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

February 3, 2010

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

SUBJECT: R.E. GINNA NUCLEAR POWER PLANT - NRC INTEGRATED INSPECTION REPORT 05000244/2009005

Dear Mr. Carlin:

On December 31, 2009, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your R.E. Ginna Nuclear Power Plant. The enclosed integrated inspection report documents the inspection results, which were discussed on January 20, 2010, with you and other members of your staff.

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

This report documents two NRC-identified and one self-revealing findings of very low safety significance (Green). These findings were determined to be violations of NRC requirements. Additionally, one licensee-identified violation, which was determined to be of very low safety significance, is listed in this report. However, because of their very low safety significance, and because they were entered into your corrective action program, the NRC is treating these findings as non-cited violations (NCVs) consistent with Section VI.A.1 of the NRC Enforcement Policy. If you contest any 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 characterization of any 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. The information you provide will be considered in accordance with Inspection Manual Chapter 0305.

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,

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

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

Enclosure: Inspection Report No. 05000244/2009005
w/ Attachment: Supplemental Information

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Sincerely,

/RA/

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

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No.:	50-244
License No.:	DPR-18
Report No.:	05000244/2009005
Licensee:	Constellation Energy Nuclear Group, LLC
Facility:	R.E. Ginna Nuclear Power Plant, LLC
Location:	Ontario, New York
Dates:	October 1, 2009 through December 31, 2009
Inspectors:	K, Kolaczyk, Senior Resident Inspector L. Casey, Resident Inspector P. McKenna, Reactor Inspector
Approved by:	Glenn T. Dentel, Chief Projects Branch 1 Division of Reactor Projects

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SUMMARY OF FINDINGS

IR 05000244/2009005; 10/01/2009 – 12/31/2009; R.E. Ginna Nuclear Power Plant (Ginna), Maintenance Effectiveness, Refueling and Other Outage Activities, and Surveillance Testing.

The report covered a three month period of inspection by resident inspectors and a region-based inspector. Three Green non-cited violations (NCVs) were identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). The cross-cutting aspect for one finding was determined using IMC 0305, "Operating Reactor Assessment Program." 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 an NCV of 10 CFR 50.65, "Maintenance Rule (MR)," paragraph (a)(2), when Ginna did not demonstrate that the performance of the diesel-driven service air compressor was being effectively controlled through preventive maintenance. Specifically, Ginna did not fully evaluate whether failures of the diesel-driven air compressor that occurred in October 2006 justified monitoring under paragraph (a)(1) of the Maintenance Rule (MR). Ginna reassessed the October events and determined that both events were functional failures and one event was a maintenance preventable functional failure. Ginna subsequently determined that the air compressor should have been placed in category (a)(1) of the MR as specified by 10 CFR 50.65. Ginna's corrective actions included modifying procedures to identify the operations department as the responsible department for maintaining fuel level in the compressor, establishing a monitoring frequency for fuel level, and providing direction for refueling the compressor. Additional corrective actions included documenting and monitoring the compressor run times to ensure the fuel filter replacement frequency of 250 hours is not exceeded.

  This finding is more than minor because it is associated with the Mitigating Systems Cornerstone and 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 the finding was of very low safety significance (Green) using Inspection Manual Chapter (IMC) 0609, Appendix A, "Determining the Significance of Reactor Inspection Findings for At-Power Situations." Specifically, the finding was not a design or qualification deficiency, did not represent a loss of safety function, and did not screen as potentially risk significant due to seismic, flooding, or severe weather. Since this performance deficiency occurred in 2006 and does not reflect current performance, no cross-cutting aspect was assigned. (Section 1R12)

- Green. The inspectors identified an NCV of Technical Specification (TS) 5.4.1.a, "Procedures," when Ginna personnel did not correctly implement procedure A-3.1, "Containment Storage and Closeout Inspection," Revision 04200, and restrain or remove loose debris from containment prior to entering Mode 4, and verify that process instrumentation tubing, sample tubing, and their supports were properly clamped and were not leaking or bent. On September 30, 2009, during a walkdown of containment with the plant in Mode 3, the inspectors identified a large amount of loose debris that had not been removed prior to entering Mode 4. In addition, the inspectors identified several examples where process instrumentation tubing was not properly supported. Ginna implemented several corrective actions including removing the debris and either repairing the instrument tubing that was degraded or performing an engineering analysis of the degraded condition and determining it did not require repair prior to plant startup. A subsequent Ginna engineering analysis determined that the debris left in containment and the missing tubing supports did not adversely impact operability of the safety-related systems or components in containment. These issues were entered into Ginna's corrective action program (CAP) for resolution.

  This finding is more than minor because it is associated with the Mitigating Systems Cornerstone and 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 that the finding was of very low safety significance (Green) because it was not a design or qualification deficiency, did not represent a loss of safety function, and did not screen as potentially risk significant due to seismic, flooding, or severe weather. This finding has a cross-cutting aspect in the area of human performance because Ginna did not adhere to the procedural requirements specified in A-3.1 (H.4.b per IMC 0305). (Section 1R20)

Cornerstone: Barrier Integrity

- Green. A self-revealing NCV of 10 CFR 50, Appendix B, Criterion III, "Design Control," was identified for Ginna's failure to select a suitable relay in the design of control room emergency air treatment system (CREATS) actuation and sequencing logic which led to the inoperability of both trains of CREATS fans. On September 16, 2009, while operating in Mode 5, Ginna completed emergency diesel generator load and safeguard sequence testing. This testing included placing the CREATS in service followed by initiation of a simulated safety injection (SI) signal concurrent with a loss of offsite power (LOOP) condition. Both trains of CREATS fan breakers tripped and did not sequence on as required. The CREATS fan breakers tripped on over-current due to a design deficiency that incorrectly utilized both alternating current (AC)-powered relays and direct current (DC)-powered relays in the CREATS SI and LOOP actuation logic circuitry. Ginna's corrective actions included changing the AC-powered relays to DC-powered relays to eliminate the design deficiency.

This finding is more than minor because it affected the design control attribute of the Barrier Integrity Cornerstone objective of maintaining radiological barrier functionality in the control room. The inspectors determined that the finding was of very low safety significance (Green) using IMC 0609, Appendix A, "Determining the Significance of Reactor Inspection Findings for At-Power Situations." Specifically, the finding only represented a degradation of the radiological barrier function provided for the control room. Since the CREATS was designed and implemented in 2004, this finding does not reflect current licensee performance and there is no cross-cutting aspect. (Section 1R22)

Other Findings

- A violation of very low safety significance, which was identified by Ginna, has been reviewed by the inspectors. Corrective actions taken or planned by Ginna have been entered into Ginna's CAP. This violation and corrective actions are listed in Section 4OA7 of this report.

REPORTS DETAILS

Summary of Plant Status

The R.E. Ginna Nuclear Power Plant (Ginna) began the inspection period in Mode 3, hot shutdown, following completion of a scheduled refueling outage (RFO). On October 2, 2009, the plant was taken critical, and the turbine was synchronized to the grid on October 3. Full rated thermal power was reached on October 7. On December 30, an automatic reactor trip occurred when the main turbine tripped due to a loss of pressure in the plant turbine electrohydraulic control system. The plant remained in Mode 3 for the remainder of the report period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection (71111.01 – Four samples)

.1 Cold Weather Preparations

a. Inspection Scope

The inspectors performed a review of the cold weather preparation program and implementing procedures at Ginna before the arrival of sustained periods of cold weather. The review assessed the effectiveness of Ginna's cold weather readiness program, to ensure systems would remain functional and available during cold weather conditions as specified by technical specifications (TSs). The inspectors conducted discussions with control room operators to understand protective measures applicable to these systems. The inspectors performed field walkdowns of the systems per Ginna procedure O-22, "Cold Weather Walkdown Procedure," Revision 00600, to evaluate the material condition and functionality of the freeze protection equipment (e.g., heat tracing, instrumentation, and ventilation).

b. Findings

No findings of significance were identified.

.2 External Flood Protection Measures

a. Inspection Scope

The inspectors performed a review of the external flood preparation and mitigation program. To perform this review, the inspectors toured the screen house, turbine building, and exterior yard area located north of the turbine building. The inspectors used procedure ER-SC.2, "High Water (Flood) Plan," Revision 00702, and the updated final safety analysis report (UFSAR) as reference material. The purpose of the

walkdown was to verify Ginna personnel could implement procedures that were developed to mitigate the consequences of an external flood condition and to verify flood protection equipment was installed in accordance with the UFSAR.

b. Findings

No findings of significance were identified.

.3 Impending Adverse Weather

a. Inspection Scope

During the weeks of December 13 and December 27, 2009, Ginna experienced unusually cold temperatures with nighttime temperatures below 10 degrees and wind conditions in excess of 30 miles per hour. During this time, the inspectors toured areas of the plant that contained equipment and systems that could be adversely affected by cold temperatures. Areas of focus were the intake structure, auxiliary building, and the standby auxiliary feedwater (AFW) pump room. During the tours, the inspectors verified that temperatures in those areas did not decrease below the values outlined in the plant UFSAR.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (71111.04)

.1 Partial System Walkdown (71111.04Q – One sample)

a. Inspection Scope

The inspectors reviewed the alignment of system valves and electrical breakers to ensure proper in-service or standby configurations as described in plant procedures, piping and instrument drawings (P&IDs), and the UFSAR. During the walkdown, the inspectors evaluated the material condition and general housekeeping of the system and adjacent areas. The inspectors also verified that operators were following plant TSs, and system operating procedures. The inspectors performed a partial walkdown of the following system:

- Offsite power supply electrical lineup while the 767 offsite power line was out of service for planned maintenance.

b. Findings

No findings of significance were identified.

.2 Complete Walkdown (71111.04S – One sample)

a. Inspection Scope

The inspectors performed a detailed walkdown of the auxiliary building ventilation (ABV) system to identify any discrepancies between the existing equipment lineup and the specified lineup. The ABV system was chosen because of its risk-significant function to filter airborne radioactive particles from the area of the spent fuel pool following a fuel handling accident. The inspectors verified proper system alignment as specified by TSs, UFSAR, plant procedures, and P&IDs. Documentation associated with open maintenance requests and design issues were reviewed and included items tracked by plant engineering to assess their collective impact on system operation. In addition, the inspectors reviewed the associated corrective action database to verify that any equipment alignment problems were being identified and appropriately resolved.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05Q – Four samples)

a. Inspection Scope

The inspectors performed walkdowns of fire areas to determine if there was adequate control of transient combustibles and ignition sources. The material condition of fire protection systems, equipment and features, and the material condition of fire barriers were inspected against Ginna's licensing basis. In addition, the passive fire protection features were inspected including the ventilation system fire dampers, structural steel fire proofing, and electrical penetration seals. The following plant areas were inspected:

- Auxiliary Building Mezzanine Level (Fire Zone ABM);
- Auxiliary Building Basement (Fire Zone ABB);
- Intermediate Building Subbasement (Fire Zone IB-0); and
- Intermediate Building South (Fire Zone IBS-1).

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures (71111.06 – Two samples)

a. Inspection Scope

On October 20, 2009, the inspectors evaluated Ginna's internal flood protection measures for the diesel generator rooms. These areas were selected given their risk significance regarding internal flooding events as outlined in Ginna's probabilistic risk analysis (PRA). To perform this evaluation, the inspectors reviewed the UFSAR, PRA,

P&IDs, work orders (WOs), condition reports (CRs), the site repetitive task database, and toured the 'A' and 'B' diesel generator rooms.

Ginna does not have safety-related cables located in underground bunkers/vaults accessible for inspection. Therefore, there was no opportunity to review the condition of these cables during this report period.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program (71111.11Q – One sample)

a. Inspection Scope

On October 27, 2009, the inspectors observed a licensed operator simulator scenario, ES1213-05, "Small Break Loss of Coolant Accident," Revision 8. The inspectors reviewed the critical tasks associated with the scenario, observed the operators' performance, and observed the post-evaluation critique. The inspectors also reviewed and verified compliance with Ginna procedure OTG-2.2, "Simulator Examination Instructions," Revision 43.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness (71111.12Q – Three samples)

a. Inspection Scope

The inspectors evaluated work practices and follow-up corrective actions for selected systems, structures, and components (SSCs) for maintenance effectiveness. The inspectors reviewed the performance history of those SSCs and assessed extent-of-condition determinations for those issues with potential common cause or generic implications to evaluate the adequacy of corrective actions. The inspectors reviewed Ginna's problem identification and resolution actions for these issues to evaluate whether Ginna had appropriately monitored, evaluated, and dispositioned the issues in accordance with procedures and the requirements of 10 CFR Part 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." In addition, the inspectors reviewed selected SSC classifications, performance criteria and goals, and corrective actions that were taken or planned to verify whether the actions were reasonable and appropriate.

The following issues were reviewed:

- Performance of the floor drain sumps located in the 'A' and 'B' battery and diesel generator rooms and the auxiliary and intermediate buildings from January 1 to November 30, 2009;

- Material and equipment deficiencies associated with the diesel-driven service air compressor; and
- The adequacy of the structural monitoring program for the intermediate building "clean side."

b. Findings

Introduction. The inspectors identified a very low safety significant (Green), non-cited violation (NCV) of 10 CFR 50.65, paragraph (a)(2), in that Ginna did not demonstrate that the performance of the diesel-driven service air compressor was being effectively controlled through preventive maintenance. Specifically, Ginna did not fully evaluate whether failures of the diesel- driven air compressor that occurred in October 2006 necessitated monitoring under paragraph (a)(1) of the Maintenance Rule (MR).

Description. Ginna has five air compressors that provide high pressure air to the instrument and service air systems. One of the compressors is a diesel-driven unit that is located in the protected area between the turbine and screen house buildings. The accident mitigation purpose of this unit is to supply compressed air to the instrument and service air systems during certain postulated station blackout events. The MR-based performance criteria for the diesel-driven service air compressor established a limit of 2 functional failures per 36 months.

On October 10, 2006, with the plant in a scheduled RFO and the diesel-driven compressor in service as an augmented source of compressed air to the plant instrument and service air systems, the compressor stopped when it ran out of fuel. This condition was documented in CR 2006-4860 and was determined not to be a functional failure by Ginna. On September 19, 2009, with the plant in a scheduled RFO outage and the diesel-driven compressor being used again as an augmented source of compressed air to the plant air systems, the compressor ran out of fuel on two separate occasions. However, unlike the October 2006 failures, Ginna determined these events (as documented in CRs 2009-6801 and 2009-6764) were functional failures. While reviewing CR 2006-4860, the inspectors questioned Ginna's determination that the October 10, 2006, compressor shutdown was not a functional failure since the air compressor would not have been able to perform its accident mitigation function.

The inspectors also questioned whether other unplanned compressor shutdowns were properly classified. For example, the inspectors noted that on October 31, 2006, the diesel air compressor stopped operating and did not restart due to a clogged fuel filter. However, Ginna, in CR 2006-6062, did not consider the issue a maintenance preventable functional failure (MPFF) even though prior to the event, the compressor fuel filter had accumulated more than 400 hours of operation without being replaced. This is contrary to the air compressor vendor manual which recommended changing the fuel filter at 250 hours of operation.

In response to the inspector's questions, Ginna initiated CRs 2009-8770 and 2009-8774 to reassess the October 2006 compressor failures and their impact on the compressor's maintenance rule classification. Ginna verified that the October 2006 events were functional failures, and the October 31, 2006, event was a MPFF. Ginna subsequently

determined that the air compressor should have been placed in category (a)(1) of the MR as specified by 10 CFR 50.65. Ginna's corrective actions included modifying procedures to identify the operations department as the responsible department for maintaining fuel level in the compressor, establishing a monitoring frequency for fuel level, and providing direction for refueling the compressor. Additional corrective actions included documenting and monitoring the compressor run times to ensure the fuel filter replacement frequency of 250 hours is not exceeded.

Analysis. This issue represented a performance deficiency because Ginna did not properly evaluate performance of the diesel-driven air compressor following the October 2006 events. Due to the incorrect functional failure determinations, Ginna did not realize that the MR performance criteria had been exceeded, and the performance of the diesel-driven air compressor was not being effectively controlled through the performance of appropriate preventive maintenance such that it could fulfill its MR function. This finding is more than minor because it is associated with the Mitigating Systems Cornerstone and affects 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 the finding was of very low safety significance (Green) using Inspection Manual Chapter (IMC) 0609, Appendix A, "Determining the Significance of Reactor Inspection Findings for At-Power Situations." Specifically, the finding was not a design or qualification deficiency, did not represent a loss of safety function, and did not screen as potentially risk significant due to seismic, flooding, or severe weather. Since Ginna properly evaluated the most recent 2009 failures, this finding does not reflect current licensee performance and there is no cross-cutting aspect.

Enforcement. 10 CFR 50.65 (a)(1) requires that licensees monitor the performance of SSCs within the scope of the rule defined by 10 CFR 50.65(b), against licensee-established goals in a manner sufficient to provide reasonable assurance that such SSCs are capable of fulfilling their intended safety function. 10 CFR 50.65 (a)(2) requires that monitoring as specified in 10 CFR 50.65 (a)(1) is not required where it has been demonstrated that the performance of a SSC is being effectively controlled through the performance of preventive maintenance such that the SSC remains capable of performing its intended safety function.

Contrary to the above, Ginna did not demonstrate that the performance of the diesel air compressor had been effectively controlled through the performance of appropriate preventive maintenance and did not monitor against licensee-established goals. Specifically, Ginna did not properly evaluate the performance of the diesel-driven air compressor or appropriately determine that the October 10, 2006, failure was a functional failure, or that the October 31, 2006, failure was a MPFF. Due to the incorrect functional failure determinations, Ginna did not realize that the MR performance criteria had been exceeded and that the performance of the diesel-driven air compressor was not being effectively controlled through the performance of appropriate preventive maintenance such that it could fulfill its MR function. This violation existed since the incorrect evaluations in October 2006 and inspector's identification of this issue in November 2009. However, because the finding was of very low safety significance (Green) and has been entered into Ginna's corrective action program (CAP), this

violation is being treated as an NCV, consistent with Section V1.A.1 of the NRC Enforcement Policy. **(NCV 05000244/2009005-01, Failure to Demonstrate the Performance of the Diesel Air Compressor was Being Effectively Controlled Through Preventive Maintenance)**

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

a. Inspection Scope

The inspectors evaluated the effectiveness of Ginna's maintenance risk assessments specified by 10 CFR Part 50.65(a)(4). The inspectors discussed the use of Ginna's online risk monitoring software with control room operators and scheduling department personnel. The inspectors reviewed equipment tracking documentation and daily work schedules, and performed plant tours to verify that actual plant configuration matched the assessed configuration. Additionally, the inspectors verified that risk management actions, for both planned and emergent work, were consistent with those described in CNG-OP-4.01-1000, "Integrated Risk Management," Revision 00200.

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

- Planned maintenance on offsite power line 767 (October 19, 2009);
- Unplanned maintenance on safety injection (SI) accumulator 'A' relief valve 830A (October 22, 2009);
- 'B' diesel generator surveillance testing and maintenance activities (December 15, 2009);
- 'B' AFW pump testing (December 21, 2009); and
- Charging the 'B' SI accumulator (December 23, 2009).

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15 – Two samples)

a. Inspection Scope

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

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

- CR 2009-7520, Issues From NRC Walkdown of Containment Prior to Startup; and
- CR 2009-8052, Bushing Power Factor Test Results Exceed Acceptance Criteria.

b. Findings

No findings of significance were identified.

1R18 Plant Modifications (71111.18)

Temporary Modification (One sample)

a. Inspection Scope

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

The inspectors reviewed the following temporary plant modification:

- Install temporary power to motor control center 'F'.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing (71111.19 – 12 samples)

a. Inspection Scope

The inspectors observed portions of post-maintenance testing (PMT) activities in the field to determine whether the tests were performed in accordance with approved procedures. The inspectors assessed each test's adequacy by comparing the test methodology to the scope of maintenance performed. In addition, the inspectors evaluated the test acceptance criteria to verify that the tested components satisfied the applicable design and licensing bases and TS requirements. The inspectors reviewed the recorded test data to determine whether the acceptance criteria were satisfied.

The following PMT activities were reviewed:

- Work instructions contained in WO C20802627, "Repair Sump Pump Screen in West Condenser Pit," (October 15, 2009);
- Work instructions contained in WO C90671288, "SI Accumulator 'A' Nitrogen Leak," (October 22, 2009);
- PT-60.13A, "Control Room Emergency Air Treatment System (CREATS) Heating and Cooling System Performance Test Train 'A'," Rev. 00700, to test the 'B' control room air handling systems after maintenance activities performed under WO C20806739, "Perform TXV and HGPB Valve Checks on CREATS Cooling System 'B'," (October 26, 2009);
- Work instructions contained in WO C90467574, "Replace Type 'U' Bushings on Transformer 12A and 52/7T132," (October 27, 2009);
- STP-O-2.7.1B, "Loop 'B' Service Water (SW) Pump Test," Rev. 00400, to test the 'D' SW pump following maintenance performed under WO C20804397, "SW Pump 'D' Motor PM Inspection," (October 28, 2009);
- STP-O-12.1, "Emergency Diesel Generator (EDG) 'A'," Rev. 00600, to test the 'A' EDG following maintenance performed under WO C90217696, "Perform Major Electrical Inspection on Diesel Generator '1A'," (November 5, 2009);
- Work instructions contained in WO C90218661, "Replace Solenoid-Operated Valve (SOV) 4325, AFW Pump 'A' SW Strainer Bypass SOV," (November 12, 2009);
- STP-O-12.2, "EDG 'B'," Rev. 00500, to test the 'B' EDG following maintenance performed under WO C90605466, "Replace O-Ring for Diesel Generator 'B' Lube Oil Filter," (November 19, 2009);
- Work instructions contained in WO C20900074, "Replace Battery Charger BYCB1 per engineering change package 2009-0001, Replace Battery Charger BYCA1 and BYCB1," (November 20, 2009);
- STP-O-16Q-T, "AFW Turbine Pump – Quarterly," Rev. 00300, to test the turbine-driven auxiliary feedwater (TDAFW) pump following maintenance performed under WO C90629822, "Perform Inspection of the Stem, Bushings, Sample, and Check Oil in the TDAFW Pump Inboard Bearing," (December 2, 2009);
- Work instructions contained in WO C90466092, "Lubricate Fuel and Governor Linkages for 'B' Diesel Generator," (December 15, 2009); and
- STP-O-2.5.6, "Air-Operated Valves (AOVs) – Quarterly Surveillance (AOVs 5735, 5736, 5737, 5738)," Rev. 00003, to test steam generator blow down isolation valve V-5785 following maintenance performed under WO C20901119, "Replace Steam Generator 'A' Blow Down Isolation Valve V-5738 (December 21, 2009).

b. Findings

No findings of significance were identified.

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

a. Inspection Scope

The inspectors performed several planned tours of plant areas including the containment structure while the plant transitioned from Mode 5 (cold shutdown) to Mode 3 (hot shutdown). The purposes of the tours were to verify outage-related material had been removed from plant areas, and plant systems and components were restored to the pre-outage condition. During tours of the containment structure, the inspectors observed portions of the reactor coolant system (RCS) leak rate examinations performed by Ginna non-destructive evaluation personnel. The inspectors observed the leak test inspections and verified that examination points were identified in procedure, PT-7, "Inservice Inspection (ISI) System Leakage Test RCS," Revision 5700, personnel were following the procedure, leaking mechanical joints were adequately tracked, and maintenance personnel were appropriately briefed on salient aspects of the examination.

Once the reactor was taken critical and the turbine was placed on-line, the inspectors observed portions of the power ascension program. The inspectors verified that plant operations were performed in accordance with procedure O-1.2, "Plant Startup from Hot Shutdown to Full Load," Revision 19100.

b. Findings

Introduction: The inspectors identified a Green NRC-identified NCV of TS 5.4.1.a, "Procedures," when Ginna personnel did not correctly implement procedure A-3.1, "Containment Storage and Closeout Inspection," Revision 04200, and restrain or remove loose debris from containment prior to entering Mode 4, and verify that process instrumentation tubing was properly clamped and not leaking or bent.

Description: During a September 30, 2009, walkdown of containment while the plant was in Mode 3, the inspectors identified numerous outage-related items left in containment. Items included a large plastic tarpaulin that was approximately 3 feet by 5 feet in diameter, plastic bags, test flanges, paper tags, and tools. Further, the inspectors identified that instrument tubing used for the level indicating systems for the pressurizer and steam generators were either missing support clamps or were bent due to the possible application of excessive external force. Missing or inadequate tubing supports were also noted on other systems such as the reactor coolant sampling system.

During a design basis event, loose debris in containment could impact the operability of the residual heat removal (RHR) system when it is operating in the containment recirculation mode by clogging the RHR suction strainers. Improperly supported instrument tubing could fail during a seismic event resulting in a loss of RCS inventory.

Ginna procedure A-3.1 describes the equipment storage and cleanliness requirements for inside containment prior to entering Mode 4. Attachment F, "General Containment Housekeeping," of A-3.1 requires that loose debris be restrained or removed from containment prior to entering Mode 4. Attachment C, "Additional Information for Containment Inspections," states that when performing a walkdown of containment,

Ginna personnel should verify that process instrumentation tubing, sample tubing, and their supports are properly clamped and are not leaking or bent. Although Ginna personnel performed a walkdown of containment prior to entering Mode 4, the inspectors determined that, based upon the amount of outage-related debris left in containment, and the number of process tubing support issues identified by the inspectors, procedure A-3.1 was not properly implemented.

Ginna's initial corrective actions included removing the debris, and either repairing the instrument tubing that was degraded or performing an engineering analysis of the degraded condition and determining it did not require repair prior to plant startup. Additional walkdowns of containment were performed by Ginna using the guidance specified in procedure A-3.1. A subsequent Ginna engineering analysis determined that the debris left in containment and the missing tubing supports did not adversely impact operability of the safety-related systems or components in containment. These corrective actions were documented in Ginna's CAP as CRs 2009-7405, 2009-7506, and 2009-7520.

Analysis: The performance deficiency associated with this finding was a failure of Ginna personnel to correctly implement procedure A-3.1. This finding is more than minor because it is associated with the Mitigating Systems Cornerstone and affects 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 the finding was of very low safety significance (Green) using Inspection Manual Chapter (IMC) 0609, Appendix A, "Determining the Significance of Reactor Inspection Findings for At-Power Situations." Specifically, the finding was not a design or qualification deficiency, did not represent a loss of safety function, and did not screen as potentially risk significant due to seismic, flooding, or severe weather.

This finding has a cross-cutting aspect in the area of human performance because Ginna personnel did not adhere to the procedural requirements specified in A-3.1 when performing a walkdown of containment (H.4.b per IMC 0305).

Enforcement: TS 5.4.1.a, "Procedures," requires, in part, that the applicable procedures recommended in regulatory guide (RG) 1.33, "Quality Assurance Program Requirements (Operation)," Revision 2, Appendix A, February 1978, be established, implemented, and maintained. RG 1.33 requires, in part, that procedures be implemented for preparing the containment for power operation. Procedure A-3.1 as stated in RG 1.33 provides instructions for inspecting containment to ensure it is ready to support plant operation. Attachment C, "Additional Information for Containment Inspections," and Attachment F, "General Containment Housekeeping," of Ginna administrative procedure A-3.1 requires, in part, that loose debris be restrained or removed from containment prior to entering Mode 4, and personnel are to verify that process instrumentation tubing, sample tubing, and their supports are properly clamped and are not leaking or bent.

Contrary to the above requirements of A-3.1, on September 30, 2009, with the plant in Mode 3, the inspectors identified a large amount of loose debris in containment that had not been removed prior to entering Mode 4. Further, the inspectors identified several

examples where process instrumentation tubing was not properly supported. Because this finding was verified to be of very low safety significance, and was entered into Ginna's CAP (CRs 2009-7405, 2009-7506, and 2009-7520), this violation is being treated as an NCV, consistent with section VI.A.1 of the NRC Enforcement Policy. **(NCV 05000244/2009005-02, Failure to Correctly Implement Containment Closeout Procedure)**

1R22 Surveillance Testing (71111.22 – Two samples)

a. Inspection Scope

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

- STP-O-16-COMP-T, "AFW Turbine Pump – Comprehensive Test," Rev. 00600 (October 26, 2009) Inservice Testing (IST); and
- STP-O-R-2.2, "Diesel Generator Load and Safeguard Sequence Test," Rev. 00301 (September 14, 2009).

b. Findings

Introduction. A Green self-revealing NCV of 10 CFR 50, Appendix B, Criterion III, "Design Control," was identified for Ginna's failure to select a suitable relay in the design of the CREATS actuation and sequencing logic which led to the inoperability of both trains of CREATS fans.

Description. The CREATS at Ginna was installed in November 2004 and consists of two redundant safety-related trains of ventilation dampers, charcoal filters, and fans. The system is designed to start automatically and circulate control room air through the charcoal filters upon initiation of a SI, toxic gas, or high control room radioactivity signal. During routine plant operation, control room air temperature is maintained by a separate non-safety-related system that deenergizes when a CREATS start signal is received. On September 16, 2009, while operating in Mode 5, Ginna completed EDG load and safeguard sequence testing. This testing involved placing the CREATS in service followed by initiation of a simulated SI signal concurrent with a loss of offsite power (LOOP) condition. Both trains of CREATS fan breakers tripped and did not sequence on as specified. Operator action was required to restore CREATS to operation.

A subsequent Ginna investigation revealed that the CREATS fan breakers tripped on over-current due to a design deficiency that incorrectly utilized both alternating current (AC)-powered relays and direct current (DC)-powered relays in the CREATS SI and LOOP actuation logic circuitry. This design deficiency caused high fault currents to develop in the CREATS fan power sources during testing, which caused the CREATS breakers to trip on over-current. Ginna verified that this over-current condition would

exist only if the CREATS system was in operation and a SI signal concurrent with a LOOP condition occurred. Corrective actions included changing the AC-powered relays to DC-powered relays to eliminate the design deficiency. Ginna documented this condition in the CAP as CR 2009-6572.

Ginna determined that with both CREATS fans operating prior to a postulated loss-of-coolant accident concurrent with a LOOP, the CREATS fans would have tripped on over-current rendering both trains of CREATS inoperable. Ginna TS 3.7.9, "CREATS," states, in part, that if two trains of CREATS are inoperable for reasons other than an inoperable control room envelope boundary, immediate entry into limited condition for operation (LCO) 3.0.3 is required, which necessitates placing the plant in Mode 3 within 6 hours. Ginna personnel reviewed the CREATS in-service logs and found 43 occurrences since October 2006 where both trains of CREATS fans were operating simultaneously. Of those 43 instances, there were 5 occurrences where both CREATS trains operated longer than the 6-hour action time associated with LCO 3.0.3 which placed the plant in a condition prohibited by TS.

Analysis. The performance deficiency associated with this finding is that Ginna did not ensure the suitability of AC-powered relays in the CREATS fan control logic when the system was installed in November 2004. This finding is more than minor because it affected the design control attribute of the Barrier Integrity Cornerstone objective of maintaining radiological barrier functionality in the control room. The inspectors determined that the finding was of very low safety significance (Green) using IMC 0609, Appendix A, "Determining the Significance of Reactor Inspection Findings for At-Power Situations." Specifically, the finding only represented a degradation of the radiological barrier function provided for the control room. Since the CREATS was designed and implemented in 2004, this finding does not reflect current licensee performance and there is no cross-cutting aspect.

Enforcement. 10 CFR 50, Appendix B, Criterion III, "Design Control," requires, in part, that measures shall be established for the selection and review for suitability of application of parts that are essential to the safety-related functions of SSCs. Contrary to the above, Ginna did not select a suitable relay in the design of CREATS actuation and sequencing logic which led to the inoperability of both trains of CREATS fans. As a result of this design deficiency, the requirements of TS 3.7.9, "CREATS," were not met for five instances since October 2006. Because this violation is of very low safety significance, and was entered into Ginna's CAP (CR 2009-6572), this violation is being treated as an NCV, consistent with Section V1.A.1 of the NRC Enforcement Policy. **(NCV 05000244/2009005-03, Inadequate Selection of Alternating Current-Powered Relays in Control Room Emergency Air Treatment System Fan Control Logic)**

Cornerstone: Emergency Preparedness

1EP6 Drill Evaluation (71114.06 – One sample)

a. Inspection Scope

On November 17, 2009, the inspectors observed portions of a scheduled drill of the Ginna emergency preparedness organization. Following the drill, the inspectors observed the post-drill critique and assessment of technical support center (TSC) performance during the drill. The drill scenario included a steam generator tube rupture with a stuck open main steam safety valve. The inspectors verified that the TSC post-drill critique was thorough, and drill enhancements were identified in Ginna's CAP.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA2 Identification and Resolution of Problems

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

a. Inspection Scope

In order to identify trends that might indicate the existence of a more significant safety issue, the inspectors reviewed CRs initiated from May to November 2009. Additionally, the inspectors reviewed quality assurance assessment reports, the temporary modification log, system health reports, the maintenance rule status report, the low margin list, and a 2009 top 10 issues list. The inspectors also discussed trends and potential trends with appropriate personnel.

b. Findings and Observations

No findings of significance were identified. No trends were noted that indicated a potential safety significant issue. Although several trends or potential trends were identified by inspectors, plant personnel were aware of these and had initiated corrective actions as necessary.

.2 Annual Sample: IST Corrective Actions for Pump Vibration Analysis and SI Accumulator Relief Valve American Society of Mechanical Engineers (ASME) Code Testing (71152 – One sample)

a. Inspection Scope

This inspection focused on Ginna's evaluation and resolution of the incorrect measurement of pump vibration data in their IST program. Specifically, Ginna had measured and recorded pump vibration velocity in root mean square vice the specified

peak-to-peak units for approximately 6 months of ASME code-specified testing. Consequently, Ginna did not take the specified action for the 'B' RHR pump vibration values exceeding the IST-specified action level for four consecutive tests.

The inspectors reviewed the actions taken by Ginna after discovery of the vibration measurement problem in June 2009. The inspectors reviewed Ginna's apparent cause evaluation, operability evaluation of the 'B' RHR pump, CRs, corrective action reports, and interviewed plant personnel to evaluate the adequacy of Ginna's performance in the areas of problem identification, evaluation, extent-of-condition scoping, and corrective actions.

Additionally, the inspectors reviewed the corrective action for ASME code relief valve missed IST on the SI accumulator relief valves which was granted relief by the NRC. The inspectors reviewed the CRs, corrective action reports, and sampled eight relief valves to ensure they were tested in the correct periodicity.

b. Findings and Observations

A violation of very low safety significance (Green), which was identified by the licensee, was reviewed by the inspectors. Corrective actions taken or planned by Ginna have been entered into Ginna's CAP. This violation and corrective actions are listed in Section 4OA7 of this report.

The inspectors verified Ginna appropriately evaluated the cause of the incorrect pump vibration measurements. Further, Ginna appropriately evaluated the cause of the subsequent missed specified actions for the 'B' RHR pump peak vibration values which exceeded the IST-specified action for four consecutive tests. Ginna performed an apparent cause evaluation in response to the 'B' RHR pump unknowingly exceeding the IST-specified action range, and verified that there was not a formalized process delineating how IST program data was reviewed by all responsible personnel to ensure an adequate level of checks and balances. Contributing causes were that operations personnel were not trained in sufficient detail to identify that IST program acceptance criterion units were in peak rather than root mean square, and that program procedures did not identify if documented units were in peak or root mean square. Ginna's extent-of-condition review identified one additional pump, the 'A' EDG fuel oil transfer pump, which exceeded its ASME code alert level. There were no pumps that were inoperable because of the incorrect pump vibration measurements.

The inspectors verified that Ginna had completed all of the corrective actions for the missed tests and that Ginna's current relief valve tracking system was adequate to ensure future relief valve IST requirements will be met. The inspectors also verified that Ginna's extent-of-condition reviews, and the planned and completed corrective actions for both the pump vibration testing issue and missed relief valve IST were appropriate.

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

a. Inspection Scope

As specified by Inspection Procedure 71152, "Identification and Resolution of Problems," and in order to help identify repetitive equipment failures or specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into Ginna's CAP. This review was accomplished by reviewing electronic copies of CRs, periodic attendance at daily screening meetings, and accessing Ginna's computerized database.

b. Findings and Observations

No findings of significance were identified.

4OA3 Followup of Events and Notices of Enforcement Discretion (71153 – One sample)

.1 Turbine Electrohydraulic (EH) System Malfunction

a. Inspection Scope

On December 30, 2009, at 4:37 a.m., Ginna experienced a turbine trip followed by a reactor trip from approximately 100 percent of rated thermal power due to a malfunction in the turbine EH system that led to a loss of hydraulic system pressure. The loss of pressure caused both turbine stop valves to close, which initiated the turbine trip and subsequent reactor trip protective action signals. The EH system controls the position of the valves that admit steam to the main turbine. Prior to the turbine trip, operators noticed the temperature of the EH fluid had increased and system pressure was fluctuating. To address these conditions, operators swapped the running EH pump and increased cooling water flow to the EH system coolers, but pressure continued to lower and could not be maintained causing the turbine trip and the reactor trip. All safety systems functioned as designed following the reactor trip.

After the turbine trip, one of the turbine stop valve hydraulic actuators and a relief valve line on the '3B' feedwater heater failed. The stop valve hydraulic actuator failure was a result of the trip, not a cause. Water hammer was also experienced in the plant feed and condensate systems as a result of an operator decision to shut down all operating condensate pumps, while the feed and condensate were still hot, to minimize water flow through the failed feedwater heater relief valve line. The water hammer caused some insulation to become dislodged and piping hangers to be displaced.

Followup to the event included inspectors reviewing the plant sequence of event report, monitoring Ginna's post-trip event recovery and assessment actions, and touring plant areas to assess the status of plant equipment. To assess the condition of plant equipment in the containment structure, the inspectors toured containment with Ginna personnel who were performing a walkdown of containment as part of Ginna's boric acid leak mitigation program.

b. Findings

No findings of significance were identified.

.2 (Closed) LER 05000244/2009005-00, Control Room Emergency Air Treatment System Inoperable Due to Design Deficiency

The circumstances and enforcement issues involving this event were previously reviewed in Section 1R22 of this report. This LER is closed.

4OA5 Other Activities

.1 Quarterly Resident Inspector Observations of Security Personnel and Activities

a. Inspection Scope

During the inspection period, the inspectors conducted observations of security force personnel and activities to ensure that the activities were consistent with Ginna's security procedures and regulatory requirements relating to nuclear plant security. These observations took place during both normal and off-normal plant working hours.

These quarterly resident inspector observations of security force personnel and activities did not constitute any additional inspection samples. Rather, they were considered an integral part of the inspectors' normal plant status review and inspection activities.

b. Findings

No findings of significance were identified.

.2 Institute of Nuclear Power Operations (INPO) and World Association of Nuclear Operators (WANO) Report Review

a. Inspection Scope

The inspectors reviewed a September 29, 2009, report issued by WANO that assessed plant performance at Ginna for the period of May 2007 to April 2009. The report primarily relied on observations made by WANO representatives during the weeks of March 30 and April 6, 2009.

The inspectors reviewed a November 18, 2009, INPO report that documented the results of an accreditation team evaluation of the maintenance, chemistry and radiological protection technical training programs performed at Ginna during the week of June 15, 2009.

The inspectors reviewed the reports to ensure that issues identified were consistent with the NRC perspectives of plant performance and to verify if any significant issues were identified that required further NRC follow-up.

b. Findings

No findings of significance were identified.

4OA6 Meetings, Including Exit

Exit Meeting Summary

On January 20, 2010, the resident inspectors presented the inspection results to Mr. John Carlin and other members of his staff, who acknowledged the findings. The inspectors verified that none of the material examined during the inspection is considered proprietary in nature.

4OA7 Licensee-Identified Violations

The following violation of very low safety significance (Green) was identified by the licensee and is a violation of NRC requirements which meets the criteria of the NRC Enforcement Policy for being dispositioned as an NCV.

Appendix B, Criterion XI, of 10 CFR 50, "Test Control," states, in part, that a test program shall be established to assure that all testing specified to demonstrate that SSCs will perform satisfactorily in service is identified and performed in accordance with written test procedures which incorporate the requirements and acceptance limits contained in applicable design documents. Contrary to this requirement, Ginna's test procedures did not adequately state the correct units to measure and record vibration data which resulted in the 'B' RHR pump peak vibration values exceeding the IST-specified action for four consecutive tests. Ginna identified the deficiency during a review of IST data for 'B' RHR pump on June 30, 2009. Ginna found that vibration data, read off the 2130 vibration analyzer and entered into the test procedure to evaluate the ASME code requirement, was recorded in root mean square vice peak units. As a result of measuring in the incorrect units during data collection, the recorded data used for the ASME code IST-specified evaluation of pump vibration was non-conservative for approximately 6 months worth of testing. Ginna entered this issue into their CAP as CR 2009-4517. This violation was of very low safety significance (Green) because it was not a design or qualification deficiency, did not represent a loss of safety function, and was not associated with any external events.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

J. Carlin	Vice President, Ginna
D. Dean	Assistant Operations Manager (Shift)
T. Hedges	Emergency Preparedness Manager
E. Larson	Plant Manager
F. Mis	General Supervisor, Radiation Protection
T. Paglia	Scheduling Manager
S. Snowden	Chemistry Supervisor
J. Sullivan	Manager of Operations
P. Swift	Manager, Nuclear Engineering Services

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed

05000244/2009005-01	NCV	Failure to Demonstrate the Performance of the Diesel Air Compressor was Being Effectively Controlled Through Preventive Maintenance (Section 1R12)
05000244/2009005-02	NCV	Failure to Correctly Implement Containment Closeout Procedure (Section 1R20)
05000244/2009005-03	NCV	Inadequate Selection of Alternating Current-Powered Relays in Control Room Emergency Air Treatment System Fan Control Logic (Section 1R22)

Closed

05000244/2009001-00	LER	Control Room Emergency Air Treatment System Inoperable Due to Design Deficiency (Section 4OA3)

LIST OF DOCUMENTS REVIEWED

Section 1R01: Adverse Weather Protection

Document
Updated Final Safety Analysis Report

Procedures
ER-SC.2, High Water (Flood) Plan, Rev. 00702
ER-SH.1, Response to Loss of Screen House, Rev. 002
IP-REL-7, Seasonal Readiness Program, Rev. 00101
O-22, Cold Weather Walkdown Procedure, Rev. 00600

Condition Reports
2009-9456
2009-7985
2009-7987

Section 1R04: Equipment Alignment

Documents
A-1040, Ventilation Filter Testing Program, Rev. 01400
Auxiliary Building Heating, Ventilation, and Air Conditioning (HVAC) System Health Report, October 1 to December 31, 2009

Procedures
O-6.13, Daily Surveillance Log, Rev. 17400
T-35A, Auxiliary and Intermediate Building Ventilation System (Startup and Shutdown), Rev. 029
T-35C, Auxiliary and Intermediate Building Ventilation System Operation with the Auxiliary Building Supply Air Handling Unit 'A' Out of Service, Rev. 017

Drawings
33013-1870, Auxiliary/Intermediate Buildings HVAC Systems P&ID, Rev. 18
33013-1871, Auxiliary/Intermediate Buildings HVAC Systems P&ID, Rev. 23
33013-1872, Auxiliary/Intermediate Buildings HVAC Systems P&ID, Rev. 21

Condition Reports

2006-5906	2009-7875
2008-1488	2009-4313
2009-6218	2009-6846

Section 1R05: Fire Protection

Document
Ginna Fire Protection Program, Rev. 5b

Procedures
SC-3.1.1, Fire Alarm Response (Fire Brigade Activation), Rev. 017
SC-3.4.1, Fire Brigade Captain and Control Room Personnel Responsibilities, Rev. 038

Drawings
33013-1991, Fire Protection Fire SW Auxiliary Building, Intermediate Building, and Containment Building P&ID, Rev. 021
33013-2542, Fire Response Plan CNMT Structure and Intermediate Building Plan – Basement Floor Elev. 235 feet 8 inches, Rev. 005
33013-2545, Containment Fire Response Plan CNMT, Structure and Intermediate Building Plan – Intermediate Floor Elev. 253 feet 3 inches, Rev. 009

Condition Report
2009-7397

Section 1R06: Flood Protection Measures

Document
Ginna's PRA Report, Rev. 4.3

Procedures
CNG-CA-1.01-1005, Apparent Cause Evaluation, Rev. 00200
ER-SC.1, Response to Loss of Screen House, Rev. 2
M-95, Annual Inspection and Operational Check of Backflow Protection System, Rev. 01200

Condition Reports
2009-4054
2009-5549
2009-7880

Work Order
C90466479

Section 1R11: Licensed Operator Requalification Program

Document
ES1213-05, Small Break Loss of Coolant Accident, Rev. 8

Procedures
E-1, Loss of Reactor or Secondary Coolant, Rev. 03900
OTG-2.2, Simulator Examination Instructions, Rev. 43

Section 1R12: Maintenance Effectiveness

Documents
Auto Log Entries for the Diesel Air Compressor, 11/08/2006 to 11/15/2009
Diesel-Driven Service Air Compressor System Health Report, 4th Quarter 2009
VTD-56059-4101, Diesel Engine Vendor Manual
VTD-56204-4101, Air Compressor Vendor Manual

Procedures
ATT-11.2, Attachment Diesel Air Compressor, Rev. 5
CNG-AM-1.01-1023, MR Program, Rev. 0

ECA-0.0, Loss of All A/C Power, Rev. 03400
O-6.11, Surveillance Requirement/Routine Operations Check Sheet, Rev. 15700

Drawings
33013-1886, Service Air P&ID, Sheet 1, Rev. 26
33013-1886, Service Air P&ID, Sheet 2, Rev. 21

Condition Reports

2006-4464	2007-7259	2009-0718	2009-7999
2006-4860	2008-2455	2009-3354	2009-8353
2006-6062	2008-6187	2009-4054	2009-8770
2007-0671	2008-7309	2009-6764	2009-8774
2007-5905	2008-7721	2009-6801	2009-8722

Work Orders

C20805996	C20402297
C20901178	C20601163
C20603976	C20802912
C20502275	

Section 1R13: Maintenance Risk Assessments and Emergent Work Control

Documents
Auto Log Entries for Equipment Out of Service on October 19, 2009
High Risk Activity Plan for Maintenance on 767 Regulator, October 19, 2009
OPG-IWS-Support, Rev. 04000

Procedures
CNG-OP-4.01-1000, Integrated Risk Management, Rev. 00200
OPG-AUTO-SOFTWARE, Control Room Software Operation, Rev. 00901

Condition Reports
2009-7947
2009-9406

Work Orders
C90671288
C90468020
C90466092
C90701346

Section 1R15: Operability Evaluations

Documents
ATS-2007, Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems
Voltage Regulator 767 Insulation Test Results from 7/11/1996, 10/20/2003, and 10/20/2009

Drawings
33309-115, 767 Regulator, Rev. 2
33309-220, 767 Regulator Name Plate, Rev. 2

Condition Reports
2009-7520
2009-8052

Section 1R18: Plant Modifications

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

Section 1R19: Post-Maintenance Testing

Procedures
100-74, Welding Procedure Specification, ASME, Rev. 4
GME-45-99-01, Electric Motor Inspection and Maintenance, Rev. 02101
GMM-15-01-EDGLUBE, EDG Fuel Control Shaft and Linkage Lubrication, Rev. 00000
GMM-15-01-KDG01A/B, Alco Diesel Generator Mechanical Inspection and Maintenance, Rev. 00700
M-73.10, Welding and Brazing, Rev. 02600
MMP-GM011-00004, SW Pump Replacement, Rev. 00100
O-6.13, Daily Surveillance Log, Rev. 17400
PT-60.13A, CREATS Heating and Cooling System Performance Test Train 'A', Rev. 00700
RSSP-2.3A, Diesel Generator 'A' Trip Testing, Rev. 01900
STP-O-2.5.6, AOVs Quarterly Surveillance (AOVs 5735, 5736, 5737, 5738), Rev. 00003
STP-O-2.7.1B, Loop 'B' SW Pump Test, Rev. 00400
STP-O-12.1, EDG 'A', Rev. 00600
STP-O-12.2, EDG 'B', Rev. 00500
STP-O-16Q-A, AFW Pump 'A' – Quarterly, Rev. 00301
STP-O-16Q-T, AFW Turbine Pump – Quarterly, Rev. 00300

Drawings
33013-1239, Diesel Generator 'A' P&ID, Rev. 25
33013-1250, Station Service Cooling Water Safety-Related P&ID, Rev. 49
33013-1237, AFW P&ID, Rev. 55

Condition Reports
2007-3353
2008-1859
2009-8138

Work Orders

C20806739	C20901119	C90218661	C20901119
C90467574	C90671288	C20900075	
C90629822	C90217696	C90605466	
C90466092	C20804397	C90638090	

Section 1R20: Refueling and Other Outage Activities

Procedures
A-3.1, Containment Storage and Closeout Inspection, Rev. 04200
O-1.1, Plant Heatup from Cold Shutdown to Hot Shutdown, Rev. 16102 (16401)
O-1.2, Plant Startup from Hot Shutdown to Full Load, Rev. 19100
PT-7, ISI System Leakage Test RCS, Rev. 5700

Condition Reports
2009-5804
2009-7405
2009-7506
2009-7520

Section 1R22: Surveillance Testing

Procedures
STP-O-16-COMP-T, AFW Turbine Pump – Comprehensive Test, Rev. 00600
STP-O-R-2.2, Diesel Generator Load and Safeguard Sequence Test, Rev. 00301
STP-O-R-2.2, Diesel Generator Load and Safeguard Sequence Test, Rev. 0, Performed on April 22, 2008

Condition Reports

2009-6655	2009-6461	2008-3357
2009-6765	2009-6572	2009-6457
2009-7745	2008-3157	
2009-8118	2008-3355	

4OA2: Identification and Resolution of Problems

Documents
2009-0170, Engineering Change Proposal for RHR Pump 'B', Rev. 0
CSI 2130 Analyzer Updated Data Collection Training Presentation
Fleet Quality Performance and Assessment Report, May 1 to August 31, 2009
G1R352009, RFO QPA Assessment Report, October 26, 2009
Ginna Relief Request No. VR-14, dated February 16, 2009
Ginna IST Relieve Valve Tracking Program, dated November 19, 2009
QPAR 2009-02-G, Quality Performance and Assessment Report, May 1 to August 1, 2009
R.E. Ginna Nuclear Power Plant IST Program Fourth 10-Year Interval, Rev. 0

Procedures
CNG-AM-1.01-1012, ISE Program, Rev. 0000
CNG-CA-1.01-1000, CAP, Rev. 00200
CNG-CA-1.01-1005, Apparent Cause Evaluation, Rev. 00200
IP-REL-2.1, Vibration Program, Rev. 00100
STP-O-12.6A, Diesel Generator Fuel Oil Transfer Pump 'A' Test, Rev. 00201
STP-O-2.2B, RHR Pump 'B' IST, Rev. 00400

Condition Reports

2007-7901	2009-0116	2009-4660	2009-8004
2008-1465	2009-4532	2009-4675	
2008-9201	2009-4517	2009-4852	
2008-8329	2009-4651	2009-7799	

4OA3: Followup of Events and Notices of Enforcement Discretion

Documents

10905-0546, Control Room HVAC Isolation 'A' Train Elementary Wiring Diagram, Rev. 13
10905-0822, SI Auxiliary Relay CREATS 'A' Train Elementary Wiring Diagram, Rev. 1
10905-0822, SI Auxiliary Relay CREATS 'A' Train Elementary Wiring Diagram, Rev. 3
10905-0824, CREATS Fan 'A' Elementary Wiring Diagram, Rev. 2
10905-0824, CREATS Fan 'A' Elementary Wiring Diagram, Rev. 3
CNG-OP-1.01-1006, Post Trip Reviews, Rev. 00001
DA-NS-2001-087, Large Break Loss-of-Coolant Accident Offsite and Control Room Doses, Rev. 4
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LIST OF ACRONYMS

ABV	auxiliary building ventilation
AC	alternating current
ADAMS	Agencywide Documents Access and Management System
AFW	auxiliary feedwater
AOV	air-operated valve
ASME	American Society of Mechanical Engineers
CAP	corrective action program
CFR	*Code of Federal Regulations*
CR	condition report
CREATS	control room emergency air treatment system
DC	direct current
EDG	emergency diesel generator
EH	electrohydraulic
Ginna	R.E. Ginna Nuclear Power Plant
HVAC	heating, ventilation, and air conditioning
IMC	Inspection Manual Chapter
INPO	Institute of Nuclear Power Operations
ISI	inservice inspection
IST	inservice testing
LCO	limited condition for operation
LOOP	loss of offsite power
MPFF	maintenance preventable functional failure
MR	maintenance rule
NCV	non-cited violation
NRC	U.S. Nuclear Regulatory Commission
PARS	Publicly Available Records
P&ID	piping & instrument drawing
PMT	post-maintenance testing
PRA	probabilistic risk analysis
RCS	reactor coolant system
RFO	refueling outage
RG	regulatory guide
RHR	residual heat removal
SDP	significance determination process
SSC	system, structure, and component
SI	safety injection
SOV	solenoid-operated valve
SW	service water
TDAFW	turbine-driven auxiliary feedwater
TS	technical specification
TSC	technical support center
UFSAR	updated final safety analysis report
WANO	World Association of Nuclear Operators
WO	work order

Attachment