UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
2100 RENAISSANCE BOULEVARD, SUITE 100
KING OF PRUSSIA, PENNSYLVANIA 19406-2713

October 23, 2012

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, LLC - NRC INTEGRATED INSPECTION REPORT 05000244/2012004

Dear Mr. Pacher:

On September 30, 2012, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your R.E. Ginna Nuclear Power Plant, LLC. The enclosed inspection report documents the inspection results, which were discussed on October 4, 2012, with Mr. Edwin D. Dean III 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.

No findings were identified during this inspection.

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 component of the NRC's Agencywide Document Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

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

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

Enclosure: Inspection Report No. 05000244/2012004
w/Attachment: Supplementary Information
cc w/encl: Distribution via ListServ

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No.:	50-244
License No.:	DPR-18
Report No.:	05000244/2012004
Licensee:	Constellation Energy Nuclear Group, LLC
Facility:	R.E. Ginna Nuclear Power Plant, LLC
Location:	Ontario, New York
Dates:	July 1 to September 30, 2012
Inspectors:	N. Perry, Senior Resident Inspector D. Dodson, Resident Inspector K. Kolaczyk, Senior Resident Inspector S. Barr, Senior Emergency Preparedness Inspector J. Cherubini, Physical Security Inspector T. Moslak, Health Physicist
Approved by:	Glenn T. Dentel, Chief Reactor Projects Branch 1 Division of Reactor Projects

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SUMMARY OF FINDINGS

IR 05000244/2012004; 07/01/2012 – 09/30/2012; 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 announced inspections performed by regional 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 were identified.

REPORT DETAILS

Summary of Plant Status

R.E. Ginna Nuclear Power Plant, LLC (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

1R04 Equipment Alignment

.1 Partial System Walkdowns (71111.04Q – Four samples)

a. Inspection Scope

The inspectors performed partial walkdowns of the following systems:

- Motor-driven auxiliary feedwater (AFW) system while the standby AFW was out of service (OOS) on July 31, 2012
- Containment isolation valves on August 7, 2012
- 'B' spent fuel pool (SFP) cooling and standby SFP cooling systems while the 'A' SFP cooling system was OOS on August 15, 2012
- The fire main system in the screen house, turbine, and intermediate buildings while the diesel-driven fire water pump was OOS for planned maintenance activities on September 5, 2012

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), technical specifications (TSs), work orders (WOs), condition reports (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 staff had properly identified equipment issues and entered them into the corrective action program (CAP) for resolution with the appropriate significance characterization. Documents reviewed for each section of this inspection report are listed in the Attachment.

b. Findings

No findings were identified.

.2 Full System Walkdown (71111.04S – One sample)

a. Inspection Scope

On September 25, 2012, the inspectors performed a complete system walkdown of accessible portions of the 'B' emergency diesel generator (EDG) to verify the existing equipment lineup was correct. The inspectors reviewed operating procedures, drawings, equipment lineup 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 systems 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 to ensure Ginna appropriately evaluated and resolved any deficiencies.

b. Findings

No findings were identified.

1R05 Fire Protection

Resident Inspector Quarterly Walkdowns (71111.05Q – Five 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 station personnel implemented compensatory measures for OOS, degraded, or inoperable fire protection equipment, as applicable, in accordance with procedures.

- Air handling room on August 10, 2012
- Screen house operating floor on August 13, 2012
- 'A' and 'B' battery rooms on August 13, 2012
- Auxiliary building intermediate floor on August 15, 2012
- Diesel generator room 'B' on August 22, 2012

b. Findings

No findings were identified.

1R06 Flood Protection Measures (71111.06 – One sample)

Annual Review of Cables Located in Underground Bunkers/Manholes

a. Inspection Scope

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 all manholes containing offsite power cables to verify that the cables were not submerged in water, that cables and/or splices appeared intact, and to observe the condition of cable support structures. When applicable, the inspectors verified proper sump pump operation and verified level alarm circuits were set in accordance with station procedures to ensure that the cables will not be submerged. The inspectors also ensured that drainage was provided and functioning properly in areas where dewatering devices were not installed.

b. Findings

No findings were identified.

1R11 Licensed Operator Requalification Program and Licensed Operator Performance (71111.11 – Two samples)

.1 Quarterly Review of Licensed Operator Requalification Testing and Training

a. Inspection Scope

The inspectors observed licensed operator simulator training on September 18, 2012, which included a failed turbine control valve, a reactor coolant system (RCS) leak coincident with a failed RCS temperature indicator, and a small-break loss-of-coolant accident. 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.

b. Findings

No findings were identified.

.2 Quarterly Review of Licensed Operator Performance in the Main Control Room

a. Inspection Scope

The inspectors observed and reviewed operators maintaining reactor power less than 99.4 percent as part of 'D' standby AFW pump post-maintenance testing (PMT) conducted on August 1, 2012. The inspectors also observed and reviewed operators decreasing and maintaining reactor power less than 99 percent as part of turbine-driven AFW pump quarterly testing on August 21, 2012. The inspectors observed pre-shift briefings and reactivity control briefings to verify that the briefings met the criteria specified in Ginna procedure CNG-OP-1.01-1000, "Conduct of Operations," Revision 00700, and CNG-OP-3.01-1000, "Reactivity Management," Revision 00701. Additionally, the inspectors observed test performance to verify that procedure use, crew communications, and coordination of activities between work groups similarly met established expectations and standards.

b. Findings

No findings were identified.

1R12 Maintenance Effectiveness (71111.12Q – 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 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. 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 staff 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 staff was identifying and addressing common cause failures that occurred within and across maintenance rule system boundaries.

- Main steam system performance on September 6, 2012
- Reactor protection system (RPS) performance on September 19, 2012
- EDG system performance on September 20, 2012

b. Findings

No findings were identified.

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 calibration of nuclear instrument N41 on July 9, 2012
- Unplanned elevated risk (orange) for bus 18 undervoltage (UV) relay failure during planned testing on July 17, 2012
- Planned replacement of bistable PC-420 reactor coolant pressure single alarm unit hot leg low interlock on August 6, 2012
- Planned maintenance on the 'C' standby AFW pump on August 14, 2012
- Planned maintenance on the technical support center (TSC) inverter on August 22, 2012

b. Findings

No findings were identified.

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

a. Inspection Scope

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

- Degraded 12-inch block wall fire barrier between the intermediate building and the auxiliary building on July 5, 2012
- Installation of a leak clamp device on component cooling water (CCW) leak at TE-621 on August 6, 2012
- Safeguards buses 14 and 17 degraded voltage relays found out of tolerance on September 6, 2012
- Fire protection pumps did not meet National Fire Protection Association Standard #20 test requirement on September 7, 2012
- Reduced auxiliary building roof drainage capacity on September 14, 2012

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

No findings were identified.

1R18 Plant Modifications (71111.18 – One sample)

Temporary Modification

a. Inspection Scope

The inspectors reviewed the temporary modification listed below to determine whether the modification affected the safety functions of systems that are important to safety. The inspectors reviewed 10 CFR 50.59 documentation and post-modification testing results, and conducted field walkdowns of the modification to verify that the temporary modification did not degrade the design bases, licensing bases, and performance capability of the affected system.

- Engineering Change Package (ECP) 12-000634 - ESR-12-0210 ESR (000) - Perform Temporary Change to Spray Down Exterior of Containment Dome, Revision 0000

b. Findings

No findings were identified.

1R19 Post-Maintenance Testing (71111.19 – Eight samples)

a. Inspection Scope

The inspectors reviewed the PMTs 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.

- 'B' containment spray (CS) pump following planned maintenance on July 5, 2012
- 'A' EDG following planned maintenance on July 20, 2012
- 'D' standby AFW pump following planned maintenance on August 1, 2012
- 'C' charging pump following planned maintenance on August 2, 2012
- Replacement of bus 17 EDG supply breaker on August 10, 2012
- 'A' SFP pump following planned maintenance on August 15, 2012
- 'C' standby AFW pump following planned maintenance on August 16, 2012
- Offsite power circuit 767 following planned maintenance on September 28, 2012

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 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-I-32B, Reactor Trip Breaker Testing Train 'B', Revision 00103, on July 27, 2012
- STP-O-2.8Q, CCW Pump Quarterly Test, Revision 00600, on August 3, 2012
- STP-O-6.3.4, Power Range Nuclear Instrumentation System Channel 44, Revision 00103, on August 9, 2012
- STP-I-32A, Reactor Trip Breaker Testing Train 'A', Revision 00100, on August 17, 2012
- STP-O-16QT, AFW Pump – Quarterly, Revision 00701, on August 21, 2012

b. Findings

No findings were identified.

Cornerstone: Emergency Preparedness

1EP2 Alert and Notification System Evaluation (71114.02 – One sample)

a. Inspection Scope

An onsite review was conducted to assess the maintenance and testing of Ginna's alert and notification system. During this inspection, the inspectors conducted a review of the alert and notification system testing and maintenance programs. The inspectors reviewed the associated alert and notification system procedure and the Federal Emergency Management Agency (FEMA)-approved alert and notification system design report to ensure compliance with design report commitments for system maintenance and testing. The inspection was conducted in accordance with NRC Inspection Procedure 71114, Attachment 2. Title 10 of the *Code of Federal Regulations* (10 CFR) 50.47(b)(5) and the related requirements of 10 CFR Part 50, Appendix E, were used as reference criteria.

b. Findings

No findings were identified.

1EP3 Emergency Response Organization Staffing and Augmentation System (71114.03 – One sample)

a. Inspection Scope

The inspectors conducted a review of Ginna's emergency response organization (ERO) augmentation staffing requirements and the process for notifying and augmenting the ERO. The review was performed to verify the readiness of key Ginna staff to respond to an emergency event and to verify Ginna's ability to activate their emergency response facilities (ERFs) in a timely manner. The inspectors reviewed Ginna's emergency plan for ERF activation and ERO staffing requirements, the ERO duty roster, applicable station procedures, communication test reports, the most recent drive-in drill report, and CRs related to this inspection area. The inspectors also reviewed a sample of ERO responder training records to verify training and qualifications were up to date. The inspection was conducted in accordance with NRC Inspection Procedure 71114, Attachment 3. 10 CFR 50.47(b)(2) and related requirements of 10 CFR Part 50, Appendix E, were used as reference criteria.

b. Findings

No findings were identified.

1EP5 Maintenance of Emergency Preparedness (71114.05 – One sample)

a. Inspection Scope

The inspectors reviewed a number of activities to evaluate the efficacy of Ginna's efforts to maintain Ginna's emergency preparedness (EP) program. The inspectors reviewed letters of agreement and/or memorandums of understanding with offsite agencies, the 10 CFR 50.54(q) EP change process and practice, Ginna's maintenance of equipment important to EP, and records of evacuation time estimate population evaluation. A walkdown of the plant was conducted to inspect equipment important to EP which included interviews with work control staff on the process for identifying and managing OOS equipment. The inspectors also verified Ginna's compliance with new NRC EP regulations regarding emergency action levels for hostile action events, the EOF performance-based approach, ERO augmentation at alternate ERFs, event declaration within 15 minutes, and protective actions for on-site personnel during events.

The inspectors further evaluated Ginna's ability to maintain their EP program through their identification and correction of EP weaknesses by reviewing a sample of drill reports, actual event reports, self-assessments, 10 CFR 50.54(t) audits, and EP-related CRs. The inspectors reviewed a sample of EP-related CRs initiated at Ginna from January 2011 through August 2012. The inspection was conducted in accordance with NRC Inspection Procedure 71114.05. 10 CFR 50.47(b) and the related requirements of 10 CFR Part 50, Appendix E, were used as reference criteria.

b. Findings

No findings 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

During the period of July 16 to 19, 2012, the inspectors conducted the following activities to verify that Ginna was evaluating, monitoring, and controlling radiological hazards for work performed during power operations, in locked high radiation areas, and other radiological controlled areas (RCAs). Implementation of these controls was reviewed against the criteria contained in 10 CFR 20, TSs, and Ginna's procedures.

Radiological Hazards Control and Work Coverage

The inspectors identified work performed in RCAs and evaluated Ginna's assessment of the radiological hazards. Specific work activities evaluated included workers making a containment entry during full power operations and technicians performing calibrations of neutron survey instruments in a neutron radiation field.

The inspectors evaluated the survey maps, electronic dosimeter dose/dose rate alarm set points, and radiation work permits (RWPs) associated with these areas to determine

if the exposure controls were acceptable and that the set points were consistent with the survey indications and plant policy.

The inspectors attended the pre-job briefing for the containment entry to assess the adequacy of instructions given to workers regarding the radiological conditions in the reactor containment and the entry contingency plans.

The inspectors toured site RCAs including the auxiliary building, SFP area, contaminated material storage building, and portions of the turbine building (where a neutron source was being used to calibrate neutron survey instruments) to assess the adequacy of radiological controls. The inspectors evaluated the adequacy of postings and barriers and that personnel wore the appropriate dosimetry and complied with the associated RWP.

During tours, radiation protection technicians were questioned regarding their knowledge of plant radiological conditions for selected jobs and the associated controls.

b. Findings

No findings were identified.

2RS3 In-Plant Airborne Radioactivity Control and Mitigation (71124.03)

This area was inspected July 16 to 19, 2012, to verify in-plant airborne concentrations were being controlled consistent with as low as is reasonably achievable (ALARA) principles, and that respiratory protection devices were properly used and maintained. The inspectors used the requirements in 10 CFR 20, the guidance in Regulatory Guide (RG) 8.15, “Acceptable Programs for Respiratory Protection,” RG 8.25, “Air Sampling in the Workplace,” NUREG-0041, “Manual of Respiratory Protection Against Airborne Radioactive Material,” TSs, and Ginna’s procedures to evaluate ALARA implementation and compliance with applicable regulations.

.1 Inspection Planning

a. Inspection Scope

The inspectors reviewed the UFSAR to identify areas of the plant designed as potential airborne radiation areas and any associated ventilation systems or airborne monitoring instrumentation. This review included instruments used to identify changing airborne radiological conditions such that actions to prevent an unplanned exposure may be taken. The review included an overview of the respiratory protection program and a description of the types of devices used.

The inspectors reviewed the UFSAR, TSs, and emergency planning documents to identify locations and quantity of respiratory protection devices stored for emergency use. The inspectors reviewed Ginna’s procedures for maintenance, inspection, and use of respiratory protection equipment, including self-contained breathing apparatus (SCBA) and procedures for assuring breathing air quality.

b. Findings

No findings were identified.

.2 Engineering Controls

a. Inspection Scope

Ventilation

The inspectors reviewed Ginna's use of permanent and temporary ventilation to determine whether Ginna uses ventilation systems as part of its engineering controls to control airborne radioactivity. The inspectors reviewed procedural guidance for use of installed plant systems to reduce dose and assessed whether the systems are used, to the extent practicable, during high-risk activities.

The inspectors selected the control room emergency air treatment system (CREATS), an installed ventilation system used to mitigate the potential for airborne radioactivity, and evaluated whether the ventilation system operating parameters were consistent with maintaining, to the extent practicable, concentrations of airborne radioactivity in the control room below the concentrations of an airborne area. The inspectors reviewed related surveillance procedures, high efficiency particulate air (HEPA)/charcoal filter test data, and test flow measurements to determine if operability criteria were met. The inspectors walked down this system to assess material condition and its present operating configuration. The inspectors verified that the system alert and high alarm set points for the associated radiation monitors, R-45 and R-46, were properly established. The inspectors had the system engineer describe the automatic actions that would occur should R-45 or R-46 alarm.

The inspectors evaluated the control and testing of portable HEPA filtration systems and HEPA-supplied vacuum cleaners. The inspectors evaluated whether testing was appropriately performed on these devices, and this equipment was strictly secured and only provided to authorized users.

Airborne Monitoring

The inspectors reviewed airborne monitoring protocols by selecting three installed systems (AMS-4) used to monitor and warn of changing radioactive air concentrations in the auxiliary building and one AMS-4 in the canister preparation building. The inspectors reviewed calibration records and the operability checks performed daily on these AMS-4 monitors to verify that the monitors were functioning properly.

The inspectors reviewed the procedure and equipment used for sampling airborne radiological contaminants. The inspectors verified that the procedure provided a methodology for assessing radioactive air concentrations and that the necessary equipment (e.g., lapel samplers, portable low and high volume air samplers, and installed monitors) was properly calibrated and operable.

Through review of relevant procedures and discussions with a Ginna representative, the inspectors assessed Ginna's alpha monitoring and control program. The inspectors evaluated the plant areas where alpha contamination was identified, the threshold

criteria for alpha contamination levels for implementing various radiological controls, and the action levels for alpha-emitting airborne radionuclide requiring bioassay evaluations.

b. Findings

No findings were identified.

.3 Use of Respiratory Protection Devices

a. Inspection Scope

The inspectors evaluated the material condition of the air compressor and reviewed records of air testing for refilling SCBA bottles to assess whether the air supplied by the compressor met or exceeded grade 'D' quality.

The inspectors selected five individuals qualified to use respiratory protection devices and assessed whether they were deemed qualified to use the devices by successfully passing an annual medical examination, respirator fit-test, and relevant respiratory protection training. In addition, the inspectors observed an individual being fit tested for using respirators. The inspectors evaluated whether the tested individual was medically qualified and completed the requisite training.

b. Findings

No findings were identified.

.4 SCBA for Emergency Use

a. Inspection Scope

The inspectors reviewed the status and surveillance records of selected SCBAs staged for in-plant use during emergencies. The inspectors reviewed Ginna's capability for refilling and transporting SCBA air bottles to and from the control room and outage control center during emergency conditions.

The inspectors chose three SCBAs staged in the outage control center and three SCBAs staged for use in the control room. The inspectors observed a technician perform monthly operational inspections of these SCBAs. The inspectors assessed the physical condition of the device components, and reviewed records of equipment inspection, maintenance and testing on the vital components. The inspectors verified that the required periodic air cylinder hydrostatic testing was documented and up-to-date.

The inspectors verified that personnel assigned to repair SCBA components had received vendor-provided training and were certified by the manufacturer.

The inspectors selected five individuals from each of the five control room shift crews and from the radiation protection department who were assigned emergency duties to assess whether these individuals were trained and qualified in the use of SCBAs. The inspectors also reviewed training lesson plans for using these respiratory protection devices to confirm that individuals were trained in replacing spent SCBA bottles with filled bottles.

The inspectors assessed whether appropriate mask sizes and types were available for use. The inspectors evaluated whether on-shift operators had facial hair that would interfere with the sealing of the mask to the face and whether vision correction mask inserts were readily available.

b. Findings

No findings were identified.

.5 Problem Identification and Resolution

a. Inspection Scope

The inspectors evaluated whether problems associated with the control and mitigation of in-plant airborne radioactivity were being identified by Ginna at an appropriate threshold and were properly addressed for resolution in Ginna's CAP. The inspectors assessed whether the corrective actions were appropriate for a selected sample of problems involving airborne radioactivity and were appropriately documented by Ginna.

b. Findings

No findings were identified.

2RS4 Occupational Dose Assessment (71124.04)

This area was inspected July 16 to 19, 2012, to ensure occupational dose was appropriately monitored and assessed. The inspectors used the requirements in 10 CFR 20, the guidance in RG 8.13, "Instructions Concerning Prenatal Radiation Exposures," RG 8.36, "Radiation Dose to Embryo Fetus," RG 8.40, "Methods for Measuring Effective Dose Equivalent from External Exposure," TSs, and Ginna's procedures as criteria for determining compliance.

.1 Inspection Planning

a. Inspection Scope

The inspectors reviewed the results of self assessments related to internal and external dosimetry. The inspectors reviewed the most recent quality assurance audit of Ginna's dosimetry provider/processor to evaluate whether Ginna appropriately verified compliance of the dosimetry program with the relevant codes and standards.

The inspectors reviewed Ginna's procedures associated with dosimetry operations, including issuance/use of external dosimetry, assessment of internal dose, evaluation of multi-dosimetry, and effective dose equivalent method use.

The inspectors verified that Ginna had procedural requirements for determining when external and internal dosimeters were required.

b. Findings

No findings were identified.

.2 External Dosimetry

a. Inspection Scope

The inspectors verified that Ginna's dosimetry vendor was National Voluntary Laboratory Accreditation Program accredited. The inspectors also evaluated whether the approved irradiation test categories for each type of personnel dosimeter used were consistent with the types and energies of the radiation present and the way the dosimeters were being used.

The inspectors evaluated the onsite storage of dosimeters before issuance, during use, and before processing/reading. The inspectors also verified that guidance was provided to radiation workers with respect to care and storage of dosimeters.

The inspectors assessed the use of electronic personal dosimeters to determine if Ginna used a correction factor to address the response of the electronic personal dosimeter as compared to the dosimeter of legal record for situations when the electronic personal dosimeter was used to assign dose. The inspectors also evaluated whether the correction factor was based on sound technical principles.

b. Findings

No findings were identified.

.3 Internal Dosimetry

a. Inspection Scope

Routine Bioassay (In Vivo)

The inspectors reviewed procedures used to assess the dose from internally deposited radionuclides using whole body (WB) counting equipment (AccuScan II). The inspectors evaluated whether the procedures addressed methods for differentiating between internal and external contamination, criteria for release of contaminated individuals, determining the route of intake, and assignment of dose.

The inspectors reviewed the WB count process to determine if the frequency of measurements was consistent with the biological half-life of the radionuclides that exist at the site.

The inspectors reviewed Ginna's evaluation for use of its portal radiation monitors as a passive monitoring system. The inspectors verified that the instrument minimum detectable activities were adequate to detect the potential for internally deposited radionuclides and prompt further investigation.

The inspectors reviewed a routine WB count and evaluated whether the counting system used had sufficient counting time/low background to ensure appropriate sensitivity for the radionuclide of interest. The inspectors reviewed the instrument's calibration records and radionuclide library used for the count system to determine that it included the gamma-emitting radionuclides that exist at the site. The inspectors verified that hard-to-detect nuclides were accounted for in the dose assessments.

Special Bioassay (In Vitro)

There were no recent routine dose assessments obtained using bioassay techniques for the inspectors to review. The inspectors reviewed the procedural adequacy of Ginna's program for urinalysis and fecal analysis of radionuclide, including collection and storage of samples.

Internal Dose Assessment – Airborne Monitoring

The inspectors reviewed Ginna's program for dose assessment based on airborne monitoring and calculations of derived air concentration calculations in the work place.

Internal Dose Assessment – WB Count Analyses

Ginna had no incidents requiring internal dose assessments using WB count results during the period reviewed.

b. Findings

No findings were identified.

.4 Special Dosimetric Situations

a. Inspection Scope

Declared Pregnant Workers

The inspectors reviewed Ginna's process to inform workers of the risks of radiation exposure to the embryo/fetus, the process to be used for declaring a pregnancy, and the specific process to be used for monitoring and controlling exposure to a declared pregnant worker. Ginna had no declared pregnant workers during this inspection period.

Dosimeter Placement and Assessment of Effective Dose Equivalent for External Exposures

The inspectors reviewed Ginna's methodology for monitoring external dose in situations in which non-uniform fields were expected or where large dose gradients existed. The inspectors verified that Ginna had established criteria for determining when alternate monitoring techniques were to be used.

The inspectors reviewed selected dose assessments using multi-badging to evaluate whether the assessments were performed consistent with Ginna's procedures and dosimetric standards.

Shallow Dose Equivalent

The inspectors reviewed the procedures for calculating shallow dose equivalent for adequacy. The inspectors evaluated Ginna's method for calculating shallow dose equivalent from distributed skin contamination and for discrete radioactive particles.

Neutron Dose Assessment

The inspectors reviewed Ginna's neutron dosimetry program including dosimetry types and radiation survey instrumentation. The inspectors reviewed the use of neutron dosimetry for workers during a reactor building entry at full power operations on July 19, 2012, and assessed the adequacy of the personnel dosimetry and instrumentation used, reviewed the workers' dose, and verified that neutron detection instruments were properly calibrated. The inspectors also assessed whether gamma radiation had been accounted for when using the neutron survey instruments.

b. Findings

No findings were identified.

.5 Problem Identification and Resolution

a. Inspection Scope

The inspectors assessed whether problems associated with occupational dose assessment have been identified by Ginna at an appropriate threshold and are properly addressed for resolution in Ginna's CAP. The inspectors assessed the appropriateness of the corrective actions for a selected sample of problems documented by Ginna involving occupational dose assessment.

b. Findings

No findings were identified.

2RS5 Radiation Monitoring Instrumentation (71124.05)

This area was inspected from July 16 to 19, 2012, to verify Ginna was assuring the accuracy and operability of radiation monitoring instruments that were used to protect occupational workers performing nuclear power plant operations. The inspectors used the requirements in 10 CFR 20, the TSs, applicable industry standards, and Ginna's procedures as criteria for determining compliance.

.1 Inspection Planning

a. Inspection Scope

The inspectors reviewed the UFSAR to identify radiation instruments associated with monitoring plant areas, airborne radioactivity, process streams, and workers. In addition, the inspectors reviewed the associated TS requirements for post-accident monitoring instrumentation. The inspectors reviewed a listing of in-service survey

instrumentation, including air samplers and small article monitors, along with radiation monitoring instruments used to detect and analyze workers' external contamination as well as external dose. Additionally, the inspectors reviewed personnel contamination monitors and portal monitors including WB counters to detect workers' surface and internal contamination. The inspectors assessed whether an adequate number and type of instruments were available to support operations.

The inspectors reviewed a self-assessment report and a system health report of the radiation monitoring program to determine the status of instrument operability and maintenance issues.

The inspectors reviewed procedures that govern instrument source checks and calibrations focusing on instruments used for monitoring transient high radiological conditions. The inspectors reviewed the calibration and source check procedures for adequacy. The inspectors reviewed the area radiation monitor alarm set point values and bases as provided in the TSs and the UFSAR.

b. Findings

No findings were identified.

.2 Walkdowns and Observations

a. Inspection Scope

The inspectors walked down the CREATS radiation monitors, R-45 and R-46, to verify they were properly calibrated and operable. The inspectors verified that the alarm and system activation set points were properly established to automatically place the normal CREATS line up into the emergency configuration upon receipt of a high radiation alarm.

The inspectors selected several portable survey instruments in use or available for issuance and assessed calibration and source check stickers for currency as well as instrument material condition and operability. Instruments inspected included RO-20, telepole, teleprobe, neutron survey instruments (ASP-1 and ASP-2), and a Bicron Micro-Rem meter.

The inspectors observed Ginna staff perform calibrations of ASP-1 and ASP-2 neutron survey instruments (RemBalls). The inspectors assessed whether these instruments were calibrated on all appropriate scales and if the calibration procedure was properly implemented.

The inspectors walked down three continuous air monitors (AMS-4) located in the auxiliary building to determine whether they were appropriately positioned relative to possible sources of airborne contamination. The inspectors verified that the instruments were properly calibrated and daily operability checks were preformed as required. Additionally, the inspectors assessed whether portable air samplers were properly calibrated, operable, and available for immediate use.

The inspectors selected personnel contamination monitors (GEM-5, PM-7, PCM-1C), portal monitors (ARGOS-5AB), and two small article monitors (SAM-11/12) and reviewed the calibration records to determine if the instruments were operable and if the

calibrations were performed in accordance with the manufacturer's recommendations and Ginna procedures. The inspectors verified that the instruments' sensitivities were appropriate to provide alarm settings to assure workers and materials leaving the site were properly monitored for contamination.

The inspectors randomly selected seven electronic dosimeters available for issue and reviewed the calibration data for these instruments. The inspectors verified that the dosimeters were calibrated with the required frequency and that the dose and dose rate alarms were properly tested.

b. Findings

No findings were identified.

.3 Calibration and Testing Program

a. Inspection Scope

WB Counter

The inspectors reviewed the methods and sources used to perform functional checks on the WB counter (AccuScan II) before use and assessed whether check sources were appropriate and aligned with the plant's radionuclide mix.

The inspectors reviewed calibration records for the WB counter to determine if calibration sources were representative of the plant radionuclide mix and that the appropriate calibration phantom was used. The inspectors reviewed anomalous results or other indications of instrument performance problems.

Portal Monitors, Personnel Contamination Monitors, and Small Article Monitors

The inspectors selected various contamination monitors, including a PM-7, PCM-1C, ARGOS-5AB, and SAM-11/12, and verified that the alarm set points were reasonable to ensure that contaminated material/equipment or contaminated workers were not released from the site.

The inspectors reviewed the calibration documentation for each selected instrument and reviewed the calibration methods to assess consistency with the manufacturer's recommendations.

Portable Survey Instruments, Area Radiation Monitors, Electronic Dosimetry, and Air Samplers/Continuous Air Monitors

The inspectors reviewed calibration documentation for various types of portable instruments in use. Instrument calibration records reviewed included electronic dosimeters, neutron survey instruments (ASP-1/2), telepoles, teleprobes, and RO-20s.

Instrument Calibrator

The inspectors reviewed the current radiation output values for Ginna's portable instrument calibrator units. The units included a Shepherd Model 89 box calibrator, a

Shepherd Model 142-10 panoramic calibrator, and a Shepherd Model 38 beam calibrator. The inspectors verified that Ginna periodically characterized calibrator output over the appropriate ranges of the calibrated instruments.

The inspectors verified that the measuring devices had been calibrated by using National Institute of Standards Technology traceable sources and that decay correction factors were properly applied by Ginna in its source characterization of the calibrators.

Calibration and Check Sources

The inspectors reviewed Ginna's source term or waste stream characterization per 10 CFR 61, "Licensing Requirements for Land Disposal of Radioactive Waste," to assess whether calibration sources and check sources used were representative of the types and energies of radiation encountered in the plant.

b. Findings

No findings were identified.

.4 Problem Identification and Resolution

a. Inspection Scope

The inspectors evaluated whether problems associated with radiation monitoring instrumentation were being identified by Ginna at an appropriate threshold and were properly addressed for resolution in Ginna's CAP. Included in this review were the radiation protection department self-assessment report for the instrumentation program and the engineering department quarterly system health report. The inspectors assessed the appropriateness of the corrective actions for a selected sample of problems documented by Ginna that involved radiation monitoring instrumentation.

b. Findings

No findings were identified.

2RS6 Radioactive Gaseous and Liquid Effluent Treatment (71124.06)

This area was inspected during the week of September 10 to 13, 2012, to evaluate whether the gaseous and liquid effluent processing systems were maintained so radiological discharges were properly reduced, monitored, and evaluated, and to verify the accuracy of effluent releases and public dose calculations resulting from radioactive effluent discharges.

The inspectors used the requirements in 10 CFR 20; 10 CFR 50.35(a); TSs; 10 CFR 50 Appendix A, Criterion 60, "Control of Release of Radioactivity to the Environment," and Criterion 64, "Monitoring Radioactive Releases;" 10 CFR 50 Appendix I, "Numerical Guides for Design Objectives and Limiting Conditions for Operations to Meet the Criterion ALARA for Radioactive Material in Light-Water – Cooled Nuclear Power Reactor Effluents;" 10 CFR 50.75(g), "Reporting and Recordkeeping for Decommissioning Planning;" 40 CFR 141, "Maximum Contaminant Levels for Radionuclides;" 40 CFR 190, "Environmental Radiation Protection Standards for Nuclear

Power Operations;" the guidance in RGs 1.109, 1.21, 4.1 and 4.15; NUREG 1301 or 1302, "Offsite Dose Calculation Manual (ODCM) Guidance: Standard Radiological Effluent Controls;" as well as applicable industry standards, Ginna procedures required by the TS, and the ODCM as criteria for determining compliance.

.1 Inspection Planning and Program Reviews

a. Inspection Scope

Event Report and Effluent Report Reviews

The inspectors reviewed Ginna's radiological effluent release reports for 2010 and 2011 submitted as required by the ODCM/TSs. The inspectors reviewed anomalous results, unexpected trends, or abnormal releases identified by Ginna. The inspectors verified that these abnormal releases were evaluated and entered in the CAP and adequately resolved.

The inspectors identified radioactive effluent monitor operability issues reported by Ginna as provided in Ginna's annual radioactive effluent release reports. The inspectors reviewed these issues and verify that they were entered into the CAP and adequately resolved.

ODCM and UFSAR Review

The inspectors reviewed Ginna's UFSAR descriptions of the radioactive effluent monitoring systems, treatment systems, and effluent flow paths to identify system design features and required functions.

The inspectors reviewed changes to Ginna's ODCM made since the last inspection. The inspectors reviewed the evaluations of the changes and assesed whether they were technically justified and maintained effluent releases ALARA.

The inspectors reviewed Ginna documents to determine if Ginna had identified any non-radioactive systems that have become contaminated as documented in either an event report or the ODCM. The inspectors reviewed selected evaluations and verified that no contaminated systems had an unmonitored effluent discharge path to the environment.

Ground Water Protection Initiative Program

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

Procedures, Special Reports, and Other Documents

The inspectors reviewed CRs related to the effluent program issued since the last inspection to identify any additional focus areas for the inspection based on the scope of problems described in these reports.

The inspectors reviewed effluent program implementing procedures, including those associated with effluent sampling, effluent monitor set point determinations, and dose calculations.

To gather insights into the effectiveness of Ginna's program, the inspectors reviewed copies of Ginna's and third party (independent) evaluation reports of the effluent monitoring program since the last inspection.

b. Findings

No findings were identified.

.2 Walkdowns and Observations

a. Inspection Scope

The inspectors walked down selected components of the gaseous and liquid discharge systems to verify that equipment configuration and flow paths aligned with the descriptions in the UFSAR and to assess equipment material condition. Special attention was made to identify potential unmonitored release points, building alterations that could impact airborne or liquid effluent controls, and ventilation system leakage that communicates directly with the environment. Monitoring equipment inspected included:

Liquid Discharge Monitors

- R-16, containment fan coolers
- R-18, liquid radioactive waste
- R-19, steam generator blowdown
- R-20A/B, spent fuel heat exchangers
- R-21, turbine building floor drains
- R-22, high conductivity waste tank

Gaseous Discharge Monitors

- R-10B, R-13, R-14, plant ventilation iodine, particulate, and noble gas monitors
- R-10A, R-11, R-12, containment purge iodine, particulate, and noble gas monitors

The inspectors reviewed Ginna's surveillance test records for air cleaning equipment (i.e., fans, charcoal filters, and HEPA filters) to verify that the equipment met the TS operability criteria.

The inspectors walked down filtered ventilation systems to verify there were no degraded conditions associated with HEPA/charcoal banks, improper alignment, or system installation issues that would impact the performance or the effluent monitoring capability of the effluent system.

Ventilation systems walked down included the auxiliary building exhaust, intermediate building exhaust, and the containment purge system.

The inspectors verified that Ginna had not made any changes to their effluent release paths.

The inspectors reviewed liquid and gaseous discharge permits for routine processing and discharging waste streams. The inspectors verified that appropriate effluent treatment equipment was being used, and that radioactive liquid and gaseous waste was being processed and discharged in accordance with Ginna procedures.

b. Findings

No findings were identified.

.3 Sampling and Analyses

a. Inspection Scope

The inspectors selected two effluent abnormal discharges to verify that controls were in place to ensure that sampling was performed consistent with the TSs/ODCM and that those controls were adequate to prevent the release of unmonitored liquid and gaseous effluents.

The inspectors verified that the facility was not routinely relying on the use of compensatory sampling in lieu of adequate system maintenance based on the frequency of compensatory sampling since the last inspection.

The inspectors reviewed the results of the inter-laboratory and intra-laboratory comparison program to verify the quality of the radioactive effluent sample analyses. The inspectors also assessed whether the intra- and inter-laboratory comparison program included hard-to-detect isotopes.

.4 Instrumentation and Equipment

a. Inspection Scope

Effluent Flow Measuring Instruments

The inspectors reviewed the methodology that Ginna used to determine the effluent stack and vent flow rates to verify that the flow rates were consistent with TSs/ODCM and/or UFSAR values. The inspectors reviewed the differences between assumed and actual stack and vent flow rates to verify that they did not affect the calculated results of the public doses.

Air Cleaning Systems

The inspectors verified that surveillance test results for TS required ventilation effluent discharge systems met TS acceptance criteria.

b. Findings

No findings were identified.

.5 Dose Calculations

a. Inspection Scope

The inspectors reviewed significant changes in reported dose values compared to the previous radioactive effluent release report to evaluate the factors which may have resulted in the change.

The inspectors reviewed three radioactive liquid and three gaseous waste discharge permits to verify that the projected doses to members of the public were accurate and based on representative samples of the discharge path.

The inspectors evaluated the methods used to determine the isotopes that were included in the source term to verify all applicable radionuclides were included within detectability standards. The review included Ginna's current waste stream analyses to ensure hard-to-detect radionuclides were included in the effluent releases.

The inspectors reviewed changes in Ginna's methodology for offsite dose calculations since the last inspection to verify the changes were consistent with the ODCM and RG 1.109. The inspectors reviewed meteorological dispersion and deposition factors used in the ODCM and effluent dose calculations to verify appropriate dispersion and deposition factors were being used for public dose calculations.

The inspectors reviewed the latest land-use census to verify that changes in the local land use have been factored into the dose calculations and environmental sampling/ analysis program.

The inspectors verified that the calculated doses were within 10 CFR 50, Appendix I, and TS dose criteria. The inspectors verified that Ginna tracked cumulative doses on a monthly, quarterly, and annual basis and compared doses to the regulatory criteria.

The inspectors reviewed two records of abnormal gaseous releases to verify that the abnormal discharges were monitored by the discharge point effluent monitor. These releases were reviewed to verify that an evaluation of the discharges was made to account for the effluent releases and that public dose was assessed and included in the annual radiological effluent release report.

b. Findings

No findings were identified.

.6 Ground Water Protection Initiative

a. Inspection Scope

The inspectors reviewed monitoring results of the ground water protection initiative (GPI) to determine if Ginna had implemented its program as intended and to identify any anomalous results. For anomalous results or missed samples, the inspectors assessed whether Ginna had identified and addressed deficiencies through its CAP.

The inspectors reviewed identified leakage or spill events and the entries made into Ginna's decommissioning files. The inspectors reviewed evaluations of leaks or spills and reviewed the effectiveness of any remediation actions. The inspectors reviewed onsite contamination events which involved contamination of ground water and assessed whether the source of the leak or spill was identified and terminated.

For past spills, leaks, or unexpected liquid or gaseous discharges, the inspectors assessed whether an evaluation was performed to determine the type and amount of radioactive material that was discharged. This was accomplished by verifying that sufficient radiological surveys were performed to evaluate the extent of the contamination, and assessed whether an evaluation had been performed to include consideration of hard-to-detect radionuclides. The inspector also assessed whether Ginna completed offsite notifications as provided in its GPI implementing procedures.

The inspectors reviewed the evaluation of discharges from onsite surface water bodies that contained or potentially contained radioactivity and the potential for ground water leakage from these onsite surface water bodies. The inspectors assessed whether Ginna properly accounted for discharges from these surface water bodies as part of its effluent release reports.

The inspectors assessed whether on-site ground water sample results and a description of any significant onsite leaks/spills into ground water for each year were documented in the annual radioactive effluent release report.

b. Findings

No findings were identified.

.7 Problem Identification and Resolution

a. Inspection Scope

The inspectors assessed whether problems associated with the effluent monitoring and control program were being identified by Ginna at an appropriate threshold and were properly addressed for resolution in Ginna's CAP. In addition, the inspectors evaluated the appropriateness of the corrective actions for a selected sample of problems documented by Ginna.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

.1 Mitigating Systems Performance Index (Five samples)

a. Inspection Scope

The inspectors reviewed Ginna's submittal of the Mitigating Systems Performance Index (MSPI) for the following systems for the period of October 1, 2011, through June 30, 2012:

- Emergency Alternating Current (AC) Power
- High Pressure Injection System
- Heat Removal System
- Residual Heat Removal System
- Cooling Water Systems

To determine the accuracy of the performance indicator (PI) data reported during this period, the inspectors used definitions and guidance contained in Nuclear Energy Institute (NEI) Document 99-02, "Regulatory Assessment PI Guideline," Revision 6. The inspectors also reviewed Ginna's operator narrative logs, CRs, MSPI derivation reports, event reports, and NRC integrated inspection reports to validate the accuracy of the submittals.

b. Findings

No findings were identified.

.2 Emergency Preparedness Performance Index (Three samples)

a. Inspection Scope

The inspectors reviewed data for the following EP PIs:

- Drill and Exercise Performance
- ERO Drill Participation
- Alert and Notification System Reliability

The last NRC EP inspection at Ginna was conducted in the fourth calendar quarter of 2011. Therefore, the inspectors reviewed supporting documentation from EP drills and equipment tests from the fourth calendar quarter of 2011 through the second calendar quarter of 2012 to verify the accuracy of the reported PIs data. The review of the PIs was conducted in accordance with NRC Inspection Procedure 71151. The acceptance criteria documented in NEI 99-02 was used as reference criteria.

b. Findings

No findings were identified.

4OA2 Problem Identification and Resolution (71152)

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.

4OA3 Follow-Up of Events and Notices of Enforcement Discretion (71153 – One sample)

(Closed) Licensee Event Report (LER) 05000244/2012-001-00: Automatic Start of 'B' Emergency Diesel Generator Caused by Loss of Offsite Circuit 767 Due to Wildlife

On June 3, 2012, offsite power circuit 767 tripped offline causing the momentary loss of safeguards buses 16 and 17 and the EDG 'B' to automatically start and reenergize the buses. The cause of the loss of circuit 767 was determined to be a temporary fault caused by a raccoon. Plant equipment performed as designed and no damage occurred to any plant equipment. The event was reviewed in NRC Integrated Inspection Report 05000244/2012003. The LER was reviewed and no findings or violations of NRC requirements were identified. This LER is closed.

4OA5 Other Activities

.1 (Closed) NRC Temporary Instruction (TI) 2515/185: Followup to the Review of the Implementation of the Industry Ground Water Protection Voluntary Initiative, Revision 1

a. Inspection Scope

An NRC assessment was performed of Ginna's ground water protection program during September 10 to 13, 2012, to determine whether Ginna fully implemented this voluntary industry initiative, (NEI 07-07, "Industry GPI – Final Guidance," dated August 2007, ADAMS accession numbers ML072610036 and ML072600292). The inspectors interviewed personnel, reviewed applicable documents, and performed walkdowns of selected areas. In addition, the inspectors verified completion for the following 10 deviations to the acceptance criteria in NEI 07-07 that were reported in NRC Integrated Inspection Report 05000244/20100003:

GPI Objective 1.1 – Site Hydrology and Geology

1.1a Ginna had a new hydrology-geology study performed in August 2011.
1.1b A Ginna employee reviewed the hydrology-geology study to determine the dominant direction of ground water flow and the effect site modifications had on prevailing flow direction.
1.1d Ginna established a frequency to conduct a periodic review of the hydrology-geology study.

GPI Objective 1.2 – Site Risk Assessment

1.2a Ginna identified SSCs and work practices that could involve or could reasonably be expected to involve licensed material and for which there is a credible mechanism for licensed material to reach ground water.
1.2b Ginna identified leak detection methods for SSCs and work practices that could involve or could reasonably be expected to involve licensed material and for which there is a credible mechanism for licensed material to reach ground water.
1.2c Ginna made enhancements to leak detection systems and programs.
1.2d Ginna made enhancements to prevent leaks or spills from reaching ground water.
1.2f Ginna established a frequency to conduct periodic reviews of SSCs and work practices to assure that leak detection methods and enhancements were effective in identifying and preventing leaks and spills from reaching ground water.

GPI Objective 1.3 – On-Site Ground Water Monitoring

1.3f Ginna established a long-term program for preventive maintenance of ground water monitoring wells.
1.3g Ginna established a frequency for periodic review of the ground water monitoring program.

b. Findings and Observations

No findings were identified. The industry GPI has been fully implemented at Ginna. This completes the inspection requirements for TI 2515/185.

.2 TI 2515/187, Inspection of Near-Term Task Force Recommendation 2.3 – Flooding Walkdowns

On August 28, 2012, inspectors commenced activities to independently verify that Ginna conducted external flood protection walkdown activities using an NRC-endorsed walkdown methodology. These flooding walkdowns are being performed at all sites in response to Enclosure 4 of a letter from the NRC to licensees entitled, “Request for Information Pursuant to Title 10 of the *Code of Federal Regulations* 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident,” dated March 12, 2012, (ADAMS Accession No. ML12053A340). The results of this TI will be documented in a future inspection report.

.3 TI 2515/188, Inspection of Near-Term Task Force Recommendation 2.3 – Seismic Walkdowns

On July 31, 2012, inspectors commenced activities to independently verify that Ginna conducted seismic walkdown activities using an NRC-endorsed walkdown methodology. These seismic walkdowns are being performed at all sites in response to Enclosure 3 of a letter from the NRC to licensees entitled, "Request for Information Pursuant to Title 10 of the *Code of Federal Regulations* 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident," dated March 12, 2012, (ADAMS Accession No. ML12053A340). The results of this TI will be documented in a future inspection report

4OA6 Meetings, Including Exit

Exit Meeting

On October 4, 2012, the inspectors presented the inspection results to Mr. Edwin D. Dean III and other members of the Ginna staff. The inspectors verified that no propriety information was retained by the inspectors or documented in this report.

ATTACHMENT: SUPPLEMENTARY INFORMATION

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
D. Dean	General Supervisor, Operations Support
E. Dean III	Plant General Manager
S. Doty	Manager, Maintenance
M. Geckle	Manager, Training
T. Harding	Director, Licensing
K. McLaughlin	General Supervisor, Shift Operations
T. Mogren	Manager, Engineering Services
T. Paglia	Manager, Operations
S. Preston	Director, Performance Improvement Unit
J. Scalzo	Director, Emergency Preparedness
S. Snowden	General Supervisor, Chemistry
S. Wihlen	Manager, Integrated Work Management

LIST OF ITEMS OPENED, CLOSED, DISCUSSED, AND UPDATED

Closed

05000244/2012-001-00	LER	Automatic Start of 'B' Emergency Diesel Generator Caused by Loss of Offsite Circuit 767 Due to Wildlife (Section 4OA3)

LIST OF DOCUMENTS REVIEWED

Section 1R04: Equipment Alignment

Procedures
OPG-PROTECTED-EQUIPMENT, Operations Protected Equipment Program, Revision 00300
S-9, SFP Cooling System Operation, Revision 00403
STP-O-23A, Containment Isolation Valve Test Connection/Boundary Control, Revision 00201
STP-O-30.7, Containment Isolation Valve Verification, Revision 00100
STP-O-30.11, EDG 'B' Pre-Startup Alignment, Revision 00401

Drawings
33013-1234, Condensate Storage Piping and Instrument Drawing (P&ID), Revision 041
33013-1237, AFW P&ID, Revision 060
33013-1239, Diesel Generator 'B' P&ID, Sheet 2, Revision 022
33013-1248, Auxiliary Cooling SFP Cooling P&ID, Revision 038
33013-1607, Fire Protection System, Yard Loop P&ID, Revision 039
33013-1991, Fire Protection Fire Service Water Auxiliary Building, Intermediate Building, and Containment Building P&ID, Revision 021

Condition Reports
CR-2012-1548
CR-2012-5208
CR-2012-6470

Work Order
WO C91314349

Section 1R05: Fire Protection

Document
R.E. Ginna Fire Protection Program, Revision 6.1

Procedures
FRP-5.0, Auxiliary Building Intermediate Floor, Revision 00803
FRP-16.0, Air Handling Room, Revision 00701
FRP-17.0, Battery Room 'A', Revision 006
FRP-18.0, Battery Room 'B', Revision 005
FRP-25.0, Diesel Generator Room 'B' and Vault, Revision 00700
FRP-31.0, Screen House Operating Floor, Revision 007

Drawings
33013-2540, Fire Response Plan General Plant Drawing Index and Symbol Legend, Revision 007
33013-2544, Fire Response Plan Turbine Building Plan – Basement Floor, Elevation 253 feet 6 inches, Revision 012
33013-2546, Fire Response Plan Auxiliary Building Plan – Intermediate Floor, Elevation 253 feet 0 inches, Revision 004
33013-2559, Fire Response Plan Control Building Plan Views, Revision 013
33013-2567, Fire Response Plan Control Building Sections, Revision 003

33013-2569, Fire Response Plan Turbine Building Section 1-1, Revision 000
33013-2571, Fire Response Plan Screen House Plan – Above Elevation 253 feet 6 inches, Revision 006

Condition Reports
CR-2012-5424
CR-2012-5425
CR-2012-5438

Section 1R06: Flood Protection Measures

Procedure
CNG-AM-1.01-1029, Medium Voltage Cable Program, Revision 00000

Drawing
33013-0014, 34.5KV Duct and Control Duct Plan and Profile, Revision K

Condition Reports
CR-2012-0164
CR-2012-1729
CR-2012-2252
CR-2012-3037
CR-2012-3163
CR-2012-6669

Work Order
WO C91812746

Section 1R11: Licensed Operator Requalification Program and Licensed Operator Performance

Document
ES1213-14, Constellation Energy Nuclear Group R.E. Ginna Nuclear Power Plant Examination Scenario, SBLOCA, Revision 02

Procedures
CNG-OP-1.01-1000, Conduct of Operations, Revision 00700
CNG-OP-3.01-1000, Reactivity Management, Revision 00701
OTG-2.2, Simulator Examination Instructions, Revision 43
P-7, Operations Control Room Operating Instructions, Revision 01501
STP-O-16QT, AFW Turbine Pump – Quarterly, Revision 00701
STP-O-36-COMP-D, Standby AFW Pump 'D' – Comprehensive Test, Revision 00500

Drawing
33013-1238, Standby AFW P&ID, Revision 026

Section 1R12: Maintenance Effectiveness

Documents
RPS Health Report, July 1 to September 30, 2012
RPS Maintenance Rule Functional Failure Evaluations, September 19, 2012
RPS Maintenance Rule Status/Goal Record, September 19, 2012

Procedure
CNG-AM-1.01-1023, Maintenance Rule Program, Revision 00200

Drawing
33013-1231, Main Steam P&ID, Revision 040

Condition Reports

CR-2006-4753	CR-2010-7622	CR-2011-7338
CR-2007-3584	CR-2010-7906	CR-2011-7896
CR-2009-0819	CR-2011-1525	CR-2011-7902
CR-2009-9239	CR-2011-2427	CR-2011-8092
CR-2010-1507	CR-2011-2861	CR-2011-8188
CR-2010-2398	CR-2011-2895	CR-2011-8395
CR-2010-2512	CR-2011-3369	CR-2011-8499
CR-2010-5276	CR-2011-3860	CR-2011-8685
CR-2010-5538	CR-2011-4262	CR-2012-2666
CR-2010-6018	CR-2011-4335	CR-2012-3168
CR-2010-7106	CR-2011-4871	

Section 1R13: Maintenance Risk Assessments and Emergent Work Control

Procedures
CNG-OP-4.01-1000, Integrated Risk Management, Revision 01100
CPI-PRESS-420, Calibration of RCS Pressure Channel 420 Rack Instrumentation, Revision 01000
OPG-PROTECTED-EQUIPMENT, Operations Protected Equipment Program, Revision 00300
STP-O-6.3.1, Power Range Nuclear Instrumentation System Channel 41, Revision 00103

Drawing
03202-0102, 125 VDC Power Distribution System One-Line Diagram, Revision 020

Condition Reports
CR-2012-4477
CR-2012-4695

Work Orders
WO C91321383
WO C91302703

Section 1R15: Operability Evaluations

Documents

ECP-12-000447, ESR-12-0135 ESR (000) – Update DA-EE-93-006-08, Uncertainty Analysis for UV Relays for 480 Volt Safeguards Buses, for the Degraded Voltage Relays (Type 27) Using Monte Carlo Method and Change Degraded Voltage Relay Set Points Accordingly, Revision 0000

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PCR-12-03603, Change Degraded Voltage Relay Set Points and Update References Per Attached, Revision 1.0

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Procedures

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CNG-FES-015, Design Change Technical Evaluation, Revision 00005, Form 7

CNG-FES-015, Installation and Testing Instructions, Revision 00005, Form 9

CNG-OP-1.01-1002, Conduct of Operability Determinations/Functionality Assessments, Revision 00200

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Condition Reports

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CR-2012-4514
CR-2012-5429
CR-2012-5448
CR-2012-5599
CR-2012-5741
CR-2012-6004

Section 1R18: Plant Modifications

Document

ECP-12-000634, ESR-12-0210 ESR (000) - Perform Temp Change to Spray Down Exterior of Containment Dome, Revision 0000

Procedure

CNG-CM-1.01-1004, Temporary Plant Configuration Change Process, Revision 00201

Drawing

33013-1885, Circulating Water P&ID, Revision 014, Sheet 1

Condition Report

CR-2012-4681

Work Order

WO C91937810

Section 1R19: Post-Maintenance Testing

Procedures
ER-ELEC.3, Emergency Offsite Back Feed via Main and Unit Transformers, Revision 00702
O-6.9.2, Establishing and/or Transferring Offsite Power to Bus 12A/12B, Revision 02101
S-9, SFP Cooling System Operation, Revision 00403
STP-I-9.1.16, UV Protection – 480 Volt Safeguard Bus 16, Revision 00400
STP-O-3QB, CS Pump 'B' Quarterly Test, Revision 00300
STP-O-12.1, EDG 'A', Revision 01301
STP-O-12.2, EDG 'B', Revision 01101
STP-O-31C, Charging Pump 'C' Inservice Test, Revision 00400
STP-O-33A, SFP Pump 'A', Revision 00300
STP-O-36-COMP-C, Standby AFW Pump 'C' – Comprehensive Test, Revision 00600
STP-O-36-COMP-D, Standby AFW Pump 'D' – Comprehensive Test, Revision 00500

Drawings
33013-1238, Standby AFW P&ID, Revision 026
33013-1261, CS Safety Injected P&ID, Revision 042
33309-0401, Station: 13A Interconnection Diagram, Revision O

Condition Reports
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CR-2012-5100
CR-2012-5106
CR-2012-5124
CR-2012-5138
CR-2012-5315

Work Orders
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WO C91302416
WO C91302948
WO C91304205
WO C91305504

Section 1R22: Surveillance Testing

Procedures
CPI-BISTABLES-N44, Calibration of Nuclear Instrumentation System Power Range N44 Bistables and Indicators, Revision 02201
STP-I-32A, Reactor Trip Breaker Testing Train 'A', Revision 00100
STP-I-32B, Reactor Trip Breaker Testing Train 'B', Revision 00103
STP-O-2.8Q, CCW Pump Quarterly Test, Revision 00600
STP-O-6.3.4, Power Range Instrumentation System Channel 44, Revision 00103
STP-O-16QT, AFW Turbine Pump – Quarterly, Revision 00701

Condition Reports

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CR-2012-5196	CR-2012-5541	CR-2012-5560
CR-2012-5285	CR-2012-5542	
CR-2012-5497	CR-2012-5543	

Work Orders
WO C91309133
WO C91301144
WO C91312506
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Section 1EP2: Alert and Notification System Evaluation

Documents
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ECP-11-000528, Replacing Penetrator Sirens with Tempest Sirens
ECP-2009-0125, Report on the May 7, 2009, Activation of the Alert and Notification System Siren System
Constellation Letter to FEMA, Regarding Modifications to the Alert and Notification System Made Since November 1984 Design Report Submittal (dated July 24, 2006)
FEMA letter to Constellation Responding to Constellation July 24, 2006, Letter (dated September 8, 2006)
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R1110900, An Off-Site EP Prompt Alert and Notification System for the R.E. Ginna Nuclear Power Station, dated November 1984

Procedures
EPIP 4-8, Testing of the Ginna Sirens from the TSC, Revision 01200
EPIP 4-9, Activation of Ginna Emergency Sirens from the TSC, Revision 00800
EPIP 4-10, Silent Testing of the Ginna Sirens from the County Activation Points, Revision 01300
EPIP 4-11, Activation of the Ginna Sirens from the County Activation Points, Revision 00700

Drawing
10904-0691, Alert and Notification System

Condition Reports
ANS-Related CRs, January 2011 – August 2012

Section 1EP3: Emergency Response Organization Staffing and Augmentation System

Documents
2011-12 Call-Out Drill Records
Ginna Station Nuclear Emergency Response Plan, Revision 03200

Procedures
EPG-2, ERO, Revision 08600
EPIP 1-5, Notifications, Revision 08000
EPIP 3-1, EOF Activation, Revision 03500

EPIP 5-7 Emergency Organization, Revision 06400
EPIP-5-9, Testing the Off Hour Notification of the Response Organization and Quarterly Telephone Number Checks, Revision 02100
EPIP 5-11, Nuclear Emergency Response Plan Training Program, Revision 00800

Condition Reports
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Section 1EP5: Maintenance of Emergency Preparedness Weaknesses

Documents
GNP-EP-DR-012-01, Ginna EP Drill Report
GNP-EP-DR-012-02, Ginna EP Drill Report

Procedures
CNG-EP-1.01-1004, 10 CFR 50.54(q) Effectiveness Review, Revision 00100
CNG-NL-1.01-1011, 10 CFR 50.59/10 CFR 72.48 Applicability Determinations, Screenings and Evaluations, Revision 00200
IP-EPP-10, Control of Emergency Response Facilities and Equipment, Revision 00301

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QA-11-02-G, Quality and Performance Assessment Report
QA-11-03-G, Quality and Performance Assessment Report
QA-12-1P-G, Quality and Performance Assessment Report
SA-2012-000094, SA-2012-000099, SA-2012-000103, SA-2012-000105, and SA-2012-000157

Section 2RS3: In-Plant Airborne Radioactivity Control and Mitigation

Procedures
CNG-RP-1.01-3001, Alpha Monitoring and Control, Revision 00000
CPI-MON-R45, Calibration of Control Room Ventilation Monitor R-45, Revision 00901
CPI-MON-R46, Calibration of Control Room Ventilation Monitor R-46, Revision 00804
DA-EE-2001-013, Control Room Radiation Monitors Analytical Limit Calculation, Revision 001
P-9, Radiation Monitoring System (RMS), Revision 09809
RP-4102, Maintenance and Care of Respirators, Revision 00002
RP-JC-AIRSAMPLE, Operation of Portable Air Sampling Equipment, Revision 01800
RP-RES-Q-FIT, Fit Testing of Personnel Using Respirators, Revision 02102
RP-RES-U-HEPA, Testing of Portable HEPA Ventilation Units, Revision 00500
RP-RES-U-PAPR, Use of Power Air Purifying Respirators, Revision 00401
RP-RES-U-SEL, Selection of Respiratory Protection Equipment, Revision 00700
SC-3.15.7, Inspection of SCBA Scott 4.5, Revision 02705
STP-E-47.3A, CREATS Train 'A' Filter Inspection and Efficiency Testing, Revision 00100
STP-E-47.3B, CREATS Train 'B' Filter Inspection and Efficiency Testing, Revision 00004
STP-E-47.3C, Control Room Envelope Trace Gas In-Leakage Test, Revision 00100
STP-O-17.4, Control Room Radiation Monitor R-45 and R-46 Operability Test, Revision 00001

STP-O-17.7AM, CREATS Filtration Train 'A' Monthly Surveillance Test, Revision 00201
STP-O-17.7BM, CREATS Filtration Train 'B' Monthly Surveillance Test, Revision 00102
T-31.10, Check of Toxic Gas Monitoring System and Radiation Monitors R-45 and R-46 for Control Room Heating, Ventilation, and Air Conditioning System, Revision 03002

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CR-2011-2374	CR-2011-7442	CR-2012-4685
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Nuclear Oversight Audit and Field Observations
Audit RPP-11-01-G, Radiation Protection Program
SA-2010-000167, Self Assessment, Respiratory Protection Program

Miscellaneous Reports
AMS-4 Daily Operational Check Forms
Breathing Air Compressor Air Quality Data
Lesson Plan: Scott Air Pak 4.5
Respiratory and SCBA User Qualification Status
SCBA Regulator, Alarms, Air Tank Test Records, and Monthly Inspection Records
CREATS Health Report
Technician Training/Qualification Reports for Repairing and Testing Scott Respirators

Section 2RS4: Occupational Dose Assessment

Procedures
CNG-RP-1.01-2002, Effective Dose Equivalent – External, Revision 00000
RP-JC-ALARM-PORTAL, Response to Portal Monitor Alarms, Revision 00904
RP-JC-HOTPART-ASSESS, Hot Particle Dose Assessment, Revision 01001
RP-WBC-EVAL, WB Count Evaluation, Revision 02100

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CR-2012-3561

Nuclear Oversight Audit and Field Observations
Audit RPP-11-01-G, Radiation Protection Program
SA-2011-000166, Self Assessment, Alpha Monitoring
SA-2011-000190, Self Assessment, Bioassay Sample Collection, Handling, and Analysis
SA-2012-000040, Self Assessment, Dose Assessment

Miscellaneous Reports
Calibration Record for AccuScan II, WB Counter
Minimum Detectable Activity Study for PM-7 and PCM-1C Portal Monitors
Pre-Use WB Counter Operability Checks

Section 2RS5: Radiation Monitoring Instrumentation

Procedures
CH-RETS-RMS-INOP, Actions for RMS Monitor Alarm or Inoperability, Revision 02100

RP-INS-C-AMS4, Calibration of the Eberline AMS-4 Monitor, Revision 00801
RP-INS-O-RADCAL2026C, Radcal Model 2026C Electrometer Operation, Revision 00200
RP-INS-C-REMBALL, Calibration of Neutron Survey Instruments, Revision 00802
RP-JC-AMS4, Routine Operation of the Eberline AMS-4, Revision 01203
RP-SHEPHERD-142-10-OPS, Operation of Model 142-10 Panoramic Irradiator, Revision 00000
RP-TLD-IRRAD-CAL&QC, TLD-OSLD Irradiation for Calibration or Quality Control Checks, Revision 00500
RP-WBC-BLIND, WB Counter Quality Control Blind, Revision 005

Condition Reports

CR-2011-0253	CR-2011-3403	CR-2012-2416
CR-2011-0254	CR-2011-6810	CR-2012-2153
CR-2011-0660	CR-2011-7033	CR-2012-4066
CR-2011-2085	CR-2012-1506	CR-2012-4110

Calibration Records Reviewed for Following Instruments
AMP-50, Serial Number (S/N) 0907-066
AMP-100, S/N 5007-138
AMS-4, S/Ns 40, 41, 42
ARGOS 5AB, S/Ns 1012-330, 331, 332, 250, 251, 252, 253, 254
ASP-1, S/N 3613/4
ASP-2, S/Ns 173/2, 244/7, 238/1, 256/5
Electronic Dosimeters, S/Ns19633, 19787, 18626, 18573, 19595, 23003, 19306
Gil-Air 5 Samplers, S/Ns 11517, 13029, 13030, 13032, 13033, 13034, 13039, 13040
Radeco Sampler (H809C/H809V32), S/Ns 2192, 2193, 2425, 2427, 4284
Radeco Sampler (HD-29A), S/Ns 2599, 3954, 4035
RO-20, S/Ns 2754, 2829, 122, 193, 521, 2561
SAC-4, S/N 1441
SAM-11, S/Ns 325, 400
SAM-12, S/Ns 12043, 12040
Telepole, S/Ns 6609-137, 6609-107, 6609-170
Teleprobe, S/Ns 564, 656, 627

Nuclear Oversight Audit and Field Observation
Audit RPP-11-01-G, Radiation Protection Program
SA-2012-000042, Self Assessment, Radiation Protection Instrumentation

Section 2RS6: Radioactive Gaseous and Liquid Effluent Treatment

Procedures
CH-ENV-LAND-USE, Land Use Census, Revision 00402
CH-QC-INTERLAB, Chemistry Quality Control Inter-Laboratory Assessment Guidelines, Revision 00400
CH-RETS-RMS-INOP, Actions for RMS Monitor Alarm or Inoperability, Revision 02100
CHA-RETS-REP-ANNUAL, Preparation of Radioactive Effluent Release Report, Revision 01100
CNG-EV-1.01-1001, Radiological Ground Water Protection Program, Revision 00100
CPI-MON-R10A, Calibration of RMS Channel R-10A Containment Iodine, Revision 02000
CPI-MON-R11, Calibration of RMS Channel R-11 Containment Particulate, Revision 02000
CPI-MON-R12, Calibration of RMS Channel R-12 Containment Gas, Revision 01900
CPI-MON-R15, Calibration of RMS Air Ejector Monitor R-15, Revision 01400

CPI-MON-R15/R20, Calibration of RMS Rate Meter Drawers R-15 thru R-20B, Revision 01801
CPI-MON-R18, Calibration of RMS Liquid Waste Disposal Monitor R-18, Revision 01203
IP-RPP-8, 10 CFR 50.75(g) Record Keeping, Revision 00100
P-9, RMS, Revision 09810
PT-37.7, Auxiliary Building Exhaust Fan 'G' Mass Air Flow Check, Revision 01600
PT-47.2, Containment Purge Exhaust Ventilation Units 'A' and 'B' HEPA and Charcoal Filter Efficiency Test, Revision 00900
STP-E-38.1, Visual Inspection of Charcoal Absorber Cell Assemblies, Revision 00001
STP-E-38.2, Visual Inspection of HEPA Filter Assemblies, Revision 00002
STP-E-47.1, Auxiliary Building Exhaust System HEPA Filtration Unit Efficiency Test, Revision 00100
STP-E-47.2, Containment Purge Exhaust Ventilation Units 'A' and 'B' HEPA and Charcoal Filter Efficiency Tests, Revision 00000
STP-E-47.4, Auxiliary Building Ventilation Unit – Charcoal Filtration System Efficiency Test, Revision 00001
STP-E-47.7, Auxiliary Building Exhaust Fan 'G' HEPA and Charcoal Filter Efficiency Test, Revision 00001
STP-O-17.2, Process Radiation Monitors R-11 thru R-18, R20 thru R-22, and Iodine Monitors R-10A and R-10B Source Check, Alarm Set Point Verification, and Functional Test, Revision 00100
STP-O-17.5M, Source Check of High Range Effluent Monitors RM-12A, RM-14A, R-31, R-32, R-47, R-48, Revision 00201

Drawings
33013-1870, Auxiliary/Intermediate Buildings HVAC Systems Volume Control Tank Exhaust Auxiliary Building Charcoal Filter Auxiliary Building 1G Filter P&ID, Revision 019
33013-1871, Auxiliary/Intermediate Buildings HVAC Systems Intermediate Building Exhaust System Spent Fuel and Decon Pit Exhaust System, Main Auxiliary Building Exhaust System PI&D, Revision 025

Condition Reports
CR-2011-2626
CR-2011-3654
CR-2011-7962
CR-2012-4715
CR-2012-6157

Discharge Permits
Gas Releases
G-2011-032, Decay Tank Release
G-2011-041, Containment Building Release
G-2012-039, Containment Depressurization
G-2012-040, Gas Decay Tank 'D'
G-2012-044, Turbine-Driven AFW Pump Operation

Liquid Releases
L-2012-082, High Conductivity Waste Tank
L-2012-083, Monitor Tank 'A'
L-2012-084, Monitor Tank 'A'

Calibration Records Reviewed for Following Instruments
Gaseous Effluent Radiation Monitors
Containment Purge, Iodine (R-10A)
Containment Ventilation: Particulate (R-11), Noble Gas (R-12)
Plant Ventilation: Particulate (R-13), Iodine (R-10B), Noble Gas (R-14)

Liquid Effluent Radiation Monitors
R-16, Containment Fan Coolers
R-18, Liquid Radwaste
R-19, Steam Generator Blowdown
R-20A/B, SFP Heat Exchanger
R-21, Turbine Building Floor Drains
R-22, High Conductivity Waste

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CHE-11-01-G, Chemistry Program Audit, April 2012
QA-2012-0010 5.57.1, Chemistry ODCM Effectiveness

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Annual Radioactive Effluent Release Report for 2010 and 2011
Liquid and Gaseous Effluent Dose Monthly, Quarterly, and Annual Dose Summaries for 2012
ODCM, Revision 27
RMS (43D) Health Report, 3rd Quarter 2012
Results of Radiochemistry Cross Check Program

Section 4OA1: Performance Indicator Verification

Documents
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DEP PI Data, October 2011 – June 2012
ERO Drill Participation PI data, October 2011 – June 2012
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NEI 99-02, Regulatory Assessment PI Guideline, Revision 6

Procedure
IP-EPP-9, ERO PIs, Revision 00000

Condition Reports
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CR-2012-4021

Section 4OA5: Other Activities

Procedures
CH-261, Collection and Analysis of Ground Water Samples, Revision 00502
CNG-EV-1.01-1001, Radiological Ground Water Protection Program, Revision 00100

Condition Reports

CR-2010-1438	CR-2010-1447	CR-2012-5005
CR-2010-1439	CR-2012-5002	CR-2012-5089
CR-2010-1440	CR-2012-5003	CR-2012-5136
CR-2010-1441	CR-2012-5004	CR-2012-5148

Self-Assessment and Quality Performance Assessment Audit
QA-2012-0010 5.571, Chemistry ODCM Effectiveness
Review of the Implementation of the Industry Voluntary GPI
SA-2012-000111, Annual Assessment of Radiological Ground Water Protection Program

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
CREATS	control room emergency air treatment system
CS	containment spray
ECP	engineering change package
EDG	emergency diesel generator
EP	emergency preparedness
ERF	emergency response facility
ERO	emergency response organization
FEMA	Federal Emergency Management Agency
GPI	ground water protection initiative
HEPA	high efficiency particulate air
LER	licensee event report
MSPI	mitigating systems performance index
NEI	Nuclear Energy Institute
NRC	Nuclear Regulatory Commission
ODCM	offsite dose calculation manual
OOS	out of service
P&ID	piping and instrument drawing
PI	performance indicator
PMT	post-maintenance testing
RCA	radiological controlled area
RCS	reactor coolant system
RG	regulatory guide
RMS	radiation monitoring system
RPS	reactor protection system
RWP	radiation work permit
SCBA	self-contained breathing apparatus
SFP	spent fuel pool
S/N	serial number
SSC	structure, system, and component
TI	temporary instruction
TS	technical specification
TSC	technical support center
UFSAR	Updated Final Safety Analysis Report
UV	undervoltage
WB	whole body
WO	work order