Oyster Creek
2Q/2011 Plant Inspection Findings

Initiating Events

Significance: G Mar 31, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Establish Proper Baseline Data for Service Water Pumps in Accordance with ASME Code
The inspectors identified a Green NCV of 10CFR 50.55a, Codes and Standards, because Exelon did not properly establish baseline reference values for the service water pumps as required by the American Society of Mechanical Engineers (ASME) Operation and Maintenance (OM) Code for Inservice Testing (lST). Exelon procedure 641.1.001, "Seryice Water Pump Operability and In-Service Test" required the operators to take differential pressure baseline data at three flow rates, while the ASME requirement in subsection ISTB (lST of pumps in light-water reactor power plants) paragraph 4.1, "Preservice Testing" requires that this data be taken at a minimum of five points. Exelon's corrective actions included revising procedure 641.1.001 to be in accordance with the ASME code, rebaselining #1 and #2 service water pumps, and performing an extent of condition review to ensure that all pumps are baselined in accordance with the ASME Code. Exelon entered this issue into the CAP as lR 1175089.

This finding is more than minor because it is similar to IMC 0612 Appendix E minor example 2.cin that the same issue affected both service water pumps and both have experienced degrading performance into the action range. Additionally, the finding is more than minor because if left uncorrected it could have the potential to lead to a more significant safety concern. The inspectors used Inspection Manual Chapter 0609.04, Phase 1 lnitial Screening and Characterization of Findings, to determine that the NCV screened as very low safety significance (Green). This finding is applicable to the lnitiating Events cornerstone as a transient initiator, but screens as Green because the finding does not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. This finding has a cross-cutting aspect in the area of human performance, resources, where complete, accurate, and upto-date procedures are available and adequate to assure nuclear safety. (1R22)

Inspection Report# : 2011002 *(pdf)*

Significance: G Dec 31, 2010
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to Implement Procedures Resulting in Reactor Scram
A Green, self-revealing NCV of Technical Specification 6.8.1.a occurred when Exelon did not adequately implement plant startup procedures which resulted in an automatic reactor scram. Immediate corrective actions included just in time training with all reactor operators, increased management oversight during the subsequent startup, and procedural changes to list all alarms by name that must be cleared prior to raising reactor pressure above 500 psig. Exelon is performing a full root cause evaluation on the event (IR 1155520).

The inspectors determined that the performance deficiency was similar to the “not minor if” statement contained in example 4b of IMC 0612, Appendix E, “Examples of Minor Issues,” because the performance issue resulted in a manual reactor scram. The finding was more than minor in accordance with IMC 0612, Appendix B, “Issue Screening,” because it was associated with the equipment performance attribute of the initiating events cornerstone and affected the objective to limit the likelihood of those events that upset plant stability and challenge critical safety

functions during power operation. In accordance with IMC 0609.04 (Table 4a), “Phase 1 – Initial Screen and Characterization of Findings,” the finding was determined to be of very low safety significance (Green) because the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. This finding has a cross-cutting aspect in the area of human performance, work practices (H.4(b)), where personnel work practices support human performance. Specifically, Exelon defines and effectively communicates expectations regarding procedural compliance and personnel follow procedures. On December 23, operators did not verify that condenser vacuum was adequate prior to raising reactor pressure above 500 psig contrary to established procedural guidance.

Inspection Report# : 2010005 *(pdf)*

Mitigating Systems

Significance: G Jun 30, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to perform acceptance inspection of contractor work results in damage to safety related instrument cable
The inspectors identified a NCV of 10 CFR Part 50, Appendix B, Criterion X, “Inspection,” when Exelon did not conduct a post maintenance inspection of work accomplished by a contractor on main steam isolation valve (MSIV), V-1-10, which resulted in heat damage to the valve position indication cabling causing a ground on the cable and the receipt of a half scram. Exelon’s corrective actions included replacement of the damaged cable, performance of a work group evaluation and revising the main steam insulation work orders to include a caution to not install insulation on top of cabling.

The finding was more than minor because it affected the design control attribute of the Mitigating Systems Cornerstone of equipment performance to ensure the availability, reliability, and capability of a class I cable. Additionally, this finding is similar to IMC 0612, Appendix E, Example 4.a, in that an evaluation required by procedures was not performed and resulted in a failure in the system. The inspectors evaluated the risk of this finding using IMC 0609, “Significance Determination Process,” Attachment 4, “Phase 1 - Initial Screening and Characterization of Findings.” The inspectors determined that the finding was of very low safety significance (green) because it did not result in an actual loss of function of the MSIV or the reactor protection system. The inspectors determined that this performance deficiency did not involve a cross cutting aspect as it occurred 4 years earlier and is not indicative of current licensee performance. (Section 1R12)

Inspection Report# : 2011003 *(pdf)*

Significance: G Apr 01, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
Control Cables for the Reactor Coolant Inventory Makeup Source Not Protected From Fire Damage
The team identified an NCV of 10 CFR 50, Appendix R, lll.G.2, in that Exelon failed to maintain the credited reactor coolant inventory makeup system free of fire damage in the event of a fire in the 'B' 480 volt (V) switchgear room. Specifically, Exelon failed to assure that the 'A' control rod drive (CRD) pump would remain available during 'B'480V switchgear room fire scenarios. Cables associated with the'A'CRD pump low pressure suction trip are located in the 'B' 480V switchgear room and are not protected by one of the methods specified in 10 CFR 50, Appendix R, Section lll.G.2. Fire damage to these cables could result in the trip of the credited 'A' pump and render it inoperable from the control room. Exelon entered this issue into its corrective action program for long term resolution as lssue Report (lR) 01187591 and promptly established compensatory measures (an hourly fire watch) in the 'B' 480V switchgear room. Exelon also promptly performed an extent of condition review to ensure the 'B' CRD pump was not similarly affected for fire areas that credited its remote operation from the main

control room.

This finding is more than minor because it is associated with the external factors attribute (fire) of the Mitigating Systems Cornerstone and adversely affects the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the availability of the credited 'A' CRD pump was not ensured for a 'B'480V switchgear room fire scenario. A Senior Reactor Analyst performed a Phase 3 Fire Protection Significance Determination Process analysis and determined that this finding was of very low safety significance (Green). The Phase 3 SDP conservatively assumed the 'A' CRD pump failed for eight separate fire scenarios initiated by electrical ignition sources or transient combustibles. The results of the SDP were largely dominated by the availability of the feedwater and condensate system for reactor coolant inventory control because its circuits were not routed through the 'B' 480V switchgear room. This finding did not have a cross-cutting aspect because the performance deficiency occurred during development of the safe shutdown analysis in the 1980's and is not reflective of current licensee performance.
Inspection Report# : 2011007 *(pdf)*

Significance: G Mar 31, 2011
Identified By: NRC
Item Type: FIN Finding
Failure to Make an Accurate lmmediate Operability Determination
The inspectors identified a finding of very low safety significance (Green) when Exelon did not make an accurate immediate operability determination in accordance with OP-M-108-115 "Operability Determinations" following discovery of a through wall leak in the emergency service water (ESW) pump discharge piping. The finding does not involve enforcement action because no violation of regulatory requirements was identified. Exelon's corrective actions included performing a prompt operability determination which determined that the piping was inoperable, replacing the discharge tee for the 'C' ESW pump, and performing detailed ultrasonic tests on the remaining portions of the ESW piping at the intake structure. Exelon placed this issue in the corrective action program (CAP) as lR 1164020.

The finding is more than minor because it affects the procedure quality attribute of the mitigating systems cornerstone to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences, specifically the ESW system piping. In accordance with table 4a of IMC 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," the finding was determined to be of very low safety significance (Green) because it was not a design or qualification deficiency confirmed not to result in loss of operability or functionality; did not result in a loss of system safety function; did not represent an actual loss of safety function of a single train for greater than its technical specification allowed outage time; was not an actual loss of safety function of one or more non-technical specification trains of equipment designated as risk significant per 10CFR50.65 for greater than 24 hours and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. This finding has a cross-cutting aspect in the area of human performance, resources because Exelon did not ensure that procedures were available and adequate to ensure nuclear safety, specifically the accuracy of Attachment 3 to OPAA-108-115 was not adequate to guide a STA/SRO to the proper operability determination when evaluating leakage from an ASME class 1 ,2 or 3 component.
Inspection Report# : 2011002 *(pdf)*

Significance: G Mar 31, 2011
Identified By: NRC
Item Type: NCV NonCited Violation

Failure to Establish Procedures for Responding to the Loss of Control Room Annunciator
The inspectors identified a Green NCV of technical specification 6.8.1.a for Exelon's failure to have written procedures for activities listed in Regulatory Guide 1.33 , which includes procedures for abnormal, off-normal, or alarm conditions and procedures for combating emergencies and other significant events. Specifically, Exelon did not have a procedure to cope with a loss of main control room annunciators. Exelon entered this issue into the CAP as lR 1205823.

This finding is not similar to any of the IMC 0612 Appendix E minor examples, but is more than minor because it affects the procedure quality attribute of the mitigating systems cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors used lnspection Manual Chapter 0609 Appendix M, "Significance Determination Process Using Qualitative Criteria," because other significance determination process guidance was not suited to provide reasonable estimates of the significance of this inspection finding. With the assistance of NRC management, the inspectors determined that the finding was of very low safety significance (Green) because there was no actual loss of safety system function during the time period the annunciator panels were inoperable. This finding has a cross-cutting aspect in the area of human performance, resources (H.2(c)), where complete, accurate, and up-to-date procedures are available and adequate to assure nuclear safety. (Section 4OA3)
Inspection Report# : 2011002 *(pdf)*

Significance: G Dec 31, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Snubber Maintenance History Not Taken Into Account When Conducting Service Life Reviews
The inspectors identified a Green non-cited violation of technical specification 4.5.M.1.f, “Snubber Service Life Monitoring”, while inspecting 4 snubber testing failures that occurred during 1R23. Specifically, Exelon’s snubber testing program, contained in SP-1302-52-045, “Requirements for Functional Testing of Snubbers”, does not evaluate snubber maintenance and test records to identify common cause failures of snubbers due to environmental (temperature, vibration, humidity, etc) conditions and adjust snubber service life expectations accordingly so snubber service life reviews can be accomplished effectively without service life affecting reactor operations. Exelon took immediate corrective action to repair or replace the failed snubbers, performed an analysis to ensure the snubber failures had no impact on system operation, and entered this issue into their corrective action program.

There are no similar examples in IMC 0612, Appendix E, “Examples of Minor Issues”. This finding is more than minor because it affects the equipment performance attribute of the mitigating systems cornerstone to ensure the availability, reliability and capability of system that respond to initiating events to prevent undesirable consequence, specifically the safety related piping systems in containment. In accordance with table 4a of IMC 0609.04, “Phase 1 – Initial Screening and Characterization of Findings,” the finding was determined to be of very low safety significance (Green) because it was a qualification deficiency confirmed not to result in loss of operability or functionality. This finding has a cross-cutting aspect in the area of problem identification and resolution because Exelon did not thoroughly evaluate problems such that the resolutions address causes and extent of conditions. Additionally, Exelon did not conduct effectiveness reviews of corrective actions to ensure that the problems are resolved. (P.1(c)).

Inspection Report# : 2010005 *(pdf)*

Significance: G Aug 27, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Scaffold Installation Procedure Not Properly Implemented
The team identified a finding of very low safety significance (Green) involving a non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion V, Instructions, Procedures, and Drawings, because Exelon did not properly implement scaffolding

control procedural requirements. Specifically, Exelon did not perform engineering evaluations for scaffolding constructed within the minimum allowed distance of safety related equipment to determine its acceptability. Exelon entered the issue into their corrective action system and remediated each identified scaffold issue in accordance with procedural requirements.

The finding was more than minor because it was associated with the external factors attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. In accordance with IMC 0609, Significance Determination Process, Attachment 0609.04, Phase 1 -Initial Screening and Characterization of Findings, the finding was determined to be of very low safety significance because it was not a design or qualification deficiency, did not represent a loss of a systemltrain safety function, and did not screen as potentially risk significant due to external events. The performance deficiency had a cross-cutting aspect in the area of human performance, Work Practices, because Exelon had not effectively communicated expectations regarding procedural compliance. Specifically, Exelon had not followed procedures and obtained engineering evaluations for scaffolds that did not meet the requirements contained in procedures for scaffold installation in the plant. [IMC 0310, Aspect H.4(b)].
Inspection Report# : 2010008 *(pdf)*

Significance:  Aug 27, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
EDG Low Voltage Control Cable Submergence
The team identified a finding of very low safety significance (Green) involving an NCVof 10 CFR 50, Appendix B, Criterion III, Design Control. Specifically, Exelon did not maintain safety-related emergency diesel generator (EDG) instrumentation and low voltage control cables in the EDG cable trenches from becoming submerged, which resulted in subjecting the cables to an environment for which they were not qualified. Exelon entered the issue into their corrective action program and determined that there was no impact to EDG operability based on the observed condition of the cables and no apparent signs of degradation. The finding was determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of equipment performance and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, Exelon did not maintain the cables for the EDG 1 and EDG 2 in an environment for which they were designed when the cables were allowed to be submerged in a below grade trench without ensuring adequate drainage. The team determined the finding could be evaluated using the SDP in accordance with IMC 0609, Significance Determination Process, Attachment 0609.04, Phase 1 - Initial Screening and Characterization of Findings. The finding was of very low safety significance because it was a qualification deficiency confirmed not to result in a loss of operability.

The performance deficiency had a cross-cutting aspect in the area of human performance, Resources, because Exelon did not ensure that personnel, equipment, procedures, and other resources were available and adequate to maintain long term plant safety through minimization of long-standing equipment issues. Specifically, Exelon did not correct long-standing deficiencies that allowed debris to block the drains allowing the cables to become submerged. Additionally, procedures were not adequate to ensure that the trenches were inspected and the drains were maintained to ensure that they remained free of debris. [IMC 0310, Aspect H.2.(a)).
Inspection Report# : 2010008 *(pdf)*

Significance: G Aug 27, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
1A2 and 1B2 480 V Load Center Transformer Cooling Fan Testing
The team identified a finding of very low safety significance (Green) involving an NCVof 10 CFR 50, Appendix B, Criterion XI, Test Control, because Exelon had not established a test program for safety-related load center transformer cooling fans to confirm the capability of the fans to cool the load center at its rated output. Specifically, Exelon had not established periodic testing to verify the 1A2 and 1 B2 transformer cooling fans were functional to support the design rating allowed for in operational procedures. This failed to meet the design requirement established in modification package SDD OC-732A, which required in part, that the cooling system fans shall be periodically tested for operability both in the manual and automatic modes. Exelon entered the issue into the corrective action program and tested the fans during the inspection to ensure the fans were operational in the manual mode and would be in a ready to operate status if needed.

The finding was determined to be more than minor because it was associated with the Mitigating Systems Cornerstone attribute of procedure quality and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the lack of testing impacts the objective because there is no method to determine the capability of the fans to support cooling of the transformers at their rated output. The team determined the finding could be evaluated using the SDP in accordance with IMC 0609, Significance Determination Process, Attachment 0609.04, Phase 1-lnitial Screening and Characterization of Findings. The finding was of very low safety significance because it was not a design or qualification deficiency, did not represent a loss of a system/train safety function, and did not screen as potentially risk significant due to external events. The team did not identify a cross-cutting aspect with this finding because this was an old design/test issue and therefore was not reflective of current performance.
Inspection Report# : 2010008 *(pdf)*

Significance: G Aug 27, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Core Spray System I Pump Room Degraded Ball Float Drain Valve
The team identified a finding of very low safety significance (Green) involving an NCVof 10 CFR 50, Appendix B, Criterion XVI, Corrective Action, because Exelon did not identify and correct a condition adverse to quality. Specifically, Exelon did not identify and correct an impaired ball float drain valve that had the potential to adversely impact two safety-related core spray pumps during an internal flooding event. Exelon's short-term corrective actions included entering the issue into their corrective action program, removing the ball float valve impairment to restore functionality, and improving configuration control awareness.

The finding is more than minor because it is associated with the configuration control attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective of ensuring the capability, availability and reliability of systems (core spray pumps) that respond to initiating events to prevent undesirable consequences. In accordance with IMC 0609, Significance Determination Process, Attachment 0609.04, Phase 1 - Initial Screening and Characterization of Findings, the finding screened as potentially risk significant. After additional SDP Phase 3 analysis, the team determined the finding was of very low safety significance (Green) because flood mitigation that was impacted by the finding would have minimal impact on redundant equipment required to

safely shut down the unit. The performance deficiency had a cross-cutting aspect in the area of Problem Identification and Resolution, Corrective Action Program Component, because Exelon did not identify issues completely, accurately, and in a timely manner commensurate with their safety significance. Specifically, Exelon did not identify a degraded condition involving a non-functional ball float drain valve. [IMC 0310, Aspect P.1 (a)]
Inspection Report# : 2010008 *(pdf)*

Significance: G Jul 02, 2010
Identified By: NRC
Item Type: FIN Finding
Preconditioning of Isolation Condenser Valves Prior to ASME In-service Test
Green: The inspectors identified a Green finding when Exelon cycled valves for maintenance prior to performing scheduled quarterly in-service testing (IST) which resulted in unacceptable preconditioning of valves within the isolation condenser system on April 7. This finding was of very low safety significance and was determined not to be a violation of NRC requirements. Exelon entered this issue into their corrective action system as IR 1053801.

The finding was more than minor because it was associated with the equipment performance attribute of the mitigating systems cornerstone and affected the objective to ensure the reliability and capability of systems that respond to initiating events to prevent undesirable consequences. In accordance with IMC 0609.04, “Phase 1 – Initial Screening and Characterization of Findings,” the finding was determined to be of very low safety significance because it was not a design or qualification deficiency which resulted in a loss of operability or functionality, did not represent a loss of system safety function, did not represent an actual loss of safety function of a single train for greater than its 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 for greater than 24 hours, and was not potentially risk significant due to a seismic, flooding or severe weather initiating event.

The performance deficiency had a cross-cutting aspect in the area of human performance because Exelon did not appropriately coordinate work activities to support long term equipment reliability. [H.3(b)]. (Section 1R19)

Inspection Report# : 2010003 *(pdf)*

Significance: G Jul 02, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Core Spray ASME Code Compliance Issues
Green: The inspectors identified a SL IV, Green non-cited violation of 10CFR50.55(a) when Exelon did properly implement the ASME code requirements for the core spray system check valves. Specifically, Exelon did not properly implement the ASME Check Valve Condition Monitoring Program, improperly extended the inspection interval when working under the condition monitoring program, and did not restore compliance with the ASME code for check valve testing once the condition monitoring program requirements were not met. Exelon entered this issue into their corrective action system as IR 1093256.

This finding is more than minor because it affects the equipment performance attribute of the mitigating system cornerstone to ensure the reliability and availability of the core spray system. Specifically, ASME testing assesses the operational readiness of certain valves required to perform a specific safety function. In accordance with IMC 0609.04, “Phase 1 – Initial Screening and Characterization of Findings,” the finding was determined to be of very low safety significance because it was not a design or qualification deficiency which resulted in a loss of operability or functionality, did not represent a loss of system safety function, did not represent an actual loss of safety function of a single train for greater than its 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 for greater than 24 hours, and was not potentially risk significant due to a seismic, flooding or severe weather initiating event.

The inspectors determined that the finding also involved traditional enforcement because Exelon did not seek NRC approval prior to using alternate means to demonstrate the core spray check valves could perform their intended

function, which impacted the regulatory process. In accordance with Supplement I, Reactor Operations, of the NRC Enforcement Policy, the NRC determined that the safety significance of this violation was SL IV because the situation, per example 3 of a SL IV violation, was a matter with more than a minor safety or environmental significance.

This finding has a cross-cutting aspect in the area of human performance because Exelon did not use conservative assumptions in decision making and assumed the core spray system check valves would be in compliance with the ASME code despite using a non-approved testing method (H.1(b)). (Section 1R15)

Inspection Report# : 2010003 *(pdf)*

Significance: G Jul 02, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Follow Preventive Maintenance Procedure Leading to Incomplete Fire Diesel Maintenance
Green. The inspectors identified a Green non-cited violation of Technical Specification 6.8.1 for Exelon's failure to follow MA-MA-716-009, "Preventive Maintenance Work Order Process." Specifically, Exelon closed work order R2120325 without completing the necessary work and did not take action to evaluate the acceptability of this action, contrary to MA-MA-716-009 requirements. Exelon entered this issue into their corrective action program as IRs 1085811 and 1088269 to evaluate the corrective actions needed to address this issue.

This finding is more than minor because it affects the equipment performance attribute of the mitigating systems cornerstone and affects the cornerstone objective of ensuring the availability, reliability, and dependability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the fire diesel is the credited backup source of makeup water to the isolation condensers and the failure to perform scheduled preventive maintenance challenges the availability and reliability of the diesel.
This finding affects the fire protection defense-in-depth strategies involving fire suppression and screens to Green using IMC 0609, Appendix F, "Fire Protection Significance Determination Process." Because of the fire diesel function as an isolation condenser makeup source, the inspectors reviewed the Mitigating Systems Cornerstone as well and found it also screened to Green because the finding is not a design or qualification deficiency confirmed not to result in loss of operability, does not represent a loss of system safety function, does not represent the actual loss of safety function of a single train for greater than its allowed outage time, does 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 for greater than 24 hours, and does not screen as potentially risk significant due to seismic, flooding, or severe weather initiating event. This finding has a cross-cutting aspect in the area of human performance because Exelon personnel did not follow procedures. Specifically, when Exelon did not follow or refer to procedure MA-MA-716-009, "Preventive Maintenance Work Order Process," they did not develop an evaluation to consider the impacts of omitting portions of the work package for the two-year fire diesel preventive maintenance [H.4(b)] [Section 40A2.1.c.(2)]
Inspection Report# : 2010007 *(pdf)*

Barrier Integrity

Significance: G Apr 01, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
B.5.b. Phase 2 and 3 Mitigating Strategy

This finding, affecting the Barrier Integrity Cornerstone, is related to mitigative measures developed to cope with losses of large areas of the plant; in response to Section B.5.b. of the February 25, 2002, Interim Compensatory Measures (ICM) Order (EA-02-026) and related NRC guidance. This finding has been designated as "Official Use Only - Security-Related Information;" therefore, the details of this finding are being withheld from public disclosure. This finding has a cross-cutting aspect in the area of H.2.(C). See inspection report for more details.
Inspection Report# : 2011009 *(pdf)*

Significance: G Jul 02, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Corrective Actions Associated With the Reactor Building to Torus Vacuum Breaker Trip Valve Failures
Green. The inspectors identified a finding of very low safety significance (Green) involving a non-cited violation of 10 CFR 50 Appendix B, Criterion XVI, "Corrective Action," for Exelon's failure to promptly identify and correct a condition adverse to quality associated with the January 2009 failure of the reactor building to torus vacuum breaker system. Specifically, Exelon did not promptly identify and correct an inadequate instrument air flow capacity condition associated with the reactor building to torus vacuum breaker trip valve. Due to the inadequate corrective actions, the reactor building to torus vacuum breaker system experienced a subsequent failure in April 2009. Exelon entered this issue into their corrective action program as I R 1088325 to evaluate the corrective actions needed to address this issue.

The finding was determined to be more than minor because the performance deficiency was associated with the containment attribute of the barrier integrity cornerstone and adversely impacted the cornerstone objective of providing reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. The inspectors evaluated the finding using IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of Findings," Table 4a, for the Barrier Integrity Cornerstone. Specifically, since all four containment barrier screening questions were answered "no," the finding was determined to be of very low safety significance (Green). In addition, the failure did not represent an actual open pathway in the physical integrity of the reactor containment. This finding has a cross-cutting aspect in the area of problem identification and resolution because Exelon failed to thoroughly evaluate the condition adverse to quality and appropriately address the cause. [P.1.(c)] [Section 40A2.1.c.(1)]
Inspection Report# : 2010007 *(pdf)*

Emergency Preparedness

Significance: G Jul 02, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Provide Adequate Compensatory Actions for the RAGEMS Being Out Of Service
Green: The inspectors identified a Green non-cited violation (NCV) of 10 CFR 50.54(q), “Conditions of Licenses,” because Exelon did not properly maintain the conditions of the Oyster Creek Emergency Plan. Specifically, Exelon did not implement timely compensatory actions for the Plan and its implementing procedures when the Oyster Creek main stack radioactive gaseous effluent monitoring system (RAGEMS) was discovered to have a faulted sample supply line. The licensee entered this issue into their corrective action program and implemented corrective actions, including revising site procedures to provide for an alternate sampling plan and the repair of the sample line.

The finding was more than minor because it affected the Emergency Response Organization Performance attribute of the EP Cornerstone to ensure that the licensee is capable of implementing adequate measures to protect the public

health and safety in the event of a radiological emergency. In accordance with Inspection Manual Chapter (IMC) 0609, Appendix B, “Emergency Preparedness Significance Determination Process,” the inspectors determined the finding to be of very low safety significance (Green), because other methods of performing the dose assessment function were functional while the RAGEMS was unavailable.

The performance deficiency had a cross-cutting aspect in the area of corrective action, because there were indications that the RAGEMS sample line had not been sufficiently repaired, yet Exelon did not implement compensatory actions in a timely manner to assure the RAGEMS dose assessment function was still available. Specifically, the RAGEMS was out of service for 12 days from the time of the sample line defect identification, yet an adequate alternate sampling plan was not in place until 8 days after that discovery [P.1(d)]. (Section 4OA2)

Inspection Report# : 2010003 *(pdf)*

Significance: G Jul 02, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
Failure To Notify the NRC within the time requirements of 10 CFR 50.72
Green: The NRC identified a Severity Level IV non-cited violation (NCV) of 10 CFR 50.72 when Exelon did not make the required initial notification within 8 hours of the occurrence of the condition. Specifically, on the morning of April 7th, a maintenance technician found the stack radioactive gas effluent monitoring system (RAGEMS) sampling line disconnected, which rendered it inoperable and Exelon did not make the required report until 1535 on April 8. The licensee entered this issue into their corrective action program with an action to review this issue for lessons learned and to incorporate them into an ongoing apparent cause evaluation on technical human performance.

The finding was more than minor because it is similar to inspection manual chapter 0612, appendix E, example 2.d. The finding was determined to be subject to traditional enforcement because the NRC’s ability to perform its regulatory function was potentially impacted by the licensee’s failure to report the event within the eight hour time requirement of 10 CFR 50.72. The finding was determined to be a Severity Level IV violation in accordance with Section D of Supplement I of the NRC Enforcement Policy. The finding was not suitable for evaluation using the significance determination process, but has been reviewed by NRC management and is determined to be a finding of very low safety significance.

This finding has a cross-cutting aspect in the area of human performance, decision-making. Specifically, Exelon’s delay in determining that the reported condition of the stack RAGEMS sampling line constituted a loss of monitoring capability did not demonstrate that the licensee uses conservative assumptions in decision making and adopts a requirement to demonstrate that the proposed action is safe in order to proceed rather than a requirement to demonstrate that it is unsafe in order to disapprove the action. [H.1(b)]. (Section 4OA3)

Inspection Report# : 2010003 *(pdf)*

Occupational Radiation Safety

Public Radiation Safety

Significance: G Dec 31, 2010
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to Conduct Representative Sampling of Stack Effluents
A Green, self-revealing NCV of Technical Specification 6.8.4 occurred for Exelon’s failure to maintain continuous, representative monitoring and sampling of plant stack gaseous effluents, as required by the Offsite Dose Calculation

Manual, due to degradation of sample line integrity over the period March 2006 through March 2010. Exelon reported the issue, initiated compensatory monitoring, repaired the stack sample tubing, conducted bounding dose calculations, and entered this issue, including the evaluation of extent-of-condition, into the corrective action program (IR 01053577).

This finding is more than minor because the performance deficiency adversely impacted the Public Cornerstone objective of ensuring adequate protection of public health and safety in that effluent releases were not fully monitored in accordance with applicable requirements to ensure proper quantification and characterization of radioactive releases. This finding was assessed for significance using IMC 0609, Appendix D, and determined to be of very low safety significance because: Exelon was able to re-assess the radioactive effluent using alternative radiation monitoring instrumentation and programs, therefore Exelon had data by which to assess dose to a member of the public, determine the dose impact to the public, and conclude that the doses were less than the dose values in Appendix I to 10 CFR Part 50 and/or 10 CFR 20.1301(e). The cause of this finding is related to the crosscutting area of Human Performance, Resources aspect H.2(c) because procedures were not sufficiently robust for review of reasonableness and consistency of data from samples to support identification of the issue in a timely manner.

Inspection Report# : 2010005 *(pdf)*

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 Mar 31, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Administer Post Event Fitness for Duty Testing
The inspectors identified a Severity Level (SL) lV, non-cited violation (NCV) of 10 CFR 26.31 (c) (3) and Exelon procedure SY-AA-102-202, "Testing For Cause," for failure to administer post-event drug and alcohol testing after a potential substantial degradation of the level of safety of the plant occurred on December, 23,2010. Additionally, the inspectors identified that the licensee failed to administer a post event fatigue assessment per 10 CFR 26.211 (aX3) and Exelon procedure LS-AA-1 19-1001 , "Fatigue Management." Specifically, the inspectors identified that on December, 23, 2010, the licensee failed to conduct post-event drug and alcohol testing, and fatigue assessments of the operators whose human error caused a reactor scram during a reactor startup. Upon identification, the licensee entered this issue into the CAP.

The inspectors determined that the finding involved traditional enforcement because Exelon did not perform 10 CFR 26.31 post event fitness for duty (FFD) testing and 10 CFR 26.211 post event fatigue assessments. lf a licensed operator had tested positive, Exelon would have had to report this to the NRC per 10 CFR26.719 (2xii). Exelon's failure to perform the required testing had the potential to impact the NRC's ability to take action against individual licensed operators, which impacted the regulatory process. In accordance with Section 6.14, "Fitness for Duty," of the NRC Enforcement Policy, the NRC determined that the safety significance of this violation met the SL lV criteria because the situation, per example 3 of a SL lV violation, was a matter with more than a minor safety or environmental significance. (Section 4OA2)
Inspection Report# : 2011002 *(pdf)*

Last modified : October 14, 2011