

Palo Verde 2

4Q/2008 Plant Inspection Findings

Initiating Events

Significance:  Jun 30, 2008

Identified By: Self-Revealing

Item Type: FIN Finding

Failure to Evaluate Design Changes Leads to a Manual Reactor Trip

A self-revealing finding of Procedure 81DP-0DC13, "Deficiency Work Order," Revision 13, was identified for the failure of engineering personnel to ensure modifications do not inadvertently affect design basis plant conditions. Specifically, between January 23, 2001 and October 6, 2007, engineering personnel failed to ensure material compatibility of the condenser air removal system seal water cooler tube plugs to prevent corrosion. This resulted in sodium ingress into the condenser hotwell and steam generators due to a corroded tube plug that failed in the condenser air removal system D seal water cooler, and consequently a manual reactor scram. This issue was entered into the licensee's corrective action program as Condition Report/Disposition Request 3074272.

The finding is greater than minor because it is associated with the design control attribute of the initiating events cornerstone and affects the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown and power operations. Using Manual Chapter 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," the finding is determined to have very low safety significance because the finding did not result in exceeding the technical specification limit for identified reactor coolant system leakage, did not affect other mitigation systems, did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available; and did not increase the likelihood of a fire or internal/external flood. This finding was evaluated as not having a crosscutting aspect because the performance deficiency is not indicative of current performance.

Inspection Report# : [2008003](#) (*pdf*)

Significance:  Jun 30, 2008

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Fire in Pressurizer Cubicle due to Poor Work Practices

A self-revealing noncited violation of License NPF-51, Condition 2.C. (6), was identified involving the failure to follow procedures for proper control of ignition sources. Specifically, contract welding personnel failed to deenergize welding equipment and properly secure the welding rod electrodes, resulting in a fire in the Unit 2 pressurizer cubicle inside containment. This issue was entered into the licensee's corrective action program as Condition Report/Disposition Request 3170965.

The finding is greater than minor because it is associated with the external factors attributes of the initiating events cornerstone and affected the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Manual Chapter 0609, "Significance Determination Process," Appendix M, "Significance Determination Process Using Qualitative Criteria," was used since the Manual Chapter 0609, Appendix F, "Fire Protection Significance Determination Process," does not address the potential risk significance of fire protection findings during shutdown conditions. The finding was determined to be of very low safety significance by NRC management review because the finding occurred while the unit was already in a cold shutdown condition and the finding did not affect equipment necessary to maintain safe shutdown. This finding has a crosscutting aspect in the area of human performance associated with work practices because the licensee did not ensure supervisory and management oversight of work activities, including contractors, such that nuclear safety is supported [H.4(c)].

Inspection Report# : [2008003](#) (pdf)

Significance:  Jun 30, 2008

Identified By: Self-Revealing

Item Type: FIN Finding

Failure to Resolve Discrepancies Between Installed Equipment and Work Instructions Results in Mispositioning Event

A self-revealing finding was identified for the failure of operations and maintenance personnel to follow Procedure 01DP-9ZZ01, "Systematic Troubleshooting," and resolve a discrepancy with a work instruction prior to proceeding with troubleshooting. Specifically, maintenance and operations personnel did not resolve an error in Work Order 3174332 when troubleshooting Breaker NBN-S01A that failed to trip, resulting in a loss of the non-vital electrical bus that supplied power to the nuclear cooling water and normal chilled water systems. This issue was entered into the licensee's corrective action program as Palo Verde Action Request 3174647.

The finding is greater than minor because it is associated with the initiating events cornerstone attribute of configuration control and affects the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown and power operations. Using the Manual Chapter 0609 Appendix G, "Shutdown Operations Significance Determination Process," the finding is determined to have very low safety significance because the finding did not result in a loss of shutdown safety functions. This finding has a crosscutting aspect in the area of human performance associated with work practices because maintenance and operations personnel proceeded in the face of uncertainty or unexpected circumstances [H.4(a)].

Inspection Report# : [2008003](#) (pdf)

Significance:  Jun 30, 2008

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Inadvertent Decrease in Reactor Water Level Due to Personnel Error

A self-revealing noncited violation of Technical Specification 5.4.1, "Procedures," was identified for the failure of operations personnel to adequately implement Procedure 40DP-9OP19, "Locked Valve, Breaker, and Component Tracking." Specifically, on May 14, 2008, Valve SIA-V421 was found out of its locked closed position one and one-half turns open resulting in approximately 930 gallons of water being inadvertently transferred from the reactor coolant system to the refueling storage water tank. This issue has been entered into the licensee's corrective action program as Palo Verde Action Request 3174527.

The failure to ensure the valve was properly closed resulted in an inadvertent reactor vessel level decrease. The finding is more than minor because it is associated with the configuration control attribute of the initiating events cornerstone and affected the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown operations. A Phase 2 analysis was required because using Manual Chapter 0609, Appendix G, "Shutdown Operations Significance Determination Process," Attachment 1, the inspectors determined that the finding actually resulted in a loss of reactor coolant system inventory. Using the Phase 2 worksheets in Attachment 2, this was determined to be a loss of level control precursor event. The initiating event likelihood for this finding was determined from Table 1 of the worksheet and the resultant core damage frequency was determined to be 1E-8, therefore the finding screened as having very low safety significance. The finding has a crosscutting aspect in the area of human performance associated with work practices because the licensee failed to use human error prevention techniques such as self-checking [H.4(a)].

Inspection Report# : [2008003](#) (pdf)

Mitigating Systems

Significance:  Dec 31, 2008

Identified By: NRC

Item Type: FIN Finding

Failure to Promptly Identify and Correct Degraded Hydrostatic Penetration Seals

The inspectors identified a finding of Palo Verde Nuclear Generating Station Procedure 01DP 0AP10, "Corrective Action Program," Revision 1, for the failure of operations and engineering personnel to promptly identify and correct a condition adverse to quality. Specifically, between February 13, 2007 and July 18, 2008, operations and engineering personnel failed to identify and correct degraded hydrostatic flood penetration seals which provide protection to safety-related equipment during internal flooding events. This resulted in over 100 hydrostatic penetration seals in the control, diesel, and main steam support structure buildings being left degraded for greater than 12 months. This issue was entered into the licensee's corrective action program as Palo Verde Action Request 3264501.

The finding is greater than minor because it is associated with the protection against external factors (i.e. flood hazard) attribute of the mitigating systems cornerstone and affects the cornerstone objective of ensuring the reliability and capability of systems that respond to initiating events to prevent undesirable consequences. Using Manual Chapter 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," the finding was determined to have a very low safety significance because the finding did not result in a loss of system safety function, an actual loss of safety function of a single train for greater than its Technical Specification allowed outage time, or screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. This finding has a crosscutting aspect in the area of problem identification and resolution associated with operating experience because operations and engineering personnel failed to implement and institutionalize operating experience through changes to station processes, procedures, equipment, and training programs [P.2(b)].

Inspection Report# : [2008005](#) (*pdf*)

Significance:  Sep 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform an Operability Determination for High Chlorine in the Essential Spray Pond

The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure of operations and chemistry personnel to follow the corrective action program to ensure that potentially nonconforming conditions associated with the essential spray pond system were reviewed for operability. Specifically, between July 10, 2008 and July 11, 2008, operations and chemistry personnel failed to ensure all relevant information was reviewed for operability when the Unit 2 essential spray Pond A hypochloride addition Valve 2-SPN-V494 was found open. This resulted in the essential spray pond chemistry pH and chlorine samples being delayed to the extent that the sample results were not reliable to assess operability. This issue was entered into the licensee's corrective action program as Condition Report/Disposition Request 3206115.

The finding is greater than minor because it is associated with the equipment performance attribute of the mitigating systems cornerstone and affects the cornerstone objective of ensuring the reliability of systems that respond to initiating events to prevent undesirable consequences. Using Manual Chapter 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," the finding was determined to have a very low safety significance because the finding did not result in a loss of system safety function, an actual loss of safety function of a single train for greater than its technical specification allowed outage time, or screen as potentially risk-significant due to a seismic, flooding, or severe weather initiating event. This finding has a crosscutting aspect in the area of human performance associated with decision-making because safety-significant decisions were not verified to validate underlying assumptions and identify unintended consequences [H.1(b)].

Inspection Report# : [2008004](#) (*pdf*)

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Work Instructions for Reinstallation of Constant Support Hanger

The inspectors identified a noncited violation of Technical Specification 5.4.1.a, "Procedures," for the failure to establish and implement adequate maintenance procedures. These inadequate instructions resulted in the failure to install required washers during installation of a constant support spring hanger for a main steam line on May 14, 2008. This issue was entered into the licensee corrective action program as Condition Report/Disposition Request 3177622.

The finding is greater than minor because it is associated with the procedure quality attribute of the mitigating systems cornerstone and affects the cornerstone objective of ensuring the reliability and capability of systems that respond to initiating events to prevent undesirable consequences. Using Manual Chapter 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," the finding was determined to have a very low safety significance because the finding did not result in a loss of system safety function, an actual loss of safety function of a single train for greater than its Technical Specification allowed outage time, or screen as potentially risk-significant due to a seismic, flooding, or severe weather initiating event. This finding has a crosscutting aspect in the area of human performance associated with resources because the licensee failed to ensure work packages were complete, accurate and included up-to-date design documentation to assure nuclear safety [H.2(c)].

Inspection Report# : [2008003](#) (*pdf*)

Significance:  Jun 30, 2008

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure to Prevent Recurrence of a Significant Condition Adverse to Quality for the Feedwater Isolation Valves

A self-revealing noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions," was identified for the failure of engineering personnel to implement adequate corrective actions to preclude recurrence of a significant condition adverse to quality. Specifically, between June 28, 1998 and July 17, 2006, on several occasions, the four way 'N' valve for an economizer main feedwater isolation valve became lodged in the center blocked position, preventing fast closure of the main feedwater isolation valve upon receipt of a main steam isolation signal. This issue was entered into the licensee's corrective action program as Condition Report/Disposition Request 2915450.

This finding is greater than minor because it is associated with the equipment performance attribute of the mitigating systems cornerstone and affects the cornerstone objective of ensuring the availability and reliability of systems that respond to initiating events to prevent undesirable consequences. A Phase 2 analysis was required because using Manual Chapter 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," there was a loss of main feedwater isolation of a single train to Steam Generator 1 for greater than the Technical Specification allowed outage time. Using the Phase 2 worksheets associated with a steam generator tube rupture without steam generator isolation, the finding is determined to have very low safety significance since all remaining mitigation capability was available or recoverable. This finding was evaluated as not having a crosscutting aspect because the performance deficiency is not indicative of current performance.

Inspection Report# : [2008003](#) (*pdf*)

Significance:  Mar 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Establish Preventative Maintenance Procedures for Emergency Diesel Generator Fuel Oil Injection Pump O-Rings

The inspectors identified a non-cited violation of Technical Specification 5.4.1.a for the failure of operations and engineering personnel to establish and implement maintenance procedures for inspection and replacement of items that have a specific lifetime. Specifically, between February 12, 2007 and March 7, 2008, operations and engineering personnel failed to inspect or replace the emergency diesel generators fuel oil injection pump upper O-rings prior to the end of their service life resulting in fuel leakage and increased unavailability and unreliability of Unit 1 Train A, Unit 2 Train B, and Unit 3 Train B emergency diesel generators. This issue was entered into the licensee's corrective action program as Palo Verde Action Request 3143422.

This finding is greater than minor because it is associated with the equipment performance attribute of the mitigating

systems cornerstone and affects the cornerstone objective of ensuring the availability and reliability of systems that respond to initiating events to prevent undesirable consequences. Using the Manual Chapter 0609, "Significance Determination Process," Phase 1 Worksheets, the finding is determined to have very low safety significance because it did not represent a loss of system safety function, an actual loss of safety function of a single train for greater than its technical specification allowed outage time, or screen as potentially risk-significant due to a seismic, flooding, or severe weather initiating event. This finding has a crosscutting aspect in the area of problem identification and resolution associated with operating experience because the licensee failed to use available operating experience, including vendor recommendations, to implement and institutionalize operating experience through changes to station processes, procedures, equipment, and training programs [P.2(b)].

Inspection Report# : [2008002](#) (*pdf*)

Significance:  Mar 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain Adequate Staffing Levels Results in Heavy Use of Overtime to Maintain Adequate Shift Coverage

The inspectors identified a non-cited violation of Technical Specification 5.2.2.d involving the routine use of excessive overtime for operations personnel that performed safety-related functions. Specifically, between January 1 and December 31, 2007, operations personnel routinely used excessive overtime. This issue was entered into the licensee's corrective action program as Condition Report/Disposition Request 3112231.

The finding is greater than minor because if left uncorrected the finding would become a more significant safety concern in that the routine use of excessive work hours increases the likelihood of operator errors. Using the IMC 0609, "Significance Determination Process," Appendix M, the finding is determined to have very low safety significance because there were no recent instances where findings of low to moderate (White) or greater significance were attributed to the increased use of overtime by operating personnel. The finding has a crosscutting aspect in the area of human performance associated with resources because the licensee failed to maintain sufficient qualified operations personnel to maintain working hours within guidelines without the excessive use of overtime [H.2(b)].

Inspection Report# : [2008002](#) (*pdf*)

Significance:  Mar 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Properly Implement Corrective Action Process for Potential Operability Issues with the Class 1E 125 V DC System

The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure of engineering personnel to ensure that potentially nonconforming conditions associated with the Class 1E 125 Vdc system were reviewed for operability. Specifically, between September 29, 2007 and March 7, 2008, engineering personnel failed to ensure all relevant information was reviewed for operability when it was determined that vendor recommended preventative maintenance tasks were not being performed on the Class 1E 125 Vdc system. This issue was entered into the licensee's corrective action program as Palo Verde Action Request 3144707.

This finding is greater than minor because it is associated with the equipment performance attribute of the mitigating systems cornerstone and affects the cornerstone objective to ensure the availability and reliability of systems that respond to initiating events to prevent undesirable consequences. Using the Manual Chapter 0609, "Significance Determination Process," Phase 1 Worksheets, the finding is determined to have very low safety significance because it did not represent a loss of system safety function, an actual loss of safety function of a single train for greater than its technical specification allowed outage time, or screen as potentially risk-significant due to a seismic, flooding, or severe weather initiating event. This finding has a crosscutting aspect in the area of human performance associated with decision making because safety significant decisions were not verified to validate underlying assumptions and identify unintended consequences [H.1(b)].

Inspection Report# : [2008002](#) (pdf)

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Significance: Mar 31, 2008

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure to Identify Inoperable Feedwater Isolation Valve Exceeds Technical Specification Allowed Outage Time

A self-revealing non-cited violation of Technical Specification 3.7.3.c was identified for the failure of operations personnel to perform the actions required for an inoperable main feedwater isolation valve. Specifically, on July 17, 2006, operations personnel failed to perform actions to place the unit in Mode 3 within 6 hours and Mode 5 within 36 hours, as required by Technical Specification 3.7.3.c, for an inoperable main feedwater isolation valve that had not been closed or isolated in 72 hours, as required by Technical Specification 3.7.3.a. This resulted in main feedwater isolation Valve 2JSGAUV0174 to steam Generator A exceeding the Technical Specification 3.7.3 allowed outage time. This issue was entered into the licensee's corrective action program as Condition Report/Disposition Request 2915450.

This finding is greater than minor because it is associated with the equipment performance attribute of the mitigating systems cornerstone and affects the cornerstone objective to ensure the availability and reliability of systems that respond to initiating events to prevent undesirable consequences. A Phase 2 analysis was required because the Manual Chapter 0609, "Significance Determination Process," Phase 1 Worksheets, determined that there was a loss of main feedwater isolation of a single train to steam Generator A for greater than the technical specification allowed outage time. Using the Phase 2 Worksheets associated with a steam generator tube rupture without steam generator isolation, the finding is determined to have very low safety significance since all remaining mitigation capability was available or recoverable.

Inspection Report# : [2008002](#) (pdf)

Significance: N/A Sep 30, 2006

Identified By: NRC

Item Type: FIN Finding

SUMMARY FINDING. 95002 TEAMS ASSESSMENT OF IR 2004-14 (YELLOW) 10 CFR PART 50, APPENDIX B, CRITERION III, VIOLATION

The NRC performed a followup supplemental inspection to assess the licensee's corrective actions associated with a Yellow design control finding involving the potential for air entrainment into the emergency core cooling system. The team concluded that the technical issues specifically associated with the voided emergency core cooling system piping have been addressed. However, the Yellow finding will remain open because the licensee did not implement effective corrective actions for all of the causes associated with the Yellow finding. Specifically, the licensee's actions to improve questioning attitude, technical rigor, and technical review were not fully effective. Also, the implementation of performance measures and metrics to monitor the effectiveness of corrective actions associated with the Yellow finding were not adequate to assess effectiveness. This performance issue was previously characterized as a 10 CFR Part 50, Appendix B, Criterion III, violation having substantial safety significance (Yellow), and was originally identified in NRC Inspection Report 05000528; 05000529; 05000530/2004014.

The licensee's corrective actions taken in response to the root causes and related programmatic concerns involving questioning attitude, technical rigor, and technical review have not been completely effective. Specifically, following implementation of corrective actions between September 2005 and March 2006, the licensee: (1) continued to conduct inadequate technical reviews of emerging issues; (2) did not routinely question the validity of engineering assumptions used to support operability decisions; (3) did not consistently implement a qualify, validate, and verify process; and (4) did not consistently notify operations personnel of immediate operability concerns.

The team concluded that adequate qualitative or quantitative measures for determining the effectiveness of the corrective actions to prevent recurrence have not been established. For example, not all relevant performance data was considered when performance monitoring measures were developed to assess the effectiveness of corrective actions. When the pertinent data was considered, or otherwise clarified, the performance measures suggested declining rather

than improving performance in some areas.

The team also concluded that the licensee had not completed adequate reviews of the effectiveness of corrective actions prior to their notifying the NRC of their readiness for inspection of the Yellow finding. Specifically, several assessments were completed after the requested date of the inspection (June 2006). Several of the assessments noted that insufficient progress in resolving some of the root and contributing causes had been made. Additionally, a standard guideline for metrics was not issued and implemented until July 2006.

Inspection Report# : [2006010](#) (*pdf*)

Significance:  Dec 09, 2004

Identified By: NRC

Item Type: VIO Violation

FAILURE TO MAINTAIN DESIGN CONTROL OF CONTAINMENT SUMP RECIRCULATION PIPING

The team identified an apparent violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure to establish measures to assure design basis information was translated into specifications, drawings, procedures, and instructions. Specifically, the licensee failed to maintain the safety injection sump suction piping full of water in accordance with the Updated Final Safety Analysis Report. This nonconformance had the potential to significantly affect the available net positive suction head described in the Updated Final Safety Analysis Report for the high pressure safety injection and containment spray pumps, since the analysis assumed the piping would be maintained full of water.

{Note: Finding remains open - IP 95002 results pending 12/16/2005}

This finding is more than minor because it is associated with the equipment performance attribute of the Mitigating Systems cornerstone and adversely affects the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events. The NRC assessed this finding through Phase 3 of the Significance Determination Process and made a preliminary determination that the issue had substantial safety significance (Yellow). After considering the information developed during the inspection and the results of testing sponsored by the licensee, the NRC has concluded that this inspection finding is appropriately characterized as Yellow. The final Significance Determination Process letter was issued on April 8, 2005. This issue was inspected within the scope of a Supplemental 95002 Inspection in August - September 2005.

{NOTE: Yellow finding remains open because the corrective actions taken in response to the root causes and related programmatic concerns involving questioning attitude, technical rigor, and operability determinations have not been fully effective. - IP 95002 Supplemental Inspection completed December 2005, IR 05000528/20050112, 05000529/20050112 and 05000530/2005012, IP 95002 Followup Supplemental Inspection completed August 2006, IR 05000528/2006010, 05000529/2006010 and 05000530/2006010}

Inspection Report# : [2004014](#) (*pdf*)

Barrier Integrity

Significance:  Sep 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedural Requirements to Implement Technical Specification 5.5.2.b

The inspectors identified a non-cited violation of Technical Specification 5.5.2.b, "Primary Coolant Sources Outside Containment," for the failure of engineering and maintenance personnel to implement a program to verify integrated leak test requirements for abandoned valves still connected to an active system. Specifically, between January 8, 1993 and September 30, 2008, engineering personnel failed to ensure portions of the containment spray system, which could be in contact with radioactive fluids outside containment, were included in the integrated leak test requirements. This issue was entered into the licensee's corrective action program as Condition Report/Disposition Request 3170965.

The performance deficiency associated with this finding was the failure of engineering and maintenance personnel to implement a program to verify integrated leak test requirements for abandoned valves still connected to an active system. The finding is greater than minor because it is associated with the design control and procedural quality attribute associated with maintaining radiological barrier functionality for the auxiliary building of the barrier integrity cornerstone and affects the cornerstone objective to provide reasonable assurance that the physical design barriers protect the public from radio nuclide releases caused by accidents or events. Using Manual Chapter 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," the finding is determined to have very low safety significance because it only represented a degradation of the radiological barrier function of the auxiliary building. This finding was evaluated as not having a crosscutting aspect because the performance deficiency is not indicative of current performance.

Inspection Report# : [2008004](#) (*pdf*)

Significance:  Mar 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedure to Evaluate Foreign Material in the Spent Fuel Pool

The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure of fuels services personnel to evaluate leaving foreign material in the Unit 2 spent fuel pool in accordance with procedures, and failed to ensure those procedures included appropriate quantitative and qualitative acceptance criteria. Specifically, between October 13, 2006, and January 31, 2008, fuels services personnel used Procedure 30DP-9MP03, "System Cleanliness and Foreign Material Exclusion Controls," Revision 6, which did not specify acceptance criteria for time to perform a functional assessment of foreign material in the spent fuel pool, resulting in foreign material being left in the spent fuel pool for greater than one year without an evaluation on affected safety systems. This issue was entered into the licensee's corrective action program as Palo Verde Action Request 3126308.

This finding is greater than minor because it is associated with the structure, systems, and component performance and human performance attributes of the barrier integrity cornerstone and affects the cornerstone objective to provide reasonable assurance that physical design barriers (fuel cladding, reactor coolant system, and containment) protect the public from radionuclide releases caused by accidents or events. Using the Manual Chapter 0609, "Significance Determination Process," Phase 1 Worksheets, the finding is determined to have very low safety significance because the finding did not result in loss of cooling to the spent fuel pool; the finding did not result from fuel handling errors that caused damage to the fuel clad integrity or a dropped assembly; and the finding did not result in a loss of spent fuel pool inventory greater than ten percent of the spent fuel pool volume. This finding has a crosscutting aspect in the area of human performance associated with decision-making because the licensee failed to use conservative assumptions when evaluating degraded and nonconforming conditions [H.1.(b)].

Inspection Report# : [2008002](#) (*pdf*)

Emergency Preparedness

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Correct a Risk Significant Planning Standard

The inspectors identified a noncited violation (NCV) of 10 CFR 50.54(q) and 10 CFR Part 50, Appendix E.IV.F.2.g, for the licensee's failure to correct an identified risk significant planning standard weakness between May 2, 2007 and October 28, 2007. Specifically, the licensee failed to implement adequate corrective actions for identified weaknesses in the ability to correctly make a Site Area Emergency declaration for a steam generator tube rupture event. This issue was entered into the licensee's correction action program as Palo Verde Action Request 3083911.

The NRC determined that the inability to consistently implement an Emergency Action Level was a performance deficiency within the licensee's control. This finding is more than minor because it was associated with the Emergency Preparedness attribute of emergency response organization performance and affected the cornerstone objective to implement adequate measures to protect the health and safety of the public because the inability to properly recognize and classify an emergency condition affects the licensee's ability to implement adequate protective measures. This finding was preliminarily determined to be of low to moderate safety significance. After consideration of information provided during and after a Regulatory Conference held on March 25, 2008, the NRC has concluded that the knowledge deficiency identified among senior operators would not likely result in an incorrect emergency classification during a steam generator tube rupture event, and the NRC has concluded the significance of the inspection finding is appropriately characterized as Green (i.e., a finding of very low safety significance). This violation is being treated as an NCV, consistent with Section VI of the NRC Enforcement Policy. The cause of this finding has crosscutting aspects associated with the corrective action aspect of the problem identification and resolution area in that the licensee failed to thoroughly evaluate problems such that resolutions ensured correcting problems [P.1.(c)]. The cause of this finding was also related to the safety culture component of accountability in that the licensee failed to demonstrate a proper safety focus and reinforce safety principles [O.1.(c)].

Inspection Report# : [2008003](#) (*pdf*)

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : April 07, 2009