



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

April 29, 2010

Mr. John T. Carlin, Vice President
R.E. Ginna Nuclear Power Plant, LLC
Constellation Energy Nuclear Group, LLC
1503 Lake Road
Ontario, New York 14519

SUBJECT: R.E. GINNA NUCLEAR POWER PLANT - NRC INTEGRATED INSPECTION
REPORT 05000244/2010002

Dear Mr. Carlin:

On March 31, 2010, 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 April 8, 2010, 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, 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 Website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

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

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

Enclosure: Inspection Report No. 05000244/2010002
w/ Attachment: Supplemental Information

cc w/encl: Distribution via ListServ

April 29, 2010

Mr. John T. Carlin, Vice President
R.E. Ginna Nuclear Power Plant, LLC
Constellation Energy Nuclear Group, LLC
1503 Lake Road
Ontario, New York 14519

**SUBJECT: R.E. GINNA NUCLEAR POWER PLANT - NRC INTEGRATED INSPECTION
REPORT 05000244/2010002**

Dear Mr. Carlin:

On March 31, 2010, 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 April 8, 2010, 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, 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 Website 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. 05000244/2010002
w/ Attachment: Supplemental Information

Distribution w/encl: (see attached page)

SUNSI Review Complete: NP (Reviewer's Initials)

ML101190333

DOCUMENT NAME: G:\Sites\Ginna\Reports, Feeders and Skeleton\2010-002 Draft IR and Feeder\2010-002 Rev 1.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/NP for	NPerry/NP	GDentel/GD
DATE	04/29/10	04/29/10	04/29/10

OFFICIAL RECORD COPY

Distribution w/encl: (via E-mail)

S. Collins, RA (R1ORAMAIL RESOURCE)

M. Dapas, DRA (R1ORAMAIL RESOURCE)

D. Lew, DRP (R1DRPMAIL RESOURCE)

J. Clifford, DRP (R1DRPMAIL RESOURCE)

D. Roberts, DRS (R1DRSMail RESOURCE)

P. Wilson, DRS (R1DRSMail RESOURCE)

L. Trocine, RI OEDO

G. Dentel, DRP

N. Perry, DRP

J. Hawkins, DRP

S. Sloan, DRP

K. Kolaczyk, DRP, SRI

L. Casey, DRP, RI

M. Rose, DRP, OA

RidsNrrPMREGinna Resource

RidsNrrDorlLp11-1 Resource

ROPreportsResource@nrc.gov

U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No.: 50-244

License No.: DPR-18

Report No.: 05000244/2010002

Licensee: Constellation Energy Nuclear Group, LLC

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

Location: Ontario, New York

Dates: January 1, 2010 through March 31, 2010

Inspectors: K. Kolaczyk, Senior Resident Inspector
L. Casey, Resident Inspector
S. Barr, Senior Emergency Preparedness Specialist
J. D'Antonio, Senior Operations Engineer
E. Gray, Senior Reactor Inspector
D. Johnson, Emergency Preparedness Specialist
J. Nicholson, Health Physicist
R. Rolph, Health Physicist
S. Sloan, Project Engineer

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

Enclosure

TABLE OF CONTENTS

SUMMARY OF FINDINGS.....	3
REPORTS DETAILS.....	4
1. REACTOR SAFETY.....	4
1R01 Adverse Weather Protection	4
1R04 Equipment Alignment	5
1R05 Fire Protection	6
1R06 Flood Protection Measures	6
1R11 Licensed Operator Requalification Program	7
1R12 Maintenance Effectiveness	7
1R13 Maintenance Risk Assessments and Emergent Work Control	8
1R15 Operability Evaluations	9
1R18 Plant Modifications	10
1R19 Post-Maintenance Testing	10
1R20 Refueling and Other Outage Activities	11
1R22 Surveillance Testing	11
1EP2 Alert and Notification System Evaluation.....	12
1EP3 Emergency Response Organization Staffing and Augmentation System	13
1EP4 Emergency Action Level and Emergency Plan Changes	13
1EP5 Correction of Emergency Preparedness Weaknesses	13
1EP6 Drill Evaluation	14
2. RADIATION SAFETY.....	14
2RS1 Radiological Hazard Assessment and Exposure Controls	14
2RS2 Occupational ALARA Planning and Controls	17
2RS8 Radioactive Solid Waste Processing and Radioactive Material Handling Storage and Transportation	17
4. OTHER ACTIVITIES.....	19
4OA1 Performance Indicator Verification	19
4OA3 Followup of Events and Notices of Enforcement Discretion	20
4OA5 Other Activities	22
4OA6 Meetings, Including Exit.....	23
ATTACHMENT: SUPPLEMENTAL INFORMATION	23
KEY POINTS OF CONTACT	A-1
LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED.....	A-1
LIST OF DOCUMENTS REVIEWED	A-1
LIST OF ACRONYMS.....	A-11

Enclosure

SUMMARY OF FINDINGS

IR 05000244/2010002; 01/01/2010 – 03/31/2010; R.E. Ginna Nuclear Power Plant, LLC (Ginna), Routine Integrated Inspection Report.

The report covered a three month period of inspection by resident inspectors and region-based inspectors. 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.

No findings of significance were identified.

Enclosure

REPORTS DETAILS

Summary of Plant Status

R.E. Ginna Nuclear Power Plant (Ginna) began the inspection period in Mode 3, hot shutdown, following a December 30, 2009, automatic reactor trip due to a loss of pressure in the plant turbine electrohydraulic (EH) control system. On January 5, 2010, the plant was taken critical, and the turbine generator was synchronized to the grid. Full rated thermal power was reached on January 9. On February 7, reactor power was decreased to approximately 90 percent in response to ice buildup in the intake structure. The plant was returned to full rated thermal power on February 9 and operated at full power for the remainder of the report period.

1. REACTOR SAFETY**Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity****1R01 Adverse Weather Protection (71111.01 – Two samples)**Impending Adverse Weather Conditions**a. Inspection Scope**

During the week of January 4, 2010, Ginna experienced unusually cold and snowy conditions with nighttime temperatures below 10 degrees. During this time, large amounts of sheet ice formed on Lake Ontario along the shoreline. The inspectors toured areas of the plant that contained structures and systems that could be adversely affected by cold temperatures and frazil ice conditions. Areas of focus were the intake structure, auxiliary building, and the standby auxiliary feedwater (AFW) pump room. The inspectors verified that temperatures in those areas did not decrease below the values outlined in the plant updated final safety analysis report (UFSAR) and that the buildup of ice on Lake Ontario did not impact the service and circulating water systems.

From February 6 to 9, 2010, Ginna experienced ice buildup on the intake structure components. The ice buildup reduced the volume of water flowing into the intake structure which caused the water level in the screen house to decrease. Operators were alerted to this condition when alarms were received in the control room indicating the screen house level had decreased below the normal operating level. In response to this condition, operators entered procedure ER-SC.3, "Low Screen House Water Level," Revision 02100, and implemented the immediate corrective actions outlined in the procedure which included increasing the amount of warm condenser discharge water that flows into the intake structure. The corrective actions were successful, and the screen house level was restored to the normal operating level. Periodically during this event, the inspectors toured the screen house building and control room to verify ER-SC.3 was correctly implemented and that appropriate actions were in place to ensure that ice buildup on the intake structure components did not impact operability of safety related equipment.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (71111.04)

.1 Partial System Walkdown (71111.04Q – Four 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&IDs), and the 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 (TSs) and system operating procedures. The inspectors performed a partial walkdown of the following systems:

- Both trains of the safety injection (SI) system following completion of a planned surveillance test of the bearing cooling water system;
- The 'A' train of the AFW system while the turbine-driven AFW pump was out of service (OOS) for planned maintenance;
- The boric acid injection system flow paths following the failure of level control valve 112B; and
- Both trains of the heating, ventilation, and air conditioning (HVAC) system for the standby AFW system.

b. Findings

No findings of significance were identified.

.2 Complete Walkdown (71111.04S – One sample)

a. Inspection Scope

The inspectors performed a detailed walkdown of the SI system to identify any discrepancies between the existing equipment lineup and the specified lineup. The SI system was chosen because of its risk-significant function to provide emergency core cooling during a loss-of-coolant accident. The inspectors verified proper system alignment as specified by TSs, UFSAR, plant procedures, and P&IDs. Documentation associated with open maintenance requests and design issues were reviewed and included items tracked by plant engineering to assess their collective impact on system operation. In addition, the inspectors reviewed the associated corrective action database to verify that any equipment alignment problems were being identified and appropriately resolved.

Enclosure

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05Q – Five 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. The following plant areas were inspected:

- Air Handling Room (Fire Zone AHR);
- 'A' Diesel Generator Room (Fire Zone EDG-1A);
- Relay Room (Fire Zone RR);
- 'A' Battery Room (Fire Area BR1A); and
- 'B' Battery Room (Fire Area BR1B).

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures (71111.06 – One sample)

a. Inspection Scope

The inspectors walked down the upper and middle levels of the auxiliary building to verify Ginna had implemented appropriate measures to reduce the possibility that those areas could be damaged by internal flooding. To perform this evaluation, the inspectors reviewed the UFSAR, integrated plant safety assessment, condition reports (CRs), plant change records, the site repetitive task database, and various flooding analyses for equipment located in the areas of concern. During the field walkdown, to the extent practicable, the condition of flood mitigation equipment was examined by the inspectors.

b. Findings

No findings of significance were identified.

Enclosure

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

On January 12, 2010, the inspectors observed a licensed operator simulator scenario, "FRP1-06, Steam Line Break in Containment Leads to FRP-1," Revision 01, which was part of the annual licensed operator requalification test. 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," Revision 43.

b. Findings

No findings of significance were identified.

.2 Biennial Review (71111.11B – One sample)a. Inspection Scope

On February 11, 2010, the inspectors performed an in-office review of Ginna's annual operating test results for 2009. The inspection assessed whether pass rates were consistent with the guidance of NRC Inspection Manual Chapter (IMC) 0609, Appendix I, "Operator Requalification Human Performance Significance Determination Process." The inspectors verified that:

- Crew pass rates were greater than 80 percent (pass rate was 100 percent);
- Individual pass rates on the dynamic simulator test were greater than 80 percent (pass rate was 100 percent);
- Individual pass rates on the walk-through test were greater than 80 percent (pass rate was 100 percent); and
- More than 80 percent of the individuals passed all portions of the exam (100 percent of the individuals passed all portions of the exam).

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness (71111.12Q – Three samples)a. Inspection Scope

The inspectors evaluated work practices and follow-up corrective actions for selected systems, structures, and components (SSCs) for maintenance effectiveness. The inspectors reviewed the performance history of those SSCs and assessed extent-of-condition determinations for those issues with potential common cause or generic

Enclosure

implications to evaluate the adequacy of 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 procedures and the requirements of 10 CFR Part 50.65, "Requirements for Monitoring the Effectiveness of Maintenance." In addition, the inspectors reviewed selected SSC classifications, performance criteria and goals, and corrective actions that were taken or planned to verify whether the actions were reasonable and appropriate.

The following issues were reviewed:

- Performance of containment spray (CS) discharge check valve (CV) 862B;
- Performance of the instrument air system from May 2008 to February 2010; and
- Corrective actions taken to address seat leakage past AFW service water (SW) isolation valve 4344 from April 2005 to March 2010.

b. Findings

No findings of significance were identified.

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

a. Inspection Scope

The inspectors evaluated the effectiveness of Ginna's maintenance risk assessments required by 10 CFR Part 50.65(a)(4). The inspectors discussed the use of Ginna's online risk monitoring software with control room operators and scheduling department personnel. The inspectors reviewed equipment tracking documentation and daily work schedules, and performed plant tours to verify that actual plant configuration matched the assessed configuration. Additionally, the inspectors verified that risk management actions, for both planned and emergent work, were consistent with those described in CNG-OP-4.01-1000, "Integrated Risk Management," Revision 00500.

Risk assessments for the following out of service (OOS) SSCs were reviewed:

- Unplanned maintenance on the turbine EH control system (January 1 to 6, 2010);
- Planned maintenance on the 'A' component cooling water (CCW) heat exchanger (HX) with the 'B' spent fuel pool (SFP) HX and 'B' SFP recirculation pump OOS, and valve 112B, emergency makeup from the refueling water storage tank (RWST) to the charging pumps, OOS (January 25, 2010);
- Lowering SFP level to facilitate independent spent fuel storage installation (ISFSI) modifications (February 7 to 9, 2010);
- Planned maintenance on circuit 7T with the 'A' charging pump OOS (February 16, 2010);
- Failure of the 'A' battery room high energy line door with planned testing of the under voltage relays on electrical busses 14 and 18 (February 19, 2010);
- Planned maintenance on the 'B' battery (February 24, 2010);

Enclosure

- Unplanned maintenance on the fire system for transformer 12A which necessitated de-energizing offsite power line 7T (March 17, 2010); and
- Unplanned maintenance on the 'A' train of the control room emergency air treatment system (CREATS) (March 22 to 26, 2010).

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15 – Six samples)

a. Inspection Scope

The inspectors reviewed operability evaluations and/or 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.

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

- CR 2008-9906, Document the Decision Why Split Pin Replacement is Required in the 2011 Refueling Outage (RFO);
- CR 2009-9500, Both Main Steam Non-Return CVs 3518 and 3519 Do Not Meet Acceptance Criteria of STP-O-2.10.15, "Main Steam Non-Return CV Closure Verification," Rev. 00300;
- CR 2010-0698, Chemical Addition Valves Found Out of Their Normal At-Power Positions;
- Response to NRC Question Regarding Operability of SI System During an Accumulator Fill;
- CR 2010-0215, FI-924 SI Line Flow to Reactor Coolant System Loop 'B' Indicates 55 Gallons Per Minute With No System Flow; and
- CR 2010-0722, Prior to Performance of Pump Performance Test, a Void was Discovered in the NAOH Line to CS Eductors.

b. Findings

No findings of significance were identified.

Enclosure

1R18 Plant Modifications (71111.18 – Three samples)Temporary Modificationa. Inspection Scope

The inspectors reviewed three temporary plant modifications to determine whether the temporary changes adversely affected system availability or a function important to plant safety. The inspectors reviewed the associated system design bases including the UFSAR and TS, and assessed the adequacy of the safety determination screening and evaluation. The inspectors also assessed configuration control of the temporary changes by reviewing selected drawings and procedures to verify whether appropriate updates had been made. The inspectors compared the actual installation with the temporary modification documents to determine whether the implemented changes were consistent with the approved, documented modification. The temporary modifications were reviewed by the inspectors in the field to verify they had been installed in conformance with the instructions contained in procedure CNG-CM-1.01-1004, "Temporary Plant Configuration Change Process, Revision 0.

The inspectors reviewed the following temporary plant modifications:

- TM 2008-004, "Radiation Protection (RP) Remote Monitoring System;"
- E2009-0265, "Leak Repair of Relief Valve (RV) 4407;" and
- ECP-10-000185, "Single Cell Removal from the 60 Cell Vital Battery Banks."

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing (71111.19 – Seven 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 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.

The following PMT activities were reviewed:

- M-109, "Auxiliary Electrohydraulic (AEH) Governor High Pressure Fluid System Adjustment, Calibration, and Maintenance," Rev. 02700, to test the EH system following the completion of work order (WO) C90735261, "Replace 'B' EH Pump Unloader and Flush," (January 3, 2010);

Enclosure

- Work instructions contained in WOs C20806923, "Auxiliary Building Sump Pump 'A' Motor Maintenance," and C20806919, "Auxiliary Building Sump Pump 'A' – Perform Minor Pump Preventive Maintenance (PM) Inspection," (February 1, 2010);
- STP-O-12.1, "Emergency Diesel Generator (EDG) 'A,'" Rev. 00700, to test the 'A' diesel generator following completion of WO C90662791, "Check and Adjust EDG 'A' Governor In Response to Load Drift Identified Under CR 2009-6985," (February 2, 2010);
- Work instructions contained in WOs C20706788, "Standby AFW Pump 'C' Cooling Fan PM and Inspection," and C20900686, "Open, Inspect, and Clean Standby AFW Pump Room Cooler," (February 18, 2010);
- STP-O-12.1, "EDG 'A,'" Rev. 00800, to test the 'A' diesel generator following completion of WO C90792059, "Calibrate EDG '1A' Relays," (March 5, 2010);
- STP-O-31B, "Charging Pump 'B' Inservice Test (IST)," Rev. 00500, to test the 'B' charging pump following completion of WOs C90801680, C90804833, and C90716561, "Replace Suction and Discharge Valves," "Adjust Low Speed Stops," and "Vari-Drive Rebuild," respectively (March 5, 2010); and
- STP-O-16-COMP-B, "AFW Pump 'B' Comprehensive Test," Rev. 0300, to test RV 4022 following completion of WO C90687350, "RV 4022 Leaking One Drop Every 15 Seconds," (March 24, 2010).

b. Findings

No findings of significance were identified.

1R20 Refueling and Other Outage Activities (71111.20 – One sample)

a. Inspection Scope

The inspectors reviewed troubleshooting activities performed on Ginna's turbine EH system following the December 30, 2009, turbine/reactor plant trip. As part of the review, the inspectors examined documents associated with the EH system including CRs, WOs, and system engineering health reports. The inspectors also attended plant operations review committee and outage control center meetings associated with EH troubleshooting activities. Following the completion of EH troubleshooting activities, the inspectors observed portions of the reactor plant startup.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22 – Nine samples)

a. Inspection Scope

The inspectors observed the performance and/or reviewed test data for the following 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

Enclosure

also verified that proper test conditions were established as specified in the procedures, no equipment preconditioning activities occurred, and acceptance criteria were met.

- STP-O-2.1S, "SW Flow From SI Pump Oil Cooler Determination," Rev. 00100 (January 7, 2010);
- STP-O-12.6A, "Diesel Generator Fuel Oil Transfer Pump 'A' Test," Rev. 00300 (January 24, 2010);
- STP-O-36Q-D, "Standby AFW Pump 'D' – Quarterly," Rev. 00100 (January 29, 2010);
- STP-O-22.18, "Local Leak Rate Test of Electrical Manifold Test Header 'C'," Rev. 00200 (February 2, 2010);
- STP-O-16-COMP-T, "AFW Turbine Pump – Comprehensive Test," Rev. 00900 (February 8, 2010);
- STP-I-32B, "Reactor Trip Breaker Testing – Train 'B'," Rev. 0 (February 10, 2010);
- STP-O-2.7.1B, "Loop 'B' SW Pump Test," Rev. 00600 (February 23, 2010);
- STP-E-12.5, "Technical Support Center (TSC) Diesel Test," Rev. 0000 (March 9, 2010); and
- STP-O-17.7BM, "CREATS Filter Train 'B' Monthly Surveillance," Rev. 00102 (March 25, 2010).

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness

1EP2 Alert and Notification System Evaluation

a. Inspection Scope (71114.02 – One sample)

An onsite review was performed to assess the maintenance and testing of Ginna's alert and notification system (ANS). During this inspection, the inspectors interviewed emergency preparedness (EP) staff responsible for implementation of the ANS testing and maintenance. CRs pertaining to the ANS were reviewed for causes, trends, and corrective actions. The inspectors reviewed the ANS procedures and the ANS design report to ensure compliance with design report commitments for system maintenance and testing. Planning standard 10 CFR 50.47(b)(5), and the related requirements of 10 CFR 50 Appendix E, were used as reference criteria.

b. Findings

No findings of significance were identified.

Enclosure

EP3 Emergency Response Organization Staffing and Augmentation System

a. Inspection Scope (71114.03 – One sample)

A review of Ginna's emergency response organization (ERO) augmentation staffing requirements and the process for notifying the ERO was performed. This was performed to ensure the readiness of key staff for responding to an event and to ensure timely facility activation. The inspectors reviewed Ginna's ERO roster, training records, applicable procedures, drill reports for augmentation, quarterly EP drill reports, and CRs related to the ERO staffing augmentation system. Planning standard 10 CFR 50.47(b)(2), and related requirements of 10 CFR 50 Appendix E, were used as reference criteria.

b. Findings

No findings of significance were identified.

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

a. Inspection Scope

Since the last NRC inspection in May 2009, changes were implemented to Ginna's nuclear emergency plan. Ginna had verified that, in accordance with 10 CFR 50.54(q), any change made to the plan, and its lower-tier implementing procedures, had not resulted in any decrease in effectiveness of the plan and that the revised plan continued to meet the requirements of 10 CFR 50.47(b) and Appendix E to 10 CFR 50. The inspectors reviewed all emergency action level changes that had been made since May 2009 and conducted a sampling review of other emergency plan changes including the changes to lower-tier emergency plan implementing procedures (EIPs) to evaluate for any potential decreases in effectiveness of the plan. This review was not documented in an NRC safety evaluation report and does not constitute formal NRC approval of the changes, and as such, the changes are subject to future NRC inspection. The requirements in 10 CFR 50.54(q) were used as reference criteria.

b. Findings

No findings of significance were identified.

1EP5 Correction of Emergency Preparedness Weaknesses (7111.4.05 – One sample)

a. Inspection Scope

The inspectors reviewed a sampling of self-assessment procedures and reports to assess Ginna's ability to evaluate their performance and programs. The inspectors reviewed CRs from January 2009 through January 2010 initiated by Ginna from drills, self assessments, and audits. The inspectors assessed Ginna's response to and documentation of the actual declarations of an Unusual Event on August 28, 2008, and on February 5, 2009. In addition, the inspectors reviewed quality assurance audits,

Enclosure

including 10 CFR 50.54(t) audits, and several self-assessment reports. Planning standard 10 CFR 50.47(b)(14) and the related requirements of 10 CFR 50 Appendix E were used as reference criteria.

b. Findings

No findings of significance were identified.

1EP6 Drill Evaluation (71114.06 -- One sample)

a. Inspection Scope

On January 12, 2010, the inspectors observed a licensed operator simulator scenario "FRP1-06, Steam Line Break in Containment Leads to FRP-1," Revision 01, 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 EIPs.

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Public Radiation Safety and Occupational Radiation Safety

2RS1 Radiological Hazard Assessment and Exposure Controls (71124.01)

a. Inspection Scope

From January 11 to 15, 2010, the inspectors performed the following activities to verify that Ginna properly assessed the radiological hazards in the workplace and implemented appropriate radiation monitoring and exposure controls during routine operations. Implementation of these controls was reviewed against the criteria contained in 10 CFR 20, relevant TSs, and Ginna procedures.

Inspection Planning

The inspectors reviewed all of Ginna's performance indicators (PIs) for the Occupational Exposure Cornerstone for followup. The inspectors reviewed RP program self assessments and audits and verified no operational events occurred relating to radiation safety.

Radiological Hazard Assessment

The inspectors verified one change to plant operations that could result in a change to plant radiological conditions. The inspectors verified that Ginna assessed the impact of the change to plant radiological hazards.

Enclosure

The inspectors reviewed the last two surveys performed on each level of the auxiliary building including the charging pump room, chemical and volume control tank room, gas decay tank room, and the SFP.

The inspectors walked down the facility, including the radioactive waste processing, storage, and handling areas to evaluate material and radiological conditions. With the assistance of a radiation protection technician (RPT), dose rates were verified at the boundary of several high radiation areas and at the doors to six locked high radiation areas.

Instructions to Workers

The inspectors verified the labeling of several drums containing licensed material staged in the upper radiation waste building. The inspectors reviewed all medium risk radiation work permits (RWPs) and verified appropriate work control instructions were specified. The permissible dose was included on each RWP as the electronic personal dosimeter alarm setpoint. The RWP also specified a dose rate alarm setpoint for the electronic personal dosimeter. The inspectors reviewed one CR where a worker's electronic personal dosimeter alarmed.

Contamination and Radioactive Material Control

In accordance with Ginna procedure RP-SUR-REL, "Unconditional Release of Material from Restricted Areas," Revision 01400, Ginna has five normal points used to release materials. The inspectors observed two of these areas. Only the RP access control area actively released material during the inspection. The inspectors verified surveying and release of material was in accordance with plant procedures, and the instrumentation had appropriate sensitivity. The inspectors reviewed Ginna's criteria for the survey and release of material and the response specified for an alarm indicating the presence of licensed material.

The inspectors verified the presence of five sources on Ginna's inventory and verified that three of the sources were leak tested and were not leaking. The inspectors verified that Ginna has one source meeting the requirements to be reported on the nationally tracked sources. The source has not been moved and is still in use.

Radiological Hazards Control and Work Coverage

The inspectors observed work in progress at the SFP for fuel sipping operations. The inspectors attended the pre-job briefing and verified the existing conditions were consistent with posted surveys, RWPs, and worker briefing.

The inspectors verified the adequacy of radiological controls, such as surveys during movement of equipment from the SFP, and contamination control. The inspectors verified the placement of radiation monitoring devices on the individuals. There were no airborne radioactivity areas; therefore, there was no opportunity to review RWPs for airborne radioactivity areas. The inspectors verified the physical and programmatic controls for highly activated material stored within the SFP.

Enclosure

The inspectors verified that appropriate controls were in place to preclude inadvertent removal of these materials from the pool.

The inspectors verified the integrity and posting of six locked high radiation area doors. Ginna has only one very high radiation area. This area, 'A' sump, was not accessible during the inspection as it is in the containment building.

Risk-Significant High Radiation Area and Very High Radiation Area Controls

The inspectors discussed the controls and procedures for high risk high radiation areas and very high radiation areas with the radiation protection manager (RPM). Only administrative changes had been made to the procedures. The controls for the very high radiation area access included those controls for locked high radiation areas, and the key was maintained in the RPM office in a lock box under the control of the RPM.

The inspectors discussed the controls in place for special areas that have the potential to become very high radiation areas during certain plant evolutions with an RP supervisor. The inspectors verified that communication is required with RP prior to one of these evolutions to allow appropriate RP actions. The inspectors verified that controls for very high radiation areas ensure that an individual is not able to gain unauthorized access to a very high radiation area.

Radiation Worker Performance

The inspectors observed radiation workers' performance and that they were aware of the radiological conditions and the RWP controls, and that their performance reflected the level of radiological hazards present. The inspectors reviewed nine CRs where human performance errors were the cause. No observable trends were noted.

RPT Proficiency

The inspectors observed RPTs' performance to determine if technicians were aware of the radiological conditions in their workplace and the RWP controls. The inspectors reviewed two CRs where the cause was an RPT error. No observable trends were noted.

Problem Identification and Resolution

The inspectors reviewed Ginna's self assessments, audits, and special reports related to the RP program to determine if identified problems were entered into Ginna's corrective action program (CAP). The inspectors verified that problems identified were put into the CAP and appropriate corrective actions were identified. Industry and plant operating experiences were discussed at the pre-job briefing attended by the inspectors.

b. Findings

No findings of significance were identified.

Enclosure

2RS2 Occupational ALARA Planning and Controls (71124.02)**a. Inspection Scope**

From January 11 to 15, 2010, the inspectors performed the following activities to verify that Ginna was properly implementing operational, engineering, and administrative controls to maintain personnel exposure as low as reasonably achievable (ALARA) for activities performed during routine operations. Implementation of these controls was reviewed against the criteria contained in 10 CFR 20, applicable industry standards, and Ginna procedures.

Inspection Planning

The inspectors reviewed pertinent information regarding cumulative exposure history, current exposure trends, and ongoing activities. The inspectors reviewed Ginna's 3-year rolling average dose and compared Ginna's average with the industry average. The inspectors reviewed Ginna's site-specific trends in collective exposures and source term measurements. The inspectors reviewed Ginna's procedures associated with maintaining occupational exposure ALARA. The inspectors verified Ginna's processes used included job estimating and tracking.

Radiological Work Planning

The inspectors reviewed a list of work activities with estimated and actual exposure for the previous outage (G1RFO35).

Declared Pregnant Workers

There were no declared pregnant workers during this inspection period. Ginna has established an administrative limit (300 millirem) for a declared pregnant worker.

b. Findings

No findings of significance were identified.

2RS8 Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation (71124.08)**a. Inspection Scope**

From March 22 to 26, 2010, the inspectors performed the following activities to verify that Ginna effectively implemented their programs for processing, handling, storage, and transportation of radioactive material. Implementation of these controls was reviewed against the criteria contained in 10 CFR 20, relevant TSs, and Ginna procedures.

Enclosure

Inspection Planning

The inspectors reviewed the solid waste system description in Ginna's UFSAR, Ginna's process control program, and Ginna's 2008 annual effluent release report. The inspectors reviewed Ginna's December 9, 2009, RPP-09-01 audit of the RP program.

Radioactive Material Storage

The inspectors observed the storage of containers of radioactive material in the upper radwaste building and the radioactive material storage building. The inspectors verified the containers were properly labeled. The inspectors verified that the radioactive material storage areas were properly posted and controlled. The inspectors verified that Ginna has not established a process for monitoring the impact of long-term storage of radioactive waste. Radioactive waste is not stored long-term at Ginna. The inspectors verified that there were no signs of swelling, leakage, or deformation of the containers used to store radioactive materials.

Radioactive Waste System Walkdown

The inspectors walked down the accessible portions of the liquid radioactive waste system including the monitor tanks, the demineralizers, and the spent resin processing system.

The inspectors verified the evaporator waste condensate tanks and waste condensate demineralizers that were abandoned in place were isolated and would not contribute to an unmonitored release path.

The inspectors verified there have been no changes to the radioactive waste processing system since the last inspection in 2008.

The inspectors verified that the waste stream mixing, sampling procedures, and methodology for waste concentration averaging were consistent with the process control plan and provided representative sampling of the spent resin for waste classification.

Waste Characterization and Classification

The inspectors reviewed the analyses for four waste streams and verified that Ginna's radiochemical sample analysis results were sufficient to support radioactive waste characterization. The inspectors verified that Ginna's use of scaling factors and calculations to account for difficult-to-measure radionuclides was technically sound and based on current 10 CFR Part 61 analyses.

The inspectors verified that Ginna's procedures take into account changing plant operational parameters and obtaining additional samples for 10 CFR Part 61 analyses when needed to maintain the validity of the waste stream composition data between the annual and biennial sample analysis.

Enclosure

The inspectors verified that Ginna has established and maintains an adequate quality assurance program to ensure compliance with the waste classification and characterization requirements.

Problem Identification and Resolution

The inspectors reviewed Ginna's self assessments and audits related to the solid radioactive material control program to determine if identified problems were entered into the CAP. The inspectors verified that problems identified were put into the CAP and appropriate corrective actions were identified.

b. Findings

No findings of significance were identified.

4. **OTHER ACTIVITIES**

4OA1 Performance Indicator Verification (71151)

.1 Cornerstone: Mitigating Systems

a. Inspection Scope (71151 – Three samples)

Using the criteria specified in Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment PI Guideline," Revision 6, the inspectors verified the completeness and accuracy of the PI data for calendar year 2009 for unplanned scrams per 7,000 critical hours, unplanned power changes per 7,000 critical hours, and unplanned scrams with complications. To verify the accuracy of the data, the inspectors reviewed monthly operating reports, NRC inspection reports, and Ginna event reports issued during 2009.

b. Findings

No findings of significance were identified.

.2 Cornerstone: Emergency Preparedness

a. Inspection Scope (71151 – Three samples)

The inspectors reviewed data for the EP PIs which are: (1) Drill and Exercise Performance, (2) ERO Drill Participation, and (3) ANS Reliability. The last NRC EP inspection at Ginna was performed in the second quarter of 2009. The inspectors reviewed supporting documentation from EP drills, training records, and equipment tests from the second quarter of 2009 through the fourth quarter of 2009 to verify the accuracy of the reported data. The review of these PIs was performed using the acceptance criteria documented in NEI 99-02.

Enclosure

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems

Continuous Review of Items Entered into the Corrective Action Program

a. Inspection Scope

As specified 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 Ginna's CAP. This review was accomplished by reviewing electronic copies of CRs, periodic attendance at daily screening meetings, and accessing Ginna's computerized database.

b. Findings and Observations

No findings of significance were identified.

4OA3 Followup of Events and Notices of Enforcement Discretion (71153 – Three samples)

.1 Fire in Transformer PXYD27

a. Inspection Scope

On January 19, 2010, Ginna operators entered emergency procedure ER-FIRE.0, "Control Room Response to Fire Alarms and Reports," Revision 00903, due to a fire in transformer PXYD27, a 12-kilovolt, non-safety-related, residential transformer supplying power to electrical outlets that are located in the protected area. No flames were present at the transformer, but operators and responders did notice smoke, arcing, and hissing emanating from the transformer. The inspectors responded to the control room to verify proper licensee response and to the site of the fire to observe Ginna's fire brigade and offsite response.

Approximately 30 minutes after the fire was discovered, Ginna operators requested assistance from Rochester Gas & Electric to isolate the affected transformer. Approximately 1.5 hours after the fire was discovered, Ginna operators requested assistance from the Ontario Fire Department as recommended by the fire brigade captain. In preparation for transformer isolation, Ginna entered emergency procedure ER-ELEC.9, "Loss of Sodas Line CKT 5241," Revision 00701. Approximately 3 hours after the fire was discovered, the fire was confirmed out.

Ginna personnel enacted appropriate compensatory measures for the systems and components that lost power due to the transformer isolation. This fire did not affect any safety-related SSCs and did not impact safe plant operation.

Enclosure

b. Findings

No findings of significance were identified.

.2 (Closed) Licensee Event Report (LER) 05000244/2009002-00: Plant Trip Due to Loss of Electrohydraulic Control System

On December 30, 2009, at 4:37 a.m., Ginna experienced a turbine trip followed by a reactor trip from approximately 100 percent of rated thermal power when a turbine stop valve drifted closed because of inadequate EH system pressure. Prior to the trip, Ginna operators were taking actions to address abnormal EH system parameters, which included high system temperature (165 degrees Fahrenheit) and low system pressure (1,300 pounds per square inch).

Following the trip, Ginna's investigation verified that the abnormal conditions (low system pressure coincident with high system temperature) were caused by degraded O-ring seals in both EH pumps. The EH pumps were degraded because a third party vendor had installed seals in the pumps during a scheduled rebuild activity that were not compatible with the system fluid. This oversight was not detected by Ginna during the installation process, and the pumps were placed into service during the September 2009 RFO. The NRC determined that it was not reasonable for Ginna to have detected the improper O-ring seals prior to installation since the EH system is not safety-related, and therefore, not required to meet the quality assurance standards of 10 CFR Part 50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants." Because the seals were not compatible with the system fluid, they failed to maintain critical pump internal dimensions within design tolerances, which led to the subsequent loss of system pressure. The high temperature EH condition resulted from both EH pumps continuously operating in an effort to maintain system pressure. Ginna's immediate corrective actions included installing pumps in the EH system that had the correct seal material. Long-term corrective actions under consideration include revising the EH pump PM program so that both EH pumps are not replaced at the same time. This LER was reviewed by the inspectors and no findings of significance were identified and no violation of NRC requirements occurred. Ginna's investigation of this trip was documented in several CRs including CR 2010-0084. This LER is closed.

.3 (Closed) LER 05000244/2010001-00: Two Fuel Assemblies Identified In Incorrect Spent Fuel Pool Locations Following Database Upgrade

On January 7, 2010, during a review of fuel moves in the SFP in preparation for a fuel assembly canister sipping evolution, Ginna personnel identified that two fuel assemblies were misclassified and were stored in incorrect locations per TS limiting condition for operability 3.7.13, "SFP Storage." Subsequent investigation by Ginna personnel verified that both assemblies were correctly classified utilizing the existing methodology in 2001. However, in 2005, the fuel database was changed and minor assembly burnup adjustments were made utilizing the specific weights for each fuel assembly as opposed to region-average assembly weights used in the 2001 methodology. This resulted in a less than 1 percent change in the burnup of several regions of assemblies. At the time,

Enclosure

this change was seen as insignificant and was not evaluated against TS 3.7.13 requirements. Upon discovery of the misclassification, actions were taken to immediately restore the storage of the SFP to an acceptable configuration. Additional corrective actions included a complete fuel burnup validation and reconciliation calculation by Ginna personnel. No new findings were identified in the inspector's review. Based on multiple conservatisms in Ginna's criticality analysis, the minor change in burnup, and the margin in the soluble boron concentration in the SFP, this finding constitutes a violation of minor significance that is not subject to enforcement action in accordance with Section IV of the NRC Enforcement Policy. This LER is closed.

4OA5 Other Activities

Preoperational Testing of an ISFSI (60854.1)

a. Inspection Scope

The inspectors observed and evaluated welding and nondestructive testing (NDT) to determine whether Ginna had developed the capability to properly weld and perform NDT of the dry shielded canister (DSC) 32PT to be used in storage of spent fuel.

The inspectors observed the welding equipment setup, welding of the mockup inner and outer covers, visual weld examination, penetrant testing, and helium leak testing of the cover welds and the drain/vent port covers. Portions of the applicable work instructions and procedures were reviewed. The inspection included verification that the activities were accomplished in accordance with the commitments and requirements contained in the safety analysis report, the NRC's safety evaluation report, the certificate of compliance (COC), the American Society of Mechanical Engineers (ASME) code, as well as Ginna's quality assurance program, and 10 CFR 72.

The inspectors discussed the work steps and plans with those involved and reviewed portions of various controlling procedures (work packages) to verify their adequacy. The inspectors also examined the welding equipment, observed welding in progress on each of the DSC components, reviewed welder qualification records and portions of the welding, and the NDT procedures.

The inspectors observed several pre-job briefings to ensure they were thorough and addressed pertinent aspects of the relevant procedures and COC. Ginna used simulated radiological conditions based on industry experience. This data was utilized as simulated radiation levels during the actual performance of the dry run to promote ALARA awareness. The inspectors verified procedure steps were strictly followed and field supervisors maintained effective oversight of work activities.

The inspectors reviewed the vacuum drying and helium backfilling sequence. The sequence involved draining water from the DSC mock-up, drying the DSC, backfilling the DSC with helium, and helium leakage testing.

Enclosure

The technique for the helium leak testing of the final closure welds was demonstrated on a mockup DSC during the welding portion of the dry run inspection. The helium leak testing was performed by experienced contractor personnel qualified to perform NDT on these components. The vacuum drying process was performed in accordance with approved procedures. The specified vacuum pressure was achieved and the pressure maintained within the TS limits. Helium backfilling operations were also performed in accordance with approved procedures. The inspectors verified individuals performing the leak test demonstrated good understanding of the requirements for performing helium leak tests and the associated acceptance criteria were met. The inspectors verified procedures and processes were sufficient in achieving the specified limits in the TSs, ensuring minimal water content of loaded DSCs, and maintaining an inert atmosphere to support the safe storage of spent fuel assemblies.

b. Findings

No findings of significance were identified.

The inspectors verified that the capability to adequately weld, perform NDT, and helium leak testing of DSCs was demonstrated by the mockup work. During additional parts of the dry run (preoperational demonstration), the welding staff at Ginna plan to confirm the adequacy of the welding equipment, as set up in the DSC fuel loading area, by preproduction weld performance welding.

The inspectors also verified that the capability to drain a DSC, perform vacuum drying, helium backfilling and unloading of a DSC during the preoperational tests was adequately demonstrated using a mock-up.

4OA6 Meetings, Including Exit

Exit Meeting Summary

On April 8, 2010, 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
J. Bowers	Acting General Supervisor, Radiation Protection
D. Dean	Assistant Operations Manager (Shift)
T. Hedges	Emergency Preparedness Manager
E. Larson	Plant General Manager
T. Paglia	Scheduling Manager
S. Snowden	Chemistry Supervisor
J. Sullivan	Manager of Operations
P. Swift	Manager, Nuclear Engineering Services

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Closed

05000244/2009002-00	LER	Plant Trip Due to Loss of Electrohydraulic Control System (Section 40A3)
05000244/2010001-00	LER	Two Fuel Assemblies Identified In Incorrect Spent Fuel Pool Locations Following Database Upgrade (Section 40A3)

LIST OF DOCUMENTS REVIEWED

Section 1R01: Adverse Weather Protection

Document

UFSAR

Procedure

ER-SC.3, Low Screen House Water Level, Rev. 02100

Condition Reports

2010-0050

2010-0110

2010-0950

Section 1R04: Equipment Alignment

Document

SI System Health Report, January to March 2010

Procedures

S-16A, SI System Alignment, Rev. 07100

S-16.13, RWST Water Makeup to Accumulators, Rev. 03501

T-44.4, HVAC Line-Up for the Standby AFW System, Rev. 011

Drawings

33013-1237, AFW P&ID, Rev. 55

33013-1238, Standby AFW P&ID, Rev. 26

33013-1245, Auxiliary Coolant CCW P&ID, Rev. 32

33013-1246, Auxiliary Coolant CCW P&ID, Sheet 2 of 2, Rev. 12

33013-1247, Auxiliary Coolant Residual Heat Removal P&ID, Rev. 44

33013-1250, Station Service Cooling Water Safety-Related P&ID, Sheet 1 of 3, Rev. 53

33013-1250, Station Service Cooling Water Safety-Related P&ID, Sheet 2 of 3, Rev. 39

33013-1260, Reactor Coolant P&ID, Rev. 25

33013-1261, CS P&ID, Rev. 38

33013-1262, SI and Accumulators P&ID, Sheet 1 of 2, Rev. 25

33013-1262, SI and Accumulators P&ID, Sheet 2 of 2, Rev. 7

33013-1265, Auxiliary Building Chemical Volume Control System (CVCS) Charging P&ID,
Sheet 2 of 2, Rev. 22

33013-1266, Auxiliary Building CVCS Boric Acid P&ID, Rev. 33

33013-1274, Hydrogen and Nitrogen P&ID, Rev. 21

Condition Report

2010-0343

Section 1R05: Fire Protection

Document

Ginna Fire Protection Plan, Rev. 5

Section 1R06: Flood Protection Measures

Procedure

ER-ELEC.8, Restoration of Charging Pump Supply From Bus 16 Following HELB in Auxiliary
Building, Rev. 0

Condition Report

2010-0620

Section 1R11: Licensed Operator Regualification Program

Document

FRP1-06, Steam Line Break in Containment Leads to FRP-1, Rev. 01

Procedure

OTG-2.2, Simulator Examination Instructions, Rev. 43

Section 1R12: Maintenance EffectivenessDocument

System Engineer Status Report Summary Tier 4 Indicators, January 2010

Procedure

CNG-CA-1.01-1005, Apparent Cause Evaluation, Rev. 0100

Condition Reports

2003-1600	2007-8998	2008-8173	2010-0419
2005-4040	2006-4202	2008-4859	2010-0801
2006-5897	2007-7153	2009-0864	2010-1004
2010-1967			

Section 1R13: Maintenance Risk Assessments and Emergent Work ControlDocuments

Auto Log Entries for Equipment OOS, February 16 and 24, 2010

Procedure

CNG-OP-4.01-1000, Integrated Risk Management, Rev. 00500

Drawings

03202-0102, 125-Volt, Direct-Current Power Distribution System One-Line Diagram, Rev. 017

33013-1248, SFP Cooling P&ID, Rev. 36

33013-1250, Station Service Cooling Water Safety-Related P&ID, Sheet 2 of 3, Rev. 39

Section 1R15: Operability EvaluationsDocuments

DA-ME-94-112, SI Flow Through Accumulator Fill and Test Lines at Cold Shutdown, Rev. 0

GIMP-PROGPLAN, Gas Intrusion Management Program, Rev. 0

Response to NRC Question Regarding Operability of SI System during an Accumulator Fill

SEV-1076, SI Pump Testing with Test Line Open, Rev. 0

Procedures

EP-UT-606, Ultrasonic Surveillance Test of CS Pump 'B' and Associated Piping, Rev. 0

S-16.13, RWST Water Makeup to Accumulators, Rev. 03501

Drawings

33013-1261, CS P&ID, Rev. 37

33013-1262, SI and Accumulators P&ID, Sheet 1 of 2, Rev. 25

33013-1262, SI and Accumulators P&ID, Sheet 2 of 2, Rev. 7

Condition Reports

2008-9906
2009-9500
2010-0698
2010-0215
2010-0722

Section 1R18: Plant Modifications

Documents

DA-EE-2001-047, Instrument Bus Electrical System Evaluation, Rev. 1
DA-EE-2001-028, Vital Battery 8-Hour Capacity, Rev. 1
DA-EE-97-069, Sizing Vital Batteries 'A' and 'B', Rev. 3

Procedure

CNG-CM-1.01-1004, Temporary Plant Configuration Change Process, Rev. 0

Section 1R19: Post-Maintenance Testing

Procedures

M-15.1.3, Inspection, Testing, and Setup of Diesel Generator Governors, Rev. 5
M-109, AEH Governor High Pressure Fluid System Adjustment, Calibration, and Maintenance,
Rev. 02700
STP-O-12.1, EDG 'A', Rev. 00700
STP-O-12.1, EDG 'A', Rev. 00800
STP-O-16-COMP-B, AFW Pump 'B' Comprehensive Test, Rev. 0300
STP-O-31B, Charging Pump 'B' IST, Rev. 00500

Drawings

33013-0652, 480-Volt One Line Wiring Diagram, Rev. 25
33013-1264, Chemical & Volume Control Letdown P&ID, Rev. 26
33013-1265, CVCS Charging P&ID, Sheet 1 of 2, Rev. 11
33013-1265, Auxiliary Building CVCS P&ID, Sheet 2 of 2, Rev. 22
33013-1266, Auxiliary Building CVCS Boric Acid P&ID, Rev. 33
33013-1270, Waste Disposal Liquid Waste Drains, Holdup Tank, Spent Resin Tanks P&ID,
Sheet 1 of 2, Rev. 19
33013-1271, Waste Disposal Liquid Reactor Coolant Drain Tank P&ID, Sheet 2 of 2, Rev. 13

Condition Reports

2009-6985
2010-1501
2010-1137

Work Orders

C90735261	C20806919	C90801680	C20706788
C90687350	C90662791	C90804833	C20900686
C20806923	C90792059	C90716561	

Section 1R20: Refueling and Other Outage Activities

Documents

2009 Forced Outage Quality and Performance Assessment Report, Rev. 0

Procedures

A-3.1, Containment Storage and Closeout Inspection, Rev. 04200

CNG-AM-1.01-1004, Equipment Reliability Reporting, Rev. 00500

CNG-OP-1.01-1006, Post-Trip Reviews, Rev. 00001

CNG-OP-1.01-2003, Alarm Response and Control, Rev. 0000

Condition Reports

2009-7405

2009-7506

2009-7520

2010-0002

2010-0680

Section 1R22: Surveillance Testing

Procedures

IP-IIT-3, Containment Leakage Rate Testing Program, Rev. 00701

IP-IIT-3.2, Containment Penetration Leak Rate Testing, Rev. 000001

STP-E-12.5, TSC Diesel Test, Rev. 0000

STP-I-32B, Reactor Trip Breaker Testing Train 'B', Rev. 0

STP-O-2.1S, SW Flow from SI Pump Oil Cooler Determination, Rev. 01000

STP-O-2.7.1B, Loop 'B' SW Pump Test, Rev. 00600

STP-O-12.6A, Diesel Generator Fuel Oil Transfer Pump 'A' Test, Rev. 00300

STP-O-16-COMP-T, AFW Turbine Pump – Comprehensive Test, Rev. 009000

STP-O-17.7BM, CREATS Filter Train 'B' Monthly Surveillance, Rev. 00102

STP-O-22.18, Local Leak Rate Test of Electrical Manifold Test Header 'C', Rev. 00200

STP-O-36Q-D, Standby AFW Pump 'D' – Quarterly, Rev. 00100

Drawings

33013-1231, Main Steam P&ID, Rev. 37

33013-1234, Condensate Storage P&ID, Rev. 38

33013-1237, AFW P&ID, Rev. 55

33013-1238, Standby AFW P&ID, Rev. 26

33013-1239, Diesel Generator 'A' P&ID Sheet 1 of 2, Rev. 25

33013-1250, Station Service Cooling Water Safety-Related P&ID, Sheet 1 of 3, Rev. 49

33013-1250, Station Service Cooling Water Safety-Related P&ID, Sheet 2 of 3, Rev. 36

33013-1250, Station Service Cooling Water Safety-Related P&ID, Sheet 3 of 3, Rev. 34

33013-2285, Motor-Driven and Turbine-Driven AFW Pumps Lube Oil Skid P&ID, Rev. 17

Condition Reports

2010-0175

2010-0975

2010-1077

2010-0976

2010-1585

2010-1247

2010-0762

Section 1EP2: Alert and Notification System Evaluation

Documents

ANS-Related CRs, January 2009 to January 2010

Constellation letter to Federal Emergency Management Agency (FEMA), regarding modifications to the ANS made since November 1984 design report submittal (July 24, 2006)

FEMA letter to Constellation responding to Constellation's July 24, 2006, letter (September 8, 2006)

Constellation letter to FEMA, regarding FEMA's September 8, 2006, letter (January 18, 2010)

Procedures

EPIP 4-8, Testing of the Ginna Sirens from the TSC, Rev. 01100

EPIP 4-9, Activation of Ginna Emergency Sirens from the TSC, Rev. 00700

EPIP 4-10, Silent Testing of the Ginna Sirens from the County Activation Points, Rev. 01200

EPIP 4-11, Activation of the Ginna Sirens from the County Activation Points, Rev. 00600

Work Order

C20807270

Audits and Assessments

ANS System Health Reports, 2nd Quarter 2009, 3rd Quarter 2009, 4th Quarter 2009

ECP-2009-0125, Report on the May 7, 2009, Activation of the ANS Siren System

R1110900, An Off-Site Emergency Plan Prompt ANS for Ginna, November 1984

SA-2010-000007, Snapshot Self-Assessment, Siren Failures

Section 1EP3: Emergency Response Organization Staffing and Augmentation System

Documents

2009 Call-Out Drill Records

ERO-Related CRs, January 2009 to January 2010

Ginna's Nuclear Emergency Response Plan, Rev. 02900

Procedures

EPIP 1-5, Notifications, Rev. 08200

EPIP 1-6, Site Evacuation, Rev. 02100

EPIP 1-9, TSC Activation, Rev. 03600

EPIP 3-1, Emergency Operations Facility Activation, Rev. 03500

EPIP 5-11, Nuclear Emergency Response Plan Training Program, Rev. 00500

Section 1EP4: Emergency Action Level and Emergency Plan Changes

Documents

IP-EP-10, Control of Emergency Response Facilities and Equipment, DRAFT

50.54(q) Screenings conducted between April 2009 and January 2010

50.54(q) Evaluations for procedure changes:

EPIP 1-5, Rev. 08000

EPIP 1-10, Rev. 01600

EPIP 1-12, Rev. 01200

EPIP 2-1, Rev. 02700

EPIP 2-18, Rev. 01600

EPIP 3-2, Rev. 03400
IP-EPP-5, Rev. 00500

Procedures

CNG-EP-1.01-1004, 50.54(q) Effectiveness Review, Rev. 00001
CNG-NL-1.01-1011, 10 CFR 50.59 / 10 CFR 72.48 Applicability Determinations, Screenings, and Evaluations, Rev. 00101
EPG-6, Equipment and Facilities Important to Emergency Preparedness, Rev. 00100

Section 1EP5: Correction of Emergency Preparedness Weaknesses

Documents

EP-DR-009-01, EP Drill Report
EP-DR-009-02, EP Drill Report
EP-DR-009-05, EP Drill Report
EP-DR-009-07, EP Drill Report
EP-Related CRs, January 2009 to January 2010

Procedure

CNG-CA-2.01-1000, Self Assessment and Benchmarking Process, Rev. 00200

Condition Reports

2008-7557
2009-0896

Audits and Assessments

Audit EPP-08-01-G, EP Program
Audit, EPP-09-01-G, EP Program
QPR-2008-04-G, Quality and Performance Assessment Quarterly Report
QPR-09-1P-G, Quality and Performance Assessment Report
QPR-2009-02-G, Quality and Performance Assessment Report
QPR-09-3P-G, Quality and Performance Assessment Report
SA-2008-000154, Evaluation of EP-Required Equipment/Systems Availability
SA-2008-000156, Assessment of Shift Communicator/Phone Talker Effectiveness
SA-2010-000004, Corrective Actions of CR-2009-2636, On-Shift Crew Members Relieved Due to Not Having Appropriate Self-Contained Breathing Apparatus Prescription Lenses
SA-2010-000007, Siren Failures

Section 2RS1: Radiological Hazard Assessment and Exposure Controls

Procedures

A-1.1, Access Control to Locked High Radiation and Very High Radiation Areas, Rev. 04601
CH-PRI-VOL-REL, Unconditional Release of Samples & Material Using Gamma Spectroscopy, Rev. 004
RP-JC-AIRSAMPLE, Operation of Portable Air Sampling Equipment, Rev. 01700
RP-JC-JOBCOVERAGE, Job Coverage, Rev. 01400
RP-RW-REP-SMPLG, Representative Sampling of Radioactive Material, Rev. 002
RP-SUR-CONTAM, Performance of Contamination Surveys, Rev. 00500
RP-SUR-LABEL, Labeling and Control of Radioactive Material, Rev. 00902
RP-SUR-POST, Radiological Postings and Boundary Control, Rev. 01002

Attachment

RP-SUR-RADIATION, Performance of Radiation Surveys, Rev. 00702
 RP-SUR-REL, Unconditional Release of Material from Restricted Areas, Rev. 01400

Condition Reports

Radiological Hazard

2009-6078	2009-6780	2009-7059	2009-8439
2009-6376	2009-6820	2009-7238	2009-8584
2009-6602	2009-6905	2009-7567	2009-8585
2009-6671	2009-6979	2009-8050	2009-8739

Radiation Worker

2009-6417	2009-6961	2009-7297
2009-6468	2009-7016	2009-9119
2009-6771	2009-7089	2009-9141

Radiation Technician

2009-6861
 2009-8586

Audits and Assessments

SA-2009-000171, CR-2008-4620, 2008 Outage Dose Exceeded Original Estimate
 SA-2009-000185, Fundamentals of Radiological Protection, Radioactive Materials Controls
 SA-2009-000235, RP SWF Records for the 2009 RFO
 SA-2009-000252, Ginna RFO 2009, TEEW (Air Sample Data) Requirements
 SA-2010-000001, Ginna G1R035 Personnel Contamination Event Assessment
 Report Number 2009-0046, Quality and Performance Assessment Report, RP Outage ALARA
 Planning
 Report of Audit RPP-09-01-G, Radiation Protection

Section 2RS2: Occupational ALARA Planning and Controls

Procedures

RP-ALA-PLAN/RWP-PREP, ALARA Planning and RWP Preparation, Rev. 00200
 RP-ALA-REVIEW, ALARA Job Review, Rev. 00901

Section 2RS08: Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation

Procedures

RP-4303, Sampling Spent Primary Resin During Spent Resin Transfer to HIC, Rev. 00000
 RP-RW-DEWATER, Dewatering Wet Solid Wastes, Rev. 2
 RP-RW-SHIP-TYPEA, Shipment of Radioactive Material, Type 'A' Package, Rev. 00301
 RPA-RW-SHIP-MTL, Shipment of Radioactive Material – General Guidance, Rev. 00901
 RPA-RW-SHIP-WSTE, Preparation and Shipment of Radioactive (Waste) Material, Rev. 2

Condition Reports

2008-5464	2009-7962	2009-8649
2009-4313	2009-8578	2010-0411
2009-5677	2009-8583	2010-1445
2009-7875	2009-8584	

Attachment

Audits and Assessments

SA-2008-000100, Ginna RP Program and Organization

SA-2009-000003, Review of Documentation Associated with the Shipment of Radioactive Material

Audit, RPP-09-01, Radiation Protection

Shipping Packages

2008-18	Type 'A'	.009 mCi
2008-55	Type 'A'	44.2 Ci
2009-6	Type 'A'	136 mCi
2009-93	Type 'A'	8 mCi
2009-109	LSA	65 Ci

10 CFR 61 Analyses

Liquid Waste Processing Bead Resin

Primary Bead Resin (spent resin tank)

Primary Cartridge Filters (reactor coolant system)

Secondary Filters (high conductivity waste tank)

Section 40A1: Performance Indicator VerificationDocuments

ANS Reliability PI Data, April to December 2009

Drill and Exercise Performance PI Data, April to December 2009

ERO Drill Participation PI Data, April to December 2009

NEI 99-02, NEI Regulatory Assessment PI Guideline, Rev. 6, July 2007

Procedure

IP-EPP-9, Emergency Preparedness PIs, Rev. 00000

40A3: Followup of Events and Notices of Enforcement DiscretionDocuments

ER-ELEC.9, Loss of Sodium Line CKT 5241, Rev. 00701

ER-FIRE.0, Control Room Response to Fire Alarms and Reports, Rev. 00903

Drawings

33013-2722, Site Plan Residential Air Conditioning (AC) Power Distribution Circuit Site Layout, Sheet 1, Rev. 027

33013-2722, West Side Feed Residential AC Power Distribution Circuit One-Line Diagram, Sheet 2, Rev. 025

33013-2722, Residential AC Power Distribution Circuit One-Line Diagram, Sheet 4, Rev. 012

Condition Reports

2010-0194

2010-0084

40A5: Other Activities

Documents

Benchmark Calibration Laboratory, Certificate of Calibration, Leak Testing Specialists, 51 K/J
Thermometer, Identification Number TH-05, December 10, 2009
Constellation Energy, Welding Procedure Specification, ASME, WPS No. 100-116, Rev. 1
Constellation Nuclear, Visual Acuity Examination Records and Certificates of Qualification for
Ginna Nondestructive Examination (NDE) Personnel
Helium Mass Spectrometer Leak Test Procedure Dry Fuel Storage Container, MSLT-DSC-CE,
Rev. Ginna-0, Leak Testing Specialists, January 22, 2010
Purchase Order Number 6609428, Rev. 0, dated January 5, 2010, for Lease of Trans-Nuclear Tri
Tool Cutting Machine
Welder Performance Qualification for Ginna Welders

Procedures

CNG-AM-1.01-1006, Qualification and Certification of NDE Personnel, Procedures, and
Equipment, Rev. 00200
EP-PT-101, Liquid Penetrant Examinations Acceptance Criteria, Rev. 00100
EP-PT-106, Liquid Penetrant Examinations, Rev. 00300
EP-VT-101, Visual Examinations Acceptance Criteria, Rev. 00100
EP-VT-103, Visual Examination of Welds, Rev. 00100
M-ISFSI-01(0U), DSC Closure Operations, Rev. 000-00
M-ISFSI-02(0N), DSC Unloading Operations, Rev. 00000
NDE-QUAL-LTS, Written Practice for the Qualification and Certification of NDT Personnel, Leak
Testing Specialists, Rev. 4

Work Order

C20803106

LIST OF ACRONYMS

AC	air conditioning
ADAMS	Agencywide Documents Access and Management System
AFW	auxiliary feedwater
ALARA	as low as reasonably achievable
ANS	alert and notification system
ASME	American Society of Mechanical Engineers
CAP	corrective action program
CCW	component cooling water
CFR	Code of Federal Regulations
COC	certificate of compliance
CR	condition report
CREATS	control room emergency air treatment system
CS	containment spray
CV	check valve
CVCS	chemical and volume control system
DSC	dry shielded canister
EDG	emergency diesel generator
EH	electrohydraulic
EP	emergency preparedness
EPIP	emergency plan implementing procedure
ERO	emergency response organization
FEMA	Federal Emergency Management Agency
HVAC	heating, ventilation, and air conditioning
HX	heat exchanger
IMC	Inspection Manual Chapter
IP	inspection procedure
ISFSI	independent spent fuel storage installation
IST	inservice test
LER	licensee event report
NDE	nondestructive examination
NDT	nondestructive testing
NEI	Nuclear Energy Institute
NRC	U.S. Nuclear Regulatory Commission
OOS	out of service
PARS	Publicly Available Records
P&ID	pipng and instrument drawing
PI	performance indicator
PM	preventive maintenance
PMT	post-maintenance testing
RFO	refueling outage
RP	radiation protection
RPM	radiation protection manager
RPT	radiation protection technician
RV	relief valve
RWP	radiation work permit
RWST	refueling water storage tank
SFP	spent fuel pool

SI	safety injection
SSC	system, structure, and component
SW	service water
TS	technical specification
TSC	technical support center
UFSAR	updated final safety analysis report
WO	work order