

May 5, 2006

Mrs. Mary G. Korsnick  
Vice President, R.E. Ginna Nuclear Power Plant  
R.E. Ginna Nuclear Power Plant, LLC  
1503 Lake Road  
Ontario, New York 14519

SUBJECT: R. E. GINNA NUCLEAR POWER PLANT- NRC INTEGRATED INSPECTION  
REPORT 05000244/2006002

Dear Mrs. Korsnick:

On March 31, 2006, the US Nuclear Regulatory Commission (NRC) completed an inspection at your R. E. Ginna facility. The enclosed inspection report documents the inspection results, which were discussed on April 14, 2006 with you and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

This report documents three findings of very low safety significance (Green) which were determined to involve a violation of NRC requirements. However, because of the very low safety significance and because they were entered into your corrective action program, the NRC is treating these three findings as non-cited violations (NCV) consistent with Section VI.A.1 of the NRC Enforcement Policy. If you contest any NCV in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN.: Document Control Desk, Washington, D.C. 20555-0001; with copies to the Regional Administrator Region I; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, D.C. 20555-0001; and the NRC Resident Inspector at R.E. Ginna Nuclear Power Plant.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the

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Sincerely,

**/RA/**

Brian J. McDermott, Chief  
Reactor Projects Branch 1  
Division of Reactor Projects

Docket No.: 50-244  
License No.: DPR-18

Enclosure: Inspection Report 05000244/2006002  
w/ Attachment: Supplemental Information

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No.: 50-244

License No.: DPR-18

Report No.: 05000244/2006002

Licensee: Constellation Energy, R.E. Ginna Nuclear Power Plant, LLC

Facility: R. E. Ginna Nuclear Power Plant

Location: Ontario, New York

Dates: January 1, 2006 through March 31, 2006

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## SUMMARY OF FINDINGS

IR 05000244/2006-002; 01/01/2006 - 03/31/2006; R. E. Ginna Nuclear Power Plant; Fire Protection, Licensed Operator Requalification Program, and Problem Identification and Resolution, Cross-Cutting Areas.

The report covered a 3-month period of inspection by resident inspectors and announced inspections by regional specialists. Three Green findings, all of which were non-cited violations (NCVs) were identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). Findings for which the SDP does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

### A. NRC-Identified and Self-Revealing Findings

#### Cornerstone: Mitigating Systems

- Green. The inspectors identified a non-cited violation (NCV) of Technical Specification (TS) 5.4.1.d, which requires, in part, that written procedures be established, implemented, and maintained for the fire protection program. Contrary to TS 5.4.1.d, during a fire walkdown of the auxiliary building operating floor the inspectors identified four drums of charcoal which were not identified as a transient combustible load and did not have a transient combustible permit in violation of Ginna fire protection procedure FPS-16. Ginna entered this performance deficiency into their corrective action program for resolution.

The inspectors determined that the failure to properly implement procedure FPS-16 was more than minor because it affected the objectives of availability and reliability for systems which respond to mitigate events under the protection against external hazards attribute of the Mitigating Systems cornerstone and because the amount of charcoal exceeded the transient combustible limit of the Fire Hazards Analysis for that area of the plant. The inspectors assessed the finding using Appendix F of the Significance Determination Process (SDP). The finding is of very low safety significance because the charcoal in question has a high ignition point (350°C) and was stored in approved containers resulting in a Degradation Rating of Low, which screens to Green in the fire protection SDP. This finding has a cross-cutting aspect in Human Performance because Ginna personnel did not follow established procedures for the control of transient combustibles. (Section 1R05)

- Green. The inspectors identified a non-cited violation (NCV) of 10 CFR 55.46 (c)(1) which requires, in part, that the plant-referenced simulator must show the expected plant response to operator input and to normal, transient, and accident conditions. Contrary to the above, the inspectors identified that certain elements of the plant process computer system (PPCS) as displayed in the simulator had not correctly replicated the expected plant response since PPCS was added to

the simulator in 2001. This performance deficiency was entered into the Ginna corrective action program for resolution.

The inspectors determined that this simulator fidelity issue was more than minor because it affected the capability objective of the human performance attribute under the Mitigating Systems cornerstone. The finding was evaluated using the Operator Requalification Human Performance SDP (MC 0609 Appendix I). The inspectors determined that the deviation in the simulator had impacted operator actions and could potentially lead to a failure to use PPCS to diagnose conditions on the actual plant. The finding was of very low safety significance because the failure to use PPCS as a diagnostic tool in the simulator had no actual plant impact on equipment or personnel safety. (Section 1R11)

- Green. The inspectors identified a non-cited violation (NCV) of 10 CFR 50, App. R III.1.3.b which requires that drills shall be performed at regular intervals not to exceed 3 months for each shift fire brigade. Contrary to the requirement, four of five shift fire brigades were not drilled during the fourth quarter of 2005. This performance deficiency was entered into Ginna's corrective action program for resolution.

The inspectors determined that the failure to meet the fire brigade drill requirement was more than minor because it affected the reliability and capability objectives of the protection against external factors attribute under the Mitigating Systems cornerstone. The finding was evaluated using Fire Protection Significance Determination Process (Manual Chapter 0609, App F). The finding category is Fire Prevention and Administrative Controls with an assigned degradation factor of low which screens to Green (very low safety significance). This finding has a cross-cutting aspect in Human Performance associated with a poor turnover of responsibilities and poor management oversight of the turnover process when fire personnel changed jobs. (Section 4OA2)

B. Licensee-Identified Violations

None

## REPORT DETAILS

### Summary of Plant Status

Ginna began the period at full Rated Thermal Power (RTP) and operated at full power for the entire report period.

## 1. REACTOR SAFETY

### **Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity**

#### 1R01 Adverse Weather Protection (71111.01 - 2 samples, impending weather)

##### a. Inspection Scope

On February 17, 2006, Control Room Operators entered ER-SC.1, "Adverse Weather Plan," when predicted high winds exceeded the limit in the procedure. The inspectors had monitored preparations the previous day when the forecast was made for high winds and continued to monitor site response throughout the morning of the 17<sup>th</sup> until the high winds had passed. Processes were followed site wide and no incidents occurred do to the high winds.

On March 2, 2006, Control Room Operators entered ER-SC.3, "Low Screenhouse Water Level," when the plant experienced an unexpected six inch decrease in Screenhouse water level. The inspectors monitored plant response and operator response as corrective actions were taken by on-shift personnel. Several cycles of the screenhouse recirculation gate restored screenhouse level in the intake water bay during the ensuing three hour time period. Over the next several days the condition repeated itself and was solved in a similar fashion by the operators. The formation of ice observed in the screenhouse intake bay did not resemble frazile ice in structure or form. The intake bay water level did not approach any limiting parameters during the transient.

##### b. Findings

No findings of significance were identified.

#### 1R04 Equipment Alignment (71111.04)

##### .1 Partial Walkdown (3 samples)

##### a. Inspection Scope

The inspectors performed partial walkdowns of plant systems to verify operability of redundant or diverse trains and components when safety equipment was inoperable. The inspectors used plant technical specifications, Ginna operating procedures, plant piping and instrument drawings (P&ID), and the UFSAR as guidance for conducting partial system walkdowns. The inspection reviewed the alignment of system valves and electrical breakers to ensure proper in-service or standby configurations as described in plant procedures and drawings. During the walkdown, the inspectors evaluated material



conditions and general housekeeping of the system and adjacent spaces. The inspectors also verified that operations personnel were following plant technical specifications (TS). The following plant system alignments were reviewed:

- On January 17, 2005, the inspectors completed a walkdown of the “A” motor driven auxiliary feedwater system when the “B” motor driven auxiliary feedwater pump was out of service for scheduled maintenance. This system was examined because it is a diverse means of supplying water to the steam generators in the event offsite power was lost.
- On February 9, 2006, the inspectors completed a walkdown of the “B” emergency diesel generator (EDG) when the “A” EDG was out of service for scheduled maintenance. This system was examined because it provides backup emergency power to vital class 1E equipment and was the sole source for backup alternating current power while the “A” EDG was not available.
- On March 7, 2006, the inspectors completed a walkdown of the “C” standby auxiliary feedwater (SAFW) pump after quarterly maintenance had been performed and the system had been restored to an operable status. This risk significant system was examined because it is an important backup means for supplying water to the steam generators in the event of a high energy line break or other event that disables the preferred auxiliary feedwater pumps.

b. Findings

No findings of significance were identified.

.2 Complete Walkdown (1 sample)

a. Inspection Scope

The inspectors conducted a detailed walkdown of the alignment and condition of the safety injection (SI) system. The SI system was chosen because of the important role it would play to provide makeup water to the reactor under a small -break loss of coolant (SBLOCA) accident . In addition to verifying proper system alignment as required by plant TS, the plant UFSAR, and Ginna procedures and drawings, the inspector reviewed system maintenance and action reports. None of the action reports or maintenance work orders indicated the performance reliability of the system had declined.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05 - 8 samples)a. Inspection Scope

Using the Ginna Fire Protection Program documents as a guide, the inspectors performed walkdowns of the following fire areas to determine if there was adequate control of transient combustibles and ignition sources. The material condition of fire protection systems, equipment and features, and the material condition of fire barriers were also inspected against industry standards. In addition, the passive fire protection features were inspected, including the ventilation system fire dampers, structural steel fire proofing, and electrical penetration seals. The following plant areas were inspected:

- Intermediate Building Sub-basement, Fire Zone IB-0
- Cable Tunnel, Fire Zone, Fire Zone CT
- Class 1E Switchgear, Fire Zone ABO
- Intermediate Building Controlled Side Operating Floor, Fire Zone IBN-1
- Diesel Generator Room, Fire Area EDG1A
- Diesel Generator Room and Vault, Fire Area EDG1B
- Screenhouse, Fire Area, Fire Zones SH-2 and SH-3
- Screenhouse, Fire Area, Fire Zone SH-1

b. Findings

Introduction: The inspectors identified a Green non-cited violation (NCV) of TS 5.4.1.d, which requires in part, that procedures be established, implemented and maintained covering the fire protection program. A Ginna procedure was not properly implemented when four drums of charcoal were stored in an area adjacent to the class 1E bus 14 switchboard and motor control center (MCC) L without a required transient combustible permit (TCP).

Description: Procedure FPS-16, "Bulk Storage of Combustible Materials and Transient Fire Loads," provides requirements for controlling the storage and use of transient combustible materials at Ginna. During a walkdown of the auxiliary building on January 26, 2006, the inspectors observed four drums of charcoal stored on the auxiliary building operating floor near class 1E Bus 14 and MCC L. A tag affixed to the drums indicated that they were placed in the auxiliary building on December 2, 2005. The inspectors discussed the drums with the on-duty fire protection supervisor and were initially informed that no TCP was required. The on-duty fire protection supervisor notified both the Fire Protection Program Manager and the Fire Protection System engineer who recognized the error and wrote a Condition Report to get the material removed from the area. The inspectors discussed the issue with the Fire Protection System Engineer.

On January 31, 2006, the drums of charcoal were moved from the auxiliary building to the contaminated storage building (CSB) where a TCP was not required. Ginna initiated condition report 2006-0370 to address this problem in their corrective action program.

Analysis: The inspectors determined that the failure to properly implement procedure FPS-16 was more than minor because it was associated with the protection against external factors attribute of the Mitigating Systems cornerstone and affected the objective to ensure the reliability of the mitigating systems. The increased combustible loading from the improperly stored drums potentially reduced the availability and reliability of mitigating systems in and adjacent to class 1E switchgear and MCC "L" in the event of a postulated fire. The inspectors assessed the finding using Appendix F of the Significance Determination Process (SDP) and determined the finding to be of very low safety significance. The finding is of very low safety significance because the materials in question have a fairly high ignition point (350°C) and were stored in approved containers. As a result, the combustible material controls issue was assigned a degradation of low, which screens to Green in the fire protection SDP. This finding involved an amount of combustible material which exceeds the fire hazard analysis load limit for the area, thus meeting the more than minor criteria of example 4.k in NRC Inspection Manual Chapter 0612, Appendix E. This finding has a cross-cutting aspect in Human Performance because Ginna personnel did not follow established procedures for the control of transient combustibles.

Enforcement: TS 5.4.1.d requires that written procedures be established, implemented, and maintained for the fire protection program. Ginna fire protection procedure FPS-16, Step 5.10.1 requires a Transient Combustible Permit be utilized when transient combustibles must be stored in the protected area of the plant. Step 5.10.2 requires that the Job Supervisor initiate the TCP. Step 5.3 states that no combustibles shall be stored in either the combustible control zones listed in Attachment 2 or safety related areas, except what is specifically approved by the Fire Hazard Analysis unless accompanied by an approved TCP. Contrary to these requirements, between December 2, 2005 and January 31, 2006 Ginna stored four drums of charcoal, more than the transient combustible limit allowed in the fire hazards analysis, in a safety-related area without an engineering approved transient combustible permit. Because this violation was determined to be of very low safety significance and Ginna entered the deficiency into their corrective action system in condition report 2006-0370, it is being treated as a NCV, consistent with section VI.A.1 of the NRC Enforcement Policy. **(NCV 5000244/2006002-01, Inadequate Control of Transient Combustible Material).**

1R06 Flood Protection Measures (71111.06 - 1 sample, internal flood protection)

a. Inspection Scope

The inspectors evaluated Ginna's internal flood protection measures for the cable tunnel. To perform this evaluation, the inspectors reviewed the Ginna UFSAR, design drawings for the cable tunnel and associated drain systems, work orders, and toured the cable tunnel, intermediate building, and turbine building areas.

b. Findings

No findings of significance were identified.

1R07 Heat Sink Performance (71111.07 - 2 samples)a. Inspection Scope

The inspectors evaluated Ginna's heat sink performance by monitoring the heat exchanger effectiveness for the Containment Recirculating Fan Coolers (CRFC) and the "B" Emergency Diesel Generator (EDG) Coolers. To perform this inspection, the inspectors reviewed the Ginna UFSAR, the Ginna Service Water System Reliability Optimization Program (SWSROP), periodic tests PT 2.9Q (Containment Recirc Fan Testing) and PT 12.2 (EDG "B") and observed the execution of PT 2.9Q and PT 12.2. The inspectors also interviewed the SWSROP System Engineer and reviewed "as found" and "as left" photos of the last clean and inspected evolutions when the heat exchangers were open. The inspectors also observed actions taken to mitigate actual icing conditions in the service water intake structure during cold weather.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program (71111.11).1 Resident Inspector Quarterly Review (1 sample)a. Inspection Scope

On January 25, 2006, the inspectors observed a licensed operator simulator scenario. The test observed was scenario ECA00-06, "Loss of All AC Power." The inspectors reviewed the critical tasks associated with the scenario, observed the operators' performance, and observed the post-evaluation critique. The inspectors also reviewed and verified compliance with Ginna procedure OTG-2.2, "Simulator Examination Instructions."

b. Findings

Introduction: The inspectors identified a Green non-cited violation (NCV) of 10 CFR 55.46(c)(1), which requires in part that a plant-referenced simulator used for the administration of operating tests must demonstrate expected plant response to normal, transient and accident conditions. An annual requalification scenario was observed in which Ginna's simulator did not replicate the expected plant response during a loss of all AC power accident condition because the Plant Process Computer System (PPCS) indicated steam generator (SG) water level to be 28% when actual SG level was 42%.

Description: While observing an Annual Requalification operating exam, the inspectors noted several instances where the simulator failed to replicate expected plant response. The inspectors determined, from discussions with 2 simulator instructors and both the current and former PPCS system engineers, that PPCS in the simulator responds differently than PPCS in the plant. The plant PPCS is designed to recognize the data

from the de-energized equipment as being “failed” and will not use this data in applicable calculations. Inspectors learned through discussion with the systems engineers that the PPCS modification made to the simulator in 2001 was implemented with failed transmitters modeled as a “zero” input versus a failed input to the computer. Since PPCS sees a zero input as valid (e.g. SG level could be zero), this input is used in numerous simulator PPCS calculations (e.g. SG level, PZR level, RCS temperature, RCS subcooling, etc.) and results in the simulator’s PPCS providing the operator with invalid data. The inspectors were informed that the PPCS software would flag the data as failed and not use the data in calculations if the simulator modeled the failed inputs as “-999” or sent over a failed data point to PPCS.

Interviews of 5 currently licensed operators revealed a general misunderstanding of how the PPCS functions to automatically delete the averaged input from a failed channel. Operators expect the PPCS to provide erroneous indications of SG level during a loss of all AC power event or any event in which a vital bus is de-energized. One operator stated that due to the problems with false information coming from PPCS they typically don’t use PPCS for information during simulated accident scenarios.

This issue has resulted in negative training of the licensed operators and shift technical advisors. Through repeated simulator training over the last few years, the operators have learned to work-around the problem with PPCS in the simulator providing them invalid information and as a result they would no longer use PPCS, a valuable tool for rapid assessment of plant status, during emergencies in the real control room.

Analysis: The inspectors determined that this simulator fidelity issue was more than minor because it affected the capability objective of the human performance attribute under the Mitigating Systems cornerstone. The finding was evaluated using the Operator Requalification Human Performance SDP (MC 0609 Appendix I). The inspectors further determined that the deviation in the simulator had impacted operator actions through negative training and could potentially lead to a failure to use PPCS to diagnose conditions on the actual plant. The finding was of very low safety significance because the failure to use PPCS as a diagnostic tool in the simulator had no actual plant impact on equipment or personnel safety.

Enforcement: 10 CFR 55.46 (c)(1) requires a plant-referenced simulator used for the administration of the operating test or to meet experience requirements must demonstrate the expected plant response to operator input and to normal, transient, and accident conditions to which the simulator has been designed to respond. Contrary to the above, on January 25, 2006, the inspectors identified that Ginna failed to ensure that the simulator correctly replicated the expected plant response to accident conditions as a result of an improperly implemented modification which added PPCS to the simulator in 2001. Because this violation was determined to be of very low safety significance and entered into the corrective action program in condition report 2006-0467, it is being treated as a NCV, consistent with section VI.A of the NRC enforcement policy. **(NCV 5000244/2006002-02: Simulator Incorrectly Replicated Plant Design).**

.2 Biennial Review (1 sample)

Enclosure

a. Inspection Scope

On March 13, 2006, the inspector conducted an in-office review of licensee annual operating test results. The annual operating tests were conducted from January 3 to February 4, 2006. This inspection assessed whether pass rates were consistent with the guidance of NRC Manual Chapter 0609, Appendix I, "Operator Requalification Human Performance Significance Determination Process (SDP)". For Ginna, the inspector verified that:

- Crew failure rate was less than 20%. (Crew failure rate was 11.0%.)
- Individual failure rate on the dynamic simulator test was less than or equal to 20%. (Individual failure rate was 0% at both units.)
- Individual failure rate on the walk-through test was less than or equal to 20%. (Individual failure rate was 0%)
- Overall pass rate among individuals for all portions of the exam was greater than or equal to 75%. (Overall pass rate was 91.6%)

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness (71111.12 - 2 samples)

a. Inspection Scope

The inspectors evaluated Ginna's work practices and follow-up corrective actions for selected system, structure, or component (SSC) issues to assess the effectiveness of Ginna's maintenance activities. The inspectors reviewed the performance history of those SSCs and assessed Ginna's extent-of-condition determinations for those issues with potential common cause or generic implications to evaluate the adequacy of Ginna's corrective actions. The inspectors reviewed Ginna's problem identification and resolution actions for these issues to evaluate whether Ginna had appropriately monitored, evaluated, and dispositioned the issues in accordance with Ginna procedures and the requirements of 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance." In addition, the inspectors reviewed selected SSC classification, performance criteria and goals, and Ginna's corrective actions that were taken or planned, to verify whether the actions were reasonable and appropriate. The following issues were reviewed:

- Failure of three check valves and a lube oil pump trip associated with MDAFW Pump "A" testing were evaluated. The repair activities were conducted February 22-24, 2006.
- Repairs and ongoing maintenance efforts in the "B" Emergency Diesel Generator (EDG) Vault associated with a 3 hour fire barrier which assures division between the two EDGs were evaluated. The repair activities were conducted the week of March 13, 2006. Additionally reviews were conducted to determine treatment of the entire Diesel Generator building structure maintenance.

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13 - 5 samples)

a. Inspection Scope

The inspectors evaluated the effectiveness of Ginna's maintenance risk assessments required by paragraph a(4) of 10 CFR 50.65. This inspection included discussions with control room operators and scheduling department personnel regarding the use of Ginna's online risk monitoring software. The inspectors reviewed equipment tracking documentation and daily work schedules, and performed plant tours to gain reasonable assurance that actual plant configuration matched the assessed configuration. Additionally, the inspectors verified that Ginna's risk management actions, for both planned and/or emergent work, were consistent with those described in procedure IP-PSH-2, "Integrated Work Schedule Risk Management." Risk assessments for the following out-of-service systems, structures, and / or components were reviewed:

- Planned maintenance on the "B" motor driven auxiliary feedwater pump (January 16-18, 2006)
- Emergent work on the service water piping to the stand-by auxiliary feedwater pumps (February 6-7, 2006)
- Emergent Work on the "A" motor driven auxiliary feedwater system check valves and lube oil support system (February 22-25, 2006)
- Maintenance conducted by RG&E in the 13A switchyard which increased overall plant risk in a 100/0 lineup while already in a high winds condition (March 15, 2006)
- Planned maintenance to replace the "A" Battery Charger with a new 200 amp charger (weeks of March 13 and March 27, 2006)

b. Findings

No findings of significance were identified.

1R14 Operator Performance During Non-Routine Evolutions and Events (71111.14 - 1 sample)

a. Inspection Scope

For the non-routine event described below, the inspectors reviewed operator logs, plant computer data, the Updated Final Safety Analysis Report (IFSAR) and station procedures to determine what occurred and how the operators responded, and to determine if the response was in accordance with plant procedures.

- On February 6, 2006 during a walkdown of the service water system in preparation for power uprate a system engineer determined that the increased feed requirements for power uprate vacuum breakers in the service water

system, installed in the mid 1990's to prevent water hammer, could cause air binding of the standby auxiliary feedwater pumps. The inspectors followed the plant response to this determination by the engineer including declaration of the system as inoperable and an engineering evaluation recommending isolation of the previously installed vacuum breakers. The repairs and plant response were reviewed and the restoration of the system to operable status was evaluated by the inspectors.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15 - 4 samples)

a. Inspection Scope

The inspectors reviewed four operability determinations to verify that the operability of systems important to safety was properly established, that the affected components or systems remained capable of performing their intended safety functions, and that no unrecognized increase in plant or public risk occurred. In addition, the inspectors reviewed the following operability evaluations to determine if system operability was properly justified in accordance with IP-CAP-1.1, "Technical Evaluation for Current Operability and Past Operability Determination Worksheet":

- Condition Report (CR) 2006-0436, Operability of the Standby Auxiliary Feedwater System under Specific Accident Conditions with Recommendations to Change the Service Water System Vacuum Breaker Configuration
- CR 2006-0446, Evaluation of Siren Operability Under Winter Weather Conditions Causing Freezing of Rotating Elements
- CR 2006-0719, MDAFW Pump "A" Lube Oil Pump Trip During Testing
- CR 2006-0786, Incorrect Resistance Found on Reactor Protection Channel 2 Distribution Block

b. Findings

No findings of significance were identified.

1R19 Post Maintenance Testing (71111.19 - 6 samples)

a. Inspection Scope

The inspectors observed portions of post-maintenance testing activities in the field to determine whether the tests were performed in accordance with approved procedures. The inspectors assessed the test's adequacy by comparing the test methodology to the scope of maintenance work performed. In addition, the inspectors evaluated the test acceptance criteria to verify that the tested components satisfied the applicable design and licensing bases and technical specification requirements. The inspectors reviewed



the recorded test data to determine whether the acceptance criteria were satisfied. The following post-maintenance testing activities were reviewed:

- Work Order (WO) 20504209, Replace Letdown Line Temperature Controller Pair TC-130 and HC-130 with new NUSI Style Controllers (January 16-17, 2006)
- PT-16Q-B, Auxiliary Feedwater Pump "B" - Quarterly (January 18, 2006)
- PT-3Q, Containment Spray Pump Quarterly Test (January 24, 2006)
- PT-2.8Q, Component Cooling Water Pump Quarterly Test (February 15, 2006)
- PT-16Q-A, Auxiliary Feedwater Pump "A" - Quarterly (February 24, 2006)
- WO 20502387, Replace the 150 Amp Battery Charger "BYCA" with a new 200 Amp Battery Charger per PCR 2004-0046 - March 13-31, 2006

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22 - 5 samples)

a. Inspection Scope

The inspectors witnessed the performance and/or reviewed test data for the following five surveillance tests that are associated with selected risk-significant systems, structures, and components (SSCs) to verify that TS were followed, and that acceptance criteria were properly specified. The inspectors also verified that proper test conditions were established as specified in the procedures, that no equipment preconditioning activities occurred, and that acceptance criteria had been met.

- PT-12.1, Emergency Diesel Generator A - Monthly (January 12, 2006)
- PT-2.7.1, Service Water Pumps - Quarterly (January 16, 2006)
- PT-36.Q, "D" Standby Auxiliary Feedwater Pump (February 1, 2006)
- PT-2.2Q, Residual Heat Removal (February 6, 2006)
- PT-16.3A, AFW Pump "A" Discharge MOV and Check Valve Test (February 24, 2006)

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23 -1 sample)

a. Inspection Scope

The inspectors reviewed the following temporary plant modification to determine whether the temporary change adversely affected system or support system availability, or adversely affected a function important to plant safety. The inspectors reviewed the associated system design bases, including the UFSAR and TS, and assessed the adequacy of the safety determination screening and evaluation. The inspectors also

assessed configuration control of the temporary change by reviewing selected drawings and procedures to verify whether appropriate updates had been made. The inspectors compared the actual installation with the temporary modification documents to determine whether the implemented change was consistent with the approved documented modification. The inspectors reviewed the post-installation test results to verify whether the actual impact of the temporary change had been adequately demonstrated by the test. The temporary modifications were reviewed by the inspectors to verify they were installed in conformance with the instructions contained in procedure IP-DES-3, "Temporary Modifications."

- Temporary Modification 2006-0002, Cap Vacuum Breakers 9640E and 9640G on Service Water Piping to SBAFW

b. Findings

No findings of significance were identified.

**Cornerstone: Emergency Preparedness**

1EP4 Emergency Action Level and Emergency Plan Changes (71114.04 - 1 sample)

a. Inspection Scope

An in-office inspection that reviewed recent changes to the Ginna emergency plan implementing procedures was conducted on January 26, March 1, and March 10, 2006. These changes were made in accordance with 10 CFR 50.54(q), which the licensee had determined did not result in a decrease in effectiveness to the Plan and concluded that the changes continued to meet the requirements of 10 CFR 50.47(b) and Appendix E to 10 CFR 50. During this inspection, the inspector conducted a sampling review of the changes which could potentially result in a decrease in effectiveness. This review does not constitute an approval of the changes and, as such, the changes are subject to future NRC inspection. The inspection was conducted in accordance with NRC Inspection Procedure 71114, Attachment 4, and the applicable requirements in 10 CFR 50.54(q) were used as reference criteria.

b. Findings

No findings of significance were identified.

1EP6 Drill Evaluation (71114.06 - 1 sample)a. Inspection Scope

On January 25, 2006, the inspectors observed a licensed operator simulator scenario that included a limited test of the Ginna emergency response plan. Scenario ECA00-06, "Loss of All AC Power," was observed. During the exercise, the crew successfully classified the event in a timely manner, and the drill was counted as a success in the Ginna "Drill/Exercise Performance" performance indicator.

b. Findings

No findings of significance were identified.

**2. RADIATION SAFETY****Cornerstone: Occupational Radiation Safety**2OS1 Access Control to Radiologically Significant Areas (71121.01 - 8 samples)a. Inspection Scope

The inspector reviewed radiological work activities and practices and procedural implementation during observations and tours of the facilities and inspected procedures, records, and other program documents to evaluate the effectiveness of Ginna's access controls to radiologically significant areas. This inspection activity represents the completion of eight (8) samples relative to this inspection area (i.e., inspection procedure sections 02.01, 02.02.f, 02.03.b, c, and d, and 02.05.a, b, and c) and partially fulfills the annual inspection requirements.

Inspection Planning (02.01)

The inspector verified that site procedures stated that the following types of occurrences required the generation of an incident report: high radiation area non-conformance, very high radiation (> one rem per hour) area non-conformance, and unintended exposure occurrence. The inspector reviewed radiation protection incident reports generated since the last inspection and also discussed experience in this area with the site Senior Health Physicist responsible for evaluating these type of issues. Based on this inspection activity, the inspector verified that there were no licensee Performance Indicator events for the Occupational Exposure Cornerstone which required follow-up.

Plant Walkdowns and RWP Reviews (02.02.f)

During this inspection, the inspector examined the licensee's physical and programmatic controls for highly-activated or contaminated materials (non-fuel) stored within the spent fuel and other storage pools. The inspector noted that the licensee had incorporated guidance for this area in numerous procedures, including in the radiation protection

procedures for labeling radioactive materials, radiation work permits (RWPs), job coverage, and for use of underwater filters and vacuums. The inspector reviewed the subject procedures (as listed in the List of Documents Reviewed section) to verify the adequacy of the controls.

#### Problem Identification and Resolution (02.03.b, c, & d)

The inspector reviewed corrective action reports related to access controls and included in this review any high radiation area radiological events that have occurred since the last inspection in this area. The inspector discussed the corrective action reports with several members of the radiological protection staff to determine that the follow-up activities were being conducted in an effective and timely manner commensurate with their importance to safety and risk. Also, the inspector reviewed the licensee's self-assessment activities for any results related to the access control program. The intent of this review was to determine if identified problems were entered into the corrective action program for resolution. There were no licensee Performance Indicator (PI) events or licensee documentation packages for the Occupational Exposure Control Effectiveness PI which required review.

#### High Risk-Significant, High Dose Rate HRA and VHRA Controls (02.05.a, b, & c)

During this week of inspection, the inspector discussed, with several members of site radiation protection supervision, including the radiation protection manager (RPM), the procedural controls for entrances to high-dose-rate high radiation areas (HDR-HRAs) and very high radiation areas (VHRAs). The inspector reviewed the subject procedures (as listed in the List of Documents Reviewed section) to verify the adequacy of the controls. During tours of the radiologically-controlled area, the inspector examined the postings and barriers at selected accessible locations of locked high radiation areas. The inspector verified adequate posting and locking of the entrances to the selected locations which were examined.

#### Related Activities

The inspector performed a selective examination of documents (as cited in the List of Documents Reviewed section) to evaluate the adequacy of radiological controls. The review in this area was against criteria contained in 10 CFR 19.12, 10 CFR 20 (Subparts D, F, G, H, I, and J), site Technical Specifications, and site procedures.

b. Findings

No findings of significance were identified.

## 2OS2 ALARA Planning and Controls (71121.02- 5 required & 2 optional samples)

### a. Inspection Scope

The inspector reviewed the effectiveness of the licensee's program to maintain occupational radiation exposure as low as is reasonably achievable (ALARA). This inspection activity represents the completion of five (5) required and two (2) optional samples relative to this inspection area (i.e., inspection procedure sections 02.01.a & d, 02.03.a, 02.05.a, b\*, and c\*, and 02.07) and partially fulfills the biennial inspection requirements.

#### Inspection Planning (02.01.a & d)

The inspector reviewed the plant collective exposure history for the last three full years (2003 through 2005), the current exposure trends in 2006, and ongoing or planned activities to reduce individual, work group, and site collective exposure. The inspector examined the plant's current three-year rolling average collective exposure in comparison with industry experience. The inspector also evaluated the adequacy of the site-specific procedures associated with maintaining occupational exposures ALARA which included the procedures for radiation work permits, ALARA job reviews, and ALARA job review preparation. The inspector also reviewed the processes currently used to estimate and track work-activity-specific exposures.

#### Verification of Dose Estimates and Exposure Tracking Systems (02.03.a)

During this inspection, the inspector met with the Lead ALARA Technician. During this meeting, the inspector discussed the assumptions and bases for the current annual collective exposure estimate. This included the estimate for on-line operation and that for the refueling outage scheduled for this coming October. The inspector also reviewed the applicable ALARA procedures used for pre-job planning to determine the methodology employed for estimating work-activity-specific exposures and the intended dose outcome.

#### Source-Term Reduction and Control (02.05.a, b\*, & c\*)

The inspector utilized licensee records to determine the historical trends and current status of tracked plant source terms. The inspector determined that the licensee had developed an understanding of the plant source-term, including knowledge of input mechanisms to reduce the source term. This understanding was evidenced in their five-year ALARA plan and their source term reduction plan. The former included plans for permanent shielding and permanent scaffolding and improved ALARA processes. The inspector noted that the radiation protection group was working closely with the chemistry group to assure that the on-line and shut down chemistry procedures provided for an appropriate clean-up of the reactor coolant during operation and shut down. A review of the five-year ALARA plan showed specific actions had been identified, assigned to an owner, and assigned a due date, and the person-rem impact for each specific action had been estimated.

Declared Pregnant Workers (02.07)

The inspector determined that there had been no declared pregnant workers during the current assessment period. The inspector verified that adequate procedures and monitoring controls were in place to implement the requirements of 10 CFR 20.1208, Dose equivalent to an embryo/fetus.

Related Activities

The inspector performed a selective examination of documents (as cited in the List of Documents Reviewed section) for regulatory compliance and for adequacy of control of radiation exposure. The review was against criteria contained in 10 CFR 20.1101 (Radiation protection programs), 10 CFR 20.1701 (Use of process or other engineering controls), and site procedures.

b. Findings

No findings of significance were identified.

2OS3 Radiation Monitoring Instrumentation and Protective Equipment (71121.03 - 2 samples)a. Inspection Scope

The inspector reviewed the program for health physics instrumentation and protective equipment to determine the accuracy and operability of the instrumentation and of the personnel protective equipment. This inspection activity represents the completion of two (2) samples relative to this inspection area (i.e., inspection procedure sections 02.01 and 02.02) and partially fulfills the biennial inspection requirements.

Inspection Planning (02.01)

The inspector reviewed the plant's Updated Final Safety Analysis Review (UFSAR) and identified applicable radiation monitors associated with transient high and very high radiation areas including those used in remote emergency assessment. The inspector identified the appropriate installed area and process radiation monitors, emergency assessment instrumentation, and portable radiation instruments that are used to identify changing radiological conditions such that actions to prevent an overexposure may be taken. The identified monitors, instrumentation, and instruments will be examined in future inspections.

Identify Additional Radiation Monitoring Instrumentation (02.02)

The inspector identified the types of portable radiation detection instrumentation used for job coverage for high radiation area work, types of temporary area radiation monitors currently used in the plant, and types of continuous air monitors associated with jobs with the potential for workers to receive fifty millirems of committed effective dose equivalent (CEDE). The inspector also reviewed the types of whole body counter

equipment in place and the types of radiation detection instruments utilized for personnel release from the radiologically controlled area.

Related Activities

The inspector performed a selective examination of documents (as cited in the List of Documents Reviewed section) for regulatory compliance and adequacy in this area. The review was against criteria contained in 10 CFR 20.1501, 10 CFR 20 Subpart H, site Technical Specifications, and site procedures.

b. Findings

No findings of significance were identified.

**4. OTHER ACTIVITIES**

4OA1 Performance Indicator Verification

.1 Initiating Events Cornerstone (71151 - 3 samples)

a. Inspection Scope

Using the criteria specified in Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 2, the inspectors verified the completeness and accuracy of the performance indicator data for unplanned scrams per 7,000 critical hours, scrams with loss of normal heat removal and unplanned power changes per 7,000 critical hours for calendar year 2005. To verify the accuracy of the data the inspector reviewed monthly operating reports, NRC inspection reports and licensee event reports issued during calendar year 2005.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems

.1 Review of Items Entered into the Corrective Action Program:

As required by Inspection Procedure 71152, "Identification and Resolution of Problems," and in order to help identify repetitive equipment failures or specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into the Ginna corrective action program. This review was accomplished by reviewing paper copies of each condition report (CR) , attending daily screening meetings, and accessing Ginna's computerized database.

.2 Annual Sample: Process for Transitioning Fire Fighting Responsibilities into Operations Department (71152 - 1 sample)

a. Inspection Scope

The inspectors conducted interviews of operations department personnel and fire fighting personnel, reviewed documents presented (which consisted of project plans and a task to training matrix of requirements for the transition of fire fighting responsibilities) and reviewed AR's associated with the current change over of personnel from contractor fire team to Operations Department employees. Records of recent performance to meet training requirements of Appendix R were obtained and reviewed as well as future plans to ensure that Appendix R requirements will continue to be met by Ginna.

b. Findings and Observations

Introduction: The inspectors identified a Green non-cited violation (NCV) of 10 CFR 50, Appendix R III.1.3.b which requires that drills shall be performed at regular intervals not to exceed three months for each shift fire brigade. A review of records for the fourth quarter of 2005 revealed that four of five shift fire brigades did not drill during that period.

Description: On February 27, 2006, while reviewing Ginna plans for turning over fire brigade responsibilities from a contractor vendor to the Operations Department, the inspectors requested a copy of fire brigade drill records. The following day a condition report was written by Ginna personnel that documented a failure to drill four of five shift fire brigade teams during the fourth quarter of 2005 documenting the failure to conduct the required fire drills and subsequently the records were delivered to the Resident Office. A review of the records by the inspectors confirmed the failure to meet the drill requirement.

Additional review of the documents associated with the turnover plan revealed that the plan as presented was not on schedule and the task to training matrix was still being developed. No other failures to meet regulatory requirements were noted at the time of the review.

Analysis: The inspectors determined that the failure to conduct the fire drills constituted a failure to comply with the requirements of 10 CFR 50 Appendix R III.1.3.b. The finding was determined to be more than minor because it affects the reliability and capability objective of the protection against external factors attribute of the Mitigating Systems Cornerstone. The finding was evaluated using Appendix F of the Significance Determination Process of Manual Chapter 0609. The issue was determined to fall in the category of Fire Prevention and Administrative Controls and was assigned a degradation factor of low which screens directly to green in step 1.3.1 of Appendix F. The finding has a cross-cutting aspect in Human Performance associated with a poor turnover of responsibilities and poor management oversight of the turnover process when fire personnel changed jobs.



Enforcement: 10 CFR 50, Appendix R III.I.3.b which requires, in part, that drills shall be performed at regular intervals not to exceed three months for each shift fire brigade. Contrary to the above, during the fourth quarter of 2005, Ginna failed to drill four of five shift fire brigades. Because this violation was determined to be of very low safety significance and entered into the corrective action program in condition report 2006-0785, it is being treated as a NCV, consistent with section VI.A of the NRC enforcement policy. **(NCV 5000244/2006002-03, Missed Fire Brigade Drills).**

3. Identification and Resolution of Problems - Occupational Radiation Safety (71121)

a. Inspection Scope

The inspector selected six issues identified in the Corrective Action Program (CAP) for detailed review (RP Incident Report Nos. 2005-6717 and -6862 and 2006-0651, -0882, -0909, and -0923). These issues were associated with a procedural reference to 10 CFR 20.1101( c ), a containment entry exceeding the ALARA estimate, an incident involving portal monitor alarms, and several equipment contamination events, respectively. The documented reports for the issues were reviewed to ensure that the full extents of the issues were identified, appropriate evaluations were performed, and appropriate corrective actions were specified and prioritized.

b. Findings

No findings of significance were identified.

4OA6 Meetings, Including Exit

On April 14, 2006, the resident inspectors presented the inspection results to Ms. M. Korsnick and other members of her staff, who acknowledged the findings. The inspectors asked the licensee whether any of the material examined during the inspection should be considered proprietary. Proprietary information was examined during this inspection, but is not specifically discussed in this report.

4OA7 Licensee-identified Violations

None.

ATTACHMENT: SUPPLEMENTAL INFORMATION

Enclosure

**SUPPLEMENTAL INFORMATION**

**KEY POINTS OF CONTACT**

Licensee personnel

S. Adams	Manager of Operations
D. Blankenship	Manager, Radiation Protection
M. Coleman	LORT Training Instructor
M. Gallaway	Manager, Ginna Maintenance
D. Holm	Plant Manager
M. Korsnick	Vice President - Ginna
B. Leonard	Manager of Nuclear Training
K. Masker	Senior Licensed Instructor
R. Ploof	Director Operations Training
B. Randall	Nuclear Safety and Licensing Manager

**LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED**

Opened

None

Opened and Closed

5000244/2006002-01	NCV	Inadequate Control of Transient Combustible Material (Section 1R05)
5000244/2006002-02	NCV	Simulator Incorrectly Replicated Plant Design
5000244/2006002-03	NCV	Missed Fire Brigade Drills

Closed

None

Discussed

None

## LIST OF DOCUMENTS REVIEWED

### **Section 1R01: Adverse Weather Protection**

#### Condition Reports

2006-0644 Entered ER-SC.4, Turbine Building Window Flashing Loose  
2006-0817 Entered ER-SC.3 Low Screenhouse Water Level due to Unexpected 6 Inch Drop  
in Screenhouse Water Level

#### Procedures

ER-SC.1, "Adverse Weather Plan"  
EPIP 1-5, "Notifications"

### **Section 1R04: Equipment Alignment**

#### Condition Report

2005-6141 PT-915 slow to pressurize  
2005-0190 Boric acid deposits on B SI pump seals  
2004-1291 P&ID Drawings does not match system configuration  
2001-1011 B SI Pump tripped while filling accumulator  
2000-0959 MOV 817A/B stroke times outside of accident analysis assumptions  
2000-0513 MOV on SI system damaged  
1999-0724 RSSP-2.1 valve testing problems on MOV-817B  
98-1404 Response to NRC IN-98-21 Electrical Connectors  
97-1016 SI Pump curve - wrong version in curve book  
96-0493 Response to NRC GL 96-01 logic testing deficiencies

#### Procedures

S-30.4 "Auxiliary Feedwater System Valve and Breaker"  
T-27.2 "Emergency Diesel Generator B Pre-startup Alignment"  
RSSP 2.1A "Functional Test Alignment/Realignment"  
RSSP 23 "SI Pump C Interlock Verification"  
PT-2.1Q "Safety Injection Quarterly Test"  
PT-2.1S "A, B, and C SI Pump Service Water Cooler Discharge Flow Check"  
PT-2.3 "Safeguard Power Operated Valve Operation"  
PT-2.10.1 "SI System Discharge Check Valves, Full Flow Verification Test"  
PT-2.10.4 "SI Check Valve and MOV leakage Test"  
PT-50.19 "RHR to SI and CS MOV 857A/B/C Differential Pressure Test"  
PT-50.20 "SI Pump C Suction MOV 1815A/B Differential Pressure Test"

Drawings

33013-1237 Auxiliary Feedwater P&ID

**Section 1R05: Fire Protection**

Condition Reports

2006-0742 Flamastic Coating Applied with —56.3 Procedure  
2006-0370 Storage of Combustible Materials without Transient Combustible Permit

Drawings

33013-2552 Fire Response Plan - Auxiliary Bldg. Plan - Operating Flr. Elev. 271'0"  
33013-2544 Fire Response Plan - Turbine Building - Basement Flr Elev. 253'6"  
33013-2371 Fire Response Plan - Screen House

Procedures

FPS-16 Bulk Storage of Combustible Materials and Transient Fire Loads, Rev. 9  
FRP-24.0 Diesel Generator Room A and Vault  
FRP-25.0 Diesel Generator Room B and Vault  
ER-FIRE.6 Response to Fire in D/G "B" Vault  
FRP-31.0 Screenhouse Operating Floor

Documents

DA-ME-98-004 Combustible Loading Analysis, Rev. 3  
Ginna Fire Protection Program, Rev. 3

**Section 1R06: Flood Protection Measures**

Work Orders

20500111 Clean/Repair and Inspect Floor Drains Between Turbine Building and Cable Tunnel and Inside Relay Room

Condition Reports

Relay Room Floor Drains

Drawings

D-311-003 Floor and Equipment Drains Turbine Building Elevation 253  
D-311-004 Floor and Equipment Drains Turbine Building Elevation 271  
D-327-010 Floor and Equipment Drains Intermediate Building Elevation 253  
D-421-301 Reactor Containment Vessel, Electrical Cable Tunnel and Retaining Wall

D-421-303, Reactor Containment Vessel, Electric Cable Tunnel

### **Section 1R11: Licensed Operator Requalification**

#### Condition Reports

2006-1247 Procedure for Control of NRC Exam Room Key not Followed  
 2006-0842 Evaluate requirements and practices for training exam/test security  
 2006-0828 Unclear expectations regarding Exam Failures  
 2006-0778 Evaluate V C Summer Initial NRC Exam Failures  
 2006-0467 Simulator PPCS Response to Instrument Failures does not Model actual Plant PPCS response  
 2006-0184 Staff Group Failure of Annual Requal Simulator Exam Scenario

#### Procedures

OTG-2.2 Simulator Examination Instructions, Rev. 38  
 OTG-2.6 Dynamic Simulator Examination Scenarios, Rev. 13  
 OTG-2.0 Annual Examination Instructions, Rev. 18  
 OTG-2.5 Exam Failure Review Process, Rev. 11

#### Documents

NUREG 1021 Operator Licensing Examination Standards for Power Reactors, Rev. 9  
 ANSI 3.5-1985 Nuclear Power Plant Simulators for use in Operator Training  
 ECA00-06 Loss of All AC Power, Examination Scenario, Rev. 2  
 ES1213-03 Large Break LOCA, Examination Scenario, Rev 12  
 10CFR55.46 Simulation Facilities

### **Section 1R12: Maintenance Rule Implementation**

#### Condition Reports

2005-1787 "A" MDAFW Pump Casing Stud is Leaking  
 2006-0201 Valve Found Improperly Installed, V-4308B  
 2006-0719 MDAFW Pump "A" Lube Oil Pump Trip During Testing  
 2006-0721 After MDAFW Pump "A" Secured, Possible Leakage Thru CV4000C  
 2004-0191 "B" D/G Sump Pump  
 2005-2070 Rain Water Leaking Through Crack in "B" EDG Room  
 2004-2346 EDG Equipment Door Leakage During Rainstorm

#### Procedures

A 1.6.4 Requirements for Safe Work in Confined Space

Work Orders

20600581 Replace Pump and Motor Assembly PLO12A  
20600589 CV4000C May be Leaking by - Cut out and Replace Valve  
20600221 Install Holders for Vault Hatch Cover Tools  
20505361 Perform Sealing Ground Water Leakage Repairs in the "B" D/G Vault  
20503266 Ground Water Leakage Repairs to "B" D/G Vault Append. "R" Fire Enclosure  
20401295 Inspect/Repair or Replace Sump Pump Discharge Check Valves

Plant Change Requests

2004-0007 "B" Diesel Generator Bldg Combustion Air and Room Air Tornado Missile Barriers

**Section 1R13: Maintenance Risk Assessments and Emergent Work Evaluation**

Condition Reports

2006-1041 Operations Management Unaware of Backhoe activity in Station 13A  
2006-1005 Evaluate NRC IN 2006-06 ('LOOP and SBO are More Applicable During Summer Period') for Applicability to Ginna Station  
2006-0436 Vacuum Breakers 9640E and 9640G May Render SBAFW Inoperable  
2006-0689 Flow Transmitter FT-2013 as-found Data out of Tolerance  
2006-0710 "A" AFW Pump Discharge Pressure Transmitter Found out of Tolerance and Non-Linear  
2006-0715 AFW Pump "A" Suction Check Valve 4017 Failure to Meet PT-!6Q-A Requirements  
2006-0721 Pressure Indicated on "A" AFW Discharge PI-2189 after AFW Pump Secured, Possible Leakage thru Check Valve 4000C  
2006-0733 Common Cause Concern on Check Valve Issues  
2006-0806 Parts not Assigned to EIN for Valve 4000C

Work Orders

20600487 Measure any Air Flow When Vent Valves 9640H and 9640F are Opened  
20504423 Install a Tell Tale Drain on the Outlet Side of V-4342

PSA Evaluations

2006-0003 Evaluate Risk Significance of Air Binding Concern with Standby Auxiliary Feedwater (SAFW) Pumps

Procedures

IP-PSH-2 "Integrated Work Schedule Management

**Section 1R14: Personnel Performance During Non-routine Plant Evolutions**

Condition Reports

2006-0436 Vacuum Breakers 9640E and 9640G May Render SAFW Inoperable

**Section 1R15: Operability Evaluations**

Operability Evaluations

2006-0436 Operability of the Standby Auxiliary Feedwater System under Specific Accident Conditions with Recommendations to Change the Service Water System Vacuum Breaker Configuration  
2006-0446 Evaluation of Siren Operability Under Winter Weather Conditions Causing Freezing of Rotating Elements  
2006-0719 MDAFW Pump "A" Lube Oil Pump Trip During Testing  
2006-0786 Incorrect resistance found on Reactor Protection Channel 2 rack one distribution block terminals

Condition Reports

2006-0719 MDAFW Pump "A" Lube Oil Pump Trip During Testing  
2006-0786 Incorrect resistance found on Reactor Protection Channel 2 rack one distribution block terminals

Work Order

20600139 Perform a Wire Verification Check of RPS Rack W1, DB-2 Terminal Board Connections

**Section 1R19: Post Maintenance Testing**

Procedures

PT-16Q-B Auxiliary Feedwater Pump "B" - Quarterly  
PT-3Q Containment Spray Pump Quarterly Test  
PT-2.8Q Component Cooling Water Pump Quarterly Test  
PT-16Q-A Auxiliary Feedwater Pump "A" - Quarterly

Condition Reports

2006-0193 HC-130 Setpoint Adjustment Response not as Expected  
2006-0757 "A" MDAFW Pump Chemistry Sample Initially Out-of-Specification  
2006-0812 First Chemistry Sample for "A" AFW Pump Test was Unsatisfactory  
2006-1130 New Battery Charger "A" Output has Excessive AC Ripple

Work Orders

- 20504209     Replace Letdown Line Temperature Controller Pair TC-130 and HC-130 with new NUSI Style Controllers
- 20502387     Replace the 150 Amp Battery Charger "BYCA" with a new 200 Amp Battery Charger per PCR 2004-0046

Plant Change Record

- 2004-0046     Replace Battery Charger "BYCA" and Battery Charger "BYCB" and install Battery Terminal Covers for Vital Batteries BTRYA, BTRYB, and BTRYSP

**Section 1R22: Surveillance Testing**

Procedures

- PT-12.1       Emergency Diesel Generator A, Rev 121
- PT-2.7.1      Service Water Pumps, Rev 59
- PT-2.2Q       Residual Heat Removal System - Quarterly, Rev. 24
- PT-36.2D      SAFW Pump D Discharge MOV and Check Valve Test, Rev. 8
- PT-16.3A      AFW Pump A Discharge MOV and Check Valve Test

**Section 1R23: Temporary Plant Modifications**

Temp Mod's

- 2006-0002     Cap Vacuum Breakers 9640E and 9640G on Service Water Piping to SBAFW

**Section 1EP4: Emergency Action Level and Emergency Plan Changes**

EIPs

- EPIP 1-0, Ginna Station Event Evaluation and Classification, Rev 35, 36 & 37
- EPIP 1-2, Alert, Rev 10
- EPIP 1-3, Site Area Emergency, Rev 13
- EPIP 1-4, General Emergency, Rev 13
- EPIP 1-18, Discretionary Actions for Emergency Conditions, Rev 11
- EPIP 5-9, Testing the Off Hours Call-in Procedure and Quarterly Telephone No. Check, Rev 14

**Section 1EP6: Drill Evaluation**

Documents

- ECA00-06       Loss of All AC Power, Examination Scenario, Rev. 2
- ES1213-03      Large Break LOCA, Examination Scenario, Rev 12

**Section 2OS1: Access Control to Radiologically Significant Areas**



Documents

Dose and personnel contamination tracking information for the week of March 12, 2006  
Dose and personnel contamination tracking information for the week of March 19, 2006  
Radiation Protection 3-Year Self-Assessment/Benchmarking Schedule (2006 thru 2008)  
Benchmarking Report 2006-0020, Radiological Impact of Power Uprate, January 30, 2006

Procedures

Procedure A-1, Rev. 074, Radiation Control Manual  
Procedure A-1.1, Rev. 44, Access control to locked high radiation and very high radiation areas  
Procedure A-1.8, Rev. 023, Radiation Work Permits  
Procedure RPA-PERFORMANCE- IND, Rev. 1, RP performance indicator guidelines  
Procedure RP-JC-JOBCOVERAGE, Rev. 007, Job coverage  
Procedure RP-SUR-LABEL, Rev. 6, Labeling and control of radioactive material  
Procedure RF-71, Rev. 4, Tri-Nuclear Corporation underwater filter/vacuum unit operating procedure

**Section 2OS2: ALARA Planning and Controls**

Documents

Ginna Station ALARA Five Year Plan (2006 - 2010) as of March 24, 2006  
Ginna ALARA Stat Sheet for 2005  
ALARA Number Dose Report from 01-01-2005 to 12-31-2005  
2006 Off-line Dose Checkbook  
2006 Refueling Outage Dose Checkbook  
Station ALARA Committee meeting minutes for February 14, 2006  
Benchmarking Report 2006-0030, PWR ALARA Committee Conference, January 11 - 13, 2006

Procedures

Procedure A-1.6, Rev. 021, Station ALARA Committee  
Procedure A-1.6.1, Rev. 028, ALARA job reviews  
Procedure RPA-QA, Rev. 2, Radiation Protection Quality Assurance Program  
Procedure RPA-DOS, Rev. 11, Dosimetry program administrative procedure  
Procedure RP-ALA-REVIEW, Rev. 7, ALARA job review preparation  
Procedure RP-EXP-EMBRYO/FETUS, Rev. 3, Determining radiation dose to the embryo/fetus

Other

Source Term Reduction at R.E. Ginna Nuclear Power Plant Presentation, Greg Jones and Bud Meighan  
2006 Refueling Outage Major Activities

**Section 2OS3: Radiation Monitoring Instrumentation and Protective Equipment**

Documents

Ginna Updated Final Safety Analysis Report  
Passive monitoring for internal radioactivity at Ginna, September 5, 2003

Procedures

Procedure RP-INS-M&TE, Rev. 7, Radiation Protection Measurement and Test Equipment Control

**Section 40A1: Performance Indicator Verification**

Nuclear Energy Institute 99-02      Regulatory Assessment Performance Indicator Guideline, Revision 2

**Section 40A2: Identification and Resolution of Problems**

Condition Reports

2006-1182      INPO Assist - Operator Fundamentals #2 - Provide Expectations to Operations Leaders  
2006-1106      Transition of Performance Monitoring Functions appears disjointed  
2006-1030      Performance Monitoring Task Transition Vertical Slice Areas for Improvement  
2006-0959      Fire Brigade Quals and OJT/OJE  
2006-0946      Operations OJT/TPE Instructors not observed per TR-4.1  
2006-0887      Lack of Analytical Basis for assumed operator actions - Fire  
2006-0886      Fire Brigade Inconsistencies - Self Assessment  
2006-0867      Fire Brigade Member offsite  
2006-0859      Desire to increase purpose and awareness of A-54.7 Tour  
2006-0854      Non-Licensed Operator Task Matrix not being Reviewed Annually  
2006-0848      Evaluate Performance of Fire Brigade  
2006-0845      Hourly Fire Tour Records lacking  
2006-0834      Failure to Submit a CR (on fire drill deferment)  
2006-0830      Procedure FR-H.1 Enhancement  
2006-0785      Missed Fire Brigade Drill

Procedures

SC-3.4.1 "Fire Brigade Captain and Control Room Personnel Responsibilities"

**LIST OF ACRONYMS**

ADAMS	Agency-Wide Documents Access and Management System
ALARA	As Low As Reasonably Achievable
AR	Action Report
CAP	Corrective Action Program
CEDE	Committed Effective Dose Equivalent
CFR	Code of Federal Regulation
EP	Emergency Preparedness
HDR	High Dose Rate
HRA	High Radiation Area
IP	Inspection Procedure
NRC	U.S. Nuclear Regulatory Commission
OA	Other Activities
OS	Occupational Radiation Safety
PARS	Publicly Available Records
PI	Performance Indicator
RP	Radiation Protection
RWP	Radiation Work Permit
SDP	Significance Determination Process
UFSAR	Updated Final Safety Analysis Report
VHRA	Very High Radiation Area