



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

July 22, 2013

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

**SUBJECT: R.E. GINNA NUCLEAR POWER PLANT, LLC - NRC INTEGRATED
INSPECTION REPORT 05000244/2013003**

Dear Mr. Pacher:

On June 30, 2013, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your R.E. Ginna Nuclear Power Plant, LLC (Ginna). The enclosed integrated inspection report documents the inspection results, which were discussed on July 15, 2013, with you and other members of your staff.

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

This report documents one self-revealing finding of very low safety significance (Green). This finding was determined to involve a violation of NRC requirements. Additionally, a licensee-identified violation, which was determined to be of very low safety significance, is listed in this report. However, because of the very low safety significance, and because they are entered into your corrective action program, the NRC is treating these findings as non-cited violations (NCVs), consistent with Section 2.3.2 of the NRC Enforcement Policy. If you contest any NCVs in this report, you should provide a response within 30 days of the date of this inspection report, with the basis of your denial, to the United States 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 Ginna. In addition, if you disagree with the cross-cutting aspect assigned to any finding in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region I, and the NRC Resident Inspector at Ginna.

J. Pacher

2

In accordance with Title 10 of the *Code of Federal Regulations* 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's Public Document Room or from the Publicly Available Records component of the NRC's Agencywide Documents Access Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Daniel L. Schroeder, Chief
Reactor Projects Branch 1
Division of Reactor Projects

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

Enclosure: Inspection Report No. 05000244/2013003
w/Attachment: Supplemental Information

cc w/encl: Distribution via ListServ

J. Pacher

2

In accordance with Title 10 of the *Code of Federal Regulations* 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's Public Document Room or from the Publicly Available Records component of the NRC's Agencywide Documents Access Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Daniel L. Schroeder, Chief
Reactor Projects Branch 1
Division of Reactor Projects

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

Enclosure: Inspection Report No. 05000244/2013003
w/Attachment: Supplementary Information

cc w/encl: Distribution via ListServ

Distribution w/encl:

W. Dean, RA
D. Lew, DRA
D. Roberts, DRP
A. Burritt, DRP
C. Miller, DRS
J. Rogge, DRS
D. Schroeder, DRP
A. Rosebrook, DRP

B. Scrabeck, DRP
N. Perry, DRP, SRI
D. Dodson, DRP, RI
M. Rose, DRP, AA
V. Campbell, RI OEDO
RidsNrrPMREGinna Resource
RidsNrrDorlLp1-1 Resource
ROPreports Resource

DOCUMENT NAME: G:\DRP\BRANCH1\Ginna\Reports\2013-003\GIN 2013-003 final IR.docx
ADAMS ACCESSION NUMBER: **ML13204A061**

<input checked="" type="checkbox"/> SUNSI Review		<input checked="" type="checkbox"/> Non-Sensitive <input type="checkbox"/> Sensitive		<input checked="" type="checkbox"/> Publicly Available <input type="checkbox"/> Non-Publicly Available	
OFFICE	RI/DRP	RI/DRP	RI/DRP		
NAME	NPerry/via phone	ARosebrook/AAR	DSchroeder/DLS		
DATE	07/22/13	07/22/13	07/22/13		

OFFICIAL RECORD COPY

U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No: 50-244

License No: DPR-18

Report No: 05000244/2013003

Licensee: Constellation Energy Nuclear Group, LLC (CENG)

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

Location: Ontario, NY

Dates: April 1, 2013 through June 30, 2013

Inspectors: N. Perry, Senior Resident Inspector
D. Dodson, Resident Inspector
J. Laughlin, Emergency Preparedness Inspector
M. Orr, Reactor Inspector
J. Rady, Reactor Inspector

Approved by: Daniel L. Schroeder, Chief
Reactor Projects Branch 1
Division of Reactor Projects

Enclosure

TABLE OF CONTENTS

SUMMARY	3
1. REACTOR SAFETY	4
1R01 Adverse Weather Protection	4
1R04 Equipment Alignment	5
1R05 Fire Protection	6
1R06 Flood Protection Measures	7
1R11 Licensed Operator Requalification Program & Licensed Operator Performance	7
1R12 Maintenance Effectiveness	8
1R13 Maintenance Risk Assessments and Emergent Work Control	8
1R15 Operability Determinations and Functionality Assessments	9
1R18 Plant Modifications	11
1R19 Post-Maintenance Testing	12
1R22 Surveillance Testing	12
1EP4 Emergency Action Level and Emergency Plan Changes	13
4. OTHER ACTIVITIES	13
4OA1 Performance Indicator Verification	13
4OA2 Problem Identification and Resolution	14
4OA6 Meetings, Including Exit	17
4OA7 Licensee-Identified Violations	17
ATTACHMENT: SUPPLEMENTARY INFORMATION	18
SUPPLEMENTARY INFORMATION	A-1
KEY POINTS OF CONTACT	A-1
LIST OF ITEMS OPENED, CLOSED, DISCUSSED, AND UPDATED	A-1
LIST OF DOCUMENTS REVIEWED	A-1
LIST OF ACRONYMS	A-9

SUMMARY

IR 05000244/2013003; 04/01/2013 – 06/30/2013; R.E. Ginna Nuclear Power Plant, LLC (Ginna); Operability Determinations and Functionality Assessments.

This report covered a 3-month period of inspection by resident inspectors and announced inspections performed by regional inspectors. Inspectors identified one finding of very low significance (Green), which was a non-cited violation (NCV). A finding's significance is indicated by a color (i.e., greater than Green, or Green, White, Yellow, Red) and determined using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process," dated June 2, 2011. Cross-cutting aspects are determined using IMC 0310, "Components Within the Cross-Cutting Areas," dated October 28, 2011. All violations of NRC requirements are dispositioned in accordance with the NRC's Enforcement Policy, dated January 28, 2013. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4.

Cornerstone: Mitigating Systems

- Green. A self-revealing NCV of Title 10 of the *Code of Federal Regulations* (10 CFR) 50, Appendix B, Criterion XVI, "Corrective Action," was identified for CENG failing to establish measures to assure that a condition adverse to quality associated with the 'B' service water pump (SWP) was promptly identified and corrected. Specifically, during installation, CENG did not identify that the 'B' SWP sole plate for the discharge head was unlevel and not flat. This resulted in a misaligned pump shaft, and subsequently, on April 5, 2013, the 'B' SWP shaft failed while in service. Immediate corrective actions included replacing the broken shaft, properly aligning the SWP, and entering the issue into CENG's corrective action program (CAP) as condition report (CR)-2013-002275.

This finding is more than minor because it is associated with the equipment performance attribute of the Mitigating Systems cornerstone and adversely impacted the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Due to the misalignment, the SWP failed while in service. The inspectors evaluated the finding using IMC 0609, Attachment 0609.04, "Initial Characterization of Findings," and IMC 0609, Appendix A, "Significance Determination Process for Findings At-Power," Exhibit 2, "Mitigating Systems Screening Questions." The inspectors determined this finding was not a deficiency affecting the design or qualification of a mitigating structure, system, and component; did not represent a loss of system and/or function; and did not represent an actual loss of function of at least a single train. Therefore, the inspectors determined the finding to be of very low safety significance (Green). The inspectors determined that this finding has a cross-cutting aspect in the area of Human Performance, Resources, because CENG did not have complete, accurate, and up-to-date procedures and work packages. Specifically, CENG's pump installation procedure did not contain sufficient guidance to ensure adequate pump reassembly [H.2(c)]. (Section 1R15)

Other Findings

A violation of very low safety significance that was identified by CENG was reviewed by the inspectors. Corrective actions taken or planned by CENG have been entered into CENG's corrective action program. This violation and corrective action tracking number are listed in Section 4OA7 of this report.

REPORT DETAILS

Summary of Plant Status

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

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection (71111.01 – 3 samples)

.1 Readiness for Seasonal Extreme Weather Conditions

a. Inspection Scope

The inspectors performed a review of CENG's readiness for the onset of seasonal hot temperatures. The review focused on the turbine building, emergency diesel rooms, screen house, and the auxiliary building. The inspectors reviewed the Updated Final Safety Analysis Report (UFSAR), technical specifications (TSs), control room logs, and the CAP to determine what temperatures or other seasonal weather could challenge these systems, and to ensure CENG had adequately prepared for these challenges. The inspectors reviewed station procedures, including CENG's seasonal weather preparation procedure and applicable operating procedures. The inspectors performed walkdowns of the selected systems to ensure station personnel identified issues that could challenge the operability of the systems during hot weather conditions. Documents reviewed for each section of this inspection report are listed in the Attachment.

b. Findings

No findings were identified.

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

a. Inspection Scope

The inspectors performed a review of plant features and procedures for the operation and continued availability of the offsite and alternate AC power systems to evaluate readiness of the systems prior to seasonal high grid loading. The inspectors reviewed CENG's procedures affecting these areas and the communications protocols between the transmission system operator and CENG. This review focused on changes to the established program and material condition of the offsite and alternate AC power equipment. The inspectors assessed whether CENG established and implemented appropriate procedures and protocols to monitor and maintain availability and reliability of both the offsite AC power system and the onsite alternate AC power system. The inspectors evaluated the material condition of the associated equipment by observing 115 kilovolt generator output breaker 9X13A72 inservice inspection activities and by

walking down portions of the offsite and AC power systems including the 115 kilovolt switchyard and the transformer yard.

b. Findings

No findings were identified.

.3 Readiness for Impending Adverse Weather Conditions

a. Inspection Scope

The inspectors reviewed CENG's preparations for the high wind conditions on May 15, 2013. The inspectors reviewed the implementation of adverse weather preparation procedures during this adverse weather condition. The inspectors discussed the adverse weather conditions with control room operators and verified all actions were taken in accordance with procedures. The inspectors verified that operator actions defined in CENG's adverse weather procedure maintained the readiness of essential systems. The inspectors discussed readiness and staff availability for adverse weather response with operations personnel.

b. Findings

No findings were identified.

1R04 Equipment Alignment

.1 Partial System Walkdowns (71111.04Q – 4 samples)

a. Inspection Scope

The inspectors performed partial walkdowns of the following systems:

- 'D' auxiliary feedwater (AFW) pump during planned 'C' AFW pump maintenance on May 16 and 17, 2013
- 'A' safety injection pump after quarterly testing on June 18, 2013
- 'A' charging pump due to its risk significance on June 28, 2013
- Spent fuel pool (SFP) cooling after realignment to the 'B' train on June 30, 2013

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

b. Findings

No findings were identified.

.2 Full System Walkdown (71111.04S – 1 sample)

a. Inspection Scope

From May 23 to 29, 2013, the inspectors performed a complete system walkdown of accessible portions of the component cooling water system to verify the existing equipment lineup was correct. The inspectors reviewed operating procedures, surveillance tests, drawings, equipment lineup check-off lists, and the UFSAR to verify the system was aligned to perform its required safety functions. The inspectors also reviewed electrical power availability, component lubrication and equipment cooling, hanger and support functionality, and operability of support systems. The inspectors performed field walkdowns of accessible portions of the systems to verify system components and support equipment were aligned correctly and operable. The inspectors examined the material condition of the components and observed operating parameters of equipment to verify that there were no deficiencies. Additionally, the inspectors reviewed a sample of related CRs to ensure CENG appropriately evaluated and resolved any deficiencies.

b. Findings

No findings were identified.

1R05 Fire Protection

Resident Inspector Quarterly Walkdowns (71111.05Q – 4 samples)

a. Inspection Scope

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

- 'B' battery room on April 26 and May 1, 2013
- HEMYC[®] fire wrap areas in the 'B' battery room, intermediate building basement and platform elevation, and the basement and intermediate floor of the auxiliary building on June 18 and 20, 2013
- Technical Support Center (TSC) on June 28, 2013
- Auxiliary building intermediate floor on June 30, 2013

b. Findings

No findings were identified.

1R06 Flood Protection Measures (71111.06 – 1 sample)

Annual Review of Cables Located in Underground Bunkers/Manholes

a. Inspection Scope

The inspectors conducted an inspection of underground bunkers/manholes subject to flooding that contain cables whose failure could affect risk-significant equipment. The inspectors performed walkdowns of risk-significant areas, including the east and west manholes in the transformer yard, to verify that the cables were not submerged in water, that cables appeared intact, and to observe the condition of cable support structures. The cables in these manholes were associated with relay protection for the offsite power switchyard.

b. Findings

No findings were identified.

1R11 Licensed Operator Requalification Program and Licensed Operator Performance (71111.11Q – 2 samples)

.1 Quarterly Review of Licensed Operator Requalification Testing and Training

a. Inspection Scope

The inspectors observed licensed operator simulator training on May 22, 2013, which included a failure of the 'A' charging pump mechanical speed control, an 'A' reactor coolant pump seal degradation and subsequent failure, and a reactor coolant system (RCS) cold leg break. The inspectors evaluated operator performance during the simulated event and verified completion of risk-significant operator actions, including the use of abnormal and emergency operating procedures. The inspectors assessed the clarity and effectiveness of communications, implementation of actions in response to alarms and degrading plant conditions, and the oversight and direction provided by the control room supervisor. The inspectors verified the accuracy and timeliness of the emergency classification made by the shift manager and the TS action statements entered by the shift technical advisor. Additionally, the inspectors assessed the ability of the crew and training staff to identify and document crew performance problems.

b. Findings

No findings were identified.

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

a. Inspection Scope

The inspectors observed and reviewed main generator output breaker (9X13A72) switching activities on May 13, 2013. The inspectors observed pre-shift briefings to verify that the briefings met the criteria specified in CENG procedures CNG-OP-1.01-1000, "Conduct of Operations." Additionally, the inspectors observed operator performance to verify that procedure use, crew communications, and coordination of activities between work groups similarly met established expectations and standards.

b. Findings

No findings were identified.

1R12 Maintenance Effectiveness (71111.12Q – 3 samples)

a. Inspection Scope

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

- Chemical and volume control system following identification of scoping issues on March 27, 2013
- 'B' emergency diesel generator (EDG) due to unplanned maintenance during the first quarter of 2013
- Maintenance rule (a)(3) evaluation dated March 29, 2013

b. Findings

No findings were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13 – 4 samples)

a. Inspection Scope

The inspectors reviewed station evaluation and management of plant risk for the maintenance and emergent work activities listed below to verify that CENG performed the appropriate risk assessments prior to removing equipment from service. The inspectors selected these activities based on potential risk significance relative to the reactor safety cornerstones. As applicable for each activity, the inspectors verified that

CENG personnel performed risk assessments as required by 10 CFR 50.65(a)(4) and that the assessments were accurate and complete. When CENG performed emergent work, the inspectors verified that operations personnel promptly assessed and managed plant risk. The inspectors reviewed the scope of maintenance work and discussed the results of the assessment with the station's probabilistic risk analyst to verify plant conditions were consistent with the risk assessment. The inspectors also reviewed the TS requirements and inspected portions of redundant safety systems, when applicable, to verify risk analysis assumptions were valid and applicable requirements were met.

- Planned maintenance on the 'B' EDG underground fuel oil tank from April 2 to 4, 2013
- Planned maintenance on the TSC diesel generator and monitor tank pump on April 23 and 24, 2013, respectively
- Planned maintenance on the 'C' AFW system on May 15 and 16, 2013
- Planned maintenance on the city water system from June 4 to 6, 2013

b. Findings

No findings were identified.

1R15 Operability Determinations and Functionality Assessments (71111.15 – 3 samples)

a. Inspection Scope

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

- 'B' SWP failure on April 5, 2013
- Missing backflow preventer between the turbine building and intermediate building on April 12, 2013
- Potential non-conservative SFP criticality analysis on May 10, 2013

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

b. Findings

Introduction. A self-revealing Green NCV of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," was identified for failing to establish measures to assure that a condition adverse to quality associated with the 'B' SWP was promptly identified and corrected. Specifically, during installation, CENG did not identify that the 'B' SWP sole

plate for the discharge head was unlevel and not flat. This resulted in a misaligned pump shaft, and subsequently, on April 5, 2013, the 'B' SWP shaft failed while in service for less than two months.

Description. CENG's service water system consists of four SWPs, with two pumps per train. The SWPs take suction on Lake Ontario and supply cooling water for plant systems including safety-related systems. On February 22, 2013, CENG replaced the 'B' SWP motor and shaft during planned maintenance. During post-maintenance testing, the pump's motor vibrations were found to be higher than expected. After numerous attempts to balance the pump, the vibrations were still higher than desired but were below the established inservice test (IST) alert set point following rebaselining of a pump. The pump was returned to service without further actions.

On April 5, the pump shaft failed while in service; the failure was in the lowest section of the shaft where it was coupled to the section above it. The SWPs have their motors at the operating level of the screen house, and the shaft to the pump is in five vertical sections with a total span of about 30 feet. CENG investigation determined the apparent cause of the shaft failure to be misalignment due to quality issues with the assembly combined with a shaft material with low toughness properties that caused a high-cycle brittle fatigue failure. The sole plate on which the discharge head and motor are mounted was found to be unlevel and not flat; this resulted in inadequate and incomplete contact between the discharge head and the sole plate. The pump installation procedure did not contain sufficient guidance to ensure adequate pump reassembly. Additionally, CENG determined that the vibrations experienced in February were not fully understood in that the vibration levels on the SWP were improperly analyzed by engineering and maintenance personnel.

Extent-of-condition review determined that two of the four SWPs have shaft material with low toughness properties; however, vibration levels have been low for these pumps. A reasonable expectation of continued operability was completed for these two SWPs which showed there is reasonable assurance failure will not occur on these pumps since vibration levels were low and there were no indications of misalignments. Additionally, the two fire water pumps have vertical shafts with spans of approximately 30 feet but have a tougher shaft material.

On April 11, the 'B' SWP was returned to service after its shaft was replaced and the pump was properly aligned, and an adverse condition monitoring plan was established to monitor pump vibrations for the above-mentioned SWPs. Additional planned corrective actions include replacing the shafts of the two SWPs having shaft material with low toughness properties with a material of higher toughness properties, changing the service water maintenance procedure to ensure that the quality issues associated with pump assembly are addressed to ensure proper alignment, leveling the sole plate for the 'B' SWP, conducting an evaluation for improvements to basic engineering training for analysis of vibration data, and adding periodic vibration monitoring to the appropriate procedure for the fire water pumps.

Analysis. The inspectors determined that CENG's failure to establish measures to assure a condition adverse to quality associated with the 'B' SWP during installation was promptly identified and corrected, was a performance deficiency within CENG's ability to foresee and correct and should have been prevented. Specifically, CENG failed to identify that the 'B' SWP sole plate was unlevel and not flat resulting in a misaligned

pump. This finding is more than minor because it is associated with the equipment performance attribute of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, due to the misalignment, the SWP failed after less than two months of service. The inspectors evaluated the finding using IMC 0609, Attachment 0609.04, "Initial Characterization of Findings," worksheet issued June 19, 2012, and IMC 0609, Appendix A, "Significance Determination Process for Findings At-Power," issued June 19, 2012, Exhibit 2, "Mitigating Systems Screening Questions." The attachment instructs the inspectors to utilize IMC 0609, Appendix A, "Significance Determination Process for Findings At-Power," issued June 19, 2012. The inspectors determined this finding was not a deficiency affecting the design or qualification of a mitigating SSC, did not represent a loss of system and/or function, and did not represent an actual loss of function of at least a single train. Therefore, the inspectors determined the finding to be of very low safety significance (Green).

The inspectors determined that this finding has a cross-cutting aspect in the area of Human Performance, Resources, because CENG did not have complete, accurate, and up-to-date procedures and work packages. Specifically, CENG's pump installation procedure did not contain sufficient guidance to ensure adequate pump reassembly [H.2(c) per IMC 0310].

Enforcement: 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," requires, in part, that measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and non-conformances are promptly identified and corrected. Contrary to the above, on February 22, 2013, CENG failed to establish measures to assure that a condition adverse to quality associated with the installation of the 'B' SWP was promptly identified and corrected. Specifically, CENG did not identify that the 'B' SWP sole plate for the discharge head was unlevel and not flat resulting in a misaligned pump shaft. Subsequently, on April 5, the 'B' SWP shaft failed while in service for less than two months. Immediate corrective actions included replacing the broken shaft and properly aligning the SWP. Because this violation is of very low safety significance, and CENG entered this issue into their CAP (CR-2013-002275), this violation is being treated as an NCV, consistent with Section 2.3.2 of the NRC Enforcement Policy. **(NCV 05000244/2013003-01, Failure to Establish Measures to Assure that a Misaligned Service Water Pump was Promptly Identified and Corrected)**

1R18 Plant Modifications (71111.18 – 1 sample)

Permanent Modification

a. Inspection Scope

The inspectors evaluated a modification to the undervoltage (UV) protection system implemented by engineering change package (ECP)-13-000311, "Change Degraded Voltage Relay Set Points." The inspectors verified that the design bases, licensing bases, and performance capability of the affected systems were not degraded by the modification. In addition, the inspectors reviewed modification documents associated with the design change, including the design change technical evaluation, the 10 CFR 50.59 screening form, and the design inputs and change impact screen. The inspectors

also reviewed revisions to the calibration and test procedures and interviewed engineering personnel to ensure the procedures could be reasonably performed.

b. Findings

No findings were identified.

1R19 Post-Maintenance Testing (71111.19 – 7 samples)

a. Inspection Scope

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

- 'B' containment spray pump planned maintenance on April 1, 2013
- Planned maintenance on the 'B' EDG underground fuel oil storage tank on April 4, 2013
- 'B' SWP planned maintenance on April 11, 2013
- 'A' EDG planned maintenance on April 18, 2013
- Calibration of pressurizer level channel 426 rack instrumentation on April 22, 2013, and calibration of steam generator 'B' wide range level loop 506 rack instrumentation on April 25, 2013
- TSC diesel planned maintenance on April 25, 2013
- 'D' AFW pump planned maintenance on May 23, 2013

b. Findings

No findings were identified.

1R22 Surveillance Testing (71111.22 – 7 samples)

a. Inspection Scope

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

- STP-O-16QA, AFW Pump 'A' – Quarterly on April 16, 2013 (IST)
- CPI-TRIP-TEST-5.50, Trip Test for Turbine Auto Stop Pressure Switches, Relays, Turbine Emergency Trip Solenoid-Operated Valve (SOV) and Turbine Auxiliary Governor SOVs on April 23, 2013
- STP-O-13.4.20, Flood Valve Testing – Suppression System S09 Relay Room SE Manual Deluge on May 6, 2013
- STP-O-1, Rod Control System on May 15, 2013
- STP-E-11.4, TSC 60 Cell Battery Bank on May 20, 2013
- STP-O-16-QT, AFW Turbine Pump - Quarterly on May 20, 2013 (IST)
- STP-O-2.1QA, Safety Injection Pump 'A' Quarterly Test on June 12 and 13, 2013 (IST)

b. Findings

No findings were identified.

Cornerstone: Emergency Preparedness

1EP4 Emergency Action Level and Emergency Plan Changes (71114.04 – 1 sample)

a. Inspection Scope

The Office of Nuclear Security and Incident Response headquarter's staff performed an in-office review of the latest revisions of various emergency plan implementing procedures and the emergency plan located under ADAMS accession number ML13077A018 as listed in the Attachment.

CENG determined that in accordance with 10 CFR 50.54(q), the changes made in the revisions resulted in no reduction in the effectiveness of the plan and that the revised plan continued to meet the requirements of 10 CFR 50.47(b) and Appendix E to 10 CFR Part 50. The NRC review was not documented in a safety evaluation report and did not constitute approval of CENG-generated changes; therefore, this revision is subject to future inspection.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

.1 Safety System Functional Failures (1 sample)

a. Inspection Scope

The inspectors sampled CENG's submittals for the Safety System Functional Failures performance indicator (PI) for the period of April 1, 2012, through March 31, 2013. To determine the accuracy of the PI data reported during those periods, inspectors used definitions and guidance contained in Nuclear Energy Institute (NEI) Document 99-02,

“Regulatory Assessment Performance Indicator Guideline,” Revision 6, and NUREG-1022, “Event Reporting Guidelines 10 CFR 50.72 and 10 CFR 50.73.” The inspectors reviewed CENG’s operator narrative logs, operability assessments, maintenance rule records, maintenance WOs, CRs, event reports, and NRC integrated inspection reports to validate the accuracy of the submittals.

b. Findings

No findings were identified.

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

a. Inspection Scope

The inspectors reviewed CENG’s submittal for the RCS specific activity and RCS leak rate PIs for the period of April 1, 2012, through March 31, 2013. To determine the accuracy of the PI data reported during those periods, the inspectors used definitions and guidance contained in NEI Document 99-02. The inspectors also reviewed RCS sample analysis and control room logs of daily measurements of RCS leakage, and compared that information to the data reported by the PI. Additionally, the inspectors observed surveillance activities that determined the RCS identified leakage rate, and chemistry personnel taking and analyzing an RCS sample.

b. Findings

No findings were identified.

4OA2 Problem Identification and Resolution (71152 – 3 samples)

.1 Routine Review of Problem Identification and Resolution Activities

a. Inspection Scope

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

b. Findings

No findings were identified.

.2 Semi-Annual Trend Review

a. Inspection Scope

The inspectors performed a semi-annual review of site issues, as required by Inspection Procedure 71152, "Problem Identification and Resolution," to identify trends that might indicate the existence of more significant safety issues. In this review, the inspectors included repetitive or closely related issues that may have been documented by CENG outside of the CAP, such as trend reports, PIs, major equipment problem lists, system health reports, maintenance rule assessments, and maintenance or CAP backlogs. The inspectors also reviewed CENG's CAP database for the first and second quarters of 2013 to assess CRs written in various subject areas (equipment problems, human performance issues, etc.) as well as individual issues identified during the NRCs daily CR review (Section 40A2.1). The inspectors reviewed CENG's quarterly trend report for the fourth quarter of 2012 and the first quarter of 2013 conducted under CNG-QL-1.01-1007, "Performance Improvement Program Trending and Analysis," to verify that CENG personnel were appropriately evaluating and trending adverse conditions in accordance with applicable procedures.

b. Findings and Observations

No findings were identified.

The inspectors evaluated a sample of issues and events that occurred over the course of the past 2 quarters to determine whether issues were appropriately considered as emerging or adverse trends. The inspectors verified that these issues were addressed within the scope of the CAP or through department review and documentation in the quarterly trend presentation for overall assessment. For example, the inspectors noted that CENG personnel had appropriately identified operator fundamentals and maintenance human performance as continuing adverse trends and transient combustible material control as a new adverse trend.

.3 Annual Sample: Core Exit Thermocouples Low Margin Issue

a. Inspection Scope

The inspectors performed an in-depth review of CENG's failure analysis and corrective actions associated with CR-2012-008541 and CR-2012-008663 that documented occurrences where multiple core exit thermocouples (CETs) were inoperable. As a result, CENG was at the minimum limit of two CETs per channel for quadrants one and two as specified in TS 3.3.3, "Post Accident Monitoring Instrumentation." The CETs are used for post accident monitoring of reactor core temperatures in accordance with Regulatory Guide 1.97, "Criteria for Accident Monitoring Instrumentation for Nuclear Power Plants," Revision 4. CENG categorized the reduced margin for the CETs as an official low margin issue, and the issue was tracked in the incore flux and temperature monitoring system health report as a long-term asset management issue.

The inspectors assessed CENG's problem identification threshold, causal analyses, compensatory actions, and the prioritization and timeliness of corrective actions to determine whether CENG was appropriately identifying, characterizing, and correcting problems associated with this issue. The inspectors interviewed engineering personnel

to assess the immediate corrective actions as well as the actions planned to complete full resolution of this issue. In addition, the inspectors reviewed documentation associated with this issue including CRs and CET temperature mapping data to ensure that CENG was meeting the minimum TS 3.3.3 limits.

b. Findings and Observations

No findings were identified.

In response to the CET low margin issue, CENG promptly assembled an incident response team to repair one failed CET and return it to operable status during the 2012 refueling outage (RFO). A major contributor to the CET failures over the last several years occurred during the reconnection process due to not maintaining the CET male connector body in a fixed position while tightening the female connector body. Misalignment during this connection process caused the wiring to become damaged and rendered the CETs inoperable. Based on the review of this failure mechanism, CENG plans to provide just-in-time training to instrumentation and control technicians prior to performing maintenance activities on the CETs during the 2014 RFO.

CENG also plans to procure the services of Westinghouse Electric Company for repair and replacement of up to 10 inoperable CETs. There are currently 13 of 39 CETs inoperable and repairing or replacing up to 10 of these will significantly increase the CET margin. CENG generated a WO to facilitate the repair and replacement of up to 10 CETs during the 2014 RFO.

The inspectors determined CENG's overall response to this issue was commensurate with the safety significance, was timely, and the actions taken and planned were reasonable to resolve the CET low margin issue.

.4 Annual Sample: Undervoltage Relays Out of Tolerance Issue

a. Inspection Scope

The inspectors performed an in-depth review of CENG's failure analysis and corrective actions associated with CR-2012-009012 and CR-2013-002867 that documented multiple occurrences of UV relays failing to meet the administrative acceptance criteria during monthly completion of surveillance test STP-I-9.1.17, "Undervoltage Protection – 480V Safeguard Bus 17," Revision 00900. As a result of these failures, CENG completed apparent cause evaluations to identify the failure mechanism associated with these repetitive failures.

The inspectors assessed CENG's problem identification threshold, causal analyses, extent-of-condition reviews, compensatory actions, and the prioritization and timeliness of corrective actions to determine whether CENG was appropriately identifying, characterizing, and correcting problems associated with this issue. The inspectors compared the actions taken to the requirements of CENG's CAP and 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action." In addition, the inspectors reviewed documentation associated with this issue including condition and failure analysis reports, and interviewed engineering personnel to assess the effectiveness of the implemented corrective actions to complete full resolution of the issue.

b. Findings and Observations

No findings were identified.

The inspectors found that CENG took appropriate actions to identify the apparent cause of the issue. The apparent cause was determined to be an UV relay dropout voltage set point margin issue. In June 2012, CENG updated the UV relay instrument uncertainty calculation to include the effects of harmonics caused by the installation of variable frequency drives for the station's charging pumps. Based on the updated uncertainty calculation, a new UV relay set point was selected at the midpoint between the analytical limits so that equal margin would exist on either side of the set point. However, the new set point was located on a more exponential portion of the UV relay's time current characteristic curve than the previous set point. The UV relay's set point drift was more than anticipated at this new set point and resulted in numerous failures of monthly surveillance test STP-I-9.1.17.

CENG promptly investigated this issue and consulted with an independent testing facility to better understand the characteristics and response times of the UV relays. Based on this analysis, CENG revised the UV relay dropout voltage set point to reside along a more linear portion of the UV relay's time current characteristic curve. Preliminary results of monthly surveillance testing indicated that the UV relay set point drift was reduced and the acceptance criteria were satisfied.

The inspectors determined CENG's overall response to this issue was commensurate with the safety significance, was timely, and the actions taken and planned were reasonable to resolve the set point margin issue.

40A6 Meetings, Including Exit

Exit Meeting

On July 15, 2013, the inspectors presented the inspection results to Mr. Joseph Pacher, Vice President, and other members of the Ginna staff. The inspectors verified that no proprietary information was retained by the inspectors or documented in this report.

40A7 Licensee-Identified Violations

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

- 10 CFR 50.54(k) requires a licensed operator shall be present at the controls at all times during the operation of the facility. Additionally, CENG procedure CNG-OP-1.01-1000, "Conduct of Operations," Revision 00900, requires reactor operators to ensure that one operator assumes the reactor operator function to comply with 10 CFR 50.54(k). Contrary to 10 CFR 50.54(k), on June 1, 2013, operators identified that for a very short time period there was no licensed operator at the controls. One reactor operator was behind the main control board performing an evolution and two other senior licensed operators were in the shift manager's office which is also behind the main control board. The cause of the time period with no licensed operator at the controls was that each board operator thought the other was the at

the controls operator. Corrective action included instating a control board monitoring badge to clearly define the operator at the controls. The issue was entered into the CAP as CR-2013-003494. The inspectors determined that the finding was more than minor because it was associated with human performance attribute of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences, and if left uncorrected, it would have the potential to lead to a more significant safety concern. The finding was of very low safety significance (Green) in accordance with IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power," issued June 19, 2012, Exhibit 2, "Mitigating Systems, Screening Questions," Section C, "Reactivity Control Systems." The finding screens to Green because the finding did not affect the reactor protection system, did not involve control manipulations, and did not result in a mismanagement of reactivity by operators.

ATTACHMENT: SUPPLEMENTARY INFORMATION

SUPPLEMENTARY INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

J. Pacher, Vice President, Ginna
M. Philippon, Plant General Manager
J. Bowers, General Supervisor, Radiation Protection
D. Dean, General Supervisor, Operations Support
S. Doty, Manager, Maintenance
S. Fregeau, General Supervisor, System Engineering
M. Geckle, Manager, Nuclear Safety and Security
T. Harding, Director, Licensing
J. Jackson, Licensing Supervisor
T. Mogren, Manager, Engineering Services
T. Paglia, Manager, Operations
J. Scalzo, Director, Emergency Preparedness
S. Wihlen, Manager, Integrated Work Management

LIST OF ITEMS OPENED, CLOSED, DISCUSSED, AND UPDATED

Opened/Closed

05000244/2013003-01	NCV	Failure to Establish Measures to Assure that a Misaligned Service Water Pump was Promptly Identified and Corrected (Section 1R15)
---------------------	-----	---

LIST OF DOCUMENTS REVIEWED

Section 1R01: Adverse Weather Protection

Procedures

ER-SC.1, Adverse Weather Plan, Revision 01900
O-6, Operations and Process Monitoring, Revision 10701
O-6.9, Ginna Station Operating Limits for Station 13A Transmission, Revision 03400
O-23, Hot Weather Seasonal Readiness Walkdown, Revision 00802

Condition Reports

CR-2013-003157
CR-2013-003476

Work Order
WO C91862524

Miscellaneous
Substation Operating Agreement between R.E. Ginna Nuclear Power Plant, LLC and Rochester Gas and Electric Corporation, dated October 1, 2007

Section 1R04: Equipment Alignment

Procedures

A-52.2, Control of Locked Valve and Breaker Operation, Revision 16300
S-3.2A, Charging and Volume Control System Pre-Startup Alignment, Revision 05000
STP-O-30.1, Safety Injection System Valve and Breaker Position Verification, Revision 00101
STP-O-30.5, Standby Auxiliary Feedwater Pumps Valves and Breakers, Revision 00002
STP-O-30.9, Component Cooling Water Flow Path Verification, Revision 00002

Drawings

33013-1238, Standby Auxiliary Feedwater Piping and Instrument Drawing (P&ID), Revision 26
33013-1245, Auxiliary Coolant Component Cooling Water P&ID, Revision 33
33013-1246, Auxiliary Coolant Component Cooling Water P&ID, Revision 16, Sheet 1
33013-1246, Auxiliary Coolant Component Cooling Water P&ID, Revision 13, Sheet 2
33013-1248, Auxiliary Cooling Spent Fuel Pool Cooling P&ID, Revision 38
33013-1250, Station Service Cooling Water Safety Related P&ID, Revision 46, Sheet 2
33013-1262, Safety Injection and Accumulators P&ID, Revision 29, Sheet 1
33013-1262, Safety Injection and Accumulators P&ID, Revision 7, Sheet 2
33013-1264, Chemical and Volume Control Letdown P&ID, Revision 27
33013-1265, Chemical and Volume Control System Charging P&ID, Revision 12, Sheet 1
33013-1265, Auxiliary Building Chemical Volume Control System Charging P&ID, Revision 27, Sheet 2

Miscellaneous

WO C91934538, Monthly Walkdown for Auxiliary Feedwater System – PSSSL04, April Walkdown

Section 1R05: Fire Protection

Procedures

A-54.7, Fire Protection Tour, Revision 03402
FPS-16, Bulk Storage of Combustible Materials and Transient Fire Loads, Revision 01700
FRP-5.0, Auxiliary Building Intermediate Floor, Revision 00902
FRP-18.0, Battery Room 'B', Revision 00600
FRP-29.0, Technical Support Center, Revision 01300

Drawings

21488-0100, Fire, Smoke, and Pressure Barriers, Revision 13, Sheet 4
21488-0102, Battery Room 'B' North Wall Section A-A Penetration Locations Floor Elevation 253 feet 6 inches, Revision 5, Sheet 1
21488-0102, Battery Room 'B' West Wall Elevation Penetration Locations Floor Elevation 253 feet 6 inches, Revision 10, Sheet 2
21488-0105, Relay Room Floor Plan (East End) Penetration Locations Floor Elevation 271 feet 0 inches, Revision 9

33013-2546, Fire Response Plan Auxiliary Building Plan – Intermediate Floor Elevation 253 feet
0 inches, Revision 4
33013-2555, Fire Response Plan Technical Support Center, Revision 7
33013-2559, Fire Response Plan Control Building, Revision 13

Condition Reports

CR-2013-001829
CR-2013-002803

Miscellaneous

DA-ME-98-004, Combustible Loading Analysis, Revision 10
EPM-FPPR, Ginna Station Fire Protection Program Report Volumes 1, 2 and 3, Revision 008.0
PRAER-G1-2013-002, Probability Risk Assessment Evaluation Request, Revision 0
R.E. Ginna Fire Protection Program, Revision 8.0

Section 1R06: Flood Protection Measures

Condition Report

CR-2013-003407

Work Orders

WO C92024716
WO C92052121

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

Procedures

AP-PRZR.1, Abnormal Pressurizer Pressure, Revision 01700
CNG-OP-1.01-1000, Conduct of Operations, Revision 00900
CNG-OP-3.01-1000, Reactivity Management, Revision 00800

Section 1R12: Maintenance Effectiveness

Procedures

AP-CVCS.3, Loss of All Charging Flow, Revision 01200
CNG-AM-1.01-1023, Maintenance Rule Program, Revision 00201
CPI-FLO-110, Calibration of Boric Acid Flow Loop 110, Revision 01401
EP-3-S-0308, Maintenance Rule Scoping, Revision 00902
FR-S.1, Response to Reactor Restart/ATWS, Revision 02000
IP-IIT-2, Inservice Testing Program for Pumps and Valves, Revision 01200

Drawings

33013-1265, Auxiliary Building Chemical Volume Control System Charging P&ID, Revision 27,
Sheet 2
33013-1266, Auxiliary Building Chemical Volume Control System Boric Acid P&ID, Revision 34

Condition Reports

CR-2005-001127	CR-2007-006126	CR-2008-005802
CR-2005-004650	CR-2008-005441	CR-2009-001799

CR-2009-003817	CR-2012-005870	CR-2013-000802
CR-2011-001143	CR-2012-007792	CR-2013-000825
CR-2011-006122	CR-2013-002083	CR-2013-000826
CR-2012-008543	CR-2013-002327	CR-2013-000827
CR-2012-003666	CR-2013-002600	CR-2013-000829
CR-2012-005107	CR-2013-003075	

Miscellaneous

Emergency Diesel Generators System Health Report for 1st Quarter of 2013
Maintenance Rule (a)(3) Periodic Maintenance Effectiveness Assessment, 10 CFR 50.65 (a)(3),
dated March 29, 2013
MRule Manager Database

Section 1R13: Maintenance Risk Assessments and Emergent Work Control

Procedures

CNG-OP-4.01-1000, Integrated Risk Management, Revision 01300
ER-SC.4, Earthquake Emergency Plan, Revision 01300
ER-SH.1, Response to Loss of Screen House, Revision 00201
OPG-PROTECTED-EQUIPMENT, Operations Protected Equipment Program, Revision 00501
OPG-PROTECTED-EQUIPMENT, Operations Protected Equipment Program, Revision 00503
SCM-G-3-02, Transferring Fuel at Thee Offsite Fuel Oil Storage Facility, Revision 00200

Drawing

33013-1607, City Water Main P&ID, Revision 0, Sheet 4

Condition Reports

CR-2011-006122
CR-2013-001412
CR-2013-002230

Work Orders

WO C91935961
WO C92200259

Miscellaneous

Operations Planner Instructions, Availability Plan to Fill 'B' EDG Day Tank, April 2, 2013

Section 1R15: Operability Determinations and Functionality Assessments

Procedures

CNG-CA-1.01-1005, Apparent Cause Evaluation, Revision 00603
CNG-CA-1.01-GL002, Causal Analysis Handbook, Revision 00400
CNG-OP-1.01-1002, Conduct of Operability Determinations/Functionality Assessments,
Revision 00200
STP-O-2.7.1-COMP-A, Loop 'A' Service Water Comprehensive Pump Test, Revision 00500
STP-O-2.7.1A, Loop 'A' Service Water Pump Test, Revision 01000

Drawings

33013-1259, Miscellaneous Liquid Waste Disposal Liquid P&ID, Revision 15

D-311-003, Floor and Equipment Drains Turbine Room Basement Floor Elevation 253 feet 6 inches and Elevation 248 feet, Revision 14

D-327-010, Floor and Equipment Drains Intermediate Building Floors Elevation 253 feet 6 inches, Elevation 271 feet 0 inches, and Elevation 278 feet 4 inches, Revision 07

Condition Reports

CR-2013-001314

CR-2013-002275

CR-2013-002437

CR-2013-002516

CR-2013-002978

Miscellaneous

ACE for 'B' SWP Failure, May 1, 2013

'B' SWP Shaft Failure Analysis, dated April 24, 2013

Basis for Reasonable Expectation of Continued Operability for SWPs, dated April 22, 2013

Event Notification Number 48918

Operability Determination for SFP Criticality Analysis

Rotor Balance Report, dated March 11, 2013

Section 1R18: Plant Modifications

Procedures

CNG-CM-1.01-1003, Design Engineering and Configuration Control, Revision 00601

PR-1.1, Protective Relay Calibration 480V Undervoltage and Ground Alarm Scheme for Buses 14, 16, 17, 18, Revision 03600

STP-I-9.1.14, Undervoltage Protection – 480V Safeguard Bus 14, Revision 00800

Condition Report

CR-2013-002867

Miscellaneous

ECP-13-000311, Change Degraded Voltage Relay Set Points, Revision 0000

Section 1R19: Post-Maintenance Testing

Procedures

CPI-LVL-426, Calibration of Pressurizer Level Channel 426 Rack Instrumentation, Revision 00901

CPI-LVL-506, Calibration of Steam Generator 'B' Wide Range Level Loop 506 Rack, Revision 00900

IP-IIT-2, Inservice Testing Program for Pumps and Valves, Revision 01200

STP-E-12.5, Technical Support Center Diesel Test, Revision 00300

STP-O-2.7.1-COMP-A, Loop 'A' Service Water Comprehensive Pump Test, Revision 00600

STP-O-2.7.1-COMP-A, Loop 'A' Service Water Comprehensive Pump Test, Revision 00800

STP-O-2.7.1-COMP-B, Loop 'B' Service Water Comprehensive Pump Test, Revision 00500

STP-O-3QB, Containment Spray Pump 'B' Quarterly Test, Revision 00401

STP-O-36-COMP-D, Standby Auxiliary Feedwater Pump 'D' – Comprehensive Test, Revision 00700

STP-O-12.1, Emergency Diesel Generator 'A', Revision 01400
STP-O-12.6B, Diesel Generator Fuel Oil Transfer Pump 'B' Test, Revision 00700

Condition Reports

CR-2010-007085
CR-2013-000327
CR-2013-002450
CR-2013-002714
CR-2013-002783
CR-2013-003290
CR-2013-003303
CR-2013-003327

Work Orders

WO C90866414	WO C91840263	WO C92200259
WO C91324835	WO C91853704	WO C92237009
WO C91829312	WO C92052595	
WO C91840190	WO C92149023	

Section 1R22: Surveillance Testing

Procedures

CPI-TRIP-TEST-5.50, Trip Test for Turbine Auto Stop Pressure Switches, Relays, Turbine
Emergency Trip SOV and Turbine Auxiliary Governor SOV's, Revision 01601
STP-E-11.4, Technical Support Center 60 Cell Battery Bank, Revision 00200
STP-O-1, Rod Control System, Revision 00103
STP-O-2.1QA, Safety Injection Pump 'A' Quarterly Test, Revision 00601
STP-O-13.4.20, Flood Valve Testing – Suppression System S09 Relay Room SE Manual Deluge,
Revision 00001
STP-O-13.22.1, Fire System Flow Alarm Check (S01, S03, S04, S05, S06, S09, S10, S11, S12,
S13, S15, S16, S17, S29), Revision 00000
STP-O-16QA, Auxiliary Feedwater Pump 'A' – Quarterly, Revision 00800
STP-O-16QT, Auxiliary Feedwater Turbine Pump - Quarterly, Revision 00800

Drawings

03202-0102, 125 VDC Power Distribution System, Revision 20
33013-1237, Auxiliary Feedwater P&ID, Revision 66

Condition Reports

CR-2011-005946	CR-2013-001948	CR-2013-002971
CR-2012-003261	CR-2013-002534	CR-2013-002994
CR-2012-006892	CR-2013-002543	
CR-2013-001742	CR-2013-002546	

Work Orders

WO C91728645
WO C91853927
WO C91874866
WO C91874873
WO C91881861

WO C91882032
WO C91888492
WO C91906256

Section 1EP4: Emergency Action Level and Emergency Plan Changes

Procedure

EPIP-1-5, Notifications, Revision 09400

Section 4OA1: Performance Indicator Verification

Procedures

CH-714, Gamma Isotopic Analysis of CRUD and Degassed Primary Coolant, Revision 00300
CH-PRI-SAMP-ROOM, Sampling in the Nuclear Sample Room, Revision 01501
S-12.4, RCS Leakage Surveillance Record Instructions, Revision 05602

Miscellaneous

NEI-99-02, Regulatory Assessment Performance Indicator, Revision 6

Section 4OA2: Problem Identification and Resolution

Procedures

CNG-CA-1.01-1007, Performance Improvement Program Trending and Analysis, Revision 00400
IP-MTE-1, Calibration and Control of Measuring and Test Equipment, Revision 002100
M52.7, Core Exit Thermocouples, Revision 02300
PR-1.1, Protective Relay Calibration 480V Undervoltage and Ground Alarm Scheme for
Buses 14, 16, 17, and 18, Revision 03500

Condition Reports

CR-2012-000810	CR-2013-000020	CR-2013-002203
CR-2012-002298	CR-2013-000160	CR-2013-002560
CR-2012-005429	CR-2013-000306	CR-2013-002867
CR-2012-008541	CR-2013-000334	CR-2013-003008
CR-2012-008663	CR-2013-001497	CR-2013-003117
CR-2012-009012	CR-2013-001290	CR-2013-003196
CR-2012-009061	CR-2013-001490	CR-2013-003357
CR-2012-009325	CR-2013-001596	CR-2013-003414
CR-2012-009398	CR-2013-001829	CR-2013-003730
CR-2013-000017	CR-2013-001901	CR-2013-003786

Work Orders

WO C20900865	WO C91300741	WO C92307137
WO C20900998	WO C91301601	WO C92307183
WO C90989389	WO C91391516	WO C92307200
WO C90995105	WO C92085973	
WO C91159325	WO C92307112	

Miscellaneous

Integrated Performance Assessment Ginna Station, 4th Quarter 2012 and 1st Quarter 2013

CPI-MON-A-14, Calibration of Incore Temperature Monitor A-14, Revision 016, completed March 14, 2011, December 13, 2012
CPI-MON-B-14, Calibration of Incore Temperature Monitor B-14, Revision 019, completed March 8, 2011, and August 27, 2012
CR-2012-009012, ACE for Undervoltage Relays, dated December 26, 2012
CR-2013-002867, ACE for Undervoltage Relays, dated June 4, 2013
GNA-2013-265, Training Request Form, Revision 0
IC-GCI-CRDM, Head Disconnect and Control Rod Drive Mechanism Coil Modification Just-In-Time Training, Revision 0
M-52.7, Core Exit Thermocouples, Revision 22, completed January 10, 2013
STP-I-9.1.14, Undervoltage Protection – 480V Safeguard Bus 14, Revision 00800, completed June 14, 2013
STP-I-9.1.16, Undervoltage Protection – 480V Safeguard Bus 16, Revision 00900, completed June 17, 2013
STP-I-9.1.17, Undervoltage Protection – 480V Safeguard Bus 17, Revision 00900, completed June 19, 2013
STP-I-9.1.18, Undervoltage Protection – 480V Safeguard Bus 18, Revision 00800, completed June 15, 2013
System Health Reports, 1st to 4th Quarters 2012 and 1st Quarter 2013
Testing of Three Asea Brown Boveri (ABB) UV Relays Response to Harmonics, dated April 20, 2010
VTD-A0500-4002, ABB UV Relays and Overvoltage Relays, Revision 0
VTD-C0773-4201, Procedure for Installation and Maintenance of Nuclear Service Connector and Connector/Cable Assemblies, Revision 0

Section 40A7: Licensee-Identified Violations

Procedures

CNG-HU-1.01-1000, Human Performance, Revision 00801
CNG-OP-1.01-1000, Conduct of Operations, Revision 00900

Condition Report

CR-2013-003494

LIST OF ACRONYMS

10 CFR	Title 10 of the <i>Code of Federal Regulations</i>
AC	alternating current
ADAMS	Agencywide Documents Access and Management System
AFW	auxiliary feedwater
CAP	corrective action program
CENG	Constellation Energy Nuclear Group
CET	core exit thermocouple
CR	condition report
ECP	engineering change package
EDG	emergency diesel generator
IMC	Inspection Manual Chapter
IST	inservice test
NEI	Nuclear Energy Institute
NCV	non-cited violation
NRC	Nuclear Regulatory Commission
PI	performance indicator
RCS	reactor coolant system
RFO	refueling outage
SFP	spent fuel pool
SOV	solenoid-operated valve
SSC	structure, system, and component
SWP	service water pump
TS	technical specification
TSC	Technical Support Center
UFSAR	Updated Final Safety Analysis Report
UV	undervoltage
WO	work order