Comanche Peak 2
3Q/2016 Plant Inspection Findings

Initiating Events

Significance: G Sep 15, 2016
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Evaluate the Suitability of Teflon Gaskets in a Safety-Related Pressure Boundary
The inspectors identified a Green, non-cited violation of 10 CFR 50 Appendix B, Criterion III, "Design Control," which requires, in part, that measures shall also be established for the selection and review for suitability of application of materials, parts, equipment, and processes that are essential to the safety related functions of the structures, systems and components. Specifically, from November 25, 2014, to September 15, 2016, the licensee failed to appropriately evaluate the suitability of polytetrafluoroethylene (PTFE) gaskets in pressure indication diaphragm assemblies that form the pressure boundary of the chemical and volume control system. In response to this issue, the licensee immediately isolated all affected diaphragm seal assemblies from the safety-related pressure boundary of the chemical and volume control system. This condition was entered into the corrective action program as Condition Reports CR-2016-008180 and CR-2016-008215.

The inspectors determined that the failure to meet 10 CFR 50, Appendix B, Criterion III, "Design Control" was performance deficiency. The performance deficiency was more than minor because the finding is associated with the equipment performance attribute of the Initiating Events cornerstone and adversely affects the cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown. Specifically, in the event of an accident with 1% core damage, the high radiation environment of the centrifugal charging pump rooms would cause degradation to Teflon gaskets in pressure indication diaphragm assemblies, which would potentially cause an intersystem loss-of-coolant accident through the safety-related chemical and volume control system pressure boundary. Using the Manual Chapter 0609, Appendix A, Significance Determination Process for Findings At-power, Exhibit 1, "Initiating Events Screening Questions," the finding screens to a detailed risk evaluation because, after a reasonable assessment of degradation, the finding could have an effect on systems used to mitigate a loss-of-cooling accident resulting in a total loss of their function (e.g. intersystem loss-of-coolant accident). A senior reactor analyst performed a qualitative detailed risk evaluation. The analyst determined that the finding was of very low safety significance (Green). The inspectors determined that the most significant contributor to this finding had an Evaluation cross-cutting aspect in the area of problem identification and resolution because the licensee failed to thoroughly evaluate issues to ensure that resolutions address causes and extent of conditions commensurate with their safety significance. Specifically, in November 2014, the licensee's engineering department failed to properly evaluate the effects of radiation on the PTFE gasket, as documented in Condition Report CR 2014 012353. [P.2] (Section 1R17.2.b)

Inspection Report# : 2016007 *(pdf)*

Significance: G Dec 31, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
Incorrect Visual Resolution Requirements in Augmented Dissimilar Metal Weld Visual Examination Procedures

The inspectors identified a non-cited violation of 10 CFR 50, Appendix B, Criterion IX, "Control of Special Processes," because the licensee failed to assure that visual examination activities for the reactor vessel dissimilar metal nozzle welds and bottom-mounted instrumentation nozzles were accomplished in accordance with the visual acuity requirements of ASME Code Case N-722-1. In response to the issue, for Unit 2, the licensee scheduled reexamination of the welds prior to the end of the outage, and, for Unit 1, performed a reasonable degradation evaluation to determine that reexamination of the welds could be delayed to the next outage. This finding was entered into the corrective action program as Condition Report 2015-009586.

The inspectors determined that the failure to assure visual examination activities were accomplished in accordance with the visual acuity requirements of ASME Code Case N-722-1 was a performance deficiency. The performance deficiency was more than minor, and therefore a finding, because if left uncorrected, the performance deficiency would have the potential to lead to a more significant safety concern. Specifically, routinely performing examinations with incorrect visual acuity requirements of N-722-1 has the potential to lead to missed opportunities to identify and correct relevant indications in reactor coolant system pressure boundaries. In accordance with Inspection Manual Chapter MC 0609, Attachment 4, "Significance Determination Process Initial Characterization," the inspectors determined that this finding affected the Initiating Events cornerstone as a primary system LOCA initiator contributor. In accordance with Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," dated June 19, 2012, Exhibit 1, "Initiating Events Screening Questions," the finding screened as having very low safety significance (Green) because after a reasonable assessment of degradation, the finding did not result in exceeding the RCS leak rate for a small LOCA and did not affect other systems used to mitigate a LOCA. The finding does not have a crosscutting aspect because the most significant contributor is not reflective of current licensee performance.
Inspection Report# : 2015004 *(pdf)*

Mitigating Systems

Significance: G Jun 30, 2016
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Correct Conditions Adverse to Quality
The inspectors identified a non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," associated with the licensee's failure to correct a condition adverse to quality in safety-related equipment. Specifically, following an in-service testing failure of auxiliary feedwater check valve 2FW-0191 in November 2012, the licensee performed an operability evaluation of the auxiliary feedwater system. However, the inspectors identified that the licensee failed to take corrective action to address the condition adverse to quality that resulted in the valve failing to seat properly. Consequently, the same valve failed a subsequent inservice test in November 2015. Following discovery of this issue, the licensee performed an operability determination that established a reasonable expectation of operability pending implementation of corrective actions. The licensee entered this issue into corrective action program as CR-2015-10961.

The licensee's failure to correct a condition adverse to quality was a performance deficiency. The performance deficiency was more than minor, and therefore a finding, because it was associated with the equipment performance attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the licensee failed to correct auxiliary feedwater check valve 2FW-0191 failure to seat in November 2012 resulting in an additional failure in November 2015. Using Inspection Manual Chapter (IMC) 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," dated June 19, 2012, inspectors

determined that this finding was of very low safety significance (Green) because the finding (1) was not a deficiency affecting the design and qualification of a mitigating structure, system, or component, and did not result in a loss of operability or functionality, (2) did not represent a loss of system and/or function, (3) did not represent an actual loss of function of at least a single train for longer than its allowed outage time, or two separate safety systems out-of-service for longer than their technical specification allowed outage time, and (4) did not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant for greater than 24 hours in accordance with the licensee's maintenance rule program. The finding has a problem identification and resolution cross-cutting aspect associated with evaluation, in that, the licensee failed to thoroughly evaluate issues to ensure that resolutions address extent of conditions. Specifically, the licensee failed to appropriately classify the issue of the check valve not seating and recognize this as a degraded condition [P.2].
Inspection Report# : 2016002 *(pdf)*

Significance: G Dec 31, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Take Appropriate Maintenance Rule Corrective Actions for the 6.9 kV System
The inspectors identified a non-cited violation of 10 CFR Part 50.65(a)(1), for the failure to establish goals that provide reasonable assurance that the 6.9 kV electrical distribution system is capable of fulfilling its intended functions. Specifically, the 6.9 kV electrical distribution system had been in maintenance rule (a)(1) status since 2009 due to the failure of breakers to close on demand. Subsequently, in 2013 and 2015 there were additional breaker failures, which exceeded the established performance criteria, and were due to causes not previously evaluated. These additional failures were determined to be due to inadequate maintenance, but the licensee did not re-evaluate the established goals and revise the corrective actions to address these additional failures. The licensee implemented corrective actions to re-evaluate the goals and corrective actions for the 6.9 kV AC system. The licensee entered this issue into the corrective action program as Condition Report CR-2015-009077.

The licensee's failure to evaluate existing goals and corrective actions for a system that did not meet established performance goals was a performance deficiency. The performance deficiency was more than minor, and therefore a finding, because it affected the equipment performance attribute of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the failure to take appropriate corrective actions adversely affected the reliability of a system scoped in the plant's maintenance rule program. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 2, "Mitigating Systems Screening Questions," dated June 19, 2012, the finding was determined to be of very low safety significance (Green) because the finding: (1) was not a deficiency affecting the design and qualification of a mitigating structure, system, or component, and did not result in a loss of operability or functionality, (2) did not represent a loss of system and/or function, (3) did not represent an actual loss of function of at least a single train for longer than its allowed outage time, or two separate safety systems out-of-service for longer than their technical specification allowed outage time, and (4) does not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant for greater than 24 hours in accordance with the licensee's maintenance rule program. The finding has a human performance cross-cutting aspect associated with procedure adherence, in that, the licensee failed to follow maintenance rule implementing procedures [H.8].
Inspection Report# : 2015004 *(pdf)*

Significance: G Dec 31, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Identify Conditions Adverse to Quality
The inspectors identified two examples of a non-cited violation of 10 CFR 50, Appendix B, Criterion XVI,

"Corrective Action," for the licensee's failure to identify conditions adverse to quality. Specifically, in two separate instances involving extent of condition reviews for grease on 6.9 kV breaker stabs and degraded piping in the Unit 1 service water system, the licensee failed to identify conditions adverse to quality that were reasonably within their ability to identify. As a result, the licensee failed to: (1) identify 24 additional breakers that were in a degraded condition due to grease on secondary stabs, and (2) identify a section of service water piping that was below the ASME minimum wall thickness. The licensee implemented immediate corrective actions by entering the issues into the corrective action program for resolution and performed an operability determination for the identified degraded conditions. The licensee entered these issues into the corrective action program as Condition Reports CR-2015-009992 and CR-2015-010120.

The licensee's failure to identify conditions adverse to quality for quality related systems was a performance deficiency. The performance deficiency was more than minor, and therefore a finding, because it affected the equipment performance attribute of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the failure to identify degraded conditions could affect the reliability or availability of multiple safety related systems. Using Inspection Manual Chapter 0609, Attachment 04, "Initial Characterization of Findings," and Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 1, "Initiating Events Screening Questions," dated June 19, 2012, the finding was determined to be of very low safety significance (Green) because the finding is a deficiency affecting the design or qualification of a mitigating SSC, but the SSC maintained its operability. The finding has a problem identification and resolution cross-cutting aspect associated with evaluation, in that, the licensee failed to thoroughly evaluate issues to ensure that resolutions address extent of conditions. Specifically, the licensee failed to adequately consider the extent of the degraded conditions on similar safety related components [P.2].
Inspection Report# : 2015004 *(pdf)*

Significance:  Nov 13, 2015
Identified By: NRC
Item Type: VIO Violation
Failure to Evaluate the Lack of Missile Protection on the Turbine Driven Auxiliary Feedwater Pumps' Steam Exhaust Piping
Green. The team identified a cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to evaluate the lack of missile protection on the turbine driven auxiliary feedwater pumps' steam exhaust piping. Specifically, since June 13, 2012, the licensee failed to verify the adequacy of design of the turbine driven auxiliary feedwater pumps' steam exhaust piping to withstand impact from a tornado driven missile hazard, or to evaluate for exemption from missile protection requirements using an approved methodology. This issue does not represent an immediate safety concern because the licensee performed an operability evaluation, which established a reasonable expectation of operability. The licensee entered this issue into the corrective action program for resolution as Condition Report CR-2015-007869.

The licensee's failure to analyze the effects of a tornado missile strike on the turbine driven auxiliary feedwater pumps' steam exhaust piping was a performance deficiency. The performance deficiency was more than minor because it was associated with the protection against external events factors attribute of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the licensee failed to evaluate a design nonconformance on the turbine driven auxiliary feedwater pumps' steam exhaust piping for lack of missile protection. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 2, "Mitigating Systems Screening Questions," dated June 19, 2012, the team determined that the finding is of very low safety significance (Green) because (1) the finding was not a deficiency affecting the design or qualification of a mitigating system; (2) the finding did not represent a loss of system and/or function; (3) the finding did not represent an actual loss of function of a single train for greater than its technical specification allowed outage

time; and (4) the finding does not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant in accordance with the licensee's maintenance rule program for greater than 24 hours. The finding has a human performance cross-cutting aspect associated with conservative bias because individuals failed to use decision making practices that emphasize prudent choices over those that are simply allowable [H.14]. (Section 4OA2.5a)

Inspection Report# : 2015008 *(pdf)*

Significance: G Oct 01, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Properly Assess and Document the Basis for Operability associated with the Turbine Driven Auxiliary Feedwater Pumps' Steam Exhaust Piping not being Evaluated for Tornado Generated Missil
Green. The team identified a non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," associated the licensee's failure to perform adequate operability assessments when a degraded or nonconforming condition was identified associated with the turbine driven auxiliary feedwater pumps' steam exhaust piping not being evaluated for tornado generated missile impacts. Specifically, operators used probabilistic assumptions and failed to adequately assess and document the basis for operability when a degraded or nonconforming condition was identified associated with the turbine driven auxiliary feedwater pumps' steam exhaust piping not being evaluated for tornado generated missile impacts. This issue does not represent an immediate safety concern because the licensee performed a subsequent operability evaluation, which established a reasonable expectation of operability. The licensee entered this issue into the corrective action program for resolution as Condition Report CR-2015-007919.

The licensee's failure to properly assess and document the basis for operability when a degraded or nonconforming condition associated with the turbine driven auxiliary feedwater pumps' steam exhaust piping not being evaluated for tornado generated missile impacts was identified, was a performance deficiency. The performance deficiency was more than minor because it was associated with the protection against external events factors attribute of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the licensee failed to evaluate a design nonconformance on the turbine driven auxiliary feedwater pumps' steam exhaust piping for lack of missile protection. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 2, "Mitigating Systems Screening Questions," dated June 19, 2012, the team determined that the finding is of very low safety significance (Green) because (1) the finding was not a deficiency affecting the design or qualification of a mitigating system; (2) the finding did not represent a loss of system and/or function; (3) the finding did not represent an actual loss of function of a single train for greater than its technical specification allowed outage time; and (4) the finding does not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant in accordance with the licensee's maintenance rule program for greater than 24 hours. The finding has a human performance cross-cutting aspect associated with conservative bias because individuals failed to use decision making practices that emphasize prudent choices over those that are simply allowable [H.14]. (Section 4OA2.5b)

Inspection Report# : 2015008 *(pdf)*

Significance: G Oct 01, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
Inadequate Procedure for Surveillance on Safety-Related Service Water Systems
Green. The team identified a non-cited violation of Technical Specification (TS) 5.4.1, "Procedures," for an

inadequate procedure for performing surveillances on the station service water (SSW) systems in units 1 and 2. Specifically, Procedures OPT-207 A and B, “Service Water System,” were modified in September 2010 so that failure of any SSW vacuum breaker to OPEN was considered a degraded condition and not an inoperable condition of the associated SSW System train. However, per DBD-ME-233, “Station Service Water,” Revision 33, “Active Valves,” vacuum breakers are required by ASME [Code Section] III on the inlet and outlet piping to the diesel generator jacket water coolers to mitigate the effects of water hammer due to water column separation and subsequent rejoining following a pump trip. This issue does not represent an immediate safety concern because the licensee confirmed that all of the vacuum breakers in service had passed their most recent surveillance test. The licensee entered this issue into the corrective action program for resolution as Condition Report CR-2015-010800.

The finding is more than minor because it is associated with the procedure quality attribute of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the licensee did not ensure the guidance incorporated into quality related procedures was accurate and consistent with the design basis analysis for the systems and this conflict resulted in inadequate operability determinations associated with the SSW System. Using Inspection Manual Chapter 0609, Appendix A, “The Significance Determination Process (SDP) for Findings At-Power,” Exhibit 2, “Mitigating Systems Screening Questions,” dated June 19, 2012, the team determined that the finding is of very low safety significance (Green) because (1) the finding was not a deficiency affecting the design or qualification of a mitigating system; (2) the finding did not represent a loss of system and/or function; (3) the finding did not represent an actual loss of function of a single train for greater than its technical specification allowed outage time; and (4) the finding does not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant in accordance with the licensee’s maintenance rule program for greater than 24 hours. This finding has a human performance cross cutting aspect associated with design margins because the licensee failed to operate and maintain the SSW system equipment within design margins. Rather than ensure that margins are carefully guarded and changed only through a systematic and rigorous process, the licensee failed to re-evaluate SSW system operability with failed vacuum breaker valves even when additional test information indicated previous assumptions were incorrect [H.6]. (Section 4OA2.5c)
Inspection Report# : 2015008 *(pdf)*

Significance: G Oct 01, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Maintain Adequate Controls for Design Calculations
Green. The team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” with two examples associated with the licensee’s failure to ensure that design changes were subject to design control measures commensurate with those applied to the original design and were approved by the designated responsible organization. Specifically: (1) The licensee instituted an engineering change package to modify the design and setpoints for the station service water (SSW) system vacuum breaker valves (CP1/2-SWVAVB-01/02/03/04) and did not consider the allowable tolerance for the setpoint for all design basis events and operating conditions. The licensee adequately addressed this issue by reperforming the calculation incorporating the setpoint allowable tolerance. (2) The licensee failed to account for system design leakage in design calculation DBD-CS-096, for the safe shutdown impoundment minimum level. The licensee evaluated the water loss from the impoundment due to evaporation, but failed to account for losses due to system design leakage. The licensee adequately addressed this issue by applying the design system leak rate for a 30-day mission time to the available water in the safe shutdown impoundment.

The licensee’s failure to evaluate properly the effects of modifying the setpoint including allowable tolerances for all modes of operation and all sources of water loss from the safe shutdown impoundment was a performance deficiency. The performance deficiency was more than minor, and therefore a finding, because it was associated with the configuration control attribute of the Mitigating Systems Cornerstone, and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable

consequences. Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 2, "Mitigating Systems Screening Questions," dated June 19, 2012, the team determined that the finding is of very low safety significance (Green) because (1) the finding was not a deficiency affecting the design or qualification of a mitigating system; (2) the finding did not represent a loss of system and/or function; (3) the finding did not represent an actual loss of function of a single train for greater than its technical specification allowed outage time; and (4) the finding does not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant in accordance with the licensee's maintenance rule program for greater than 24 hours. The inspectors determined that this finding does not have a cross-cutting aspect because the most significant contributor of this finding occurred more than three years ago and does not reflect current licensee performance. (Section 4OA2.5d)
Inspection Report# : 2015008 *(pdf)*

Significance: G Oct 01, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Adequately Evaluate Operability for a Degraded Condition
The inspectors identified seven examples of a non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," associated with the licensee's failure to perform adequate operability assessments for a degraded or nonconforming condition. Specifically, when vacuum breakers installed in the service water system failed to actuate during surveillance testing, the licensee completed an operability evaluation that relied on judgement, and was contrary to the station design analysis. In particular, the licensee concluded that the vacuum breakers were not required to support operability of the service water system. Following questions from inspectors, the licensee determined that this judgement was not correct and performed a new evaluation to establish operational parameters necessary to ensure operability of the service water system with a failed vacuum breaker. The licensee entered this issue into corrective action program as Condition Report CR-2015-008334.

The failure to properly assess and document the basis for operability for a degraded or nonconforming condition was a performance deficiency. The performance deficiency was more than minor, and therefore a finding, because it was associated with the equipment performance attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, service water vacuum breakers failing to open resulted in a condition where structures, systems, and components necessary to mitigate the effects of a column separation event may not have functioned as required. Using Inspection Manual Chapter (IMC) 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," dated June 19, 2012, inspectors determined that this finding was of very low safety significance (Green) because the finding (1) was not a deficiency affecting the design and qualification of a mitigating structure, system, or component, and did not result in a loss of operability or functionality, (2) did not represent a loss of system and/or function, (3) did not represent an actual loss of function of at least a single train for longer than its allowed outage time, or two separate safety systems out-of-service for longer than their technical specification allowed outage time, and (4) does not represent an actual loss of function of one or more non-technical specification trains of equipment designated as high safety-significant for greater than 24 hours in accordance with the licensee's maintenance rule program. The inspectors determined that this finding does not have a cross-cutting aspect because the most significant contributor of this finding occurred more than three years ago, and is not indicative of current licensee performance.
Inspection Report# : 2015008 *(pdf)*
Inspection Report# : 2016001 *(pdf)*

Barrier Integrity

Emergency Preparedness

Significance: G Dec 31, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
Inadequate Compensatory Measures for Seismic Monitoring System Maintenance
The inspectors identified a non-cited violation of 10 CFR 50.54(q)(2) for a failure to meet planning standard 10 CFR 50.47(b)(4) during periodic outages of the seismic monitoring system. Specifically, during planned maintenance on the seismic monitoring system, inspectors determined that the system would not be able to perform its function of alerting control room staff of an entry condition into the emergency action levels for a seismic event, and the specified compensatory measures were not adequate. The licensee implemented correction actions to establish viable compensatory measures for periods when the seismic monitoring system is unavailable. The licensee entered these issues into corrective action program as Condition Report CR-2016-000091.

The licensee's failure to maintain the effectiveness of their emergency plan was a performance deficiency. The performance deficiency was more than minor, and therefore a finding, because it affected the ERO Performance attribute of the Emergency Preparedness cornerstone and impacted 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. Using Inspection Manual Chapter 0609, Attachment 04, "Initial Characterization of Findings," and Inspection Manual Chapter 0609, Appendix B, "Emergency Preparedness Significance Determination Process," the inspector determined that the violation is of very low safety significance (Green) because the finding represented a failure to comply with planning standard (b)(4), and, using table 5.4-1, was screened as a Green finding because an emergency action level initiating condition was rendered ineffective such that an Alert would be declared in a degraded manner for a seismic event, but no Site Area Emergency or General Emergency initiating conditions were affected. The violation was entered into the licensee's corrective action program as CR-2016-000091. The inspectors determined that this finding has a problem identification and resolution cross-cutting aspect associated with resolution, because the licensee failed to take appropriate corrective action after they recognized the inadequacy of their compensatory measures [P.3].
Inspection Report# : 2015004 *(pdf)*

Occupational Radiation Safety

Significance: G Jun 30, 2016
Identified By: Self-Revealing
Item Type: NCV Non-Cited Violation
Failure to Determine Dose Rates Prior to Allowing Entry into a High Radiation Area
The inspectors reviewed a self-revealed non-cited violation of Technical Specification 5.7.1.e associated with the licensee allowing a worker access into the 2-077-B penetration valve room, a high radiation area, without an adequate knowledge of the radiological conditions. Specifically, the licensee briefed the worker on the conditions with outdated radiation survey information even though the 2-077-B penetration valve room was subject to changing radiological conditions. As a result, an individual entered areas with general area dose rates of 210 mrem per hour rather than the briefed dose rates of less than 50 mrem per hour. This issue was entered into the licensee's corrective action program as Condition Report CR-2015-010211. Corrective actions included performing follow-up radiation surveys and implementing improvements to the high radiation area access control program.

The inspectors determined that allowing a worker access into a high radiation without an adequate knowledge of the radiological conditions was a performance deficiency. The performance deficiency was more than minor, and therefore a finding, because it affected the program and process attribute of the Occupational Radiation Safety cornerstone and adversely affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation. Specifically, entry into a high radiation area without adequate knowledge of the radiological conditions placed the individual at risk for unnecessary exposure. The finding was assessed using Inspection Manual Chapter 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," issued August 19, 2008, and was determined to be of very low safety significance (Green) because the performance deficiency was not an ALARA planning issue, there was not an overexposure nor substantial potential for an overexposure, and the licensee's ability to assess dose was not compromised. The finding has a human performance cross-cutting aspect associated with work management, because the organization failed to implement a process of planning, controlling, and executing work activities such that nuclear safety was the overriding priority [H.5].
Inspection Report# : 2016002 *(pdf)*

Significance: G Dec 31, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Barricade High Radiation Areas
The inspector identified a non-cited violation (NCV) of Technical Specification 5.7.1.a, with two examples, associated with not barricading High Radiation Areas (HRAs) with dose rates not exceeding 1.0 rem/hour at 30 centimeters from the radiation source. Specifically, access to the HRA containment trashracks and access to the HRA reactor cavity before flood up were not barricaded to prevent entry. The licensee took immediate corrective action to barricade the associated HRAs to restrict access and entered this issue into the corrective action program as CR-2015-009095 and CR-2015-009303.

The failure to barricade high radiation areas in accordance with TS 5.7.1.a was a performance deficiency. The inspector determined that the performance deficiency was more than minor, and therefore a finding, because it impacted the program and process attribute of the Occupational Radiation Safety Cornerstone and adversely affected the cornerstone objective to ensure adequate protection of worker health and safety from exposure to radiation from radioactive material during routine civilian nuclear reactor operation. Specifically, not barricading HRAs could lead to inadvertent worker entry into high dose rate areas without knowledge of the radiological conditions. The finding was assessed using IMC 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," dated August 19, 2008, and was determined to be of very low safety significance (Green) because the problem was not an ALARA planning issue; there was no overexposure, nor substantial potential for an overexposure; and the licensee's ability to assess dose was not compromised. The finding was associated with a cross-cutting aspect of Resolution in Problem Identification and Resolution area. Specifically, the organization's corrective actions to address HRA issues raised by Nuclear Oversight, the NRC and independent assessments in a timely manner commensurate with their safety significance have not been effective [P.3].
Inspection Report# : 2015004 *(pdf)*

Public Radiation Safety

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.

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Miscellaneous

Significance: N/A Sep 29, 2016
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Update FSAR Section 8.3.1.1.11
The inspectors identified a Severity Level IV non-cited violation of 10 CFR50.71(e) which requires, in part, that licensee shall update periodically the final safety analysis report originally submitted as part of the application for the license, to assure that the information included in the report contains the latest information developed. The submittal shall include the effects of all changes to the facility as described in the final safety analysis report, or all safety analyses and evaluation performed by the licensee either in support of approved license amendments or in support of conclusion that changes did not require a license amendment in accordance with 10 CFR 50.59 (c)(2). Specifically, from October 9, 2012 to September 29, 2016, the licensee did not include the effects of changes to the K300 voltage relay setpoint or the safety evaluation in submittals to the Final Safety Analysis Report, Section 8.3.1.1.11, that supported the conclusion that the changes did not require a license amendment. The licensee plans to initiate a Licensing Document Change Request to update the final safety analysis report. This is not an immediate safety concern. The licensee entered this issue into their corrective action program as Condition Report CR-2016-008177.

The licensee's failure to initiate a Licensing Document Change Request, in accordance with procedure STA-116, "Maintenance of CPNPP Licensing Basis Documents, Operating License conditions and Technical Specifications," Revision 14, instruction 6.1, to update the Final Safety Analysis Report, Section 8.3.1.1.11, for the setpoint revision of voltage K300 voltage relays was a performance deficiency. This led to a violation of 10 CFR 50.71(e) for failing to update the final safety analysis report. Using NRC Inspection Manual Chapter 0612, Appendix B, "Issue Screening," dated September 7, 2012, this was determined to be a minor performance deficiency. This violation was evaluated using the traditional enforcement process because it impacted the NRC's ability to perform its regulatory oversight function. The reactor oversight process's significance determination process does not consider violations that impacts the NRC's regulatory oversight function. This violation was determined to be a Severity Level IV violation because it was consistent with the example in Paragraph 6.1.d.3 of the NRC Enforcement Policy, dated August 1, 2016. Specifically, the licensee failed to update the final safety analysis report as required by 10 CFR 50.71(e), but the lack of up-to-date information has not resulted in any unacceptable change to the facility or procedures. No cross-cutting aspect was assigned to this violation because there was no reactor oversight process finding associated with the performance deficiency.
(Section 1R17.2.b)

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