



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PA 19406

January 23, 2008

Mr. John T. Carlin  
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 05000244/2007005

Dear Mr. Carlin:

On December 31, 2007, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your R.E. Ginna Nuclear Power Plant. The enclosed integrated inspection report documents the inspection results, which were discussed on January 9, 2008 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.

Based on the results of this inspection, no findings of significance were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web Site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

**/RA/**

Glenn T. Dentel, Chief  
Projects Branch 1  
Division of Reactor Projects

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

Enclosure: Inspection Report No. 05000244/2007005  
w/ Attachment: Supplemental Information

cc w/encl:  
see next page

J. Carlin

2

cc w/encl:

M. J. Wallace, President, Constellation Energy Nuclear Group, LLC

J. M. Heffley, Senior Vice President and Chief Nuclear Officer

P. Eddy, Electric Division, NYS Department of Public Service

C. Donaldson, Esquire, Assistant Attorney General, New York Department of Law

C. W. Fleming, Esquire, Senior Counsel, Constellation Energy Group, Inc.

B. Weaver, Director, Licensing, Constellation Energy Nuclear Group, LLC

P. Tonko, President and CEO, New York State Energy Research and Development Authority

J. Spath, Program Director, New York State Energy Research and Development Authority

T. Wideman, Director, Wayne County Emergency Management Office

M. Meisenzahl, Administrator, Monroe County, Office of Emergency Preparedness

T. Judson, Central New York Citizens Awareness Network

cc w/encl:

- M. J. Wallace, President, Constellation Energy Nuclear Group, LLC
- J. M. Heffley, Senior Vice President and Chief Nuclear Officer
- P. Eddy, Electric Division, NYS Department of Public Service
- C. Donaldson, Esquire, Assistant Attorney General, New York Department of Law
- C. W. Fleming, Esquire, Senior Counsel, Constellation Energy Group, Inc.
- B. Weaver, Director, Licensing, Constellation Energy Nuclear Group, LLC
- P. Tonko, President and CEO, New York State Energy Research and Development Authority
- J. Spath, Program Director, New York State Energy Research and Development Authority
- T. Wideman, Director, Wayne County Emergency Management Office
- M. Meisenzahl, Administrator, Monroe County, Office of Emergency Preparedness
- T. Judson, Central New York Citizens Awareness Network

Distribution w/encl:

- S. Collins, RA
- M. Dapas, DRA
- G. West, RI OEDO (Acting)
- J. Lubinski, NRR
- D. Pickett, PM, NRR
- M. David, PM, NRR
- G. Dentel, DRP
- K. Kolaczyk, DRP, Senior Resident Inspector
- M. Marshfield, DRP, Resident Inspector
- M. Rose, DRP, Resident OA
- Region I Docket Room (with concurrences)
- [ROPreports@nrc.gov](mailto:ROPreports@nrc.gov)

**SUNSI Review Complete:           BAB4           (Reviewer's Initials)**

DOCUMENT NAME: T:\DRP\BRANCH1\Ginna\Reports\2007-005\2007-005 rev1.doc  
 After declaring this document "An Official Agency Record" it **will** be released to the Public.  
 To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	RI/DRP	RI/DRP	RI/DRP
NAME	KKolaczyk/ GTD FOR	BBickett/BAB	GDentel/GTD
DATE	01/22/08	01/22/08	01/22/08

OFFICIAL RECORD COPY

U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No.: 50-244

License No.: DPR-18

Report No.: 05000244/2007005

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

Facility: R.E. Ginna Nuclear Power Plant

Location: Ontario, New York

Dates: October 1, 2007 through December 31, 2007

Inspectors: K. Kolaczyk, Senior Resident Inspector  
M. Marshfield, Resident Inspector  
A. Dimitriadis, Senior Physical Security Inspector  
P. Frechette, Physical Security Inspector  
S. Kennedy, Senior Resident Inspector  
T. Moslak, Health Physicist  
J. Schoppy, Senior Reactor Inspector

Approved by: Glenn T. Dentel, Chief  
Projects Branch 1  
Division of Reactor Projects

Enclosure

## TABLE OF CONTENTS

SUMMARY OF FINDINGS .....	3
REPORT DETAILS.....	4
REACTOR SAFETY .....	4
1R01 Adverse Weather Protection.....	4
1R04 Equipment Alignment .....	4
1R05 Fire Protection .....	5
1R06 Flood Protection Measures.....	6
1R11 Licensed Operator Requalification Program .....	6
1R12 Maintenance Effectiveness.....	6
1R13 Maintenance Risk Assessments and Emergent Work Control.....	7
1R15 Operability Evaluations .....	8
1R17 Permanent Plant Modifications .....	8
1R19 Post-Maintenance Testing.....	9
1R22 Surveillance Testing .....	9
1EP6 Drill Evaluation.....	10
RADIATION SAFETY .....	10
2OS1 Access Control to Radiologically Significant Areas .....	10
OTHER ACTIVITIES .....	12
4OA1 Performance Indicator Verification.....	12
4OA2 Identification and Resolution of Problems.....	13
4OA3 Event Follow-up.....	15
4OA5 Other Activities .....	15
4OA6 Meetings, Including Exit.....	16
ATTACHMENT: SUPPLEMENTAL INFORMATION .....	16
KEY POINTS OF CONTACT .....	A-1
LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED .....	A-1
LIST OF DOCUMENTS REVIEWED .....	A-2
LIST OF ACRONYMS .....	A-7

## SUMMARY OF FINDINGS

IR 05000244/2007005; 10/1/2007 – 12/31/2007; R.E. Ginna Nuclear Power Plant, Routine Integrated Report.

The report covered a three-month period of inspection by resident inspectors and region-based inspectors. No findings of significance were identified. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

A. NRC-Identified and Self-Revealing Findings

No findings of significance were identified.

B. Licensee-Identified Violations

None.

## REPORT DETAILS

Summary of Plant Status

R.E. Ginna Nuclear Power Plant (Ginna) began the inspection period operating at full rated thermal power and operated at full power for the entire period.

**1. REACTOR SAFETY****Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity**1R01 Adverse Weather Protection (71111.01 - One sample)a. Inspection Scope

During the period of November 30 to December 3, 2007, the site experienced stormy weather with wind speeds at times exceeding 55 miles per hour. In accordance with procedure ER-SC.1, Adverse Weather Plan, the site implemented compensatory measures to mitigate the effects of the high wind conditions. At different times throughout this period, the inspectors toured plant buildings and exterior areas of the plant to ensure the applicable portions of ER-SC-1 had been implemented and plant equipment and structures had not been adversely affected by the high wind conditions.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (71111.04).1 Partial System Walkdown (71111.04Q – Three samples)a. Inspection Scope

The inspectors reviewed the alignment of system valves and electrical breakers to ensure proper in-service or standby configurations as described in plant procedures, piping and instrument drawings (P&ID), and the updated final safety analysis report (UFSAR). During the walkdown, the inspectors evaluated the material condition and general housekeeping of the system and adjacent spaces. The inspectors also verified that operators were following plant technical specifications (TS) and system operating procedures. Documents reviewed are listed in the Attachment.

The following plant system alignments were reviewed:

- On October 31, 2007, the inspectors performed a walkdown of the component cooling water (CCW) system while the 'B' CCW heat exchanger was out of service for extended maintenance;
- On November 8, 2007, the inspectors performed a walkdown of the 'B' containment spray system while maintenance was conducted on the 'A' train components; and
- On November 26, 2007, the inspectors performed a walkdown of the 'A' train of the service water (SW) system while the 'D' SW pump was out of service for diagnostic testing.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

.1 Quarterly Inspection (71111.05Q – Eight samples)

a. Inspection Scope

The inspectors performed walkdowns of 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 inspected against Ginna's licensing basis and 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. Documents reviewed are listed in the Attachment. The following plant areas were inspected:

- Cable Tunnel (Fire Area CT);
- Control Room (Fire Area CC);
- Standby Auxiliary Feedwater Pump Building (Fire Area SAF);
- Service Building Hot Shop Elevation 253'.6" (Fire Zone SB-1HS);
- Service Building Water Treatment Area Elevation 253'.6" (Fire Zone SB-1WT);
- Contaminated Storage Building Elevation 271' (Fire Area WS);
- Condensate Demineralizer Building Elevation 253'.6" (Fire Zone WT); and
- Relay Room Elevation 271' (Fire Zone RR).

b. Findings

No findings of significance were identified.



1R06 Flood Protection Measures (71111.06 - Two samples)

a. Inspection Scope

The screen house and intermediate building basement were walked down to verify appropriate measures had been taken to reduce the possibility that those areas could be damaged by internal flooding. Before these areas were walked down, the inspectors reviewed the UFSAR, probabilistic safety assessment, work orders, and repetitive task items for equipment located in the areas of concern. The inspectors also utilized operating experience that involved an internal flooding event that occurred at a foreign plant. During the field walkdown, to the extent practicable, the condition of the sumps and flood mitigation equipment in those areas were examined by the inspectors. Documents reviewed are listed in the Attachment.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Regualification Program (71111.11Q - One sample)

a. Inspection Scope

On November 6, 2007, the inspectors observed a licensed operator simulator scenario, ECA3132-08, "Faulted Ruptured Steam Generator." 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." Documents reviewed are listed in the Attachment.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness (71111.12Q - Two samples)

a. Inspection Scope

The inspectors evaluated 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 extent-of-condition determinations for those issues with potential common cause or generic implications to evaluate the adequacy of corrective actions. The inspectors reviewed Ginna's problem identification and resolution actions for these issues to evaluate whether the station had appropriately monitored, evaluated, and dispositioned the issues in accordance with procedures and the requirements of

10 CFR Part 50.65, "Requirements for Monitoring the Effectiveness of Maintenance." In addition, the inspectors reviewed selected SSC classification, performance criteria and goals, and corrective actions that were taken or planned to verify whether the actions were reasonable and appropriate. Documents reviewed are listed in the Attachment.

The following issues were reviewed:

- standby auxiliary feedwater (SAFW) pump controllers and electrical equipment; and
- 'B' CCW heat exchanger aging management inspection and preventative maintenance.

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13 – Three samples)

a. Inspection Scope

The inspectors evaluated the effectiveness of Ginna's maintenance risk assessments specified by paragraph a (4) of 10 CFR Part 50.65. The inspectors discussed with control room operators and scheduling department personnel regarding the use of the station'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 risk management actions, for both planned and/or emergent work, were consistent with those described in IP PSH-2, "Integrated Work Schedule Risk Management." Documents reviewed are listed in the Attachment.

Risk assessments for the following out-of-service SSCs were reviewed:

- Emergent maintenance on CV862B, containment spray pump "B" discharge check valve, which failed to pass the surveillance on the 'B' train of containment spray making the train out of service (October 12, 2007);
- Emergent maintenance on the main steam check valves (October 24, 2007); and
- Planned maintenance in the 13A transformer yard with simultaneous work on the 'A' coolant charging pump and the 'B' CCW heat exchanger (November 6, 2007).

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15 - Four samples)a. Inspection Scope

The inspectors reviewed operability evaluations and/or condition reports (CRs) in order to verify that the identified conditions did not adversely affect safety system operability or plant safety. The evaluations were reviewed using criteria specified in NRC Regulatory Issue Summary 2005-20, "Revision to Guidance formerly contained in NRC Generic Letter 91-18, Information to Licensees Regarding two NRC Inspection Manual Sections on Resolution of Degraded and Nonconforming Conditions and on Operability" and Inspection Manual Part 9900, "Operability Determinations and Functionality Assessments for Resolution of Degraded or Nonconforming Conditions Adverse to Quality or Safety." In addition, where a component was inoperable, the inspectors verified the TS limiting condition for operation implications were properly addressed. Documents reviewed are listed in the Attachment.

The inspectors performed field walkdowns, interviewed personnel, and reviewed the following items:

- CR 2007-8154, Steam driven auxiliary feedwater (AFW) pump steam trap ZMS-16 not operating properly;
- CR 2007-6678, Evidence of air in SW supply to 'A' motor driven AFW pump;
- CR 2007-7336, Weight on arm on south side of the main steam isolation check valve 3518 has a cracked/bent bolt on its upper bracket; and
- CR 2007-7338, Degraded conditions associated with main steam non-return check valves (3518 and 3519).

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications (71111.17 – One sample)a. Inspections Scope

The inspectors reviewed plant change record (PCR) 2007-0045, "Manually Depressurize Steam Generators (SGs) and Use a Portable Pump," which was installed in two phases during December 2007. The modification added a tee section to both trains of SAFW to assist in providing a connection point to allow refilling the SGs from an alternate source. The inspectors reviewed PCR to ensure that the replacement components are consistent with design basis and were compatible with installed system structures and components. The inspectors observed actions taken by personnel to complete the modification and test the resultant configuration.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing (71111.19 - Five samples)a. Inspection Scope

The inspectors observed portions of post-maintenance testing (PMT) activities in the field to determine whether the tests were performed in accordance with approved procedures. The inspectors assessed each 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 TS requirements. The inspectors reviewed the recorded test data to determine whether the acceptance criteria were satisfied. Documents reviewed are listed in the Attachment.

The following PMT activities were reviewed:

- PTT-23.18B, Containment Isolation Valve Leak Rate Testing 'B' Containment Spray Header PEN 109 following repairs to CV-862B, containment spray pump 'B' discharge check valve, under WO 20705750, "Open, Inspect, and Repair if Necessary, CV-862B" (October 12, 2007);
- PT-2.8Q, Component Cooling Water Pump Quarterly Test, conducted to retest the CCW system following work on the 'B' CCW heat exchanger and subsequent system restoration (November 11, 2007);
- Operational leak check during weekly service water pump shifts as retest for WO 20700820, "Adjust 'D' Service Water Pump Packing/Replace Expansion Joint" (November 28, 2007);
- ME-45-99-01 and GMM-45-99-01, associated with preventive maintenance on the 'B' charging pump room cooling fan under WO 20504616, "Perform Preventive Maintenance on the 'B' Charging Pump Room Cooler Fan" (November 29, 2007);
- Operational retest of the main discharge canal recirculation gate, MOV-3184, conducted upon the completion of modifications and repairs to MOV-3184 coordinated under PCR 2007-0046, Screen house Recirculation Gate Valve, MOV-3184, upgrade modification (November 29, 2007).

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22 – Four samples)a. Inspection Scope

The inspectors observed the performance and/or reviewed test data for the following four surveillance tests that are associated with selected risk-significant SSCs to verify that TSs were followed and that acceptance criteria were properly specified. The inspectors also verified that proper test conditions were established as specified in the procedures, no equipment preconditioning activities occurred, and acceptance criteria were met. Documents reviewed are listed in the Attachment.

- PT-12.5, Technical Support Center Emergency Diesel Test, Rev. 35 (November 19, 2007)
- CPI-FIA-2033, Calibration of Containment Fan Cooler Service Water Flow Meter, Rev. 11 (November 19, 2007)
- PT-9, Undervoltage and Underfrequency Protection 11A & 11B – 4160 Volt Buses, Rev. 2401 (November 21, 2007)
- STP-O-12.6B, Diesel Generator Fuel Oil Transfer Pump B Test, Rev. 0 (December 4, 2007) (IST)

b. Findings

No findings of significance were identified.

**Cornerstone: Emergency Preparedness**

1EP6 Drill Evaluation (71114.06 - One sample)

a. Inspection Scope

On November 6, 2007, the inspectors observed a licensed operator simulator scenario, ECA3132-08, "Faulted Ruptured Steam Generator," that included a limited test of Ginna's emergency response plan. The inspectors verified that emergency classification declarations and notifications were completed in accordance with 10 CFR Part 50.72, 10 CFR Part 50 Appendix E, and emergency plan implementing procedures.

b. Findings

No findings of significance were identified.

**2. RADIATION SAFETY**

**Cornerstone: Occupational Radiation Safety (OS)**

2OS1 Access Control to Radiologically Significant Areas (71121.01 – Eight samples)

a. Inspection Scope

During the period December 10 to 13, 2007, the inspectors performed the following activities to verify that Ginna was properly implementing physical, administrative, and

engineering controls for access to locked high radiation areas (LHRA), and other radiologically controlled areas (RCA) during normal power operations, and that workers were adhering to these controls when working in these areas. Implementation of these programs was reviewed against the criteria contained in 10 CFR 20, TSs, and procedures.

The inspectors toured accessible RCAs and, with the assistance of a radiation protection technician, performed independent radiation surveys of selected areas and components to confirm the accuracy of survey data and the adequacy of postings. Surveys were performed in the intermediate building (hot side) and the auxiliary building. Keys to LHRAs and Very High Radiation Areas (VHRA) were inventoried, and accessible LHRAs were verified to be properly secured and posted during plant tours.

The inspectors identified plant areas where radiologically significant work activities were being performed. These activities included entry into the containment vessel (CV) on December 12, 2007, for conducting various maintenance and operations tasks. The inspectors reviewed the applicable Radiation Work Permit (RWP) for these activities (RWP 6008) and CV radiation survey data. The inspectors attended the pre-job briefings for the associated tasks to determine whether the radiological controls were clearly communicated to the workers, the tasks were properly coordinated with site operations, operational experience was discussed, and the workers were aware of the radiological conditions in their work areas.

The inspectors determined that during 2007, there were no actual internal exposures, in which the threshold reporting criteria (greater than 10 mrem) was exceeded. The inspectors also reviewed data for the 10 highest exposed individuals for 2007, and the dose/dose rate alarm report and determined that no exposure exceeded site administrative, regulatory, or performance indicator criteria. Additionally, the inspectors reviewed the dosimetry records and associated documentation for a declared pregnant worker to determine if dose was controlled in accordance with 10 CFR 20.1208.

A review of quality performance assessment reports and a departmental self-assessment report was performed to determine if identified problems were entered into the corrective action program for resolution. Seventeen CRs, associated with radiation protection control access, initiated between January 1, 2007 and December 1, 2007, were reviewed and discussed with station staff to determine if the follow-up activities were being performed in an effective and timely manner, commensurate with their safety significance.

The inspectors attended an as-low-as-reasonably-achievable (ALARA) challenge board that was conducted in preparation for performing ultrasonic examinations of the waste holdup tank (WO 20701891). The inspector evaluated the preparations, including survey data, dose estimates, dose mitigation efforts, shielding measures, use of operational experience, and the follow-up action items that resulted from this meeting.

The inspectors evaluated the effectiveness of past ALARA challenge board meetings for controlling the dose for completed activities. Tasks reviewed included installing

mechanical plugs in the 'A' reactor compartment cooler (WO 20703069), and inspecting the fuel transfer system (WO 20703134). The inspector compared actual doses with forecasted exposure and evaluated the effectiveness of dose reduction measures.

The inspectors reviewed pertinent information regarding cumulative exposure history, current exposure trends, and ongoing activities to assess past (2007) exposure control performance, preparations for the spring 2008 outage, and long-term (5-year) dose challenges.

b. Findings

No findings of significance were identified.

**4. OTHER ACTIVITIES**

4OA1 Performance Indicator Verification (71151)

.1 Cornerstone: Occupational Radiation Protection

a. Inspection Scope (71151 - One sample)

The inspectors reviewed implementation of Ginna's occupational exposure control effectiveness performance indicator data for the period October 1, 2006 through November 30, 2007. Specifically, the inspectors reviewed CRs and associated documents for occurrences involving LHRAs, VHRAs, and unplanned exposures against the criteria specified in Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Performance Indicator Guideline," Rev. 5, to verify that all occurrences that met the NEI criteria were identified and reported as performance indicators.

b. Findings

No findings of significance were identified.

.2 Cornerstone: Public Radiation Protection

a. Inspection Scope (71151 - One sample)

The inspectors reviewed relevant effluent release condition reports for the period October 1, 2006 through November 30, 2007, for issues related to the RETS/ODCM Radiological Effluent performance indicator, which measures radiological effluent release occurrences that exceed 1.5 mrem/quarter whole body or 5.0 mrem/quarter organ dose for liquid effluents; 5 mrad/quarter gamma air dose, 10 mrad/quarter beta air dose, and 7.5 mrad/quarter for organ dose for gaseous effluents.

The inspectors reviewed the following documents to ensure that Ginna met all requirements of the performance indicator from the fourth quarter 2006 through the third quarter 2007:

- Monthly projected dose assessment results due to radioactive liquid and gaseous effluent releases;
- Quarterly projected dose assessment results due to radioactive liquid and gaseous effluent releases; and
- Dose assessment procedures.

a. Findings

No findings of significance were identified.

.3 Cornerstone: Physical Protection

a. Inspection Scope (71151 - Three samples)

The inspectors reviewed Ginna's PI data for gathering, processing, evaluating, and submitting data for the Fitness-for-Duty, Personnel Screening, and Protected Area Security Equipment Performance Indicators (PIs) for the period September 2006 through August 2007. The inspectors verified that the PIs had been properly reported as specified in NEI 99-02. The review included Ginna's tracking and trending reports, personnel interviews, and security event reports for the PI data collected since the last security baseline inspection. The inspectors noted from Ginna's submittal that there were no reported failures to properly implement the requirements of 10 CFR 73 and 10 CFR 26 during the reporting period.

Security PIs were inspected during the annual security baseline inspection and the documentation was inadvertently omitted from the security baseline inspection report issued previously in 2007.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems

.1 Semi-Annual Review (71152 - One sample)

a. Inspection Scope

In order to identify trends that might indicate the existence of a more significant safety issue, the inspectors reviewed a sample of system health reports, department performance indicators, and CRs initiated from January to October in 2007. The inspectors also discussed trends and potential trends with appropriate station personnel.



b. Findings and Observations

No findings of significance were identified. Although several trends or potential trends were identified by the inspectors, plant personnel were aware of these and had initiated corrective actions as necessary.

.2 Continuous Review of Items Entered into the Corrective Action Program

a. Inspection Scope

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 electronic copies of condition reports, periodic attendance at daily screening meetings, and accessing Ginna's computerized database.

b. Findings

No findings of significance were identified.

.3 Annual Sample – Torque Wrench Calibration and Control (71152 - One sample)

a. Inspection Scope

The inspectors reviewed Ginna's torque wrench calibration program. This review was initiated after the inspectors observed through a review of CRs, that their appeared to be unresolved issues regarding the calibration and control of torque wrenches. To perform this review, the inspectors reviewed maintenance conducted on the 'B' CCW heat exchanger, Ginna procedures related to the calibration and control of test equipment, and relevant CRs.

b. Findings and Observations

No findings of significance were identified. When issues regarding the calibration of torque wrenches were first identified by Ginna Quality Assurance inspectors, the initial extent of condition review conducted by Ginna line management did not identify all of the weaknesses associated with this program. As a result, additional corrective actions were developed to ensure torque wrenches are corrected calibrated and controlled. During this review, NRC inspectors did not identify any new issues regarding the torque wrench calibration program that had not already been identified by Ginna.

4OA3 Event Follow-up (71153 - One sample)Loss of Hydrazine Flow to the Secondary Plant with a Potential Shutdowna. Inspection Scope

On November 14, 2007, Ginna experienced a loss of normal hydrazine makeup flow to the feedwater system. This loss placed the plant in a level three EPRI chemistry condition, which requires the plant to be shutdown if hydrazine levels are not restored to normal within eight hours after makeup flow ceased. Hydrazine is added to the secondary system to scavenge oxygen and thereby reduce the impact of corrosion on SG small bore piping. Although initial attempts to start the standby pump were unsuccessful, Ginna operations personnel were eventually able to start the standby pump, and restore hydrazine concentrations in the feedwater system to acceptable levels without requiring a shutdown of the plant.

The resident inspector was on-site during this event and monitored the operator efforts to restore hydrazine flow. As part of the review of this event, the inspectors reviewed plant logs, and applicable station procedures. A subsequent Ginna investigation determined that the initial loss of hydrazine flow was caused by a blockage in the in-service hydrazine pump. The blockage was removed, and the pump returned to service.

b. Findings

No findings of significance were identified.

4OA5 Other ActivitiesInstitute of Nuclear Power Operations (INPO) Report Reviewa. Inspection Scope

The inspectors reviewed a report that documented INPO's assessment of plant performance at Ginna for the period of May 2005 to May 2007. The inspectors reviewed the report to ensure that issues outlined in the report were consistent with the NRC perspectives of plant performance and to verify if any significant issues were identified that required further NRC follow-up.

b. Findings

No findings of significance were identified.

4OA6 Meetings, Including Exit

Exit Meeting Summary

On January 9, 2008, the resident inspectors presented the inspection results to Mr. John Carlin and other members of his staff, who acknowledged the findings. The inspectors verified that none of the material examined during the inspection is considered proprietary in nature.

**ATTACHMENT: SUPPLEMENTAL INFORMATION**

Enclosure

**SUPPLEMENTAL INFORMATION**

**KEY POINTS OF CONTACT**

Licensee Personnel

J. Carlin	Vice President, Ginna
D. Blankenship	Manager, Radiation Protection
D. Dean	Assistant Operations Manager (Shift)
M. Giacini	Scheduling Manager
E. Hedderman	Chemistry Supervisor
D. Holm	Plant Manager
J. Jones	Emergency Preparedness Manager
J. Pacher	Manager, Nuclear Engineering Services
B. Weaver	Nuclear Safety and Licensing Manager
J. Yoe	Manager of Operations

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

None.

## LIST OF DOCUMENTS REVIEWED

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

#### Procedures

ER-SC-1 Adverse Weather Plan, Rev. 17  
EPIP 1-17 Planning for Adverse Weather, Rev. 8

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

#### Drawings

33013-1261 Containment Spray, Rev. 37  
33013-1270 Waste Disposal Liquid, Rev. 17  
33013-1245 Auxiliary Component Cooling Water (AC), Rev. 30  
33013-1246 Auxiliary Component Cooling Water (AC), Sheet 1 of 2, Rev. 14  
33013-1246 Auxiliary Component Cooling Water (AC), Sheet 2 of 2, Rev. 12

#### Procedures

S-17.1 Containment Spray System Alignment, Rev. 23

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

#### Documents

MPR 3085, Ginna Flooding Report, Rev. 0  
Ginna Fire Hazards Analysis Report, Rev. B

#### Drawings

21488-0100 Fire, Smoke, and Penetration Barriers Elevation 253' 6", Rev. 10  
21488-0100 Fire, Smoke, and Penetration Barriers Elevation 271, Rev. 14

### **Section 1R06: Flood Protection Measures**

#### Documents

MPR 3085, Ginna Flooding Report, Rev. 0  
International Event: Flooding Caused by a Large Leak in a Bonna Condenser Circulating Water Pipe

#### Work Orders

20702919  
20700368  
20605234  
20504969

#### Drawings

33013-2142 Plant Arrangement Screen house Plan Elevation 243, Rev. 0  
33013-2171 Plant Arrangement Yard, North East, Rev. 9  
33013-2163 Plant Arrangement Equipment List, Rev. 1

33013-2248 Ginna Station System P&ID Index, Rev. 54

**Section 1R11: Licensed Operator Requalification**

Documents

ECA3132-08 Faulted Rupture Steam Generator

**Section 1R12: Maintenance Rule Implementation**

Condition Reports

2004-3342	2007-3189
2005-1508	2007-3192
2005-1511	2007-6359
2006-4391	2007-0769
2006-4420	2007-7119
2006-5907	2007-7156
2006-6407	2007-7358

Procedures

CNG-MN-1.01-1005, Scaffold Control, Rev. 0  
CMP-01-04-EAC01B, Atlas Industrial Manufacturing, Type NEN Heat Exchanger  
Maintenance for EAC01B, Rev. 3  
CNG-MN-1.01-1001, Foreign Material Exclusion, Rev. 1  
CP-81.1, Calibration Procedure for Torque Wrenches, Rev. 13  
IP-MTE-1, Calibration and Control of Measuring and Test Equipment, Rev. 13  
Plastacor Procedure No. P772, Plastacor Coating Procedure for Tubesheet Cladding and  
Channel Head, Rev. 0  
QCIP-2, Torque Verification, Rev. 5

Documents

W.O. 04-4594-011, Design Criteria Standby Auxiliary Feedwater System  
Ginna Eddy Current Report, Component Cooling Water Heat Exchanger 'B', October 31, 2007  
LSS Report No. 07-0403, Daily Coating Inspection Report ('B' CCHX), October 31, 2007  
TE 2001-0051, Component Cooling HX Waterbox Gasket Change, Rev. 0

Work Orders

20704081  
20705109  
20604882

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

Work Orders

20705750  
20702220

Procedures

IP-PSH-2 Integrated Risk Management, Rev. 2

**Section 1R15: Operability Evaluations**

Procedures

PT-2.10.15 Main Steam Non-Return Check Valve Closure Verification, Rev. 9

Condition Reports

2007-6678	2007-7336	2007-7338	2007-8154	2007-2130
2007-2650	2007-4010	2007-7336	2007-7338	2007-7976
2006-3500	2005-0625	1999-0246		

Documents

DA-ME-2000-015, Main Steam Check Valve Closure Analysis, Rev. 0  
In-service Testing Program Fourth 10-Year Interval R. E. Ginna Nuclear Power Plant,  
Rev. 3  
Measuring and Test Equipment Nonconformance Report (Model No. QIER275E /  
Serial No. 11920064011), October 12, 2007  
PT-2.10.15, Main Steam Non-Return Check Valve Closure Verification, January 28, 2007, and  
March 17, 2007

**Section 1R17: Permanent Plant Modifications**

Condition Reports

2007-8849  
2007-8855

Documents

PCR 2007-0045, Manually Depressurize SGs and Use Portable Pump

**Section 1R19: Post-Maintenance Testing**

Condition Reports

2007-7153

Work Orders

20705750  
20700820  
20700789  
20705725

Procedures

PTT-23.18B, Containment Isolation Valve Leak Rate Testing 'B' Containment Spray Heater  
PEN 109, Rev. 7  
PT-2.8Q, Component Cooling Water Pump Quarterly Test, Rev. 4  
S-8A, Component Cooling Water System Startup and Normal Operation Valve Alignment,  
Rev. 48

Documents

PCR – 2007-0046, Screen house Recirculation Gate Valve, MOV 3184, Upgrade Modification

**Section 1R22: Surveillance Testing**Procedures

CPI-FIA-2033 Calibration of Containment Fan Cooler Service Water Flow Meter, Rev. 11  
 PT-12.5 Technical Support Center Emergency Diesel Test, Rev. 03500  
 PT-9 Undervoltage and Underfrequency Protection 11A & 11B – 4160 Volt Buses,  
 Rev. 02401  
 STP-O-12.6B Diesel Generator Fuel Oil Transfer Pump B Test, Rev. 00000

Diagrams

33013-1250 Station Service Water Cooling, Rev. 27  
 33103-1878 Service Building HVAC Systems, Rev. 13  
 33013-1239 Diesel Generator – B, Rev. 21

Documents

ACB 2002-0037, Acceptance Criteria Basis for Opening of Check Valve 5956

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

IP-PSH-2, Integrated Work Schedule Risk Management, Rev. 2  
 A-1, Radiation Control Manual, Rev. 79  
 A-1.1, Access Control to Locked High Radiation and Very High Radiation Areas, Rev 46  
 A-3, Containment Vessel Access Requirements, Rev. 63  
 A-103.10, Radiation Protection Technician Entry Level Requirements, Responsibilities and  
 Training, Rev. 14  
 A-1.6, Station ALARA Committee, Rev. 21  
 A-1.6.1, ALARA Job Reviews, Rev. 28  
 IP-ALA-1, ALARA Challenge Board, Rev. 0  
 RP-ALA-REVIEWS, ALARA Job Review Preparation, Rev. 8  
 RP-ALA-PLAN/RWP-PREP, ALARA Planning and RWP Preparation, Rev. 0  
 RP-DOS-CALC-INT, Determination of Internal Dose Using the Indos Computer Program,  
 Rev. 3  
 RP-SUR-POST, Radiological Postings and Boundary Control, Rev. 9  
 RP-SUR-RADIATION, Performance of Radiation Surveys, Rev. 7  
 RPA-PREJOB, RP Pre-Job Brief and Turnover Guidelines, Rev. 1  
 RP-JC-JOBCOVERAGE, Job Coverage, Rev. 12

Condition Reports:

2007-4968	2007-6637
2007-5389	2007-6759
2007-5405	2007-6860
2007-5569	2007-7324
2007-5624	2007-7799
2007-5929	2007-7867
2007-6045	2007-7941
2007-6604	2007-8047
2007-8199	



Quality Performance Assessment Reports

Audit RPP-07-01-G, Radiation Protection Program  
QPA Field Observation Reports for 2007

Departmental Self-Assessments

Radiation Protection Training Self-Assessment (2007-0108)

ALARA Challenge Board Presentations

WO 20703134      Inspection of the Fuel Transfer System Rails  
WO 20701891      Ultrasonic examination of the Waste Holdup Tank  
WO 20703069      Install Mechanical Plugs in A-reactor compartment cooler

Miscellaneous Documents

Ginna ALARA Statistics for 2007  
2008 Refueling Outage ALARA Summary  
Dose and Dose Rate Alarm Report for 2007  
Ginna 5-Year Radiation Exposure Reduction Plan

**Section 40A1: Performance Indicator Verification**

Procedures:

RP-EXP-EXT-LIMIT, Determining External Exposure Control Levels, Rev. 25  
RP-WBC-EVAL, Whole Body Count Evaluation, Rev. 19  
RP-JC-ALARM-PORTAL, Response to Portal Monitor Alarms, Rev. 9  
MD- RPP, Radiation Protection Program, Rev. 10  
RP-PERFORMANCE-IND, RP Performance Indicator Guidelines, Rev. 2  
CH-125, Chemistry NRC and INPO Performance Indicator Reporting, Rev. 0  
CH-RETS-GDT-REL, Gas Decay Tank Releases, Rev. 10  
CH-RETS-LIQ-REL, Liquid Waste Release, Rev. 15  
CH-RETS-REP-MONTHLY, Preparation of Monthly Reports for Effluent Releases, Rev. 3  
CH-RETS-PURGE-CV, Containment Purge Releases, Rev. 10  
CH-RETS-PV-RELEASE, Plant Vent Releases, Rev. 9  
CHA-RETS-DOSECALC, General Population Dose Calculations for Annual Reports via Midas,  
Rev. 3

**40A2 Identification and Resolution of Problems**

Procedures:

CP-81.1, Calibration Procedure for Torque Wrenches, Rev. 13  
IP-MTE-1, Calibration and Control of Measuring and Test Equipment, Rev. 13  
QCIP-2, Torque Verification, Rev. 5

**40A5 Other Activities**

Documents

INPO Final Report May 2007 Evaluation

**LIST OF ACRONYMS**

ADAMS	Agency-Wide Documents Access and Management System
AFW	auxiliary feedwater
ALARA	As low as is reasonably achievable
CCW	component cooling water
CFR	Code of Federal Regulations
CR	condition report
CV	containment vessel
EPRI	Electric Power Research Institute
GINNA	R.E. Ginna Nuclear Power Plant
IMC	Inspection Manual Chapter
INPO	Institute of Nuclear Power Operations
IP	Inspection Procedure
LHRA	locked high radiation areas
MOV	motor operated valve
mrem	millirem
NEI	Nuclear Energy Institute
NCV	non-cited violation
NRC	U.S. Nuclear Regulatory Commission
P&ID	pipng & instrument drawings
PARS	Publicly Available Records
PCR	plant change record
PI	performance indicator
PMT	post-maintenance testing
RCA	radiologically controlled area
RWP	radiation work permit
SAFW	standby auxiliary feedwater
SG	steam generator
SSC	system, structure, or component
SW	service water
TS	Technical Specification
UFSAR	Updated Final Safety Analysis Report
VHRA	very high radiation areas
WO	work order