

## Clinton

### 2Q/2014 Plant Inspection Findings

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#### Initiating Events

**Significance:** G Jun 30, 2014

Identified By: NRC

Item Type: FIN Finding

#### **ELECTRO HYDRAULIC CONTROL SYSTEM LEAK RESULTS IN MANUAL SCRAM**

The inspectors documented a self-revealing, Green finding associated with a failure to provide adequate work instructions to perform repairs to the shutoff valve for 1TGCV4 main turbine control valve. Specifically, contrary to station procedure MA-AA-716-010, "Maintenance Planning," Revision 21, the work instructions generated to install the shutoff valve failed to reference the appropriate cap screw size, lubricate the cap screws and install lock washers on the cap screws used to attach the shut off valve to the control valve. This allowed the cap screws to loosen and ultimately fail due to fatigue resulting in a leak of electro hydraulic control fluid of sufficient rate to require a manual scram of Unit 1 on April 26, 2013. The valve was replaced and successfully tested and the unit was restarted. The licensee documented this issue in the corrective action program (CAP) as Issue Report (IR) 01506929.

The performance deficiency was more than minor because it was associated with the procedure quality attribute of the Initiating Events Cornerstone and adversely 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 and is therefore a finding. Using Manual Chapter 0609, Attachment 4 "Initial Characterization of Findings," and Appendix A "The Significance Determination Process for Findings at Power", issued June 19, 2012, the finding was screened against the initiating events cornerstone and determined to be of very low safety significance (Green) because the finding did not cause a reactor trip with a coincident loss of mitigating equipment relied upon to transition the plant from the onset of the trip to a stable shutdown condition. The inspectors determined that no cross cutting aspect will be assigned to this performance deficiency since it occurred in 2008 and is not indicative of current plant performance.

Inspection Report# : [2014003](#) (*pdf*)

**Significance:** G Jun 30, 2014

Identified By: NRC

Item Type: FIN Finding

#### **FAILURE TO IMPLEMENT ENGINEERING CHANGE RESULTS IN MANUAL REACTOR SCRAM**

The inspectors documented a self-revealing, Green finding associated with a failure to implement engineering change (EC) 380150 "Upgrade Feed Water Level Control and Turbine Speed." Specifically, contrary to station procedure CC-AA-256, "Process for Managing Plant Modifications Involving Microprocessor Technology," Revision 2, the licensee failed to identify, evaluate and mitigate software component critical parameters in the engineering change that installed the digital feed water system. This resulted in nonlinear reactor water level oscillations when transferring from the motor driven feed pump to the turbine driven feed pump that required the reactor operator to manually scram the reactor prior to reaching the level 8 automatic scram set point. The licensee documented this issue in the corrective action program as IR 1596987.

The performance deficiency was more than minor because it was associated with the design control attribute of the

Initiating Events Cornerstone and adversely 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 and is therefore a finding. Using Manual Chapter 0609, Attachment 4 “Initial Characterization of Findings,” and Appendix A “The Significance Determination Process for Findings at Power”, issued June 19, 2012, the finding was screened against the initiating events cornerstone and determined to be of very low safety significance (Green) because the finding did not cause a reactor trip with a coincident loss of mitigating equipment relied upon to transition the plant from the onset of the trip to a stable shutdown condition. The inspectors determined this finding affected the cross cutting area of human performance in the aspect of documentation where the organization creates and maintains complete, accurate and up-to date documentation. Specifically, the contractors failed to create complete documentation to be use by the licensee when evaluating the critical parameters.

Inspection Report# : [2014003](#) (*pdf*)

**Significance:**  Feb 14, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to Correct Identified Combustibles**

The inspectors identified a finding of very low safety significance and associated NCV of License Condition 2.F for the failure to remove an identified combustible. Specifically, the failure to remove a piece of wood located directly under a safety-related cable tray for a period in excess of three years was a failure to take corrective action as required by the licensee’s Quality Assurance Program. The licensee entered the issue into their Corrective Action Program and removed the piece of wood by the end of the inspection.

The finding was determined to be more than minor because the combustible material was located directly beneath a safety-related cable tray and, as such, represented a credible fire scenario. The finding was determined to be of very low safety significance (i.e., Green) because the impact of the fire would be largely limited to one train/division of equipment important to safety. The inspectors determined that the finding has a cross-cutting aspect in the area of human performance because the licensee did not ensure sufficient resources were available to support nuclear safety. Specifically, the failure to remove the identified combustible was due to a lack of resources to schedule and accomplish removing the material.

Inspection Report# : [2014007](#) (*pdf*)

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## Mitigating Systems

**Significance:**  Jun 30, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

**FOREIGN MATERIAL IN RELAY PREVENTS EMERGENCY DIESEL GENERATOR OUTPUT BREAKER FROM CLOSING**

The inspectors documented a self-revealing, Green non-cited violation of Clinton Power Station Technical Specification 5.4.1, “Procedures,” for a failure to prevent foreign material from entering a relay associated with the Division 1 Diesel Generator. Specifically, contrary to station procedure CPS 8501.05, “CV-2 Relay Inspection and Calibration with Doble Test Equipment,” Revision 4, the licensee failed to verify that relay 227-DGIKA, CV-2 AB phase was clean and free of all foreign material. The foreign material prevented the relay from operating and satisfying the permissive logic required to close the Division 1 Diesel Generator output breaker resulting in having to

declare the Diesel Generator inoperable. The relay was replaced and successfully tested and the licensee documented this issue in the corrective action program as IR 01600935.

The finding was more than minor because it was associated with the procedure quality attribute of the mitigating systems cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences and is therefore a finding. Using Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," issued June 19, 2012, Exhibit 2 for the Mitigating Systems Cornerstone, the inspectors answered "Yes" to the screening question under the Mitigating Systems Cornerstone "Does the finding represent an actual loss of function of at least a single Train for > its Tech Spec Allowed Outage Time OR two separate safety systems out-of-service for > its Tech Spec Allowed Outage Time?," since the finding represented an actual loss of function of at least a single Train for > its Tech Spec Allowed Outage Time of 14 days. Therefore, a detailed risk evaluation was performed using IMC 0609, Appendix A. The Senior Reactor Analysts (SRAs) evaluated the finding using the Clinton Standardized Plant Analysis Risk (SPAR) model version 8.17, Systems Analysis Programs for Hands-on Integrated Reliability Evaluations (SAPHIRE) version 8.1.0 and concluded that the risk increase to the plant due to this finding is very low (Green). The inspectors determined this finding affected the cross cutting area of human performance in the aspect of work management where the organization implements a process of planning, controlling and executing work activities such that nuclear safety is the overriding priority. Specifically, the licensee's implementation of their foreign material exclusion process for this maintenance activity lacked sufficient planning, controls and execution to prevent foreign material from entering a risk significant piece of safety related equipment.

Inspection Report# : [2014003](#) (*pdf*)

**Significance:**  Jun 30, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

**FAILURE TO DEVELOP ADEQUATE PROCEDURES FOR PRE-PLANNING AND PERFORMING MAINTENANCE AFFECTING SAFETY-RELATED EQUIPMENT**

The inspectors documented a self-revealing, Green non-cited violation (NCV) of Clinton Power Station Technical Specification 5.4.1, "Procedures" for a failure to develop adequate procedures for properly pre-planning and performing maintenance affecting the performance of safety-related equipment which resulted in the subsequent failure of the Division 3 Diesel Room Ventilation damper hydramotor on August 15, 2013. Specifically, during pre-scheduled performance testing of the Division 3 (High Pressure Core Spray System) Emergency Diesel Generator Room Ventilation Damper hydramotor, the ventilation supply air intake damper, 1VD01YC, failed to open as a result of Damper Hydramotor 1TZVD003A experiencing an age-related degradation failure. This was due in part to the licensee's failure to properly pre-plan and perform the appropriate preventive maintenance for the hydramotor due to inadequate procedures. Procedure WC-AA-113, "Predefine Database Revisions," Revision 2, did not provide adequate instructions appropriate to the circumstances to properly pre-plan and perform maintenance affecting the performance of safety-related equipment. This resulted in a loss of safety function of the HPCS Diesel Generator and its supported High Pressure Core Spray system because of the low confidence that diesel room temperature would be maintained to support the diesel during an event when it would be required to perform its function. The licensee subsequently replaced the hydramotor, tested the new hydramotor successfully and restored the diesel ventilation system to operable. They documented this issue in the corrective action program as IR 1546973 and IR 1547294.

The performance deficiency was more than minor because it was associated with the equipment performance attribute of the mitigating systems cornerstone attribute and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences and is therefore a finding. Using Manual Chapter 0609, Appendix A, "The SDP for Findings At-Power," issued June 19, 2012, Exhibit 2 for the Mitigating Systems Cornerstone. The inspectors answered "Yes" to the screening question under the Mitigating Screening Cornerstone "Does the finding represent a loss of system and/or function?" since the

finding resulted in a loss of safety function. Therefore, a detailed risk evaluation was performed using IMC 0609, Appendix A. The SRAs evaluated the finding using the Clinton SPAR model version 8.17, SAPHIRE version 8.1.0 and concluded that the risk increase to the plant due to this finding is very low (Green). The inspectors determined that no cross-cutting aspect will be assigned to this performance deficiency since it occurred in 2005 and is not indicative of current plant performance

Inspection Report# : [2014003](#) (*pdf*)

**Significance:**  Dec 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

**FAILURE TO IMPLEMENT REQUIREMENTS OF STATION SCAFFOLD INSTALLATION PROCEDURE.**

Inspectors identified a NCV of 10 CFR 50, Appendix B, Criterion V, Instructions, Procedures and Drawings for the failure to follow station procedure MA AA-796-024, "Scaffold Installation, Inspection, and Removal," Revision 8, to obtain engineering approval for seismic scaffolds not complying with specific requirements of approved station procedures during the C1R14 outage. Specifically, seismic scaffolds identified during walkdowns by the inspectors did not meet procedural requirements for required clearances from or tie off to safety-related components and did not have the required engineering evaluation and approval for acceptability. The licensee documented this issue in the corrective action program (CAP) as Issue Report (IR) 01574003 and completed the required engineering review and approval.

The inspectors determined that the licensee's failure to follow the station procedure for scaffold installation, inspection, and removal was a performance deficiency. The performance deficiency is more than minor because it was associated with the protection against external factors attribute of the Mitigating Systems (MS) 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. Using IMC 0609, Attachment 4 "Initial Characterization of Findings," and Appendix G "Shutdown Operations Significance Determination Process," the finding was screened against Attachment 1, Checklist 8 and found to be of very low safety significance (Green) because the finding did not: 1) increase the likelihood of a loss of reactor coolant system (RCS) inventory, 2) degrade the licensee's ability to terminate a leak path or add RCS inventory when needed, 3) significantly degrade the licensee's ability to recover decay heat removal once it is lost, 4) result in one or less safety relief valves being available to establish a heat removal path to the suppression pool with the vessel head on. The finding was determined to have a cross-cutting aspect in the area of human performance, associated with the resources component, in that the licensee ensures that personnel, equipment, procedures and other resources are available and adequate to assure nuclear safety. Specifically, the licensee failed to ensure that the scaffold coordinator and superintendents had the required training to assure nuclear safety while erecting seismic scaffolds. [H.2(b)]

Inspection Report# : [2013005](#) (*pdf*)

**Significance:**  Dec 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

**FAILURE TO ASSESS AND MANAGE RISK ASSOCIATED WITH THE PERFORMANCE OF SURVEILLANCE TESTING ON AVERAGE POWER RANGE MONITORS**

Inspectors reviewed a self-revealing NCV of 10 CFR 50.65(a)(4) for failing to manage risk when the Division 4 Nuclear System Protection System (NSPS) inverter unexpectedly transferred from its normal direct current (DC) power source to its alternate alternating current (AC) power source during the Average Power Range Monitor (APRM) 'D' surveillance test. Specifically, the installed operational barrier failed to protect a fuse block when a test cable connector was inadvertently dropped. This caused a momentary electrical short and resulted in the inverter to

transfer power sources. The licensee documented this issue in the CAP as IR 01476647 and performed (1) a stand-down with instrument maintenance craftsmen to discuss the event and lessons learned, (2) changes to the licensee's risk/hazards assessment process to include a checklist designed to aid in challenging jobsite conditions, (3) conduct of paired observations by maintenance department managers on use of the checklist, and (4) a case study with the maintenance shops using this event to highlight determining risk perception and robust protective barriers.

The inspectors determined that the licensee's failure to adequately manage the risk associated with performance of surveillance testing for APRM 'D' was a performance deficiency. The performance deficiency is more than minor because it was associated with the configuration control attribute of the MS cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The performance deficiency involved the licensee's assessment and management of risk associated with performing maintenance in accordance with 10 CFR 50.65(a)(4); therefore the inspectors used IMC 0609, Attachment 4 "Initial Characterization of Findings," and Appendix K, "Maintenance Risk Assessment and Risk Management Significance Determination Process," and determined that a detailed risk evaluation would be required since the issue represented an actual loss of safety function of a system. The Region III Senior Reactor Analyst (SRA) completed a detailed risk evaluation using the NRC's Standardized Plant Analysis Risk (SPAR) model for Clinton Power Station (CPS), Version 8.17 and SAPHIRE Version 8.09 to calculate an Incremental Core Damage Probability Deficit (ICDPD) for the unevaluated condition. The SRA ran the SPAR model conservatively assuming that High Pressure Core Spray System (HPCS) was unavailable during the 6-hour time. The result was an ICDPD of less than 2E-08/year. In accordance with IMC 0609, Appendix K, because the ICDPD was not greater than 1E-06/year, the finding was determined to be of very low safety significance (i.e., Green). The finding was determined to have a cross cutting aspect in the area of human performance, associated with the work practices component, in that personnel work practices are used commensurate with the risk of the assigned task, such that work activities are performed safely. Specifically, the technicians did not perform adequate self or peer checks after installation of the barrier to ensure the barrier would provide protection from shorting. [H.4(a)]

Inspection Report# : [2013005](#) (pdf)

**Significance:**  Dec 19, 2013

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

#### **Insulation Resistance Testing for Unit Substation Transformers Was Incorrectly Performed**

A finding of very low safety significance (Green) and associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed from an event that resulted in a reactor scram. Specifically, during troubleshooting of the Unit Substation "A" transformer failure on December 08, 2013, it was identified that the licensee incorrectly measured the resistance between the transformer windings instead of the winding and ground. The licensee entered this concern into its Corrective Action Program as AR 01594794, and satisfactory re-measured the insulation resistance for the un-faulted transformer 1AP11E.

The performance deficiency was determined to be more than minor because it 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. The finding screened as very low safety significance (Green), because the inspectors answered NO to all Mitigating Systems Screening questions in Exhibit 2 of Appendix A of IMC 0609. The finding was determined to have a cross-cutting aspect in the area of human performance, associated with the work control component, in that the licensee failed to ensure supervisory and management oversight of work activities, including contractors, such that nuclear safety is supported. H.4(c).

Inspection Report# : [2013009](#) (pdf)

**Significance:**  Dec 19, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

**Inadequate Acceptance Criteria in the Insulation Resistance Test Procedure**

The inspectors identified a finding of very low safety significance (Green) and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to have adequate acceptance criteria in testing procedure. Specifically, the minimum acceptable insulation resistance for transformers as specified in Procedure CPS 8440.01 did not meet the minimum vendor recommended values in accordance with the vendor manual. The licensee entered this concern into its Corrective Action Program as IR 01596730 and IR 01598375. The performance deficiency was determined to be more than minor because it was associated with the Mitigating Systems cornerstone attribute of design control and affected the cornerstone objective of ensuring capability and reliability of systems that respond to initiating events to prevent undesirable consequences. The finding screened as very low safety significance (Green), because the inspectors answered NO to all Mitigating Systems Screening questions in Exhibit 2 of Appendix A of IMC 0609. The inspectors identified the finding had a cross-cutting aspect in the area of problem identification and resolution, associated with the corrective action program component because the licensee failed to ensure issues potentially impacting nuclear safety are promptly identified. (P.1(a))

Inspection Report# : [2013009](#) (pdf)

**Significance:**  Sep 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

**FAILURE TO FOLLOW PROCEDURE AND APPROPRIATELY DOCUMENT BASIS FOR IMMEDIATE OPERABILITY OF THE DIVISION 2 EMERGENCY DIESEL GENERATOR**

An NRC identified non-cited violation of 10CFR50, Appendix B, Criterion V, Instructions, Procedures and Drawings for the failure to follow procedure OP-AA-108-115, "Operability Determinations", Revision 11, and document the basis that a reasonable expectation of operability existed after an immediate operability determination. Specifically, after the control room received a report of a crack on the after cooler ducting of the Division 2 emergency diesel generator the licensee failed to document their basis that a reasonable expectation of operability existed for the Division 2 emergency diesel generator. The licensee documented this issue in the corrective action program as Action Request 015401540.

The inspectors determined that the licensee failing to follow the station procedure for operability determinations was a performance deficiency. Specifically, the licensee failed to follow the station procedure for operability determinations and appropriately document the decision and the basis that a reasonable expectation of operability existed for the Division 2 emergency diesel generator. The performance deficiency is more than minor because if immediate operability determination and either the basis that a reasonable expectation of operability exists or the declaration that the system, structure or component is inoperable is not appropriately documented it could lead to a more significant safety concern. Using Manual Chapter 0609, Attachment 4 "Initial Characterization of Findings," and Appendix A "The Significance Determination Process for Findings at Power" the finding was screened against the mitigating systems cornerstone and determined to be of very low safety significance (Green) because the finding was/did not: 1) a deficiency affecting the design or qualification of a mitigating structure, system or component, 2) represent a loss of system and/or function, 3) represent an actual loss of function of a single train for greater than its technical specification allowed outage time, 4) represent an actual loss of function of one or more non-technical specifications trains of equipment designated as high safety-significant for greater than 24 hours and 5) did not involve the loss or degradation of equipment or function specifically designed to mitigate a seismic, flooding or severe weather event.

The finding was determined to have a cross-cutting aspect in the area of human performance, associated with the decision making component, in that the licensee decisions failed to demonstrate that nuclear safety is an overriding priority. Specifically, the licensee failed to use their systematic process, when faced with an unexpected plant condition of the Division 2 emergency diesel generator to ensure safety was maintained.. H.1(a).

Inspection Report# : [2013004](#) (pdf)

**Significance:**  Aug 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

**FAILURE TO EVALUATE A DEGRADED/NON-CONFORMING CONDITION ON DIESEL FIRE PUMP.**

The inspectors identified a finding of very low safety significance associated with the licensee's failure to appropriately evaluate the functionality of the 'B' Diesel Fire Pump (DFP) after identifying a degraded/non-conforming crankcase pressure condition while performing testing on June 13, 2011, and on numerous occasions thereafter, that could have affected the ability of the system to perform a function important to safety. An associated NCV of Clinton Power Station License Condition 2.F was identified. The License Condition required the licensee to implement and maintain in effect all provisions of the approved Fire Protection program as described in the Updated Final Safety Analysis Report (UFSAR). Appendix E, Section 4.0.C.8 of the UFSAR stated that the Clinton Power Station Quality Assurance Program establishes measures for corrective action on conditions adverse to fire protection. Quality Assurance Topical Report (QATR), Chapter 16, Section 2.4 stated that personnel performing the evaluation function of conditions adverse to quality are responsible for considering the cause and the feasibility of corrective action to assure that the necessary quality of an item is not deteriorated. The licensee entered the issues into the CAP and initiated corrective actions to evaluate the functionality of the 'B' DFP.

The failure to correctly evaluate a degraded/non-conforming condition potentially affecting the functionality of structures, systems, and components (SSCs) important to safety would become a more significant safety concern if left uncorrected because it could reasonably result in an unrecognized condition of an SSC failing to fulfill a function important to safety. In addition, the finding was associated with the Equipment Performance attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the degraded condition of high crankcase pressure resulted in repeat operational equipment challenges and extended periods of unavailability of the 'B' DFP. Therefore the finding was of more than minor significance. The finding was a licensee performance deficiency of very low safety significance (Green) because it involved only a low degradation of the protection against external factors function due to a redundant train that could supply water. The inspectors concluded that this finding affected the cross-cutting area of problem identification and resolution. Specifically, the licensee failed to thoroughly evaluate problems such that the resolutions addressed causes and extent of condition as necessary for an SSC important to safety when a degraded/non-conforming condition was identified. [P.1(c)]  
Inspection Report# : [2013007](#) (*pdf*)

## Barrier Integrity

**Significance:**  Dec 31, 2013

Identified By: NRC

Item Type: FIN Finding

**FAILURE TO IDENTIFY EMBEDDED OPERATOR CHALLENGE**

Inspectors identified a finding of very low safety significance associated with the licensee's failure to identify an embedded operator challenge. Specifically, the licensee proceduralized compensatory actions which were necessary in order to maintain a negative pressure (-0.25 in. H<sub>2</sub>O) inside the fuel building when opening the inner railroad bay door. The licensee documented this issue in the CAP as IR 1589104 and subsequently screened this issue as an operator challenge.

The inspectors determined that the licensee's failure to identify an embedded operator challenge was a performance deficiency. This finding was more than minor significance because it was associated with the Barrier Integrity Cornerstone attribute of structure, system and component (SSC) and barrier performance, and adversely affected the cornerstone objective to provide reasonable assurance that the physical design barrier of secondary containment

protects the public from radionuclide releases caused by accidents or events. This finding is of very low safety significance due to answering ‘no’ to all questions under the Barrier Integrity Cornerstone column of IMC 0609, Attachment 4, “Phase 1 - Initial Screening and Characterization of Findings.” The inspectors concluded that this finding affected the cross-cutting aspect of problem identification and resolution. Specifically, the licensee failed to implement its CAP with a low threshold for identifying issues and did not identify this challenge to operators completely, accurately, and in a timely manner commensurate with its safety significance. [P.1(a)]

Inspection Report# : [2013005](#) (*pdf*)

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## Emergency Preparedness

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## Occupational Radiation Safety

**Significance:**  Dec 31, 2013

Identified By: NRC

Item Type: FIN Finding

### **FAILURE TO MAINTAIN RADIATION EXPOSURE ALARA DURING 1R13.**

Inspectors reviewed a self-revealing finding due to the licensee having unplanned and unintended occupational collective radiation dose because of deficiencies in the licensee’s Radiological Work Planning and Work Execution Program. Specifically, the licensee failed to properly incorporate as-low-as-reasonably-achievable strategies and insights while planning and executing work activity during the C1R13 refueling outage. During the In-Service Inspection (ISI) examinations performed inside the bio-shield, the dose overage was 28.410 person-rem (68 percent higher than initial estimate). This result was caused by poor radiological planning and work execution of these tasks. The licensee entered this issue into their CAP as IR 01593794 and incorporated the lesson learned into the outage planning.

The inspectors determined that the failure to appropriately plan and coordinate outage activities, together with the failure to properly incorporate ALARA strategies or insights while planning and executing ISI examinations inside the bio-shield during the C1R13 refueling outage was a performance deficiency. The finding was more than minor because it was associated with the program and process attribute of the Occupational Radiation Safety Cornerstone. This issue affected the cornerstone objective of ensuring the adequate protection of worker health and safety from exposure to radiation from radioactive material during routine civilian nuclear reactor operation. The finding is also very similar to IMC 0612, Appendix E, “Examples of Minor Issues,” Example 6.i. This example provides guidance that an issue is not minor if the actual collective dose exceeded 5 person-rem and exceeded the planned, intended dose by more than 50 percent. The inspectors determined that this finding was of very low safety significance because CPS’s 3-year rolling average collective was less than the 240 person-rem/unit referenced within IMC 0609, Appendix C, “Occupational Radiation Safety Significance Determination Process.” This finding did not have a cross cutting aspect due to not being reflective of current performance as exemplified by improvements in the recently completed C1R14 outage.

Inspection Report# : [2013005](#) (*pdf*)

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## Public Radiation Safety

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### Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

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### Miscellaneous

Last modified : August 29, 2014