Palo Verde 3
1Q/2013 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: G Mar 31, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Provide Adequate Technical Justification for Operability
The inspectors identified a Green NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure of operations and engineering personnel to follow station procedures to provide an adequate technical justification for continued operation of a degraded structure, system, or component. After one channel of initiation logic inadvertently tripped for the Unit 3 containment spray actuation signal portion of the engineered safety features actuation system, plant operators declared the channel inoperable and entered Technical Specification 3.3.6, "Engineered Safety Features Actuation System Logic and Manual Trip," Condition B. Before troubleshooting began, operators evaluated the condition, declared the channel operable, and exited the technical specification condition. Plant personnel subsequently restored the channel after troubleshooting. The inspectors concluded that plant personnel did not consider all required functions and design requirements of the system and should not have declared the channel operable before completing troubleshooting and restoring the system to normal operation. This issue is captured in the corrective action program as Condition Report Disposition Request 4350321.

The inspectors concluded that the failure of plant personnel to adequately evaluate the operability of a safety-related structure, system, or component was a performance deficiency. The inspectors concluded the performance deficiency is more than minor because, if left uncorrected, the performance deficiency had the potential to lead to a more significant safety concern. Specifically, a spurious signal or channel failure would have resulted in an inadvertent actuation of containment spray in Unit 3. The inspectors evaluated the significance of the issue under the SDP, as defined in Inspection Manual Chapter 0609.04, "Initial Characterization of Findings," and 0609 Appendix A, "The Significance Determination Process for Findings at-Power." Inspectors concluded that the finding was of very low safety significance (Green) because the finding is not a design or qualification issue, did not represent an actual loss of safety function of the system or train, did not result in the loss of one or more trains of non-technical specification equipment, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The inspectors determined this finding has a cross-cutting aspect in the area of human performance associated with the component of resources because the licensee failed to provide sufficient training to plant personnel to ensure all aspects of the current licensing basis and design requirements are considered when evaluating degraded and non-conforming conditions for operability [H.2(b)].

Inspection Report# : 2013002 *(pdf)*

Significance: G Mar 31, 2013

Identified By: NRC
Item Type: NCV NonCited Violation
Multiple Failures to Identify Conditions Adverse to Quality
The inspectors identified two examples of a Green NCV of 10 CFR Part 50, Appendix B, Criterion XVI "Corrective Action," for the failure of the licensee to promptly identify and correct conditions adverse to quality. Specifically, on July 19, 2012, personnel failed to follow Procedure 01DP-0AP12, "Palo Verde Action Request Processing," and enter into the corrective action process a failure to comply with technical specifications to enter limiting condition for operation 3.0.3 when maintenance activities rendered safety related inverters inoperable. In addition, on May 2, 2011, the licensee also failed to enter an unanalyzed diversion of emergency core cooling system flow into the corrective action process, despite procedural guidance to the contrary. The licensee entered the issues into the corrective action program as Palo Verde Action Request (PVAR) 4347283 and PVAR 4389514 and is assessing corrective actions.

The inspectors concluded that the failure to promptly identify and correct conditions adverse to quality was a performance deficiency. The inspectors determined the performance deficiency is more than minor, and therefore a finding, because it adversely affected the equipment performance attribute of the Mitigating Systems Cornerstone and its objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the two issues had similar causal factors and should be documented as one NCV in accordance with NRC enforcement guidance. The inspectors evaluated the significance of each issue under the SDP, as defined in Inspection Manual Chapter 0609.04, "Initial Characterization of Findings," and IMC 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations." For the issue associated with inoperable safety related inverters, the inspectors determined the finding to be of very low safety significance (Green) because all questions in Exhibit 2.A could be answered no. For the issue associated with an unanalyzed condition of the high pressure safety injection system, the inspectors determined that the finding represented a loss of system function and needed a detailed evaluation. The inspectors used the Palo Verde Standardized Plant Analysis Risk model, Revision 8.20, with a truncation limit of E-11 and performed a bounding significance determination and found the finding to be of very low safety significance (Green). The bounding change to the core damage frequency was 2.4E-9/year. The dominant core damage sequences included: medium break loss of coolant accident, system transient, and steam generator tube rupture. The very short exposure period minimized the significance. A Region IV senior reactor analyst reviewed the results and agreed with the conclustions. This finding has a cross-cutting aspect in the area of human performance associated with the decision making component because the licensee failed to use a systematic process for dealing uncertain conditions adverse to quality [H.1(a)].

Inspection Report# : 2013002 *(pdf)*

Significance: G Dec 31, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Identify and Correct a Condition Adverse to Fire Protection
The inspectors identified a Green non-cited violation of License Conditions 2.C.7, 2.C.6, and 2.F for Palo Verde Units 1, 2, and 3 for the licensee's failure to identify and correct a condition adverse to fire protection. Specifically, on November 19, 2012, inspectors questioned operations personnel and identified that operators did not know the locations of sound powered telephone equipment, were unfamiliar with their use, and unfamiliar with procedural guidance for their use. This is a communications device used for post-fire safe shutdown credited in the fire protection program and emergency plan. The lack of familiarity with location and use of these communication devices would have adversely affected operations personnel response to an emergency. The licensee completed a self-assessment of emergency preparedness communication on October 31, 2012, and did not identify these weaknesses. The licensee immediately issued a night order and informed operations personnel of the location of the sound powered phones and procedural guidance. The licensee entered this issue into the licensee's corrective action program as Palo Verde Action Request 4294407.
The failure to identify and correct a condition adverse to fire protection was a performance deficiency. The

performance deficiency was more than minor, and therefore a finding, because it adversely affected the human performance attribute of the Mitigating Systems Cornerstone and its objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the significance of the issue under the Significance Determination Process, as defined in Inspection Manual Chapter 0609.04, “Initial Characterization of Findings,” and Inspection Manual Chapter 0609, Appendix F, “Fire Protection Significance Determination Process.” The finding was determined to be a low degradation of the post-fire safe shutdown program element and screens to Green using Step 1.3.1. The inspectors determined this finding has a crosscutting aspect in the area of problem identification and resolution associated with the self and independent assessments component because the licensee failed to conduct a self-assessment of sufficient depth, that was comprehensive and self-critical, which failed to recognize that operator knowledge was lacking for the use of some communication device [P.3(a)].
Inspection Report# : 2012005 *(pdf)*

Significance: G Dec 31, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Maintain Licensed Operator Examination Integrity
The inspectors identified a non-cited violation of 10 CFR 55.49, “Integrity of Examinations and Tests,” for the failure of the licensee to ensure the integrity of the licensed operator biennial written examinations. During the 2012 biennial written examination cycle, the exams were administered in a simulator environment that lacked positive controls to ensure that operators could not observe the reference material or examinations of other operators. Operators were allowed to review engineering schematics while standing at a table which allowed an angle to observe the computer screen and desk of another examinee approximately 5 feet away. Having the ability to view exam reference material being displayed on the computer screen during exam administration is considered an exam integrity compromise. However, an evaluation of the written exam results and interviews with the licensed operators signed in on an exam security agreement showed that the compromise did not have an actual effect on the equitable and consistent administration of the examination. The licensee entered the finding into the corrective action program as Action Request PVAR-4238204.
The failure of the licensee’s training staff to maintain the integrity of examinations administered to licensed operations personnel was a performance deficiency. The performance deficiency was more than minor because it adversely affected the Human Performance attribute of the Mitigating Systems Cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Additionally, if left uncorrected, the performance deficiency could have become more significant in that allowing licensed operators to return to the control room without valid demonstration of appropriate knowledge on the biennial written examinations could be a precursor to a more significant event. Using NRC Inspection Manual Chapter 0609, “Significance Determination Process,” Attachment 4, Table 1 and 2 worksheets; and the corresponding Appendix I, “Licensed Operator Requalification Significance Determination Process,” the finding was determined to have very low safety significance (Green). Although the 2012 finding resulted in a compromise of the integrity of biennial written examinations, compensatory actions were immediately taken, and the equitable and consistent administration of the biennial written examination was not actually affected by this compromise. This finding has a cross-cutting aspect in the area of human performance associated with the work control component because the licensee failed to adequately plan work activities that incorporated job site conditions, including environmental conditions [H.3(a)]
Inspection Report# : 2012005 *(pdf)*

Significance: G Sep 30, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Correct Scupper Obstruction

The inspectors identified a Green non-cited violation of 10 CFR Part 50 Appendix B, Criterion XVI, “Corrective Action,” for the failure of the licensee to correct a condition adverse to quality. Specifically, on November 7, 2011, after the inspectors notified the licensee about scupper obstruction on safety related building roofs, the licensee failed to enter this issue into the corrective action program and take appropriate corrective actions to remove the obstructions. The licensee rediscovered this condition during post Fukushima walkdowns in response to a Request for Information pursuant to 10 CRF 50.54(f), removed the obstructions and established walkdowns to ensure the scuppers remained unobstructed. The licensee has entered the issue into the corrective action program as PVAR 4255561.

The inspectors concluded that the failure of the licensee to correct a condition adverse to quality was a performance deficiency. The performance deficiency was more than minor, and therefore a finding, because it affected the protection against external events of the Mitigating Systems Cornerstone and its objective to ensure the availability, reliability, and capability of systems that respond to initialing events to prevent undesirable consequences. The inspectors evaluated the significance of the issue under the Significance Determination Process, as defined in Inspection Manual Chapter 0609.04, “Initial Characterization of Findings,” and 0609 Appendix A, “The Significance Determination Process (SDP) for Findings at-Power.” The inspectors concluded the finding was of very low safety-significance (Green) because the finding did not result in the complete loss of a safety function due to an external event. The inspectors determined this finding has a crosscutting aspect in the area of problem identification and resolution associated with the corrective action program component because the licensee failed to have a low threshold for entering issues into the corrective action program [P.1(a)].
Inspection Report# : 2012004 *(pdf)*

Significance: G Sep 30, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Boric Acid Evaluation
The inspectors identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” for the failure of engineering personnel to follow Procedure 70TI-9ZC01, “Boric Acid Walkdown Leak Detection,” to provide an adequate evaluation of an active boric acid leak. Specifically, an evaluation of a boric acid leak from the packing of the charging backpressure header control valve did not assess all consequences of continued operation. The licensee performed a subsequent boric acid leakage evaluation and determined that monitoring coupled with mitigating actions of cleaning and greasing all susceptible components was sufficient to support the functionality of the valve. The licensee will repair the valve at the soonest available opportunity; prior to restart after any maintenance or refueling outage.

The inspectors concluded that the failure of the engineering personnel to provide an adequate evaluation of an active boric acid leak was a performance deficiency. The performance deficiency was more than minor, and therefore a finding, because if left uncorrected the performance deficiency could possibly become a more significant safety concern in that unevaluated boric acid leaks could result with unmitigated boric acid corrosion of components. The inspectors evaluated the significance of the issue under the Significance Determination Process, as defined in Inspection Manual Chapter 0609.04, “Initial Characterization of Findings.” Inspectors determined that the finding affected the Mitigating Systems Cornerstone and using Inspection Manual Chapter 0609 Appendix A, “The Significance Determination Process (SDP) for Findings at-Power.” Inspectors concluded the finding was of very low safety-significance (Green) because the finding is a design or qualification issue confirmed not to result in the loss of operability or functionality. The inspectors determined this finding has a crosscutting aspect in the area of human performance associated with the decision making component because the licensee failed to make conservative assumptions and allowed corrosion of carbon steel components without an appropriate understanding of their function or unintended consequences [H.1(b)].
Inspection Report# : 2012004 *(pdf)*

Significance: G Sep 30, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Operability Determination for ARD Relay Failures
The inspectors identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure of operations and engineering personnel to follow station procedures to provide an adequate technical justification for continued operation of a degraded structure, system, or component. After a ventilation damper failed to close during a functional stroke test, plant personnel did not consider previous operability determinations and failed to provide supporting analysis to confirm there was no reduction in reliability of ARD relays. This issue is captured in the corrective action program as PVAR 4255816. The licensee has successfully cycled all ARD relays which could be performed during at-power operations, scheduled testing for remaining relays, and initiated a design change document that will determine a permanent substitute for the ARD660UR DC relays.

The failure of the operations and engineering personnel to follow Procedure 40DP-9OP26 to evaluate the operability of a structure, system, or component was a performance deficiency. The inspectors concluded the performance deficiency was more than minor because it affected the equipment performance attribute of the Mitigating Systems Cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the significance of the issue under the Significance Determination Process, as defined in Inspection Manual Chapter 0609.04, "Initial Characterization of Findings," and 0609 Appendix A, "The Significance Determination Process (SDP) for Findings at-Power." Inspectors concluded that the finding was of very low safety-significance (Green) because the finding is not a design or qualification issue, did not represent an actual loss of safety function of the system or train, did not result in the loss of one or more trains of non-technical specification equipment, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The
inspectors determined that the finding has a cross-cutting aspect in the area of human performance associated with decision making. Specifically, the licensee did not communicate the results of the apparent cause evaluation for the first three ARD relay failures to the appropriate operations personnel [H.1(c)].
Inspection Report# : 2012004 *(pdf)*

Significance: G Jun 30, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Follow Hot Work Permit Procedure
The inspectors identified a non-cited violation of technical specification 5.4.1.d for the failure of the licensee to follow Procedure 14DP-0FP36, "Hot Work Permit." Specifically, the licensee failed to implement all requirements of the hot work permit and let welding slag impinge on combustible materials in containment. The licensee stopped work and corrected the issue after being informed by the inspectors. This finding has been entered into the licensee's corrective action program as Condition Report Disposition Request 4120969.

The failure of the licensee to follow Procedure 14DP-0FP36, "Hot Work Permit," was a performance deficiency. The performance deficiency is more than minor, and therefore a finding, because it affected the protection against external events attribute of the Mitigating Systems Cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors evaluated the significance of the issue under the Significance Determination Process, as defined in Inspection Manual Chapter 0609.04, "Initial Characterization of Findings," and concluded the finding needed additional screening under IMC 0609, Appendix F, "Fire Protection Significance Determination Process." The inspectors determined that the condition represented a high degradation of the fire prevention and administrative controls fire protection program element due to the failure to observe all areas of vulnerability to a fire from hot work operation. The finding was determined only to affect the ability to maintain cold shutdown and using Figure F.1, the finding was determined to be

of very low safety significance (Green). The inspectors determined this finding has a cross-cutting aspect in the area human performance associated with the work practices component because the licensee failed to communicate human error prevention techniques, such as self and peer checking [H.4(a)].

Inspection Report# : 2012003 *(pdf)*

Significance: G Jun 30, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Perform Boric Acid Evaluation
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 follow Procedure 70TI-9ZC01 "Boric Acid Walkdown Leak Detection," to provide an evaluation of an active boric acid leak prior to the end of the outage. Specifically, a boric acid leak from the packing of the charging backpressure header control valve did not receive an evaluation prior to the end of the outage when it was left in service as an active leak and corrective actions were deferred. The licensee performed the boric acid leakage evaluation and determined that monitoring coupled with mitigating actions of cleaning and greasing were sufficient to support the functionality of the valve. The licensee plans to repair the valve at the soonest available opportunity and prior to restart after any maintenance or refueling outage. This finding has been entered into the licensee's corrective action program as PVAR 4191552.

The failure of engineering personnel to provide an evaluation of an active boric acid leak prior to the end of the outage is a performance deficiency. The performance deficiency was more than minor, therefore a finding, because if left uncorrected the performance deficiency could possibly become a more significant safety concern in that unevaluated boric acid leaks could result with unmitigated boric acid corrosion of components. The inspectors evaluated the significance of the issue under the Significance Determination Process, as defined in Inspection Manual Chapter 0609.04, "Initial Characterization of Findings." Inspectors determined that the finding affected the Mitigating Systems Cornerstone and screened the finding using 0609 Appendix A, "The Significance Determination Process (SDP) for Findings at-Power." Inspectors concluded the finding was of very low safety significance (Green) because the finding is a design or qualification issue confirmed not to result in the loss of operability or functionality. The inspectors determined this finding has a crosscutting aspect in the area of human performance with the decision making component because the licensee failed to make decisions using a systematic process when faced with unexpected circumstances because decisions associated with boric acid corrosion mitigation and management were made outside of the boric acid corrosion control program [H.1.(a)].

Inspection Report# : 2012003 *(pdf)*

Significance: N/A Jun 30, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Provide Complete and Accurate Information Regarding Safety Related Roof Drainage Capabilities
The inspectors identified a Severity Level IV violation of 10 CFR 50.9, "Completeness and Accuracy of Information," for the failure of the licensee to provide complete and accurate information in all material respects in response to Generic Letter 88-20, Supplement 4. Specifically, the licensee asserted that roofs are equipped with roof drains and scuppers as backup. As a result, the licensee concluded roof ponding considerations were not applicable to the Palo Verde Nuclear Generating Station site. Inspectors determined that there are no roof drains installed. The licensee initiated corrective actions to provide an accurate depiction of the roof drainage capabilities to the NRC. This finding has been entered into the licensee's corrective action program as Palo Verde Action Request 3952605.

The failure of the licensee to provide complete and accurate information for safety related building roof drainage was a performance deficiency. The Significance Determination Process is not suited to assess the significance of the

performance deficiency because it affected the ability of the NRC to perform its regulatory oversight function and as such, it was assessed using traditional enforcement. This issue was determined to be a Severity Level IV violation in accordance with NRC Enforcement Policy examples provided in Section 6.9. No crosscutting aspect was assigned because the performance deficiency was assessed using traditional enforcement.

Inspection Report# : 2012003 *(pdf)*

Barrier Integrity

Significance: G Dec 31, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Perform Pressure Testing of the Reactor Vessel Flange Leak-Off Lines
Inspectors identified a non-cited violation of 10 CFR 50.55a(g)(4) involving the licensee's failure to perform a system pressure test of the reactor vessel flange leak off-line of Units 1, 2, and 3 in accordance with the applicable edition of Section XI of the ASME Code. Contrary to the above, prior to October 10, 2012, the licensee failed to perform the required pressure test of the reactor vessel flange seal leak-off line for all three units. Specifically, the licensee failed to implement the ASME Code, Section XI, Class 2 requirements for pressure retaining components as provided by Article IWC-5220, "System Leakage Test." The licensee entered the finding into their corrective action program as Palo Verde Action Request 4269674.
The inspectors determined that the licensee's failure to perform a pressure test of the reactor vessel flange leak-off line was a performance deficiency. The performance deficiency was more than minor because it is associated with the Barrier Integrity Cornerstone attribute of systems, structures and components and barrier performance, and adversely affects the cornerstone objective to provide a reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Using Manual Chapter 0609, Attachment A, "The Significant Determination Process (SDP) for Findings At-Power," the finding was determined to be of very low safety significance (Green) because the finding did not result in exceeding the reactor coolant system leak rate for a small loss-of-coolant accident, and did not affect other systems used to mitigate a loss-of-coolant accident resulting in a total loss of their function. This issue did not have a cross-cutting aspect associated with it because it is not indicative of current performance
Inspection Report# : 2012005 *(pdf)*

Significance: G Dec 31, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Tracking of a Functional Assessment for Spent Fuel Pool Heat Load
The inspectors identified a non-cited violation of 10 CFR 55.49, "Integrity of Examinations and Tests," for the failure of the licensee to ensure the integrity of the licensed operator biennial written examinations. During the 2012 biennial written examination cycle, the exams were administered in a simulator environment that lacked positive controls to ensure that operators could not observe the reference material or examinations of other operators. Operators were allowed to review engineering schematics while standing at a table which allowed an angle to observe the computer screen and desk of another examinee approximately 5 feet away. Having the ability to view exam reference material being displayed on the computer screen during exam administration is considered an exam integrity compromise. However, an evaluation of the written exam results and interviews with the licensed operators signed in on an exam security agreement showed that the compromise did not have an actual effect on the equitable and consistent administration of the examination. The licensee entered the finding into the corrective action program as Action

Request PVAR-4238204.
The failure of the licensee's training staff to maintain the integrity of examinations administered to licensed operations personnel was a performance deficiency. The performance deficiency was more than minor because it adversely affected the Human Performance attribute of the Mitigating Systems Cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Additionally, if left uncorrected, the performance deficiency could have become more significant in that allowing licensed operators to return to the control room without valid demonstration of appropriate knowledge on the biennial written examinations could be a precursor to a more significant event. Using NRC Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 4, Table 1 and 2 worksheets; and the corresponding Appendix I, "Licensed Operator Requalification Significance Determination Process," the finding was determined to have very low safety significance (Green). Although the 2012 finding resulted in a compromise of the integrity of biennial written examinations, compensatory actions were immediately taken, and the equitable and consistent administration of the biennial written examination was not actually affected by this compromise. This finding has a cross-cutting aspect in the area of human performance associated with the work control component because the licensee failed to adequately plan work activities that incorporated job site conditions, including environmental conditions [H.3(a)]
Inspection Report# : 2012005 *(pdf)*

Emergency Preparedness

Significance: G Mar 31, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to identify weak preformance during an exercise
The inspectors identified a Green NCV of 10 CFR 50.47(b)(14) for the licensee's failure to identify and correct a performance deficiency during an evaluated exercise. Specifically, the licensee failed to identify that the Emergency Director in the Simulator Control Room did not evaluate emergency action level RS-1 when information was available indicating a need to upgrade the emergency classification because of offsite radiation dose.
The failure to identify a deficiency occurring during a drill and ensure correction is a performance deficiency within the licensee's control. The finding is more than minor because the failure to identify a deficiency and ensure correction impacts the Emergency Preparedness cornerstone objective associated with the emergency response organization performance cornerstone attribute. The finding is a non-cited violation of 10 CFR 50.47(b)(14). The finding was evaluated using the Emergency Preparedness SDP and identified as having very low safety significance because it was a failure to comply with NRC requirements and was not a loss of the planning standard function because the classification deficiency was associated with a successful performance indicator opportunity. The Emergency Director declared the correct emergency classification within fifteen minutes of performing the dose assessment report using an emergency action level for which conditions currently existed, although this was not the first emergency action level that applied. This issue was entered into the CAP as PVAR 4365021. The finding was assigned a cross-cutting aspect of 'Low Threshold,' because the licensee failed to completely and accurately recognize a performance deficiency [P.1.a]
Inspection Report# : 2013002 *(pdf)*

Significance: G Dec 31, 2012
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Technical Support Center Diesel Generator Not Restored Following Maintenance

A self revealing Green non-cited violation of 10 CFR 50.47(b)(8) was identified for the failure to maintain adequate facilities to support emergency response. Specifically, the licensee found the technical support center battery disconnect switch had not been restored following maintenance activities. This configuration would have rendered the diesel generator unable to start automatically as designed in the event of a loss of off-site power. The licensee initiated immediate corrective actions to restore the technical support center diesel generator to a functional configuration and has begun implementation of a more formal process for component configuration verification of critical technical support center equipment. The licensee has entered this issue into their corrective action program as Palo Verde Action Request 4165625.
The failure to follow Procedure 40OP-9NG01 for performing a functional test of 480V switchgear following maintenance activities is a performance deficiency. This performance deficiency was more than minor because it is associated with the Emergency Preparedness Cornerstone attribute of facilities and equipment and it adversely affected the cornerstone objective to ensure that the licensee is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. The inspectors evaluated the significance of the issue under the Significance Determination Process, as defined in Inspection Manual Chapter 0609.04, “Initial Characterization of Findings,” and Manual Chapter 0609, Appendix B, “Emergency Preparedness Significance Determination Process.” The finding was determined to be of very low safety significance (Green) because the degraded planning standard function did not result in the loss of technical support center functionality for longer than 7 days. The inspectors determined that the finding had a cross-cutting aspect in the area of human performance associated with resources. Specifically, the licensee’s work control procedures did not include critical technical support center systems to ensure that technical support center configuration control was maintained commensurate with its significance [H.2(c)]
Inspection Report# : 2012005 *(pdf)*

Significance: G Sep 30, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Perform 50.54(q) Evaluation
Inspectors identified a Severity Level IV, non-cited violation of 10 CFR 50.54 (q), “Conditions of licenses,” and an associated Green finding for the licensee’s failure to perform an appropriate design scope change, which resulted in the reduction in effectiveness of the emergency plan. Specifically, on May 19, 2011, the licensee completed a modification to revise protective area lightning power sources and removed ground fault protections on a circuit breaker attached to the bus, which powers the technical support center. This change created a condition that would remove power to the technical support center and prevent emergency plan required back up power from being able to power the bus. On August 10, 2012, a lighting fault caused a complete loss of power to the technical support center, demonstrating that this change decreased the effectiveness of the emergency plan. On September 26, 2012, the licensee reactivated the ground fault protection for the circuit breaker and established compensatory measures to restore power to ensure technical support center staffing will not be challenged. The licensee entered this into their corrective action program as condition report disposition request 4230209.

The failure to perform an appropriate design scope change was a performance deficiency. The performance deficiency was more than minor, and therefore a finding, because it affected the facilities and equipment attribute of the Emergency Preparedness Cornerstone and its objective to ensure that the licensee is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. The inspectors evaluated the significance of the issue under the Significance Determination Process, as defined in Inspection Manual Chapter 0609.04, “Initial Characterization of Findings,” and Manual Chapter 0609, Appendix B, “Emergency Preparedness Significance Determination Process.” The finding was determined to be of very low safety significance (Green). Additionally, the violation of 10 CFR 50.54 (q) impacted the ability of the NRC to perform its regulatory oversight function and was dispositioned using traditional enforcement. This violation was determined to be a Severity Level IV violation per Section 6.6 of the NRC Enforcement Policy because the violation was not associated with licensee’s ability to meet or implement any regulatory requirement related to assessment or notification.

Although the regulatory requirement could be implemented during the response to an actual emergency, the implementation would be degraded. The inspectors determined this finding has a crosscutting aspect in the area of human performance associated with the work practices component because the licensee failed to ensure supervisory management and oversight of contractors such that nuclear safety is supported [H.4.(c)].
Inspection Report# : 2012004 *(pdf)*

Significance: G Sep 30, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Declare an Unusual Event
The inspectors identified a Green non-cited violation of 10 CFR 50.54(q) for the failure of operations personnel to adequately implement the emergency plan. Specifically, on August 26, 2012, auxiliary operators felt vibratory ground motion inside the protected area at 12:31pm and again at 1:58pm. The United States Geological Survey (USGS) confirmed that two earthquakes, of magnitude 5.3 and 5.5 respectively, occurred at those times in the area of the plant. Plant operators did not declare an Unusual Event in accordance with the emergency plan. The licensee entered the issue into the corrective action program as PVAR 4255819 and initiated an apparent cause evaluation to identify the cause and corrective actions.

The failure to implement the emergency plan and declare an Unusual Event was a performance deficiency. The performance deficiency was more than minor and therefore a finding, because it affected the Emergency Response Organization performance attribute of the Emergency Preparedness cornerstone and affected the cornerstone objective to ensure the licensee is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. Using Manual Chapter 0609, Appendix B, "Emergency Preparedness Significance Determination Process," Attachment 1, the finding was determined to have very low safety - significance (Green) because the actual event implementation problem was associated with an Unusual Event. This finding has a crosscutting aspect in the area of human performance associated with the resources component because the licensee failed to ensure training of personnel was adequate to assure proper implementation of the emergency plan [H.2.(b)].
Inspection Report# : 2012004 *(pdf)*

Occupational Radiation Safety

Significance: N/A Mar 31, 2013
Identified By: NRC
Item Type: VIO Violation
Failure to Maintain the Updated Final Safety Analysis Report for Radwaste Systems and Processes
The inspectors identified a Severity Level IV violation of 10 CFR 50.71(e), “Maintenance of Records, Making of Reports,” with two examples for the failure to restore compliance within a reasonable time after a previous Severity Level IV non-cited violation of 10 CFR 50.71(e) was identified. The violation was identified because the licensee failed to periodically update the Updated Final Safety Analysis Report (UFSAR) with all changes made in the facility or procedures. Specifically,
Example 1: From 1988 to 2013, the licensee did not update Chapter 11.2.2.3, “Liquid Radwaste System,” with a description of the temporary adsorption tanks and their use. The licensee has entered this violation into their corrective action program as PVAR 3075089.
Example 2: From December 2003 to January 2013, the licensee made changes to the facility and procedures as described in the UFSAR, and performed safety analyses and evaluations in support of these changes, but failed to update the UFSAR to include these changes. Specifically, the licensee built the old steam generator storage facility used for long-term storage of radioactive waste (six replaced steam generators and three reactor vessel heads) on the

owner controlled site until decommissioning. The licensee has entered this violation into their corrective action program as Condition Report (CR) 3398042 and PVAR 4330483.
This violation is more than minor because the NRC relies on licensees to identify and report conditions or events meeting the criteria specified in the regulations in order to perform its regulatory function. Because this issue affected the NRC's ability to perform its regulatory function, it was evaluated using the traditional enforcement process. The issue was characterized as a Severity Level IV violation in accordance with Section 6.1.d.3 of the NRC Enforcement Policy because the erroneous information in the UFSAR was not used to make an unacceptable change to the facility or procedures. A cross-cutting aspect was not assigned because the violation was handled through traditional enforcement.
Inspection Report# : 2013002 *(pdf)*

Significance: G Jun 30, 2012
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to Follow Procedures and Radiation Exposure Permit Requirements
The inspectors reviewed a self-revealing non-cited violation of Technical Specification 5.4.1, because workers failed to follow radiation exposure permit requirements and entered high radiation area without authorization by entering the wrong room. As corrective action, the licensee coached the workers, restricted their access to the radiologically controlled area, and entered the issue into the corrective action program as CRDR 3988625.

The failure to follow radiation exposure permit requirements is a performance deficiency. The performance deficiency was more than minor because it was associated with the Occupational Radiation Safety Cornerstone attribute (exposure control) of program and process and affected the cornerstone objective, in that entering an area outside the scope of the radiation exposure permit and not knowing the associated dose rates in the high radiation area had the potential to increase personnel dose. Using the Occupational Radiation Safety Significance Determination Process, the inspectors determined the finding had a very low safety significance because: (1) it was not associated with ALARA planning or work controls, (2) there was no overexposure, (3) there was no substantial potential for an overexposure, and (4) the ability to assess dose was not compromised. The finding had a human performance cross-cutting aspect associated with work practices because the individuals did not use peer or self-checking before entering the unauthorized high radiation area [H.4(a)].
Inspection Report# : 2012003 *(pdf)*

Public Radiation Safety

Significance: G Jun 30, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Verify a Transferee was Licensed to Receive Byproduct Material
The inspector identified a non-cited violation of 10 CFR 30.41 because the licensee failed to verify a transferee was authorized to receive byproduct material before transferring it. This finding was entered in the licensee's corrective action program as CRDR 4136342.

The failure to verify a transferee is licensed to receive the type, form, and quantity of byproduct being transferred is a performance deficiency. The significance was more than minor because radioactive material was actually transferred to an entity which was not licensed to receive the material. Thus, the performance deficiency was associated with the cornerstone attribute of Program & Process and adversely affected the associated cornerstone objective because the

release of radioactive material to unlicensed entities could cause unplanned radiation dose or environmental contamination. Using Inspection Manual Chapter 0609, Appendix D, "Public Radiation Safety Significance Determination Process, " December 12, 2008, page D 13, the inspectors determined the violation had very low safety significance because the violation involved a radioactive material control issue, was not a transportation issue, and did not result in a dose to public of greater than 0.005 rem. This finding had a crosscutting aspect in the human performance area, work practices component, because personnel did not follow procedures [H.4(b)].

Inspection Report# : 2012003 *(pdf)*

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the cover letters to security inspection reports may be viewed.

Miscellaneous

Significance: N/A May 31, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Request an Experience Waiver for a Reactor Operator License Applicant
An NRC-identified non-cited violation of 10 CFR 50.9, "Completeness and Accuracy of Information," was identified for failure to request an experience waiver on NRC Form 398 for a Reactor Operator license applicant who did not have three years of responsible nuclear power plant experience as required by NUREG 1021, Revision 9, Supplement 1, ES-202.D.1.a.(1). Upon discovery, the facility licensee submitted a revised NRC Form 398, which included the waiver request, and entered this issue into their corrective action program as Condition Report 4080143.

The examiners evaluated this issue using the traditional enforcement process because the performance deficiency had the potential for impacting the NRC's ability to perform its regulatory function. This performance deficiency was determined to be Severity Level IV because it fits the SL-IV example of Enforcement Policy Section 6.4.d, "Violation Examples: Licensed Reactor Operators." This section states, "Severity Level IV violations involve, for example … cases of inaccurate or incomplete information inadvertently provided to the NRC that does [sic] not contribute to the NRC making an incorrect regulatory decision as a result of the originally submitted information or an unqualified individual performing the functions of an operator or senior operator… ." Because the performance deficiency was corrected before the issuance of a license and an experience waiver was ultimately granted, it did not cause the NRC to make an incorrect regulatory decision. There is no Cross-Cutting Aspect associated with this violation because it was processed using Traditional Enforcement.
Inspection Report# : 2012301 *(pdf)*

Significance: N/A May 31, 2012
Identified By: NRC
Item Type: NCV NonCited Violation

Inaccurate Identification of an Open-Reference Initial Licensing Exam Question as Closed-Reference
An NRC-identified non-cited violation of 10 CFR 50.9, "Completeness and Accuracy of Information," was identified for submitting a final written exam question to the NRC which was identified and approved as "Closed Reference," but administered by the licensee as "Open Reference" by supplying the applicants with an unapproved Technical Specification. On evaluation, the NRC determined that it would not have approved the question had it been properly identified as open-reference on submittal, because the reference made the question a direct lookup and the information in the reference was of a nature that licensed operators are expected to have memorized. No licensing decisions were affected and the facility licensee entered this issue into their corrective action program as Condition Report 4144197.

The examiners evaluated this issue using the traditional enforcement process because the performance deficiency impacted the NRC's ability to perform its regulatory function. This performance deficiency was determined to be Severity Level IV because it fits the SL-IV example of Enforcement Policy Section 6.4.d, "Violation Examples: Licensed Reactor Operators." This section states, "Severity Level IV violations involve, for example … cases of inaccurate or incomplete information inadvertently provided to the NRC that does [sic] not contribute to the NRC making an incorrect regulatory decision as a result of the originally submitted information or an unqualified individual performing the functions of an operator or senior operator… ." The performance deficiency did not cause the NRC to make an incorrect regulatory decision because it did not affect the number of applicants who passed. There is no Cross-Cutting Aspect associated with this violation because it was processed using Traditional Enforcement.
Inspection Report# : 2012301 *(pdf)*

Last modified : June 04, 2013