



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

December 18, 2000

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

**SUBJECT: PALO VERDE NUCLEAR GENERATING STATION - NRC INTEGRATED
INSPECTION REPORT 50-528/00-10, 50-529/00-10, 50-530/00-10**

Dear Mr. Overbeck:

On November 25, 2000, the NRC completed an inspection at your Palo Verde Nuclear Generating Station, Units 1, 2, and 3, facility. The enclosed report documents the results of this inspection. These results were discussed on October 20, November 3, and November 29, 2000, with you and other members of your staff as described in Section 4OA5.

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.

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 and its enclosure will be 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/NRC/ADAMS/index.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

Docket Nos.: 50-528
50-529
50-530

License Nos.: NPF-41
NPF-51
NPF-74

Enclosure:

NRC Inspection Report 50-528/00-10, 50-529/00-10, 50-530/00-10
w/attachments

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Only inspection reports to the following:

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NRR Event Tracking System (**IPAS**)

PV Site Secretary (**TLB4**)

Dale Thatcher (**DFT**)

R:_PV2000\PV2000-10RP-JHM.wpd

RIV:RI:DRP/D	RI:DRP/D	SRI:DRP/D	SRI:DRS/EMB	C:DRS/EMB
NLSalgado	GWarnick	JHMoorman	JEWhittemore	JLShackelford
T-LJSmith	T-LJSmith	T-LJSmith	LJSmith for	RPMullikin for
12/15/00	12/15/00	12/15/00	12/15/00	12/18/00
SPSI:DRS/PSB	C:DRS/PSB	PE:DRP/D	C:DRP/D	
ABEarnest	GMGood	LMWilloughby	LJSmith	
E-LJSmith	MPShannon for	T-LJSmith	/RA/	
12/15/00	12/18/00	12/15/00	12/18/00	

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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket Nos.: 50-528, 50-529, 50-530
License Nos.: NPF-41, NPF-51, NPF-74
Report No.: 50-528/00-10, 50-529/00-10, 50-530/00-10
Licensee: Arizona Public Service Company
Facility: Palo Verde Nuclear Generating Station, Units 1, 2, and 3
Location: 5951 S. Wintersburg Road
Tonopah, Arizona
Dates: October 8 through November 25, 2000
Inspectors: J. H. Moorman, III, Senior Resident Inspector
N. L. Salgado, Resident Inspector
G. G. Warnick, Resident Inspector, St. Lucie
L. M. Willoughby, Project Engineer
J. E. Whittemore, Senior Reactor Inspector
A. B. Earnest, Senior Physical Security Inspector
Approved By: Linda Joy Smith, Chief, Project Branch D
Division of Reactor Projects

SUMMARY OF FINDINGS

Palo Verde Nuclear Generating Station
NRC Inspection Report 50-528/00-10, 50-529/00-10, 50-530/00-10

IR 05000-528-00-10, IR 05000-529-00-10, IR 05000-530-00-10, on 10/08-11/25/00, Arizona Public Service Company, Palo Verde Nuclear Generating Station; Units 1, 2, and 3. Integrated resident and regional report. No findings identified.

The inspection was conducted by resident inspectors, a regional project engineer, a regional senior reactor inspector, and a regional senior physical security inspector. In the Reactor Safety area, the cornerstones inspected included Initiating Events, Mitigating Systems, and Barrier Integrity. In the Safeguards area, the Physical Protection cornerstone was inspected. No findings of significance were identified.

A. Inspector Identified Findings

No findings of significance were identified.

B. Licensee Identified Violations

Violations of very low significance, which were identified by the licensee, have been reviewed by the inspectors. Corrective actions taken or planned by the licensee appear reasonable. These violations are listed in Section 4OA7 of this report.

Report Details

Summary of Plant Status

Unit 1 operated at essentially 100 percent power for the duration of this inspection period.

Unit 2 began the inspection period in Mode 6 in the ninth refueling outage. The unit was restarted on November 5, 2000, and was returned to 100 percent power on November 9. On November 18, the unit experienced an automatic reactor trip on a valid auxiliary variable over power rate trip signal (see Section 1R14). Power was returned to 100 percent on November 21 and remained at that level for the duration of this inspection period.

Unit 3 operated at essentially 100 percent power for the duration of this inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R05 Fire Protection - Monthly Routine Inspection (71111.05)

a. Inspection Scope

The inspectors performed fire protection walkdowns to assess the material condition of plant fire protection equipment and proper control of transient combustibles. The following risk significant areas were inspected:

- Control Building 74-foot elevation (Unit 2)
- Reactor Building - all accessible levels (Unit 2)

b. Issues and Findings

No findings of significance were identified.

1R07 Heat Sink Performance (71111.07)

a. Inspection Scope

During the Unit 2 outage, licensee personnel conducted an inspection of the Train A essential cooling water heat exchanger. The inspectors conducted an inspection of the heat exchanger to determine if the licensee's inspections were sufficient to detect degradation prior to loss of heat removal capabilities below design basis values. The inspectors also reviewed test and analysis results for the Train A essential cooling water heat exchanger. The analysis and test were conducted in accordance with Procedure 73DP-9ZZ10, "Guidelines For Heat Exchanger Thermal Performance Analysis," Revision 3, and Procedure 70TI-9EW01, "Thermal Performance Testing Of Essential Cooling Water Heat Exchangers," Revision 4. This review was conducted to determine if the test acceptance criteria and results appropriately considered the differences between testing conditions and design conditions and to determine if the results were appropriately measured against pre-established acceptance criteria and were acceptable.

b. Issues and Findings

No findings of significance were identified.

1R08 Inservice Inspection Activities (71111.08)

.1 Performance of Nondestructive Examination (NDE) Activities

a. Inspection Scope

The inspector observed the licensee's NDE contractor personnel perform the inservice inspection program specified examinations listed below.

<u>System/Code Class</u>	<u>Weld/Part No.</u>	<u>Report No.</u>	<u>Examination Method</u>
Steam Generator/2	51-07	00-2209	Ultrasonic
Steam Generator/2	51-07	00-2211	Dry Magnetic Particle
High Pressure SI/2	91-76-21	00-2224	Liquid Penetrant
High Pressure SI/2	91-77-14	00-2226	Liquid Penetrant

During the performance of each examination, the inspector verified that the correct NDE procedure was used, procedural requirements or conditions were as specified in the procedure, test instrumentation or equipment was within the allowable calibration period, and examination consumables (cleaner, penetrant, and developer) were within the specified shelf life. The inspector also verified that indications revealed by the examinations were compared against the ASME code-specified acceptance standards.

Following the examination, the inspector verified that the examination reports properly reflected the size, shape, and orientation of the identified flaws. It was further verified for the examinations observed, that a Level III Certified Examiner accepted the examination results documented by the Level II Certified Examiners.

b. Issues and Findings

No findings of significance were identified.

.2 Unit 2 ASME Code Repair and Replacement Activities

a. Inspection Scope

The inspector reviewed a sample of repair and replacement work orders for the current Unit 2 outage that were subject to ASME Code Section XI requirements. The inspector verified that the correct preservice or inservice Section XI-specified examinations were identified and included in the work orders. The inspector also determined through review and discussions with the licensee's engineering staff that a specially-developed

weld repair method and specified NDEs that were planned for use on an abandoned, leaking pressurizer heater sleeve were permitted by the ASME Code.

b. Issues and Findings

No findings of significance were identified.

.3 Problem Identification and Resolution

a. Inspection Scope

The inspector performed a detailed review of the sample of Condition Report/Disposition Requests listed in the attachment. The corrective action documents reviewed were all initiated from 1999 to the present to identify and correct problems related to the inservice inspection program issues below:

- Control of weld filler material
- Failure to properly analyze eddy current test data collected during steam generator tube inspection
- Inappropriate submission of relief requests for code required inservice inspection
- Errors in the application of code exemptions
- Improperly referenced acceptance standards in NDE reports
- Improperly filled-out weld data sheets in regard to socket depth verification

The review was conducted to ascertain that the licensee's corrective action program was identifying performance issues within the inservice inspection program. Further review assessed the effectiveness of cause determination, the appropriateness of applied corrective action, the adequacy of transportability review and identification of generic issues, and the overall corrective action program effectiveness in addressing previously identified administrative issues affecting the inservice inspection program.

b. Issues and Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation (71111.12)

a. Inspection Scope

The inspectors reviewed one equipment failure 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." Specifically, the inspectors

evaluated the Unit 3 failure of Control Element Assembly Calculator 1. The inspectors used the maintenance rule field flow chart to determine if the licensee properly dispositioned the failure.

b. Issues and Findings

No findings of significance were identified.

1R14 Personnel Performance During Nonroutine Plant Evolutions (71111.14)

a. Inspection Scope

A Unit 2 turbine trip and reactor power cutback was followed by a reactor trip on November 18. At 10:08 a.m., operators in Unit 2 began to perform Procedure 73TI-9MB02, "Exciter Model Verification Test Instruction (WSCC Recommended Static VAR Test)," Revision 0. At 10:59 a.m., a failure of the generator exciter system caused a turbine trip which resulted in a valid reactor power cutback. At 11:47 a.m., with the unit at 38 percent reactor power, a reactor trip occurred on a valid variable overpower reactor trip signal generated by the core protection calculators. The reactor trip occurred after reactor power had been increased approximately 9 percent in 4 minutes by operator withdrawal of the Group 3 control rods. The inspectors responded to the site and determined that no immediate safety issues existed. The licensee initiated Condition Report/Disposition Request 2339523 for the reactor trip investigation. Assessment of operating procedures and human performance that resulted in withdrawal of Group 3 rods for compliance with operating requirements was not completed at the end of this inspection period. This issue will be tracked as Unresolved Item 50-529/0010-01

b. Issues and Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The licensee isolated automatic makeup to essential chilled water Surge Tank B to support the essential chilled water system leak check preventive maintenance. The licensee used existing Operability Determination 110 to justify that the essential chilled water system remained operable with automatic makeup isolated. The inspectors evaluated the operability determination for technical adequacy and assessed the impact of the condition on continued plant operation.

b. Issues and Findings

No findings of significance were identified.

1R20 Refueling and Outage Activities (71111.20)

.1 Review of the Unit 2 Outage Plan

a. Inspection Scope

The inspectors reviewed the licensee's outage risk assessment, Palo Verde Unit 2 Ninth Refueling Shutdown Risk Assessment, to verify that the licensee appropriately considered risk in planning and scheduling the outage activities.

The inspectors primarily focused on the following activities:

- Transition and midloop operation
- Fuel offload and reload

b. Issues and Findings

No findings of significance were identified.

.2 Monitoring of Shutdown Activities

a. Inspection Scope

The inspectors reviewed plant data records and control room and unit logs and conducted interviews with licensed operators to assess the licensee's compliance with Technical Specification plant cooldown limits during the Unit 2 plant cooldown.

b. Issues and Findings

No findings of significance were identified.

.3 Control of Outage Activities

a. Inspection Scope

The inspectors reviewed plant conditions and observed selected refueling outage activities throughout the outage to verify that the licensee maintained the plant in a configuration consistent with the requirements of Technical Specifications and with the assumptions of the outage risk assessment. The inspectors verified that emergent issues were properly assessed for their impact on plant risk.

Electrical power availability was periodically verified to meet Technical Specification requirements and outage risk assessment recommendations. Control room operators were interviewed to determine if they were cognizant of plant conditions. The inspectors reviewed equipment clearance activities, controls for reactivity management, and reactor coolant system inventory.

b. Issues and Findings

No findings of significance were identified.

.4 Clearance Activities

a. Inspection Scope

The inspectors reviewed the following equipment clearances:

- ID# 24735 1185 U2R9 PHIX Clearance
- ID# 23544 1616 U2R9 PCNV-118 Status Control Permit

b. Issues and Findings

No findings of significance were identified.

.5 Reduced Inventory and Midloop

a. Inspection Scope

The inspectors observed, in part, Unit 2 midloop activities to verify that the licensee had appropriately considered the risk associated with this activity. The inspectors reviewed the licensee's response to Generic Letter 88-17 and verified that licensee commitments had been properly translated into procedures. The inspectors also verified that multiple sources of electrical power, multiple reactor vessel level indications, and multiple reactor coolant system temperature indications were available. The inspectors observed licensee compliance with the following procedures:

- 40OP-9ZZ16 "RCS Drain Operations," Revision 20
- 40OP-9ZZ20 "Reduced Inventory Operations," Revision 3

b. Issues and Findings

No findings of significance were identified.

.6 Refueling Activities

a. Inspection Scope

The inspectors observed portions of core off-load and core reload activities to determine if these activities were conducted in accordance with the Technical Specifications and administrative procedures. Refueling was conducted using Procedure 721C-9RX03, "Core Reloading," Revision 14.

b. Issues and Findings

No findings of significance were identified.

.7 Monitoring of Heatup and Startup Activities

a. Inspection Scope

The inspector reviewed control room and unit logs to verify that the Unit 2 startup was conducted in compliance with Technical Specifications and administrative requirements. The inspectors accompanied licensee personnel during the performance of Procedure 40ST-9ZZ09 "Containment Cleanliness Inspection," Revision 4, to assess containment cleanliness and material condition of components.

b. Issues and Findings

No findings of significance were identified.

.8 Identification and Resolution of Problems

a. Inspection Scope

The inspectors screened condition report/disposition requests that documented problems identified during the Unit 2 outage to verify that problems were identified at an appropriate threshold.

b. Issues and 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 of the following tests:

- 72ST-9RX02 "Moderator Temperature Coefficient At Power," Revision 12 (Unit 1)
- 73ST-9DG02 "Class 1E Diesel Generator And Integrated Safeguards Test Train B," Revision 1, Section 8.5, DG-B 24 Hour Continuous Load Test/100% Load Rejection/ DG-B Hot Start (Unit 2)
- 73ST-9CL02 "Integrated Leakage Rate Test," Revision 7 (Unit 2)
- 73TI-9ZZ37 "Pre-ILRT Local Leak Rate Tests," Revision 4 (Unit 2)

b. Issues and Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

The inspectors observed the installation of and/or reviewed documentation for the following temporary modifications:

- 31MT-9IA02 "Install/Remove Alternate Cooling To IA System Air Compressors," Revision 7 (Unit 2)
- 32MT-9NA01 "Outage Support Temporary Power For E-NAN-S01," Section 4.5, Revision 20 (Provides for temporary Non-Class 1E 480 VAC and 120 VAC electrical power from E-NGN-L08B3 to E-NGN-L01C3 feeding instrument air compressor M-IAN-C01C) (Unit 2)
- 01-SH-2000-001 "Disable the Train A heated and unheated thermocouple field inputs for sensor 2A" (Unit 1)
- 2328673 "Install and remove air purge system on the Refueling Water Tank flange" (Unit 2)

b. Issues and Findings

No findings of significance were identified.

**3. SAFEGUARDS
Cornerstone: Physical Protection**

3PP1 Access Authorization (71130.01)

a. Inspection Scope

The inspector:

- Reviewed licensee event reports and safeguards event logs to identify problems in the access authorization program.
- Reviewed procedures, audits, and self-assessments of the following programs/areas: behavior observation, access authorization, fitness-for-duty, supervisor and escort training, and requalification training.

- Interviewed five supervisors/managers and five individuals who had escorted visitors into the protected and/or vital areas to determine their knowledge and understanding of their responsibilities in the behavior observation program.
- Reviewed condition reports, licensee event reports, safeguards event logs, audits, selected security event reports, and self-assessments for the licensee's access authorization program to determine the licensee's ability to identify and resolve problems.

b. Issues and Findings

No findings of significance were identified.

3PP2 Access Control (71130.02)

a. Inspection Scope

The inspector:

- Reviewed licensee event reports and safeguards event logs to identify problems with access control equipment.
- Reviewed procedures and audits for testing and maintenance of access control equipment and for granting and revoking unescorted access to protected and vital areas.
- Interviewed security personnel concerning the proper operation of the explosive and metal detectors, X-ray devices, and key card readers.
- Observed licensee testing of access control equipment and the ability of security personnel to control personnel, packages, and vehicles entering the protected area.
- Reviewed procedures to verify that a program was in place for controlling and accounting for hard keys to vital areas.
- Reviewed the licensee's process for granting access to vital equipment and vital areas to authorized personnel having an identified need for that access.
- Reviewed condition reports, licensee event reports, safeguards event logs, audits, selected security event reports, and self-assessments for the licensee's access control program in order to identify the licensee's ability to identify and resolve problems with the access control program.
- Interviewed key security department and plant support personnel to determine their knowledge and use of the corrective action reports and resolution of problems regarding repair of security equipment.

b. Issues and Findings

No findings of significance were identified.

3PP3 Security Plan Changes (71130.04)

a. Inspection Scope

The inspector completed the following actions:

- Reviewed the Physical Security Plan, Revision 44, dated April 4, 2000, and the Training and Qualifications Plan, Revision 13, dated October 22, 1999, to determine if requirements of 10 CFR 50.54(p) had been met.
- Reviewed the previous year's safeguards event logs and interviewed security personnel to determine their knowledge and use of the corrective action program and resolution of problems as it relates to making changes to the licensing documents.

b. Issues and Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

.1 Initiating Events Cornerstone

a. Inspection Scope

The inspectors reviewed a random sample of the reactor coolant system activity data logs from January through September 2000, to verify the accuracy and completeness of the reactor coolant system specific activity reported for all three units.

b. Issues and Findings

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

.2 Safeguards Cornerstone

a. Inspection Scope

The inspector reviewed the program for collection and submittal of performance indicator data. Specifically a random sampling of security event logs and corrective action reports were reviewed for the following program performance areas:

- Fitness-for-duty
- Access authorization
- Perimeter detection system
- Assessment aids system

b. Issues and 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) 50-530/1998-006-00: During the October 1998 eddy current tube inspection of Steam Generator 3-2 the licensee failed to identify a tube defect that exceeded the Technical Specification limit for through-wall defect of 40 percent. The defect was subsequently identified during the next tube inspection that was performed in April 2000. The analysts were debriefed to illustrate the missed indication. To preclude recurrence, the licensee implemented a requirement to use a computer data analysis screening system as an additional barrier. Also, the data management process will be revised to flag indications for retesting. The corrective action is being implemented under Condition Report/Disposition Request 117497.

This event did not approach or challenge the tube burst limit during the cycle that it was operated in an unplugged condition. The licensee initiated corrective action to re-evaluate inspection data in all similar locations and all other large indications. The licensee also performed an analysis on the defective tube, which demonstrated that the tube would remain intact structurally under a differential pressure condition at 3810 psid caused by any accident that resulted in the steam generator boiling dry. Based on this fact, the risk significance of this issue was characterized as very low (Green) consistent with the significance determination process. See Section 4OA7.1.

- .2 (Closed) LER 50-528;-529;-530/2000-S01-00: On July 28, 2000, the licensee identified an incident wherein significant safeguards information was stored in an unlocked safeguards container outside of the protected area. The safe contained numerous safeguards documents, including the protective strategy and the target set lists. There was no evidence to indicate that the safeguards documents had been compromised. The licensee entered this issue into the corrective action program as Condition Report/Disposition Request 2308078.

This issue was determined to be of very low safety significance (Green) by the significance determination process because there were not greater than two similar findings in the last four quarters (see Section 4OA7.2).

- .3 (Closed) LER 50-528/2000-001-00: Missed Shiftly Channel Check Causes Condition Prohibited by Technical Specifications. Because there was no loss of quality or functional capability of the radiation monitors involved, the inspectors determined that the issue is minor and warrants no additional inspection. Although this issue should be

corrected, it constitutes a violation of minor significance that is not subject to enforcement action in accordance with Section IV of the NRC's Enforcement Policy.

4OA5 Exit Meeting Summary

The regional engineering inspector presented the results of the inservice inspection activities to Mr. G. Overbeck, Senior Vice Present - Nuclear, and other members of the licensee's staff at the conclusion of the inspection on October 20, 2000.

The physical security inspector presented the inspection results to Mr. D. Mauldin, Vice President, Engineering and Support Services, and other members of the licensee's staff at the conclusion of the inspection on November 3, 2000. A telephonic exit was also conducted on November 9, 2000.

The resident inspectors presented the inspection results to Mr. G. Overbeck, Senior Vice President - Nuclear, and other members of licensee management on November 29, 2000.

The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

4OA7 Licensee-Identified Violations - The following findings of very low significance were identified by the licensee and are violations of NRC requirements which meet the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600 for being dispositioned as noncited violations (NCV).

<u>NCV Tracking Number</u>	<u>Requirement Licensee Failed to Meet</u>
.1 NCV 50-530/0010-02	Technical Specification 5.5.9.4.a.6 requires steam generator tubes that have a wall thickness of less than 40 percent of the original tube wall to be plugged. During the October 1998 eddy current tube inspection of Steam Generator 3-2, the licensee failed to identify a tube defect that exceeded the Technical Specification limit for a through-wall defect of 40 percent. The defect was subsequently identified during the next tube inspection that was performed in April 2000 and corrected. The steam generator tube was operated in violation of Technical Specification 5.5.9.4.a.6 for an entire cycle. This condition was identified by the licensee and corrective actions were specified in Condition Report/Disposition Request 117497. This condition was reported in LER 50-530/1998-006-00 (see Section 4OA3.1).
.2 NCV 50-528/0010-03; -529/0010-03; -530/0010-03	10 CFR 73.21(d)(2) states that, while safeguards information is unattended, the information shall be stored in a locked security storage container. Procedure 20DP-OSK43, Revision 4, paragraph 3.8.3, states that, while

unattended, materials containing safeguards information shall be stored in an approved, locked safeguards storage container. Contrary to the above requirements, on July 28, 2000, the licensee left a safeguards safe unlocked outside the protected area. This condition was identified by the licensee and corrective actions were specified in Condition Report/Disposition Request 2308078. This condition was reported in LER 50-528;-529;-530/2000-S01-00 (see Section 4OA3.2).

ATTACHMENT 1

Supplemental Information

KEY POINTS OF CONTACTS

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A. Krainik, Director, Regulatory Affairs
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J. Levine, Executive Vice President, Generation
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C. Mauldin, Vice President, Engineering and Support
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G. Overbeck, Senior Vice President, Nuclear
S. Peace, Consultant, Communications
M. Priebe, Section Leader, Health Services, Fitness-for-Duty
T. Radtke, Director, Maintenance
R. Schaller, Department Leader, Steam Generator Projects
C. Seaman, Director, Emergency Services Division
M. Sontag, Section Leader, Nuclear Assurance
E. Sterling, Department Leader, Nuclear Assurance

Other

R. Hogstrom, Authorized Nuclear Inservice Inspector

LIST OF ITEMS OPENED AND CLOSED

Opened

50-529/0010-01	URI	Assessment of operator response to Unit 2 reactor trip on November 11, 2000 (Section 1R14)
50-530/0010-02	NCV	Violation of Technical Specification 5.5.9.4.a.6 (Sections 4OA3.1 and 4OA7.1)

50-528;-529;-530/0010-03 NCV Failure to Properly Secure Safeguards Information
(Sections 4OA3.2 and 4OA7.2)

Closed

50-530/1998-006-00 LER Technical Specification 5.5.9.4.a.6 for Steam
Generator Tube Inspection Not Met
(Sections 4OA3.1 and 4OA7.1)

50-528;-529;-530/2000-S01-00 LER Safeguards Material Found in Office Complex
Outside of the Protected Area (Sections 4OA3.2
and 4OA7.2)

50-528/2000-001-00 LER Missed Shiftly Channel Check Causes Condition
Prohibited by Technical Specifications

50-530/0010-02 NCV Violation of Technical Specification 5.5.9.4.a.6
(Sections 4OA3.1 and 4OA7.1)

50-528;-529;-530/0010-03 NCV Failure to Properly Secure Safeguards Information
(Sections 4OA3.2 and 4OA7.2)

LIST OF DOCUMENTS REVIEWED

The team reviewed the following documents to accomplish the objectives and scope of the inspection and to support any findings:

PROCEDURES

PROCEDURE	TITLE	REVISION
73DP-9EE02	Inservice Inspection Examination Activities	4
73DP-9XI03	ASME Section XI Inservice Inspection	4
73DP-9ZZ17	Repair and Replacement-ASME Section XI	5
73TI-9ZZ05	Magnetic Particle Examination	9
73TI-9ZZ07	Liquid Penetrant Examination	8
73TI-9ZZ18	Visual Examination of Support Components	8
73TI-9ZZ79	ASME Section XI Appendix VIII Ultrasonic Examination of Ferritic Piping	0
73TI-9ZZ80	ASME Section XI Appendix VIII Ultrasonic Examination of Austenitic Piping	0

90DP-0IP10	Condition Reporting	9
20DP-OSK43	Control of Safeguards Information	4

Condition Report/Disposition Requests

117497	9-9-0240	9-9-0421
9-9-0107	9-9-0286	9-9-Q029
110683	116200	2308078

Nondestructive Examination Reports

00-343 **	00-2015	00-2212
00-345 **	00-2209	00-2225
00-357 **	00-2210	00-2226
00-458	00-2211	

(**report included film)

Code-Related Work Orders

NUMBER	CODE CLASS	WORK DESCRIPTION
230753	1	Replace Reactor Coolant Pump Seal Housing Adapter
232174	2	Repair Safety Injection Flow Orifice Flange Leak
232717	1	Repair Heater Sleeve Leak at Pressurizer Heater Location A06
240661	2	Replace Safety Injection Check Valve Bolting

Unit 2 Inservice Inspection Program Isometric Drawings

Zone No.	Drawing Title	Revision
41	Steam Generator 1	0
51	Atmospheric Dump 1	0
56	Feedwater Steam Generator 1	0
103	Refueling Water Suction A Train	0
110	HPSI Discharge West Wrap	0

MISCELLANEOUS

NUMBER	DESCRIPTION	REVISION
N/A	Palo Verde Inservice Inspection Program Bases	0
N/A	Safeguards Event Logs, First Quarter, 1999 and First through Fourth Quarters, 2000	N/A
N/A	Safeguards Report dated October 20, 1999	N/A
N/A	Palo Verde Audit Report 00-001, dated March 28, 2000	N/A
N/A	Palo Verde Audit Report 99-009, dated July 15, 1999	N/A
N/A	Palo Verde Audit Report 99-005, dated May 14, 1999	N/A
N/A	NEI Audit 00-02, dated April 19, 2000	N/A
N/A	NEI Audit 10256-A00, dated June 23, 2000	N/A
N/A	NEI Audit 1081-A001, dated March 9, 2000	N/A
N/A	Site Access Training Handout, dated August 2000	N/A
N/A	Behavioral Observation Course No. NQE 02-06	N/A

LIST OF ACRONYMS

CFR	Code of Federal Regulations
LER	licensee event report
NCV	noncited violation
NDE	nondestructive examination
URI	unresolved item

ATTACHMENT 2

NRC'S REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting safety performance at NRC licensed plants.

The new process monitors licensee performance in three broad areas (called strategic performance areas): reactor safety (avoiding accidents and reducing the consequences of accidents if they occur), radiation safety (protecting plant employees and the public during routine operations), and safeguards (protecting the plant against sabotage or other security threats). The process focuses on licensee performance within each of seven cornerstones of safety in the three areas:

Reactor Safety	Radiation Safety	Safeguards
<ul style="list-style-type: none">•Initiating Events•Mitigating Systems•Barrier Integrity•Emergency Preparedness	<ul style="list-style-type: none">•Occupational•Public	<ul style="list-style-type: none">•Physical Protection

To monitor these seven cornerstones of safety, the NRC used two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection findings will be evaluated according to their potential significance for safety, using the Significance Determination Process, and assigned colors of GREEN, WHITE, YELLOW or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent very low safety significance. WHITE findings indicate issues that are of low to moderate safety significance. YELLOW findings are issues that are of substantial safety significance. RED findings represent issues that are of high safety significance with a significant reduction in safety margin.

Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing varying levels of performance and incremental degradation in safety: GREEN, WHITE, YELLOW, and RED. GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections. WHITE corresponds to performance that may result in increased NRC oversight. YELLOW represents performance that minimally reduces safety margin and requires even more NRC oversight. RED indicates performance that represents a significant reduction in safety margin but still provides adequate protection to public health and safety.

The assessment process integrates performance indicators and inspection so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner which regulatory actions should be taken based on a licensee's performance. The NRC's actions in response to the significance (as represented by the color) of issues will be the same for performance indicators as for inspection findings. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, which can include shutting down a plant, as described in the Action Matrix.

More information can be found at: <http://www.nrc.gov/NRR/OVERSIGHT/index.html>.