

## Ginna

# 2Q/2005 Plant Inspection Findings

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### Initiating Events

**G****Significance:** Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

**Instrument lines not adequately supported**

The inspectors identified a non-cited violation (NCV) of 10 CFR 50 Appendix B, Criterion XVI, "Corrective Action," on April 5, 2005 when they noted that Ginna did not implement effective corrective action(s) to ensure seismic supports on various instrumentation sensing lines in the pressurizer enclosure were properly installed. Degraded seismic supports had previously been identified by the NRC during plant walkdowns in February 2004 and November 2001.

This finding is more than minor, because it is associated with the "Design Control" attribute of the Initiating Events Cornerstone and affected the cornerstone objective of limiting the likelihood of events that upset plant stability and challenge critical safety systems. In accordance with Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Findings for At-Power Situations," the inspectors conducted a Significance Determination Process (SDP) phase 1 screening and determined that the finding is of very low safety significance (Green). The SDP process screened to Green since the degraded condition of the seismic mountings for the pressurizer instrumentation sensing lines did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available. Corrective actions were completed under work order 20502000. This finding has a cross-cutting aspect in the problem identification and resolution area with an associated causal factor of inadequate problem identification.

Inspection Report# : [2005003\(pdf\)](#)**G****Significance:** Dec 31, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to Establish Appropriate Measures to Assure the Monitoring Panel for the Compensated Steam Support System is Maintained**

A violation of 10 CFR 50 Appendix B, Criterion XII, "Control of Measuring and Test Equipment," was identified by inspectors when they noted that prior to December 2003 several alarms on the panel for the temperature compensated support system, which monitors a critical dimension between the safety valves and support columns, were "locked in" and the degraded condition had not been investigated and resolved.

This finding is greater than minor, because it is associated with the equipment performance attribute of the initiating events cornerstone and affected the cornerstone objective of limiting the likelihood of events that upset plant stability and challenge critical safety functions. In accordance with Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Findings for At-Power Situations," the inspectors conducted a Significance Determination Process (SDP) phase 1 screening and determined that the finding is of very low safety significance (Green). The SDP process screened to Green since the degraded condition of the monitoring system does not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available. This finding did not contribute to the likelihood of a primary or secondary system LOCA initiator, since the critical gaps were found to be acceptable. Additionally, the finding did not increase the likelihood of a fire or internal/external flood. This finding has cross-cutting aspects associated with the failure to properly identify the problem and resolve the situation to produce a timely corrective action. Corrective actions taken included restoring the monitoring system so that it was not causing false alarms.

Inspection Report# : [2004005\(pdf\)](#)**G****Significance:** Sep 30, 2004

Identified By: NRC

Item Type: FIN Finding

**No Alarm on R-11 to Provide Early Detection of RCS Leakage**

The inspectors identified a finding that the Ginna Station does not have an installed control room alarm for the containment airborne radioactive particulate detector (R11) as described in the Updated Final Safety Analysis Report (UFSAR). A purpose of the alarm is to notify plant operators of reactor coolant system (RCS) leakage in the containment building. The radiation detector has indication in the control room and there are several other indicators and alarms in the control room that indicate the presence of reactor coolant system leakage.

The finding is greater than minor, because it is associated with the design control attribute of the Initiating Events Cornerstone, and adversely affects the cornerstone objective of limiting the likelihood of those events that upset plant stability. The finding is also greater than minor because a radiation detector alarm could provide operators with an early indication of a loss of primary coolant event. In accordance with Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," the inspectors

conducted SDP Phase 1 screening and determined that the finding was of very low safety significance (Green). The SDP process screens to Green since the absence of the alarm would not result in exceeding the RCS leakage Technical Specification limit for identified RCS leakage. Inspection Report# : [2004004\(pdf\)](#)

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## Mitigating Systems

**Significance:**  Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

### **Failure to develop adequate procedures concerning the testing and maintenance of mechanical and hydraulic snubbers**

The inspectors identified a Green non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings" when they noted snubber RHU-36 was removed from the "A" train of the residual heat removal (RHR) system when the system was required to be operable without first performing an engineering analysis as required by procedure IP-IIT-5, "Snubber Inspection and Testing Program."

This finding is more than minor because if left uncorrected, the finding would become a more significant safety concern. This finding, which is under the "Protection Against External Factors" attribute of the Mitigating Systems Cornerstone and affected the objective to ensure availability of systems that respond to initiating events to prevent undesirable consequences, was determined to be of very low safety significance in accordance with Manual Chapter 0609, Appendix G, "Shutdown Operations Significance Determination Process." The inspectors conducted a SDP Phase 1 screening using Checklist 3 of Appendix G and determined the finding to be of very low safety significance (Green) since it did not increase the likelihood of a loss of reactor coolant system (RCS) inventory, did not degrade the ability to terminate a leak path or add RCS inventory when needed, and did not degrade the ability to recover decay heat removal systems once lost. (Section 1R19)

Inspection Report# : [2005003\(pdf\)](#)

**Significance:**  Mar 31, 2005

Identified By: NRC

Item Type: FIN Finding

### **Failure to Implement Effective Corrective Actions Associated with Component Mispositioning Events**

Green. The inspectors identified a finding that Ginna personnel have failed to implement effective corrective actions for conditions adverse to quality associated with component mispositioning events. Numerous mispositioning events have occurred over the past year and efforts to correct the deficiency have been ongoing since the last quarter of 2004. While many of the events have been minor in nature, two of the events which occurred this quarter had the potential to impact the acceptable operating environment for safety significant equipment. Specifically, the isolation valves on a relay room air conditioner service water strainer were found out-of-position rendering the cooler inoperable and the battery room air conditioning unit power switch was found in the off position rendering it inoperable.

This finding is greater than minor because it affects the reactor safety, mitigating systems attribute of equipment performance, and the availability, reliability, and capability objective of the mitigating systems cornerstone. This finding was of very low safety significance because none of the events resulted in the actual loss of a system safety function. The inspectors identified that a contributing cause of this finding was related to the cross-cutting area of problem identification and resolution specifically under the subcategory of effectiveness of corrective actions.

Inspection Report# : [2005002\(pdf\)](#)

**Significance:**  Sep 30, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

### **Non-Rated Cable Tunnel Hatch**

The inspector identified a Green non-cited violation of 10 CFR 50.48, "Fire Protection," because the Ginna cable tunnel contained an escape hatch that was not adequately designed to minimize the effects of fire and explosion. As a result, safety-related equipment located in the cable tunnel could have been damaged under certain postulated scenarios. The licensee has completed a modification to the escape hatch to correct this condition.

The finding was greater than minor because it was associated with the Mitigating Systems cornerstone attribute of protection against external factors and affected the objective of ensuring the capability of systems to respond in the event of a fire. Using the Fire Protection significance determination process, IMC 0609, Appendix F, the finding required a Phase 2 analysis because of the effect on the fixed fire suppression system and of the reduced effectiveness of the fire brigade in combating the postulated fire scenario. The finding was determined to need a detailed Phase 3 fire risk evaluation because the Phase 2 SDP, using conservative assumptions, determined that the issue could have been greater than very low safety significance. The Phase 3 evaluation was needed to ensure a thorough review of factors such as ignition frequency, suppression capability, and shutdown methods. Based on a comprehensive Phase 3 evaluation of the initiation event frequency, surviving mitigating systems, and operator actions to mitigate the impact of the fire event, the finding was considered to have a very low safety significance

Inspection Report# : [2004004\(pdf\)](#)

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## Barrier Integrity

**G****Significance:** Jun 30, 2005

Identified By: NRC

Item Type: FIN Finding

**A bare metal inspection of the lower reactor vessel head was not performed during the spring 2005 refuel outage**

A finding was identified by the inspectors that contrary to a commitment outlined in a September 19, 2003, letter to the NRC, Ginna did not perform a bare metal inspection of the lower reactor vessel head during the spring 2005 refueling outage. The performance deficiency associated with this finding was a failure of Ginna to develop adequate inspection procedures for the lower reactor vessel head that could identify pressure boundary leakage. As a result, the ability of Ginna personnel to detect leakage from the lower reactor vessel head could be degraded.

The inspector determined that this finding, which is under the "RCS Equipment and Barrier Performance" attribute of the Barrier Integrity Cornerstone is more than minor because the failure to develop adequate inspection procedures and evaluation guidance could result in a failure to detect a degraded lower reactor vessel head penetration boundary. In accordance with Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," the inspectors conducted an SDP Phase 1 screening and determined that the finding is of very low safety significance (Green). Using the Reactor Safety SDP, this finding screened to Green and was of very low safety significance, since the reactor coolant system pressure boundary was not actually degraded.

Inspection Report# : [2005003\(pdf\)](#)**G****Significance:** Sep 30, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to Establish Appropriate Design Controls When Modifying the Control Room**

The inspectors identified a non-cited violation of 10 CFR 50 Appendix B, Criterion III, "Design Control" on July 22, 2004, when several breaches in the control room boundary (wall) were identified. The cumulative area of the breaches would allow air in-leakage into the control room at levels that exceeded control room design criteria assumptions. The licensee implemented immediate action to repair this condition.

This finding was greater than minor because if left uncorrected the finding could become a more significant safety concern. If the breaches were not repaired, untreated outside air could leak into the control room and have an adverse effect on the control room environment during certain postulated accidents. In addition, this finding was greater than minor because it affected the design control attribute and the Barrier Cornerstone objective of providing reasonable assurance that physical barriers will provide protection during events and accidents. The inspectors determined this finding was a cross-cutting issue in the Problem Identification and Resolution area since Ginna personnel did not initially conduct a thorough extent of condition review when the degraded control room conditions were identified. In accordance with Manual Chapter 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," the inspectors conducted an SDP Phase 1 screening. This screening determined that a Phase 3 evaluation was required because the degradation of the control room barrier function against a toxic atmosphere was affected. The Phase 3 SDP analysis concluded that this issue was of very low safety significance (Green), because of the low initiating event frequency of an inadvertent offsite release of toxic gas that would affect the Ginna control room operators.

Inspection Report# : [2004004\(pdf\)](#)

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## Emergency Preparedness

**G****Significance:** Sep 30, 2004

Identified By: NRC

Item Type: FIN Finding

**Failure to Maintain the TSC Ventilation System**

The inspectors identified a finding that Ginna did not adequately evaluate Technical Support Center (TSC) ventilation surveillance test failures or maintain the TSC ventilation system in a manner to ensure it would be capable of performing its intended emergency preparedness function in a reliable manner.

The finding is greater than minor because it is associated with the facilities and equipment attribute of the EP Cornerstone, and impacts the objective to ensure that Ginna staff is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. The inspectors determined this finding was a cross-cutting issue in the Problem Identification and Resolution area

since Ginna personnel did not adequately assess the significance of the degraded conditions of the TSC ventilation system as required by the Ginna corrective action program. The EP Significance Determination Process (SDP) was used to assess the safety significance of this finding. Based on IMC 0609, Appendix B, "Emergency Preparedness SDP," Sheet 1 for the failure to comply with an NRC requirement and the examples provided in Section 4.8, this finding was determined to be of very low safety significance (Green). This significance determination was supported by the subsequent Ginna analysis that concluded the TSC ventilation system remained operable with the failed damper and ductwork perforations.

Inspection Report# : [2004004\(pdf\)](#)

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## Occupational Radiation Safety

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**Significance:** Mar 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

### **Failure to provide adequate instruction in an RWP to prevent an unintended uptake**

Green. The inspector identified a self-revealing, non-cited violation of Technical Specification (TS) 5.4.1.a, because a radiation work permit was not adequate for controlling the manual cleaning of highly-contaminated equipment. This resulted in a worker receiving an unintended uptake of radioactive material. The radiation work permit failed to provide adequate precautionary instructions to work on highly contaminated equipment and to prevent the generation and uptake of airborne radioactivity.

This violation is more than minor because this manual cleaning of a highly-contaminated insert without the use of respiratory protection could have resulted in a significant uptake of radioactive material and affected the radiation safety cornerstone/ occupational radiation safety cornerstone's objective to ensure the adequate protection of the workers' health and safety from exposure to radiation from radioactive material. The violation is of very low safety significance because it did not involve an overexposure, did not constitute a substantial potential for an overexposure, and did not compromise the ability to assess dose.

Inspection Report# : [2005002\(pdf\)](#)

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## Public Radiation Safety

**G**

**Significance:** Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

### **Failure to meet surveillance frequency for calibration of an effluent radiation monitor**

The inspectors identified a non-cited violation of Technical Specification S.3.1.1 in the Off-site Dose Calculation Manual (ODCM) because the surveillance frequency for the R-22 radioactive liquid effluent monitor was not met. Ginna personnel immediately scheduled the monitor for calibration on the day following identification of the violation.

This violation is more than minor because it is associated with the cornerstone attribute of maintaining properly calibrated radioactive effluent monitors and affected the Radiation Safety Cornerstone/Public Radiation Safety Cornerstone's objective to ensure the adequate protection of public health and safety from exposure to radioactive materials released into the public domain as a result of routine civilian nuclear reactor operation. The violation is of very low safety significance because, while it did impair Ginna's ability to assess dose, Ginna personnel assessed the doses from effluent releases, and the assessed doses did not exceed the dose values in Appendix I to 10 CFR 50. This finding has a cross-cutting aspect in the problem identification and resolution area with a causal factor of effectiveness of corrective actions (Section 2PS1).

Inspection Report# : [2005003\(pdf\)](#)

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## Physical Protection

[Physical Protection](#) information not publicly available.

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## Miscellaneous

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