



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

January 27, 2009

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

**SUBJECT: R.E. GINNA NUCLEAR POWER PLANT - NRC INTEGRATED INSPECTION
REPORT 05000244/2008005**

Dear Mr. Carlin:

On December 31, 2008, 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 16, 2009, with Mr. Joseph Sullivan and other members of your staff.

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

This report documents one NRC-identified finding of very low safety significance (Green). This finding was determined to be a violation of NRC requirements. However, because of its very low safety significance, and because it was entered into your corrective action program, the NRC is treating this finding as a non-cited violation (NCV) consistent with Section VI.A.1 of the NRC Enforcement Policy. If you contest this NCV in this report, you should provide a written response within 30 days of the date of this inspection report with the basis for 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 accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web Site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/ Original Signed By:

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

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

Enclosure: Inspection Report No. 05000244/2008005
w/ Attachment: Supplemental Information

cc w/encl:

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M. Meisenzahl, Administrator, Monroe County, Office of Emergency Preparedness
T. Judson, Central New York Citizens Awareness Network

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No.: 50-244

License No.: DPR-18

Report No.: 05000244/2008005

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

Facility: R.E. Ginna Nuclear Power Plant

Location: Ontario, New York

Dates: October 1, 2008 through December 31, 2008

Inspectors: K, Kolaczyk, Senior Resident Inspector
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Projects Branch 1
Division of Reactor Projects

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SUMMARY OF FINDINGS

IR 05000244/2008005; 10/01/2008 – 12/31/2008; R.E. Ginna Nuclear Power Plant (Ginna) Other Activities.

The report covered a three-month period of inspection by resident inspectors and region-based inspectors. One Green non-cited violation (NCV) was 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). 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.

A. NRC-Identified and Self-Revealing Findings

Cornerstone: Mitigating Systems

Green. An NRC-identified NCV of Technical Specification 5.4.1.a, "Procedures," was identified on November 21, 2008, when minimum shift staffing decreased below the requirements contained in procedure ND-OPS, "Operations," because a Ginna auxiliary operator (AO) was inattentive. The individual of concern was assigned the shift role of "primary AO" and was responsible for performing rounds in the auxiliary building, as well as valve manipulations to support plant testing/operation. Further, he was one of the five members of the site fire brigade. Ginna's immediate corrective action consisted of relieving the AO of his duties, and in accordance with Ginna's policy, subjecting the AO to a for-cause fitness for duty drug test. Shift staffing was restored to the full complement outlined in ND-OPS within one hour, when an additional AO arrived on-site.

This finding is more than minor, because it could reasonably be viewed as a precursor to a significant event. Specifically, while inattentive, the AO may not have been able to respond to a plant event which reduces the effectiveness of event mitigation. This finding has been reviewed by NRC management in accordance with IMC 0609, Appendix M, "Significance Determination Process Using Qualitative Criteria," and was determined to be of very low safety significance (Green) because staffing for the operating shift and fire brigade was restored to a full complement within one hour after the AO was relieved, and because no initiating events occurred during that time. This finding has a cross-cutting aspect in the area of human performance because the AO did not implement effective actions to remain fit for duty (H.4.a per IMC 0305). (Section 4OA5)

B. Licensee-Identified Violations

None.

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REPORT DETAILS

Summary of Plant Status

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

1. REACTOR SAFETY**Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity**

1R01 Adverse Weather Protection (71111.01 - Two 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. Using Ginna's interface administrative procedure IP-REL-7, "Seasonal Readiness Program," Revision 00100, and the Updated Final Safety Analysis Report (UFSAR) as references, the inspectors reviewed preparations for cold weather and selected systems for an in-plant walkdown. Two risk-significant systems were selected for review: the station batteries, and the standby auxiliary feedwater (AFW) system. The inspectors assessed the effectiveness of Ginna's cold weather readiness program to ensure that the systems would remain functional and available during cold weather conditions as specified by technical specifications (TSs). The inspectors conducted discussions with control room operators and the seasonal readiness coordinator 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 00400, to evaluate the material condition and functionality of the freeze protection equipment (e.g., heat tracing, instrumentation, and ventilation). Documents reviewed for each inspection in this report are listed in the Attachment.

b. Findings

No findings of significance were identified.

.2 External Flood Protection Measures**a. Inspection Scope**

To evaluate Ginna's external flood protection measures, the inspectors toured the auxiliary building and examined the condition of the portable flood barriers and their associated fixed retaining appurtenances. The area surrounding the equipment hatch was also examined to assess the condition of flood seals that had been installed in the "rattle space" located between the containment and auxiliary building, and the

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intermediate building subbasement. The inspectors also reviewed an internal self-assessment report, MPR-3084, "Evaluation of Internal and External Flooding at R.E. Ginna Nuclear Power Plant," Revision 0, and condition reports (CRs) that were created as a result of issues identified in the report.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (71111.04)

.1 Partial System Walkdown (71111.04Q – Two samples)

a. Inspection Scope

The inspectors reviewed the alignment of system valves and electrical breakers to ensure proper in-service or standby configurations as described in plant procedures, piping and instrument drawings (P&ID), and the 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 TS and system operating procedures.

The following plant system alignments were reviewed:

- On October 20, 2008, the inspectors performed a walkdown of the component cooling water (CCW) system following the extensive construction of scaffolding on the operating floor of the auxiliary building, to support the independent spent fuel storage installation construction activities. Valve alignments were verified to be in the positions required by procedure S-30.9, "CCW Flow Path Verification," Rev. 2, and capable of being operated without obstruction by the installed scaffolding. The electrical lineup was also verified to be proper in the control room; and
- On November 18, 2008, the inspectors performed a walkdown of the 'A' train of the boric acid system while the 'B' train of the boric acid system was removed from service for maintenance activities. During this walkdown, the inspectors compared valve positions to system drawing 33013-1266, "Chemical and Volume Control System," Rev. 33.

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 service water (SW) system to identify any discrepancies between the existing equipment lineup and the specified

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lineup. The SW system was chosen because of its risk-significant function to provide a heat sink for the removal of process and operating heat from safety-related components during a design basis accident or transient. In addition, loss of the SW system is an accident initiator within Ginna's probabilistic risk analysis (PRA) report. The inspectors verified proper system alignment as specified by TS, UFSAR, P&IDs, and plant procedures. 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 (71111.05)

Quarterly Inspection (71111.05Q – Five samples)

a. Inspection Scope

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

- Service Building Water Treatment Room (Fire Zone SB-1WT);
- Charging Pump Room (Fire Area CHG);
- Intermediate Building North Elevation 278 (Fire Zone IBN-2);
- Circulating Pump Area Elevation 237 (Fire Zone SH-3); and
- Screen House Operating Floor Elevation 253 (Fire Zone SH-2).

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures (71111.06 - One sample)

a. Inspection Scope

The inspectors evaluated Ginna's internal flood protection measures for the relay room. This area was selected given its risk significance regarding internal flooding events as outlined in the Ginna PRA. To perform this evaluation, the inspectors reviewed the UFSAR, PRA, piping drawings, work orders (WOs), CRs, the site repetitive task database, and toured the relay room area.

b. Findings

No findings of significance were identified.

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

a. Inspection Scope

The inspectors reviewed performance tests, periodic cleaning, eddy current inspections, chemical control methods, tube plugging condition, tube leak monitoring, operation procedures and maintenance practices for a sample of safety-related heat exchangers (HXs). The HXs reviewed were:

- 'A' and 'B' CCW HXs
- 'A' and 'B' emergency diesel generator (EDG) jacket water and lube oil coolers
- 'A' and 'B' residual heat removal (RHR) HXs

The HXs were selected based on a plant-specific risk assessment and past inspection results. The SW system, which provides cooling to the CCW HXs, was also reviewed.

The inspectors examined and verified that controls for the selected components conformed to Ginna's commitments to Generic Letter (GL) 89-13, "Service Water System Problems Affecting Safety-Related Equipment." The inspectors compared the inspection results to established acceptance criteria to verify that the results were acceptable and that the HXs operated in accordance with design. The inspectors walked down the systems, structures, and components (SSC), reviewed system health reports, and interviewed the applicable system engineers. The inspectors also reviewed "as-found" and "as-left" photos of the last cleaning and inspection evolutions when the CCW HXs and EDG coolers were open.

The inspectors verified that common cause heat sink performance problems with the potential to increase risk were identified and corrected by Ginna. The inspectors closely examined potential macro fouling issues (silt, debris, etc.) and biotic fouling issues. The inspectors walked down accessible areas of the SW intake, chlorination system, and other support and subcomponents of the SW system to assess the material condition of these systems and components. The inspectors reviewed a sample of CRs related to the CCW HXs, EDG coolers, RHR HXs, and the SW system to ensure that Ginna was appropriately identifying, characterizing, and resolving problems related to these systems and components within regulatory requirements and Ginna's commitments.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program (71111.11Q - One sample)a. Inspection Scope

On October 7, 2008, the inspectors observed a licensed operator simulator scenario, ES1213-15, "Intermediate LOCA," Revision 0. 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 - Two samples)a. Inspection Scope

The inspectors evaluated work practices and follow-up corrective actions for selected 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 the requirements of 10 CFR Part 50.65, "Requirements for Monitoring the Effectiveness of Maintenance." In addition, the inspectors reviewed selected SSC classifications, performance criteria and goals, and corrective actions that were taken or planned to verify whether the actions were reasonable and appropriate.

The following issues were reviewed:

- Changes made to the structural monitoring program to ensure the condition of foam flood barrier seals installed in the void areas between the containment, intermediate, and auxiliary buildings are monitored; and
- Failure of a weld on a ½-inch line between the 'C' charging pump and valve 292E.

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13 – Three samples)a. Inspection Scope

The inspectors evaluated the effectiveness of Ginna's maintenance risk assessments

required by 10 CFR Part 50.65(a)(4). The inspectors discussed with control room operators and scheduling department personnel required actions regarding the use of Ginna's online risk monitoring software. 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 00010.

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

- Planned temporary power installation to support the technical support center (TSC) diesel generator replacement project involving the connection of replacement power and a temporary automatic connection switch into the TSC battery electrical systems (October 29, 2008);
- Planned maintenance on external loop fire system isolation valves 8573 and 8577 which removed the backup water supply to the standby AFW pumps resulting in an increased core damage frequency risk. Risk reduction compensatory measures put in place to reduce the risk were reviewed. This scenario also involved an increased risk while the TSC backup diesel was removed from service during portions of the fire water system outage (November 20, 2008); and
- Unplanned maintenance on the steam driven AFW pump conducted due to a surveillance test failure (December 2 to 4, 2008).

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15 - Three 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 GL 91-18, Information to Licensees Regarding Two NRC Inspection Manual Sections on Resolution of Degraded and Nonconforming Conditions and on Operability" and Inspection Manual Part 9900, "Operability Determinations and Functionality Assessments for Resolution of Degraded or Nonconforming Conditions Adverse to Quality or Safety." In addition, where a component was inoperable, the inspectors verified the TS limiting condition for operation implications were properly addressed.

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

- CR 2008-9201, Missed Relief Valve Surveillance Test for DG Fuel Oil Booster Pump;

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- TSR 2008-0015, Modification to Allow Charging Pump Alignment to TSC D/G; and
- CR 2008-9424, 'B' Diesel Generator Jacket Water and Lube Oil Cooler Erosion and Corrosion.

b. Findings

No findings of significance were identified.

1R18 Plant Modifications (71111.18)

Permanent Modification (One sample)

a. Inspection Scope

The inspectors reviewed plant change record (PCR) 2008-0015, "RHR Pump Recirculation Line Relief Valve." The inspectors reviewed the PCR to ensure that the replacement components were consistent with the design basis and were compatible with installed SSCs. The inspectors observed portions of the modification installation including non-destructive testing of modification piping.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing (71111.19 - Seven samples)

a. Inspection Scope

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

The following PMT activities were reviewed:

- STP-O-31C, "Charging Pump 'C' In-service Test," Rev. 00100, to retest 'C' charging pump after maintenance under WO 20802577, "Perform Charging Pump 'C' Varidrive Lube/Inspection and Low Speed Stop Check, M-11.4.13" (October 15, 2008);
- PT-47.7, "Auxiliary Building Exhaust Fan G HEPA and Charcoal Filter Efficiency Units Test," Rev. 01000, to retest HEPA filter efficiency after replacement in accordance with WO 20701662, "Replace the Carbon in the AB Charcoal Filter 1G," which also replaced the HEPA filter in the same unit (October 16, 2008);

- T-36.2, "SW Redundant Return Line Operation," Rev. 17, to retest WO 20805597, "Remove V-4620 for UT/VT Inspection of Adjacent Piping" (October 28, 2008);
- WO 20806221, "Replace the HXs on the Relay Room A/C Unit AKP04," including non-destructive testing and test operation of the unit following repairs to the condenser (October 28, 2008);
- WO 20803450, "Replace TSC D/G per technical staff request (TSR) 2008-0015," after replacement of the old TSC diesel with an upgraded model and improved circuitry in accordance with TSR 2008-0015, "Modification to Allow Charging Pump Alignment to TSC D/G" (November 8, 2008);
- STP-0-12.2, "EDG 'B'," Rev. 00200, to restore operability after functional equipment group maintenance window outage on the 'B' EDG including WO 20801623, "Diesel Generator 'B' – Perform Mechanical Preventative Maintenance Inspection (GMM-15-1-KDG01A/B, Alco Diesel Generator Mechanical Inspection and Maintenance, Rev. 00700)" (November 13, 2008); and
- PT-2.3.3, "Safeguard MOV 850A/B and 851A/B Surveillance," Rev. 4, following modifications to MOV 850A and diagnostic testing completed in accordance with WO 20805574, "Install RHR Pump Recirc Line Relief Valves per PCR 2008-0015" and WO 20603278, "Limitorque Operator/850A Diagnostic Testing and PM the Actuator" (December 17, 2008).

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22 – Three 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.

- PT-3Q, "Containment Spray Pump Quarterly Test," Rev. 04501 (October 10, 2008)
- WO 20805770, "Weekly Checks at Station 13A," Rev. 23 (October 24, 2008)
- WO 20802799, "Perform UT/VT Inspection on V-4620 and Adjacent Piping" (October 28, 2008)

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety (OS)

2OS1 Access Control To Radiologically Significant Areas (71121.01 – Four samples)

a. Inspection Scope

From November 17 to 21, 2008, the inspectors performed the following activities to verify that Ginna was properly implementing physical, administrative, and engineering controls for access to locked high radiation areas (LHRA) and other radiologically controlled areas (RCAs). Implementation of these programs was reviewed against the criteria contained in 10 CFR 20, relevant TS, and Ginna's procedures.

Plant Walkdown and Radiation Work Permits (RWPs) Reviews

The inspectors toured accessible RCAs. The inspectors reviewed Ginna's physical and programmatic controls for highly activated or contaminated materials (non-fuel) stored within spent fuel and other storage pools.

Problem Identification and Resolution

The inspectors verified that Ginna has had no performance indicator events from January 1, 2008, through the date of this inspection.

High Risk Significant, High Dose Rate High Radiation Areas (HRA) and Very High Radiation Areas (VHRA) Controls

The inspectors discussed high dose rate HRA and VHRA controls and procedures with the radiation protection manager. There have been no procedural changes since the last inspection in September 2008.

Radiation Protection Technician Proficiency

The inspectors reviewed eight CRs since January 1, 2008, which identified the cause to be radiation protection technician error. No observable patterns regarding technician performance were found by the inspector.

b. Findings

No findings of significance were identified.

2OS2 ALARA Planning and Controls (71121.02 – One sample)

a. Inspection Scope

From November 17 to 21, 2008, the inspector performed the following activities to verify that Ginna was properly implementing operational, engineering, and administrative controls to maintain personnel exposure. Implementation of these controls was

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reviewed against the criteria contained in 10 CFR 20, applicable industry standards, and Ginna procedures.

Inspection Planning

The inspectors observed Ginna's entry activities into two LHRAs. The inspectors attended a pre-job brief, reviewed the RWP, and reviewed the as low as is reasonably achievable (ALARA) estimate for the task.

b. Findings

No findings of significance were identified.

Cornerstone: Public Radiation Safety (PS)

2PS3 Radiological Environmental Monitoring Program (REMP) and Radioactive Material Control Program (71122.03 – Ten samples)

a. Inspection Scope

The inspectors reviewed the current annual radiological environmental operating report and Ginna assessment results to verify that the REMP was implemented as required by TSs and the offsite dose calculation manual (ODCM). The review included changes to the ODCM with respect to environmental monitoring commitments in terms of sampling locations, monitoring and measurement frequencies, land-use census, inter-laboratory comparison program, and analyses of data. The inspectors also reviewed the ODCM to identify environmental monitoring stations. In addition, the inspectors reviewed the following: Ginna self assessments and audits, event reports, inter-laboratory comparison program results, the UFSAR for information regarding the environmental monitoring program and meteorological monitoring instrumentation, and the scope of the audit program to verify that it met the requirements of 10 CFR 20.1101.

The inspectors performed walkdowns of eight air particulate and iodine sampling stations; one control and one indicator water sampling locations, two locations for milk sample collection, and eight thermo luminescent dosimeter (TLD)/optically stimulated luminescent (OSL) dosimeter monitoring locations and verified that they were located as described in the ODCM and verified that any applicable equipment material condition was acceptable.

The inspectors observed the collection and preparation of a variety of environmental samples (listed above) and verified that environmental sampling was representative of the release pathways as specified in the ODCM and that sampling techniques were in accordance with procedures.

Based on direct observation and review of records, the inspectors verified that the primary meteorological tower instruments were operable, calibrated, and maintained in accordance with guidance contained in the UFSAR and Ginna's procedures. The inspectors verified that the meteorological data readout and recording instruments in the control room were operable.

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The inspectors reviewed each event documented in the annual radiological environmental monitoring report which involved a missed sample, inoperable sampler, lost TLD, or anomalous measurement for the cause and corrective actions. The inspectors conducted a review of Ginna's assessment of any positive sample results.

The inspectors reviewed any significant changes made by Ginna to the ODCM as the result of changes to the land census or sampler station modifications since the last inspection. The inspectors also reviewed technical justifications for any changed sampling locations and verified that Ginna performed the reviews required to ensure that the changes did not affect its ability to monitor the impacts of radioactive effluent releases on the environment.

The inspectors reviewed the calibration and maintenance records for air samplers. The inspectors reviewed the results of Ginna's inter-laboratory comparison program to verify the adequacy of environmental sample analyses performed by Ginna's contractor, Ginna's quality control evaluation of the inter-laboratory comparison program and the corrective actions for any deficiencies, Ginna's determination of any bias to the data and the overall effect on the REMP, and quality assurance audit results of the program to determine whether Ginna met the TS/ODCM requirements. The inspectors verified that the appropriate detection sensitivities with respect to TS/ODCM were utilized for counting samples.

The inspectors verified that the radiation monitoring instrumentation used for the release of material from the radiologically controlled area was appropriate for the radiation types present and was calibrated with appropriate radiation sources. The inspectors reviewed Ginna's equipment to ensure the radiation detection sensitivities were consistent with the NRC guidance.

The inspectors reviewed Ginna's audits and self assessments related to the REMP since the last inspection to determine if identified problems were entered into the corrective action program (CAP), as appropriate. Selected corrective action reports for the REMP and the radioactive material control program were reviewed since the last inspection to determine if identified problems accurately characterize the causes and corrective actions were assigned to each commensurate with their safety significance. Any repetitive deficiencies were also assessed to ensure that Ginna's self-assessment activities were identifying and addressing these deficiencies

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

.1 Cornerstone: Occupational Radiation Protection

a. Inspection Scope (71151 - One sample)

Enclosure

The inspectors reviewed implementation of Ginna's occupational exposure control effectiveness performance indicator (PI) data for the period January 1, 2008, through November 15, 2008. Specifically, the inspectors reviewed CRs and associated documents for occurrences involving LHRAs, VHRAs, and unplanned exposures. The exposure data was compared against the criteria specified in Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment PI Guideline," Revision 5, to verify that all occurrences which met the NEI criteria were identified and reported in the PI.

b. Findings

No findings of significance were identified.

.2 Cornerstone: Public Radiation Protection

a. Inspection Scope (71151 - One sample)

The inspectors reviewed relevant effluent release CRs for the period January 1, 2008, through November 15, 2008, for issues related to the Radiological Effluent Technical Specifications (RETS)/ODCM radiological effluent PI which measures radiological effluent release occurrences that exceed 1.5 mrem/quarter whole body or 5.0 mrem/quarter organ dose for liquid effluents; 5 mrad/quarter gamma air dose, 10 mrad/quarter beta air dose, and 7.5 mrem/quarter for organ dose for gaseous effluents. The release data was compared to Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment PI Guideline," Revision 5, to verify that all occurrences which met the NEI criteria were identified and reported in the PI.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems

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

a. Inspection Scope

In order to identify trends that might indicate the existence of a more significant safety issue, the inspectors reviewed CRs initiated from July 2008 to December 2008, corrective action trend reports from January 2008 to August 2008, system health reports, and departmental performance indicators. Additionally, the inspectors reviewed the temporary modification log, the maintenance rule status report, the low margin list, and a "2008 Top 10 Issues List." The inspectors also discussed trends and potential trends with appropriate station personnel.

b. Findings and Observations

No findings or observations 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 Continuous Review of Items Entered into the Corrective Action Program

a. Inspection Scope

As required by Inspection Procedure 71152, "Identification and Resolution of Problems," and in order to help identify repetitive equipment failures or specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into 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

No findings of significance were identified.

.3 Annual Sample - Review of Corrective Actions for Planned Maintenance Scheduling Deficiencies (71152 – One sample)

a. Inspection Scope

The inspectors reviewed the response by Ginna to several missed surveillances and planned maintenance (PM) items which were not completed within the periodicities required by the TS surveillance or PM programs. This issue was selected for review by the inspectors when Ginna identified that it missed the 2-year full-flow requirement surveillance test for the 'A' motor driven AFW pump on October 1, 2008, and subsequently identified missed PM items. Because the pump surveillance was promptly conducted and the pump passed the test, this failure to comply with TS surveillance requirements constitutes a violation of minor significance that is not subject to enforcement action in accordance with the NRC's Enforcement Policy.

Following the missed AFW surveillance, subsequent Ginna reviews of the PM and surveillance test programs revealed a missed Inservice Testing Program (IST) EDG fuel oil booster pump relief valve surveillance, and a PM scheduled beyond the 10-year PM due date required for a safety significant motor operated valve (MOV). Ginna was able to reschedule the MOV PM activity, but not the surveillance test. As a result, a fuel oil booster pump relief valve was not tested within the required surveillance test program periodicity. One of the two relief valves associated with the missed IST surveillance was replaced shortly after Ginna identified the issue, during a subsequent EDG maintenance activity, restoring the IST periodicity requirement. Because the relief valve passed a subsequent surveillance "bench" test, this failure to comply with the IST program requirements constitutes a violation of minor significance that is not subject to enforcement action in accordance with the NRC's Enforcement Policy.

The inspectors reviewed Ginna's response to the missed 'A' motor driven AFW pump surveillance, and the missed EDG fuel oil booster pump relief valve PM, including the completion of maintenance actions and administrative plans to correct the problem and

prevent recurrence of this issue. The inspectors interviewed operations and engineering department personnel to determine the impact of the corrective actions, and whether they were effective in correcting the errors which caused the original problems.

b. Findings and Observations

No findings of significance were identified. The apparent cause identified by Ginna's review of these events, was that there was not a dedicated individual or process to track PM or surveillance test due dates. As a result, PM and surveillance activities were missed. An individual has now been identified by Ginna who will track surveillance and preventive maintenance items. Although the inspectors did not disagree with the Ginna apparent cause evaluation, the inspectors determined that there were additional contributing causes. First, the process of controlling and tracking surveillances was formerly conducted by a Performance Monitoring Group which Ginna discontinued in 2005. The personnel who tracked the completion of surveillances in this group were reassigned to other duties, and the change management program process in place at the time failed to fully transfer this role to another group or individual.

Second, ongoing issues in the procedure upgrade program, which include an inability to develop accurate and timely revised procedures when changes are made to long-established on-site procedures, contributed to the scheduling challenges associated with the 'A' motor driven AFW pump. If accurate test procedures were developed in a timely manner, the inspectors concluded the AFW surveillance test, which had been revised to support a TS change, may not have been missed.

These items were not explored in the apparent cause review of this issue. The procedure upgrade program has had several management changes since its inception, and change management has been a concern for several years at Ginna. Problems with these processes have been documented in several CRs and are being addressed by site management but were not identified as contributing causes to this event.

.4 Annual Sample - Corrective Action Effectiveness in Addressing Problem Identification and Resolution Cross-Cutting Theme (71152 - One Sample)

a. Inspection Scope

The inspectors reviewed the apparent cause evaluation (ACE) for CR 2008-4764 which evaluated four non-cited violations (NCVs) from the assessment period of July 1, 2007, to June 30, 2008, for any commonalities or common causes. Each NCV had a cross-cutting aspect in the area of problem identification and resolution which involved Ginna's ability to take appropriate corrective actions to address safety issues and adverse trends in a timely manner. The inspectors reviewed the ACE to determine if the issues identified in the ACE were properly addressed by corrective actions. The inspectors also reviewed the adequacy of the corrective actions which were implemented to address the NCVs and the deficiencies identified in the ACE, and reviewed planned corrective actions not yet completed, but captured within Ginna's CAP, to determine if they were reasonable. The inspectors discussed the corrective actions with appropriate plant personnel and reviewed other various condition reports to ensure that issues entered

into the CAP were appropriately addressed.

b. Findings and Observations

No findings of significance were identified. The inspectors determined that the completed and planned corrective actions were reasonable and that they addressed the deficiencies identified in the ACE.

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

(Closed) LER 05000244/2008001-00, Plant Heat-up with Required Residual Heat Removal Loops Inoperable Due to Personnel Error (Voluntary Report)

On May 8, 2008, Ginna identified that while performing a plant heat-up in Mode 4, TS limiting condition for operation (LCO) action 3.4.6.A was inadvertently entered. Both loops of RHR were isolated from the reactor coolant system by MOV closure and subsequent removal of power, rendering both RHR loops inoperable. The 'A' reactor coolant pump was experiencing pump seal challenges at the time leaving only the 'B' reactor coolant loop as operable and available for cooling. This led the operators to a determination that the TS LCO action statement had been entered. This violation was previously documented in R.E. Ginna Nuclear Power Plant – NRC Integrated Inspection Report 05000244/2008003 as a non-cited violation of TS 5.4.1.a. No new findings were identified by the inspector's review of this licensee event report (LER). Ginna documented the problem in the site CAP in CR 2008-4290. This LER is closed.

4OA5 Other Activities

.1 Tours of Plant Areas

a. Inspection Scope

Periodically, the inspectors toured plant areas to assess the adequacy of plant housekeeping, the condition of fire barriers and equipment, the acceptability of radiological controls, and the alertness and attentiveness of personnel who were engaged in plant activities.

b. Findings and Observations

Introduction: A Green NCV of TS 5.4.1.a, "Procedures," was identified by the inspectors for a failure to ensure the operating shift staffing met the requirements contained in procedure ND-OPS, "Operations." Specifically the inspectors identified an auxiliary operator inattentive to duty.

Description: On November 21, 2008, while touring the auxiliary building, the inspectors identified that an on-shift auxiliary operator (AO) was inattentive to his duties. The individual of concern was assigned the shift role of "primary AO," and was responsible for performing rounds in the auxiliary building, as well as valve manipulations to support plant testing/operation. Further, he was one of the five members of the site fire brigade.

The inattentive AO was seated in a chair in the lower level of the auxiliary building, adjacent to a frisking station, located outside of the charging pump room.

Ginna's immediate corrective action consisted of relieving the AO of his duties, and in accordance with Ginna's policy, subjecting the AO to a for-cause fitness for duty drug test. The test results were negative. Because this AO was a member of the site fire brigade, staffing for the fire brigade and operations shift temporarily dropped below the minimum level outlined in section 3.3 of Ginna procedure ND-OPS, "Operations." Shift staffing was restored to the full complement outlined in ND-OPS within one hour when an additional AO arrived on-site.

Additional Ginna corrective actions included examining the number of work hours that this AO worked and instructing control room personnel to contact AOs that are not under direct observation via radio once every 20 minutes.

The performance deficiency was the AO's failure to ensure he was fit for duty.

Analysis: This finding was greater than minor, because it could reasonably be viewed as a precursor to a significant event. Specifically while inattentive, the AO may not have been able to respond to a plant event, which reduces the effectiveness of event mitigation. This finding has been reviewed by NRC management in accordance with IMC 0609, Appendix M, "Significance Determination Process Using Qualitative Criteria," and was determined to be of very low safety significance (Green) because staffing for the operating shift and fire brigade was restored to a full complement within one hour after the AO was relieved, and because no initiating events occurred during that time.

This finding has a cross-cutting aspect in the area of human performance because the AO did not implement effective actions to remain fit for duty (H.4.a per IMC 0305).

Enforcement: TS 5.4.1.a, "Procedures," requires, in part, that the applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978, be established, implemented, and maintained. Regulatory Guide 1.33 requires, in part, that procedures be implemented for maintenance of minimum shift complement and call-in of personnel. Procedure ND-OPS, section 3.3 states, in part, that the operating staff shall include two AOs and five fire brigade members.

Contrary to the requirements of Section 3.3, on November 21, 2008, the inspectors identified that one AO who was a member of the shift crew and fire brigade was inattentive. As a result, he was relieved of his duties and the minimum shift crew and

fire brigade composition decreased below the levels outlined in ND-OPS. Because this finding was determined to be of very low safety significance, and was entered into Ginna's CAP (CRs 2008-9736/9737), this violation is being treated as a NCV, consistent with Section VI.A.1 of the NRC Enforcement Policy: **(NCV 05000244/2008005-01, Failure to Meet Minimum Shift Manning Requirement Due to Inattentiveness)**

.2 (Closed) VIO 05000244/2008502-01, Failure to Obtain NRC Approval for Emergency Action Level (EAL) Changes Which Decreased the Effectiveness of the Emergency Plan

This violation identified an instance where Ginna made changes to its emergency plan, which decreased its effectiveness, without first obtaining Commission approval. Specifically, six EALs were changed and decreased the effectiveness of the emergency plan by non-conservatively limiting the conditions under which the EALs could be declared. As documented in Inspection Report 05000244/2008502, actions taken included changing Ginna's EALs back to the original configuration and conducting site training for licensed operators and for the site emergency response organization. Ginna later completed a root cause report and an effectiveness review for those corrective actions.

The inspectors reviewed the root cause analysis (CR 2007-6123), including the root cause, the contributing causes, the extent of cause/condition, and the corrective actions. The root cause was determined to be that management did not recognize the need to assure rigorous programmatic controls in regards to addressing evolving regulatory guidance in a timely manner. Adequate programs and processes were not in place to effectively address 10 CFR 50.54 regulatory changes, and management did not recognize the value of a rigorous collegial review through Ginna's oversight committees [plant operations review committee (PORC), management review committee, etc.] or by engaging outside expertise knowledgeable in these requirements. The CR identified corrective actions to be taken and assigned responsibility for implementing the corrective actions. Key corrective actions taken included: enhanced controls for emergency plan changes (50.54(q) reviews) through procedural guidance; established and institutionalized a process, through training, to maintain personnel knowledgeable in the implementation of changes relating to 10 CFR 50.59 and 10 CFR 50.54; revised the procedure for use of operating experience to provide specific guidance on addressing the identification and processing of emergent guidance from regulatory agencies; provided training to station oversight committees regarding the appropriate methodology of conducting a 50.54(q) review; added a requirement that all 50.54(q) reviews be sent to PORC; and performed a self-assessment of the programs for 10 CFR 50.54 implementation.

The inspectors concluded that the root cause analysis was thorough and complete. Additionally, corrective actions taken were appropriate and timely. This violation is closed.

.3 Implementation of Temporary Instruction 2515/176, Emergency Diesel Generator Technical Specification Surveillance Requirements Regarding Endurance and Margin Testing

a. Inspection Scope

The objective of Temporary Instruction (TI) 2515/176, "Emergency Diesel Generator Technical Specification Surveillance Requirements Regarding Endurance and Margin Testing," is to gather information to assess the adequacy of nuclear power plant EDG endurance and margin testing as prescribed in plant-specific TSs. The inspectors reviewed EDG ratings, design basis event load calculations, surveillance testing

requirements and EDG vendor's specifications, and gathered information in accordance with TI 2515/176.

The inspectors' assessment and information gathered while completing this TI were discussed with Ginna personnel. This information was forwarded to the Office of Nuclear Reactor Regulation for further review and evaluation.

b. Findings

No findings of significance were identified.

.4 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.

.5 Independent Spent Fuel Storage Installation (60853 – One Sample)

a. Inspection Scope

The inspectors reviewed construction documents and records associated with the construction of the Ginna Independent Spent Fuel Storage Installation (ISFSI) pad. A list of the documents reviewed is provided in the Supplemental Information section. The inspectors discussed construction activities with cognizant personnel. The inspectors toured the construction site and observed work activities. The inspectors verified that the construction details for the ISFSI pad are bounded by the design parameters for the dry cask storage system selected for use at Ginna. The inspectors also verified that the design specifications for the ISFSI pad were met in the construction documentation. Subsequent to the inspection, Ginna sent additional post-pour construction documentation to the inspectors on November 13, and December 2, 2008.

b. Findings

No findings of significance were identified.

4OA6 Meetings, Including ExitExit Meeting Summary

On January 16, 2009, the resident inspectors presented the inspection results to Mr. Joseph Sullivan and other members of his staff, who acknowledged the findings. The inspectors verified that none of the material examined during the inspection is considered proprietary in nature.

ATTACHMENT: SUPPLEMENTAL INFORMATION

Enclosure

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

J. Carlin	Vice President, Ginna
D. Dean	Assistant Operations Manager (Shift)
M. Giacini	Scheduling Manager
E. Hedderman	Director, Performance Improvement
T. Hedges	Emergency Preparedness Manager
D. Holm	Plant Manager
F. Mis	General Supervisor, Radiation Protection
J. Pacher	Manager, Nuclear Engineering Services
J. Sullivan	Manager of Operations

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed

05000244/2008005-01	NCV	Failure to Meet Minimum Shift Manning Requirements Due to Inattentiveness (Section 40A5)
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Closed

05000244/2008001-00	LER	Plant Heat-up with Required Residual Heat Removal Loops Inoperable Due to Personnel Error (Section 40A3)
05000244/2008502-01	VIO	Failure to Obtain NRC Approval for Emergency Action Level Changes Which Decreased the Effectiveness of the Emergency Plan (Section 40A5)

LIST OF DOCUMENTS REVIEWED

Section 1R01: Adverse Weather Protection

Documents

UFSAR, Rev. 21

MPR-3084, Evaluation of Internal and External Flooding at R.E. Ginna Nuclear Power Plant,
Rev. 0

Procedures

EP-2-P-0169, Structural Assessment and Monitoring Program, Rev. 01000
 IP-REL-7, Seasonal Readiness Program, Rev. 00100
 M-115, Preparation of Screen House for Fall Season, Rev. 5
 M-1306.1, Winterizing Inspection Program, Rev. 02200
 O-22, Cold Weather Walkdown Procedure, Rev. 00400

Condition Reports

2007-5356	2008-9180	2008-9233
2008-9177	2008-9230	2008-9224
2008-9178	2008-9231	2008-9223
2008-9179	2008-9232	

Section 1R04: Equipment AlignmentDocuments

GL 89-13, SW System Problems Affecting Safety-Related Equipment
 TS Basis B 3.7.8, SW System
 UFSAR, Section 9.2.1, SW System
 UFSAR, Section 9.2.2, Component Cooling Water System
 USFAR, Section 9.3.4.5, Boric Acid System

Procedures

AP-CCW.2, Loss of CCW During Power Operation, Rev. 02200
 AP-CCW.3, Loss of CCW – Plant Shutdown, Rev. 019
 AP-SW.2, Loss of SW, Rev. 801
 S-3.1B, Pre-operational Line Up of the Boric Acid System, Rev. 27
 S-3.1P, Action for Boric Acid Tanks Exceeding the TS or Administrative Limit on Concentration and Volume, Rev. 14
 S-30.8, SW System Valve Position Verification, Rev. 0040
 S-30.9, CCW Flow Path Verification, Rev. 002

Drawings

33013-1245, Auxiliary Coolant CCW (AC) P&ID, Rev. 31
 33013-1246, Sheet 1 of 2, Auxiliary Coolant CCW (AC), Rev. 15
 33013-1246, Sheet 2 of 2, Auxiliary Coolant CCW (AC), Rev. 12
 33013-1250, Sheet 1 of 3, Station Service Cooling Water Safety-Related (SW) P&ID, Rev. 47
 33013-1250, Sheet 2 of 3, Station Service Cooling Water Safety-Related (SW) P&ID, Rev. 36
 33013-1250, Sheet 3 of 3, Station Service Cooling Water Safety-Related (SW) P&ID, Rev. 31
 33013-1251, Sheet 1 of 2, Station Service Cooling Water Non-Safety Related (SW) P&ID, Rev. 27
 33013-1251, Sheet 2 of 2, Station Service Cooling Water Non-Safety Related (SW) P&ID, Rev. 20
 33013-1237, Auxiliary Feedwater P&ID, Rev. 55
 33013-1238, Standby Auxiliary Feedwater P&ID, Rev. 26
 33013-1265, Chemical and Volume Control System Charging P&ID, Rev. 20
 33013-1266, Chemical and Volume Control System P&ID, Rev. 33

Section 1R05: Fire Protection

Document

GINNA Fire Protection Program, Rev. 4d

Procedures

FRP-4.0, Auxiliary Building Basement, Rev. 006
FRP-12.0, Intermediate Building Main Steam Header Floor, Rev. 0700
FRP-30.0, Screen House Basement, Rev. 7
FRP-31.0, Screen House Operating Floor, Rev.7
FRP-36.0, Service Building Basement, Rev. 0600

Section 1R06: Flood Protection Measures

Documents

GINNA's Probabilistic Risk Assessment Report, Rev. 4.3
Repetitive Task P301987, Inspect/Repair or Replace Sump Pump Discharge Check Valves
TSR 2007-0037, Evaluate Installing Drain or Curb in Control Room Bathroom

Drawings

33013-2681, Sump Pumps, Drains, and Sewage Pump, Rev. 9
D311-0003, Floor and Equipment Drain Turbine Room Basement Floor Elevation 253 Feet
6 Inch and Elevation 248 Feet 6 Inch, Rev. 14
D311-0004, Floor and Equipment Drain Elevation 271 Feet and Elevation 289 Feet, Rev. 9

Condition Reports

2007-0151
2006-7341
2005-0145

Work Order

20500111

Section 1R07: Heat Sink Performance

Documents

"As-found" and "as-left" photographs from the 2007 inspection of the 'A' and 'B' EDG jacket water, lube oil HX, and the 'A' and 'B' CCW HXs
Component Cooling Water System Health Report, 1st and 2nd Quarter 2007 and 2008
Final Documentation Submittal Ginna Heat Exchanger Refurbishment Program, April 24, 1989
GL 89-13, Service Water System Problems Affecting Safety-Related Equipment
Inspection Findings Report for Underground Service Water System 'A' Header Supply Piping
Residual Heat Removal System Health Report, 1st and 2nd Quarter 2007 and 2008
Self Assessment 2008-0124, Ginna Snapshot Self Assessment Heat Sink Performance Heat Exchanger Checklist
Service Water System Health Report, 1st and 2nd Quarter 2007 and 2008
Service Water System Reliability Optimization Program, Rev. 8

Procedures

American Standard Model 1205-6CP Heat Exchanger Maintenance for ESW08A, Rev. 5

Atlas Industrial Manufacturing, Type NEN Heat Exchanger Maintenance for EAC01A, Rev. 4
 CNG-AM-1.01-1016, Heat Exchanger Program, Rev. 0000
 CMP-10-03-ESW09A, American Standard, Model 1205CP, Heat Exchanger Maintenance for
 ESW09A, Rev. 00601
 EOP ATT-2.1, Attachment Min SW, Rev. 006
 MMP-GM055-00001, Underwater Inspection/Cleaning of Mechanical Equipment, Structures in the
 Screen House and Discharge Canal, Rev. 00000
 S-8A, CCW System Startup and Normal Operation Valve Alignment, Rev. 04900

Drawings

33013-1245, Auxiliary Coolant Component Cooling Water, Rev. 31
 33013-1250, Station Service Cooling Water Safety Related, Rev. 36, Sheets 1-3

Condition Reports

2008-6920	2007-8230	2008-0299	2007-7681
2008-7373	2008-6125	2007-8715	2008-0646
2008-7084	2008-4747	2007-6816	2008-4203
2008-6904	2008-4220	2007-6602	2008-6738
2008-6067	2008-4015	2006-3258	
2008-3339	2008-1511	2007-3404	
2006-2160	2008-0902	2007-3413	

Work Orders

20603944
 20603399
 20604881
 20604882
 20705109

Calculations

DA-ME-93-53, CCW Heat Exchanger Flow Analysis for Potential Flow Induced Vibration, Rev. 0
 DA-ME-93-157, Impact of CCW Flow Reduction on CCW and RHR Heat Exchanger
 Performance, Rev. 0
 DA-ME-98-138, EDG Lube Oil and Jacket Water Heat Exchanger Plugging Limits and Thermal
 Performance at Limiting Service Water Flows, Rev. 1
 DA-ME-98-139, EDG Lube Oil and Jacket Water Heat Exchanger Service Water Differential
 Pressure Limits, Rev. 1
 DA-ME-2006-028, Component Cooling Water Heat Exchangers A&B Thermal Performance
 Testing Data Reduction, Fouling, and Uncertainty Analysis, Rev. 0
 ME-5168B-1, Tube Plugging Criteria Based on Minimum Wall Thickness DG Jacket Water Heat
 Exchangers and Lube Oil Coolers, Rev. 0

Section 1R11: Licensed Operator Requalification

Document

ES1213-15, Intermediate LOCA, Rev. 0

Procedure

OTG-2.2, Simulator Examination Instructions, Rev. 43

Section 1R12: Maintenance Effectiveness

Documents

Evaluation of Internal and External Flooding at the R.E. Ginna Nuclear Power Plant, Rev. 0
P600001, Repetitive Task Auxiliary Building Inspection
P600003, Repetitive Task Intermediate Building Inspection

Procedure

EP-2-P-0169, Structural Assessment and Monitoring Program, Rev. 01000

Condition Reports

2002-1032
2007-5356
2008-9673

Work Orders

20701247
20701248
20701249

Section 1R13: Maintenance Risk Assessments and Emergent Work Control

Documents

PRAER G1-2008-008, Probabilistic Risk Assessment Evaluation Request for WO 20706981
TSR 2008-0015, Modification to Allow Charging Pump Alignment to TSC D/G

Procedure

CNG-OP-4.01-1000, Integrated Risk Management, Rev. 00010

Condition Reports

2008-9268
2008-9580
2008-9645

Work Orders

20803450
20706981

Section 1R15: Operability Evaluations

Documents

Ginna In-Service Testing Program, Rev. 3
IMC Part 9900: Technical Guidance for Operability Determinations and Functionality Assessments
NUREG-1482, Guidelines for In-Service Testing at Nuclear Power Plants, Rev.1
Regulatory Guide 1.192, Operation and Maintenance Code Case Acceptability, ASME OM Code
PRA Evaluation Report, G1-2008-007, Rev. 0
TSR 2008-0015, Modification to Allow Charging Pump Alignment to TSC D/G

Condition Reports

2008-9201
2008-9424

Section 1R18: Plant Modifications

Document

PCR 2008-0015, RHR Pump Recirculation Line Relief Valve, Rev. 0

Work Order

20604989

Section 1R19: Post-Maintenance Testing

Documents

TSR 2008-0015, Modification to Allow Charging Pump Alignment to TSC D/G
UFSAR, Section 9.4.2, Auxiliary Building Ventilation System
Plant Change Record (PCR) 2008-0015, Rev. 0, RHR Pump Recirculation Line Relief Valves

Procedures

GMM-15-01-KDG01A/B, Alco Diesel Generator Mechanical Inspection and Maintenance,
Rev. 00700
M-11.4.13, Charging Pump Drive Lubrication and Inspection, Rev. 01600
M-17, TSC Diesel Generator Mechanical Maintenance and Inspection, Rev. 01800
PT-12.5, TSC Diesel Test, Rev. 003700
PT-47.7, Auxiliary Building Exhaust Fan G HEPA and Charcoal Filter Units Efficiency Test,
Rev. 01000
RSSP-2.3B, Diesel Generator 'B' Trip Testing, Rev. 01600
STP-O-12.2, Emergency Diesel Generator 'B', Rev. 00200
STP-O-31C, Charging Pump 'C' In-Service Test, Rev. 00100
T-36.2, SW Redundant Return Line Operation, Rev. 17
PT-2.3.3, Safeguard MOV 850A/B and MOV 851A/B Surveillance, Rev. 4

Condition Reports

2008-8035
2008-10205
2008-10213

Work Orders

20603278	20803450
20802577	20805574
20701662	20806221
20805597	20811623

Section 1R22: Surveillance Testing

Procedure

PT-3Q, Containment Spray Pump Quarterly Test, Rev. 04501

Drawing

33013-1250, Station Service Cooling Water, Rev. 36

Condition Reports

2008-9028

2008-9046

Work Orders

20805770

20802799

Section 2OS1: Access Control to Radiologically Significant Areas

Procedures

A-1.1, Access Control to Locked High Radiation and Very High Radiation Areas, Rev. 46

RF-8.4, Fuel and Core Component Movement in the Spent Fuel Pool, Rev. 059

RP-JC-JOBCOVERAGE, Job Coverage, Rev. 01200

Condition Reports

2008-3215

2008-3589

2008-3257

2008-3763

2008-3282

2008-4285

2008-3350

2008-5933

Section 2OS2: ALARA Planning and Control

RWP

9012

Section 2PS3: REMP and Radioactive Material Control Program

Documents

Annual Radiological Environmental Monitoring Report

Annual Radiological Environmental Operating Report

Offsite Dose Calculation Manual

UFSAR

Procedures

CH-ENV-AIR, Collection and Calculation of Beta Activity for Environmental Air Samples,
Rev. 00901

CH-ENV-AIR-12, Counting and Calculation of Iodine Samples, Rev. 5

CHENV-AQUATIC, Gross Activity in Aquatic Samples, Rev. 5

CH-ENV-LAND-USE, Land-Use Census, Rev. 4

CH-ENV-MILK, Collection of Milk Samples, Rev. 00501

CH-ENV-SCHED, Schedule for Environmental Samples, Rev. 9

CH-ENV-TECH, Duties of Environmental Surveillance Technician, Rev. 4

CH-ENV-TLD, Collecting Environmental and Post-Accident TLDs, Rev. 8

CH-ENV-TLD-OSL, Collecting Environmental TLD/OSL(s), Rev. 00001

CH-ENV-TRANS, Preparation of Environmental Samples to Vendor Lab, Rev. 5

CH-ENV-VEG, Collection and Analysis of Vegetation Samples, Rev. 4

CH-ENV-WATER, Collection and Analysis of Water Samples
 CH-QC-INTERLAB, Chemistry Quality Control Inter-laboratory Assessment Guidelines, Rev. 3
 CH-RETS-MET, Meteorological System Surveillance, Rev. 00501
 CHA-RETS-GRNDWTR-RPT, Groundwater Notification and Reporting Requirements, Rev. 0
 CHA-RETS-VARIATION, Identification of Items Reportable in the Annual Radioactive Effluent
 Report or the Annual Radiological Environmental Operating Report, Rev. 6
 CNG-QL-1.01, Quality and Performance Assessment, Rev. 0000
 CNG-QL-1.01-1004, Quality Audit Process, Rev. 00100

Condition Reports

2007-1779	2007-8726	2008-2334	2008-4470
2007-2439	2008-0508	2008-2712	2008-6434
2007-2454	2008-0693	2008-3240	2008-8411
2007-4803	2008-1380	2008-3652	2008-8392
2007-5312	2008-2064	2008-3726	
2007-5386	2008-2107	2008-3770	
2007-8707	2008-2228	2008-4426	

Audits and Assessments

2007-0067, Procedure Adherence and Quality Control in Chemistry
 2007-0077, Meteorological Procedure Quality
 Report of Audit CHE-07-01-G, Ginna Chemistry, March 30, 2007

Section 40A1: Performance Indicator Verification

Document

NEI 99-02, Regulatory Assessment Performance Indicator Guideline, Rev. 5, July 2007

Gaseous Release Permits

2008004	2008023
2008010	2008033
2008014	2008036
2008020	

Liquid Release Permits

2008011	2008052
2008019	2008069
2008023	2008103

40A2 Identification and Resolution of Problems

Documents

Corrective Action Trend Report, 1st Quarter 2008
 Corrective Action Trend Report, June 1 to August 31, 2008
 2008 Top 10 Issues List
 System Health Reports, 4th Quarter 2008
 Temporary Modifications List, 4th Quarter 2008

Condition Reports

2006-3801	2008-4764
2007-4536	2008-7881
2007-6035	2008-7893
2007-6475	2008-8329
2007-7143	2008-8345
2008-0976	2008-9201
2008-1430	

40A3 Event FollowupDocument

LER 05000244/2008001-00, Plant Heat-up with Required Residual Heat Removal Loops
Inoperable Due to Personnel Error (Voluntary Report)

40A5 Other ActivitiesDocuments

Audit EPP-08-01-G
CA-2008-2864, Effectiveness Review of CR 2007-6123
IEEE 387-1984, Standard Criteria for Diesel Generator Units Applied as Standby Power Supplies
For Nuclear Power Generating Stations
NRC Safety Guide 1.9
SA-2008-0182, 10 CFR 50.54(a), (p), (q) Implementation
UFSAR, Rev. 20
VM A0152-0076, Alco Power Diesel Generator
50.59 Screening Form, # 2008-0384, Ginna ISFSI Project – Haul Path and ISFSI Pad
Addendum 1 to Final Geotechnical Report, Rev. 1, MACTEC Project No. 6468-05-1245, Alternate
Haul Path Route, dated July 24, 2006
Addendum 2 to Final Geotechnical Report, Rev. 1, MACTEC Project No. 6468-05-1245, Revised
Location for Proposed ISFSI, dated May 16, 2007
CEG-002-CALC-003, Rev. 2, Underground Utilities Capacity Evaluation, dated June 23, 2008
CEG-002-CALC-012, Rev. 0, Haul Path Roadway Evaluation and Design
CEG-002-CALC-019, Rev. 0, ISFSI Concrete Apron Design, dated June 23, 2008
Change Impact Evaluation # 2007-0089, Rev. 0, PCR/SPCR/TE # 2004-0071, Rev. 0, dated July
3, 2008
Constellation Energy Nuclear Group, ISFSI Project Checklist, Oversight Field Note, No. Ginna-
ISFSI-QA-030, dated October 31, 2008
Design Criteria, Ginna ISFSI Project Soil Improvement at ISFSI Site, PCR # 2007-0003, Rev. 0,
dated May 23, 2008
Design Criteria, Ginna Station, Ginna ISFSI Project Haul Path and Pad, PCR # 2004-0071, Rev.
0, Dated June 23, 2008
Final Geotechnical Report, Rev. 1, MACTEC Project No. 6468-05-1245, dated May 6, 2006
MACTEC Engineering & Consulting, Inc., Calculation Review and Approval Status Sheet, Job #
6468-05-1245, Soil Layer Properties From Shear Wave Velocity Profile
Nuclear Engineering Services, Modification Design Change Notice, No. 3594, Underground
Grounding
Nuclear Engineering Services, Modification Design Change Notice, No. 3595, Use of Crusher
Run #1
Nuclear Engineering Services, Modification Design Change Notice, No. 3596, Use of Geotextile

Plant Change Record, PCR 2004-0071, Rev. 0, Haul Path and Pad, dated July 3, 2008

Procedures

A-205.2, Emergency Plan Implementing Procedures, Rev. 02500
CNG-OP-1.01, Conduct of Operations, Rev. 00100
CNG-OP-1.01-1004, Plant Operations Review Committee/Qualified Reviewer, Rev. 00001
OPS-CONT-RM-CONDUCT, Conduct of Activities in the Control Room, Rev. 00600
ND-OPS, Operations, Rev. 13
STP-O-12.1, Emergency Diesel Generator A, Rev. 300
STP-O-12.2, Emergency Diesel Generator B, Rev. 200

Drawings

10905-0101, Diesel Generator A Supply Breaker to Bus 14, Rev. 12
10905-0027A, Station Service Transformer 14, Rev. 3
33013-2539, AC System Plant Load Distribution, Rev. 12
Enercon Services Inc., Drawing No. 33013-4000, Dry Cask Storage Project Boring Location Plan
Enercon Services Inc., Drawing No. 33013-4001, Dry Cask Storage Project Site Plan
Enercon Services Inc., Drawing No. 33013-4002, Dry Cask Storage Project Underground Utilities Plan
Enercon Services Inc., Drawing No. 33013-4014, Dry Cask Storage Project, Soil Improvement Plan, dated May 23, 2008
Enercon Services Inc., Drawing No. 33013-4014, Rev. 2, Dry Cask Storage Project, Soil Improvement Plan, dated July 30, 2008
Enercon Services Inc., Drawing No. 33013-4016, Dry Cask Storage Project Haul Path Extension
Enercon Services Inc., Drawing No. 33013-4020, Dry Cask Storage Project Pad and Apron, Pad Plan and Details
Enercon Services Inc., Drawing No. 33013-4021, Dry Cask Storage Project Pad and Apron, Apron Plan and Details

Condition Reports

2008-9736
2008-9737
2007-6123
2008-010059
2008-008677
2008-008760
2008-008805
2008-009139

Calculations

DA-EE-92-098-01, Diesel Generator A Steady State Loading Analysis, Rev. 5
DA-EE-92-120-01, Diesel Generator B Steady State Loading Analysis, Rev. 5

Completed Surveillances

STP-O-12.1, Emergency Diesel Generator A, Rev. 201, dated 08/20/08
STP-O-12.1, Emergency Diesel Generator A, Rev. 201, dated 09/16/08
STP-O-12.1, Emergency Diesel Generator A, Rev. 300, dated 10/14/08
STP-O-12.2, Emergency Diesel Generator B, Rev. 102, dated 07/30/08
STP-O-12.2, Emergency Diesel Generator B, Rev. 102, dated 09/21/08
STP-O-12.2, Emergency Diesel Generator B, Rev. 200, dated 10/22/08

LIST OF ACRONYMS

ACE	apparent cause evaluation
ADAMS	Agency-Wide Documents Access and Management System
AFW	auxiliary feedwater
ALARA	as low as is reasonably achievable
AO	auxiliary operator
CAP	corrective action program
CCW	component cooling water
CR	condition report
EAL	emergency action level
EDG	emergency diesel generator
GL	Generic Letter
GINNA	R.E. Ginna Nuclear Power Plant
HRA	high radiation area
HX	heat exchanger
ISFSI	Independent Spent Fuel Storage Installation
IMC	Inspection Manual Chapter
IST	Inservice Testing Program
LCO	limiting condition for operation
LER	licensee event report
LHRA	locked high radiation area
MOV	motor operated valve
NEI	Nuclear Energy Institute
NCV	non-cited violation
NRC	U.S. Nuclear Regulatory Commission
ODCM	offsite dose calculation manual
OSL	optically stimulated luminescent
P&ID	pipng & instrument drawing
PARS	Publicly Available Records
PCR	plant change record
PI	performance indicator
PM	planned maintenance
PMT	post-maintenance testing
PORC	plant operations review committee
PRA	probabilistic risk analysis
RCA	radiologically controlled area
REMP	radiological environmental monitoring program
RETS	radiological effluent technical specification
RHR	residual heat removal
RWP	radiation work permit
SSC	systems, structures, and components
SW	service water
TI	temporary instruction
TLD	thermo luminescent dosimeter
TS	technical specification
TSC	technical support center
TSR	technical staff request
UFSAR	Updated Final Safety Analysis Report
VHRA	very high radiation area
WO	work order