



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

June 8, 2012

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

**SUBJECT: R.E. GINNA NUCLEAR POWER PLANT - NRC PROBLEM IDENTIFICATION
AND RESOLUTION INSPECTION REPORT 05000244/2012008**

Dear Mr. Pacher:

On April 26, 2012, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your R.E. Ginna Nuclear Power Plant. The enclosed report documents the inspection results, which were discussed on April 26, 2012, with you and other members of your staff.

This inspection was an examination of activities conducted under your license as they relate to the identification and resolution of problems, and compliance with the Commission's rules and regulations and the conditions of your operating license. Within these areas, the inspection involved examination of selected procedures and representative records, observations of activities, and interviews with personnel.

Based on the samples selected for review, the inspection team concluded that Ginna was generally effective in identifying, evaluating and resolving problems. In general, Ginna personnel identified problems at a low threshold and entered them into the corrective action program. Ginna typically screened issues appropriately for operability and reportability, and prioritized issues commensurate with the safety significance of the problems. Causal analyses appropriately considered extent of condition, generic issues, and previous occurrences. In general, corrective actions addressed the identified causes and were typically implemented in a timely manner.

This report documents one NRC-identified finding of very low safety significance (Green). The finding was determined to involve a violation of NRC requirements. However, because of the very low safety significance and because it has been entered into your corrective action program, the NRC is treating the violation as a non-cited violation (NCV), consistent with Section 2.3.2 of the NRC Enforcement Policy. If you contest this NCV, you should provide a response within 30 days of the date of this inspection report with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN.: Document Control Desk, Washington DC 20555-0001, with copies to the Regional Administrator, Region I; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Senior Resident Inspector at the 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, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC Website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

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

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

Enclosure: Inspection Report No. 05000244/2012008
w/ Attachment: Supplemental Information

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No.: 50-244

License No.: DPR-18

Report No.: 05000244/2012008

Licensee: Constellation Energy Nuclear Group, LLC

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

Location: Ontario, New York

Dates: April 9 through April 26, 2012

Team Leader: Andrew Rosebrook, Senior Project Engineer, Division of Reactor Projects (DRP)

Inspectors: Javier Brand, Reactor Inspector, Division of Reactor Safety (DRS)
Doug Dodson, Resident Inspector, DRP
David Everhart, Physical Security Inspector, DRP
Tracey Ziev, Reactor Engineer, DRP

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

Enclosure

SUMMARY OF FINDINGS

IR 05000244/2012008; 04/09/2012 – 04/26/2012; R.E. Ginna Nuclear Power Plant; Biennial Baseline Inspection of the Identification and Resolution of Problems. One finding was identified in the area of problem identification.

This NRC team inspection was performed by four regional inspectors and one resident inspector. The inspectors identified one finding of very low safety significance (Green) during this inspection and classified this finding as a non-cited violation (NCV). The significance of most findings is indicated by their color (Green, White, Yellow, Red) using NRC 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.

Problem Identification and Resolution

The inspection team concluded that Ginna was generally effective in identifying, evaluating and resolving problems. In general, Ginna personnel identified problems at a low threshold and entered them into the corrective action program. Ginna typically screened issues appropriately for operability and reportability, and prioritized issues commensurate with the safety significance of the problems. Causal analyses appropriately considered extent of condition, generic issues, and previous occurrences. In general, corrective actions addressed the identified causes and were typically implemented in a timely manner. However, the inspectors identified a violation of NRC requirements, in the area of problem identification.

Ginna's audits and self-assessments reviewed by the inspectors were thorough and probing. Additionally, the inspectors concluded that, in general, Ginna identified, reviewed, and applied relevant industry operating experience (OE) to the R.E. Ginna Nuclear Power Plant.

Based on interviews, observations of plant activities, and reviews of the CAP and the Employee Concerns Program (ECP), the inspectors did not identify any concerns with site personnel willingness to raise safety issues nor did the inspectors identify conditions that could have had a negative impact on the site's safety conscious work environment.

Cornerstone: Mitigating Systems

- Green. The inspectors identified a Green NCV of 10 CFR 50, Appendix B, Criterion III, "Design Control," when it was determined that Ginna had not validated that the Safe Shutdown Analysis for a design basis tornado described in Updated Final Safety Analysis Report (UFSAR) Section 3.3.3.2.2 could be completed in a timely fashion. Specifically, although procedures existed and operators were trained on those procedures, Ginna had not validated that the safe shutdown methodology would establish standby auxiliary feedwater (SAFW) to the steam generator (S/G) prior to the S/G boiling dry. As a result, time critical operator actions were not identified and operator training was not sufficient to ensure operators could perform this task in a timely manner. Ginna entered this concern into their CAP as condition report (CR) 2012-002825 and provided operators additional guidance on the new expectations for responding to this event.

The inspectors determined that the finding was more than minor because it was similar to examples 3K and 3L of IMC 0612, Appendix E, "Examples of Minor Issues." Using IMC 0609 Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings," the finding screened as potentially risk significant since normal core cooling could be adversely impacted during a severe weather initiating event. Therefore, the inspectors coordinated with the region Senior Reactor Analysts (SRAs) to conduct a Phase 3 analysis. The SRA Phase 3 determined this finding would screen to very low safety significance (Green) due to core damage frequency (CDF) being E-8 or approximately 1 core damage event in 10,000,000 years of reactor operation. This finding was determined not to be indicative of current licensee performance since the performance deficiency occurred in 1983, thus no cross-cutting aspect is assigned.

Other Findings

One finding of very low safety significance that was identified by Ginna was reviewed by the inspectors. Corrective actions taken or planned by Ginna have been entered into the CAP.

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution (71152B)

This inspection constitutes one biennial sample of problem identification and resolution as defined by Inspection Procedure 71152. All documents reviewed during this inspection are listed in the Attachment to this report.

.1 Assessment of the Corrective Action Program Effectiveness

a. Inspection Scope

The inspectors reviewed CRs selected across the seven cornerstones of safety in the NRC's Reactor Oversight Process (ROP) to determine if site personnel properly identified, characterized, and entered problems into the CAP for evaluation and resolution. The inspectors selected items from functional areas that included chemistry, emergency preparedness, engineering, maintenance, operations, physical security, radiation safety, and oversight programs to ensure that Ginna appropriately addressed problems identified in these functional areas. The inspectors selected a risk-informed sample of CRs that had been issued since the last NRC problem identification resolution (PI&R) inspection conducted in June 2010. Insights from the station's risk analyses were considered to focus the sample selection and plant walkdowns on risk-significant systems and components.

To assess the effectiveness of the corrective action program, the inspectors reviewed performance in three primary areas: problem identification, prioritization and evaluation of issues, and corrective action implementation. The inspectors compared performance in these areas to the requirements and standards contained in 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," and Constellation procedure CNG-CA-1.01-1000, "Corrective Action Program," Revision 00600.

The inspectors reviewed Constellation's procedures that describe the CAP at Ginna. Ginna personnel identified problems by initiating CRs for conditions adverse to quality, plant equipment deficiencies, industrial or radiological safety concerns, and other significant issues. CRs were subsequently screened for operability and reportability, categorized by significance level (1, most significant, through 4, least significant), and assigned to personnel for evaluation and resolution or trending.

The inspectors evaluated the process for assigning and tracking issues to ensure that issues were screened for operability and reportability, prioritized for evaluation and resolution in a timely manner commensurate with their safety significance, and tracked to identify adverse trends and repetitive issues. In addition, the inspectors interviewed plant staff and management to determine their understanding of, and involvement with, the CAP.

(1) Effectiveness of Problem Identification

The inspectors selected items from various processes at Ginna to verify that they were appropriately considered for entry into the CAP. Specifically, the inspectors reviewed a sample of engineering requests, operator workarounds, operability determinations, system health reports, equipment problem lists, work orders (WOs), and issues entered into the ECP. Plant areas walked down included the: control room, turbine building, the screenhouse building, emergency diesel generators (EDGs), and auxiliary and intermediate buildings.

(2) Effectiveness of Prioritization and Evaluation of Issues

The inspectors reviewed CRs to assess whether Ginna personnel adequately evaluated and prioritized identified issues. The CRs reviewed encompassed the full range of evaluations, including root cause analyses, apparent cause evaluations, and common cause analyses. A sample of CRs that were assigned lower levels of significance which did not include formal cause evaluations were also reviewed by the inspectors to ensure they were appropriately classified. The inspectors' review included the appropriateness of the assigned significance, the scope and depth of the causal analysis, and the timeliness of the evaluation. The inspectors assessed whether the evaluations identified likely causes for the issues and identified appropriate corrective actions to address the identified causes. As part of this review, the inspectors interviewed various station personnel to fully understand details within the evaluations, and the proposed and completed corrective actions. The inspectors observed CR screening meetings and management review committee (MRC) meetings in which Ginna personnel reviewed new CRs for prioritization and assignment. Further, the inspectors reviewed equipment operability determinations, reportability assessments, and extent-of-condition reviews for selected CRs to verify these specific reviews adequately addressed equipment operability, reporting of issues to the NRC, and the extent of problems.

(3) Effectiveness of Corrective Actions

The inspectors' review of CRs also focused on the associated corrective actions in order to determine whether the corrective actions developed to address the identified causes of the problems were implemented in a timely and effective manner. The inspectors reviewed CRs for adverse trends and repetitive problems to determine whether corrective actions were effective in addressing the broader issues. The inspectors reviewed Ginna's timeliness in implementing corrective actions and effectiveness in precluding recurrence for significant conditions adverse to quality. Lastly, the inspectors reviewed CRs associated with NRC-identified NCVs and findings since the last PI&R inspection to determine whether Ginna personnel properly evaluated and resolved the issues. In addition, the inspectors expanded the corrective action review to five years to evaluate Ginna's actions related to service water system and spent fuel pool system deficiencies.

b. Assessment

(1) Effectiveness of Problem Identification

Based on the selected samples reviewed, plant walkdowns, and interviews of site personnel, the inspectors determined that Ginna personnel identified problems at a low threshold and entered them into the CAP. For the issues reviewed, the inspectors noted that problems or concerns had been appropriately documented in enough detail to understand the issues. The inspectors observed managers and supervisors at MRC meetings appropriately questioning and challenging CRs to ensure clarification of the issues. The inspectors determined that Ginna trended equipment and programmatic issues, and CR descriptions appropriately included references to repeat occurrences of issues. The inspectors concluded that personnel generally were identifying trends at low levels. In general, the inspectors did not identify any significant issues or concerns that had not been appropriately entered into the CAP for evaluation and resolution. In response to several minor issues identified by the inspectors, Ginna personnel promptly initiated CRs and/or took immediate action to address the issue. Examples of inspector-identified issues included:

- Condition report 2012-002825 - Inspectors identified that the Ginna Safe Shutdown Analysis for a design basis tornado where the screenhouse is lost, contained in USFAR section 3.3.3.2.2, was never validated to ensure it could be completed in a timely manner. This issue was determined to be a more than minor violation of 10 CFR 50 Appendix B Criterion III, "Design Control." This finding is discussed further in section 4OA2.1.c below. Ginna entered this issue into the CAP.
- Condition reports 2012-002413, 2012-002774, 2012-002783 - The inspectors identified a number of issues related to fire seals which appeared to be degraded. The degraded condition of the seals was not being entered into the CAP in order to ensure the seals were evaluated and trended appropriately. Ginna entered the inspectors' observations into the CAP by writing the CRs referenced above. When evaluated, the seals were still able to perform their safety function; therefore this issue is minor. In addition, operations and security management briefed personnel to look for this type of equipment degradation on their rounds and write CRs.
- Condition report 2012-002478 - During a tour of the residual heat removal system (RHR) sub-basement, the inspectors identified a ½ inch diameter tubing in direct contact with a scaffold structure. The tubing was installed as part of the high point vents modification during the 2011 refueling outage. The tubing is safety-related and required a minimum 1 inch clearance from any structure per CNG-MN-1.01-1005, "Scaffold Control," Revision 00400, to prevent damage during a design bases seismic event. There was no evaluation for this nonconforming condition. Ginna evaluated the issued, wrote the CR referenced above and conducted an engineering evaluation which determined this condition would not have prevented any of the RHR pumps or associated components from performing their intended safety function during a design basis seismic event; therefore, this issue is minor.
- Condition report 2012-002658 - During a control room tour, the inspectors identified that while steam line radiation monitor R-31 was out of service, control room indication for R-31 was removed from radiation monitoring system rack 3 and non-fire retardant tape was used as a foreign material exclusion (FME) barrier to cover

the opening in the rack. Procedure CNG-MN-1.01-1001, "Foreign Material Exclusion," Revision 00500 states that FME control devices shall be fire resistant or retardant." Ginna replaced the non-compliant tape with an approved FME barrier and wrote the CR referenced above. The inspectors determined that the non-compliant FME barrier did not represent a significant increase in plant risk due to fire since the area was continuously manned; therefore, the issue is minor.

The inspectors independently evaluated the deficiencies noted above in accordance with the guidance in IMC 0612, Appendix B, "Issue Screening," and Appendix E, "Examples of Minor Issues." The inspectors determined that, except as noted, the issues were not findings of more than minor significance, and, as a result, they are not subject to enforcement action in accordance with the NRC's Enforcement Policy.

(2) Effectiveness of Prioritization and Evaluation of Issues

The inspectors determined that, in general, Ginna personnel appropriately prioritized and evaluated issues commensurate with their safety significance. CRs were screened for operability and reportability, categorized by significance, and assigned to a department for evaluation and resolution. The CR screening process considered human performance issues, radiological safety concerns, repetitiveness and adverse trends. The inspectors observed managers and supervisors at MRC meetings appropriately questioning and challenging CRs to ensure appropriate prioritization.

CRs were categorized for evaluation and resolution commensurate with the significance of the issues. Based on the sample of CRs reviewed, the guidance provided by the Ginna implementing procedures was sufficient to ensure consistency in categorization of the issues. Operability and reportability determinations were performed when conditions warranted and the evaluations supported the conclusions. Causal analyses appropriately considered extent of condition, generic issues, and previous occurrences. During this inspection, the inspectors noted that Ginna's root cause analyses were generally thorough, and corrective and preventive actions addressed the identified causes. Additionally, the identified causes were well supported. The MRC also effectively added value, by conducting effective reviews of ACEs, RCAs, and effectiveness reviews, and rejecting products which did not meet the standards.

The inspectors identified some instances where Ginna's prioritization of CRs, specific to the site-assigned categorization levels as described in Ginna's corrective action procedure, was inconsistently implemented. Specifically, the inspectors identified some instances of category 4 CRs that documented conditions adverse to quality without sufficient knowledge of the probable cause and justification for the category 4 categorization. The following example is illustrative of CRs identified by inspectors as inconsistent in categorization of the issues:

- Condition report 2012-002836 – Category 4 CRs 2012-002700, 2012-002701, 2012-2702, and 2012-2703 documented NRC identified water in-leakage at diesel generator building doors 15, 16, 17, and 18. Multiple CRs for similar issues should have been identified as a potential trend and a Category 3 CR should have been assigned in accordance with station procedures, which would have required an extent of condition and probable cause assessment to be performed. CR 2012-002836 was written by Ginna to document the need for additional evaluation of these issues as the extent of condition review did not include other doors with flood seals

in the same room which were also leaking. The CR determined that in leakage was not great enough to impact operation of safety-related equipment inside the room; therefore, the issue was determined to be minor.

The inspectors independently evaluated the deficiency noted above in accordance with the guidance in IMC 0612, Appendix B, "Issue Screening," and Appendix E, "Examples of Minor Issues." The inspectors determined that the issue was not a finding of more than minor significance, and as a result, it is not subject to enforcement action in accordance with the NRC's Enforcement Policy.

(3) Effectiveness of Corrective Actions

The inspectors concluded that corrective actions for identified deficiencies were generally timely and adequately implemented. For significant conditions adverse to quality, corrective actions were identified to prevent recurrence. The inspectors concluded that corrective actions to address NRC-identified NCVs and findings since the last PI&R inspection were timely and effective. The inspectors concluded that, in general, Ginna appropriately used risk insights to effectively prioritize and schedule corrective actions to be completed.

However, the inspectors identified some instances where Ginna's corrective actions were not completely timely or effective. Specifically, the inspectors identified some instances of corrective actions extended excessively and corrective actions closed prematurely. The following instances were CRs identified by inspectors as examples of corrective action program timeliness and effectiveness issues:

- Condition report 2012-3015 - CNG-CA-1.01-1000, "Corrective Action Program," Revision 00600 states that corrective action (CA) extension requests must state the risk to safety and probability of recurrence under the safety significance field in the licensee's electronic CR system. Contrary to CNG-CA-1.01-1000, CA extension requests generally contained little or no discussion with respect to the probability of recurrence. Ginna acknowledged the inspectors' observation and wrote the CR referenced above. Based upon review of the applicable procedures and observation of the MRCs, where risk insights including probability of recurrence were discussed, the inspectors determined that risk insights were being considered as required by the CAP and MRC procedures and this observation was more of a documentation issue; therefore, the issue was determined to be minor.
- Condition report 2012-002826 - CNG-CA-1.01-1000, "Corrective Action Program," Revision 00600 states that compensatory actions are actions taken to reduce the risk of an adverse condition before implementing permanent corrective actions or corrective actions to prevent recurrence. Compensatory actions 2011-003090, 2011-003091, 2011-003092, and 2011-003093 associated with root cause analysis report (RCAR) 2012-001016 were completed and closed prior to the completion of all corrective actions associated with the RCAR. After evaluating the closure of these compensatory actions, Ginna determined that the compensatory actions should have originally been categorized as corrective actions. Ginna acknowledged the inspectors' observation and wrote the CR referenced above. This issue was determined to be minor since both the corrective and compensatory actions were completed.

- Condition report 2012-002822 - Long term corrective actions (LTCAs) related to category 2 CR-2007-006081 are still in the “implement CA” stage of the corrective action process. CR-2007-006081 documents that some operations crews did not meet all critical operator action times during a steam generator tube rupture simulator validation scenario. This uncompleted CR was over 1700 days old. The outstanding corrective actions include procedural changes to improve the process for conducting and documenting assumed operator times in the UFSAR, and completing UFSAR changes. Some of the CAs had been extended in excess of twenty times. The inspectors reviewed the open CAs and determined that operators did have procedures and training and the inspectors did not have a reasonable doubt whether the actions could be completed in a timely manner; therefore, the issue is minor. Ginna acknowledged the inspectors’ observation and wrote the CR referenced above.
- Condition Report 2012-002840 - A contributing cause identified in CR 2011-002598, which documents an inadvertent train ‘B’ Safety Injection System initiation signal received during testing, states, “The test procedure was not entirely clear causing the test to be stopped for further clarification prior to proceeding. Furthermore there wasn’t an allowance to backup in the procedure to reclose the DC breaker opened for the test.” CA 2011-001626 directly addresses the first part of the contributing cause; however, none of the CAs addressed the lack of an allowance to backup in the procedure to reclose the DC breaker opened for the test. Ginna acknowledged the inspectors’ observation and wrote the CR referenced above. This issue was determined to be minor since the issue was identified and entered into the CAP for resolution prior to the revised test procedure being performed for the first time.

The inspectors independently evaluated the deficiencies noted above in accordance with the guidance in IMC 0612, Appendix B, “Issue Screening,” and Appendix E, “Examples of Minor Issues.” The inspectors determined these issues were deficiencies of minor significance and, therefore, are not subject to enforcement action in accordance with the NRCs Enforcement Policy.

c. Findings

Introduction. The inspectors identified a Green NCV of 10 CFR 50, Appendix B, Criterion III, “Design Control,” when it was determined that Ginna had not validated that the Safe Shutdown Analysis for a design basis tornado described in UFSAR Section 3.3.3.2.2. Specifically, although procedures existed and operators were trained on those procedures, Ginna had not validated that the safe shutdown methodology would establish SAFW to the S/G prior to the S/G boiling dry. As a result, time critical operator actions were not identified and operator training was not sufficient to ensure operators could perform this task in a timely manner.

Description. Ginna’s screenhouse building contains all four safety-related service water pumps, safety-related electrical buses 17 and 18, and the motor driven and diesel driven fire pumps. The screenhouse is a non-class I structure, and the equipment inside is not protected from natural phenomena such as a design basis tornado and tornado borne missiles. Ginna was licensed taking this vulnerability into account. In 1983, Ginna submitted a safe shutdown analysis for a design basis tornado which did not credit any equipment or structure that was not protected, including all service water pumps and the condensate storage tank. The scenario assumed a loss of offsite power and resulting

turbine and reactor trip from 100% power. Part of this methodology involved providing alternate cooling to an EDG and establishing SAFW using the alternate supply of water to provide make-up water to a S/G. The NRC approved this safe shutdown methodology as discussed in the Integrated Plant Safety Assessment for the Ginna Nuclear Power Plant dated August 21, 1983, completed in accordance with NUREG-0821 Supplement 1. However, section 2.6.1, "Screenhouse" states, in part, "The Staff concluded that such methods are acceptable provided that operating procedures for use of alternate sources of auxiliary feedwater are developed. The licensee has committed to develop such procedures in conjunction with implementation of the operating procedures for the alternate diesel cooling system."

The inspectors identified that Ginna had developed procedures to establish alternate cooling to the EDGs and establish alternate cooling water supply to the SAFW pumps. The guidance is contained in procedures ER-D/G.2, "Alternate Cooling for Emergency Diesel Generators," and ER-AFW.1, "Alternate Water Supply to the AFW Pumps," respectively. The inspectors verified that the procedures were available, necessary equipment was pre-staged, and operators received training including walkthroughs of these procedures that typically take 15-20 minutes each to complete. However, the inspectors observed that during this postulated accident, operators would be in a number of concurrent Emergency Procedures, including E-0, "Reactor Trip or Safety Injection," Revision 04500; EOP Att-8.5, "Attachment: Loss of Offsite Power," Revision 1; ECA-0.0, Loss of All AC Power, Revision 03700; AP-SW.2, "Loss of Service Water," Revision 00801; AP-ELEC.17/18, "Loss of Safeguards Bus 17/18," Revision 00801; and ER-SH.1, "Response to Loss of Screenhouse," Revision 2. Ginna was unable to provide any verification or validation documentation to show a timeline for operator response to this event.

On April 25, 2012, Ginna ran this scenario with operators in the plant simulator. This simulation showed that the S/Gs would boil dry in approximately 42 minutes from the start of the event, and that operators would take approximately 88 minutes to establish S/G flow with SAFW. Therefore, the operators had to enter procedure FR-H.1, "Primary Feed and Bleed," in order to provide core cooling until SAFW flow was established and S/G level could be restored.

Ginna entered this concern into their CAP as CR 2012-002825, and corrective actions included running the scenario a number of additional times to identify opportunities to re-sequence and reprioritize the operators' response for this event. Operator training opportunities were identified to develop time critical operator actions for this scenario, which would allow SAFW flow to be established within 35 minutes. Operating crews were briefed and provided additional guidance on the new expectations for responding to this event, until formal training could be developed, scheduled, and completed.

In addition, the inspectors identified the Emergency Response Procedure ER-AFW.1, Section 6.2.3, "Aligning City Water To SAFW Pumps," step 6a places the SAFW Test Tank Low Level pump trip in service. There is no procedural requirement to maintain level in the SAFW test tank, and there is no note in the procedure to ensure level in the SAFW is >8% or the SAFW pump will trip/not start. The inspectors determined an indication of the trip signal being present would be received immediately in the MCR when step 6a was completed (an unexpected alarm), and because there is a note in section 6.2.4 which alerts operators of this trip function, it is likely that operators would be able to diagnosis and correct the problem. However, this previously unidentified

procedure error would have had the potential to adversely impact operators' response time and further delay establishing SAFW cooling to the S/G.

Analysis. The failure to validate the time lines for safe shutdown analysis and identify time critical operator actions and training to complete a safe shutdown for a design basis natural phenomena was considered to be a performance deficiency (PD) which was reasonably within Ginna's ability to foresee and prevent. The inspectors evaluated the finding in accordance with the guidance in IMC 0612, Appendix B, "Issue Screening," and Appendix E, "Examples of Minor Issues." This issue is more than minor because it is similar to Appendix E examples 3K and 3L which state an issue involving an engineering calculation or analysis is more than minor if the engineering calculation error results in a condition where there is reasonable doubt on the operability of a system or component.

The inspectors evaluated this PD using IMC 0609 Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings." This PD was considered to impact the Mitigating Systems cornerstone, since it involved short term core decay heat removal being degraded. The finding screened as potentially risk significant since normal core cooling could be adversely impacted during a severe weather initiating event. The inspectors coordinated with a regional SRA to conduct a Phase 3 analysis.

The SRA determined that the most probable accident sequence would be Loss of Intake Structure (LOIS) + Loss of SAFW + Loss of feed and bleed (FB). Severe thunderstorm and tornado occurrences frequencies were derived from the National Oceanic and Atmospheric Administration/National Weather Service / Storm Prediction Center. The frequency of a severe weather event that would challenge the intake structure (assumed to be wind speeds > 111mph) would be 3.84 E-6. SAFW and feed and bleed are nominally assigned a failure frequency of E-2. Using these values, the base case LOIS + SAFW + FB is approximately E-10. In this case, SAFW is assumed to fail, since it is not established in time. Therefore, the conditional case would be approximately E-8. This finding would screen as very low safety significance (Green) due to the delta CDF being E-8 or approximately 1 core damage event in 10,000,000 years of reactor operation.

This finding was determined not to be indicative of current licensee performance since the performance deficiency occurred in 1983. Thus no cross cutting aspect is assigned.

Enforcement. 10 CFR 50, Appendix B, Criterion III, "Design Control," requires, in part, that design control measures shall provide for verifying or checking the adequacy of design. UFSAR section 3.3.3.2.2 describes the methodology, basis and assumptions for the Ginna plant safe shutdown analysis for a design basis tornado. Contrary to the above, design control measures for verifying the adequacy of the design were not implemented. Specifically, for the safe shutdown analysis described in USFAR 3.3.3.2.2 and approved by the NRC in Ginna's 1983 Integrated Plant Safety Assessment, the implementing procedures were never validated to ensure the actions could be completed in a timely manner. Ginna entered this concern into their CAP as condition report (CR) 2012-002825 and provided operators additional guidance on the new expectations for responding to this event. Because this finding was of very low safety significance and it was entered into the CAP, this violation is being treated as an NCV consistent with the Enforcement Policy. **(NCV 05000244/2012008-01, Failure to Validate Plant Safe Shutdown Timeline for Design Basis Tornado.)**

.2 Assessment of the Use of Operating Experience

a. Inspection Scope

The inspectors selected a sample of CRs associated with the review of industry OE to determine whether Ginna personnel appropriately evaluated the OE information for applicability to Ginna and had taken appropriate actions, when warranted. The inspectors reviewed CR evaluations of OE documents associated with a sample of NRC Generic Letters and Information Notices to ensure that Ginna adequately considered the underlying problems associated with the issues for resolution via their CAP. The inspectors also observed plant activities to determine if industry OE was considered during the performance of routine activities.

b. Assessment

The inspectors determined that, in general, Ginna appropriately considered industry OE information for applicability, and used the information for corrective and preventive actions to identify and prevent similar issues when appropriate. The inspectors determined that OE was appropriately applied and lessons learned were generally communicated and incorporated into plant operations. However, the inspectors noted two examples where Ginna missed opportunities to effectively evaluate and incorporate industry and vendor operating experience.

- CR-2011-006651 – CNG-SC-1.01-GL003, “Guideline for Handling of Items Relative to 10 CFR 21 Notifications and Industry Operating Experience,” Revision 00000, requires the licensee to generate a CR for items that were previously issued for installation and known or suspected to be applicable to a 10 CFR 21 notification. Contrary to procedure CNG-SC-1.01-GL003, on August 23, 2011, Ginna failed to generate a CR for a vendor notification for nonconforming, non-safety related bus 11A and 11B underfrequency relays. On September 18, 2011, two of the affected relays associated with the advisory letter were installed in the plant. The underfrequency bus 11A and 11B reactor trip function ensures that protection is provided against violating the departure from nucleate boiling ratio limit due to a loss of flow in both reactor coolant pump loops from a major network frequency disturbance. This finding is more than minor because it is similar to example 5.c in IMC 0612, Appendix E, where the licensee is supposed to establish controls to prevent nonconforming parts from being used inadvertently. The issue is more than minor if the nonconforming part was installed and the system returned to service. This finding also affects the Initiating Events cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Ginna entered this issue into the corrective action program as CR-2011-006651. The inspectors determined that the finding was of very low safety significance (Green) in accordance with NRC IMC 0609, Attachment 4, “Phase 1 – Initial Screening and Characterization of Findings,” Initiating Events, because the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. There is no violation of NRC requirements because the underfrequency relays are not safety-related.

- CR-2012-002462 – During a tour of the EDG rooms, the inspectors identified that Ginna had not implemented Constellation Fleet and industry OE related to vent pipes for vented tanks becoming plugged and resulting in damage to the tanks. The inspectors discovered that Ginna had not developed preventive maintenance inspections or conducted walkdowns to inspect for these concerns at Ginna. In response to the inspectors' questions, Ginna conducted inspections for safety-related vented tanks such as the EDG Fuel Oil tanks. During these inspections, one of the EDG Fuel Oil tank vents was found 60 % blocked by a large wasp nest, which was removed. Ginna entered the inspectors' observations into the CAP by writing the CR referenced above, conducted the inspections discussed, and evaluated the blockage found for operability. The evaluation determined that the tank operability was not impacted. The inspectors independently evaluated the issue in accordance with the guidance in IMC 0612, Appendix B, "Issue Screening," and Appendix E, "Examples of Minor Issues." The inspectors determined that the issue was not of more than minor significance since the safety function was not impacted. As a result, the issue is not subject to enforcement action in accordance with the NRC's Enforcement Policy.

c. Findings

One licensee identified green finding was identified and is discussed in section 4OA2.2.b. The finding was identified by Ginna, does not involve a violation of NRC requirements, was determined to be of very low safety significance, and was entered into the licensee's CAP. Corrective actions have been completed and were reviewed by the inspectors. In accordance with NRC IMC 0612, "Inspection Reports," no further documentation is required.

.3 Assessment of Self-Assessments and Audits

a. Inspection Scope

The inspectors reviewed a sample of Quality Assurance (QA) audits, including a review of several of the findings from the most recent audit of the CAP, and a variety of self-assessments focused on various plant programs. These reviews were performed to determine if the assessments were identifying issues at a low threshold, if problems identified through these assessments were entered into the CAP, when appropriate, and whether corrective actions were initiated to address identified deficiencies. The effectiveness of the audits and assessments was evaluated by comparing audit and assessment results against self-revealing and NRC-identified observations made during the inspection.

b. Assessment

The inspectors concluded that QA audits and self-assessments were generally critical, thorough, and effective in identifying issues. The inspectors observed that these audits and self-assessments were completed by personnel knowledgeable in the subject areas and were completed to a sufficient depth to identify issues that were then entered into the CAP for evaluation. Corrective actions associated with the issues were implemented commensurate with their safety significance. Ginna managers evaluated the results and initiated appropriate actions to focus on areas identified for improvement. The inspectors also considered the system health reports to be an effectively implemented assessment tool and clearinghouse for capturing operating experience and their evaluations.

c. Findings

No findings of significance were identified.

.4 Assessment of Safety Conscious Work Environment

a. Inspection Scope

During interviews with station personnel, the inspectors assessed the safety conscious work environment (SCWE) at Ginna. Specifically, the inspectors interviewed personnel to determine whether they were hesitant to raise safety concerns to their management and/or the NRC. The inspectors also interviewed the station ECP coordinator to determine what actions were implemented to ensure employees were aware of the program and its availability with regard to raising concerns. The inspectors reviewed the ECP files to ensure that issues were entered into the CAP when appropriate.

The inspectors reviewed issues concerning SCWE and communication between security management and security officers. The inspectors performed interviews with over 50 security officers over several shifts; QP&A and ECP personnel; and the Safe2Say program manager. The inspectors attended MRC and CAP Screening meetings, shift briefings and multiple Town Hall Meetings. This enabled the inspectors to gain a better understanding of the actions proposed to increase communication and to enhance the interaction between security officers and management.

b. Assessment

During interviews, plant staff expressed a willingness to use the CAP to identify plant issues and deficiencies and stated that they were willing to raise safety issues. The inspectors noted that no one interviewed stated that they personally experienced or were aware of a situation in which an individual had been retaliated against for raising a safety issue. All persons interviewed demonstrated an adequate knowledge of the CAP and ECP. Based on these limited interviews, the inspectors concluded that there was no evidence of an unacceptable SCWE and no significant challenges to the free flow of information.

The inspectors interviewed a number of security officers and identified that Ginna management has implemented corrective actions to address work environment concerns. The officers specifically noted improved focus on communications and management involvement in addressing the concerns. Again, the inspectors concluded that there was no evidence of an unacceptable SCWE in the security organization and no significant challenges to the free flow of information.

c. Findings

No findings of significance were identified.

4OA6 Meetings, Including Exit

On April 26, 2012, the inspectors presented the inspection results to Mr. Joseph E. Pacher, Vice President, and to other members of the Ginna staff. The inspectors verified that no proprietary information was retained by the inspectors or documented in the report.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION**KEY POINTS OF CONTACT**Licensee Personnel

B. Everett	Senior Operations Safety Analyst
B. Johns	System Engineer
B. Wood	RP Technician
C. Holden	System Engineer
C. Miller	G4S Project Manager
D. Crowley	Principal Engineer
D. Garofoli	System Engineer
D. Markowski	Supervisor System Engineering
D. Pascuzzi	System Engineer
D. Peters	Design Engineer
E. Durkish	Senior Engineer
E. Hedderman	Director of Performance Improvement
E. Iannello	Design Engineer
E. Tiberio	Engineer
F. Peterson	Station Engineering
G. Palmer	Security Manager
J. Breunig	System Engineer
J. Brown	General Supervisor of Operations Support
J. Cieri	System Engineer
J. Gardiner	Design Engineer
J. Jackson	Regulatory Assurance
J. Johnson	FME Control Program
J. List	Supervisor Operations Training
J. Ortiz	Regulatory Assurance
J. Prytyska	Senior Buyer
J. Scalzo	Emergency Preparedness Director
J. Sperr	System Engineer
J. Stanger	Engineer
J. Torbitt	QP&A Inspector
K. Garnish	General Supervisor of Operations Training
M. Amos	System Engineer
M. Bodine	Senior Engineer
M. Smith	System Engineer
P. Moorehouse	Safe2Say Program Manager
P. Shipp	Supervisor System Engineering
R. Hellems	System Engineer
T. Kubiak	ECP Manager
T. Miller	Principal Engineer
T. Pagilla	Operations Manager
W. Rabin	System Engineer

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSEDOpened and Closed

05000244/2012008-01	NCV	Failure To Validate Plant Safe Shutdown Timeline for Design Basis Tornado. (4OA2.1.c)
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LIST OF DOCUMENTS REVIEWEDAudits and Self-Assessments

CAP-11-01-G, Corrective Action Program	QA-2011-0034
Audit	QA-2011-0073
EPP-10-01-G	QA-2011-0086
EPP-11-01-G	QA-2012-0004
EPP-12-01-G	RPP-11-01-G
QA-2010-0056	SA-2010-000083
QA-2010-0060	SA-2011-000028
QA-2010-0065	SA-2011-000029
QA-2011-0001	SA-2011-000115
QA-2011-0019	SA-2011-000118
QA-2011-0025	SEC-10-01-G, Security QA Audit
QA-2011-0029	SEC-11-01-G, Security QA Audit

Condition Reports

*CR-2012-002413	*CR-2012-002833	CR-2010-000724
*CR-2012-002414	*CR-2012-002836	CR-2010-001073
*CR-2012-002435	*CR-2012-002840	CR-2010-001285
*CR-2012-002451	*CR-2012-003015	CR-2010-001315
*CR-2012-002462	CR-2006-000721	CR-2010-001596
*CR-2012-002478	CR-2006-003167	CR-2010-001722
*CR-2012-002480	CR-2007-004734	CR-2010-002200
*CR-2012-002658	CR-2007-006042	CR-2010-002420
*CR-2012-002774	CR-2007-006042	CR-2010-002422
*CR-2012-002783	CR-2007-008357	CR-2010-002709
*CR-2012-002788	CR-2008-001427	CR-2010-002836
*CR-2012-002806	CR-2008-002730	CR-2010-002934
*CR-2012-002817	CR-2008-008345	CR-2010-002938
*CR-2012-002822	CR-2009-001567	CR-2010-003070
*CR-2012-002825	CR-2009-004532	CR-2010-003075
*CR-2012-002826	CR-2009-007133	CR-2010-003240
*CR-2012-002826	CR-2009-007615	CR-2010-003368
*CR-2012-002830	CR-2009-009518	CR-2010-003377

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CR-2010-003378	CR-2011-000649	CR-2011-005663
CR-2010-003436	CR-2011-000651	CR-2011-005890
CR-2010-003588	CR-2011-000652	CR-2011-005953
CR-2010-003678	CR-2011-000653	CR-2011-005953
CR-2010-003930	CR-2011-001375	CR-2011-005962
CR-2010-004007	CR-2011-001540	CR-2011-005984
CR-2010-004184	CR-2011-001629	CR-2011-006025
CR-2010-004187	CR-2011-001668	CR-2011-006332
CR-2010-004314	CR-2011-001841	CR-2011-006335
CR-2010-004454	CR-2011-001856	CR-2011-006341
CR-2010-004475	CR-2011-001861	CR-2011-006466
CR-2010-004476	CR-2011-002487	CR-2011-006651
CR-2010-004501	CR-2011-002506	CR-2011-006671
CR-2010-004539	CR-2011-002513	CR-2011-006675
CR-2010-004603	CR-2011-002572	CR-2011-006707
CR-2010-004782	CR-2011-002598	CR-2011-006714
CR-2010-004790	CR-2011-002626	CR-2011-006718
CR-2010-004853	CR-2011-002714	CR-2011-006733
CR-2010-004906	CR-2011-002766	CR-2011-006869
CR-2010-005119	CR-2011-002770	CR-2011-007034
CR-2010-005543	CR-2011-002781	CR-2011-007045
CR-2010-005560	CR-2011-002864	CR-2011-007308
CR-2010-005607	CR-2011-003152	CR-2011-007328
CR-2010-005624	CR-2011-003214	CR-2011-007457
CR-2010-005874	CR-2011-003281	CR-2011-007477
CR-2010-005877	CR-2011-003540	CR-2011-007485
CR-2010-006178	CR-2011-003660	CR-2011-007515
CR-2010-006182	CR-2011-003712	CR-2011-007520
CR-2010-006347	CR-2011-003780	CR-2011-007576
CR-2010-006695	CR-2011-003868	CR-2011-007591
CR-2010-006732	CR-2011-003955	CR-2011-007661
CR-2010-006766	CR-2011-004062	CR-2011-007661
CR-2010-006986	CR-2011-004179	CR-2011-007787
CR-2010-007062	CR-2011-004277	CR-2011-007870
CR-2010-007063	CR-2011-004341	CR-2011-007889
CR-2010-007084	CR-2011-004607	CR-2011-007922
CR-2010-007273	CR-2011-004790	CR-2011-007966
CR-2010-007376	CR-2011-004825	CR-2011-007970
CR-2010-007408	CR-2011-004842	CR-2011-008098
CR-2010-007452	CR-2011-004913	CR-2011-008146
CR-2010-007750	CR-2011-005083	CR-2011-008222
CR-2011-000237	CR-2011-005118	CR-2011-008232
CR-2011-000308	CR-2011-005241	CR-2011-008234
CR-2011-000309	CR-2011-005288	CR-2011-008244
CR-2011-000414	CR-2011-005311	CR-2011-008249
CR-2011-000544	CR-2011-005406	CR-2011-008348
CR-2011-000557	CR-2011-005418	CR-2011-008464

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CR-2011-008537	CR-2012-000900	CR-2012-001590
CR-2011-008601	CR-2012-000981	CR-2012-001603
CR-2011-008603	CR-2012-000981	CR-2012-001603
CR-2011-008714	CR-2012-001016	CR-2012-001718
CR-2011-008716	CR-2012-001084	CR-2012-001778
CR-2011-008753	CR-2012-001084	CR-2012-001903
CR-2012-000319	CR-2012-001247	CR-2012-002070
CR-2012-000358	CR-2012-001288	CR-2012-002172
CR-2012-000401	CR-2012-001413	CR-2012-002177
CR-2012-000555	CR-2012-001462	CR-2012-002231
CR-2012-000556	CR-2012-001475	CR-2012-002269
CR-2012-000559	CR-2012-001505	CR-2012-002269
CR-2012-000591	CR-2012-001507	CR-2012-002285
CR-2012-000636	CR-2012-001544	CR-2012-002291
CR-2012-000694	CR-2012-001548	CR-2012-002580
CR-2012-000699	CR-2012-001571	CR-2012-002614
CR-2012-000853	CR-2012-001574	

*NRC Identified During Inspection

Work Orders

C20901299	C91018476	P301949
C90811733	C91285635	P301950
C90866306	C91724160	P301951
C90866414	C91724160	P301952
C90897373	C91729756	
C91015291	P301671	

Operating Experience

OE-2010-000545 100226 - IN10-06 Inadvertent Control Rod Withdrawal Event While Shutdown
OE-2010-000353 100206 - IN10-03 Failures Of Motor-Operated Valves Due To Degraded Stem Lubricant
OE-2010-000598 100304 - IN10-04 Diesel Generator Voltage Regulation System Component Due To Latent Manufacturing Defect
OE-2010-000618 100305 - IN10-01 Pipe Support Anchors Installed Improperly
OE-2010-001019 100414 - IN10-07 Welding Defects In Replacement Steam Generators
OE-2010-001041 100415 - IN10-08 Welding and Nondestructive Examination Issues
OE-2011-000923
Part 21 # 47089, "Part 21 Regarding KF Protective Relay – Defective Capacitor," July 22, 2011
Operational Experience Daily Reports for 4/9/12-4/13/12

Drawings

11302-0448, Wiring Diagram for Screenhouse Level Instrucment LT-3006, Revision 1
21488-122, Auxiliary Building Floor Plan-West End Penetration Locations Floor Elev. 253'0", Revision 11
33013-2110, Plant Arrangement Service Building Plan-Basement FLR. EL. 253'-6", Revision 4

Attachment

33013-2116, Auxiliary Building Plan-Operating Floor, El. 271', Revision 5
71407-A, Basket Strainer 21" Diameter x 15 3/4" High- Clip on Type, Revision 1A
B1995, No. 2 Diesel Oil Tank, Revision 1
CP94B048 Sheet 4, 204HP Expansion Joint w/ Angular and lateral Offsets, Revision 3

Licensee Event Report (LER)

LER 05000244/2010-002, Revision 1
LER 05000244/2011-001, Revision 0
LER 05000244/2011-002, Revision 0

Non-Cited Violations and Findings

05000244/2010004-01
05000244/2010004-02
05000244/2010006-01
05000244/2010009-01
05000244/2010009-02
05000244/2010403-01
05000244/2011003-02
05000244/2011004-01
05000244/2011005-01
05000244/2011005-02
05000244/2011403-01
05000244/2011404-01
05000244/2011405-01

Procedures

A-601.10, Time Critical Action Management Program, Revision 1
AP-SW.1, Service Water Leak, Revision 02300
AP-CW.1, Loss of A Circ Water Pump, Revision 13
AP-ELEC.17/18, Loss of Safeguards Bus 17/18, Revision 00801
AP-SW.2, Loss of Service Water, Revision 00801
AR-AA-3, STDBY AUX FW Cond Stor Tank HI/Low Level, Revision 7
AR-I-1, Screen House Lo Level 22', Revision 01200
AR-J-31, Vital Battery Monitoring System, Revision 11
CNG-CA-1.01, Corrective Action Program, Revision 0001
CNG-CA-1.01-1000, Corrective Action Program, Revision 6
CNG-CA-1.01-1000, Corrective Action Program, Revision 00200
CNG-CA-1.01-1000, Corrective Action Program, Revision 00600
CNG-CA-1.01-1001, Management Review Committee, Revision 0001
CNG-CA-1.01-1001, Management Review Committee, Revision 00400
CNG-CA-1.01-1003, Performance Improvement Coordinators, Revision 0001
CNG-CA-1.01-1004, Root Cause Analysis, Revision 00802
CNG-CA-1.01-1005, Apparent Cause Evaluation, Revision 00600
CNG-CA-1.01-1007, Performance Improvement Program Trending and Analysis, Revision 00100
CNG-CA-1.01-1008, Significant Operating Experience Report (SOER) Process, Revision 00300
CNG-CA-1.01-1010, Use of Operating Experience, Revision 00200
CNG-CA-1.01-1010, Use of Operating Experience, Revision 00200

CNG-CA-1.01-GL008, Corrective Action Completion Evaluation (CACE), Revision 00100
 CNG-CA-2.01-1000, Self Assessment and Benchmarking Process, Revision 00500
 CNG-MN-1.01-1001, Foreign material Exclusion, Revision 00500
 CNG-MN-1.01-1002, Troubleshooting, Revision 00100
 CNG-NL-1.01-1007, Control of UFSARS, USARS, TRM, TS Bases and NRC-Approved Plans and Programs, Revision 00400
 CNG-SC-1.01-GL003, Guideline for Handling of Items Relative to 10 CRF 21 Notifications and Industry Operating Experience, Revision 00000
 CNG-TR-1.01-1022, Initial Training and Qualification of Licensed Operators, Revision 00202
 CNG-TR-1.01-GL003, NRC ILT & LOR Exam Writer Qualifications, Revision 00101
 CPI-LVL-4093, Calibration of SAFP Condensate Tank Level 4093, Revision 8
 E-0, Reactor Trip or Safety Injection, Revision 04500
 ECA-0.0, Loss of All AC Power, Revision 03700
 EOP Att-8.5, Attachment Loss of Offsite Power, Revision 1
 EOP-Att-22.0, Attachment Restoring Feed Flow, Revision 00600
 ER-AFW.1, Alternate Water Supply to the AFW Pumps, Revision 03301
 ER-D/D.2, Alternate Cooling for Emergency D/Gs, Revision 01901
 ER-ELEC.8, Restoration of Charging Pump Supply from Bus 16 Following HELB In Auxiliary Building, Revision 0
 ER-SC.3, Low Screenhouse Water Level, Revision 02203
 ER-SH.1, Response to Loss of Screenhouse, Revision 2
 ES-1.3, Transfer to Cold Leg Recirculation, Revision 04600
 FPS-3, Periodic Inspection of Fire Barrier Penetration Seals, Revision 100
 FRP-31.0, Screenhouse Operating Floor, Revision 7
 GL-PIR-1, Integrated Problem Identification and Resolution Process, Revision 00000
 IP-ALA-1, ALARA Challenge Board (ACB) Instructions for Preparation and Leading ALARA Challenge Boards, Revision 00002
 M-64.1EQ, Preventive Maintenance of Limitorque Actuators, Revision 2201
 NO-1-112, Safety Tagging Guidance, Revision 03900
 O-6, Operations and Process Monitoring, Revision 10500
 O-6.1, Auxiliary Operator Rounds and Log Sheets, Revision 46
 OMG-12, Outage Control Center Norms, Revision 04700
 OPG-IWS-Support, Operations Support of the Integrated Work Schedule, Revision 08505
 OPG-Testing, Operations Testing Activities, Revision 00403
 OTG-2.4, Written Examination Instructions, Revision 22
 SC-3.16.4.1, Cross Tie of Domestic Water Supply to Fire Service Water System, Revision 15
 SCM-G-1-07, Receipt and Acceptance of Material and parts, Revision 00300
 STP-O-R-2.2, Diesel Generator Load and Safeguard Sequence Test, Revision 00701

Surveillance Tests:

STP-E-10.3, Station Battery A Service Test, Rev. 100, completed 5/6/11
 STP-O-2.7.1A, Loop 'A' Service Water Pump Test Revision 00800 and 00900
 Completed 12/14/11 and 2/22/12
 STP-O-2.7.1B Loop 'B' Service Water Pump Test Revision 00900 completed 3/22/12
 STP-O-16QA, Auxiliary Feedwater Pump A-Quarterly, Revision 600

System health Report and System Walkdown Reports:

System Health Report 08 Service Water System (SWS) SR 04/01/2010-06/30/2010
 System Health Report 08 Service Water System (SWS) SR 07/01/2010-09/31/2010
 System Health Report 08 Service Water System (SWS) SR 10/01/2010-12/31/2010
 System Health Report 08 Service Water System (SWS) SR 01/01/2011-03/31/2011
 System Health Report 08 Service Water System (SWS) SR 04/01/2011-06/30/2011
 System Health Report 08 Service Water System (SWS) SR 07/01/2011-09/31/2011
 System Health Report 08 Service Water System (SWS) SR 10/01/2011-12/31/2011
 System Health Report 10 Spent Fuel Pool Cooling System (FPC) SR 04/01/2010-06/30/2010
 System Health Report 10 Spent Fuel Pool Cooling System (FPC) SR 07/01/2010-09/31/2010
 System Health Report 10 Spent Fuel Pool Cooling System (FPC) SR 10/01/2010-12/31/2010
 System Health Report 10 Spent Fuel Pool Cooling System (FPC) SR 01/01/2011-03/31/2011
 System Health Report 10 Spent Fuel Pool Cooling System (FPC) SR 04/01/2011-06/30/2011
 System Health Report 10 Spent Fuel Pool Cooling System (FPC) SR 07/01/2011-09/31/2011
 System Health Report 10 Spent Fuel Pool Cooling System (FPC) SR 10/01/2011-12/31/2011
 System Health Report 17 Fire Protection System (FPS) SR 04/01/2010-06/30/2010
 System Health Report 17 Fire Protection System (FPS) SR 07/01/2010-09/31/2010
 System Health Report 17 Fire Protection System (FPS) SR 10/01/2010-12/31/2010
 System Health Report 17 Fire Protection System (FPS) SR 01/01/2011-03/31/2011
 System Health Report 17 Fire Protection System (FPS) SR 04/01/2011-06/30/2011
 System Health Report 17 Fire Protection System (FPS) SR 07/01/2011-09/31/2011
 System Health Report 17 Fire Protection System (FPS) SR 10/01/2011-12/31/2011
 System Health Report 43D Radiation Monitoring 04/01/2010-06/30/2010
 System Health Report 43D Radiation Monitoring 07/01/2010-09/31/2010
 System Health Report 43D Radiation Monitoring 10/01/2010-12/31/2010
 System Health Report 43D Radiation Monitoring 01/01/2011-03/31/2011
 System Health Report 43D Radiation Monitoring 04/01/2011-06/30/2011
 System Health Report 43D Radiation Monitoring 07/01/2011-09/31/2011
 System Health Report 43D Radiation Monitoring 10/01/2011-12/31/2011
 System Health Report 49 Seismic and Meteorological Instrumentation System
 04/01/2010-06/30/2010
 System Health Report 49 Seismic and Meteorological Instrumentation System
 07/01/2010-09/31/2010
 System Health Report 49 Seismic and Meteorological Instrumentation System
 10/01/2010-12/31/2010
 System Health Report 49 Seismic and Meteorological Instrumentation System
 01/01/2011-03/31/2011
 System Health Report 49 Seismic and Meteorological Instrumentation System
 04/01/2011-06/30/2011
 System Health Report 49 Seismic and Meteorological Instrumentation System
 07/01/2011-09/31/2011
 System Health Report 49 Seismic and Meteorological Instrumentation System
 10/01/2011-12/31/2011
 System Health Report 64 125V DC Electrical System 04/01/2010-06/30/2010
 System Health Report 64 125V DC Electrical System 07/01/2010-09/31/2010
 System Health Report 64 125V DC Electrical System 10/01/2010-12/31/2010

System Health Report 64 125V DC Electrical System 01/01/2011-03/31/2011
 System Health Report 64 125V DC Electrical System 04/01/2011-06/30/2011
 System Health Report 64 125V DC Electrical System 07/01/2011-09/31/2011
 System Health Report 64 125V DC Electrical System 10/01/2011-12/31/2011
 System Health Report 93 Alert and Notification System 04/01/2010-06/30/2010
 System Health Report 93 Alert and Notification System 07/01/2010-09/31/2010
 System Health Report 93 Alert and Notification System 10/01/2010-12/31/2010
 System Health Report 93 Alert and Notification System 01/01/2011-03/31/2011
 System Health Report 93 Alert and Notification System 04/01/2011-06/30/2011
 System Health Report 93 Alert and Notification System 07/01/2011-09/31/2011
 System Health Report 93 Alert and Notification System 10/01/2011-12/31/2011
 Residual Heat Removal (RHR) System Health Report, Second Quarter 2010
 Residual Heat Removal (RHR) System Health Report, Third Quarter 2010
 Residual Heat Removal (RHR) System Health Report, Fourth Quarter 2010
 Residual Heat Removal (RHR) System Health Report, First Quarter 2011
 Residual Heat Removal (RHR) System Health Report, Second Quarter 2011
 Residual Heat Removal (RHR) System Health Report, Third Quarter 2011
 Residual Heat Removal (RHR) System Health Report, Fourth Quarter 2011
 Chemical Volume Control System (CVCS) System Health Report, First Quarter 2010
 Chemical Volume Control System (CVCS) System Health Report, Second Quarter 2010
 Chemical Volume Control System (CVCS) System Health Report, Third Quarter 2010
 Chemical Volume Control System (CVCS) System Health Report, Fourth Quarter 2010
 Chemical Volume Control System (CVCS) System Health Report, First Quarter 2011
 Chemical Volume Control System (CVCS) System Health Report, Second Quarter 2011
 Chemical Volume Control System (CVCS) System Health Report, Third Quarter 2011
 Chemical Volume Control System (CVCS) Health Report, Fourth Quarter 2011
 Diesel Generator Emergency Power System (EAC) System Health Report, First Quarter 2010
 Diesel Generator Emergency Power System (EAC) System Health Report, Second Quarter 2010
 Diesel Generator Emergency Power System (EAC) System Health Report, Third Quarter 2010
 Diesel Generator Emergency Power System (EAC) System Health Report, Fourth Quarter 2010
 Diesel Generator Emergency Power System (EAC) System Health Report, First Quarter 2011
 Diesel Generator Emergency Power System (EAC) System Health Report, Second Quarter 2011
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White Paper – SCWE Issue
White Paper for timeline to put actions into place for the use of SAFW for SSD.

LIST OF ACRONYMS

ACE	apparent cause evaluation
ADAMS	Agencywide Documents Access and Management System
ALARA	as low as reasonably achievable
CA	corrective action
CAP	Corrective Action Program
CFR	Code of Federal Regulations
CR	condition report
DRP	Division of Reactor Projects
ECP	employee concerns program
EDG	emergency diesel generator
FB	feed and bleed
FME	foreign material exclusion
Ginna	R.E. Ginna Nuclear Power Plant
IMC	Inspection Manual Chapter
LER	Licensee Event Report
LOIS	loss of intake structure
LTCA	long term corrective action
MRC	Management Review Committee
NCV	non-cited violation
NRC	Nuclear Regulatory Commission
OE	Operating Experience
PARS	Publicly Available Records System
PI&R	problem identification and resolution
QA	quality assurance
RCAR	root cause analysis report
ROP	reactor oversight process
SAFW	standby auxiliary feedwater
SCWE	safety conscious work environment
SDP	significance determination process
S/G	steam generator
SRA	Senior Reactor Analyst
WO	work Order