Callaway
1Q/2010 Plant Inspection Findings

Initiating Events

Significance: G Dec 31, 2009
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Plant Transient Caused by Human Error During Power Range Nuclear Instrument Surveillance
The inspectors reviewed a self-revealing noncited violation of Technical Specification 5.4.1.a, "Procedures," after maintenance on power range nuclear instrument N41 resulted in an unanticipated plant transient. On October 6, 2009, the licensee performed Procedure ISL-SE-00N41 to calibrate power range nuclear instrument N41. During performance of the test, control rods unexpectedly inserted ten and a half steps at a rate of 72 steps per minute. The negative reactivity that was inserted due to the inward rod motion caused reactor power to drop approximately one percent power and pressurizer pressure to drop from 2235 psig to approximately 2223 psig. Subsequent review by the licensee determined that the cause of the undesired rod motion was the rod bank selector switch being left in "auto" rather than "other than auto" as required by the procedure. The licensee initiated Callaway Action Request 200908596 to address the causes of the unanticipated plant transient.

This finding was determined to be greater than minor because it impacted the Initiating Events Cornerstone attribute of human performance and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions. Using Manual Chapter 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," this finding was determined to be of very low safety significance since it did not affect the technical specification limit for reactor coolant system leakage or mitigation systems safety function, did not contribute to both the likelihood of a reactor trip and mitigation equipment or functions not being available, and did not increase the likelihood of a fire or internal/external flooding. This finding has a crosscutting aspect in the area of human performance associated with the work practices component because the reactor operator who failed to place the rod bank selector switch into the procedurally required position failed to use human error prevention techniques, such as self- and peer-checking [H.4(a)].
Inspection Report# : 2009005 *(pdf)*

Mitigating Systems

Significance: G Dec 31, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Maintain and Adequate Flooding Analysis
The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," after AmerenUE failed to provide adequate design control measures for verifying the adequacy of flooding analysis for the auxiliary feedwater pipe chase room 1206/1207. The revised calculation, performed on December 4, 2001, determined that the 10-inch piping from the condensate storage tank going to the main condenser was the limiting source of potential flooding. However several missing or incorrect assumptions challenged the basis for operability of safety related auxiliary feedwater pump transmitters located in the room 22 inches above the floor level. On December 16, 2009, the licensee reperformed the flooding analysis calculation, M-FL-04, Revision 5, including the main condenser as an additional source of flooding. Although 984 gpm of margin was lost due to inclusion of the condenser as a source, the revised analysis supported an operability determination for the transmitters as operable.

This finding was determined to be greater than minor because it impacted the Mitigating Systems Cornerstone attribute of design control and affected the cornerstone objective to ensure the availability, 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," this issue screened as very low safety significance because it was not a design or qualification deficiency that resulted in a loss of operability or functionality, did not create a loss of system safety function of a single train for greater than the technical specification allowed outage time, and did not increase the likelihood of a seismic, flooding, or severe weather initiating event. This finding was determined to not have a crosscutting aspect as the calculation of record was not reflective of current licensee performance.
Inspection Report# : 2009005 *(pdf)*

Significance: G Dec 31, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Two Examples of Failure to Follow Operability Determination Procedure
The NRC identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," for two examples of failure to follow Procedure APA-ZZ-00500, Appendix 1, "Operability and Functionality Determinations." The first example occurred on January 14, 2009, following an immediate operability determination made in response to Callaway Action Request 200900231. That Callaway action request documented significant emergency diesel generator heat exchanger tube wall thinning during eddy current testing. The operability determination performed in response to the degraded condition identified in Callaway Action Request 200900231 assumed a linear rate of degradation based on the rate observed from 2006 to 2008 and extrapolated forward to predict when heat exchanger tube plugging limits would be exceeded. Subsequent eddy current testing by the licensee found that the assumed linear degradation rate was nonconservative. The inspectors determined that the licensee failed to provide a reasonable expectation of operability consistent with the requirements of licensee Procedure APA-ZZ-00500, Appendix 1. Specifically, the licensee assumed a nonconservative linear rate of degradation for demonstrating emergency diesel heat exchanger operability despite empirical data that suggested the rate increased as a function of time.

The second example occurred on December 10, 2009, following initiation of Callaway Action Request 200910153 which documented that the steam generator C atmospheric steam dump valve (ABPV0003) would not repeatedly stroke to the same position. The Callaway action request documented that some amount of foreign material within the valve positioner was the cause of the repeatability issue with the valve. The inspectors reviewed Callaway Action Request 200910153 and noted that an immediate operability determination was not made on the identified degraded condition of foreign material within the air supply to the steam generator atmospheric steam dump valves. Since all four steam generator atmospheric steam dump valves share a common instrument air supply, the inspectors determined that the licensee failed to identify what structures, systems, and components were affected by the degraded condition in Callaway Action Request 200910153. Following questioning by the inspectors, the licensee tested the remaining three steam generator atmospheric steam dump valves. During that testing, the licensee found the steam generator B atmospheric steam dump valve would not consistently stroke and that there was a small amount of foreign material within the air operated valve positioner.
This finding was determined to be greater than minor because it impacted the Mitigating Systems Cornerstone attribute of human performance and affected the cornerstone objective to ensure the availability, 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," this issue screened as very low safety significance because it was not a design or qualification deficiency that resulted in a loss of operability or functionality, did not create a loss of system safety function of a single train for greater than the technical specification allowed outage time and did not affect seismic, flooding, or severe weather initiating events. This finding has a crosscutting aspect in the area of human performance associated with the decision making component because the licensee failed to use conservative assumptions when performing operability evaluations [H.1(b)].

Inspection Report# : 2009005 *(pdf)*

Significance: G Sep 30, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Turbine-driven auxiliary feedwater pump inoperable due to inadequately lubricated trip throttle valve

The team identified a self-revealing apparent violation of Technical Specification 3.7.5, “Auxiliary Feedwater System,” due to the failure to adequately lubricate turbine-driven auxiliary feedwater pump trip throttle valve FCHV0312. During May 25, 2009, surveillance testing, the turbine-driven auxiliary feedwater pump did not start as expected due to hardened grease on the valve spindle of FCHV0312. The previous lubrication preventative maintenance had been missed and lack of lubrication increased friction between the sliding nut and spindle preventing FCHV0312 from opening. Following lubrication FCHV0312 and the turbine-driven auxiliary feedwater pump tested satisfactorily. The licensee entered this deficiency in their corrective action program as Callaway Action Request 200904216.

This finding is greater than minor because it was associated with the equipment performance attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective to ensure the availability, 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 issue screened as potentially risk significant since the finding represented a loss of system safety function because the turbine-driven auxiliary feedwater pump PAL02 failing eliminates the capability of the plant to cope with a station blackout. The finding required a Phase 2 analysis. When evaluated per Manual Chapter 0609, Appendix A, “Determining the Significance of Reactor Inspection Findings for At-Power Situations,” and the Callaway Plant Phase 2 pre-solved table item “Turbine Driven Auxiliary Feedwater Pump Fails to Start,” the inspectors determined this finding to be potentially risk significant. The finding was forwarded to a senior reactor analyst for review. The preliminary outcome of the Phase 3 significance determination analysis, Attachment 4, determined the finding was of low to moderate safety significance.

The inspectors determined that this finding had a crosscutting aspect in the area of human performance associated with the work practices component because the licensee failed to follow the procedural guidance provided when changing the scope of a preventive maintenance task [H.4(b)].

Inspection Report# : 2009009 *(pdf)*

Significance: G Sep 30, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Maintain an Adequate Lubrication Procedure for Valve FCHV0312
The team identified a noncited violation of Technical Specification 5.4.1.a, “Procedures,” for the failure to provide adequate procedural guidance for the lubrication of auxiliary feedwater pump turbine trip throttle valve FCHV0312. The inspectors found that 2002 corrective actions to improve the lubrication procedure were not fully developed and the procedure lubrication guidance was ambiguous in that it did not specify the amount of lubricant to apply or what valve subcomponents to lubricate. The licensee entered this deficiency in their corrective action program as Callaway Action Request 200905032.

This finding is greater than minor because it was associated with the Mitigating Systems Cornerstone attribute of procedural quality and it affected the cornerstone objective to ensure the availability, 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 issue screened as very low safety significance because it was not a design or qualification deficiency that resulted in a loss of operability or functionality, did not create a loss of system safety function of a single train for greater than the technical specification allowed outage time and did not affect seismic, flooding, or severe weather initiating events. This finding did not have a crosscutting aspect since the 2003 lubrication procedure revision was not reflective of current licensee performance.
Inspection Report# : 2009009 *(pdf)*

Significance: G Sep 30, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to adequately evaluate the use of Mobile 28 grease for the turbine-driven auxiliary feedwater pump trip throttle valve.
The team identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” for the

failure to adequately evaluate the use of Mobile 28 grease for the turbine-driven auxiliary feedwater pump trip throttle valve. The licensee's 1995 evaluation included no documentation for the appropriate relubrication interval of the valve. Additionally, the inspectors identified that the valve exhibited temperatures ranging from 235°F to near 300°F compared to the 215°F valve temperature used in the evaluation. The inspectors questioned if the use of Mobile 28 grease was appropriate since operating experience suggests that Mobile 28 grease has a tendency to thicken and harden at temperatures exceeding 250°F and elevated temperatures increased the lubricant's tendency to lose oils and could result in increased stem friction. Following questioning by the inspectors, the licensee initiated Callaway Action Request 200905067 and Request for Resolution 200905651 to determine if Mobile 28 grease was an appropriate lubricant for valve FCHV0312.

This finding is greater than minor because it was associated with the Mitigating Systems Cornerstone attribute of design control and it affected the cornerstone objective to ensure the availability, 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 issue screened as very low safety significance because it was not a design or qualification deficiency that resulted in a loss of operability or functionality, did not create a loss of system safety function of a single train for greater than the technical specification allowed outage time and did not affect seismic, flooding, or severe weather initiating events. This finding did not to have a crosscutting aspect since the inadequate 1995 lubrication evaluation was not reflective of current licensee performance.

Inspection Report# : 2009009 *(pdf)*

Significance: G Sep 30, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to enter conditions adverse to quality associated with the turbine-driven auxiliary feedwater pump trip throttle valve into the corrective action program.
The team identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," regarding the licensee's failure to follow the requirements of Callaway Procedure APA-ZZ-00500, "Corrective Action Program." Specifically, licensee personnel failed to initiate Callaway action requests for adverse conditions of high hand wheel forces, galled subcomponents, and hardened, gritty grease found during the 2007 rebuild of the spare turbine-driven auxiliary feedwater pump trip throttle valve FCHV0312. The licensee has entered this issue into their corrective action program as Callaway Action Request 200905053.

This finding is greater than minor because, if left uncorrected, failure to fully utilize the corrective action program could become a more significant safety concern. The inspectors determined that this finding impacted the Mitigating Systems Cornerstone attribute of procedural quality and it affected the cornerstone objective to ensure the availability, 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 issue screened as very low safety significance because it was not a design or qualification deficiency that resulted in a loss of operability or functionality, did not create a loss of system safety function of a single train for greater than the technical specification allowed outage time and did not affect seismic, flooding, or severe weather initiating events. The cause of this finding is related to the problem identification and resolution crosscutting component of the corrective action program because licensee personnel failed to implement a corrective action program with a low threshold for identifying issues [P.1(a)].

Inspection Report# : 2009009 *(pdf)*

Significance: G Sep 30, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to ensure turbine-driven auxiliary feedwater pump is operable prior to entry into Mode 3.
The team identified a noncited violation of Technical Specification Limiting Condition for Operation 3.0.4 for entering Mode 3 with the turbine-driven auxiliary feedwater pump inoperable. Specifically, on November 3, 2008, while in Mode 4 for Refueling Outage 16, an unexpected overspeed trip of the turbine occurred during postmaintenance testing. Callaway operations staff inappropriately concluded that a water slug from the auxiliary

steam line was the cause of the turbine overspeed. Following entry into Mode 3, during preparations for turbine-driven auxiliary feedwater pump testing, the licensee found the servo control valve installed during the outage was faulty. When questioned by the inspectors, the licensee determined that the faulty servo control valve discovered in Mode 3 was responsible for the overspeed of the turbine-driven auxiliary feedwater pump that occurred in Mode 4 and that the equipment was inoperable during the mode change that occurred on November 4, 2008. The licensee entered this deficiency in their corrective action program as Callaway Action Request 200905313.

This finding is greater than minor because it is associated with the Mitigating Systems Cornerstone attribute of equipment performance and it affected the cornerstone objective to ensure the availability, 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 issue screened as very low safety significance because it was not a design or qualification deficiency that resulted in a loss of operability or functionality, did not create a loss of system safety function of a single train for greater than the technical specification allowed outage time and did not affect seismic, flooding, or severe weather initiating events. The inspectors determined that 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 fully evaluate the overspeed of the turbine-driven auxiliary feedwater pump that occurred on November 3, 2008 [P.1(c)].

Inspection Report# : 2009009 *(pdf)*

Significance: G Sep 23, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Corrective Actions for Essential Service Water Pump Cable Underground Electrical Vault Seals
The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," associated with the licensee’s failure to take prompt corrective actions to prevent continuous submergence of essential service water pump kerite insulated power cables. The continuously submerged environment for these cables existed because the two vaults containing these cables (MH-01N and MH-01S) had inadequate seals needed to protect the vaults from incoming surface water. Callaway Action Request 200201916 stated that all medium voltage cables of concern were located more than 4 feet above the basemat of the vault and thus were not in a submerged condition. The Callaway action request noted that the seals at the top lid were the source of water intrusion and that the seal design was inadequate. On July 9 and 22, 2009, the resident inspectors, along with Callaway plant engineers, inspected the two essential service water underground vaults. The north vault (train A) was found to have water covering the two safety related upper cable trays. Contrary to the Callaway Action Request 200201916 evaluation, the cable trays were about 2.5 feet and 3.5 feet from the basemat of the vault floor. During these 2009 inspections it was noted that the same lid design deficiency identified in Callaway Action Request 200201916 still existed. This led to the discovery that the Callaway Action Request actions from 2002 had not been completely performed. The only significant corrective action had been to increase the inspection frequency to once every three years.

The licensee has subsequently taken measures to improve the seals and written Callaway Action Request/Request for Resolution 200905838 to further evaluate this issue. This finding is more than minor because it affected the Mitigating Systems Cornerstone attribute of design control for ensuring the availability, reliability, and capability of safety systems. Using Manual Chapter 0609.04, “Phase 1 – Initial Screening and Characterization of Findings,” this finding was determined to be of very low safety significance because the degraded seals were a design or qualification deficiency confirmed not to result in loss of operability. The inspectors determined that the finding has no crosscutting aspect as the performance deficiencies were not reflective of current performance. The licensee entered this item into their corrective action program as Callaway Action Request 200908855.

Inspection Report# : 2009004 *(pdf)*

Significance: SL-IV Sep 23, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Correctly Identify Safety System Functional Failures in a Licensee Event Report
The inspectors identified a Severity Level IV noncited violation of 10 CFR 50.73(a)(2)(v), “Licensee Event Report System,” for a failure to report two examples of safety system functional failures in licensee event reports within 60

days after discovery of events requiring a report. The two examples were:

• March 26, 2008, discovery that operation of containment air coolers in fast speed, during a period of higher than normal containment pressure, could open the air coolers' fast speed thermal overload device rendering all the coolers incapable of automatically restarting in slow speed

• May 21, 2008, discovery of a 6.6 cubic foot void of air in the common suction piping capable of affecting the function of both of the safety injection system pumps

For each example, the inspectors reviewed the licensee's reportability evaluation and associated past operability reviews and determined each event was reportable per 10 CFR 50.73(a)(2)(v) since each example resulted in a condition which affected both trains of a system described in the Final Safety Analysis Report that was needed to mitigate the consequences of an accident. Alternate safety systems accident mitigation is not permitted as a reason to not report the discovery of the conditions. The licensee also failed to report these failures to the NRC performance indicator database because of the failure to include the safety system functional failure in each respective licensee event report.

This finding affects the Mitigating Systems Cornerstone and is greater 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. Consistent with the guidance in Section IV.A.3 and Supplement VII, Paragraph D.1 of the NRC Enforcement Policy, this finding was determined to be a Severity Level IV noncited violation. The licensee planned to update the associated license event reports as described in Callaway Action Request 200904980. This finding has a crosscutting aspect in the area of human performance associated with the resources component because the licensee failed to ensure, through adequate training, that its staff understood the guidance documents pertaining to the 10 CFR 50.73 rule [H.2.(b)].
Inspection Report# : 2009004 *(pdf)*

Significance: SL-IV Jun 23, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Submit Complete and Accurate Risk Information for a Requested License Amendment
The inspectors identified a noncited violation of 10 CFR 50.9, "Completeness and Accuracy of Information," when AmerenUE failed to submit complete and accurate quantification of risk contributors associated with a license amendment supporting a modification to replace the underground portion of the essential service water system Train B piping with high density polyethelene pipe. The inspectors questioned the risk impact of a possible control room fire which led to the discovery that the licensee had not followed their process for screening out fire areas. The licensee entered this item into their corrective action program as Callaway Action Request 200902810 and also submitted an update to License Amendment 191 to correctly account for the control room fire risk.

This finding affects the Mitigating Systems cornerstone and is greater 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. Consistent with the guidance in Section IV.A.3 and Supplement VII, Paragraph D.1 of the NRC Enforcement Policy, this finding was determined to be a Severity Level IV noncited violation. This finding has no crosscutting aspect because the licensee's failure to thoroughly review and submit the risk for control room fires was not part of a corrective action process, but instead an oversight by the licensing review process.

Inspection Report# : 2009003 *(pdf)*

Significance: G Jun 23, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Controls of Crane Work Above the Protected Train of Essential Service Water
The inspectors identified a noncited violation of 10 CFR 50.65(a)(4) associated with the licensee's failure to adequately assess and manage risk associated with crane work over the essential service water system Train A. On March 31, 2009, the licensee performed work in the vicinity of the protected essential service water system train which included movement of 1800 pound sand bags over the protected train piping. After questioning by the resident

inspectors, the licensee determined that the lifts were not conducted in accordance with station procedures since the requirements of a required engineering judgment memo were not translated into work documents. The licensee entered this item into their corrective action program as Callaway Action Request 200902726.

The finding affected the Mitigating Systems cornerstone and was determined to be more than minor because the licensee failed to implement the prescribed significant compensatory measures associated with crane work in the vicinity of safe shutdown equipment. This finding had a crosscutting aspect in the area of human performance associated with the work controls component because the licensee failed to include appropriate risk insights in planned work activities.
Inspection Report# : 2009003 *(pdf)*

Significance: G Jun 23, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate, At Power, Risk Assessment for Maintenance Activities on One Train of Essential Service Water and Emergency Diesel Generator
The inspectors identified a noncited violation of 10 CFR 50.65(a)(4) associated with the licensee's failure to perform an adequate risk assessment for planned maintenance on the emergency diesel generator Train A and essential service water pump Train A. On April 28, 2009, Callaway Plant operators removed the emergency diesel generator Train A and essential service water pump Train A from service. The inspectors' review of the plant risk profile for the in-progress maintenance activity uncovered that this risk had not been accounted for by the plant safety monitor tool. The licensee entered this item into their corrective action program as Callaway Action Request 200903480

The finding is more than minor because the risk, when correctly assessed, put the plant into a higher risk category for large early release frequency. Also the licensee risk assessment failed to consider risk significant systems, structures, and components and support systems that were unavailable during the maintenance. This finding had a crosscutting aspect in the area of human performance associated with the work controls component because the licensee failed to appropriately plan work activities consistent with nuclear safety by incorporating risk insights.

Inspection Report# : 2009003 *(pdf)*

Significance: G Apr 30, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Ensure Suitable Replacement Parts Essential for Emergency Diesel Generator Train B
The inspectors identifed a noncited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control" after the licensee failed to adequately select suitable replacement parts essential to the operation of emergency diesel generator Train B. On December 24, 2008, during performance of Procedure OSP-NE-0001B, "Standby Diesel Generator B Periodic Tests, " Callaway operations personnel identified that the emergency diesel generator Train B had an approximately 0.82 gallon per minute jacket water leak resulting in operators declaring the equipment inoperable. Upon removal, the gasket was found to be soft and extruding from the flange edge. The licensee originally concluded the gasket failed due to vibrations associated with engine shutdown but altered that conclusion after discussions witht he resident inspectors and additional investigation. The licensee ultimately determined that the cause of the failure was due to incorrect gasket material being used during Job W200773 performed on October 16, 1999. The gasket was 1/8" thick which resulted ina lack of compression. Since the gaskets are composed of an aramid fiberous material, the lack of compression allowed the gasket to absorb water and soften. The leak identified on December 24, 2008, developed once the gasket softened sufficiently to extrude from the flange edge. This issue has been entered into the licensee's corrective action program as Callaway Action Request 200812985.

This finding was greater than minor because it was associated with the mitigating systems cornerstone attribute of design control and affects the associated cornerstone objective to ensure the availability, 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, " this finding was determined to represent an actual loss of safety function of a single train for greater thatn its Technical Specification allowed outage time. When evaluated per Manual Chapter 0609 Appendiz A, "Determining the Significance of Reactor Inspection Finding for At-Power

Situations," and the Callaway Plant P hae 2 pre-solved table item "Diesel Generator Fails to Run after Start," the inspectors determined this finding to be potentially risk significant. This finding was forwarded to a senior reactor analyst for review. The results of the senior reactor analyst's Phase 3 analysis determined the finding to be of very low safety significance. This finding did not have a crosscutting aspect since it was not a performance deficiency indicative of current licensee performance.
Inspection Report# : 2009007 *(pdf)*

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Significance: G Jun 23, 2009
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to Comply with Radiation Work Permit Requirements
The inspectors reviewed a self-revealing, noncited violation of Technical Specification 5.4.1.a, which resulted from a failure to comply with radiation work permit instructions. Specifically, on November 2, 2008, during a change out of the chemical and volume control system reactor coolant Filter FBG06, the technicians failed to follow radiation work permit instructions that required notification of the ALARA specialist if the vent port radiation monitor reading was greater than or equal to 1500 millirem per hour to determine if additional briefing requirements were needed. The licensee entered this item into their corrective action program as Callaway Action Request 200811469. As corrective action, the licensee has modified the briefing procedure and modified the radiation work permits to include a requirement to notify radiation protection supervision to evaluate dose rate readings of the vent port and filter housing. Other corrective actions are being evaluated.
Failure to comply with radiation work permit requirements is a performance deficiency. The finding is greater than minor because it is associated with the cornerstone attribute of exposure control and affected the cornerstone objective, in that, the failure to follow radiation work permit requirements increases the potential for increased dose. The finding involved workers' unplanned, unintended doses or potential of such a dose (resulting from actions or conditions contrary to the radiation work permit). Using the Occupational Radiation Safety Significance Determination Process, the inspectors determined the finding to have 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. Additionally, the finding had a crosscutting aspect in the area of human performance, work practices, because the licensee failed to communicate human error prevention techniques during the prejob briefing and ensure that all personnel understood limits stated in the radiation work permit. In addition, personnel proceeded with the filter change out even though radiation levels were significantly higher than anticipated.

Inspection Report# : 2009003 *(pdf)*

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 : May 26, 2010