Callaway
4Q/2006 Plant Inspection Findings

Initiating Events

Significance: G Sep 23, 2006
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Inadequate Equipment Control Procedur Resulted in Loss of Volume Control Tank Inventory
A self-revealing noncited violation of Technical Specification 5.4.1.a, “Procedures,” was identified following two unplanned 50 gallon per minute volume control tank loss of inventory events. Both events occurred due to an inadequate equipment control procedure. On July 17 and 18, 2006, planned maintenance on the boron thermal regeneration system inlet valve created a flow path from the reactor coolant system letdown line to the equipment drain system from a known leaking demineralizer drain valve. AmerenUE did not have an administrative procedure or other effective means to control letdown line configuration with the leaking demineralizer drain valve. AmerenUE placed this issue in the corrective action program as Callaway Action Request 200605751.

This finding is greater than minor because this finding is associated with the reactor safety initiating events cornerstone attribute of procedure quality and affected the objective to limit the likelihood of events that upset plant stability. Using the Manual Chapter 0609, “Significance Determination Process,” Phase 1 Worksheet, the inspectors determined that this finding is only of very low significance because the condition did not result in the reactor coolant system Technical Specification leakage limit being exceeded (this leakage is not considered reactor coolant system leakage), did not contribute to both the likelihood of a reactor trip and the likelihood that mitigating equipment or functions would be unavailable, and did not increase the likelihood of a fire or flooding. This finding has a crosscutting aspect in the area of human performance associated with resources because AmerenUE did not ensure a complete and accurate equipment control procedure was available to plant operators.
Inspection Report# : 2006004 *(pdf)*

Significance: G Sep 23, 2006
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Review Adequacy of Procedure and Operator Response to a Turbine Trip
A self-revealing noncited violation of Technical Specification 5.4.1.a, “Procedures,” was identified after an inadequate turbine trip procedure resulted in an unplanned manual reactor trip. On May 12, 2006, the inadequate procedure lead to a steam generator level transient after plant operators failed to stabilize reactor power following a turbine trip. Operators manually tripped the reactor following a high steam generator level feedwater isolation. AmerenUE placed this issue in the corrective action program as Callaway Action Requests 200603734 and 200603736.

This finding is greater than minor because this finding is associated with the reactor safety initiating events cornerstone attributes of procedure quality and affects the objective to limit the likelihood of events that upset plant stability. Using the Manual Chapter 0609, “Significance Determination Process,” Phase 1 Worksheet, the inspectors determined this finding to be of very low safety significance because the condition was not a loss of coolant accident initiator, did not contribute to both the likelihood of a reactor trip and the likelihood that mitigating systems would be unavailable, and did not increase the likelihood of fire or flooding. This finding has a crosscutting aspect in the area of human performance associated with resources because AmerenUE did not ensure complete, accurate, up-to-date design documentation and procedures were available to plant operators.
Inspection Report# : 2006004 *(pdf)*

Significance: G Sep 23, 2006
Identified By: NRC

Item Type: FIN Finding
Review of Less Than Adequate Post Reactor Trip Evaluation
An NRC identified finding was identified after AmerenUE restarted the reactor on May 12, 2006, without completing an adequate reactor posttrip evaluation. The licensee did not adequately address discrepancies between expected and actual plant response during the transient leading to the reactor trip. The licensee did not identify the cause of the trip or implement immediate corrective actions prior to restart as required by plant administrative procedures. AmerenUE placed this issue in the corrective action program as Callaway Action Request 200605766.

This finding is greater than minor because it could become a more significant event if left uncorrected. This finding is associated with the initiating events cornerstone. Using the Manual Chapter 0609, “Significance Determination Process,” Phase 1 Worksheet, the inspectors determined this finding is of very low safety significance because the condition was not a loss of coolant accident initiator, did not contribute to both the likelihood of a reactor trip and the likelihood that mitigating systems would be unavailable, and did not increase the likelihood of fire or flooding. This finding has a crosscutting aspect in the area of problem identification and resolution associated with the corrective action program because AmerenUE did not thoroughly evaluate the cause of the reactor trip or implement timely corrective actions prior to the Emergency Duty Officer authorizing reactor restart.
Inspection Report# : 2006004 *(pdf)*

Significance: G Jun 23, 2006
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to Follow Procedures Resulted in a Main Steam Line Water Hammer
A self-revealing noncited violation of Technical Specification 5.4.1.a, “Procedures,” was identified after a water hammer transient occurred because plant operators failed to follow a procedure. On May 31, 2006, a main steam line water hammer occurred after plant operators failed to properly align the main steam drains prior to initializing a reactor coolant system heat up. Plant operators had failed to return the drain valves to service following main turbine repairs. This issue was entered into the corrective action program as Callaway Action Request 200604255.

This finding is greater than minor because this finding is associated with the initiating events cornerstone configuration control attribute for equipment lineup in that it challenged one main steam line and the associated components upstream of the main steam isolation valves. The inspectors used the at-power significance determination process because plant operators had secured the residual heat removal pump at the time of the event. This finding is of very low safety significance because the condition was not a loss of coolant accident initiator, did not contribute to the likelihood of a reactor trip or the likelihood that mitigating systems would be unavailable, and did not increase the likelihood of fire or flooding. This finding had a crosscutting aspect in the area of human performance because plant operators failed to follow established procedures.
Inspection Report# : 2006003 *(pdf)*

Mitigating Systems

Significance: G Nov 30, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to initiate Callaway Action Request
The team identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, for failure to initiate Callaway Action Requests for conditions adverse to quality that affected the reliability of mitigating systems. Specifically, on August 17, 2005, and on May 30, 2006, the licensee discovered a high point air trap in the Train A safety injection discharge piping and decreasing water level in Steam Generators A and D; however, the licensee failed to enter these conditions adverse to quality into their corrective action program. The water in the main steam line contributed to a water hammer and the void had the potential to impact operability of the safety injection system. The licensee entered this deficiency into their corrective action program as Callaway Action Request 200609812.

The performance deficiency involved the failure to initiate corrective action documents for identified conditions adverse to quality, as required. This finding is more than minor because it is associated with the equipment performance attribute of the mitigating systems cornerstone and affects the associated cornerstone objective to ensure the reliability and availability of systems that respond to initiating events. Using Manual Chapter 0609, “Significance Determination Process,” Phase 1 worksheet, the finding was determined to have very low safety significance because it only affected the mitigating systems cornerstone, was not a design or qualification deficiency, did not represent a loss of a safety function, and did not affect seismic, flooding or severe weather initiating events. The finding has cross-cutting aspects related to problem identification and resolution, in that, personnel did not identify issues at a low threshold and in a timely manner commensurate with their safety significance.
Inspection Report# : 2006012 *(pdf)*

Significance:  Nov 30, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to identify conditions adverse to quality
The team identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion V, and the corrective action program because licensee personnel failed to recognize and to identify two separate examples as conditions adverse to quality. Specifically, on April 13, 2006, and on October 17, 2006, licensee personnel did not identify blocked containment cooler tubes and a dirty emergency diesel generator turbocharger air intake filter, respectively, as conditions adverse to quality. Failure to recognize these conditions as degraded and identify them as conditions adverse to quality, delayed the immediate evaluation of operability and implementation of corrective actions. The licensee entered this deficiency into their corrective action program as Callaway Action Request 200609813.

The performance deficiency involved the failure to promptly identify and correct conditions adverse to quality. The inappropriate classification of Callaway Action Requests 200602989 and 200608806 as Action Notice Callaway Action Requests delayed and prevented actions required by the corrective action program. This finding is greater than minor because a later evaluation by the licensee determined that safety related equipment had been adversely affected. [This deficiency is similar to Manual Chapter 0612, Appendix E, Example 4.a.] Using Manual Chapter 0609, “Significance Determination Process,” Phase 1 worksheet, the finding was determined to have very low safety significance because it only affected the mitigating systems cornerstone and was not a design or qualification deficiency, did not represent a loss of a safety function, and did not affect seismic, flooding or severe weather initiating events. The finding has cross-cutting aspects related to problem identification and resolution, in that, personnel did not identify issues at a low threshold and in a timely manner commensurate with their safety significance.
Inspection Report# : 2006012 *(pdf)*

Significance:  Nov 30, 2006
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to effectively implement actions to prevent recurrence
A self-revealing noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, resulted from the failure to correct, and preclude repetition of (evaluate extent of condition), a significant condition adverse to quality related to identification of high spots in horizontal safety injection system discharge piping. Specifically, the licensee failed to identify all high spots in the susceptible discharge piping in February 2005; consequently, a modification did not prevent recurrence of voids collecting in high spots. The licensee entered the deficiency into their corrective action program as Callaway Action Request 200608644.

The performance deficiency involved the failure to effectively evaluate all susceptible points in the Train A safety injection discharge piping. This finding is more than minor because it is associated with the equipment performance attribute of the mitigating systems cornerstone and affects the cornerstone objective of ensuring the availability of systems that respond to initiating events. The failure of the design change affected the reliability of the safety injection system. Using Manual Chapter 0609, “Significance Determination Process,” Phase 1 worksheet, the finding was determined to have very low safety significance because it only affected the mitigating systems cornerstone and was not a design or qualification deficiency, did not represent a loss of a safety function, and did not affect seismic, flooding or severe weather initiating events. This finding has a cross-cutting aspect related to problem identification and resolution, in that, the licensee did not thoroughly evaluate the voiding problems such that the resolutions addressed the extent of condition.

Inspection Report# : 2006012 *(pdf)*

Significance: G Nov 30, 2006
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to promptly correct a condition adverse to quality.
A self-revealing noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI resulted after operations personnel failed to implement corrective actions. Specifically, the licensee failed to modify Procedure OSP-AL-V0003, "Auxiliary Feedwater Pump Discharge Check Valve (ALV0054) Closure Test," to ensure that upstream piping would be vented prior to performing the test to prevent overpressurizing the turbine-driven auxiliary feedwater pump suction pipe. The licensee entered this deficiency into their corrective action program as Callaway Action Request 200509277.

The performance deficiency involved the failure to change a procedure as recommended in a corrective action to prevent recurrence. This finding associated with failure to implement corrective action is greater than minor because, if left uncorrected, the finding would become a more significant safety concern. Using Manual Chapter 0609, "Significance Determination Process," Phase 1 worksheet, the finding was determined to have very low safety significance because it only affected the mitigating systems cornerstone and was not a design or qualification deficiency, did not represent a loss of a safety function, 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 resources because the licensee did not ensure complete, accurate, up-to-date procedures were available to plant operators.
Inspection Report# : 2006012 *(pdf)*

Significance: N/A Oct 13, 2006
Identified By: NRC
Item Type: FIN Finding
Supplemental inspection following a white mitigating systems performance index heat removal system performance indicator.
The U.S. Nuclear Regulatory Commission performed this supplemental inspection to assess the licensee's evaluation associated with a performance indicator (Mitigating Systems Performance Index Heat Removal System) that became White with the initial implementation of the Mitigating Systems Performance Index performance indicators during the second quarter of 2006. The primary reason for this performance indicator being characterized as White was system reliability for the auxiliary feedwater system. The licensee performed a comprehensive evaluation that identified three primary root causes for the degraded reliability of the auxiliary feedwater system: poor implementation of maintenance programs to improve quality; a lack of training for maintenance personnel; and poor coordination of personnel and resources. During this supplemental inspection, performed in accordance with Inspection Procedure 95001, the inspector determined that the licensee, in general, adequately determined the root and contributing causes of the White performance indicator and established appropriate corrective actions. In addition, the licensee conducted an extent of cause review, which included a performance assessment of the remaining mitigating systems.
Inspection Report# : 2006013 *(pdf)*

Significance: G Jun 23, 2006
Identified By: Self-Revealing
Item Type: FIN Finding
An Inadequate Switchyard Restoration Procedure Resulted in a Partial Loss of Off-Site Power
A self-revealing finding was identified after an inadequate switchyard maintenance procedure resulted in the loss of power to a safety-related bus. On June 6, 2006, off-site power was lost to a plant safety-related bus when electricians restored the "breaker failure" relay for a main switchyard breaker. The emergency diesel generator automatically started and restored power to the bus. The inspectors identified AmerenUE did not use applicable operational experience prior to conducting the work. NRC Information Notice 1991-81, "Switchyard Problems that Contribute to Loss of Offsite Power," and an AmerenUE operational experience, "Lessons Learned Switchyard Activity Checklist," addressed similar conditions. This issue was entered into the corrective action program as Callaway Action Request 200604492.

This finding is greater than minor because the availability and reliability of a safety-related 4 kV bus was challenged. This finding was associated with the equipment performance attribute of the mitigating systems cornerstone and affected the objective to ensure availability and reliability of systems that respond to initiating events to prevent undesirable

consequences. The inspectors determined this finding to be of very low safety significance because the condition was not a design or qualification deficiency per Part 9900, Technical Guidance, Operability Determination Process, did not result in a loss of safety function for a single train for greater than its Technical Specification allowed outage time, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. This finding had a crosscutting aspect in the area of human performance because personnel did not have adequate procedures and work instructions for switchyard work.
Inspection Report# : 2006003 *(pdf)*

Significance: G Apr 14, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Recognize and Correct Inadequate Emergency Procedures
The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, for the failure to take adequate corrective action to prevent recurrence of a significant condition adverse to quality. Specifically, AmerenUE failed to correct the Emergency Operating Procedure deficiencies associated with Final Safety Analysis Report requirements following an April 15, 1998 notification of the same deficiencies at another standardized nuclear unit power plant system plant. At that time AmerenUE did not identify and correct similar deficiencies involving the component cooling water system support function for residual heat removal heat exchangers. The Emergency Operating Procedure deficiencies were discovered by plant personnel on March 27, 2006, during a simulator exercise involving the transition to the emergency core cooling system recirculation phase. Problem identification and resolution crosscutting aspects were identified for the failure to adequately identify and correct Emergency Operating Procedures deficiencies to ensure operation within the design basis.

This issue was more than minor because it affected the Mitigating Systems cornerstone objective of equipment reliability. The failure to provide for component cooling water system flow through the residual heat removal heat exchangers for initial containment recirculation could result in a loss of the component cooling water system and thus become a much more significant safety concern. AmerenUE's evaluation of the condition was considered for the time allowable to establish component cooling water flow before a loss of the component cooling water system would occur. AmerenUE provided an evaluation that demonstrated a loss of component cooling water would not occur based on the timing of operator actions. Because the timing did affect the probabilistic risk assessment for human reliability, a Phase 3 risk assessment was performed by an NRC senior reactor analyst. The analyst determined that the finding was of very low safety significance, Green. AmerenUE entered this issue into their corrective action program as Callaway Action Request 200602565.
Inspection Report# : 2006011 *(pdf)*

Significance: G Apr 14, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Corrective Actions Result in Possible CCW Runout Conditions
The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, for AmerenUE's failure to implement appropriate corrective actions for maintaining component cooling water flow consistent with design basis requirements. On April 11 and 12, 2006, AmerenUE placed the Train A component cooling water system in a configuration which could result in component cooling water pump runout in the event of a loss-of-coolant accident coincident with a loss of offsite power. Crosscutting aspects associated with problem identification and resolution were identified for the failure to implement appropriate corrective actions to ensure the component cooling water system remained operable for other design basis events.

This issue was more than minor because it affected the Mitigating Systems cornerstone objective of equipment reliability in that a loss of one train of the component cooling water system could cause other mitigating equipment (i.e., pumps and heat exchangers) to fail and thus become a much more significant safety concern. Using the NRC Inspection Manual Chapter 0609, Significance Determination Process, Phase 1 Screening Worksheet, the finding was determined to be of very low safety significance because it did not result in a loss of safety function for a single train for greater than its Technical Specification allowed outage time. AmerenUE entered this issue into its corrective action program as Callaway Action Request 200602995.
Inspection Report# : 2006011 *(pdf)*

Significance: G Mar 24, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Evaluation of Degraded Plant Equipment
The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," after the licensee failed to promptly identify, evaluate, and correct a degraded control building air conditioning unit compressor. The compressor developed a hole in one of the cylinder head discharge reed valves. The hole allowed the bypass of hot discharge gases and rendered the compressor incapable of completing the safety function for the specified mission time. The hole was caused by cyclic fatigue stress. This issue was entered into the corrective action program as Callaway Action Request 200601177. This finding is associated with the crosscutting area of problem identification and resolution because the issue involved the failure of operations personnel to adequately evaluate degraded plant equipment.

This finding is greater than minor because, if left uncorrected, the degradation would have worsened and become a more significant safety concern. This finding was a qualification deficiency that resulted in loss of operability per "Part 9900, Technical Guidance, Operability Determination Process for Operability and Functional Assessment." However, the finding is of very low safety significance because it did not represent a loss of system safety function, did not represent an actual loss of safety function for a single train for greater than the 30-day Technical Specification allowed outage time, did not represent an actual loss of safety function of one or more non-Technical Specification trains of equipment designated as risk-significant per 10 CFR 50.65, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event.
Inspection Report# : 2006002 *(pdf)*

Barrier Integrity

Significance: G Nov 30, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate operability determination of a degraded main steam isolation valve
The team identified a noncited violation of Technical Specification 3.7.2, after operations personnel failed to enter and implement required Technical Specification 3.7.2 actions. Specifically, the licensee had performed an inadequate operability determination related to a degraded main steam isolation valve that resulted in exceeding the allowed Technical Specifications out-of-service time between December 29 and 31, 2004. On October 19, 2006, the NRC determined that the licensee should have declared the main steam isolation valve and its actuation channel inoperable after removing one of two hydraulic actuators from service. The licensee entered this deficiency into their corrective action program as Callaway Action Request 200609233.

The performance deficiency involved the failure to perform an adequate operability evaluation of degraded plant equipment. As a result, the licensee failed to comply with the Technical Specifications. This finding is greater than minor because the configuration control attribute of the barrier integrity cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events is affected. The team used the “At Power Significance Determination Process,” of Manual Chapter 0609. The team concluded that a Phase 2 analysis was required because this finding affects both the fuel and containment barriers.

The team performed a Phase 2 analysis using the “Risk-Informed Inspection Notebook for Callaway Nuclear Generating Station Unit 1,” Revision 2. The team assumed that (1) one of two actuator trains was unavailable on one main steam isolation valve for less than 3 days and (2) the degraded actuator did not reduce the remaining main steam isolation valve mitigation capability credit to less than full mitigation credit. Based on the results of the Phase 2 analysis, this finding is determined to have very low safety significance. This finding has a cross-cutting aspect in the area of problem identification and resolution because the licensee did not thoroughly and correctly evaluate the operability of the degraded main steam isolation valve.
Inspection Report# : 2006012 *(pdf)*

Significance: G Jun 23, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Less Than Adequate Evaluation of Containment Heat Exchanger Postmodification Tests Results and self Assessment Recommendations
The inspectors identified a noncited violation of 10 CFR 50, Appendix B, Criterion XI, "Test Control," after containment heat exchanger postmodification tests, conducted in Refuel Outages 11 (May 2001) and 12 (November 2002), failed to demonstrate that the system would perform satisfactorily in service. The inspectors identified that postmodification tests did not meet acceptance criteria, testing was not performed under appropriate conditions, test methods did not meet industry standards, and tests did not establish complete acceptance criteria. This issue was entered into the corrective action program as Callaway Action Requests 200509450, 200600012, and 200605143.

This finding is greater than minor because it affects the barrier integrity cornerstone and if left uncorrected, this finding could become a more significant safety concern for maintaining functionality of the containment. The inspectors used the "Containment Integrity Significance Determination Process," Manual Chapter 0609, Appendix H, guidance because this finding involved an actual reduction in defense-in-depth for the atmospheric pressure control of containment. The inspectors determined that this finding was Type B because the integrity of containment was affected without increasing the likelihood of core damage. The finding was of very low safety significance because the containment heat exchanger only impacted late containment failure and source terms, but not large early release frequency.
Inspection Report# : 2006003 *(pdf)*

Significance: G Jun 23, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Less Than Adequate Evaluation of Containment Heat Exchanger Performance Monitoring Requirements
The inspectors identified a noncited violation of Technical Specification 3.6.6, "Containment Spray and Cooling Systems," after AmerenUE failed to perform Surveillance Requirement 3.6.6.7 to verify minimum cooling water was provided to each containment cooling train between October 23, 2002, and June 26, 2006. Technical Specification Bases, Figure 3.6.6.7-1, "Containment Cooler Heat Removal Minimum Cooling Flow Rates," provided an "acceptable region" for reduced service water flow as a function of the available fraction of rated heat exchanger heat removal capacity. The "acceptable region" ensured sufficient duty to remove the required containment heat loads during accident conditions. AmerenUE had not performed adequate testing to determine the containment heat exchanger available percent of rated capacity. This issue was entered into the corrective action program as Callaway Action Request 200605143.

This finding is greater than minor because if left uncorrected, this finding could become a more significant safety concern. This finding affected the barrier integrity cornerstone for the heat removal capability of the containment cooling system. The inspectors used the "Containment Integrity Significance Determination Process," Manual Chapter 0609, Appendix H, because this finding involved an actual reduction in defense in depth for the atmospheric pressure control of the containment. The inspectors determined that this finding was Type B because the integrity of the containment was affected without increasing the likelihood of core damage. The inspectors concluded this finding was of very low safety significance because the containment heat exchanger only impacted late containment failure and source terms but not large early release frequency. This finding had a crosscutting aspect in the area of problem identification and resolution because AmerenUE did not adequately evaluate containment heat exchanger problems such that the causes and extent of condition were properly classified, prioritized, and evaluated for operability and reportability.
Inspection Report# : 2006003 *(pdf)*

Significance: G Jun 23, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Less than adequate Operability Determination of a Degraded Containment Heat Exchanger
The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," after AmerenUE failed to properly evaluate a degraded containment cooling train. The inspectors identified that between August 16 and September 17, 2005, the performance data for Containment Cooler Train A did not demonstrate that the cooler was capable of performing the required design bases function because of fouling. AmerenUE performed an inadequate

evaluation before placing the degraded heat exchanger in service for an 18-month fuel cycle beginning June 12, 2004. This issue was entered into the corrective action program as Callaway Action Request 200600012.

This finding is greater than minor because it affected the barrier integrity cornerstone for the heat removal capability of the containment cooling system and if left uncorrected, this finding could become a more significant safety concern because significant degradation of the containment cooler was not predicted or detected prior to the end of the operating cycle. The inspectors used the "Containment Integrity Significance Determination Process," Manual Chapter 0609, Appendix H, because this finding involved an actual reduction in defense in depth for the atmospheric pressure control of the containment. The inspectors determined that this finding was Type B because the integrity of the containment was affected without increasing the likelihood of core damage. The inspectors concluded this finding was of very low safety significance because the containment cooler heat exchanger only impacted late containment failure and source terms but not large early release frequency. This finding had a crosscutting aspect in the area of problem identification and resolution because AmerenUE did not adequately evaluate operability of a degraded containment heat exchanger such that the resolutions addressed causes and extent of condition, as necessary.
Inspection Report# : 2006003 *(pdf)*

Emergency Preparedness

Significance: G Sep 23, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Program Failure to Ensure Emergency Action Level Entered when Meeting the Defined Limit for Hazardous Atmosphere
The inspectors identified a Green noncited violation of 10 CFR 50.54(q) for a failure to adequately implement the emergency plan. The licensee failed to declare an ALERT when conditions existed that met Emergency Action Level 3J, "Hazards Affecting Plant Safety." AmerenUE placed this issue in the corrective action program as Callaway Action Request 200607835.

This finding is greater than minor because this finding is associated with the reactor safety emergency preparedness cornerstone attribute of emergency response organization performance and affects the cornerstone objective of the licensee protecting public health and safety during a radiological emergency. The inspectors used Manual Chapter 0609, "Significance Determination Process," Appendix B, "Emergency Preparedness Significance Determination Process," Sheet 1, "Failure to Comply," because the licensee misunderstood the emergency action level, but otherwise adequately implemented the emergency plan. The inspectors concluded this finding is of very low safety significance because the performance deficiency is related to the inability to implement one emergency action level at the ALERT level, which is a risk significant planning standard problem but not a risk significant planning standard function failure or a risk significant planning standard degraded function. This finding has a crosscutting aspect in the area of human performance associated with decision making because the licensee did not provide training to the emergency response organization that clearly communicated the basis for decisions associated with the language changes made to Emergency Action Level 3J.
Inspection Report# : 2006004 *(pdf)*

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Physical Protection information not publicly available.

Miscellaneous

Significance: N/A Nov 03, 2006
Identified By: NRC
Item Type: FIN Finding
Identification and Resolution of Problems
The team reviewed 230 Callaway Action Requests, several job orders, engineering evaluations, associated root and apparent cause evaluations, and other supporting documentation to assess problem identification and resolution activities. The team concluded that, generally, the licensee effectively identified, evaluated and prioritized, and implemented effective corrective actions for conditions adverse to quality. However, the team identified that additional effort is needed in all three areas. The team identified some instances of failure to initiate corrective action documents and numerous examples of failure to appropriately classify deficiencies as conditions adverse to quality. The team determined that quality and documentation for operability assessments has not improved significantly over the course of the evaluation period. Further, on occasion personnel were not self-critical as reflected by poor operational decision making. Two examples of findings reflect the condition of the corrective action problem evaluation activities in the mid portion of the assessment period. The team remained concerned that a lack of understanding of the detailed design and licensing basis continued to be evident in problem resolution. The team concluded that the licensee, generally, implemented timely, effective corrective actions, although some examples indicate continuing weakness in this area.

The team determined that the licensee had increased efforts to evaluate existing industry operating experience for relevance to the facility, and had entered identified items in the corrective action program; however, the team identified some examples that contributed to plant events.

The extensive performance improvement plan developed to address the substantive cross-cutting issue in human performance has addressed daily worker practice issues very well, although recent events occurred that indicate challenges remain. The increased management involvement in the corrective action program and in daily activities assisted in the improved performance. The team determined that licensee audits and assessments became more detailed, probing and self-critical with better assessments at the end of the assessment period. The licensee used benchmarking of industry best practices and third party evaluations that improved the corrective action program during this assessment period. While some of the changes were too recent to evaluate, the team concluded that improvements in the significant root cause process, Corrective Action Review Board graded approach, and scope and timing of corrective actions had improved.

On the basis of formal and informal interviews conducted during this inspection, the team determined that employees will raise issues to their supervision, use the corrective action program, and if necessary, bring concerns to the employee concerns program. The team concluded that the licensee established an acceptable and improving safety-conscious work environment. However, some indication exists that additional effort is needed to encourage the free flow of information to ensure safety issues are resolved promptly.
Inspection Report# : 2006012 *(pdf)*

Last modified : March 01, 2007