Calvert Cliffs 2
3Q/2010 Plant Inspection Findings

Initiating Events

Significance: G Jun 30, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Design Control Reviews of the Turbine Control System and the Nuclear Steam Supply System
The inspectors identified an NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," because Constellation did not perform adequate design reviews associated with modifications to the turbine control system and the nuclear steam supply system (NSSS). Specifically, Constellation did not adequately evaluate the potential adverse impacts of removal of the power load unbalance (PLU) turbine trip on the quality of safety related systems, structure, and components (SSCs) such as the main steam safety valves (MSSVs) and power operated relief valves (PORVs). In addition, during significant changes to plant design such as steam generator replacements and power uprates, Constellation did not conduct an adequate evaluation to determine if the turbine bypass valve (TBV)/atmospheric dump valve (ADV) design specification of opening within 3 seconds after receiving the quick open signal would still be sufficient to prevent lifting MSSVs. Immediate corrective actions included entering these issues into their corrective action program (CAP) and performing an immediate operability determination and a probabilistic risk analysis.

This finding is more than minor because it affected the Initiating Event cornerstone attribute of design control and affects the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the removal of the PLU turbine trip and the modifications to the NSSS could challenge primary and secondary overpressure protection devices and result in a stuck open MSSV or PORV. The inspectors evaluated this finding using an SDP phase 2 analysis and determined that the issue is of very low safety significance. This finding has a cross-cutting aspect in the area of human performance, decision making, because Constellation did not adequately make safety-significant decisions using a systematic process when faced with uncertain or unexpected plant conditions, to ensure safety is maintained. (H.1.a of IMC 0310).

Inspection Report# : 2010003 *(pdf)*

Significance: G Jun 30, 2010
Identified By: Self-Revealing
Item Type: FIN Finding
Did Not Establish Preventive Maintenance Program for Switchyard Panels

Green. A self-revealing finding of very low safety significance was identified because Constellation did not establish an appropriate preventive maintenance program for the 125 VDC switchyard distribution panels in accordance with MN-1, "Maintenance Program." The 125 VDC switchyard distribution system supplies power to the switchyard direct current (DC) loads for the operation of switchyard circuit breakers, emergency lights, and protective relays. Immediate corrective actions included entering this issue into the CAP and performing an inspection of all 125 VDC switchyard distribution panels. Long-term corrective actions planned include establishing an adequate preventative measure (PM) program for the 125 VDC switchyard distribution panels.

The finding is more than minor because it is associated with the equipment performance attribute of the Initiating Events cornerstone and affects the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety function. In addition, if left uncorrected, the performance deficiency could lead to a more significant safety concern. Specifically, the failure to establish an adequate preventive maintenance program for the 125 VDC switchyard distribution panels could preclude the identification of equipment deficiencies, such as loose connections, that could result in a plant transient. The finding is of very low safety significance because it did

not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available. This finding has a cross-cutting aspect in the area of problem identification and resolution, operating experience (OE), because Constellation did not use OE information, including vendor recommendations to support plant safety. Specifically, the Constellation did not implement and institutionalize OE through changes to station processes, procedures, equipment, and training associated with the switchyard preventive maintenance program (P.2.b of IMC 0305).

Inspection Report# : 2010003 *(pdf)*

Significance: G Apr 30, 2010
Identified By: NRC
Item Type: FIN Finding
Failure to Translate Design Calculation Setpoint of Phase Overcurrent Relay on Feeder Breakers
The team identified a finding for failure to translate the design calculations of phase overcurrent relays on 13 kV feeder breakers into the actual relay settings. The overcurrent relays protect the unit service transformer against faults in the primary or secondary side windings. The design specified limit of 1200 amps was determined based on the breaker rating of the feeder breakers. Constellation determined the as-found relay setting for the feeder breakers was 1440 amps which exceeded the rating of the feeder breakers. The team determined that due to the as-found relay setting, certain phase overcurrent conditions could potentially cause the breakers to fail prior to the phase overcurrent relay sensing the degraded condition. This condition could affect the recovery of the safey buses from the electrical grid. Constellation entered this issue into the corrective action program (condition report 2010-002123).

This finding is more than minor because it affected the Initiating Events Cornerstone attribute of equipment performance for ensuring the availability and reliability of systems to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Also, this issue was similar to Example 3j of IMC 0612, Appendix E, "Examples of Minor Issues," because the condition resulted in reasonable doubt of the operability of the component, and additional analysis was necessary to verify operability. This finding was determined to be of very low safety significance because the design deficiency did not result in an actual loss of function based on Constellation's determination that the maximum load current possible would not challenge the feeder breaker ratings. Enforcement action does not apply because the performance deficiency did not involve a violation of a regulatory requirement. The finding did not have a cross-cuting aspect because the most significant contributor to the perfoormance deficiency was not reflective of current licensee performance.
Inspection Report# : 2010006 *(pdf)*

Significance: G Apr 30, 2010
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to Thoroughly Evaluate and Promptly Correct Degraded Conditions Associated with Auxiliary Building Roof Leakage
A self-revealing non-cited violation (NCV) of 10 CFR Part 50, Appendix , Criterion XVI "Corrective Actions," was identified, because auxiliary building roof leakage into the Unit 1 and Unit 2 45 foot switchgear rooms was identified on several occasions from 2002 to 2009, but was not thoroughly evaluated and corrective actions to this condition adverse to quality were untimely and ineffective. This degraded condition led to the failure of the auxiliary building to provide protection to several safety related systems from external events, a ground on a reactor coolant pump (RCP) bus, and ultimately a Unit 1 reactor trip. Immediate corrective actions included: repair of degraded areas of the roof; walk downs of other buildings within the protected area that could be susceptible to damage to electrical equipment due to water intrusion; issuance of standing orders to incude guidance regarding priortizing work orders due to roof leakage; and identifying further actions to take during periods of snow or rain to ensure plant equipment is not affected. Constellation entered the issue into their corrective action program (Condition Report (CR) 2010-001351). Long-term corrective actions include implementation of improved plant processes for categorization, prioritization and management of roofing issues.

The findings is more than minor because it is associated with the protection against external factors attribute of the Initiating Events Cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. The team

determined the finding had a very low safety significance because, although it caused the reactor trip, it did not contribute to the likelihood that mitigation equipment or functions will not be available. The cause of the finding is related to the crosscutting area of Problem Identification and Resolution, Corrective Action Program aspect P.1(c) because Constellation did not thoroughly evaluate the problems related to the water intrusion into the auxiliary building such that the resolutions addressed the causes and extent-of-condition. This includes properly classifying, prioritizing, and evaluating the condition adverse to quality.
Inspection Report# : 2010006 *(pdf)*

Mitigating Systems

Significance: G Jun 30, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Risk Assessment Associated with the 2B EDG
The inspectors identified an NCV of 10 CFR Part 50.65 (a)(4), "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," because Constellation did not perform an adequate risk assessment, which resulted in an underestimation and lack of awareness of the risk during maintenance activities on the 2B emergency diesel generator (EDG). On June 18, 2010, operators removed the 2B EDG from service and shut the air start valves in preparation for a maintenance activity. The inspectors noted that this would have prevented the 2B EDG from starting and loading automatically on a safety injection actuation signal (SIAS) or loss of offsite power. The inspectors determined that Constellation did not include the unavailability of the 2B EDG on the risk assessment. Immediate corrective actions included entering this issue into the CAP and re-performing the risk assessment. When re-performed, the core damage frequency (CDF) risk during the 2B EDG maintenance activity would have increased to medium (yellow).

The finding is more than minor because if the overall risk had been correctly assessed, it would have placed Unit 2 into a higher risk category. The finding is associated with the configuration control attribute of the Mitigating Systems cornerstone and affects the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined that the finding is of very low safety significance because the incrementally core damage probability deficit was less than 1.0E-6. This finding has a cross-cutting aspect in the area of human performance, work control, because Constellation did not appropriately plan and incorporate risk insights in work activities that impacted the availability of the 2B EDG (H.3.a of IMC 0310).

Inspection Report# : 2010003 *(pdf)*

Significance: W Apr 30, 2010
Identified By: NRC
Item Type: VIO Violation
Inadequate Preventive Maintenance Results in the Failure of the 2B Emergency Diesel Generator
The NRC identified a violation of Technical Specifidcation 5.4.1 for the failure of Constellation to establish, implement, and maintain preventive maintenance requirements associated with safety related relays. The team identified that Constellation did not implement a performance monitoring program specified by the Licensee in Engineering Service Package (ES200100067) in lieu of a previously established (in 1987) 10 year service life replacement PM requirement for the 2B EDG T3A time delay relay. As a consequence, the 2B EDG failed to run following a demand start signal on February 18, 2010. Following identification of the failed T3A relay, it was replaced and the 2B EDG was satisfactorily tested and returned to service. In addition, time delay relays used in the 1B and 2A EDG protective circuits, that also exceeded the vendor recommended 10 year service life, were replaced. Constellation entered this issue, including the evaluation of extent-of-condition, into the corrective action program.

This find is more than minor because it is associated with the equipment performance attribute of the Mitigating Systems Cornerstone and adversely impacted the objective of ensuring the availability, reliability, and capability of the safety related 2B EDG to respond to a loss of normal electrical power to its associated safety bus. This finding was

assessed using IMC 0609, Appendix A and preliminarily determined to be White (low to moderate safety significance) based upon a Phase 3 Risk Analysis with an exposure time of 323 days which resulted in a total (internal and external contributions) calculated conditional core damage frequency (CCDF) of 7.1E-6. The cause of this finding is related to crosscutting area of Human Performance, Resources aspect H.2(a) because preventive maintenance procedures for the EDGs were not properly established and implemented to maintain long term plant safety by maintenance of design margins and minimization of long standing equipment issues.
Inspection Report# : 2010006 *(pdf)*

Significance: G Apr 30, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Evaluate Degraded Conditions Associated with CO-8 Relays and Implement Timely and Effective Action to Correct the Condition Adverse to Quality.
The team identified a NCV of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," because Constellation did not thoroughly evaluate and correct a degraded condition of a CO-8 relay disc sticking or binding issues which can adversely impact the function of the EDGs and the electrical distribution protection scheme. Specifically, following the February 18, 2010 event, Constellation did not identify and adequately evaluate the recent CO-8 relay failures due to sticking or binding of the induction discs in the safety related and non-safety related applications. Constellation entered this issue into the corrective action pprogram (CR 20100004673).

The finding is more than minor because it is associated with the equipment reliability attribute of the Mitigating Systems Cornerstone, and it adversely affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). This finding was determined to be of very low safety significance safety function. The cause of the finding is related to the crosscutting area of Problem Identification and Resoluton, Corrective Action Program aspect P.1(c) because Constellation did not thoroughly evaluate the previous station operating experience of CO-8 relay induction disc sticking and binding issues such that resolutions addressed the causes and extent-of-condition.
Inspection Report# : 2010006 *(pdf)*

Significance: G Apr 30, 2010
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failed to Establish Adequate Procedures for Letdown Restoration
A self-revealing NCV of Technical Specification (TS) 5.4.1.a, "Procedures" was identified for failure to establish adequate procedures for restoration of Chemical and Volume Control System (CVCS) letdown flow. On February 18, 2010, an electrical ground fault caused a Unit 1 reactor trip, loss of the 500 kV Red Bus, and CVCS letdown isolation as expected on the ensuring instrument bus 1Y10 electrical transient. Deficient operating instructions prevented timely restoration of letdown flow following the initial transient. Pressurizer level remained above the range specified in Emergency Operating Procedure (EOP)-1 for an extended period because of the operators' inability to restore letdown. This ultimately led to exceeding the TS high limit for pressurizer level. CVCS Operating Instruction OI-2A was subsequently revised, providing necessary guidance for re-opening the letdown system excess flow check valve to restore letdown flow. This event was entered into the licensee's correction action program (CR 2010-001378).

This 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). The finding is of very low safety significance because it is not a design or qualification deficiency, did not represent a loss of a safety function of a system or a single train greater than its TS allowed outage time, and did not screen as potentially risk significant due to external events. This finding has a crosscutting aspect in the area of human performance resources aspect H.2(c), because Constellation did not ensure that procedures for restoring CVCS letdown were complete and accurate.
Inspection Report# : 2010006 *(pdf)*

Significance: G Mar 30, 2010
Identified By: NRC

Item Type: NCV NonCited Violation
Failure to Implement and Maintain Surveillance Procedures Associated with Fire Barrier and Penetration Seal Inspections
The inspectors identified a non-cited violation (NCV) of Calvert Cliffs Renewed Facility Operating License Numbers DPR-53 and DPR-54, License Condition 2.E, because Constellation did not adequately implement and maintain surveillance procedures associated with fire barrier and penetration seal inspections. As a result, Constellation did not identify degraded conditions associated with one fire barrier and three penetration seals. Immediate actions taken included entering the appropriate Technical Requirement Manual (TRM) action statement, establishing an hourly fire tour until temporary repairs were completed, and entering each issue into their corrective action program (CAP) for resolution.

The finding is more than minor because it was associated with the external factors attribute (i.e. fire) of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure availability, reliability and capability of systems that respond to initiation events to prevent undesirable consequences. Specifically, the degraded conditions had to be repaired or evaluated to ensure that the barriers/penetrations would meet their design function. In addition, if left uncorrected the finding could result in a more significant safety concern in that that the condition could continue to degrade such that the barriers/penetrations could no longer perform their specified function and/or result in the inability of Constellation to recognize additional degraded fire barriers/penetrations. The inspectors determined that the finding is of very low safety significance because there was a non-degraded automatic full area water based fire suppression system in the exposing fire area. This finding has a crosscutting aspect in the area of human performance because Constellation did not define and effectively communicate expectations regarding procedural compliance and personnel following procedures for fire penetration seal inspections (H.4.b of IMC 0310).

Inspection Report# : 2010002 *(pdf)*

Significance:  Dec 31, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Design Control Associated with the Flooding of a Saltwater Pump Pit
The inspectors identified an NCV of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” because Constellation did not correctly translate the internal flooding design basis review for the saltwater (SW) pump pit compartments into specifications, procedures and instructions. Specifically, Constellation did not translate design basis flooding considerations and provisions as described in their internal plant flooding design evaluation into procedures and instructions to assure that the SW pumps would not be submerged during normal operating conditions. As a result, the No. 21 SW pump pit flooded on December 10, 2008. Constellation entered this issue into their corrective action program (CAP) for resolution as condition reports (CR)-2009-006077, CR-2009-009030 and CR-2010-00167. The immediate corrective action included initiating a CR to document some of the design considerations and provisions needed to prevent the SW pump pit compartments from flooding. The planned corrective actions included developing a preventive maintenance instruction to perform periodic maintenance on the floor drains located in the pump pit compartments and to perform an engineering evaluation to document all of the design provisions to demonstrate the flooding protection of the SW pumps.

The finding is more than minor because it is associated with the equipment performance attribute of the Mitigating Systems cornerstone and affects the cornerstone objective to ensure the availability and reliability of the SW system, which responds to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, Constellation did not maintain adequate design control to prevent a dry SW pump pit from flooding during normal operating conditions, which affected the No. 21 SW pump availability and reliability. The inspectors determined that the finding is of very low safety significance because it is not a design or qualification deficiency, did not represent a loss of a safety function of a system or a single train greater than its Technical Specification (TS) allowed outage time, and did not screen as potentially risk significant due to external events. The inspectors did not assign a cross-cutting aspect to this finding because the inspectors determined that the performance deficiency was a result of a latent issue in that the internal flooding design basis review occurred in May of 1991. Therefore, the inspectors concluded that this did not reflect current performance.

Inspection Report# : 2009005 *(pdf)*

Barrier Integrity

Emergency Preparedness

Significance: G Sep 30, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Untimely Declaration of Notice of Unusual Event
The inspectors identified an NCV of 10 CFR Part 50.47(b)(4) for the failure to implement the emergency classification and action level scheme in a timely manner during an actual event due to the complete loss of communications to one off-site agency. Specifically, on July 4, 2010, phone communications to St. Mary's County were lost and conditions requiring declaration of a Notice of Unusual Event (NOUE) were met. However, Constellation did not declare the NOUE in a timely manner. Shortly after Constellation determined that conditions met the declaration criteria for an NOUE, the phone system was restored. Constellation entered this issue into their corrective action program (CAP) for resolution. Immediate corrective action included establishing a standing order to provide operators guidance in the event of a loss of communications.

The finding is greater than minor because it is associated with the Emergency Preparedness (EP) cornerstone attribute of emergency response organization performance (actual event response) and it adversely affects the cornerstone objective to ensure that Constellation was capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. The inspectors determined that the finding is of very low safety significance in that it was associated with an actual event where the operators failed to declare an NOUE in a timely manner during a complete loss of communications to one off-site agency. This finding has a cross-cutting aspect in the area of human performance, decision making, because Constellation did not make a safety significant decision using a systematic process to declare the NOUE in a timely manner. Specifically, Constellation did not use a systematic process such as a standing order or procedure to provide guidance to operators to address a loss of communications. In addition, Constellation did not adequately implement emergency response organization's (ERO) roles and authorities as designed to obtain interdisciplinary input on safety significance decisions such as event classification (H.1.a of IMC 0310).

Inspection Report# : 2010004 *(pdf)*

Significance: G Dec 31, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Provide for Adequate Dose Assessment with the Containment Outage Door Open
The inspectors identified a Green NCV of 10 CFR 50.54(q), "Conditions of Licenses," because Constellation did not properly maintain the conditions of the CCNPP Emergency Plan. Specifically, Constellation did not implement timely changes to the Emergency Plan and its implementing procedures when the CCNPP Technical Specifications (TSs) were changed in 2001, allowing core alterations to be performed with the containment outage door (COD) open. Constellation entered this issue into their corrective action program (CAP) for resolution as condition report (CR)-2009-004951. Constellation's corrective actions included revising site procedures to provide for the monitoring and measuring any post-fuel handling incident (FHI) release which may occur through the open containment equipment hatch and COD during refueling activities.

The finding is more than minor because it affected the Emergency Response Organization (ERO) performance attribute of the Emergency Preparedness (EP) Cornerstone to ensure that Constellation is capable of implementing adequate measures to protect the public health and safety in the event of a radiological emergency. In accordance with

IMC 0609, Appendix B, “Emergency Preparedness Significance Determination Process,” the inspectors determined that the finding is of very low safety significance (Green). Specifically, the inspectors utilized IMC 0609, Appendix B, Section 4.9 and Sheet 1, “Failure to Comply,” and determined that the failure to comply with an aspect of the Emergency Plan related to dose assessment (10 CFR 50.47(b)(9)) was a risk-significant planning standard (RSPS) problem; but it was not a RSPS functional failure of the Calvert Cliffs dose assessment process. This was not a degraded RSPS function because Calvert Cliffs maintained good procedures and practices for assessing unmonitored releases in the event of an on-site radiological event that provided assurance that this performance deficiency ultimately would not have affected the outcome of protecting the health and safety of the public or of station personnel. The inspectors did not assign a cross-cutting aspect to this finding because the inspectors determined that the performance deficiency was a result of a latent issue in that the inadequate review of the change occurred in 2001. Therefore, the inspectors concluded that this did not reflect current performance.

Inspection Report# : 2009005 *(pdf)*

Significance: G Dec 31, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Provide for Adequate Compensatory Measures with the Wide Range Noble Gas Monitor Out of Service
The inspectors identified a Green NCV of 10 CFR 50.54(q), “Conditions of Licenses,” because Constellation did not properly maintain the conditions of the CCNPP Emergency Plan. Specifically, Constellation did not implement timely changes to the Emergency Plan and its dose assessment implementing procedures when CCNPP transitioned from the NUREG-0654 emergency action level (EAL) scheme to the NUMARC NESP-007 EAL scheme in 1993. The change in the EAL schemes resulted in additional site area emergency (SAE) and general emergency (GE) classification levels based on effluent monitor radiation levels. When these new EALs were added, Constellation did not revise their Emergency Response Plan Implementing Procedure (ERPIP)-821 to consider the radiation levels, which would exist at the SAE and GE thresholds. The specific concern involved the inability to take the compensatory measures when the wide range noble gas monitor (WRNGM) was out of service; manual radiation readings could not be taken near the WRNGM due to the radiation levels which could exist at the SAE and GE conditions. Constellation entered this issue into their corrective action program (CAP) for resolution as condition report (CR)-2009-003720. Constellation’s corrective actions included: the installation of a radiation meter at the 10-meter distance from the main stack that was remotely readable; revision of emergency Response Plan Implementing Procedure (ERPIP)-821 to account for the current Calvert Cliffs EAL thresholds; and the performance of a human performance investigation to provide for additional corrective actions to assure that plant changes are evaluated for impact and necessary changes to the emergency plan and its implementing procedures.

The finding is more than minor because it affected the Emergency Response Organization (ERO) performance and procedure quality attributes of the Emergency Preparedness (EP) Cornerstone to ensure that Constellation is capable of implementing adequate measures to protect the public health and safety in the event of a radiological emergency. In accordance with IMC 0609, Appendix B, “Emergency Preparedness Significance Determination Process,” the inspectors determined that the finding is of very low safety significance (Green). Specifically, the inspectors utilized IMC 0609, Appendix B, Section 4.9 and Sheet 1, “Failure to Comply,” and determined that the failure to comply with an aspect of the Emergency Plan related to dose assessment (10 CFR 50.47(b)(9)) was an RSPS problem; but it was not a RSPS functional failure of the CCNPP dose assessment process. This was not a degraded RSPS function because Calvert Cliffs EAL scheme has redundant EALs that provided assurance that this performance deficiency ultimately would not have affected the outcome of protecting the health and safety of the public or of station personnel. This finding has a cross-cutting aspect in the area of identification and resolution of problems because the WRNGM has failed in the past (including as recently as December 2008 and May 2009), yet Constellation did not appropriately evaluate the proposed compensatory actions in a manner to assure the dose assessment function was not negatively affected. Specifically, the provisions of the ERPIP-821 sampling procedure had repeatedly been relied upon, but in fact were not able to satisfy the dose assessment functions required by the CCNPP Emergency Plan.

This item was discussed in 2010-002 Report.

Inspection Report# : 2009005 *(pdf)*

Significance: G Nov 20, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Corrective Actions for Bay Water Level EAL Entry Criteria
The inspectors identified a Green NCV of 10 CFR 50.54(q), for Constellation's failure to maintain the Emergency Plan to adequately meet the standards in 50.47(b). Specifically, Constellation failed to correct a condition related to not having a clear method to assess and determine the bay water level emergency action level (EAL) entry criteria for an Unusual Event (UE). Constellation's initial compensatory and corrective actions were inadequate because the compensatory action did not reflect the actual global bay conditions, thereby preventing operators from correctly implementing the EAL; and, the proposed corrective action, although not implemented, would have resulted in a decrease in effectiveness of the emergency plan. The immediate corrective actions included revising the compensatory measures to ensure that operators measure the bay water level at the appropriate location (i.e., in front of the trash racks). The planned corrective actions included installing a bay level monitoring system.

The inspectors determined that this finding was more than minor because it was associated with the facilities and equipment attribute of the Emergency Preparedness cornerstone and, it affected the cornerstone objective of ensuring that a licensee is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. Specifically, inadequate monitoring of intake bay level could have resulted in failure to declare a UE. The inspectors reviewed the EAL entry criteria and determined that this performance deficiency did not affect Constellation's ability to declare any event higher than a UE. The inspectors evaluated this finding using IMC 0609, Appendix B, "Emergency Preparedness Significance Determination Process," Sheet 1, "Failure to Comply." Since the declaration of a UE based on low bay level could have been missed or delayed, this finding was considered consistent with the example provided and was therefore determined to be of very low safety significance. This finding had a cross-cutting aspect in the area of problem identification and resolution because Constellation did not take appropriate corrective action to address this safety issue in a timely manner, commensurate with its safety significance and complexity. (P.1.d of IMC 0305).

Inspection Report# : 2009007 *(pdf)*

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

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

Miscellaneous

Significance: SL-IV Dec 31, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
Information Technology Analyst Failure to Disclose Prior Criminal History to Gain Unescorted Access Authorization

This severity level IV NCV identified on July 8, 2009, stated that contrary to 10 CFR 50.34(c) and the CCNPP Physical Security Plan, a former ITA deliberately failed to disclose elements of his criminal history when applying for UAA at CCNPP. This violation was documented in a July 8, 2009, NRC letter to CCNPP. CCNPP determined that the event occurred because the provisions within NEI 03-01, "Nuclear Power Plant Access Authorization Program," used to determine trustworthiness and reliability were not properly applied. This was evident in that the security access procedure, used by the reviewing official, did not identify the expectation to consider the psychologist report and comments, which lead directly to granting the ITA UAA prior to the discovery of potentially disqualifying information. To correct this performance deficiency, several corrective actions were implemented including: communicating the requirements in NEI 03-01 to access investigators that require a review of the psychologist report prior to determination of authorizing UAA, verifying all PADS reports were reviewed to ensure validity and accuracy of the information, issuing Operating Experience (OE) for this event, updating the security procedures and the security access guideline to accurately reflect the NEI 03-01 guidance, and performing a self-assessment of the Security Access Standard to identify vague or interpretive guidance in other processes. Additionally, the CAP opened an action to track and complete an effectiveness review of the security background investigator's training material and reviewing official process to evaluate trustworthiness and reliability based on the accumulation of all information, including the psychologist report prior to authorizing UAA.

The inspectors reviewed the corrective actions outlined in the August 21, 2009, Apparent Cause Evaluation, and CCNPP's review of previous industry OE dated October 2, 2009. The inspectors concluded that the root cause analysis was thorough and complete. Additionally, corrective actions taken were appropriate and timely. This violation is closed.
Inspection Report# : 2009005 *(pdf)*

Significance: N/A Nov 20, 2009
Identified By: NRC
Item Type: FIN Finding
PI&R Report Summary
The inspectors concluded that Constellation was generally effective in identifying, evaluating and resolving problems. Specifically, Constellation personnel identified problems, entered them into the corrective action program at a low threshold, and prioritized issues commensurate with the safety significance. For most cases, Constellation appropriately screened issues for operability and reportability and performed causal analyses that appropriately considered extent of condition, generic issues, and previous occurrences. However, Constellation occasionally used generic operability statements as the basis for operability decisions which resulted in inadequately documented conclusions. Corrective actions taken to address the problems identified in Constellation's corrective action process were typically implemented in a timely manner. However, for one issue reviewed by the inspectors, inadequate implementation of corrective actions resulted in one NRC-identified finding. In another case, corrective action for risk assessment tool deficiencies were not fully effective.

The inspectors also concluded that, in general, Constellation adequately identified, reviewed, and applied relevant industry operating experience to CCNPP operations. In addition, based on those items selected for review by the inspectors, Constellation's audits and self-assessments were thorough and probing.

Based on the interviews the inspectors conducted over the course of the inspection, observations of plant activities, and reviews of individual corrective action program and employees concerns program issues, the inspectors did not identify any concerns that site personnel were not willing to raise safety issues nor did they identify conditions that could have had a negative impact on the site's safety conscious work environment.

Inspection Report# : 2009007 *(pdf)*

Last modified : November 29, 2010