFR 50.59 SCREENINGS

S-01-0007	S-01-0011	S-01-0017	S-01-0023
S-01-0035	S-01-0043	S-01-0051	S-01-0054
S-01-0068	S-01-0081	S-01-0092	S-01-0113
S-02-0007	S-02-0017	WO 2411634	

LIST OF ACRONYMS USED

ALARA	as-low-as-is-reasonably-achievable
CFR	Code of Federal Regulations
CRDR	Condition report/disposition request
HPSI	high pressure safety injection
ISFSI	Independent Spent Fuel Storage Installation
LCO	limiting condition of operation
LER	licensee event report
NAC	Nuclear Assurance Corporation
NCV	noncited violation
NDE	nondestructive examination
REP	radiation exposure permit
T-Mod	temporary modification