



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

November 8, 2011

Mr. Joseph E. Pacher, 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 05000244/2011004

Dear Mr. Pacher:

On September 30, 2011, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your R.E. Ginna Nuclear Power Plant. The enclosed inspection report documents the inspection results, which were discussed on October 7, 2011, with you and other members of your staff.

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

This report documents one NRC-identified finding of very low safety significance (Green). This finding was determined to be a violation of NRC requirements. However, because of its very low safety significance, and because it was entered into your corrective action program, the NRC is treating this finding as a non-cited violation (NCV) consistent with Section 2.3.2 of the NRC Enforcement Policy. If you contest this NCV in this report, you should provide a written response within 30 days of the date of this inspection report, with the basis of your denial, to the Nuclear Regulatory Commission, ATTN.: Document Control Desk, Washington D.C. 20555-0001; with copies to the Regional Administrator, Region I; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, D.C. 20555-0001; and the NRC Resident Inspector at R.E. Ginna Nuclear Power Plant. In addition, if you disagree with the cross-cutting aspect assigned to the finding in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region I, and the NRC Resident Inspector at R.E. Ginna Nuclear Power Plant.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter 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,

A handwritten signature in cursive script that reads "Glenn T. Dentel".

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

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

Enclosure: Inspection Report No. 05000244/2011004  
w/ Attachment: Supplementary Information

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Glenn T. Dentel, Chief  
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## U.S. NUCLEAR REGULATORY COMMISSION

## REGION I

Docket No.: 50-244

License No.: DPR-18

Report No.: 05000244/2011004

Licensee: Constellation Energy Nuclear Group, LLC

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

Location: Ontario, New York

Dates: July 1 through September 30, 2011

Inspectors: G. Hunegs, Senior Resident Inspector  
K. Kolaczyk, Senior Resident Inspector  
D. Dodson, Resident Inspector  
A. Dugandzic, Acting Resident Inspector  
G. Meyer, Senior Reactor Inspector  
M. Modes, Senior Reactor Inspector  
N. Perry, Senior Project Engineer  
R. Rolph, Health Physicist

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

Enclosure

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## SUMMARY OF FINDINGS

IR 05000244/2011004; 07/01/2011 - 09/30/2011; R.E. Ginna Nuclear Power Plant (Ginna); Operability Determinations and Functionality Assessments.

The report covered a three-month period of inspection by resident inspectors and announced inspections performed by regional inspectors. Inspectors identified one finding of very low safety significance (Green), which was a non-cited violation (NCV). The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). The cross-cutting aspect for each finding was determined using IMC 0310, "Components Within the Cross-Cutting Areas." Findings for which the SDP does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

### Cornerstone: Mitigating Systems

- Green. The inspectors identified a Green NCV of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for Ginna's failure to promptly identify and correct a condition adverse to quality. Specifically, Ginna did not promptly identify and correct a deenergized control power channel for the 'B' main steam isolation valve (MSIV) caused by a loose fuse clip. Corrective actions included forming an incident response team (IRT), visually inspecting all fuse clips where the plastic fuse blanks were used since April 2011, identifying potentially loose fuse clips, repairing any loose clips identified, ensuring operators know how to properly use the plastic fuse blanks to prevent fuse clip damage, and requiring electrical maintenance support to verify the integrity of the fuse clip/fuse connection after removal of the plastic fuse blank and reinsertion of the fuse.

This finding is more than minor because the performance deficiency is associated with the Mitigating Systems cornerstone attribute of equipment performance (reliability, availability) and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The inspectors determined this finding was not a design or qualification deficiency, did not involve an actual loss of safety function for greater than its technical specification (TS) allowed outage time, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. Therefore, the inspectors determined the finding to be of very low safety significance. The finding has a cross-cutting aspect in the area of Problem Identification and Resolution (PI&R), Corrective Action Program (CAP), because Ginna did not thoroughly evaluate the problem such that the resolution addressed the cause and extent of condition. Specifically, Ginna did not adequately evaluate the loss of position indicating lights on the 'B' MSIV to ensure that the correct cause was identified. [P.1(c)] (Section 1R15)

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## REPORTS 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)

.1 Summer Readiness of Offsite and Alternate Alternating Current (AC) Power Systems

a. Inspection Scope

The inspectors performed a review of plant features and procedures for the operation and continued availability of the offsite and alternate AC power systems to evaluate readiness of the systems prior to seasonal high grid loading. The inspectors reviewed Ginna's procedures affecting these areas and the communication protocol between the transmission system operator and Ginna. This review focused on changes to the established program and material condition of the offsite and alternate AC power equipment. The inspectors assessed whether Ginna established and implemented appropriate procedures and protocols to monitor and maintain availability and reliability of both the offsite AC power system and the onsite alternate AC power system. The inspectors evaluated the material condition of the associated equipment by interviewing the responsible system manager, reviewing condition reports (CRs), and open work orders (WOs) of the offsite and AC power systems including the 115 kilovolt (kV) and 34.5 kV switchyards. Documents reviewed for each section of this inspection report are listed in the enclosure.

b. Findings

No findings were identified.

1R04 Equipment Alignment

.1 Partial Walkdowns (71111.04Q – Four samples)

a. Inspection Scope

The inspectors performed partial walkdowns of the following systems:

- The 'A' and 'B' station batteries when the technical support center (TSC) battery was out of service (OOS) for planned maintenance on August 9, 2011

- The 'A' emergency diesel generator (EDG) when operations was performing pre-startup alignment per STP-O-30.10 on September 14, 2011
- The service water (SW) system when operations was performing valve position verification per STP-O-30.8 on September 15, 2011
- The component cooling water (CCW) system following train 'A' quarterly testing per STP-O-2.8Q on September 20, 2011

The inspectors selected these systems based on their risk-significance relative to the Reactor Safety cornerstones at the time they were inspected. The inspectors reviewed applicable operating procedures, system diagrams, the updated final safety analysis report (UFSAR), TSs, WOs, CRs, and the impact of ongoing work activities on redundant trains of equipment in order to identify conditions that could have impacted system performance of their intended safety functions. The inspectors also performed field walkdowns of accessible portions of the systems to verify system components and support equipment were aligned correctly and were operable. The inspectors examined the material condition of the components and observed operating parameters of equipment to verify that there were no deficiencies. The inspectors also reviewed whether Ginna had properly identified equipment issues and entered them into the CAP for resolution with the appropriate significance characterization.

b. Findings

No findings were identified.

.2 Full Walkdown (71111.04S – One sample)

a. Inspection Scope

On August 4, 2011, the inspectors performed a complete system walkdown of the 'A', 'B', and 'C' trains of the safety injection (SI) system to verify that the existing equipment lineup was correct. The SI system was chosen because of its risk-significant function to provide emergency core cooling during a loss-of-coolant accident. The inspectors reviewed operating procedures, surveillance tests, drawings, equipment line-up check-off lists, and the UFSAR to verify the system was aligned to perform its required safety functions. The inspectors also reviewed electrical power availability, component lubrication and equipment cooling, hangar and support functionality, and operability of support systems. The inspectors performed field walkdowns of accessible portions of the system to verify system components and support equipment were aligned correctly and operable. The inspectors examined the material condition of the components and observed operating parameters of equipment to verify that there were no deficiencies. Additionally, the inspectors reviewed a sample of related CRs and WOs to ensure Ginna appropriately evaluated and resolved any deficiencies.

b. Findings

No findings were identified.



1R05 Fire Protection.1 Resident Inspector Quarterly Walkdowns (71111.05Q – Seven samples)a. Inspection Scope

The inspectors conducted tours of the areas listed below to assess the material condition and operational status of fire protection features. The inspectors verified that Ginna controlled combustible materials and ignition sources in accordance with administrative procedures. The inspectors verified that fire protection and suppression equipment was available for use as specified in the area pre-fire plan and passive fire barriers were maintained in good material condition. The inspectors also verified that Ginna personnel implemented compensatory measures for OOS, degraded or inoperable fire protection equipment, as applicable, in accordance with procedures.

- 'A' EDG on July 19, 2011
- 'B' EDG on July 19, 2011
- Screen house building basement, elevations 239 feet 6 inches and 243 feet 6 inches on July 20, 2011
- Screen house building operating floor, elevation 253 feet 6 inches on July 20, 2011
- Screen house building circulating water pump area, elevation 237 feet on July 20, 2011
- 'A' battery room on July 21, 2011
- 'B' battery room on July 21, 2011

b. Findings

No findings were identified.

1R06 Flood Protection Measures (71111.06 – Two samples).1 Internal Flooding Reviewa. Inspection Scope

The inspectors reviewed the UFSAR, the site flooding analysis, and plant procedures to assess susceptibilities involving internal flooding. The inspectors also reviewed the CAP to determine if Ginna identified and corrected flooding problems and whether operator actions for coping with flooding were adequate. The inspectors also focused on the auxiliary building to verify the adequacy of equipment seals located below the flood line, floor and water penetration seals, watertight door seals, common drain lines and sumps, sump pumps, level alarms, control circuits, and temporary or removable flood barriers.

b. Findings

No findings were identified.

.2 Annual Review of Cables Located in Underground Bunkers/Manholes

a. Inspection Scope

On September 9, 2011, the inspectors conducted an inspection of underground bunkers/manholes subject to flooding that contain cables whose failure could disable risk-significant equipment. The inspectors performed walkdowns of risk-significant areas, including manholes MH 1B and MH 2 containing offsite power cables from the start-up transformer, to verify that the cables and splices appeared intact, and to observe the condition of cable support structures. The inspectors noted that cables were submerged and verified that the cables remained functional. The inspectors verified that these conditions were in accordance with station procedures.

b. Findings

No findings were identified.

1R07 Heat Sink Performance (71111.07T – Three samples)

a. Inspection Scope

Based on the plant-specific risk assessment and previous inspections, the inspectors selected the 'B' CCW heat exchanger (HX), the 'C' instrument air compressor HXs, and the ultimate heat sink ('B' loop of SW system to Lake Ontario) to review heat sink performance. The inspectors reviewed Ginna's probabilistic risk assessment which showed the risk importance of SW (ultimate heat sink), CCW (cooling of safety-related components), and the 'C' instrument air compressor (motive force for valve operations). The inspectors reviewed the CCW system which is a closed loop cooling system with HXs cooled by SW. The inspectors reviewed the risk assessment which also showed the risk importance of associated operator actions for manually starting the standby CCW pump if an automatic start fails.

The inspectors reviewed the selected SW, CCW, and instrument air compressor material condition, maintenance, and testing to ensure that Ginna maintained the risk-significant components consistent with licensing requirements and design assumptions. In addition, the inspectors reviewed the associated operational and abnormal procedures to verify an accurate approach to achieving system cooling objectives.

The inspectors walked down the applicable SW components in the screen house, CCW components in the auxiliary building, and instrument air compressor in the turbine building. The inspectors reviewed records of completed HX and buried piping inspections, preventive maintenance activities, and testing to confirm that ongoing activities maintained cooling functional capabilities.

b. Findings

No findings were identified.

1R11 Licensed Operator Regualification Program (71111.11 – One sample)

a. Inspection Scope

The inspectors observed licensed operator simulator training on August 4, 2011, which included a loss of emergency buses, a reactor coolant pump seal failure, an anticipated transient without scram, a loss of heat sink, and the failure of select components to automatically start as required. The inspectors evaluated operator performance during the simulated event and verified completion of risk-significant operator actions, including the use of abnormal and emergency operating procedures. The inspectors assessed the clarity and effectiveness of communications, implementation of actions in response to alarms and degrading plant conditions, and the oversight and direction provided by the control room supervisor. The inspectors verified the accuracy and timeliness of the emergency classification made by the shift manager and the TS action statements entered by the shift technical advisor. Additionally, the inspectors assessed the ability of the crew and training staff to identify and document crew performance problems. The inspectors also reviewed and verified compliance with Ginna procedure OTG-2.2, "Simulator Examination Instructions," Revision 43.

b. Findings

No findings were identified.

1R12 Maintenance Effectiveness (71111.12 – Three samples)

a. Inspection Scope

The inspectors reviewed the samples listed below to assess the effectiveness of maintenance activities on structure, system, and component (SSC) performance and reliability. The inspectors reviewed system health reports, CAP program documents, maintenance WOs, and maintenance rule basis documents to ensure that Ginna was identifying and properly evaluating performance problems within the scope of the Maintenance Rule (MR). For each sample selected, the inspectors verified that the SSC was properly scoped into the maintenance rule in accordance with 10 CFR 50.65 and verified that the (a)(2) performance criteria established by Ginna was reasonable. As applicable, for SSCs classified as (a)(1), the inspectors assessed the adequacy of goals and corrective actions to return these SSCs to (a)(2). Additionally, the inspectors ensured that Ginna was identifying and addressing common cause failures that occurred within and across MR system boundaries.

- 'A', 'B', and 'C' trains of the SI system on August 4, 2011
- 'B' CCW pump failure which occurred on June 4, 2011, on August 24, 2011
- Ginna's 10 CFR 50.65(a)(3), Periodic Maintenance Effectiveness Assessment, dated August 23, 2011, on August 31, 2011

b. Findings

No findings were identified.

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

a. Inspection Scope

The inspectors reviewed station evaluation and management of plant risk for the maintenance and emergent work activities listed below to verify that Ginna performed the appropriate risk assessments prior to removing equipment for work. The inspectors selected these activities based on potential risk significance relative to the Reactor Safety cornerstones. As applicable for each activity, the inspectors verified that Ginna personnel performed risk assessments as required by 10 CFR 50.65(a)(4) and that the assessments were accurate and complete. When Ginna performed emergent work, the inspectors verified that operations personnel promptly assessed and managed plant risk. The inspectors reviewed the scope of maintenance work and discussed the results of the assessment with the station's probabilistic risk analyst to verify plant conditions were consistent with the risk assessment. The inspectors also reviewed the TS requirements and inspected portions of redundant safety systems, when applicable, to verify risk analysis assumptions were valid and applicable requirements were met.

- Planned maintenance on the TSC diesel generator on July 26, 2011
- Planned maintenance on the 'B' EDG and the 'B' standby auxiliary feedwater (AFW) pump, and emergent work on the 'A' and 'B' CCW HXs on July 28, 2011
- Planned maintenance on the TSC battery and auxiliary building fire suppression system on August 9, 2011
- Planned maintenance on both reactor makeup water pumps on September 14, 2011
- Unplanned maintenance on the 'B' feed regulation valve on September 29, 2011

b. Findings

No findings were identified.

1R15 Operability Determinations and Functionality Assessments (71111.15 – Six samples)

a. Inspection Scope

The inspectors reviewed operability determinations for the following degraded or non-conforming conditions:

- 'A' motor-driven auxiliary feedwater (MDAFW) system check valve (CV) 4000C leakage on July 22, 2011
- SW leak at inlet to V-4560, isolation valve to the 'B' CCW HX differential pressure gauge on July 27, 2011
- 'A' CCW HX SW discharge vent pipe broke off and caused the 'B' CCW HX SW discharge vent pipe to leak July 28, 2011
- Potential low charging pump net positive suction head on July 29, 2011
- Potential loss of safeguards buses 14 and 16 during a potential turbine building fire on August 11, 2011
- Loose MSIV fuse clips on August 23, 2011

The inspectors selected these issues based on the risk significance of the associated components and systems. The inspectors evaluated the technical adequacy of the operability determinations to assess whether TS operability was properly justified and the subject component or system remained available such that no unrecognized increase in risk occurred. The inspectors compared the operability and design criteria in the appropriate sections of the TSs and UFSAR to Ginna's evaluations to determine whether the components or systems were operable. Where compensatory measures were required to maintain operability, the inspectors determined whether the measures in place would function as intended and were properly controlled by Ginna. The inspectors determined, where appropriate, compliance with bounding limitations associated with the evaluations.

b. Findings

Introduction. The inspectors identified a Green NCV of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for Ginna's failure to promptly identify and correct a condition adverse to quality. Specifically, Ginna did not promptly identify and correct a deenergized control power channel for the 'B' MSIV.

Description. On August 23, 2011, one channel of the 'B' MSIV logic circuitry was declared inoperable when the channel was found deenergized due to a loose fuse clip connection. Operators entered a TS action statement requiring that the channel be restored within six hours; the channel was restored within two hours. Each MSIV has two channels in the logic circuitry, either of which will close the MSIV when an isolation signal is generated. With the one channel deenergized, the other channel was still available to close the MSIV. Ginna management formed an incident response team (IRT) to investigate and resolve the issue. The investigation concluded that the loose fuse clip caused the loss of direct current control power to the channel, and that the fuse clip was loose due to the insertion of a plastic fuse blank when safety tagging the fuse and clip. This tagging device has been in use at Ginna since April 2011.

Earlier, on August 16, a similar loose fuse was identified after a condensate bypass valve opened. At that time, Ginna personnel did not identify a cause for the loose fuse. However, after the August 23 event, Ginna personnel concluded that the cause for the August 16 loose fuse clips was the use of the plastic fuse blank on the fuse clips during tagging. During tagging operations, the plastic fuse blank was inserted into the fuse clip, and in some instances, resulted in expansion of the clips causing the fuse to be loose in the clip. Corrective actions after the August 23 event included forming an IRT, visually inspecting all fuse clips where the plastic fuse blanks were used since April 2011, identifying potentially loose fuse clips, repairing any loose clips identified, ensuring operators know how to properly use the plastic fuse blanks to prevent fuse clip damage, and requiring electrical maintenance support to verify the integrity of the fuse clip/fuse connection after removal of the plastic fuse blank and reinsertion of the fuse.

On June 11, 2011, Ginna identified that the 'B' MSIV open indicating lights were not lit. At that time, Ginna personnel concluded that the open limit switch needed to be adjusted and initiated a WO to make the proper adjustment. The open indicating lights remained

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unlit until late on August 22 when the lights relit after a fire water booster pump started. Troubleshooting revealed that loose fuse clips were the cause for the unlit open lights, not a limit switch out of adjustment.

The inspectors concluded that a performance deficiency existed in that Ginna did not promptly identify and correct a condition adverse to quality, as required by 10 CFR 50 Appendix B Criterion XVI, "Corrective Action," for over 10 weeks. The violation is an NCV because it was of very low safety significance and Constellation entered the issue into their CAP. The finding has a cross-cutting aspect in the area of PI&R, CAP, because Ginna did not thoroughly evaluate the problem such that the resolution addressed the cause and extent of condition.

Analysis. The inspectors determined that failing to promptly identify and correct the cause of the 'B' MSIV indication problem was a performance deficiency that was within Ginna's ability to foresee and correct. This finding is more than minor because the performance deficiency is associated with the Mitigating Systems cornerstone attribute of equipment performance (reliability, availability) and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The inspectors evaluated the finding using Phase 1, "Initial Screening and Characterization" worksheet of Attachment 4 to IMC 0609, "Significance Determination Process." The inspectors determined this finding was not a design or qualification deficiency, did not involve an actual loss of safety function for greater than its TS allowed outage time, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. Therefore, the inspectors determined the finding to be of very low safety significance (Green).

The finding has a cross-cutting aspect in the area of PI&R, CAP, because Ginna did not thoroughly evaluate the problem such that the resolution addressed the cause and extent of condition [P.1(c)]. Specifically, Ginna did not adequately evaluate the loss of position indicating lights on the 'B' MSIV to ensure that the correct cause was identified.

Enforcement. 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," requires, in part, that measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected.

Contrary to the above, from June 11, 2011, until August 23, 2011, Ginna did not promptly identify and correct a condition adverse to quality in that one channel of the 'B' MSIV control power was de-energized. Because this violation was of very low safety significance, and Ginna entered this finding into their CAP as CR-2011-006025 and corrected the loose fuse clips, this violation is being treated as an NCV consistent with the NRC Enforcement Policy. **(NCV 05000244/2011004-01, Failure to Promptly Identify and Correct a Condition Adverse to Quality with the 'B' MSIV)**

1R18 Plant Modifications (71111.18 – One sample)Permanent Modificationsa. Inspection Scope

The inspectors evaluated a modification to the spent fuel pool (SFP) implemented by engineering change package (ECP) 2010-053, "SFP Liner Repair." The inspectors verified that the design bases, licensing bases, and performance capability of the affected systems were not degraded by the modification. In addition, the inspectors reviewed modification documents associated with the design change, including removal of a pipe stub, bracket remnant removal, and bending spent fuel rack tabs. The inspectors also observed the installation process and interviewed engineering personnel to ensure the modification was installed in accordance with the design.

b. Findings

No findings were identified.

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

The inspectors reviewed the post-maintenance tests for the maintenance activities listed below to verify that procedures and test activities ensured system operability and functional capability. The inspectors reviewed the test procedure to verify that the procedure adequately tested the safety functions that may have been affected by the maintenance activity, that the acceptance criteria in the procedure was consistent with the information in the applicable licensing basis and/or design basis documents, and that the procedure had been properly reviewed and approved. The inspectors also witnessed the test or reviewed test data to verify that the test results adequately demonstrated restoration of the affected safety functions.

- 'A' MDAFW isolation valve replacement, CV 4000C, due to leakage on August 4, 2011
- Performance of 'B' MDAFW pump functional equipment group maintenance on September 1, 2011
- Turbine building SW isolation motor operated valve repair on September 12, 2011
- 81-1/11B, Bus 11B underfrequency relay replacement on September 18, 2011

b. Findings

No findings were identified.

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

The inspectors observed performance of surveillance tests and/or reviewed test data of selected risk-significant SSCs to assess whether test results satisfied TSs, the UFSAR, and Ginna's procedure requirements. The inspectors verified that test acceptance criteria were clear, tests demonstrated operational readiness and were consistent with design documentation, test instrumentation had current calibrations and the range and accuracy for the application, tests were performed as written, and applicable test prerequisites were satisfied. Upon test completion, the inspectors considered whether the test results supported that equipment was capable of performing the required safety functions. The inspectors reviewed the following surveillance tests:

- STP-O-36-D, Standby AFW Pump 'D' – Quarterly on July 26, 2011 (in-service test)
- STP-O-12.2, EDG 'B' on July 28, 2011 (in-service test)
- PT-13.4.29, Halon System Testing Relay Room/Computer Room (S08) on August 16, 2011
- S-12.4, Reactor Coolant System (RSC) Leakage Surveillance Record Instructions on August 24, 2011 (RCS leakage detection)
- CH-PRI-SAMP-ROOM, Sampling in the Nuclear Sample Room on August 25, 2011 (RCS leakage detection)

b. Findings

No findings were identified.

1EP6 Drill Evaluation (71114.06 – Two samples)Emergency Preparedness Drill Observationa. Inspection Scope

The inspectors evaluated the conduct of routine Ginna emergency drills on September 6 and 27, 2011, to identify any weaknesses and deficiencies in the classification, notification, and protective action recommendation development activities. The inspectors observed emergency response operations in the TSC, operations support center, and emergency operations facility to determine whether the event classification, notifications, and protective action recommendations were performed in accordance with procedures. The inspectors also attended the station drill critiques to compare inspector observations with those identified by Ginna in order to evaluate Ginna's critiques and to verify whether Ginna was properly identifying weaknesses and entering them into the CAP.

b. Findings

No findings were identified.



## 2. RADIATION SAFETY

### Cornerstone: Public and Occupational

#### 2RS01 Radiological Hazard Assessment and Exposure Controls (71124.01)

##### a. Inspection Scope

From September 12 to 16, 2011, the inspectors conducted the following activities to verify that Ginna properly addressed the radiological hazards in the workplace and implemented appropriate radiation monitoring and exposure controls. Implementation of these controls was reviewed against the criteria contained in 10 CFR Part 20, relevant TSs, and station procedures.

##### Contamination and Radioactive Material Control

The inspectors verified the dosimeter calibration source and the instrument calibrator were accounted for and intact.

The inspectors verified that any transactions involving nationally tracked sources were reported in accordance with 10 CFR 20.2207.

##### 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).

The inspectors discussed the controls in place for special areas that have the potential to become very high radiation areas during certain plant operations with a radiation protection supervisor. The inspectors verified that Ginna's controls for very high radiation areas would not allow an individual unauthorized access to these areas.

##### b. Findings

No findings were identified.

#### 2RS06 Radioactive Gaseous and Liquid Effluent Treatment (71124.06)

##### a. Inspection Scope

From September 12 to 16, 2011, the inspectors conducted the following activities to verify the gaseous and liquid effluent systems were maintained and discharges and conditions were controlled in accordance with applicable regulatory requirements and station procedures.

### Inspection Planning

The inspectors reviewed the 2010 annual radiological effluent release report. The inspectors noted no anomalous results and reviewed the effluent monitor operability issues reported.

The inspectors reviewed the UFSAR and descriptions of the radioactive effluent monitoring systems, treatment systems, and effluent flow paths. The inspectors reviewed the changes made to the offsite dose calculation manual (ODCM) since the last inspection. The inspectors verified there were no systems contaminated with licensed material that were previously uncontaminated.

The inspectors reviewed reported ground water monitoring results and changes to the Ginna written program for identifying and controlling contaminated spills/leaks to ground water.

The inspectors reviewed reports and procedures for the effluent program.

### Walkdowns and Observations

The inspectors walked down accessible components of the gaseous and liquid discharge systems. The inspectors verified the equipment configuration, equipment physical condition, and flow paths aligned with the UFSAR.

For areas that were not readily accessible due to radiological conditions, the inspectors reviewed material condition surveillance records.

The inspectors walked down the filtered ventilation systems and verified there were no degraded high efficiency particulate assemblies or charcoal banks, improper alignment or system installation issues that would impact performance or the effluent monitoring capability of the effluent system.

The inspectors observed simulated sampling of a waste gas tank for release.

The inspectors verified that no changes were made to effluent release points.

The inspectors observed simulated sampling of the 'A' monitor tank for release.

### Sampling and Analysis

The inspectors verified liquid effluent sampling included provisions for sample line flushing, vessel recirculation, and composite sampling during a release.

The inspectors verified that no releases occurred with monitoring equipment OOS.

The inspectors verified Ginna does not routinely rely on the use of compensatory sampling in lieu of adequate system maintenance.

The inspectors reviewed the inter-laboratory comparison program to verify the quality of the radioactive effluent sample analyses and that the program included hard-to-detect isotopes.

#### Instrumentation and Equipment

The inspectors reviewed the methodology Ginna used to determine the effluent stack and vent flow rates. The inspectors verified the flow rates used were consistent with the ODCM values.

The inspectors reviewed surveillance test results for the containment and auxiliary building exhausts to verify they meet TS acceptance criteria.

#### Dose Calculations

The inspectors verified there were no significant changes in the reported dose values compared to the previous radiological effluent release report.

The inspectors reviewed one liquid and four gaseous release permits to verify that projected doses to members of the public were accurate and based on representative samples.

The inspectors reviewed the analysis used to determine hard-to-detect radionuclides. The inspectors verified these radioisotopes were included in the source term as applicable.

The inspectors reviewed the changes to the ODCM since the last inspection.

The inspectors reviewed the latest land use census and verified that no changes were needed to the dose calculations.

The inspectors verified for the release packages reviewed, the calculated doses were within the 10 CFR Part 50, Appendix I, and TS dose criteria.

The inspectors verified there were no abnormal releases during this inspection period.

#### Ground Water Protection Initiative Implementation

The inspectors reviewed the monitoring results of the ground water protection initiative to verify Ginna had implemented their program as intended and to identify any anomalous results.

The inspectors verified that no entries were made into the 10 CFR Part 50.75(g) file during this inspection period.

The inspectors verified there were no leaks or spills during this inspection period.

The inspectors evaluated discharges from the retention pond, the only onsite surface water body, and verified it had no inputs from radioactive sources.

The inspectors verified the results of ground water monitoring were included in the annual radiological environmental operating report and the annual radiological effluent release report.

The inspectors noted that Ginna had no new discharge points.

b. Findings

No findings were identified.

2RS08 Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation (71124.08)

a. Inspection Scope

From September 12 to 16, 2011, the inspectors conducted the following activities to verify 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 Part 20, relevant TSs, and station procedures.

Radioactive Waste System Walkdown

The inspectors verified that the liquid waste tanks for discharge were recirculated to provide sufficient mixing.

The inspectors verified the process control program contains references to procedures that correctly describe the current methods for dewatering and waste stabilization.

Shipment Preparation and Records

The inspectors did not have the opportunity to observed shipment preparation during this inspection period.

The inspectors had no opportunity to observe radiation protection technicians during the conduct of radioactive waste processing and radioactive material shipment preparation. The inspectors verified that the personnel were knowledgeable of the shipping regulations and had adequate skills to accomplish the package preparation requirements for public transport.

The inspectors reviewed three type 'A' shipping packages and verified the documents indicated the proper shipper name, emergency response information including a 24-hour contact telephone number, accurate curie content and volume of material, appropriate waste classification, and classification number.

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b. Findings

No findings were identified.

**4. OTHER ACTIVITIES**

4OA1 Performance Indicator Verification (71151)

.1 Safety System Functional Failures (One sample)

a. Inspection Scope

The inspectors sampled Ginna's submittals for the safety system functional failures performance indicator (PI) for the period of April 1, 2010, through June 30, 2011. To determine the accuracy of the PI data reported during those periods, inspectors used definitions and guidance contained in the Nuclear Energy Institute (NEI) Document 99-02, "Regulatory Assessment PI Guideline," Revision 6, and NUREG-1022, "Event Reporting Guidelines 10 CFR 50.72 and 10 CFR 50.73." The inspectors reviewed Ginna's operator narrative logs, operability assessments, maintenance rule records, maintenance WOs, CRs, event reports, and NRC integrated inspection reports to validate the accuracy of the submittals.

b. Findings

No findings were identified.

.2 RCS Specific Activity and RCS Leak Rate (Two samples)

a. Inspection Scope

The inspectors reviewed Ginna's submittal for the RCS specific activity and RCS leak rate PIs for the period of March 1, 2010, through March 31, 2011. To determine the accuracy of the PI data reported during those periods, the inspectors used definitions and guidance contained in NEI 99-02. The inspectors also reviewed RCS sample analysis and control room logs of daily measurements for RCS leakage and compared that information to the data reported by the PI. Additionally, the inspectors observed surveillance activities that determined the RCS identified leakage rate and chemistry personnel taking and analyzing an RCS sample.

b. Findings

No findings were identified.

.3 Radiological Effluent TS/ODCM Radiological Effluent Occurrences (One sample)

a. Inspection Scope

The inspectors reviewed relevant effluent release reports for the period January 1 through December 31, 2010, for issues related to the public radiation safety PI, which measures radiological effluent release occurrences that exceed 1.5 millirem/quarter whole body or 5.0 millirem/quarter organ dose for liquid effluents; 5 millirads/quarter gamma air dose, 10 millirads/quarter beta air dose, and 7.5 millirads/quarter for organ dose for gaseous effluents.

b. Findings

No findings were identified.

4OA2 Problem Identification and Resolution (71152 – One sample)

.1 Routine Review of Problem Identification and Resolution Activities

a. Inspection Scope

As required by Inspection Procedure 71152, "Problem Identification and Resolution," the inspectors routinely reviewed issues during baseline inspection activities and plant status reviews to verify that Ginna entered issues into the CAP at an appropriate threshold, gave adequate attention to timely corrective actions, and identified and addressed adverse trends. In order to assist with the identification of repetitive equipment failures and specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into the CAP and periodically attended CR screening meetings.

b. Findings

No findings were identified.

.2 Annual Sample: Review of SFP and Reactor Cavity Leakage

a. Inspection Scope

The inspectors reviewed the cumulative effects of the leakage of the SFP and reactor refueling cavity during outage flood-up. The inspectors reviewed the management of the aging effects of borated water on the concrete and reinforcement of the structure supporting the pool and cavity to determine if the attributes of preventative actions, monitoring, detection, trending, acceptance criteria, corrective actions, confirmation, administrative controls, and operating experience were addressed.

The inspectors reviewed Ginna's process to identify, prioritize, and resolve the leakage of borated water from the SFP and the reactor cavity. The inspectors reviewed the analysis by Ginna of the long-term effects of leakage on the supporting structures of the reactor cavity and SFP.

The corrective actions were reviewed for their evaluation and disposition of operability and reportability issues, consideration of extent of condition and cause, generic implications, common cause, and previous occurrences. The corrective actions were further reviewed to determine if the classification and prioritization of the problem's resolution was commensurate with the safety significance.

The inspectors reviewed various related documents and interviewed station personnel involved in structural integrity management. The derived information was compared with the corrective action's identification of root and contributing causes of the problem. The inspectors ascertained if the documented information was reported to appropriate levels of management. The inspectors reviewed the corrective actions to determine if they were appropriately focused to correct the problem (and to address the root and contributing causes for significant conditions adverse to quality).

The inspectors then determined if the completion of corrective actions was in a timely manner commensurate with the safety significance of the issue. The inspectors considered if any delays in implementation were justified based on the safety significance of the issue. The inspectors considered if any permanent corrective actions required significant time to implement and if interim corrective actions and/or compensatory actions were identified and implemented to minimize the problem and/or mitigate its effects until the permanent actions could be implemented.

The inspectors reviewed the actions taken to determine if the actions resulted in the correction of the identified problem. In the case of this condition, the inspectors determined if the corrective actions taken would preclude repetition. Finally, the inspectors reviewed operating experience to determine if it was adequately evaluated for applicability and applicable lessons learned were communicated to appropriate organizations and implemented.

The inspectors compared the actions taken to the requirements of the station's CAP, 10 CFR Part 50, Appendix B, and NUREG 1800, Revision 2, "Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants," Appendix A.1, "Aging Management Review – Generic (Branch Technical Position RLSB-1)."

b. Findings and Observations

No findings were identified.

SFP liner leakage has been experienced as indicated by leakage drain monitoring. The cause of the liner leakage has principally been determined to be cracks in the weld seams joining liner plates although a recent upswing in the rate has been attributed to the added stress of spent fuel cask placement in proximity to a previously weld repaired crack in a floor plate of the SFP. Ginna continues to work on a permanent solution to

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reduce or eliminate the leakage by implementing specialized repairs including welded corner plates, qualified epoxy patches, and vacuum box placement. In addition, Ginna performed a multiple part engineering evaluation to first determine the effect of the leakage on the degradation of the concrete and then the affect the concrete degradation would have on the integrity of the supporting structure. The results showed, conservatively assuming continuous leak rates that have been only briefly experienced, for the entire life of the plant including the extended period, that the impact on the structural integrity is minimal and does not reduce the design margins.

In summary, no trends were noted by the inspectors in the examples and analysis selected from these specific corrective actions for detailed review. Further, the inspectors concluded that Ginna has preserved design margins under the current licensing basis and aging management over the period of extended operation. The inspectors determined that Ginna staff implemented their corrective action process in accordance with program requirements regarding the initial discovery of the reviewed issue along with managing the effects of aging. The corrective action documentation, relative to the procedural requirements, was complete and included implemented and planned future corrective actions. In addition, the elements contained in the corrective action documentation consisted of detailed and thorough information. Interim corrective actions, such as performing ongoing system monitoring and trending, were structured to minimize potential failures pending system repair. The corrective actions for the identified leakage included developing a repair plan, partly implemented successfully during a recent outage, and Ginna had long-term corrective action plans in place with future plans to continue implementing the same successful repair methodology.

#### 4OA5 Other Activities

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

###### a. Inspection Scope

The inspectors reviewed the final report for the INPO plant assessment of Ginna conducted in February 2011. The inspectors also reviewed the final report for the INPO accreditation team evaluation of nonlicensed operator, reactor operator, senior reactor operator, shift manager, continuing training for licensed personnel, shift technical advisor, and engineering personnel training programs conducted in June 2011. The inspectors reviewed these reports to ensure that any issues identified were consistent with NRC perspectives of Ginna's performance and to determine if INPO identified any significant safety issues that required further NRC follow-up.

###### b. Findings

No findings were identified.

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.2 Independent Spent Fuel Storage Installation (ISFSI) (60855)

a. Inspection Scope

The inspectors reviewed the as low as is reasonably achievable (ALARA) review and the radiation work permit (RWP) used for ISFSI activities. The inspectors walked down the ISFSI area. The conditions of the radiological postings were verified. The inspectors also reviewed surveys from the most recent transfer of a cast to the ISFSI.

b. Findings

No findings were identified.

40A6 Meetings, Including Exit

On October 7, 2011, the inspectors presented the inspection results to Mr. Joseph Pacher and other members of the Ginna staff. The inspectors verified that no proprietary information was retained by the inspectors or documented in this report.

**ATTACHMENT: SUPPLEMENTARY INFORMATION**

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**SUPPLEMENTARY INFORMATION**

**KEY POINTS OF CONTACT**

Licensee Personnel

J. Pacher, Vice President, Ginna  
D. Bierbrauer, Manager, Nuclear Safety and Security  
J. Bowers, General Supervisor, Radiation Protection  
S. Dean, Plant General Manager  
T. Hedges, Director, Emergency Preparedness  
K. McLaughlin, General Supervisor, Shift Operations  
T. Mogren, Manager, Engineering Services  
T. Paglia, Manager, Integrated Work Management  
S. Snowden, General Supervisor, Chemistry  
J. Sullivan, Manager, Operations

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

Opened/Closed

05000244/2011004-01	NCV	Failure to Promptly Identify and Correct a Condition Adverse to Quality with the 'B' MSIV (Section 1R15)
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**LIST OF DOCUMENTS REVIEWED**

**Section 1R01: Adverse Weather Protection**

Procedures

O-6, Operations and Process Monitoring, Revision 10607  
O-6.9, Ginna Station Operating Limits for Station 13A Transmission, Revision 03400

**Section 1R04: Equipment Alignment**

Documents

CCW System Health Report, July to September 2011  
Diesel Generator Emergency Power System Health Report, July to September 2011  
SI System Health Report, April to June 2011  
SW System Health Report, July to September 2011  
UFSAR

Procedures

S-16A, SI System Alignment, Revision 07100  
CPI-VL-934, Calibration of SI Accumulator B Level Loop 934, Revision 01001  
STP-O-30.8, SW System Valve Position Verification, Revision 00102  
STP-O-30.9, CCW Flow Path Verification, Revision 00002  
STP-O-30.10, EDG 'A' Pre-Startup Alignment, Revision 00302

Drawings

33013-1239, Diesel Generator 'A' Piping and Instrument Drawing (P&ID), Revision 25,  
Sheet 1 of 2  
33013-1245, Auxiliary Coolant CCW P&ID, Revision 32  
33013-1262, SI and Accumulators P&ID, Revision 25, Sheet 1 of 2  
33013-1262, SI and Accumulators P&ID, Revision 7, Sheet 2 of 2  
33013-1250, Station Service Cooling Water Safety-Related P&ID, Revision 560, Sheet 1 of 3

Condition Reports

CR-2011-2818  
CR-2011-6090  
CR-2011-6504

**Section 1R05: Fire Protection**

Document

Ginna Fire Protection Plan, Revision 5

Procedure

SC-3.15.3, Portable Extinguisher Inspection, Revision 05000

**Section 1R06: Flood Protection Measures**

Procedures

CNG-AM-1.01-1029, Medium Voltage Cable Program, Revision 00000  
ER-SC.2, High Water (Flood) Plan, Revision 00800  
SC-3.17, Auxiliary Building Flood Barrier Installation/Removal Inspection, Revision 00101

Drawing

33013-14, 34.5 kV Duct and Control Duct Plan and Profile, Revision K

Condition Reports

CR-2010-5103  
CR-2010-6396  
CR-2010-6587  
CR-2010-6775  
CR-2011-6990

Work Orders

WO C91172704  
WO C91302831  
WO C91159504

**Section 1R07: Heat Sink Performance**Documents

Apparent Cause Evaluation for SW Vents and Drains, October 22, 2009  
 BEM Condition Assessment Program – Ginna 20 inch SW Header and 90 inch Circulating Water Piping, October 19, 2009  
 Calculation DA-ME-11-011, CCW HX Thermal Performance Testing Analysis, September 22, 2011  
 ECP-10-000067, SW Vent and Drain Lines  
 ECP-11-000824, SW Vent Piping at Valve 4619A  
 Evaluation of Minimum Wall Thickness of Pipe Segment SW-1120, October 30, 1997  
 Key Ginna PRA Results, August 2011  
 Program Health Reports – SW Reliability/Generic Letter (GL) 89-13; 4<sup>th</sup> Qtr 2010 to 2<sup>nd</sup> Qtr 2011  
 RG&E Letter, Response to GL 89-13, January 29, 1990  
 Self-Assessment SA-2010-158  
 System Health Reports – CCW, 3<sup>rd</sup> Qtr 2010 to 2<sup>nd</sup> Qtr 2011  
 System Health Reports – SW, 3<sup>rd</sup> Qtr 2010 to 2<sup>nd</sup> Qtr 2011

Procedures

AP-CCW.2, Loss of CCW during Power Operation, Revision 02201  
 AR-A-17, Alarm Response – Motor off CCW Pump, Revision 008  
 AR-A-22, Alarm Response – CCW Pump Discharge Lo Press 60 psi, Revision 012  
 CMP-10-04-EAC01B, HX Maintenance for EAC01B, Revision 00301  
 SW System Reliability Optimization Program, Revision 10

Drawings

33013-1245, Auxiliary CCW P&ID, Revision 32  
 33013-1246, Auxiliary CCW P&ID, Sheet 1, Revision 16  
 33013-1246, Auxiliary CCW P&ID, Sheet 2, Revision 12  
 33013-1250, Station Service Cooling Water Safety-Related P&ID, Sheet 1 of 3, Revision 56  
 33013-1250, Station Service Cooling Water Safety-Related P&ID, Sheet 2 of 3, Revision 44  
 33013-1250, Station Service Cooling Water Safety-Related P&ID, Sheet 3 of 3, Revision 35  
 33013-1251, Station Service Cooling Water Non-Safety Related P&ID, Sheet 1 of 2, Revision 35  
 33013-1251, Station Service Cooling Water Non-Safety Related P&ID, Sheet 2 of 2, Revision 24  
 33013-1925, SW for Instrument Air Compressors and Aftercoolers P&ID, Revision 14  
 33013-2142, Plant Arrangement Screen House Plan Elevation 212 Feet 6 Inches and Elevation 243 Feet 6 Inches, Revision 4  
 33013-2143, Plant Arrangement Screen House above Elevation 253 Feet 6 Inches, Revision 5  
 33013-2144, Plant Arrangement Screen House Roof Plan and Sections, Revision 3  
 10904-0793, SW from CCW HX, Sheets 1 and 56, Revision 0  
 C-381-358, SW Isometric Sheet 1 of 3, Revision 4  
 C-381-358, SW Isometric Sheet 3 of 3, Revision 18

Condition Reports

CR-1997-1655	CR-2010-3589	CR-2011-2043
CR-2009-3214	CR-2010-6903	CR-2011-6613
CR-2010-2820	CR-2010-6918	
CR-2010-3055	CR-2010-7127	

Work Orders

WO 20604882  
WO 20803528  
WO C20805342  
WO C90681240

WO C90878160  
WO C91038460  
WO C91142446

Miscellaneous

Corrective Actions 2010-2245, 2011-1192

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

Documents

A503.1, Emergency and Abnormal Operating Procedure User Guideline, Revision 04404  
CNG-OP-1.01-2003, Alarm Response and Control, Revision 00200  
OTG-2.2, Simulator Examination Instructions, Revision 43  
SEG-11-05-05, FR-H.1 Recovery, Revision 0

**Section 1R12: Maintenance Effectiveness**

Documents

SI System Health Report, April to June 2011  
Failure Analysis of Ginna 150 HP, 1800 RPM 'B' CCW Pump Motor

Procedures

CNG-OP-4.01-1000, Integrated Risk Management, Revision 00900  
CPI-VL-934,  
CNG-AM-1.01-1023, Maintenance Rule Program, Revision 00100

Drawings

33013-1262, SI and Accumulators P&ID, Sheet 1 of 2, Revision 25  
33013-1262, SI and Accumulators P&ID, Sheet 2 of 2, Revision 7

Condition Reports

CR-2011-2818  
CR-2011-4311

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

Document

PRAER-G1-2011-006, Removal of Both Reactor Makeup Water Pumps from Service, Revision 0

Condition Report

CR-2011-6466

**Section 1R15: Operability Evaluations**

Document

AFW Health Report, April to June 2011

Procedures

AP-CVCS.3, Loss of All Charging Flow, Revision 01200  
STP-O-16-COMP-A, AFW Pump 'A' – Comprehensive Test, Revision 00600

Drawings

33013-1237, AFW P&ID, Revision 37  
C-381-352, AFW Pump Discharge Intermediate Building, Revision 8

Condition Reports

CR-2011-4539	CR-2011-5436	CR-2011-5858
CR-2011-5291	CR-2011-5466	CR-2011-5962
CR-2011-5422	CR-2011-5849	CR-2011-6025

Work Order

WO C91493144

**Section 1R18: Plant Modifications**

Miscellaneous

ECP 2010-053, SFP Liner Repair

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

Documents

AFW Health Report, April to June 2011  
33013-1250, Station Service Cooling Water Safety Related P&ID, Revision 42, Sheet 2 of 3

Procedures

CNG-MN-4.01-1008, Pre/Post-Maintenance Testing, Revision 00001  
STP-O-16-COMP-A, AFW Pump 'A' – Comprehensive Test, Revision 00600  
STP-O-2.3, Safeguard Power Operated Valve Operation, Revision 00100

Drawings

33013-1237, AFW P&ID, Revision 37  
C-381-352, Revision 8

Condition Report

CR-2011-5291

Work Orders

WO C91186658  
WO C91493144

**Section 1R22: Surveillance Testing**

Procedures

CH-120, Primary System Analysis Schedule and Limits, Revision 00601  
CH-714, Gamma Isotopic Analysis of Crud and Degassed Primary Coolant, Revision 00203  
CH-PRI-SAMP-ROOM, Sampling in the Nuclear Sample Room, Revision 01500  
S-12.4, RCS Leakage Surveillance Record Instructions, Revision 05401

STP-O-12.2, EDG 'B', Revision 00902  
STP-O-36Q-D, Standby AFW Pump 'D' – Quarterly, Revision 00200

Drawing

33013-1237, AFW P&ID, Revision 37

Work Order

WO C91122169

**Section 1EP6: Drill Evaluation**

Documents

ERO Drill for Duty Team 1 September 6, 2011, Responder Briefing Form  
GNP-EP-FA-11-06, Ginna Station Emergency Preparedness Drill

**Section 2RS01: Radiological Hazard Assessment and Exposure Controls**

Miscellaneous

Sources Verified:

Sheppard, CS-137, Serial Number 84, Instrument Calibration Laboratory  
Sheppard, CS-137, Serial Number 0886GN, TLD Laboratory

**Section 2RS06: Radioactive Gaseous and Liquid Effluent Treatment**

Procedures

CH-261, Collection and Analysis of Groundwater Samples, Revision 00401  
CH-345, Sampling and Analysis of Plant Vent Iodine, Particulate, and Noble Gasses at R10B,  
R13, R14 Skids or SPING R-14A, Revision 00003  
CH-700, Liquid Batch Release, Revision 00400  
CH-701, Liquid Waste Continuous Release, Revision 00201  
CH-702, Liquid Radwaste Compositing and Analysis, Revision 00100  
CH-703, Release of GDT's and Other Gaseous Batch Releases, Revision 00200  
CH-704, Containment Mini-Purge Releases, Revision 00000  
CH-705, Containment Purge Releases, Revision 00001  
CH-706, Plant Vent and Air Ejector Continuous Releases, Revision 00000  
CH-717, SPING Sample Flow Rates and Flow Alarm Setpoints, Revision 00102  
CNG-EV-1.01-1001, Radiological Groundwater Protection Program, Revision 00100  
CH-SAMP-MSA, Operation of MSA Waste Gas Monitoring System and Collection of Gas  
Samples, Revision 01700  
S-3.4K, Releasing Monitor Tank 'A' or 'B' to Discharge Canal, Revision 03001  
S-3.4I, Recirculation of Monitor Tank 'A' or 'B', Revision 04002  
T-6.11, Neutralizing and Release of Water from the High Conductivity Waste Tank,  
Revision 05502

Condition Reports

CR-2009-7618	CR-2010-3030	CR-2011-3721
CR-2009-8728	CR-2010-3661	CR-2011-5288
CR-2010-0931	CR-2010-6883	
CR-2010-2006	CR-2011-3654	

Work Orders

WO C20701662  
WO C20701663  
WO C90983846

Audits and Self Assessments

CHE-11-01-G Chemistry Program, April 18, 2011  
QPA Self-Assessment 2010-0055 Fleet Type-II Chemistry Equipment Reliability Assessment

Release Packages

L-2011005  
G-2011015  
G-2011016  
G-2011017  
G-2011033

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

Shipment Packages

<u>Package No.</u>	<u>milli-Curies</u>
2011-114	7
2011-115	28
2011-131	33

**Section 40A1: Performance Indicator Verification**

Document

NEI 99-02, Regulatory Assessment PI Guideline, Revision 6

Procedure

S-12.4, RCS Leakage Surveillance Record Instructions, Revision 05401

**40A2: Problem Identification and Resolution**

Documents

Calculation Number GNP-008-C-1, SFP Wall and Liner Evaluation for Degraded Concrete, April 5, 2010  
MPR-3400, R.E. Ginna Nuclear Power Plant Projection of Potential Auxiliary Building Degradation From SFP Leakage, Revision 0, May 2010



**40A5: Other Activities**Surveys

<u>Map #</u>	<u>Date</u>	<u>Time</u>
701	10/15/2010	None
730B	10/15/2010	1600
730B	10/12/2010	0735
710	10/12/2010	0815
701	10/12/2010	2230

Miscellaneous

ALARA Review for RWP 10-5001  
Post Job Review for RWP 10-5001  
RWP 10-5001 ISFSI Operation

## LIST OF ACRONYMS

AC	alternating current
ADAMS	Agencywide Documents Access and Management System
AFW	auxiliary feedwater
ALARA	as low as is reasonably achievable
CAP	corrective action program
CCW	component cooling water
CFR	Code of Federal Regulations
CR	condition report
CV	check valve
ECP	engineering change package
EDG	emergency diesel generator
GL	Generic Letter
HX	heat exchanger
IMC	Inspection Manual Chapter
INPO	Institute of Nuclear Power Operations
IRT	incident response team
ISFSI	independent spent fuel storage installation
kV	kilovolt
MDAFW	motor-driven auxiliary feedwater
MR	maintenance rule
MSIV	main steam isolation valve
NEI	Nuclear Energy Institute
NCV	non-cited violation
NRC	U.S. Nuclear Regulatory Commission
ODCM	offsite dose calculation manual
OOS	out of service
P&ID	pipng and instrument drawing
PARS	Publicly Available Records
PI	performance indicator
RCS	reactor coolant system
RPM	radiation protection manager
RWP	radiation work permit
SDP	significance determination process
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