



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION I
2100 RENAISSANCE BLVD., Suite 100
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November 8, 2017

Mr. Bryan C. Hanson
Senior Vice President, Exelon Generation Company, LLC
President and Chief Nuclear Officer, Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: R.E. GINNA NUCLEAR POWER PLANT, LLC - INTEGRATED INSPECTION
REPORT 05000244/2017003

Dear Mr. Hanson:

On September 30, 2017, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at R.E. Ginna Nuclear Power Plant, LLC (Ginna). On October 23, 2017, the NRC inspectors discussed the results of this inspection with Mr. William Carsky, Site Vice President, and other members of the Ginna staff. The results of this inspection are documented in the enclosed report.

No NRC-identified or self-revealing findings were identified during this inspection.

However, NRC inspectors documented two licensee-identified violations which were determined to be of very low safety significance in this report. The NRC is treating these violations as non-cited violations (NCV) consistent with Section 2.3.2.a of the Enforcement Policy.

If you contest the violations or significance of these NCVs, 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 Resident Inspectors at Ginna.

B. Hanson

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This letter, its enclosure, and your response (if any) will be available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC's Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

/RA/

Anthony Dimitriadis, Chief
Reactor Projects Branch 1
Division of Reactor Projects

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

Enclosure:
Inspection Report 05000244/2017003
w/Attachment: Supplementary Information

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No. 50-244

License No. DPR-18

Report No. 05000244/2017003

Licensee: Exelon Generation Company, LLC (Exelon)

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

Location: Ontario, New York

Dates: July 1, 2017, through September 30, 2017

Inspectors: N. Perry, Senior Resident Inspector
J. Schussler, Resident Inspector
H. Anagnostopoulos, Senior Health Physicist
J. Brand, Reactor Inspector
N. Floyd, Reactor Inspector
M. Modes, Senior Reactor Inspector
S. Pindale, Senior Reactor Inspector
A. Rosebrook, Senior Project Engineer

Approved by: Anthony Dimitriadis, Chief
Reactor Projects Branch 1
Division of Reactor Projects

Enclosure

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SUMMARY

Inspection Report 05000244/2017003; 07/01/2017 – 09/30/2017; Ginna; Routine Integrated Inspection Report.

This report covered a three month period of inspection by resident inspectors and announced baseline inspections performed by regional inspectors. Two licensee-identified violations of very low safety significance (Green) were documented. The significance of most findings is indicated by their color (i.e., greater than Green, or Green, White, Yellow, Red) and determined using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process (SDP)," dated April 29, 2015. All violations of NRC requirements are dispositioned in accordance with the U.S. Nuclear Regulatory Commission's (NRC's) Enforcement Policy, dated November 1, 2016. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 6.

Cornerstone: Initiating Events, Mitigating Systems, and Barrier Integrity

No findings were identified.

Other Findings

Two violations of very low safety significance that were identified by Exelon were reviewed by the inspectors. Corrective actions taken or planned by Exelon have been entered into Exelon's corrective action program (CAP). These violations and corrective action tracking numbers are listed in Section 4OA7 of this report.

REPORT DETAILSSummary of Plant Status

Ginna began the inspection period operating at 100 percent power. The unit remained at or near 100 percent power for the entire inspection period.

1. REACTOR SAFETY**Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity**1R01 Adverse Weather Protection (71111.01 – 2 samples).1 Readiness for Impending Adverse Weather Conditionsa. Inspection Scope

On August 22, 2017, the inspectors reviewed Exelon's readiness for a tornado watch. The review focused on the adverse weather preparation procedure implementation during the issued tornado watch period on the afternoon of August 22, 2017. The inspectors performed walkdowns of selected systems to ensure station personnel identified issues that could challenge the operability of the systems during tornado conditions. The inspectors verified that operator actions defined in Exelon's adverse weather procedures maintained the readiness of essential systems. The inspectors reviewed the Updated Final Safety Analysis Report (UFSAR), technical specifications (TSs), control room logs, and the CAP to determine what weather conditions could challenge these systems, and to ensure Exelon personnel had adequately prepared for such challenges. The inspectors reviewed station procedures, including Exelon's adverse weather plan and applicable operating procedures. Documents reviewed for each section in this report are listed in the Attachment.

b. Findings

No findings were identified.

.2 External Floodinga. Inspection Scope

On September 7, 2017 the inspectors performed an inspection of the external flood protection measures for Ginna. The inspectors reviewed TSs, procedures, design documents, and the UFSAR, Chapter 2.4, which depicted the design flood levels and protection areas containing safety-related equipment, to identify areas that may be affected by external flooding. The inspectors conducted a general site walkdown of external areas of the plant, including the screen house, turbine building, and auxiliary building to ensure that Exelon erected flood protection measures in accordance with design specifications. The inspectors also reviewed operating procedures for mitigating external flooding during severe weather to confirm that, overall, Exelon had established adequate measures to protect against external flooding events.

b. Findings

No findings were identified.

1R04 Equipment Alignment

.1 Partial System Walkdowns (71111.04Q – 3 samples)

a. Inspection Scope

The inspectors performed partial walkdowns of the systems below. 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, work orders (WOs), action requests (ARs), and the impact of ongoing work activities on redundant trains of equipment in order to identify conditions that could have impacted the system's performance of its 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 Exelon staff had properly identified equipment issues and entered them into the CAP for resolution with the appropriate significance characterization.

- Service air / instrument air cross tie following return to service from maintenance on July 25, 2017
- 'A' containment spray on September 13, 2017
- 'A' residual heat removal (RHR) on September 15, 2017

b. Findings

No findings were identified.

1R05 Fire Protection

.1 Resident Inspector Quarterly Walkdowns (71111.05Q – 6 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 Exelon 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.

- Cable tunnel on August 18, 2017
- Auxiliary building basement level on August 24, 2017
- Intermediate building controlled side basement on September 1, 2017
- Intermediate building controlled side top floor on September 8, 2017
- 'A' battery room on September 25, 2017
- Auxiliary building intermediate level on September 28, 2017

b. Findings

No findings were identified.

1R06 Flood Protection Measures (71111.06 – 1 sample)

Internal Flooding Review

a. Inspection Scope

The inspectors reviewed the UFSAR, the site flooding analysis, and plant procedures to identify internal flooding susceptibilities for the site. The inspectors review focused on the boundaries between the turbine building to battery room and turbine building to emergency diesel generator rooms. The inspectors verified the adequacy of flood barrier controls, equipment seals located below the flood line, floor and water penetration seals, watertight door seals, common drain lines and sumps, sump pumps, level alarms, control circuits, and temporary or removable flood barriers. The inspectors assessed the adequacy of operation actions that Exelon had identified as necessary to cope with flooding in this area and also reviewed the CAP to determine if Exelon was identifying and correcting problems associated with both flood mitigation features and site procedures for responding to flooding.

b. Findings

No findings were identified.

1R07 Heat Sink Performance (71111.07)

.1 Triennial Sample (71111.07T – 3 samples)

a. Inspection Scope

Based on Exelon's risk ranking of safety-related heat exchangers (HXs) and in consideration of postulated events involving anticipated transient without scram and steam generator tube rupture, past triennial heat sink inspections, recent operational experience, and resident inspector input, the inspectors selected the standby auxiliary feedwater (AFW) room coolers, AFA01A and AFA01B, for inspection. A third sample involved the ultimate heat sink.

The inspectors reviewed program documents, reports, and Exelon's methods for inspection, cleaning, maintaining, and performance monitoring used to ensure heat removal capabilities for the standby AFW room coolers. The inspectors compared the technical elements of the controlling procedures to the programmatic essentials contained in Exelon's commitments to NRC Generic Letter (GL) 89-13, "Service Water System Problems Affecting Safety-Related Equipment," and accepted industry practices. Accompanied by the responsible system engineer, the inspectors observed the current condition of the standby AFW room coolers, AFA01A and AFA01B, including supporting piping, pumps, and valves.

The inspectors performed a review of the service water system from the ultimate heat sink, Lake Ontario, to the common discharge header. The inspectors reviewed Exelon's controls to prevent clogging due to macrofouling and verified that macrofouling was adequately monitored, trended, and controlled, consistent with maintenance program frequencies and assumptions. The inspectors walked-down the service water intake structure, noting the condition of the intake structure, traveling screens, pumps, piping, supports, and the biocide treatment injection system. The inspectors noted the structural integrity of component mounts. The inspectors discussed silting of the intake bay and zebra mussel intrusion with the system engineer. The inspectors reviewed results of service water system inspection. Proper functioning of traveling screens and strainers, including strainer backwash function, were reviewed.

The inspectors reviewed the results of visual inspections to determine the structural integrity of the piping.

The inspectors' verified Exelon staff entered HX/sink performance problems into their CAP. Using inspection procedure (IP) 71152, "Problem Identification and Resolution," as guidance the inspectors verified the corrective actions were appropriate.

b. Findings

No findings were identified.

.2 Annual Sample (71111.07A – 2 samples)

a. Inspection Scope

The inspectors reviewed the following HXs' readiness and availability to perform their safety functions. The inspectors reviewed the design basis for the components and verified Exelon's commitments to NRC GL 89-13, "Service Water System Requirements Affecting Safety-Related Equipment," dated July 18, 1989. The inspectors reviewed the results of previous inspections of the HXs. The inspectors discussed the results of the most recent inspections with engineering staff, and reviewed pictures of the as-found and as-left conditions. The inspectors verified that Exelon initiated appropriate corrective actions for identified deficiencies. The inspectors also verified that the number of tubes plugged within the HXs did not exceed the maximum amount allowed in system design calculations.

- 'A' component cooling water HX on September 26, 2017
- 'A' Spent Fuel Pool (SFP) HX on September 28, 2017

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

On September 19, 2017, the inspectors observed licensed operator simulator training, which included, in part, a failure of nuclear instrumentation, loss of offsite power, emergency diesel generator (EDG) failure, and loss of all alternating current (AC) power. 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 unit supervisor. The inspectors verified the accuracy and timeliness of the emergency classifications made by the shift manager and the TS action statements entered by the unit supervisor. 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

On September 29, 2017, the inspectors observed and reviewed routine activities in the main control room. The inspectors observed operators responding to alarms, coordinating activities with maintenance personnel, conducting a pre-job briefing for a post-maintenance test (PMT), and performance of the PMT. The inspectors verified that the briefing met the criteria specified in procedures HU-AA-1211, "Pre-Job Briefings." Additionally, the inspectors verified 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 inspector reviewed the samples listed below to assess the effectiveness of maintenance activities on structure, system, and component (SSC) performance and reliability. The inspectors reviewed system health reports, CAP documents, maintenance WOs, and maintenance rule (MR) basis documents to ensure that Exelon was identifying and properly evaluating performance problems within the scope of the MR. For each sample selected, the inspectors verified that the SSC was properly scoped into the MR in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 50.65 and verified that the (a)(2) performance criteria established by Exelon 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 Exelon staff was identifying and addressing common cause failures that occurred within and across MR system boundaries.

- Microprocessor rod position indication on August 24, 2017
- MR (a)(3) evaluation on September 7, 2017
- Service air on September 29, 2017

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 risk activities listed below to verify that Exelon 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 Exelon personnel performed risk assessments as required by 10 CFR 50.65(a)(4) and that the assessments were accurate and complete. When Exelon 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.

- Elevated risk for planned maintenance on service air to instrument air cross tie valve on July 18, 2017
- Unplanned maintenance on the standby AFW EDG with fire protection compensatory actions on August 16, 2017
- Planned maintenance on the 'A' EDG on September 14, 2017
- Unplanned maintenance on a 'B' RHR valve (weld repair) on September 19, 2017

b. Findings

No findings were identified.

1R15 Operability Determinations and Functionality Assessments (71111.15 – 6 samples)

a. Inspection Scope

The inspectors reviewed operability determinations for the degraded or non-conforming conditions listed below 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 Exelon'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 Exelon.

- 'C' instrument air compressor motor coupling issues on August 11, 2017
- 'D' standby AFW pump elevated temperatures on August 17, 2017
- Turbine driven AFW flow to the 'A' steam generator indicating 50 gallons per minute with no flow and channel check on September 1, 2017
- Microprocessor rod position indication loss for rod I-11 on September 6, 2017
- 'A' reactor trip bypass breaker failure on September 14, 2017
- 'C' standby AFW flow indicator below zero on September 22, 2017

b. Findings

No findings were identified.

1R17 Evaluations of Changes, Tests, or Experiments (71111.17T – 27 samples)

a. Inspection Scope

Three inspectors from the NRC Region I Office completed an inspection on September 25 through 28, 2017, at Ginna to determine if Exelon staff performed screens and evaluations of changes and tests in accordance with regulatory requirements and Exelon implementing guidance. The team reviewed eight safety evaluations to determine whether the changes to the facility or procedures, as described in the UFSAR, had been reviewed and documented in accordance with 10 CFR 50.59 requirements. The safety evaluations were selected from those completed by Exelon staff since the last NRC inspection of this area and had not been previously reviewed by NRC inspectors. In addition, the team evaluated whether Exelon staff had been required to obtain NRC approval prior to implementing the changes. The team interviewed Exelon staff and reviewed supporting information including calculations, analyses, design change documentation, procedures, the UFSAR, the TS, and plant drawings to assess the adequacy of the safety evaluations.

The team compared the safety evaluations and supporting documents to the guidance and methods provided in Nuclear Energy Institute (NEI) 96-07, "Guidelines for 10 CFR 50.59 Evaluations," as endorsed by NRC Regulatory Guide 1.187, "Guidance for Implementation of 10 CFR 50.59, Changes, Tests, and Experiments," to determine the adequacy of the safety evaluations.

The team also reviewed a sample of 19 screenings and applicability determinations for which Exelon staff had concluded that a 50.59 safety evaluation was not required to be performed. These reviews were performed to assess whether Exelon's threshold for performing safety evaluations was consistent with 10 CFR 50.59 requirements. The sample included design changes, evaluations, and procedure changes. The screenings and applicability determinations were selected based on the safety significance, risk significance, and complexity of the change to the facility.

In addition, the team compared Exelon's implementing administrative procedures, used to control the screening, preparation, review, and approval of safety evaluations, to the guidance in NEI 96-07 to evaluate whether those procedures adequately implemented the requirements of 10 CFR 50.59. The reviewed safety evaluations, screenings, and applicability determinations are listed in the Attachment.

The team verified that Exelon staff entered performance issues concerning their evaluation of changes and tests into their CAP. The team verified that Exelon staff developed appropriate corrective actions to address those issues.

b. Findings

No findings were identified.

1R18 Plant Modifications (71111.18 – 1 sample)

Temporary Modifications

a. Inspection Scope

The inspectors reviewed a temporary modification to install alternate cooling to the 'C' instrument air compressor (Engineering Change Package (ECP) -17-000541) to determine whether the modification affected the functions of systems that are important to safety. The inspectors reviewed 10 CFR 50.59 documentation and post-modification testing results, and conducted field walkdowns of the modifications to verify that the temporary modification did not degrade the design bases, licensing bases, and performance capability of the affected systems. In addition, the inspectors reviewed modification documents associated with the design change, including piping configuration and flow path, pipe stress analysis, support design analysis, code applicability, and work planning instructions.

b. Findings

No findings were identified.

1R19 Post-Maintenance Testing (71111.19 – 6 samples)a. Inspection Scope

The inspectors reviewed the PMTs for the maintenance activities listed below to verify that procedures and test activities 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, that the test results were properly reviewed and accepted, and that problems were appropriately documented. The inspectors also walked down the affected job site, observed the pre-job brief and post-job critique where possible, confirmed that work site cleanliness was maintained, and witnessed the test or reviewed test data to verify quality control hold points were performed and checked, and that results adequately demonstrated restoration of the affected safety functions.

- Containment nitrogen gas supply valve unplanned maintenance on July 24, 2017
- Standby AFW EDG unplanned maintenance on August 16, 2017
- 'A' SFP pump planned maintenance on August 16, 2017
- B5b fire pump planned maintenance on August 23, 2017
- Standby AFW 30 percent load run planned maintenance on August 25, 2017
- 'A' containment spray planned maintenance on September 13, 2017

b. Findings

No findings were identified.

1R22 Surveillance Testing (71111.22 – 6 samples)a. Inspection Scope

The inspectors observed performance of surveillance tests (STs) and/or reviewed test data of selected risk-significant SSCs to assess whether test results satisfied TSs, the UFSAR, and Exelon 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 STs:

- STP-E-10.1, Quarterly Surveillance 'B' Station Battery on July 31, 2017
- STP-O-12.2, 'B' EDG on August 2, 2017
- STP-E-12.3, Security EDG on August 18, 2017
- STP-O-40.5, NFPA 805 EDG on August 21, 2017
- STP-O-12.2, 'B' EDG on August 30, 2017
- STP-O-16QT, Turbine Driven AFW Pump on September 5, 2017

b. Findings

No findings were identified.

Cornerstone: Emergency Preparedness

1EP6 Drill Evaluation (71114.06 – 1 sample)

Emergency Preparedness Drill Observations

a. Inspection Scope

On September 19, 2017, the inspectors evaluated the conduct of a routine Exelon emergency drill to identify any weaknesses and deficiencies in the classification, notification, and protective action recommendation development activities. The inspectors observed emergency response operations in the simulator to determine whether the event classification, notifications, and protective action recommendations were performed in accordance with procedures. The inspectors also attended the drill critique to compare inspector observations with those identified by Exelon staff in order to evaluate Exelon's critique and to verify whether Exelon was properly identifying weaknesses and entering them into the CAP.

b. Findings

No findings were identified.

2. RADIATION SAFETY

Cornerstone: Public Radiation Safety (PS)

2RS7 Radiological Environmental Monitoring Program (71124.07 – 3 samples)

a. Inspection Scope

The inspectors reviewed the radiological environmental monitoring program (REMP) to validate the effectiveness of the radioactive gaseous and liquid effluent release program, and implementation of the groundwater protection initiative (GPI). The inspectors used the requirements listed in 10 CFR Part 20, 40 CFR 190, 10 CFR Part 50 Appendix I, and the site's TSs, offsite dose calculation manual (ODCM), NEI 07-07, and procedures required by TSs as criteria for determining compliance.

Inspection Planning

The inspectors reviewed: the Ginna 2015 and 2016 annual radiological environmental and effluent monitoring reports, REMP program audits; ODCM changes, land use census, UFSAR, and inter-laboratory comparison program results.

Site Inspection (1 sample)

The inspectors walked down various thermoluminescent dosimeter and air and water sampling locations, and reviewed associated calibration and maintenance records. The inspectors observed the sampling of various environmental media as specified in the ODCM and reviewed any anomalous environmental sampling, events including assessment of any positive radioactivity results. The inspectors reviewed any changes to the ODCM. The inspectors verified the operability and calibration of the meteorological tower instruments and meteorological data readouts.

The inspectors reviewed environmental sample laboratory analysis results, laboratory instrument measurement detection sensitivities; and results of the laboratory quality control program audit, and the inter- and intra-laboratory comparison program results. The inspectors reviewed the groundwater monitoring program as it applies to select potential leaking SSCs, and 10 CFR 50.75(g) records of leaks, spills, and remediation since the previous inspection.

GPI Implementation (1 sample)

The inspectors reviewed: groundwater monitoring results; changes to the GPI program since the last inspection; anomalous results or missed groundwater samples; leakage or spill events, including entries made into the decommissioning files (10 CFR 50.75(g)); evaluations of surface water discharges; and Exelon's evaluation of any positive groundwater sample results, including appropriate stakeholder notifications and effluent reporting requirements.

Problem Identification and Resolution (1 sample)

The inspectors evaluated whether problems associated with the REMP were identified at an appropriate threshold and properly addressed in Exelon's CAP.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

.1 Mitigating Systems Performance Index (5 samples)

a. Inspection Scope

The inspectors reviewed Exelon's submittal of the mitigating systems performance index for the following systems for the period of July 1, 2016, through June 30, 2017:

- Emergency AC Power System (MS06)
- High-Pressure Injection System (MS07)
- Heat Removal System (MS08)
- RHR System (MS09)
- Cooling Water System (MS10)

To determine the accuracy of the performance indicator (PI) data reported during those periods, the inspectors used definitions and guidance contained in NEI 99-02, "Regulatory Assessment PI Guideline," Revision 7. The inspectors also reviewed Exelon's operator narrative logs, mitigating systems performance index derivation reports, event reports, and NRC integrated inspection reports to validate the accuracy of the submittals.

b. Findings

No findings were identified.

.2 Occupational Exposure Control Effectiveness (1 sample)

a. Inspection Scope

The inspectors reviewed Exelon submittals for the occupational radiological occurrences PI for the third quarter 2016 through the third quarter 2017. The inspectors used PI definitions and guidance contained in NEI 99-02, Revision 7, to determine the accuracy of the PI data reported. The inspectors reviewed electronic personal dosimetry accumulated dose alarms, dose reports, and dose assignments for any intakes that occurred during the time period reviewed to determine if there were potentially unrecognized PI occurrences. The inspectors conducted walk-downs of various locked high and very high radiation area entrances to determine the adequacy of the controls in place for these areas.

b. Findings

No findings were identified.

.3 Radiological Effluent TS/ODCM Radiological Effluent Occurrences (1 sample)

a. Inspection Scope

The inspectors reviewed Exelon submittals for the radiological effluent TS/ODCM radiological effluent occurrences PI for the third quarter 2016 through the third quarter 2017. The inspectors used PI definitions and guidance contained in NEI 99-02, Revision 7, to determine if the PI data was reported properly. The inspectors reviewed the public dose assessments for the PI for public radiation safety to determine if related data was accurately calculated and reported.

The inspectors reviewed the CAP database to identify any potential occurrences, such as unmonitored, uncontrolled, or improperly calculated effluent releases that may have impacted offsite dose. The inspectors reviewed gaseous and liquid effluent summary data and the results of associated offsite dose calculations to determine if indicator results were accurately reported.

b. Findings

No findings were identified.

40A2 Problem Identification and Resolution (71152)

Routine Review of Problem Identification and Resolution Activities

a. Inspection Scope

As required by IP 71152, "Problem Identification and Resolution," the inspectors routinely reviewed issues during baseline inspection activities and plant status reviews to verify that Exelon entered issues into its 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 AR screening meetings. The inspectors also confirmed, on a sampling basis, that, as applicable, for identified defects and non-conformances, Exelon performed an evaluation in accordance with 10 CFR Part 21, "Reporting of Defects and Noncompliance."

b. Findings

No findings were identified.

4OA5 Other Activities

Institute of Nuclear Power Operations (INPO) Report Review

The inspectors reviewed the final report for the INPO plant assessment of Ginna conducted in March 2017. The inspectors evaluated this report to ensure that NRC perspectives of Exelon performance were consistent with any issues identified during the assessments. The inspectors also reviewed this report to determine whether INPO identified any significant safety issues that required further NRC follow-up.

4OA6 Meetings, Including Exit

On October 23, 2017, the inspectors presented the inspection results to Mr. William Carsky, Site Vice President, and other members of the Ginna staff. The inspectors verified that no propriety information was retained by the inspectors or documented in this report.

4OA7 Licensee-Identified Violations

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

- Facility Operating License, DRP-18, for R.E. Ginna Nuclear Power Plant, paragraph 2.C.(3), "Fire Protection," requires that all provisions of 10 CFR 50.48(a) and 10 CFR 50.48(c) are implemented and maintained in effect. 10 CFR 50.48(a)(2)(i), in part, states that the fire protection plan must describe specific features such as personnel requirements for fire protection. Fire Protection Program document, EPM-FPPR, section 7.15, specifies the required number of fully qualified fire brigade members as five. Contrary to the above, on July 3, 2017, Ginna determined that an individual assumed fire brigade member duties for an entire shift with expired qualifications. This resulted in such a manner that the fire brigade position could not be staffed by any qualified individual onsite.

Upon identification, Exelon entered this into the CAP as AR 04028605. The inspectors evaluated this finding using IMC 0609 Attachment 4, "Initial Characterization of Findings," effective October 7, 2016, which directs the inspectors to use IMC 0609 Appendix A, "The SDP for Findings at Power Exhibit 2, Mitigating System Screening Questions," issued June 19, 2012, in which upon answering the questions in paragraph D it directs the use of IMC 0609 Appendix M, "SDP Using Qualitative Criteria," issued April 12, 2012. The inspectors determined that the finding was of very low safety significance (Green) due to the relatively short

exposure time, the specific qualification which had expired and because a prior similar violation significance bounded this finding's significance. The prior similar violation occurred at Nine Mile Point Nuclear Station, which was documented in inspection report 05000220/410/2016004.

- TS 5.2.1.a, "Onsite and Offsite Organizations," states, in part, that onsite organizations shall be established for plant operation and shall include positions for activities affecting the safety of the nuclear power plant. Furthermore, it states that these requirements shall be documented in the UFSAR. UFSAR 13.1.3.10.1.1 "Shift Managers" states, in part, the duties and responsibilities of the shift manager. Additionally, pursuant to 10 CFR 50.47(b)(2), the onsite shift emergency response responsibilities are to be staffed and assigned. Contrary to the above, Ginna determined that on July 1 and 2, 2017, an individual assumed the role of shift manager, and onsite shift emergency response duties, for two complete shifts with expired qualifications. This resulted in such a manner that the shift manager position could not be staffed by any qualified individual on site.

Upon identification, Exelon entered this into the CAP as AR 04029514. This finding was evaluated in accordance with IMC 0609 Attachment 4, "Initial Characterization of Findings," effective October 7, 2016, which directed the inspector, a senior reactor analyst, and regional management to assess the finding in accordance with IMC 0609 Appendix M, "Significance Determination Process Using Qualitative Criteria," issued April 12, 2012, due to the non-applicability of the SDP Appendix Router tables. The inspectors determined the finding was very low safety significance (Green) based on the short exposure time, the fact that the shift manager did not make errors related to the expired qualification, and other requirements of the shift manger qualification were satisfied.

ATTACHMENT: SUPPLEMENTARY INFORMATION

SUPPLEMENTARY INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

W. Carsky, Site Vice President
P. Swift, Plant General Manager
D. Blankenship, Director, Site Operations
M. Bodine, System Manager
F. Bundy, Security Work Control and Project Analyst
M. Burgess, Chemistry
K. Conner, Reactor Engineering Manager
A. Culotta, Plant Engineering
T. Edwards, Manager, Site Chemistry
R. Fellows, Operations Support Manager
J. Fischer, Senior Regulatory Engineer
M. Fitzsimmons, Structural Engineer
D. Gardiner, Mechanical Design Engineering
K. Garnish, Manager, Site Regulatory Assurance
K. Gould, Manager, Radiation Protection
M. Layton, Radiation Protection Technical Specialist
J. Massari, Manager of Engineering Safety Analysis
G. Meixell, Structural Engineer
T. Parsons, Mechanical Maintenance Lead Technician
D. Pascuzzi, Branch Manager
D. Peters, Senior Manager, Plant Engineering
B. Raczkiwicz, Equipment Qualification Program Owner
B. Rapin, System Manager
A. Stavalone, Chemist
D. Wilson, Director, Site Engineering

LIST OF ITEMS OPENED, CLOSED, DISCUSSED, AND UPDATED

Opened/Closed

None

Open

None

Closed

None

LIST OF DOCUMENTS REVIEWED

Section 1R01: Adverse Weather Protection

Procedures

ER-SC.1, Adverse Weather Plan, Revision 024

GMM-23-99-FLOODBARRIER, Flood Barrier Installation and Removal in Turbine Building
Basement, Revision 00100

IP-CON-9, Plant Barrier Control Program Implementation, Revision 00301

UFSAR, Chapter 2, Site Characteristics, Section 2.4 and Design of Structures, Components,
Equipment, and Systems, Section 3.4, Revision 26

ARs

04049504

CR-2012-004826

CR-2012-000983

Drawings

PR12759, Watertight Door Assembly, Revision E

WOs

C934550887

Miscellaneous

ECP-14-000571, Revision 0001

Section 1R04: Equipment Alignment

Procedures

STP-O-30.2, RHR System Valve and Breaker Position Verification, Revision 3

STP-O-30.3, Containment Spray System Valve and Breaker Position Verification, Revision 101

T-1C, Instrument Air/Service Air Cross Connect, Revision 009

T-2F, Backup Air Supply, Revision 021

Drawings

33013-1247, Auxiliary Coolant RHR (AC) P&ID, Revision 47

33013-1261, Containment Spray (SI) P&ID, Revision 46

33013-1886, Service Air P&ID, Sheet 1 of 2, Revision 33

33013-1886, Service Air, Sheet 2 of 2, Revision 28

33013-1900, Instrument Air Turbine Building Compressors, Receivers, Filters, and Dryers P&ID,
Sheet 1 of 2, Revision 13

33013-1900, Instrument Air Turbine Building Compressors, Receivers, Filters, and Dryers P&ID,
Sheet 2 of 2, Revision 14

Section 1R05: Fire ProtectionProcedures

FRP-4.0, Auxiliary Building Basement and Sub Basement Revision 10.
 FRP-5.0, Auxiliary Building Intermediate Level, Revision 12
 FRP-8.0, Intermediate Building Controlled Side Basement, Revision 008
 FRP-10.0, Intermediate Building Controlled Side Top Floor, Revision 009
 FRP-15.0, Cable Tunnel, Revision 010
 FRP-17.0, Battery Room 'A', Revision 9

Drawings

21488-0120, Fire Barrier General Arrangement Sheet Intermediate Building Clean Side Section E-E, F-F Wall to Cable Tunnel Penetration Locations Floor Elev. 253'6", Revision 6, Sheet 10
 21488-0121, Fire Barrier General Arrangement Sheet Intermediate Bldg. – Controlled Side Floor Plan Penetration Locations Floor Elev. – 253'-6", Revision 8, Sheet 1
 21488-0121, Fire Barrier General Arrangement Sheet Intermediate Bldg – Controlled Area Section A-A West Wall Penetration & Pyrocrete Locations Floor Elev. – 253'-6", Revision 9, Sheet 2
 21488-0121, Fire Barrier General Arrangement Sheet Intermediate Bldg - Controlled Area Floor Plan, Sect. A-A South Wall Penetration & Pyrocrete Locations Floor Elev. – 293'-0", Revision 6, Sheet 5
 21488-0121, Fire Barrier General Arrangement Sheet Intermediate Bldg. – Controlled Area Sect. B-B East Wall, Sect. C-C North Wall Penetration & Pyrocrete Locations Floor Elev. – 293'-0", Revision 6, Sheet 6
 21488-0122, Fire Barrier General Arrangement Sheet Auxiliary Building Basement West End Over RHR Pit Floor Plan Penetration Locations Floor Elev. 235'-8", Revision 7, Sheet 1
 21488-0122, Fire Barrier General Arrangement Sheet S.R.F. Room and S.A.T. Room Fire Area Boundaries Penetration & Pyrocrete Locations Floor Elev. – 235'-8", Revision 4, Sheet 2
 21488-0122, Fire Barrier General Arrangement Sheet Charging Pump Room Fire Area Boundaries Penetration & Pyrocrete Locations Floor Elev. – 235'-8 ' , Revision 12, Sheet 3
 33013-2542, Fire Response Plan Cnmt Structure & Intermediate Bldg Plan – Basement Floor Elev. 235'8", Revision 5
 33013-2543, Fire Response Plan Auxiliary Building Plan Basement Floor El 235'8", Revision 8
 33013-2545, Fire Response Plan Cnmt. Struct. & Intermediate Bldg. Plan – Intermediate Floor El.253'-3", Revision 9
 33013-2546, Fire Response Plan Auxiliary Building Plan Intermediate Floor El. 253', Revision 4
 33013-2557, Fire Response Plan Intermediate Building Plans – El 293'-0", El 298'4" & 315'-4", Revision 4
 33013-2559, Fire Response Plan Control Building Plan Views, Revision 14

ARs

04043994

Section 1R06: Flood Protection MeasuresProcedures

ER-AA-460, Structures Monitoring, Revision 6

ER-SC.2, High Water (Flood) Plan

IP-CON-9, Plant Barrier Control Program Implementation, Revision 00301

SC-3.17, Auxiliary Building Flood Barrier Installation/Removal/Inspection, Revision 00500

ARs

04003192

04003217

04003249

04003256

04003639

04005427

04005432

Section 1R07: Heat Sink PerformanceProcedures

CH-S-CW/SW-CHLOR, Revision 01600, Attachment 1, Sampling the Circ Water during Sodium Hypochlorite/Sodium Bromide Injection

CNG-CM-1.01-1003, Revision 00600, Design Engineering and Configuration Control, Attachment 12, Design Inputs and Change Impact Screen, ECP-13-000350, Revision 0000

CNG-FED-015, Revision 00006, Design Engineering and Configuration Management Form 11, ECP Material List, ECP-13-000350-015-7A-01

CNG-FED-015, Revision 00006, Design Engineering and Configuration Management Form 7A, Design Change Technical Evaluation Continuation, ECP-13-000350-015-11-01

CNG-FED-015, Revision 00006, Design Engineering and Configuration Management Form 7, Design Change Technical Evaluation Continuation, ECP-13-000350-015-7-01

CNG-FED-015, Revision 00006, Design Engineering and Configuration Management Form 9, Installation and Testing Instructions, ECP-13-000350-9-01

CNG-FED-015, Revision 00006, Design Engineering and Configuration Management Form 8, Operational Impact of Design Change, ECP-13-000350-8-01

CNG-FED-015, Revision 00006, Design Engineering and Configuration Management Form 3, Engineering Change Notice (ECN) ECP-13-0000350-CN-001, Revision 000

CNG-FED-015, Revision 00006, Design Engineering and Configuration Management Form 3, Engineering Change Notice (ECN) ECP-13-0000350-CN-003, Revision 001

CNG-NL-1.01-1011, Revision 00301, Attachment 3, 10 CFR 50.59/10 CRF 72.48 Screening Form, ECP-13-000350 / Service Water Valve 4617 & 4618 Replacement, February 11, 2014

Constellation Energy Nuclear Group Technical Procedure ER-CCW.1, Revision 00301, Fire Water Cooling to CCW and A SFP HXs

CY-AA-120-4110-F-13, Revision 1, Ginna Raw Water Treatment and Control

Design Analysis RWA-1433-001, ECP-13-000421, ECP-11-000104, Revision NA, Ginna Standby AFW Room Heat-Up Analysis

Emergency Operating Procedure AP-SW.2, Revision 0081, Loss of Service Water

Emergency Operating Procedure ATT-2.4, Revision 00301, Attachment No SW Pumps

Emergency Operating Procedure ATT-5.2, Revision 00601, Attachment Alternate Cooling to TDAFW Pump

Exelon Generation Procedure, CY-AA-120-410, Revision 6, Circulating/Service Water Chemistry
 Exelon Generation Procedure, ER-AA-340, Revision 8, GL 89-13 Program Implementing
 Procedure
 Exelon Generation, Service Water System Reliability Optimization Program (SWSROP),
 Revision 14
 License Renewal Aging Management Program Basis Document, Structures Monitoring Program,
 LR-STRM-PROGPALN, Revision 7
 PI-AA-126-1001-F-01, Revision 2, Self-Assessment, SOER 07-02 Triennial Cooling Water Design
 Function Review, AR 01704092-01 July 31, 2017
 R.E. Ginna Nuclear Power Plant Technical Procedure CH-NAOXL-SW-INJ-O, Service Water
 Sodium Hypochlorite Injection System Operation, Revision 02600
 R.E. Ginna Nuclear Power Plant Technical Procedure CH-S-CW/SW-CHLOR, Circulating Water
 and Service Water Sampling and Monitoring During Chlorination/Bromination,
 Revision 01600
 R.E. Ginna Nuclear Power Plant Technical Procedure ER-AFW.1, Revision 039, Alternate Water
 Supply to the AFW Pumps
 R.E. Ginna Nuclear Power Plant Technical Procedure ER-D/G.2, Revision 02000, Alternate
 Cooling for Emergency D/GS
 R.E. Ginna Nuclear Power Plant Technical Procedure ER-SC.3, Revision 024, Low Screenhouse
 Water Level
 R.E. Ginna Nuclear Power Plant Technical Procedure ER-SH.1, Revision 00202, Response to
 Loss of Screenhouse
 R.E. Ginna Nuclear Power Plant Technical Procedure STP-0-R-25, Service Water Flow Test,
 Revision 007
 R.E. Ginna Nuclear Power Plant Technical Procedure T-36.4, Revision 00701, Temporary Cooling
 Water to Various Service Water Loads
 R.E. Ginna Nuclear Power Plant, Technical Procedure STP-O-R-25, Service Water System Flow
 Test" Revision 007
 R.E. Ginna Nuclear Power Station, Technical Procedure MMP-GM055-0001, Underwater
 Inspection/Cleaning of Mechanical Equipment, Structures in the Screen house, and
 Discharge Canal, Revision 00101

ARs

02516547 02552727 04005988 04032850

Drawings

33013-1250, Sheet 1 of 3, Station Service Cooling Water Safety-Related (SW) P&ID, (with
 Chlorine Sampling System highlighted)
 33013-1885, Sheet 2, Circulating Water P & ID (with Chemical Injection Points Highlighted)
 Installation Drawing ECP-13-000350-CN-002 Rev. 0000, 33013-1250, 2-046
 Installation Drawing ECP-13-000350-PCN-01-CN-001 Rev. 0000, 33013-1250, 2-047

WOs

C20800547, Perform Inspection of the Intake Tunnel, Structure, and Vertical Intake Shaft per
 Procedure M-92.1" January 23, 2008
 C92159455, Replace SW large Bore Valve 4617 IAW ECP-13-000350, March 15, 2016
 C92159457, Replace SW Large Bore Valve 4618 IAW ECP-13-000350, March 15, 2016
 C92455325, PSWO1C-ECP-14-000795 Service Water Pump 'C' – Major Pump
 Inspection/Replace Spare Rotation Assembly

C92570689, Perform Major Inspection/Repair for 'A' SW Pump
 C92594831, Screenhouse-Underwater Inspection/Clean of Mech Equip. Struct,
 MMP-GM-55-00001, March 6, 2014
 C92942234, Open/Inspect/Clean SAFW Pump Room Cooler AFA01A
 C93338210, Divers Inspect Stop Log Channels in Screen House

Miscellaneous

DA-ME-16-003, SFP HX B Thermal Performance Testing Data Reduction, Fouling, and
 Uncertainty Analysis, Revision 000
 DA-ME-17-011, CCW HX Thermal Performance Testing Analysis (2017 RFO Data), Revision 000
 DA-ME-99-067, SAFW Pump Room Cooler Performance Evaluation, Revision 001
 Design Verification Checklist, Attachment 2 for ECP-13-000350
 Inspection Report for Exelon Generation G1R40 Ginna 2017 RFO "Underwater Inspection and
 Cleaning of Mechanical Equipment and Structures"

Section 1R11: Licensed Operator Requalification Program

Miscellaneous

Technical Requirements Manual, Revision 65

Section 1R12: Maintenance Effectiveness

Procedures

ER-AA-310-1005, MR – Dispositioning Between (a)(1) and (a)(2), Revision 7
 ER-AA-310-1007, MR – Periodic (a)(3) Assessment, Revision 4
 ER-AA-310, Implementation of the MR, Revision 10

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02573642	02580032	02581143	02581437	02610024
02699152	03984795	03997253	04010328	04010364
04011509	04020720	04021467	04035911	04036776
04036929				

Miscellaneous

MR System Basis Document System 43A, Control Rod Drive
 Robert E. Ginna Nuclear Power Plant MR (a)(3) Periodic Maintenance Effectiveness Assessment

Section 1R13: Maintenance Risk Assessments and Emergent Work Control

Procedures

A-601.13, Fire Protection Compensatory Actions, Revision 007
 A-601.16, On-Line Fire Risk Management, Revision 004
 OP-AA-108-117, Protected Equipment Program, Revision 4
 OPG-Protected-Equipment, Operations Protected Equipment Program, Revision 18

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04053350

Section 1R15: Operability Determinations and Functionality AssessmentsProcedures

CPI-FLO-4084, Calibration of Standby AFW Pump 'C', Revision 01800
 CPI-FLO-2006, Calibration of Turbine Driven AFW Flow to Steam Generator 1A, Loop 2006, Revision 01600
 CPI-FLO-2001, Calibration of 1A Motor Driven AFW Pump Discharge Flow Loop 2001, Revision 020
 CPI-FT-626, Calibration of RHR Flow Transmitter FT-626, Revision 10
 CPI-FLO-626, Calibration of RHR Flow Loop 626 Rack Instrumentation, Revision 01601
 CPI-FT-689, Calibration of RHR Redundant Flow Transmitter FT-689, Revision 05
 CPI-FLO-689, Calibration of RHR Redundant Flow Loop 689 Rack Instrumentation, Revision 01000
 O-6.13, Daily Surveillance Log, Revision 192

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33013-1002, AFW Pump Instrumentation Upgrade, Revision 4
 33013-1237, AFW P&ID, Revision 73
 33013-1925, Service Water for Instrument Air Compressors and Aftercoolers P&ID, Revision 15

ARs

03998486	04023915	04036776
04037691	04041034	04054418

WOs

C93411910

Miscellaneous

Gin-1-2017-0456, Intermittent Loss of I-11 RPI, Revision 1
 R.E. Ginna Nuclear Power Plan Surveillance Frequency Control Program List of Surveillance Frequencies, Revision 3

Section 1R17: Evaluations of Changes, Tests, or Experiments10 CFR 50.59 Evaluations

C-2014-001, Containment Air Temperature and Associated Changes, Revision 0
 C-2015-001, Turbine Stop, Re-heater Intercept/Stop Valve Testing Extension, Revision 0
 C-2015-002, Implementation of WCAP-12610-P-A and CENPD-404-P-A, Addendum 2-A, Westinghouse Clad Corrosion Model for ZIRLO and Optimized ZIRLO, Revision 0
 C-2016-001, Revision of Ginna SFP Criticality Analysis for EPU Conditions and Pu-241 Half-Life Corrections, Revision 000
 C-2016-003, Improvements at the Intake Structure to Mitigate Frazil Ice, Revision 0
 C-2016-004, RCP Shutdown Seals, Revision 0
 C-2017-001, Extending Main Turbine Valve Testing Frequency, Revision 000
 C-2017-002, Implementation of New Rods-in-DNB of the Locked Rotor Analysis, Revision 0

10 CFR 50.59 Screened-out Evaluations

A-2015-004, RPV Level Instrumentation Calibration, Revision 0
 A-2015-023, Changing CST Level on ATT from 10' to 5' at which the Head Control Operator will be Directed to Align SW to TDAFW Pump, Revision 0

- A-2015-027, Temporary Leak Repair for FAC Piping Line Segment SI-72, Revision 0
- A-2015-088, ATT-5.5, Attachment SAFW with Suction from DWST during SBO, Revision 0000
- A-2015-090, Remove NDE Requirements/Add SI Accumulator Level Verification, Revision 0
- A-2016-092, ATT-5.5, Attachment SAFW with Suction from DWST during SBO, Revision 0000
- B-2015-017, TSTF-523, GL 2008-01, Managing Gas Accumulation, Revision 000
- B-2015-018, Upgrade Network Switches to Meet Cyber Security Requirements, Revision 0
- B-2015-027, Intermediate Building Block Wall Reinforcement, Revision 0
- B-2015-039, Closure Test of TDAFW Pump Steam Admission Check Valves, Revision 0
- B-2015-044, Add Seismic Supports to House Heating Steam in 'A' EDG Room, Revision 0
- B-2015-061, Temporary Installation of a Clamping Device to Reduce Overall Vibrations on the Turbine-Driven AFW Pump, Revision 0
- B-2016-061, Ginna Design Basis Flood Re-evaluation, Revision 0
- B-2016-065, SW Rupture Disk Actuations due to SW System Pressure Transients, Revision 0
- B-2017-012, MDAFW Pump Discharge MOVs 4007 and 4008 Replacement, Revision 0
- B-2017-015, Application of Higher Allowable Stresses for ASME/Non-Nuclear Piping, Revision 0
- B-2017-020, Temporary Modification for Raising Alarm Temperature for Shroud Fan Inlet Thermocouples on RK-28B, Revision 000
- B-2017-028, Anchor/Darling Double Disc Gate Valve Wedge Pin Evaluation, Revision 0
- B-2017-035, Intermediate Building Cold Side HVAC Modification, Revision 0

Audits and Self-Assessments

Self-Assessment, 10 CFR 50.59 Review, 7/20/17

Completed Surveillance, Performance, and Functional Tests

- M-51.13EQ, Maintenance/Replacement of EQ Valcor Solenoid Valves, completed 9/9/03
- STP-O-16-MSCV-T, Closure Test of TDAFW Pump Steam Admission Check Valves, completed 5/24/15 and 10/17/15
- STP-O-3QA, Containment Spray Pump 'A' Quarterly Test, completed 9/14/17
- STP-O-40.4, SAFW Diesel Generator (KDG09) Run Test, completed 7/20/16
- STP-O-40.5, NFPA Diesel Generator (KDG08) Run Test, completed 7/29/16
- STP-O-40.5, NFPA Diesel Generator (KDG09) Run Test, completed 8/21/17
- T-18A, Intercept and Reheat Stop Valve Test, completed 4/23/17 and 10/18/15
- T-18B, Turbine Main Steam Stop Valve Testing, completed 4/23/17 and 10/19/15

ARs

01517272	01701235	01957178	01961092	02492079
02518553	02687917	02696476	02741816	04014734
04033839	04034735	04055875	04056448	04056449

2012-1084 (CR)	I01030 (CATS)	R00765 (CATS)
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Design & Licensing Bases

R.E. Ginna UFSAR, Revision 26
 TSs, Amendment 125

Drawings

- 03023-0028, Environmental Qualification of Class 1E Equipment 590, Revision 6
- 33013-1260, Reactor Coolant, Revision 27

Calculations/Engineering Evaluations

CN-TA-16-20, R.E. Ginna Locked Rotor Rods-in-DNB Analysis, 11/14/16
 DA-EE-96-009-16, Environmental Qualification Analysis of EGS Quick Disconnect Electrical Connector 2" and 3/4", Revision 2
 DA-EE-99-031-16, Qualified Life for Valcor RPV Head Vent Valve External O-Rings, Revision 0
 DA-ME-12-002, Minimum Wall Calculation for 30" Main Steam Header End Caps, Revision 1
 ECP-13-000048, Containment Air Temperature Increase and Associated Changes, Revision 0
 ECP-15-000081, Ginna Unit 1 Cycle 39 Core Reload Design, Revision 0
 ECP-15-000379, Turbine Stop, Re-heater Intercept/Stop Valve Testing Extension, Revision 0
 ECP-15-000522, Reactor Coolant Pump Shutdown Seals, Revision 0
 ECP-16-000346, Improvements at Intake Structure to Mitigate Frazil Ice, Revision 0
 ECP-16-000442, Ginna Unit 1 Cycle 40 Core Reload Design, Revision 1
 ECP-17-000170, ASME Code Reconciliation/Applicability of Later Code Editions and Addenda to Section XI/Non-Section XI Activities for Revised Allowable Stress Values, Revision 0
 OpEval 16-009, Main Steam End Caps M71-10A (West) and M73-9A (East), Revision 1

Miscellaneous

Core Operating Limits Report (COLR) Cycle 40, Revision 1
 EEQ-1 Package 55, EGS Multiple Conductor, Bayonet Type, Quick Disconnect Electrical Connectors, Revision 4
 EEQ Package 3A, Valcor Solenoid Operated Valve with Position Indication, Revision 4
 EEQ Package 4, Conax Electric Conductor Seal Assemblies, Revision 2
 ER-Fire.1, Alternate Shutdown for Control Complex Fire, Revision 03400
 EWR 4237.10, EQ Analysis of New Ambient Temperatures in Containment, Revision 1
 Final Safety Evaluation for PWR Owners Group Topical Report PWROG-14001-P, Revision 1, "PRA Model for the Generation III Westinghouse Shutdown Seal," 8/23/17
 Inter-Office Correspondence, EPU Revisions for Reactor Containment Environments, 9/28/06
 ME-318, Ginna Pipe Line Specification, Revision 6
 NF-CB-15-145, Reload Safety Evaluation Report for R.E. Ginna Cycle 39, 9/30/15
 NF-RG-13-34, NRC Ruling on Corrosion Model Hydrogen Pick-up Content 13-IC-10, 8/7/13
 NSAL-13-7, Impact of Plant Conditions on Spent Fuel Pool Criticality, 9/26/13
 PES-S-006, Code Reconciliation, Revision 6
 RGE-13-5, Westinghouse Inputs to License Amendment Request to Support an Elevated Initial Containment and Accumulator Temperature, Revision 0

Procedures

AP-CCW.2, Loss of CCW during Power Operation, Revision 02300
 CC-AA-256, Attachment 3, Digital Design Attribute Review for Plant Modifications Involving Microprocessor Technology, Revision 2
 CMP-MS-001, IST Program Steam Supply Check Valves to TDAFW Pump Corrective Maintenance Program Plan, Revision 1
 CPI-INSTR-15.1, Calibration of Reactor Vessel Level Monitoring System Train 'A' Instrumentation, Revision 01401
 ER-SC.3, Low Screenhouse Water Level, Revision 024
 LS-AA-104, Exelon 50.59 Review Process, Revision 10
 LS-AA-104-1000, Exelon 50.59 Resource Manual, Revision 11
 LS-AA-104-1006, Exelon 50.59 Training and Qualification, Revision 4
 LS-AA-125, CAP Procedure, Revision 5
 OP-GI-102-106, Operator Response Time Program at Ginna Station, Revision 4
 S-13B, RHR Pump Isolation and Restoration, Revision 02702

Work Orders

20301196 20600472

Section 1R18: Plant Modifications

Procedures

T-2A, Pre-Startup Alignment and Operation of Instrument Air System, Revision 03102

Drawings

33013-1925, Service Water for instrument Air Compressors and Aftercoolers, Revision 15

ARs

04041185

Miscellaneous

50.59 Evaluation for ECP 17-000541 dated 8/13/17

ECP-17-000541, Alternate SW Cooling to 'C' Instrument Air Compressor, Revision 000

Section 1R19: Post-Maintenance Testing

Procedures

STP-O-3-COMP-A, Containment Spray Pump A Comprehensive Test, Revision 008

STP-O-13.4, B5B Fire Pump Test, Revision 8

STP-O-23.46, Local Leak Rate Test of Nitrogen to Accumulators Pen 120A, Revision 00101

STP-O-40.4, SAFW Diesel Generator (KDG08) Run Test, Revision 009

STP-O-40.5, NFPA Diesel Generator (KDG09) Run Test, Revisions 7 and 8

WOs

C93118479

C93554896

ARs

04044439

Section 1R22: Surveillance Testing

Procedures

STP-O-12.2, EDG 'B', Revision 019

STP-O-16QT, AFW Turbine Pump – Quarterly, Revision 012

STP-E-10.1, Station Battery 'B' Quarterly Surveillance, Revision 00001

STP-E-12.3, Security Emergency Diesel Test, Revision 011

ARs

04037304

WOs

C93382820

C93367332

C93565158

Section 2RS7: Radiological Environmental Monitoring ProgramProcedures

CH-261, Collection and Analysis of Groundwater Samples, Revision 00800
 CH-ENV-AQUATIC, Gross Activity in Aquatic Samples, Revision 00801
 CH-ENV-LAND-USE, Land Use Census, Revision 00500
 CH-ENV-MILK, Collection of Milk Samples, Revision 00900
 CH-ENV-TRANS, Preparation and Shipment of Environmental Samples to Vendorlab,
 Revision 00900
 CH-ENV-TLD-OSL, Collecting Environmental TLD/OSL, Revision 00300
 CH-ENV-TECH, Duties of Environmental Surveillance Technician, Rev 00600.
 CH-ENV-VEG, Collection of Vegetation Samples, Revision 00501
 CH-ENV-WATER, Collection of Water Samples, Revision 02300
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Section 40A2: Problem Identification and Resolution

Procedures

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Section 40A7: Licensee-Identified Violations

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LIST OF ACRONYMS

10 CFR	Title 10 of the <i>Code of Federal Regulations</i>
AC	alternating current
AFW	auxiliary feedwater
AR	action request
CAP	corrective action program
CFR	Code of Federal Regulations
ECP	engineering change package
EDG	emergency diesel generator
Exelon	Exelon Generation Company, LLC
GL	generic letter
GPI	groundwater protection initiative
HX	heat exchanger
IMC	inspection manual chapter
INPO	Institute of Nuclear Power Operations
IP	inspection procedure
MR	maintenance rule
NCV	non-cited violation
NEI	Nuclear Energy Institute
NRC	Nuclear Regulatory Commission
ODCM	offsite dose calculation manual
PI	performance indicator
PMT	post-maintenance test
REMP	radiological environmental monitoring program
RHR	residual heat removal
RG	regulatory guide
SDP	significance determination process
SFP	spent fuel pool
SSC	structure, system, and component
ST	surveillance test
TS	technical specification
UFSAR	updated final safety analysis report
WO	work order