

# Ginna

## 3Q/2004 Plant Inspection Findings

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### Initiating Events

**Significance:** G 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\(pdf\)](#)

**Significance:** G Dec 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

#### **FAILURE TO IMPLEMENT PROCEDURES FOR SEVERE WEATHER**

Green. The inspectors identified that although the Ginna site was experiencing high winds, control room operators did not implement the site adverse weather plan contained in procedures EPIP 1-17, "Planning for Adverse Weather," and ER-SC-1, "Adverse Weather Plan," until prompted by the inspector. Following implementation of ER-SC-1, operators manually tripped the reactor as required by Abnormal Operating Procedure AP-RCS.2, "Loss of Reactor Coolant Pump Flow," when an offsite power supply was lost because of storm-related damage. The failure to implement EPIP 1-17 and ER-SC-1 is a violation of Technical Specification 5.4.1.

This finding is associated with the "Protection Against External Factors" attribute of the initiating events cornerstone. This finding is greater than minor because it affected the objective of limiting the likelihood of those events that upset plant stability during power operation in that the severe weather caused a reactor trip. Since operators responded appropriately to the loss of the 751 line, the finding is of very low safety significance because it did not contribute to the likelihood of a primary or secondary system LOCA initiator, or to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. Additionally, the finding did not increase the likelihood of a fire or internal/external flood. (Section 1R01)

Inspection Report# : [2003007\(pdf\)](#)

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### Mitigating Systems

**Significance:** G 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\(pdf\)](#)

**G**

**Significance:** Jun 30, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Failure to Evaluate Emergency Operating Procedure Step Differences**

Green. The inspectors identified that contrary to the requirements of Technical Specification 5.4.1(b) and certain Ginna internal procedures, Ginna procedure A-503.1 "Emergency and Abnormal Operating Procedures Users Guide" allowed steps in Emergency Operation Procedures (EOP)s to be performed out of sequence under certain conditions without these step sequence deviations being evaluated and justified in the "Ginna Step Differences Evaluation Document."

This finding is associated with the procedure quality and preventing human performance errors attributes of the Mitigating Systems Cornerstone objectives. It is greater than minor, because procedures which have not been properly evaluated could provide incorrect guidance for operators during transient conditions. The finding is of very low safety significance because once the changes were evaluated by Ginna personnel, they were determined to be acceptable. Further the issue 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. (Section 1R02)

Inspection Report# : [2004003\(pdf\)](#)

**G**

**Significance:** Jun 30, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Adequate Guidance Was Not Provided for Maintenance Activities**

Green. The inspectors identified a non-cited violation for the licensee's failure to comply with 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings." This violation is related to inadequate procedures for assembling the mechanical seal for the turbine-driven auxiliary feedwater direct current (dc) lubricating oil pump.

This finding of inadequate maintenance procedures is greater than minor because if left uncorrected, it would become a more significant safety concern, and could result in degraded reliability of the turbine-driven auxiliary feedwater pump. The finding was determined to be of very low safety significance because the condition was identified and corrected before the pump became inoperable. Further, the issue 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. (Section 1R19)

Inspection Report# : [2004003\(pdf\)](#)

**G**

**Significance:** Dec 31, 2003

Identified By: NRC

Item Type: FIN Finding

#### **FAILURE TO PROPERLY SEQUENCE WORK ACTIVITIES DURING SURVEILLANCE TESTING**

Green. The inspectors identified that RG&E had performed maintenance on four main steam safety valves prior to performing required surveillance testing. This practice may mask the as-found condition of the valves, and affect the results of the surveillance tests.

This finding is greater than minor, because it is associated with the "Equipment Performance" (reliability) attribute of the mitigating systems cornerstone, and it would adversely affect the cornerstone objective because failure to conduct as-found testing may mask any valve degradation. This could adversely impact the reliability of the steam generator overpressure protection system to prevent undesirable consequences. 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. Further, the finding is of very low safety significance since the issue involved inadequate testing, and did not degrade the ability of the main steam safety valves to perform their intended function for the next operating cycle. (Section 1R19)

Inspection Report# : [2003007\(pdf\)](#)

**G**

**Significance:** Dec 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

#### **FAILURE TO CORRECTLY ASSESS RISK OF MAINTENANCE ACTIVITIES**

Green. The inspectors identified a non-cited violation of 10 CFR 50.65 (a)(4) when RG&E personnel installed an incorrect version of the risk analysis program on the plant intranet server. The program incorrectly modeled the impact of removing emergency diesel generators from service. RG&E personnel installed the correct version of the software when the error was identified by the inspectors.

After management review, this finding was determined to be greater than minor, because the plant risk analysis assessments, which RG&E schedulers and operations personnel had performed on several occasions, were incorrect, and in one case on November 18, 2003, unbeknownst to Ginna personnel, the plant was in an elevated risk condition. If left uncorrected, this finding could become a more significant safety concern since with the incorrect software installed, operators could not correctly assess the impact on plant risk of maintenance on mitigating systems. The safety significance of the finding was very low, because the plant was not in a high risk condition at any time during the period that the wrong program was installed. (Section 1R13)

Inspection Report# : [2003007\(pdf\)](#)

**G**

**Significance:** Dec 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

**AUXILIARY FEEDWATER FLOWPATH INOPERABLE DURING MODE CHANGES, DUE TO PERSONNEL ERROR, RESULTED IN CONDITION PROHIBITED BY TECHNICAL SPECIFICATIONS**

Green. A self-revealing non-cited violation of Ginna Station Technical Specification (TS) Limiting Condition for Operation (LCO) 3.0.4 was identified when plant operators conducted PT-16Q-T after transition to Mode 2 from Mode 4 and found that flow could not be achieved from the turbine driven auxiliary feedwater (TDAFW) pump to the "B" steam generator. The line had been isolated through a sequence of lineups and testing, which was conducted prior to the Mode change that did not properly restore the system to the required line-up for the Mode change. The flow path was immediately restored by RG&E personnel when the deficiency was discovered. Procedures will be revised to minimize the possibility of event recurrence.

This finding, associated with the "Configuration Control" attribute of the mitigating systems cornerstone, is greater than minor because it affected the objective of ensuring the reliability and capability of systems to prevent undesirable consequences in that the TDAFW system was inoperable for three days. 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 (the remaining diverse trains of AFW remained operable), and was not potentially risk significant due to seismic, flood, fire, or weather related initiating events. Further, the exposure time was less than the LCO action time of seven days. (Section 4OA3)

Inspection Report# : [2003007\(pdf\)](#)

**G**

**Significance:** Oct 28, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

**FAILURE TO PROMPTLY IDENTIFY AND TAKE ACTIONS TO ADDRESS A CONDITION ADVERSE TO QUALITY CONCERNING CONTAINMENT SUMP SCREEN BYPASS FLOWPATHS**

Green. The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, Corrective Actions, for RG&E's failure to promptly identify and take actions to address a condition adverse to quality. Specifically, RG&E did not promptly identify and correct several longstanding containment sump screen bypass flowpaths that had the potential to adversely impact emergency core cooling systems (ECCS) during containment recirculation.

The finding was more than minor because it affected the Mitigating Systems cornerstone objective of ensuring the availability, reliability, and capability of ECCS to respond to initiating events (loss-off-coolant accidents (LOCAs)) to prevent undesirable conditions. The finding was associated with the design control and human performance attributes. The finding was considered to be of very low safety significance, because ECCS remained operable and there was no loss of safety function. Specifically, the finding did not represent an actual loss of ECCS function or of a single train that mitigates internal or external event (e.g., seismic, fire, flooding, or severe weather) core damage accident sequences. (Section 4OA3.1)

Inspection Report# : [2003012\(pdf\)](#)

**G**

**Significance:** Oct 28, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

**FAILURE TO PROMPTLY IDENTIFY AND TAKE ACTIONS TO ADDRESS A CONDITION ADVERSE TO QUALITY CONCERNING CONTAINMENT SUMP DEBRIS**

Green. The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, Corrective Actions, for RG&E's failure to promptly identify and take actions to address a condition adverse to quality. Specifically, RG&E did not promptly identify and correct containment sump debris that had the potential to adversely impact ECCS during containment recirculation.

The finding was more than minor because it affected the Mitigating Systems cornerstone objective of ensuring the availability, reliability, and capability of ECCS to respond to initiating events (LOCAs) to prevent undesirable conditions. The finding was associated with the procedure quality and human performance attributes. The finding was considered to be of very low safety significance, because ECCS remained operable and there was no loss of safety function. Specifically, the finding did not represent an actual loss of ECCS function or of a single train that mitigates internal or external event (e.g., seismic, fire, flood, or severe weather) core damage accident sequences.

Inspection Report# : [2003012\(pdf\)](#)

## Barrier Integrity

**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\(pdf\)](#)

**Significance:**  Mar 31, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

### **Failure to Implement Effective Corrective Action to Resolve Seismic Support Issues in The Intermediate Building Sample Hood Area.**

Green. The inspectors identified a Green NCV of 10 CFR 50, Appendix B, Criterion XVI when they identified that RG&E did not implement effective corrective actions to ensure that supports for valves in intermediate building sample hood area were properly installed. Degraded supports in the sample hood area had previously been identified by the NRC in November 2001. A subsequent inspection of the area by RG&E personnel identified other seismic-related deficiencies, one of which rendered a containment penetration inoperable.

This finding is associated with the "Design Control" attribute of the barrier integrity cornerstone. It is greater than minor because it affected the objective of maintaining containment integrity during seismic events. The issue is of very low safety significance because it did not represent a degradation of the radiological barrier function provided for the control room, auxiliary building, or the spent fuel or standby gas treatment system. The finding did not represent a degradation of the barrier function of the control room against smoke or a toxic atmosphere. Additionally, the finding did not represent an actual open pathway in the physical integrity of reactor containment or an actual reduction of the atmospheric pressure control function of the reactor containment. (Section 1R19)

Inspection Report# : [2004002\(pdf\)](#)

## Emergency Preparedness

**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\(pdf\)](#)

**G**

**Significance:** Mar 31, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

**Health Physcs Technicians Did Not Respond to The Site as Required by The E-Plan During an Event**

Green. The inspectors identified a Green non-cited violation (NCV) of 10 CFR 50.47(b)(2) when after the declaration of an Unusual Event (UE) on February 16, 2004, RG&E did not augment the shift crew with a 30-minute Radiation Protection Technician (RPT) responder in a timely manner. The shift crew delayed notification of this responder for 30 minutes. Once the notification was initiated, only one RPT responded to the site, and arrived 62 minutes after the UE declaration was made, instead of the required 30 minutes.

This finding is associated with the "Emergency Response Organization Readiness" attribute of the emergency preparedness (EP) cornerstone. It is greater than minor because it impacts the objective to ensure that RG&E is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. The EP Significance Determination Process (SDP) was used to assess this performance. (Section 1R14)

Inspection Report# : [2004002\(pdf\)](#)

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## Occupational Radiation Safety

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## Public Radiation Safety

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## Physical Protection

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

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## Miscellaneous

Last modified : December 29, 2004