Ginna
3Q/2008 Plant Inspection Findings

Initiating Events

Significance: G Sep 26, 2008
Identified By: NRC
Item Type: FIN Finding
Untimely Corrective Actions Associated With the 'C' Instrument Air Compressor
The inspectors identified a finding of very low safety significance for Ginna's failure to take timely corrective actions to address repetitive failures of the 'C' instrument air compressor (IAC). The 'C' IAC had a history of tripping on high blow-off pressure since 2000 including at least 5 trips since May 2006. Ginna determined that the cause of the trips was due to back leakage through the IAC discharge check valve and/or master control panel design deficiencies. Although a design upgrade was considered several times since 2002, each upgrade of the 'C' IAC was subsequently cancelled. Following the latest trip on September 9, 2008, Ginna declared the 'C' IAC inoperable until the completion of the master controller upgrade later this year. Ginna entered this issue into their CAP for resolution.
This finding is more than minor because it is associated with the equipment performance attribute of the Initiating Events cornerstone and affects the cornerstone objective of limiting the likelihood of events that upset plant stability and challenge critical safety functions during power operations. Specifically, unnecessary transients on the instrument air header increased the likelihood of a loss of instrument air. A loss of instrument air would cause the main steam isolation valves to close and result in a reactor trip. The inspectors determined that the finding was of very low safety significance because the finding did not contribute to the likelihood of a primary or secondary system loss of coolant accident initiator, contribute to both the likelihood of a reactor trip and the likelihood that mitigating equipment would not be available, or increase the likelihood of a fire or internal/external flood. This finding has a cross-cutting aspect in the area of problem identification and resolution in that Ginna did not periodically trend and assess information associated with the 'C' IAC trips to identify programmatic and common cause problems. (P.1.b)

Inspection Report# : 2008010 *(pdf)*

Significance: G Sep 26, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Procedure for Testing Reactor Trip Breakers
The inspectors identified a self-revealing non-cited violation of Technical Specification 5.4.1.a, “Procedures,” forGinna's failure to establish and maintain an adequate procedure for testing the reactor trip breakers. This resulted in the inadvertent isolation of letdown while restoring from reactor trip breaker testing and the subsequent lifting of pressurizer power operated relief valves (PORVs). At the time of the test, the reactor plant was shutdown and the pressurizer was water solid. With letdown flow isolated and the charging system in manual operation, pressurizer pressure increased above the low temperature overpressure protection set point which caused the PORVs to actuate. Ginna determined that the procedure did not provide adequate guidance for the restoration of the simulated pressurizer level following completion of the test. Ginna entered this issue into their corrective action program for resolution. Planned corrective actions included upgrades to the reactor trip breaker test procedures and a review of instrument and control procedures.

This finding is more than minor because it is associated with the procedure quality attribute of the Initiating Event cornerstone and affects the cornerstone objective of limiting the likelihood of events that upset plant stability and challenge critical safety functions during shutdown operations. Specifically, the inadvertent lifts of PORVs could lead to a loss of reactor coolant system inventory and pressure control. This finding was of very low safety significance because Ginna maintained adequate mitigation capability for the current plant state and the event was not considered a loss of control condition. This finding has a cross-cutting aspect in the area of problem identification and resolution because Ginna did not take appropriate corrective actions to address safety issues and adverse trends in a timely manner, commensurate with their safety significance and complexity. Specifically, corrective actions following a similar issue were not completed (and compensatory actions were not in place) in a timely manner which could have prevented this event. (P.1.d)

Inspection Report# : 2008010 *(pdf)*

Significance: G Jun 30, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Correctly Implement Reactor Coolant Heat-up Procedure
The inspectors identified a self-revealing NCV of Technical Specification 5.4.1.a when control room operators closed the inlet and outlet Residual Heat Removal (RHR) system isolation valves while conducting a plant heat-up with the ‘A’ reactor coolant system loop inoperable.

This was contrary to procedural requirements which require operators to verify that two reactor coolant system loops are operable and at least one is operating prior to isolating the RHR system. Several minutes after isolating the RHR system, the control room operators recognized they were not complying with the procedure, and restored power to the RHR isolation valves. The time that the RHR system was isolated from the reactor coolant system was 15 minutes.

This finding was determined to be of very low safety significance (Green) using Phase 1, Appendix G, Attachment 1, Checklist 4 of IMC 0609. This finding was of very low safety significance because the finding did not increase the likelihood of a loss of RCS inventory, degrade the ability of Ginna to terminate a leak path or add RCS inventory when needed, nor degrade the ability to recover RHR. This finding has a crosscutting aspect in the area of human performance because operators did not adhere to the procedural requirements prior to removing the RHR system from service (H.4.b per IMC 0305).

Inspection Report# : 2008003 *(pdf)*

Mitigating Systems

Significance: G Mar 31, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Did Not Implement Scaffolding Procedure Requirements
The inspectors identified an NCV of 10 CFR 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” because Ginna did not adequately implement scaffolding control procedural requirements related to post-installation inspections and engineering safety evaluations for scaffolding constructed within 1 inch of safety-related equipment,. During a plant walkdown on March 18, 2008, the inspectors identified multiple examples where scaffolding was not installed in accordance with Constellation Energy corporate and site procedures. For example, contrary to step 3.3.8 of Ginna procedure A-1406.1, “Requirements for the Installation of Scaffolding,” scaffolds were installed within 1 inch of safety-related equipment and did not receive an engineering safety evaluation. Similar scaffold-related issues have occurred over 26 times since July 2007, as documented in CR 2008-0292.

This finding is more than minor because it was associated with the Mitigating System cornerstone attributes of protection against external factors such as a seismic event and equipment performance such as reliability. The finding affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding is of very low safety significance, because the finding is not a design or qualification deficiency, did not represent a loss of a safety function, and did not screen as potentially risk significant due to external events. This finding is similar to example 4.a in Appendix E of IMC 0612, in that Ginna had recurring examples of not performing evaluations for scaffolds constructed within the minimum allowed distance of safety related equipment. The finding has a crosscutting aspect in the area of human performance, in that the Ginna did not effectively communicate expectations regarding work practices to workers constructing scaffolding or to supervisors who routinely monitor these activities to follow procedural requirements. (H.1.C per MC 0305)

Inspection Report# : 2008002 *(pdf)*

Significance: G Mar 31, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Promptly Identify and Correct Out-of-Specification Lubricating Oil Conditions
Inspectors identified an NCV of 10 CFR 50, Appendix B, Criterion XVI, “Corrective Action,” when Ginna failed to promptly identify and correct a condition adverse to quality associated with out-of-specification oil samples for the ‘A’ residual heat removal (RHR) and ‘A’ safety injection pumps. Specifically, Ginna did not submit the oil samples for analysis for 37 days and when informed of out-of-specification conditions on the ‘A’ safety injection pump on February 18, 2008, and the issue was not documented or assessed in the Ginna corrective action program until February 25, 2008.

This finding is greater than minor because it is associated with the equipment performance attribute of the Mitigating Systems cornerstone and affected the cornerstone’s objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, by not promptly assessing the significance of the out-of-specification oil samples, the potential inoperability of the safety injection pump was not evaluated. The inspectors determined that this finding was of very low safety significance (Green), because the finding is not a design or qualification deficiency, did not represent a loss of a safety function, and did not screen as potentially risk significant due to external events. This finding is similar to example 3.k in Appendix E of IMC 0612, in that the oil sample program had programmatic weaknesses that could lead to worse conditions if not corrected. This finding has a cross-cutting aspect in the area of problem identification and resolution because Ginna had not implemented appropriate corrective actions to ensure oil samples that are out-of-specification are promptly assessed. (P.1.a per MC 0305)
Inspection Report# : 2008002 *(pdf)*

Significance: G Oct 10, 2007
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to correctly calibrate lead and lag timing modules for the OTDT reactor protection trip channels
Inspectors identified a self-revealing NCV of 10 CFR 50 Appendix B, Criterion XVI, “Corrective Action,” Ginna failed to correct a condition adverse to quality associated with the ability of maintenance personnel to correctly calibrate lead and lag timing modules in the OTDT reactor protection trip channel instruments. Specifically, on multiple occasions from October 2006 to September 2007, the lead and lag timing circuits were found to be greater than the requirements in the Core Operating Limits Report, Cycle 33, Revision 0, indicating that Ginna failed to correctly set the lead and lag modules in the OTDT trip channel instruments. Ginna’s corrective actions included conducting an extensive analysis of the circuit for this trip function and associated procedures and revising the procedure to ensure proper calibration of the modules.

The finding is more than minor because it is associated with the equipment performance attribute of the Mitigating Systems cornerstone and affected the cornerstone’s objective to ensure the capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors conducted a Phase 1 SDP screening and determined the issue to be of very low safety significance (Green). The finding is of very low safety significance because it was not a design or qualification deficiency, it did not represent a loss of safety function, and it was not potentially risk significant due to seismic, flood, fire, or weather-related initiating events. The finding has a cross-cutting aspect in the area of problem identification and resolution because Ginna did not thoroughly evaluate the problem when it initially occurred such that the resolution addressed the causes and extent of conditions. (P.1.c). (Section 1R12)

Inspection Report# : 2007004 *(pdf)*

Significance: G Oct 10, 2007
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to correct 'C' SAFW room cooler head gasket leakage
Inspectors identified a self-revealing NCV of 10 CFR 50 Appendix B, Criterion XVI, “Corrective Action,” when service water (SW) leakage from the ‘C’ Standby Auxiliary Feedwater (SAFW) cooler indicated that Ginna failed to correct a condition adverse to quality associated with SAFW room cooler head installation. Specifically, Ginna failed to correct head gasket installation deficiencies in September 2006 associated with the ‘C’ SAFW room cooler as evidenced by the recurrence of leakage in June 2007. Ginna did not ensure that correct torque values were applied and material gasket selection was appropriate such that pressure transients within cooler design did not cause SAFW cooler head leakage. Ginna’s corrective actions included gasket replacement and issuance of a condition report (CR) to address corrective action issues associated with the events.

The finding is more than minor because it is associated with the equipment performance attribute of the Mitigating Systems cornerstone and affected the cornerstone’s objective to ensure the capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors conducted a Phase 1 SDP screening and determined the issue to be of very low safety significance (Green). The finding is of very low safety significance because it was not a design or qualification deficiency, it did not represent a loss of safety function, and was not potentially risk significant due to seismic, flood, fire, or weather-related initiating event. The finding has a cross-cutting aspect in the area of problem identification and resolution because Ginna did not implement appropriate corrective actions to correct head gasket installation issues in September 2006 (P.1.d.). (Section 1R15)

Inspection Report# : 2007004 *(pdf)*

Barrier Integrity

Emergency Preparedness

Significance: G Sep 29, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Procedure Adherence Resulting in a Loss of Normal Control Room Communications
A self-revealing NCV of Technical Specification 5.4.1.a, “Procedures,” was identified on August 28, 2008, when Ginna technicians failed to adequately implement CME-38-01-BYCTSC, “Solid State Controls, 500 Amp Battery Charger Maintenance for BYCTSC” which resulted in a loss of power to communications equipment for the control room and subsequent declaration of an Unusual Event (UE). Ginna entered this issue into their corrective action program for resolution.

This finding is more than minor because it is associated with the facilities and equipment performance attribute of the Emergency Preparedness Cornerstone and affected the cornerstone objective of ensuring that Ginna 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 was of very low safety significance (Green) using IMC 0609, Appendix B, “Emergency Preparedness Significance Determination Process,” in that it was associated with an actual event classified as an Unusual Event, the loss of communication was for a short period of time, and compensatory measures were implemented. This finding has a cross-cutting aspect in the area of human performance because Ginna personnel failed to correctly implement expected human performance tools which directly contributed to the loss of power to the control room communications systems and declaration of a UE (H.4.a per IMC 0305).

Inspection Report# : 2008004 *(pdf)*

Significance: G Jun 30, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Maintain Timely ERO Augmentation of On-shift Staff
The inspectors identified an NRC-identified NCV of 10 CFR 50.47(b)(2) for failure of Ginna’s process for maintaining timely augmentation of on-shift staff. Ginna’s nuclear emergency response plan (NERP) states that the survey team member position will be staffed by six individuals reporting onsite within one hour of the declaration of an ALERT or higher classification. Results from testing the off-hours notification of the response organization for the four quarters, starting in June 2007 through March 2008, indicated that fewer than six individuals would have responded for the survey team member position within one hour of event declaration. Plant management entered the issue into their corrective action program and took appropriate immediate corrective actions following identification of the issue by the inspectors.

This finding is more than minor because it is associated with the emergency response organization (ERO) performance attribute and affected the objective of the Emergency Preparedness cornerstone to ensure timely augmentation of on-shift staff. In accordance with the Emergency Preparedness Significance Determination Process, this finding is of very low safety significance because the failure to comply with 10 CFR 50.47(b)(2) was a planning standard problem, but not a planning standard functional failure. The inspectors determined that this finding has a crosscutting aspect in the area of problem identification and resolution because Ginna did not take appropriate corrective actions to qualify more individuals for the survey team position in 2007 (P.1.d per IMC 0305).

Inspection Report# : 2008003 *(pdf)*

Significance: SL-III Feb 22, 2008
Identified By: Licensee
Item Type: VIO Violation
Failure to Obtain NRC Approval for EAL Changes Which Decreased the Effectiveness of the Emergency Plan
10 CFR 50.54(q) requires, in part, that a licensee authorized to possess and operate a nuclear power reactor shall follow and maintain in effect emergency plans which meet the standards in 10 CFR 50.47(b) and the requirements in appendix E of this part. The nuclear power reactor licensee may make changes to these plans without Commission approval only if the changes do not decrease the effectiveness of the plans and the plans, as changed, continue to meet the standards of 10 CFR 50.47(b) and the requirements of Appendix E to this part. 10 CFR 50.47(b)(4) requires, in part, that the licensee use a standard emergency classification and action level scheme.

Contrary to the above, between 1996 and 2001, the licensee made changes to its emergency plan which decreased its effectiveness without first obtaining Commission approval. Specifically, without first obtaining Commission approval, the licensee revised its emergency classification and action level scheme related to the Emergency Action Levels (EALs) for: (1) Failed Fuel Detectors; (2) Containment Radiation; (3) Primary to Secondary Leakage; (4) Containment Integrity Status for Unusual Events or Alert Levels; (5) Fire or Explosion; and, (6) Containment Integrity Status for the Site Area Emergency Level (CIS-SAE). These six EALs decreased the effectiveness of the emergency plan by non-conservatively limiting the conditions under which the emergency action levels could be declared. For example, the EAL for CIS-SAE was previously approved for any conditions causing a rapid uncontrolled decrease in containment pressure following initial increase, but the licensee changed the EAL for CIS-SAE to be limited to a rapid uncontrolled decrease in containment pressure following initial increase, due to a loss-of-coolant-accident, which excluded certain main steam line break conditions.

Inspection Report# : 2008502 *(pdf)*

Occupational Radiation Safety

Significance: G Jun 30, 2008
Identified By: NRC
Item Type: FIN Finding
Failure to Implement Effective Occupational Exposure Control

The inspectors identified a self-revealing finding of very low safety significance associated with occupational exposure control. During the planned refueling outage, Ginna did not effectively manage its radioactive source term and work activities to prevent unnecessary occupational exposure to workers during 'B' sump strainer modification and steam generator inspections. Specifically, the collective occupational radiation dose received by individuals for these two activities exceeded the planned or intended dose that Ginna determined was as low as is reasonably achievable (ALARA) for the work activities.

This finding is more than minor because each of the two work activities exceeded their initial estimates by more than 50 percent and each accumulated more than five person-rem, as described in Appendix E of IMC 0612, example (6.b). Additionally, the finding affected the program and process attribute of the Occupational Radiation Safety cornerstone to ensure the adequate protection of the worker health and safety from exposure to radiation from radioactive material during routine civilian nuclear reactor operations. This finding is of very low safety significance because the 3-year rolling average exposure for Ginna was less than 135 person-rem. This finding has a crosscutting aspect in the area of human performance work control because Ginna did not effectively coordinate work activities to incorporate actions to address the impact of changes to the work scope or activity that were appropriate under the circumstances (H.3.b per IMC 0305).

Inspection Report# : 2008003 *(pdf)*

Public Radiation Safety

Physical Protection

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

Miscellaneous

Significance: N/A Feb 22, 2008
Identified By: NRC
Item Type: FIN Finding
95002 NRC Supplemental Inspection
The NRC performed this supplemental inspection to assess Constellation's evaluation associated with the performance indicator (PI) for Emergency Response Organization (ERO) drill participation which crossed the Yellow threshold in the first quarter of 2007 when control room communicators did not receive the required drill or exercise opportunity after qualification.

The inspectors determined that Constellation identified the broad organizational issues that led to the Yellow PI, appropriately identified root and contributing causes of the issues, and had taken or planned actions to address the identified causes and prevent recurrence of the issues. However, the inspectors determined that Constellation was slow to recognize the extent of the organizational issues with the EP organization and ERO. Compensatory actions were taken, but implementation of broader corrective actions was delayed as a result of the time taken to complete the root cause evaluation.

The inspectors determined that Constellation's extent of condition and extent of cause evaluations identified potential areas where similar problems might exist, but did not systematically determine whether similar conditions actually existed or whether similar causes had actually impacted other plant programs and processes. Additionally, Constellation did not clearly ensure that actions were in place or planned to specifically address any similar organizational issues outside of the EP and ERO programs. Although Constellation did not systematically evaluate the extent of organizational weaknesses, the NRC independent extent of condition and cause review did not identify any significant performance issues or plant impact that Constellation had not already recognized. The inspectors confirmed that the organizational issues that extended beyond the EP and ERO programs were being addressed through existing corrective action and improvement plans.

Based on the actions taken and planned to address the EP program issues and broader organizational issues, the inspectors determined that agency follow-up beyond the baseline inspection program was not warranted.

Inspection Report# : 2008502 *(pdf)*

Last modified : November 26, 2008