

November 1, 2005

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 **05000244/2005004**

Dear Mrs. Korsnick:

On September 30, 2005, 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 October 21, 2005, with Mr. David Holm 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 one NRC-identified finding and one self-revealing finding of very low safety significance (Green). None of these findings were determined to involve violations of NRC requirements.

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Sincerely,

**/RA/**

James M. Trapp, Chief  
Reactor Projects Branch 1  
Division of Reactor Projects

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

Enclosure: Inspection Report 50-244/2005004  
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.: 050244/2005004

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

Facility: R. E. Ginna Nuclear Power Plant

Location: Lake Road  
Ontario, New York

Dates: July 1, 2005 through September 30, 2005

Inspectors: K. Kolaczyk, Senior Resident Inspector  
M. Marshfield, Resident Inspector  
M. Patel, Reactor Engineer  
J. McFadden, Health Physicist  
T. O'Hara, Reactor Inspector

Approved by: James M. Trapp, Chief  
Reactor Projects Branch 1  
Division of Reactor Projects

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## SUMMARY OF FINDINGS

IR 05000244/2005-004; 07/01/2005 - 09/30/2005; R. E. Ginna Nuclear Power Plant; Equipment Alignment, Operator Performance During Non-Routine Evolutions and Events.

The report covered a 3-month period of inspection by resident inspectors and announced inspections by regional specialists. Two Green findings 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 that auxiliary operators (AOs) during their rounds, did not properly verify the relay room air-conditioning systems were operating as required by procedure P-13, "Auxiliary Operator Tour Guidelines." Specifically, the AOs failed to identify that the "B" relay room air-conditioning system was not functioning properly. As a result of this deficiency, the temperature of the relay room began to increase, and the multiplexor (MUX) cabinets for the plant process computer (PPCS) began to overheat, which could have rendered the system nonfunctional. In addition to installing temporary fans, Ginna corrective actions included increasing oversight of AO rounds to ensure degraded conditions are properly documented. The cause of this finding is related to the cross-cutting element of problem identification and resolution.

This finding is more than minor since it affected the reliability objective of the Human Performance attribute of the Mitigating Systems cornerstone. The inspectors assessed the finding using the Significance Determination Process (SDP) and determined the finding to be of very low safety significance. The finding was of low safety significance since the finding did not result in a loss of safety function. Specifically, operators took appropriate compensatory measures to limit the temperature increase of the multiplexor (MUX) cabinets before the PPCS failed. (Section 1R04)

#### Cornerstone: Barrier Integrity

- Green. The inspectors identified a self-revealing finding for a failure of plant operators to use the correct procedure to restore the steam generator blowdown system. As a result of using the incorrect procedure, a steam generator water chemistry excursion occurred, which required a plant shutdown to restore secondary chemistry to acceptable levels. In addition to restoring steam generator water chemistry to within specifications, corrective action included implementing a work package review process that would verify all work packages have proper restoration actions. The cause of this finding is related to the cross-cutting element of human performance.

This finding is more than minor since it affected the physical design barriers objective of the Configuration Control attribute of the Barrier Integrity Cornerstone. This finding is not suitable for the significance determination process evaluation, but was reviewed by NRC management and determined to be a green finding of very low safety significance. The finding was of very low safety significance because there was no evidence that the steam generator tubes had been degraded, and the operators implemented appropriate actions after the chemistry excursion occurred. (Section 1R14)

B. Licensee-Identified Violations

None

## REPORT DETAILS

### Summary of Plant Status

Ginna began the period at full power. On July 27, 2005, the plant was shutdown due to a chemistry excursion caused by lake water entering the main condenser hotwell through the plant blowdown piping. Once the water chemistry in both steam generators was restored to acceptable parameters, the plant returned to full power on July 29, 2005. On September 1, 2005, the plant was shutdown so that repairs could be made to a hydraulic fluid leak on a main turbine control valve. The plant returned to full power on September 3, 2005, and operated at full power for the duration of the period.

#### **1. REACTOR SAFETY**

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

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

##### a. Inspection Scope

On August 19, 2005, Control Room Operators entered ER-SC.1, "Adverse Weather Plan," when a tornado watch was issued by the National Weather Service at approximately 4:00 p.m. for the Rochester area. The tornado watch was cancelled later that day and operators exited ER-SC.1 at 8:32 p.m. The inspectors reviewed the operator response to the tornado watch and verified that minor procedure enhancements, that were identified by Ginna personnel and the inspector, were entered into the Ginna corrective action program (CAP).

##### b. Findings

No findings of significance were identified.

#### 1R04 Equipment Alignment

##### .1 Partial Walkdown (71111.04Q - 4 samples)

##### a. Inspection Scope

The inspectors used plant technical specifications, Ginna operating procedures, plant piping and instrument drawings (P&ID), and the Updated Final Safety Analysis Report (UFSAR) as guidance for conducting partial system walkdowns. The inspectors reviewed the alignment of system valves and electrical breakers to ensure proper in-service or standby configurations as described in plant procedures and drawings. If possible during the walkdowns, 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. The following plant system alignments were reviewed:

- On August 2, 2005, the inspectors completed a walkdown of the steam-driven auxiliary feedwater pump when the "B" diesel generator was not in service



because of surveillance testing. This system was examined because it is a diverse means of supplying water to the steam generators in the event offsite power was lost and the "A" diesel generator failed to start.

- On August 9, 2005, the inspectors completed a walkdown of the containment recirculation fan cooler system while the "A" and "B" containment spray trains were not in service because of surveillance testing. The containment recirculation system was examined, because it is a diverse means of reducing containment pressure in the event a loss of coolant accident occurs, when the containment spray pumps are not in service.
- On August 31 and September 1, 2005, the inspectors performed a walkdown of the air-conditioning systems for the relay room, when the inspectors noted the relay room air temperature was higher than normal.
- On September 22, 2005, the inspectors conducted a walkdown of both trains of the safety injection system. The safety injection system was chosen for its safety significance.

.2 Complete Walkdown (71111.04S - 1 sample)

a. Inspection Scope

Using the UFSAR, the plant TS, and design basis documents as guides, the inspectors conducted one complete walkdown of the "A" diesel generator (DG) and associated support systems that are necessary for proper operation of the DG. The "A" DG was selected for inspection because of its importance following certain accident scenarios. The inspection consisted of an examination of equipment in the field, a review of system surveillance procedures, and an observation of a surveillance test.

b. Findings

Introduction: The inspectors identified that Ginna operations personnel did not properly monitor the performance of the relay room air-conditioning systems as required by Ginna procedures. As a result, a degraded air-conditioning unit in the relay room was not identified by operations personnel, and temperature-sensitive equipment was adversely affected.

Description: The relay room is located beneath the Ginna control room; it is cooled by two non-safety-related air-conditioning systems that are physically located in the room. In addition to containing cables for the instrumentation in the control room, the relay room contains instrumentation and control equipment for the plant process computer, control rods, advanced digital feedwater control system, and undervoltage relay protection cabinets. For environmental qualification purposes, the relay room is classified as a mild environment. Although table 3.11-1 of the Ginna UFSAR indicates the room temperature will not exceed 104E F under accident conditions, chapter 3.11.3.5 of the Ginna UFSAR states that operators may have to use portable air

conditioners and natural circulation methods to keep the room temperature within design assumptions. Three times per shift, auxiliary operators are required to enter and inspect the relay room per procedure O-6.1, "Auxiliary Operator Rounds and Log Sheets." Step 4.4 of O-6.1 states that any abnormal conditions that are observed should be followed up with a maintenance work request (MWR). Procedure P-13 "Auxiliary Operator Tour Guidelines," Attachment 2 indicates that during a tour of the relay room, operators should check the condition of the relay room air-conditioning systems for "alarms and cooling."

On August 31, 2005, while touring the relay room, the inspector noted that the air temperature felt unusually warm, over 85E F as indicated on an area thermometer. Normally temperatures in the relay room are 70E F . After examining the two local air-conditioning units, the inspector determined that the elevated temperature was due to the fact that the "B" unit was not functioning properly and was blowing hot vice cold air. Upon identifying the condition, the inspector notified the control room shift manager. The following day, September 1, the inspector also notified personnel in the electrical shop who normally perform maintenance on the air-conditioning units of the degraded condition of the "B" unit. The degraded condition of the "B" air-conditioning unit was not entered into the Ginna CAP until September 2, when electricians, who were performing a routine weekly check of the relay room air-conditioning systems identified the "B" unit was not properly functioning. This condition was identified in Action Report (AR) 2005-4677, "Relay Room A/C Unit B Not Cooling Properly AK PO4." Because of the high temperature conditions in the relay room, on September 4, 2005, temperature-sensitive equipment began to overheat, which resulted in the generation of high temperature alarms in the multiplexor (MUX) cabinets for the plant process computer system (PPCS). The high temperature conditions were mitigated by Ginna personnel by opening the cabinet doors, and installing temporary cooling fans. This condition was documented in ARs 2005-4689, "Several Muffin Fans Are Not Working in MUX Cabinets" and AR 2005-4692, "MUX Cabinets are Overheating."

Analysis: The inspectors identified that the auxiliary operators (AOs) failure to properly verify the relay room air-conditioning systems were operating as required by procedure P-13 was more than minor since it affected the reliability objective of the Human Performance attribute of the Mitigating Systems cornerstone. The inspectors assessed the finding using the Significance Determination Process (SDP) and determined the finding to be of very low safety significance. The finding was of low safety significance since the finding did not result in a loss of safety function. Specifically, operators took appropriate compensatory measures to limit the temperature increase of the MUX cabinets before the PPCS failed. Further, the "A" air-conditioning system continued to operate, limiting the temperature increase to less than the 104E F design limit contained in the Ginna UFSAR. In addition to installing temporary fans, Ginna corrective actions included increasing oversight of AO rounds to ensure degraded conditions are properly documented. The cause of this finding is related to the cross-cutting element of problem identification and resolution. The late identification of the degraded relay room cooler was documented in AR 2005-4731 "Loss of B Relay A/C Unit Not Discovered Promptly." FIN 05000244/2005004-01, Auxiliary Operators Did Not Properly Monitor the Performance of the Relay Room Air-Conditioning Systems.

Enforcement: No violation of NRC requirements occurred since the components that were affected by the temperature increase were not safety-related, and the “Auxiliary Operator Tour Guidelines,” are not TS required procedures.

1R05 Fire Protection (71111.05 - 9 samples)

e. Inspection Scope

Using the Ginna Fire Protection program documents as a guide, the inspectors performed walkdowns of the following nine fire zones 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 fire zones were inspected:

- Screenhouse, Fire Zone SH-2
- Relay Room, Fire Zone CC/RR
- Intermediate Building Sub-Basement, Fire Zone IB-0
- Intermediate Building North, Fire Zone IBN-1
- Intermediate Building North, Fire Zone IBN-2
- Intermediate Building North, Fan Floor, Fire Zone IBN-3
- Intermediate Building North, Fire Zone IBN-4
- Turbine Building Feedpump Room, Fire Zone TB-1FP
- Condensate Water Storage Tank Room, Fire Zone SB-1WT

b. Findings

No findings of significance were identified.

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

a. Inspection Scope

Using the Updated Final Safety Analysis Report (UFSAR), the Technical Requirements Manual, and recent operating experience information from the Surry and Kewaunee nuclear stations as guides, the inspectors examined the testing program for the turbine and screen house flood detection instruments. As part of the review, the inspectors examined the flood protection instrumentation located in the lower level of the screenhouse and in the turbine building condenser pit area.

The inspectors also reviewed the maintenance history for the rubber expansion joints that are located in the circulating water system. The purpose of the review was to verify that Ginna has a program in place to inspect the joints and repair or replace them as necessary before a catastrophic failure occurred.

b. Findings

No findings of significance were identified.

1R07 Heat Sink Performance (71111.07 - 1 annual sample)

a. Inspection Scope

The inspector reviewed Ginna's periodic maintenance, testing, and inspection records for the spent fuel pool "A" heat exchanger. This review was done to determine if Ginna had reasonable assurance that the heat exchanger's heat transfer capability would be adequate to meet its design heat removal requirements during plant operations.

The results of performance tests were reviewed to verify that periodic maintenance schedules are consistent with results, and that additional identified deficiencies are corrected in a timely manner.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program (71111.11 - 1 sample)

a. Inspection Scope

On August 23, 2005, the inspectors observed a licensed operator simulator scenario. The test observed was scenario ECA1112-07, "LOCA Outside Containment." 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

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:

- Since May 2005, the chlorine injection system for the service water system has not been able to inject a sufficient amount of chlorine into the system that would prevent the growth of biofouling species. Actions that were taken to restore the chlorine injection system to an operable status, and monitor the performance of components that are cooled by the service water system were reviewed.
- Since January 2005, several plant radiation monitors, including the steam jet air ejector radiation monitor R-15A, and the effluent radiation monitor for the "A" spent fuel pool heat exchanger R-20A have suffered failures. Actions implemented to restore the monitors to an operable status were reviewed.

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:

- Troubleshooting and repair of a condensing pot leak on level transmitter (LT) 461, narrow range indicator for "A" steam generator, during the July 27-28 downpower for chemistry control.
- Scheduled maintenance activities for offsite power line 751 conducted during the week of June 27, 2005 and ending on July 1, 2005.
- Troubleshooting and repair of EDG load swings was monitored during repairs on July 5-6, 2005.

- Troubleshooting and repair of the turbine driven auxiliary feedwater pump as well as cleanup of the steam generators following a chemistry excursion caused by a service water intrusion was monitored during the week of July 11, 2005.
- Troubleshooting and restoration of the sodium hypochlorite systems for chlorination of the service water system was monitored during the week of July 18, 2005.

b. Findings

No findings of significance were identified.

1R14 Operator Performance During Non-Routine Evolutions and Events (71111.14 - 2 samples)

b. Inspection Scope

During this period there were two events which the inspectors followed to assess operator and licensee performance during non-routine events. The inspectors chose these two events because of the significance and plant-wide impact of the events.

- On July 27<sup>th</sup>, 2005, during a restoration of the steam generator blowdown system following maintenance, the system was improperly restored, which caused steam generator water chemistry to exceed the level 3 values. The improper restoration of the blowdown system routed lake water from the main condenser into the "B" main condenser hotwell. The initial indications of the event received in the control room were a condenser high hotwell level alarm, and a reject of condensate back to the condensate storage tanks. In response to the event, operators shutdown the plant and placed the condensate polisher system in service to clean up the feed and condensate system, and reinitiated blowdowns to restore steam generator chemistry. Water chemistry was returned to specification, and the plant returned to Mode 1 after 20 hours.

The inspectors were on site for the event and responded to the Operational Control Center. The inspectors observed the decision-making process by the investigation team as they determined the initial cause to the chemistry excursion, took confirmation samples, and planned for the cleanup. As the event progressed, the inspector monitored the cleanup, and the corrective actions implemented by Ginna to minimize the possibility of event recurrence.

- On September 1, 2005, at 11:00 p.m., operators took the main turbine off-line when a leak that was being monitored on the electro-hydraulic (EH) system significantly increased. Operators were alerted to the increased EH system leakage by Instrumentation and Control (I&C) technicians who were working in the Turbine Building. The leakage was from an actuator on the number two main turbine stop valve. The actuator was replaced and the plant was synchronized to the grid on September 2.

The inspectors were informed of the EH system leak at 2:00 a.m. by the control room shift manager after the turbine had been taken off-line. The inspectors responded to the plant and performed a control board walkdown. During the plant shutdown, the inspectors performed a containment entry with Ginna personnel and toured portions of the containment structure.

b. Findings

Introduction: The inspectors identified a Green self-revealing finding when an incorrect procedure was utilized by plant operators to restore the steam generator blowdown system following maintenance. Because an incorrect procedure was used, a steam generator chemistry excursion occurred that required the plant to be shutdown to restore secondary chemistry to acceptable levels.

Description: On July 27, 2005, a self-revealing finding was identified. Following the completion of maintenance on a valve in the steam generator blowdown piping system, an incorrect procedure was used by an auxiliary operator to restore the blowdown system to the circulating water system discharge path. The procedure used was T-14G.1, "Isolation and Restoration of S/G Blowdown System for Maintenance During Power Operation," which is written to line up the blowdown system to the condenser hotwell vice the normally used circulating water system discharge path. The procedure that should have been used was T-14F.1 "S/G/ Blowdown Alignment to Discharge Canal B, Condenser or Waterboxes."

Plant operators selected T-14G.1 because the work package, which outlined how the maintenance on the blowdown system should be conducted, did not fully outline how the blowdown system was to be restored. This failure of the work package to describe how the blowdown system would be restored, was contrary to Operations Guideline (OPG-IWS-Support) which indicates work packages should state how systems should be restored to serve.

Because the incorrect procedure was used to restore the blowdown system, a flow path was established that allowed water to flow from the main condenser circulating water system to the condenser hotwell. The rapid influx of brackish water to the condenser hotwell caused a rapid chemistry excursion in both steam generators to greater than action level 3 of plant procedure CHA-SEC-GUIDE, "Secondary Water Chemistry Guidelines", which required a plant shutdown to remove the impurities from both steam generators. The resultant shutdown period lasted for 20 hours while chemistry was restored using continuous blowdowns and condensate polishers to restore secondary chemistry to within specifications.

The inspector noted that there were other performance issues related to procedure adherence and adequacy of corrective actions that contributed to this event. First, in addition to using an incorrect procedure, operators did not follow the procedure assigned since the initial conditions for using T-14G.1 required the plant to be operating at greater than 30% power with the steam generator blowdown system in service to the

condensers. Had the operators adhered to the initial conditions outlined in T-14G.1, they would not have used the procedure since they did not meet the initial plant conditions. Second, even though the incorrect procedure was used, flow from the main circulating water system to the condenser hotwell would not have occurred had a check valve in the blowdown system (valve 3178F) operated properly. Although this valve had been examined and repaired on several occasions, most recently during the 2005 refueling outage, because of excessive flow-generated degradation, the maintenance activities did not prevent the degradation from recurring.

Analysis: The performance deficiency associated with this event was a failure of site personnel to use the correct procedure to restore the steam generator blowdown system following a work restoration process. Because the incorrect procedure was used, a steam generator water chemistry excursion occurred, which required a plant shutdown to restore secondary chemistry to acceptable levels. This finding was more than minor since it affected the physical design barriers objective of the Configuration Control attribute of the Barrier Integrity Cornerstone. This finding is not suitable for the significance determination process evaluation, but was reviewed by NRC management and determined to be a green finding of very low safety significance. The finding was of very low safety significance because there was no evidence that the steam generator tubes had been degraded, and the operators implemented appropriate actions after the chemistry excursion occurred. The chemistry excursion was documented in several Action Reports including AR 2005-3619, "Steam Generators Impurities Increase." In addition to restoring steam generator water chemistry to within specification, corrective action included implementing a work package review process that would verify all work packages have proper restoration actions. The cause of this finding is related to the cross-cutting area of human performance. FIN 05000244/2005004-02, Failure to Properly Restore The Blowdown System Results in a Plant Shutdown to Correct Steam Generator Water Chemistry.

Enforcement: No violation of regulatory requirements occurred since the blowdown system is not safety-related and the related Operating Guidelines and procedures are not required by technical specifications.

#### 1R15 Operability Evaluations (71111.15 - 6 samples)

##### a. Inspection Scope

The inspectors reviewed six operability evaluations 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:"

- Action Report (AR) 2005-3830, Evaluate MO/SWP1B Motor Data for Acceptance
- AR 2005-435, 3/4" Piping to CCW "A" SW Relief Valve

Enclosure



- AR 2005-4281, Intermediate Building Exhaust Fan "C" Concerns
- AR 2005-4419, Clarification of UFSAR Condenser Dump Flow Capability
- AR 2005-4457, Acrid Oder From "D" SW Pump
- AR 2005-4658, Condensate Pump "B" Briefly Degraded

h. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing (71111.19 - 6 samples)

a. Inspection Scope

The inspectors observed portions of the following six 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.

- PT-16Q-T, "Auxiliary Feedwater Turbine Pump - Quarterly" (July 25, 2005)
- Work Order (WO) 2050302, "Flow Restriction Downstream of RE-20A Sampler" (June 29, 2005)
- WO 20503176, "Surge Test of "B", "C", and "D" Service Water Pumps" (August 3, 2005)
- WO 20503692, "R-20A Low Flow" (August 16, 2005)
- WO 20503975, "Replace Flow Transmitter FT-416" (September 2, 2005)
- WO 20504026, "Repair Relay Room HVAC 'B'" (September 28, 2005)

h. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22 - 6 samples)

a. Inspection Scope

The inspectors witnessed the performance and/or reviewed test data for the following six 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-16Q-T, Auxiliary Feedwater Turbine Pump - Quarterly (July 25, 2005)

- PT-12.6A Emergency Diesel Generator "A" Fuel Oil Transfer Test (July 26, 2005)
- PT- 16Q-B Auxiliary Feedwater Pump "B" Quarterly Test (August 3, 2005)
- PT-2.3.1M Post Accident Filter Inspection (August 10, 2005)
- PT-2.5.1Q Quarterly Valve Surveillance Containment (August 11, 2005)
- PT-27.2 Tendon Surveillance Program (August 22- September 30, 2005 )

h. Findings

No findings of significance were identified.

**Cornerstone: Emergency Preparedness**

1EP6 Drill Evaluation (71114.06 - 1 sample)

a. Inspection Scope

On July 19, 2005, the inspectors observed portions of the annual emergency preparedness drill. The drill scenario included a fire in the turbine building, a natural gas leak in the screen house, and a leak on a pressurizer reference leg. The inspector verified that the appropriate emergency classifications were made, and notifications to external parties were completed in a timely manner as required by the Ginna emergency response plan.

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 02.02.f, 02.03.a thru d, and 02.05.a thru c) in partial fulfillment of the annual inspection requirements.

#### Plant Walkdowns and RWP Reviews (02.02.f)

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

During this week of inspection and during inspections earlier in the year, the inspector reviewed Ginna's self-assessment activities for any results related to the access control program. The intent of this review was to determine if identified problems are entered into the CAP for resolution. The inspector also 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. There were no Ginna Performance Indicator (PI) events or Ginna 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 thru c)

During this week of inspection and during inspections earlier in the year (including a refueling outage), the inspector met at various times with the Radiation Protection Manager and the Senior Health Physicist for Radiation Protection (RP) Operations, and discussed the controls and procedures for high-dose-rate high radiation areas (HRAs) and for very high radiation areas (VHRAs). The inspector reviewed the subject procedures (as listed in the List of Documents Reviewed section) to verify that the level of worker protection was adequate. During tours of the radiologically-controlled area conducted during this year's inspections, the inspector placed emphasis on identifying any accessible high-dose-rate high radiation areas (HRAs) and very high radiation areas (VHRAs). Also, during these tours of the radiologically-controlled area, the inspector examined the postings and barriers at selected accessible locations for these 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), Technical Specifications, and procedures.

b. Findings

No findings of significance were identified.

2OS2 ALARA Planning and Controls (71121.02- 5 samples)

a. Inspection Scope

The inspector reviewed the effectiveness of Ginna's program to maintain occupational radiation exposure as low as is reasonably achievable (ALARA). This inspection activity represents the completion of five (5) samples relative to this inspection area (i.e., inspection procedure sections 02.02.e\*, f\*, h\*, and I\*, and 02.08.d) in partial fulfillment of the biennial inspection requirements.

Radiological Work Planning (02.02.e\*, f\*, h\*, and I\*)

During this week of inspection and during inspections earlier in the year, the inspector reviewed the integration of ALARA requirements into work procedures and radiation-work-permit (RWP) documents through examination of pre-job ALARA reviews and discussions with ALARA personnel. While examining selected post-job ALARA review documents, the inspector compared the person-hour estimates provided by maintenance planning and other groups to the radiation protection group with the actual work activity time requirements and evaluated the accuracy of these time estimates. The inspector noted that the work activity planning included consideration of the benefits of dose-rate reduction activities and was covered by procedures. During the review of selected post-job (work activity) review documents, the inspector noted that identified problems and items for improvement were entered into Ginna's CAP.

Problem Identification and Resolutions (02.08.d)

During this week of inspection and during inspections earlier in the year, the inspector reviewed the issues raised in the CAP for repetitive deficiencies or significant individual deficiencies. Also during this same timeframe, the inspector examined the radiation protection group's ongoing self-assessment activity, the treatment of issues raised in post-job ALARA reviews, and the issues raised for corrective action by the site ALARA committee. The inspector performed these activities to determine that Ginna's self-assessment activities were also identifying and addressing any deficiencies which were being identified by the site CAP.

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 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 02.06.a and b) in partial fulfillment of the biennial inspection requirements.

Self-Contained Breathing Apparatus (SCBA) Maintenance and User Training (02.06.a & b)

During this inspection week, the inspector reviewed the status and surveillance records of SCBA staged and ready for use in the plant. The inspector examined Ginna's capability for refilling and transporting SCBA air bottles to and from the control room and operations support center during emergency conditions. The inspector also determined that control room operators and other emergency response and radiation protection personnel (assigned in-plant search and rescue duties or as required by the emergency plan) were trained and qualified in the use of SCBA (including personal bottle change-out). Additionally, the inspector determined that personnel assigned to refill bottles were trained and qualified for that task.

The inspector was informed that only vendor personnel, who possess manufacturer-certified training/qualifications, were allowed to perform maintenance and repairs on SCBA components vital to the unit's function. The inspector reviewed the vital component maintenance records for selected SCBA units currently designated as "ready for service" and, for the same units, verified that the required, periodic air cylinder hydrostatic testing was documented and up to date. The inspector also verified that the DOT-required retest air cylinder markings were in place.

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, Technical Specifications, and procedures.

b. Findings

No findings of significance were identified.

**4. OTHER ACTIVITIES**

4OA1 Performance Indicator (PI) Verification (71151- 2 samples)

a. Inspection Scope

Cornerstone: Occupational Radiation Safety

- Occupational Exposure Control Effectiveness (OECE)(02.01)

The inspector selectively examined records used by Ginna to identify occurrences involving high radiation areas, very high radiation areas, and unplanned personnel exposures for the time period from August 2004 through mid-August 2005. The reviewed records included selected CAP records and Ginna's monthly PI data records for this PI. This review was conducted against the applicable criteria specified in the Nuclear Energy Institute's (NEI) Regulatory Assessment Performance Indicator Guideline No. 99-02 (Revision 3, with an effective date of April 1, 2005).

This review and examination did not identify any problems with the PI accuracy or completeness and thus verified this performance indicator. This inspection activity represents the completion of one (1) sample relative to this inspection area (i.e., inspection procedure section 02.01) for one performance indicator (i.e., OECE).

Cornerstone: Public Radiation Safety

- Radiological Effluent Technical Specification/Offsite Dose Calculation Manual Radiological Effluent Occurrences (RETS/ODCM REOs)(02.01)

The inspector selectively examined records used by Ginna to identify any occurrences involving gaseous or liquid effluent releases for the time period from August 2004 through mid August of 2005. The reviewed record types included selected effluent release permits, CAP records, and Ginna's monthly PI data records for this PI. This review was conducted against the applicable criteria specified in Nuclear Energy Institute's (NEI) Regulatory Assessment Performance Indicator Guideline No. 99-02 (Revision 3, with an effective date of April 1, 2005).

This review and examination did not identify any problems with the PI accuracy or completeness and thus verified this performance indicator. This inspection activity represents the completion of one (1) sample relative to this inspection area (i.e., inspection procedure section 02.01) for one performance indicator (i.e., RETS/ODCM REOs).

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 all items entered into Ginna's CAP. This review was accomplished by reviewing paper copies of action and condition reports, attending daily screening meetings and accessing Ginna's computerized database.

.2 Occupational Radiation Safety (71121 - 1 sample)

b. Inspection Scope

The inspector selected nine issues identified in the Corrective Action Program (CAP) for detailed review (ACTION Report Nos. 2005-1538, -1617, -1708, -1937, -2380, -2381, -2382, -2803, and -2805). These issues were associated with a control rod drive storage box, a ladder in the lower reactor cavity, changing radiological conditions, outage staffing of laborers at the equipment hatch, the meeting format for station ALARA committee meetings, action reports for items identified by the station ALARA committee, action reports for all concerns identified in ALARA closeout packages, the locked high radiation barrier for the seal injection filter room, and the locked high radiation barrier for the spent fuel pool skimmer filter room, respectively. The documented reports for the issues were reviewed to ensure that the full extent 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.

.3 Annual Sample: Corrective Actions For Ginna Human Performance Issues (71152 - 1 sample)

a. Inspection Scope

The inspectors selected 18 ARs for detailed review that dealt with past human performance aspects, associated root cause reports, and the resulting corrective actions to prevent recurrence. The ARs reviewed, including issue dates and summary descriptions, are listed in the Attachment.

b. Findings and Observations

Although no findings of significance were identified, the inspectors noted that despite the existence of human performance procedures and tools at the plant, which had been developed to address human performance deficiencies, ten additional human performance-related ARs had been written since July 2004, which appeared to have similar causes. The inspectors determined that the recurrence of human performance-related events is due, in part, to inconsistent implementation of human performance tools and procedures, less than thorough root cause investigations of human performance related events, and inconsistent implementation of the corrective action process. For example:

(1) A category two AR, AR 2004-3194, which had been initiated to perform a common cause analysis on 18 separate mispositionings events that had occurred during 2004, had been closed without an extent of condition analysis, and without completion of the corrective actions required by procedure IP-CAP-1, "Abnormal Condition Tracking Initiation or Notification (ACTION) Report." By closing this AR and not performing the assessment, Ginna management missed an opportunity to identify why human performance-related events continued to occur at the site, and implement effective corrective action. The inspectors noted that since 2004, several additional mispositioning events and/or human performance issues had occurred. These issues resulted in the issuance of a Green finding in NRC inspection report 2005-002. Ginna initiated AR 2005-4451 to track and resolve why AR 2004-3194 was closed without performing the necessary assessment.

(2) AR 2004-3073 was initiated on November 22, 2004, to document the discovery that the battery switches for the diesel driven fire pump were found open, which caused the pump to be inoperable for seven days. Although a considerable amount of effort was expended by Ginna to identify the reason why the switches were mispositioned, the root cause investigation for this AR was indeterminate. The inspectors determined that one possible rationale for not finding the root cause was that the event assessment was not sufficiently comprehensive. Specifically, when questioned by the inspectors, Ginna personnel were unable to locate a system valve and switch lineup for the diesel fire pump that could have been used to verify that the system had been properly aligned. Although the lack of procedural controls for aligning the diesel fire pump was evident, this was not listed as a contributor.

(3) Tracking of the status of assigned AR corrective actions is laborious under the current process because ARs are usually maintained in a paper format and are occasionally difficult to locate. This could impede implementation of corrective action and identification of trends.

(4) In July 2005, following a human performance-related event that resulted in the introduction of brackish waster into the steam generators, Ginna implemented a special work package review process for all planned work packages. The reviews were designed, in part, to improve the quality of work packages and were guided by a process checklist to ensure completeness. Although the inspectors noted that the



reviews were generally effective in identifying areas where the work packages could be improved, the process did not function smoothly. Specifically:

(a) Despite having four dedicated reviewers, the inspectors observed one instance in which only one copy of the work package was used for the review. In this case, one reviewer read the work package information aloud to the other reviewers, which limited the effectiveness of the process.

(b) During the review of another work package, the reviewers were hampered by lack of specific knowledge about the details of the work to be performed (replacing the chlorine sample pump). As a result, the reviewers approved a work package but were unsure of the actual industrial hazards involved and did not understand what lifting equipment would be required to perform the work. These issues were not confirmed or verified before the work package was approved.

(c) The work package review panel was asked to change work locations twice to accommodate other plant activities. At both locations, the review process was disrupted when individual team members were distracted to perform other duties not related to the work package review.

#### 4OA3 Event Follow-up (71153)

##### .1 (Closed) LER 05000244/2005003-00, Emergency Diesel Generator Start Resulting from Loss of Off-Site Power Circuit 751

On June 10, 2005, a lightning strike resulted in the loss of off-site circuit 751. Because the plant electrical system was in a 50/50 line-up at the time of the event, power was lost to safeguards busses 16 and 17. In response to the loss of line 751, the "B" emergency diesel generator (EDG) started automatically and re-energized safeguard bus 16. However, bus 17 was not re-energized because the associated diesel generator feeder breaker did not close. Because of this failure, only the "C" service water pump was supplying the entire service water loop, and as a result, the temperature of components that are cooled by the service water system began to rise. To reduce the rate of temperature increase, operators shut down non-essential loads as outlined in the applicable abnormal operating procedure, and manually started the "A" service water pump. However, these efforts were not entirely successful since the "A" pump immediately failed when it was started because of an electrical short. Component temperatures were stabilized when operators re-energized electrical bus 17 from redundant offsite power source circuit 767 and started the "A" service water pump. During the event the plant remained at 100% power.

Following the event, line 751 was walked down by representatives of the local power distributor Rochester Gas and Electric (RG&E), and the Baltimore Gas and Electric Company (BG&E), which is owned by Constellation Energy. The walkdown participants determined that line 751 was lost when a lightning strike caused an insulator on pole T-30 to fail. To minimize the possibility of event recurrence, the BG&E representative

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recommended that RG&E re-route the ground wires on several poles for the 751 line. Several of these changes have since been adopted by RG&E while others are under review.

The failure of the "A" service water pump was attributed to insulation breakdown and the motor was rewound. The failure of the "B" diesel generator output breaker was attributed to insufficient lubrication and technician coaching has been performed. The LER was reviewed by the inspectors and no findings of significance were identified. This LER is closed.

#### 40A5 Other Activities

##### .1 Institute of Nuclear Power Operations (INPO) Report Review

###### a. Inspection Scope

The inspectors reviewed two reports that were completed by INPO . The first report documented INPO's accreditation review of the Ginna technical training programs. The second report documented INPO's assessment of plant performance at Ginna for the period of March 2003 to May 2005. The inspectors reviewed the reports to ensure that issues identified were consistent with the NRC perspectives of licensee performance and to verify if any significant issues were identified that required further NRC follow-up.

###### b. Findings

No findings of significance were identified.

##### .2 (Closed) TI 2515/161 - Transportation of reactor control rod drives in Type A packages

###### a. Inspection Scope

During the inspection week of August 15, 2005, the inspector performed Temporary Instruction 2515/161. This area was inspected to verify that Ginna's radioactive material transportation program complied with specific requirements of 10 CFR Parts 20 and 71, and Department of Transportation (DOT) regulations contained in 49 CFR Part 173 and specifically to examine the use of DOT Specification 7A Type A packages. The inspector interviewed Ginna personnel and determined that although Ginna had undergone refueling/defueling activities three times since January 1, 2002, no shipments of irradiated reactor control rod drives during this time period had been made.

###### b. Findings

No findings of significance were identified.

4OA6 Meetings, Including ExitExit Meeting Summary

Periodically during the inspection period, the resident inspector staff and visiting inspectors would meet with Ginna management to discuss inspection results. For example, on August 19, 2005, Jack McFadden met with Mr. David Holm, and other members of his staff who acknowledged their inspection results. On October 21, 2005, the resident inspectors presented the final inspection results to Mr. David Holm and other members of his staff who acknowledged the findings. The inspectors confirmed that proprietary information was not provided or examined during the inspection.

ATTACHMENT: SUPPLEMENTAL INFORMATION

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**SUPPLEMENTAL INFORMATION**

**KEY POINTS OF CONTACT**

Licensee personnel

|              |   |
|--------------|---|
| S. Adams     | Manager of Operations                           |
| B. Flynn     | Special Projects Manager Ginna Station          |
| E. Groh      | Assistant Operations Manager (Shift)            |
| T. Harding   | Senior Licensing Engineer                       |
| K. Holmes    | Technician, Radiation Protection                |
| J. Hotchkiss | Mechanical Maintenance Manager                  |
| D. Holm      | Plant Manager                                   |
| J. Pacher    | Primary Systems and Reactor Engineering Manager |
| J. Yoe       | Scheduling Manager                              |
| M. Gallaway  | Manager, Ginna Maintenance                      |
| K. Gould     | Manager, Radiation Protection                   |
| R. Whalen    | Manager Nuclear Engineering Services            |
| G. Wrobel    | Nuclear Safety and Licensing Manager            |

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

Opened

None

Opened and Closed

|                     |     |  |
|---------------------|-----|--|
| 05000244/2005004-01 | FIN | Auxiliary Operators did not properly monitor the performance of the relay room air conditioning systems. (Section 1R04)      |
| 05000244/2005004-02 | FIN | Failure to Properly Restore the Blowdown System Resulting in a Shutdown to Correct Steam Generator Chemistry. (Section 1R14) |

Closed

|                     |     |  |
|---------------------|-----|--|
| 05000244/2005003-00 | LER | Emergency Diesel Generator Start Resulting from Loss of Off-Site Power Circuit 751 |
|---------------------|-----|--|

Discussed

NONE

## LIST OF DOCUMENTS REVIEWED

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

#### Action Reports

2005-4325 Entered ER-SC.1 Adverse Weather Plan  
2005-4330 ER-SC.1 Does Not Provide Guidance on Sheltreing or Protection of Personnel on Site

#### Procedures

ER-SC.1, "Adverse Weather Plan"  
EP!P-1-5. Notifications

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

#### Action Reports

2005-3834 Pipe Supports Missing  
2005-4677 Relay Room A/C unit B Not Cooling Properly AK P04  
2005-4689 Several Muffin Fans Not Working in MUX Cabinates  
2005-4692 MUX Cabinates Overheating  
2005-4731 Loss of B Relay A/C Unit Not Discovered Promptly

#### Procedures

O-6.1 Auxiliary Operator Rounds and Log Sheets  
P-13 Auxiliary operator Tour Guidelines  
T-27.1 Emergency Diesel Generator "A" Pre-Startup Alignment

### **Section 1R05: Fire Protection**

#### Action Reports

2005-3849 Pig Socks and Absorbant Pads Lying on Containment and Plant Vent Ductwork  
2005-3465 Evaluate Configuration Control of Tubing Supports  
2005-4672 Process for Labeling Permanently Abandoned Equipment

#### Documents

Ginna Fire Protection Program Report  
Ginna Fire Damper Manual

Procedures

IP-HSC-3 Housekeeping Control

**Section 1R06: Flood Protection Measures**

Documents

Replace Expansion Joints SCW01 and SCW 02  
SM-72-51 Logic Circuitry of Circulating Water System Backfit  
P002087 Replace Expansion Joints SCW01 and SCW02  
SM-72-071 Logic Circuitry of Circulating Water System Backfit Relay Failure Investigation

Work Orders

20403119 Inspect Joints as per Attached Checklist

**Section 1R12: Maintenance Rule Implementation**

Action Reports

2005-3138 R-16 Low Flow Light is Dim  
2005-3152 Controlotron Failure Requires Declaring D/G "A" Inoperable  
2005-3322 Discovery of Zebra Mussel Shells in R-20A  
  
2005-3582 C & D Sodium Hypochlorite Pumps Operating At Reduced Capacity  
2005-4670 Personnel Hatch Inner Seal Door seal Exceeded Tech Spec Limits

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

Action Reports

2005-3072 RG&E Helicopter Flight Over Station 13A /CKT 751 Not Notified For Risk Assessment  
2005-3577 Initiated Investigations of Possible Steam/Water Leakage in Containment  
2005-3623 LT 461 Steam Leak

Procedures

IP-PSH-2 Integrated Work Schedule Risk Management  
SPG-02 Integrated Work Schedule Scheduler's Handbook

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

Action Reports

2003-1451 Check Valve Banging

2004-2427 Check Valve 3178F is Rattling  
2005-3619 Steam Generators Impurities Increase  
2005-3620 Miscalculated Cleanup Rate  
2005-3636 S/G Blowdown P&ID Does not Reflect Operational Line-up  
2005-3641 Degraded Blowdown System Check Valve  
2005-3645 Plant Shutdown Impact to Maintenance Rule Train PLPC01

Drawings

33013-1277 Steam Generator Blowdown (Sheets 1 and 2)  
33013-1231 Main Steam (Safety Related)  
33013-1252 Condensate  
33013-1885 Circulating Water (Sheet 1 of 2)

Procedures

T-14F.2 S/G Blowdown System Operation  
T-14G.1 Isolation and Restoration of S.G Blowdown System for Maintenance During Power Operation

Root Cause Analysis

CR2005-3617 Unexpected Reject in Condensate System/Chemistry Excursion

Work Orders

20202272 Inspect Blowdown Sparger  
20203281 Internal Inspections of Valves 3175F and 3178F  
20403801 Suspect that Check Valve has Failed, Repair or Replace 3178F  
20502165 Cut out Pipe Nipples Downstream of V-5727A and 5728A

**Section 1R15: Operability Evaluations**

Action Reports

2005-3830 Evaluate MO/SWP1B Motor Data for Acceptability  
2005-4658 Condensate Pump Briefly Degraded  
2005-4816 "B" Condensate Pump Inlet Support Moved and out of Position and Shim  
2005-4359 Unplanned Entry Into LCO 3.7.7 For SW Leak on "A" CCW HX  
2005-4457 Acrid Oder From the Heater on the "D" Service Water Pump

**Section 1R19: Post Maintenance Testing**

Action Reports

2005-3221 R-20A Has Low Sample Flow

2005-3559 Steam Admission Check Valve CV-3504B Indicates Full Open by Position Indication, Should be Closed

Drawings

33013-1237 Auxiliary Feedwater P&ID

Procedures

CPI-FT-416 Calibration of Reactor Coolant Flow Transmitter 416

Work Orders

20503020 Flow Restriction Downstream of RE-20A  
20503176 Surge Test of "B", "C", and "D" Service Water Pumps  
20503692 R-20A Low Flow  
20503975 Replace Flow Transmitter 416

**Section 1R22: Surveillance Testing**

Action Reports

2005-3656 CV-4014 Failed IST Closure Verification per PT-16Q-T  
2005-3557 Rough Start of TDAFW Pump Noticed During PT-16Q-T  
2005-3562 Steam Generator Sodium Increased  
2005-3563 Steam Generator Chloride Levels Increased  
2005-4371 Abnormal Noise While Performing PT-2.2 Q For "B" RHR Pump

Documents

Regulatory Guide 1.35 Revision 2 Determining Prestressing Forces For Inspection of Prestressed Concrete Containments

Drawings

33013-1239 Diesel Generator P&ID  
33013-1237 Auxiliary Feedwater P&ID

Procedures

PT-16Q-T Auxiliary Feedwater Turbine Pump - Quarterly  
PT-12.6A Diesel Generator Fuel Oil Transfer Pump A Test  
PT-27.2 Tendon Surveillance Program



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

Documents:

Gaseous release and dose summary report for 2005 to present  
Liquid release and dose summary report for 2005 to present  
Self-assessment no. 2005-0007, Radiation Protection Program on-going self-assessment/First quarter 2005 report, June 9, 2005  
Self-assessment no. 2005-0073, Radiography boundary control, August 15, 2005

Procedures:

Procedure A-1, Rev. 073, Radiation Control Manual  
Procedure A-1.1, Rev. 043, Access control to Locked High Radiation and Very High Radiation areas  
Procedure A-3, Rev. 014, Restricted area entry and exit  
Procedure A-1.8, Rev. 022, Radiation Work Permits  
Procedure A-1.10, Rev. 001, Control of underwater-diving activities in the spent fuel pool  
Procedure RP-JC-JOBCOVERAGE, Rev. 007, Job coverage  
Procedure RP-SUR-LABEL, Rev.006, Labeling and control of radioactive material  
Procedure RPA-PERFORMANCE-IND, Rev. 001, RP Performance indicator Guidelines  
Procedure RF-71, Rev. 004, Tri-Nuclear Corporation underwater filter/vacuum unit operating procedure  
Procedure CHA-PERFORMANCE-IND, Rev. 002, Primary chemistry performance indicators  
Procedure IP-CAP-1, Rev. 021, Abnormal Condition Tracking Initiation or Notification Report  
Procedure IP-LPC-8, Rev. 005, NRC performance indicators

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

Documents:

Dose report for ALARA reviews (ALARA review number, RWP, total person-rem, and total person-hours) as of August 16, 2005  
Completed documentation packages for refueling outage ALARA reviews:  
No. 050077 Routine maintenance inside the reactor containment  
No. 050093 Insulation work during the refueling outage  
No. 050202 Insulation replacement and inspection of the bottom of the reactor vessel  
Station ALARA committee meeting agenda for post-outage 2005 on May 9, 2005  
Station ALARA committee meeting minutes for post-outage 2005 dated May 13, 2005  
Post-outage ALARA report dated May 23, 2005  
Station's ALARA-five-year plan, updated as of April 2005

Procedures:

Procedure A-1.6, Rev. 021, Station ALARA Committee  
Procedure A-1.6.1, Rev. 028, ALARA job reviews  
Procedure ALA-REVIEW, Rev. 007, ALARA job review preparation

**Section 2OS3: Radiation Monitoring Instrumentation**

Documents:

Mask qualification list as of August 15, 2005  
Lesson plan no. GGE12C, Rev. 004, SCBA training: Use, care, and maintenance of the Scott 4.5

Procedures:

Procedure RP-RES-M-SCBA 45, Rev. 003, Maintenance, inspection, and repair of the Scott 4.5 SCBA unit  
Procedure RP-RES-M-TYPE-C, Rev. 001, Maintenance, inspection, and repair of the Scott supplied-air, Type C pressure/demand regulator  
Procedure RP-RES-U-CHAMP, Rev. 001, Use of the Champion portable breathing-air compressor  
Procedure SC-3.15.7, Rev. 022, Inspection of self-contained breathing apparatus Scott 4.5  
Procedure SC-3.15.15, Rev. 082, Emergency fire equipment inventory and inspection  
Procedure SC-3.16.15.1, Rev. 011, Charging of 4.5 units using the breathing air compressor  
Procedure EPIP 5-2, Rev. 036, Onsite emergency response facilities and equipment periodic inventory and operational checks

**Section 4OA2: Identification and Resolution of Problems**

Action Requests/ Condition Reports:

2004-2216  
2002-0174  
2002-2531  
2004-2056  
2004-2803  
2004-2907  
2004-2999  
2004-3234  
2004-3373  
2005-0299  
2005-0727  
2005-1833  
2005-1873  
2005-2211  
2005-2525

2005-2673  
2005-3073  
2005-3324  
2005-3617  
2005-3641  
2005-3965  
2005-4451\*  
2005-4454\*  
2005-4478\*  
2002-2531, (11/4/02), Automatic opening of AVT Bypass causes condensate bypass  
2004-2056, (8/7/04), Broken conduit on TT2041 A MFP suction temp  
2004-2216, (8/25/04), Unexpected opening of condensate bypass valve  
2004-2637, (10/8/04), Natural gas line broken during digging  
2004-2907, (11/1/04), Assess effectiveness of Mgmt. Response to Rupture of Gas Line  
2004-2999, (11/11/04), Generator Hydrogen Temperature Controller Fails Open  
2004-3073, (11/22/04), Diesel Fire Pump Inoperable Due To Mispositioned Battery Switches  
2004-3194, (12/16/04), Perform Common Cause Analysis on Misposition Adverse Trend  
2004-3373, (12/20/04), Valve 5173 Found Open  
2005-0299, (1/4/05), Relay Room A/C Unit B Service Water Valves 4761L and 4761J Found Closed  
2005-0727, (2/24/05), Compliance with NFPA 20 Requires a Supervisory Alarm  
2005-1833, (4/10/05), TE-401A connected prior to work package completion  
2005-1873, (4/11/05), Turbine Control Valve #4 Control Oil Isolated - Valve 7727  
2005-2211, (5/5/05), NRC Finding 2005002-03 Associated with Component Mispositioning Events  
2005-2524, (5/16/05), KPI Goal For Mispositionings exceeded  
2005-2525, (5/24/05), SAFW system fill and vent procedure not performed as indicated  
2005-3617, (7/27/05), Unexpected reject in condensate system/ chemistry excursion  
2005-3641, (7/27/05), Deformed Blowdown System Check Valves  
2005-3965, (8/5/05), Evaluate the failure of the corrective action system to identify rapid degradation of blowdown check valves to water boxes

\* Indicates this was generated as a result of this inspection.

Miscellaneous Documents:

PT-13, Revision 90, 6/24/04; Fire Pump Operation & System Alignment - Completed 11/22/04  
Ginna Intervention Team Report, August 15, 2005  
CNO Policy #8, CGG Accountability Model, 4/15/05  
Ginna Station, Operations Department Improvement Plan, Revision 5

Modification Reports:

PCN 96-T-0427; T-14F.1, S/G Blowdown Alignment To Discharge Canal; 6/7/98  
PCR No. 96-021, Revision 1, 4/2/96; S/G Blowdown Steam Vent Path and Liquid Overboard Modification  
TRS #2001-0214, 1/13/05; Steam Generator Overboard Blowdown

TPCN #2002-0307, Revision 7, 12/17/02; Procedure T-5F

Procedures:

IP-CAP-1, Revision 21; Abnormal Condition Tracking Initiation or Notification Report  
IP-MAI-2, Revision 0, 8/21/04; Troubleshooting Plant Equipment  
Ginna Station Nuclear Interface Procedure, IP-HPE-1, Revision 9, 1/31/05; Human  
Performance Event Evaluation Process  
Nuclear Directive ND-HPE, Revision 2, 9/21/03; Human Performance Program  
Ginna Nuclear Station Interface Procedure, IP-HPE-7, Revision 1, 12/11/04

Repair-Replacement Work Orders:

W.O. 20403379, 9/29/04  
W.O. 20404147, 10/25/04

**LIST OF ACRONYMS**

|        |  |
|--------|--|
| ACTION | Abnormal Condition Tracking Initiation Or Notification |
| ADAMS  | Agency-Wide Documents Access and Management System     |
| ALARA  | As Low As Reasonably Achievable                        |
| AR     | Action Report  |
| CAP    | Corrective Action Program                              |
| CFR    | Code of Federal Regulation                             |
| CR     | Condition Report                                       |
| DOT    | Department of Transportation                           |
| EP     | Emergency Preparedness                                 |
| HRA    | High Radiation Area                                    |
| IP     | Inspection Procedure                                   |
| LHP    | Lower Head Penetration                                 |
| NEI    | Nuclear Energy Institute                               |
| NRC    | U.S. Nuclear Regulatory Commission                     |
| OA     | Other Activities                                       |
| ODCM   | Offsite Dose Calculation Manual                        |
| OECE   | Occupational Exposure Control Effectiveness            |
| OS     | Occupational Radiation Safety                          |
| PARS   | Publicly Available Records                             |
| PI     | Performance Indicator                                  |
| REO    | Radiological Effluent Occurrence                       |
| RETS   | Radiological Effluent Technical Specifications         |
| RP     | Radiation Protection                                   |
| RWP    | Radiation Work Permit                                  |
| SCBA   | Self-Contained Breathing Apparatus                     |
| SDP    | Significance Determination Process                     |
| VHRA   | Very High Radiation Area                               |