



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
2100 RENAISSANCE BLVD.
KING OF PRUSSIA, PA 19406-2713**

November 7, 2016

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 05000244/2016003**

Dear Mr. Hanson:

On September 30, 2016, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at the R.E. Ginna Nuclear Power Plant, LLC (Ginna). On October 24, 2016, the NRC inspectors discussed the results of this inspection with Mr. Joseph Pacher, Site Vice President, and other members of the your staff. The results of this inspection are documented in the enclosed report.

NRC inspectors documented one finding of very low safety significance (Green) in this report. This finding involved a violation of NRC requirements. The NRC is treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2.a of the Enforcement Policy.

If you contest the violation or significance of this NCV, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, Region I; the Director, Office of Enforcement; and the NRC Resident Inspectors at Ginna. In addition, if you disagree with the cross-cutting aspect assignment or a finding not associated with a regulatory requirement 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 U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20551-001; with copies to the Regional Administrator, Region I; and the NRC Resident Inspectors at Ginna.

B. Hanson

-2-

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and the 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 05000244/2016003
w/Attachment: Supplementary Information

cc w/encl: Distribution via ListServ

B. Hanson

-2-

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No. 50-244

License No. DPR-18

Report No. 05000244/2016003

Licensee: Exelon Generation Company, LLC (Exelon)

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

Location: Ontario, New York

Dates: July 1, 2016, through September 30, 2016

Inspectors: N. Perry, Senior Resident Inspector
J. Petch, Resident Inspector
H. Anagnostopoulos, Health Physicist
J. DeBoer, Emergency Preparedness Inspector

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

Enclosure

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SUMMARY

Inspection Report 05000244/2016003; 07/01/2016 – 09/30/2016; Ginna; Response Organization Staffing and Augmentation System.

This report covered a 3- month period of inspection by resident inspectors and announced inspections performed by regional inspectors. The inspectors identified one non-cited violation (NCV), which was of very low safety significance (Green). 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 April 29, 2015. Cross-cutting aspects are determined using IMC 0310, "Aspects Within the Cross-Cutting Areas," issued December 4, 2014. All violations of U.S. Nuclear Regulatory Commission (NRC) requirements are dispositioned in accordance with the NRC's Enforcement Policy dated August 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: Emergency Preparedness

- Green. The inspectors identified a Green NCV of Title 10 of the *Code of Federal Regulations* (10 CFR) 50.54(q)(2) for Exelon's failure to maintain an emergency plan that meets the requirements in Appendix E, "Content of Emergency Plans," to Part 50 and the planning standards of 50.47(b). Specifically, Exelon did not perform a drive-in augmentation drill during the required 3-year cycle nor did they perform a health physics drill semi-annually as required by Ginna's Emergency Plan Implementing Procedure EP-AA-122-100, "Drill and Exercise Planning and Scheduling." Immediate corrective actions included entering this issue into their corrective action program (CAP).

This finding is more than minor because it is associated with the emergency response organization (ERO) readiness attribute of the Emergency Preparedness cornerstone and adversely affected the cornerstone objective to ensure that Exelon is capable of maintaining adequate measures to protect the health and safety of the public in the event of a radiological emergency. In accordance with IMC 0609, Appendix B, "Emergency Preparedness Significance Determination Process," Attachment 2, "Failure to Comply Significance Logic," the inspectors determined that the performance deficiency affected planning standard 10 CFR 50.47(b)(14). The inspectors concluded that this performance deficiency matched an example on Table 5.14-1 – "Significance Examples §50.47(b)(14)," for a Degraded Planning Standard Function. Specifically, two drills had not been conducted during a 2-year (calendar) period in accordance with the emergency plan, thus constituting a degraded planning standard function which corresponds to a very low safety significance (Green) finding. The cause of the finding has a cross-cutting aspect in the area of Human Performance, Procedure Adherence, because Exelon did not schedule or plan for a drive-in augmentation drill or health physics drills in accordance with procedure EP-AA-122-100. [H.8] (Section 1EP3)

REPORT DETAILS

Summary of Plant Status

Ginna began the inspection period operating at 100 percent power and 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 – 1 sample)

Readiness for Impending Adverse Weather Conditions

a. Inspection Scope

On July 20, 21, and August 11, 2016, the inspectors reviewed Exelon's readiness for the onset of seasonal hot temperatures. The inspectors reviewed the implementation of adverse weather preparation procedures before the onset of and during this adverse weather condition. The inspectors walked down the turbine building, 'A' and 'B' battery rooms, 'A' and 'B' emergency diesel rooms, intermediate building cold side, auxiliary building, screen house, standby auxiliary feedwater (AFW) pump room, standby AFW annex, and National Fire Protection Association (NFPA) 805 diesel generator enclosure. The inspectors verified that operator actions defined in Exelon's adverse weather procedures maintained the readiness of essential systems. The inspectors discussed readiness and staff availability for adverse weather response with operations and work control personnel. Documents reviewed for each section of this inspection report are listed in the Attachment.

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 following systems:

- 'A' safety injection system on August 29, 2016
- 'B' residual heat removal system on September 22, 2016
- Fire protection system yard loop on September 28, 2016

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 Updated Final Safety Analysis Report (UFSAR), technical specifications (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 system performance of their intended safety functions. The inspectors also performed field walkdowns of accessible portions of the systems to determine if 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.

b. Findings

No findings were identified.

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

a. Inspection Scope

On August 18, 2016, the inspectors performed a complete system walkdown of accessible portions of the spent fuel pool (SFP) cooling system to verify the existing equipment lineup was correct. The inspectors reviewed operating procedures, drawings, and equipment lineup check-off lists 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 as-built system configuration matched plant documentation, and that system components and support equipment remained operable. The inspectors confirmed that systems and components were aligned correctly, free from interference from temporary services or isolation boundaries, environmentally qualified, and protected from external threats. The inspectors also examined the material condition of the components for degradation and observed operating parameters of equipment to verify that there were no deficiencies. Additionally, the inspectors reviewed a sample of related ARs and WOs to ensure Exelon appropriately evaluated and resolved any deficiencies.

b. Findings

No findings were identified.

1R05 Fire ProtectionResident Inspector Quarterly Walkdowns (71111.05Q – 5 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.

- Auxiliary building intermediate floor on August 4, 2016
- Transformer yard on August 4, 2016
- Intermediate building main steam header floor on August 19, 2016
- Screen house operating floor on August 22, 2016
- Secondary hydrogen bottle house on September 9, 2016

b. Findings

No findings were identified.

1R06 Flood Protection Measures (71111.06 – 1 sample)Internal Flooding Reviewa. 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 auxiliary building. The inspectors verified the adequacy of seismic supports on tanks in the auxiliary building, equipment seals located below the flood line, floor and water penetration seals, common drain lines and sumps, sump pumps, level alarms, and safety-related 480-volt electrical separation from below flood line electrical connections. 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.

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 28, 2016, the inspectors observed licensed operator simulator training which included an unstable grid voltage, decreasing 480-volt bus voltages, two turbine control valves failing open, a degrading condenser vacuum, and a shift technical advisor turnover. 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 30, 2016, the inspectors observed and reviewed transformer 12B relay testing, an over-pressure accumulator recharge, a shift turnover, an end-of-shift briefing, and a reactivity briefing and reactor coolant dilution in the main control room. The inspectors observed pre-shift briefings and reactivity control briefings to verify that the briefings met the criteria specified in procedures HU-AA-1211, "Pre-Job Briefings," Revision 011. Additionally, the inspectors observed test 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 WOs, and maintenance rule basis documents to ensure that Exelon 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 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 maintenance rule system boundaries.

- 'A' control room toxic gas monitor on July 1, 2016
- Service air compressor on September 20, 2016
- Boric acid system on September 30, 2016

b. Findings

No findings were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13 – 5 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 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.

- Planned annual surveillance testing on the fire pumps on July 5, 2016
- Planned maintenance on the service air compressor and the 'C' charging pump on July 12, 2016
- Planned turbine-driven AFW fire protection system tests on August 22, 2016
- Unplanned maintenance on the 'B' AFW oil pump on August 30, 2016

- Planned diesel fire pump calibration on September 21, 2016

b. Findings

No findings were identified.

1R15 Operability Determinations and Functionality Assessments (71111.15 – 5 samples)

a. Inspection Scope

The inspectors reviewed operability determinations for the following degraded or non-conforming conditions based on the risk significance of the associated components and systems:

- Intermediate building cold side high temperatures on August 15, 2016
- Intermediate range nuclear instruments calibration issues on August 23, 2016
- 'B' AFW lube oil pump high vibrations on September 8, 2016
- Reactor vessel level sensing line temperature indicating high on September 9, 2016
- 'B' emergency diesel generator (EDG) fire system on September 12, 2016

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. The inspectors determined, where appropriate, compliance with bounding limitations associated with the evaluations.

b. Findings

No findings were identified.

1R18 Plant Modifications (71111.18 – 1 sample)

Permanent Modification

a. Inspection Scope

The inspectors evaluated a modification to the SFP cooling system that added a vacuum breaker in the discharge line at the SFP. 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 upgrade and design change that included replacing a 5-foot section of the SFP cooling system piping. The inspectors also reviewed the post installation of the modification above the SFP and interviewed engineering personnel concerning the modification.

b. Findings

No findings were identified.

1R19 Post-Maintenance Testing (71111.19 – 6 samples)

a. Inspection Scope

The inspectors reviewed the post-maintenance tests 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.

- 'A' control room toxic gas monitor detector planned maintenance on July 20, 2016
- NFPA 805 EDG diesel generator planned maintenance on August 12, 2016
- 'B' AFW oil pump unplanned maintenance on August 31, 2016
- 'B' containment spray planned maintenance on September 1, 2016
- 'A' safety injection pump planned maintenance on September 13, 2016
- Diesel fire pump planned maintenance on September 21, 2016

b. Findings

No findings were identified.

1R22 Surveillance Testing (71111.22 – 5 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 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 surveillance tests:

- STP-E-12.3, Security Emergency Diesel Test on July 22, 2016
- STP-I-9.1.14, Undervoltage Protection – 480-Volt Safeguard Bus 14 on July 27, 2016

- STP-O-12.1, Emergency Diesel Generator 'A' on August 17, 2016 (in-service test)
- STP-O-13.18, Satellite Station 'C' Battery Backup Test on August 18, 2016
- STP-O-16QT, Auxiliary Feedwater Turbine Pump – Quarterly Test on September 8, 2016 (in-service test)

b. Findings

No findings were identified.

Cornerstone: Emergency Preparedness

1EP2 Alert and Notification System Evaluation (71114.02 – 1 sample)

a. Inspection Scope

An onsite review was conducted to assess the performance, maintenance, and testing of Exelon's alert and notification system (ANS). During this inspection, the inspectors conducted a review of the ANS testing and maintenance programs. The inspectors reviewed the associated ANS procedures and the Federal Emergency Management Agency-approved ANS design report to ensure compliance with design report commitments for system maintenance and testing. The inspection was conducted with 10 CFR 50.47(b)(5) and the related requirements of 10 CFR Part 50, Appendix E, "Emergency Planning and Preparedness for Production and Utilization Facilities," as reference criteria.

b. Findings

No findings were identified.

1EP3 Emergency Response Organization Staffing and Augmentation System (71114.03 – 1 sample)

a. Inspection Scope

The inspectors conducted a review of Exelon's ERO on-shift and augmentation staffing requirements and the process for notifying and augmenting the ERO. The review was performed to assess the readiness of key Exelon staff to respond to an emergency event and to evaluate Exelon's ability to activate emergency response facilities (ERFs) in a timely manner. The inspectors reviewed Ginna's Emergency Plan for ERF activation and ERO staffing requirements, the ERO duty roster, applicable station procedures, augmentation test reports, the most recent drive-in drill reports, and ARs related to this inspection area. The inspectors also reviewed a sample of ERO responder training records to determine if training and qualifications were up to date. The inspection was conducted utilizing 10 CFR 50.47(b)(2) and related requirements of 10 CFR Part 50, Appendix E, as reference criteria.

b. Findings

Introduction. The inspectors identified a Green NCV of 10 CFR 50.54(q)(2) for Exelon's failure to maintain an emergency plan that meets the requirements in Appendix E to Part 50 and the planning standards of 50.47(b). Specifically, Exelon did not perform a drive-in augmentation drill during the required 3-year cycle nor did they perform a health physics drill semi-annually as required by EP-AA-122-100, "Drill and Exercise Planning and Scheduling," Revision 006 and planning standard 10 CFR 50.47(b)(14), "Drill and Exercise Program."

Description. The inspectors reviewed drill and exercise evaluation reports for drills conducted between June 2014 and June 2016. The inspectors compared the drills described in the evaluation reports with the requirements of Ginna's Emergency Plan Implementing Procedure EP-AA-122-100 to determine if all drills required by the Emergency Plan had been completed. The inspectors identified that the triennial drive-in augmentation drill and semi-annual health physics drills had not been performed as required by the Plan. The inspectors subsequently interviewed the emergency preparedness (EP) manager and EP staff to determine whether the drills had been conducted. Exelon concluded that semi-annual health physics drills and the triennial drive-in augmentation drill had not been completed and appropriately documented in the required timeframes as prescribed in EP-AA-122-100. Therefore, the inspectors concluded that the required drills had not been performed, and Exelon had not followed the requirements of their approved Emergency Plan.

Analysis. Exelon's failure to follow the requirements of the approved site Emergency Plan is a performance deficiency within Exelon's ability to foresee and correct and should have been prevented. This finding is more than minor because it is associated with the ERO readiness attribute of the Emergency Preparedness cornerstone and adversely affected the cornerstone objective to ensure that Exelon is capable of maintaining adequate measures to protect the health and safety of the public in the event of a radiological emergency. In accordance with IMC 0609, Appendix B, "Emergency Preparedness Significance Determination Process," Attachment 2, "Failure to Comply Significance Logic," issued September 22, 2015, the inspectors determined that the finding affected planning standard 10 CFR 50.47(b)(14). The inspectors determined that this performance deficiency matched an example on Table 5.14-1 – "Significance Examples §50.47(b)(14)," for a Degraded Planning Standard Function. Specifically, a drill has not been conducted during a 2-year (calendar) period in accordance with the emergency plan. A degraded planning standard function results in a very low safety significance (Green) finding. Additionally, the finding has a cross-cutting aspect in the area of Human Performance, Procedure Adherence, because Exelon did not schedule or plan for a drive-in augmentation drill or health physics drills in accordance with procedure EP-AA-122-100. [H.8]

Enforcement. 10 CFR 50.54(q)(2) states, in part, that a holder of a license under Part 50 shall follow and maintain the effectiveness of an emergency plan that meets the requirements of Appendix E to Part 50 and the planning standards of 10 CFR 50.47(b). Title 10 CFR 50.47(b)(14) requires that periodic drills are conducted to develop and maintain key skills. Appendix E, Section IV.F.1, requires that the program provide for the training of employees and exercising by periodic drills shall be described. Ginna's Emergency Plan Implementing Procedure EP-AA-122-100 requires that Exelon perform health physics drills semi-annually and drive-in augmentation drills triennially.

Contrary to the above, from June 2014 until June 2016, Exelon failed to follow an emergency plan that met the requirements of Appendix E to Part 50 and the planning standards of 10 CFR 50.47(b). Specifically, Exelon failed to conduct a drive-in augmentation drill triennially and health physics drills semi-annually as required by Ginna's Emergency Plan Implementing Procedure EP-AA-122-100. The last triennial drive-in augmentation drill was conducted in September 2012. Immediate corrective actions included Exelon entering this issue into its CAP (AR 02697081 and AR 02697234). Because this violation was of very low safety significance (Green) and Exelon entered the issue into its CAP (AR 02697081 and AR 02697234), this violation is being treated as an NCV, consistent with Section 2.3.2.a of the Enforcement Policy. **(NCV 05000244/2016003-01, Failure to Perform Drills Required by the Site Emergency Plan)**

1EP5 Maintenance of Emergency Preparedness (71114.05 – 1 sample)

a. Inspection Scope

The inspectors reviewed a number of activities to evaluate the efficacy of Exelon's efforts to maintain its EP program. The inspectors reviewed letters of agreement with offsite agencies; the 10 CFR 50.54(q) emergency plan change process and practice; Exelon's maintenance of equipment important to EP; records of evacuation time estimate population evaluation; and provisions for and implementation of primary, backup, and alternate ERF maintenance. The inspectors also examined Exelon's compliance with NRC EP regulations regarding emergency action levels for hostile action events, the emergency operations facility (EOF) performance-based approach, ERO augmentation at alternate ERFs, protective actions for on-site personnel during events, emergency declaration timeliness, ERO augmentation and alternate facility capability, evacuation time estimate updates, and on-shift ERO staffing analysis.

The inspectors further evaluated Exelon's ability to maintain its EP program through identification and correction of EP weaknesses by reviewing a sample of drill reports, actual event reports, self-assessments, 10 CFR 50.54(t) reviews, and EP-related ARs initiated from July 2014 through June 2016. The inspection was conducted utilizing 10 CFR 50.47(b) and the related requirements of 10 CFR Part 50, Appendix E, as reference criteria.

b. Findings

No findings were identified.

2. RADIATION SAFETY

Cornerstone: Public Radiation Safety and Occupational Radiation Safety

2RS2 Occupational ALARA Planning and Controls (71124.02 – 3 samples)

a. Inspection Scope

During the week of September 12, 2016, the inspectors assessed Exelon's performance with respect to maintaining occupational individual and collective radiation exposures as low as reasonably achievable (ALARA). The inspectors used the requirements contained in 10 CFR Part 20, "Standards for Protection Against Radiation;" Regulatory Guide 8.8, "Information Relevant to Ensuring that Occupational Radiation Exposures at Nuclear Power Plants Will Be As Low As Reasonably Achievable," Revision 3; Regulatory Guide 8.10, "Operating Philosophy for Maintaining Occupational Radiation Exposures As Low As Reasonably Achievable," Revision 2; TSs; and procedures required by TSs as criteria for determining compliance.

Inspection Planning

The inspectors conducted a review of Ginna's collective dose history and trends, ongoing and planned radiological work activities, previous post-outage ALARA reviews, radiological source term history and trends, and ALARA dose estimating and tracking procedures.

Radiological Work Planning (1 sample)

The inspectors selected the following radiological work activities based on exposure significance for review:

- Radiation Work Permits (RWPs) GN-1-15-00507, 00607, 00620, and 01102, "Operations Activities During 2015 RFO [Refueling Outage]"
- RWP GN-1-15-00613, 00614, 00618, and 00801, "All Refuel Activities"
- RWP GN-1-15-00501, 00601, 00609, 00621, 00627, and 01103, "RP [Radiation Protection] Outage Activities"
- RWP GN-1-15-00505, 00605, and 01112, "Scaffold Activities During 2015 RFO"
- RWP-GN-1-15-00501, 00511, 00611, 00612, 01106, 01107, and 01180, "Valve Activities During 2015 RFO"

For each of these activities, the inspectors reviewed ALARA work activity evaluations, exposure estimates, exposure reduction requirements, results achieved (dose rate reductions, actual dose), person-hour estimates and results achieved, and post-job reviews that were conducted to identify lessons learned.

Verification of Dose Estimates and Exposure Tracking Systems (1 sample)

The inspectors reviewed the current annual collective dose estimate; basis methodology; and measures to track, trend, and reduce occupational doses for ongoing work activities. The inspectors evaluated the adjustment of exposure estimates or re-planning of work. The inspectors reviewed post-job ALARA evaluations of excessive exposure.

Problem Identification and Resolution (1 sample)

The inspectors evaluated whether problems associated with ALARA planning and controls were identified at an appropriate threshold and properly addressed in the 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, 2015, through June 30, 2016:

- Emergency Alternating Current Power System (MS06)
- High-Pressure Injection System (MS07)
- Heat Removal System (MS08)
- Residual Heat Removal 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 Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Performance Indicator 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 Emergency Preparedness (3 samples)

a. Inspection Scope

The inspectors reviewed data for the following EP PIs:

- Drill and Exercise Performance (EP01)
- ERO Drill Participation (EP02)
- ANS Reliability (EP03)

The last NRC EP inspection was conducted in the second quarter of 2015. Therefore, the inspectors reviewed supporting documentation from EP drills and equipment tests from the second quarter of 2015 through the second quarter of 2016 to verify the accuracy of the reported PI data. The acceptance criteria documented in NEI 99-02 was used as reference criteria.

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 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.

b. Findings

No findings were identified.

.2 Semi-Annual Trend Review

a. Inspection Scope

The inspectors performed a semi-annual review of site issues to identify trends that might indicate the existence of more significant safety concerns. As part of this review, the inspectors included repetitive or closely related issues documented by Exelon in trend reports, major equipment problem lists, system health reports, maintenance rule assessments, and maintenance or CAP backlogs. The inspectors also reviewed

Exelon's CAP database for the first and second quarters of 2016 to assess ARs written in various subject areas (equipment problems, human performance issues, etc.), as well as individual issues identified during the NRC's daily AR review (Section 4OA2.1). The inspectors reviewed trend reports for the first and second quarters of 2016, to verify that Exelon 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 first and second quarters of 2016 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.

The evaluation did not reveal any new trends that could indicate a more significant safety issue. The inspectors assessed that Exelon personnel were identifying trend issues at a low threshold and entering them into the CAP for resolution and were appropriately prioritizing investigation reviews. The inspectors noted minor adverse trends identified by Exelon staff in the areas of maintenance rule functional failure decisions exceeding 30 days (AR 02610024), the initiation of trend ARs (AR 02632456), a potential trend with aspects of qualifications (AR 02637278), a potential trend in maintenance rework (AR 02640554), and an increasing trend in vibration on the 'C' containment recirculation fan (AR 02667209).

There were no adverse safety consequences as a result of these low-level trend issues. Based on the overall results of the semi-annual trend review, the inspectors determined that Exelon was properly identifying adverse trends at Ginna before they became more significant safety problems. The inspectors independently evaluated the deficiencies noted above for significance in accordance with the guidance in IMC 0612, Appendix B, "Issue Screening," and Appendix E, "Examples of Minor Issues." The inspectors determined these conditions were deficiencies of minor significance and, therefore, are not subject to enforcement action in accordance with the NRC's Enforcement Policy.

.3 Annual Sample: Emergency Preparedness Related Equipment Deficiencies

a. Inspection Scope

The inspectors performed an in-depth review of Exelon's corrective actions associated with a number of EP-related equipment issues. During the past 18 months, the EP department has had issues with the ANS silent tests performed at the technical support center (TSC). In the early part of 2015, the site experienced a failure of the EOF backup diesel generator in 2015, and multiple radiological emergency communications system (RECS) and satellite phone failures from 2015 into 2016.

The inspectors assessed Exelon's problem identification threshold, and the prioritization and timeliness of Exelon's corrective actions to determine whether Exelon was appropriately identifying, characterizing, and correcting problems associated with this issue, and whether the completed corrective actions were appropriate. The inspectors compared the actions taken to the requirements of Exelon's CAP and 10 CFR Part 50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants." In addition, the inspectors interviewed Exelon's EP staff responsible for tracking and maintaining EP-related equipment issues and individuals that perform the maintenance. The inspectors assessed the corrective actions performed by Exelon in association with AR 02458306, AR 02458978, and AR 02460134. The focus of the inspection was to verify the evaluation and timeliness of the corrective actions and to ensure the corrective actions were appropriate.

b. Findings and Observations

No findings were identified.

The inspectors reviewed the ARs generated regarding the ANS silent test failures, the EOF backup diesel generator failure, and multiple RECS line and satellite phone failures. The inspectors concluded that the corrective actions were appropriate and timely. Specifically, the corrective actions Exelon performed included extensive troubleshooting on the TSC siren transmitter and adjusting the voltage on the transmitter to correct for potential distortions in the signal. In addition to adjusting the transmitter, Exelon changed where and how they perform the weekly silent test to the offsite county locations instead of the TSC. With regards to the EOF diesel generator failure to start due to a coolant leak, Exelon promptly dispatched a service technician to make repairs to the engine and restore it to a functional status. Exelon also performed daily checks for a month following the repair to ensure that the repair appropriately addressed the issue and no leaks persisted. The RECS line issues were typically due to an off-site connection with the telecom provider and were resolved quickly and did not repeat themselves in the same manner. The satellite phone failures were resolved by the vendor who made appropriate repairs or replacements accordingly. In all instances, there were redundant satellite phones available in the various ERFs that were affected.

The inspectors concluded that Exelon's corrective actions were effective, and there were no apparent widespread EP-related equipment issues at Ginna. There was, however, a lack of documentation present in the corrective actions associated with the failures. Specifically, in all three of the EP equipment issues discussed above, Exelon failed to appropriately document certain corrective actions sufficiently to maintain a record of the work performed. The inspectors interviewed the maintenance technicians that completed the work on the EOF diesel and the EP manager who was knowledgeable on the ANS silent test failures and the RECS line/satellite phone issues to ensure that the actions were completed even though Exelon could not provide all of the supporting documentation to prove completion.

The inspectors independently evaluated the deficiencies noted above for significance in accordance with the guidance in IMC 0612, Appendix B, "Issue Screening," and Appendix E, "Examples of Minor Issues." The inspectors determined these conditions

were deficiencies of minor significance because they are similar to IMC 0612 Appendix E, Example 1A, in that the deficiencies were record keeping issues of low significance since there was reasonable assurance that corrective actions had been completed based upon interviews and equipment performance.

.4 Annual Sample: Work Week Risk

a. Inspection Scope

The inspectors performed an in-depth review of Exelon's corrective actions associated with performance of station procedures OPG-OPERATIONS-ON-LINE-WORK-MANAGEMENT, "Operations On-Line Work Management," Revision 001, and WC-AA-104, "Integrated Risk Management," Revision 023. Specifically, during 2016, there were at least 12 cases of ARs generated related to work week risk. The NRC requires that prior to performing maintenance activities, a risk associated with those activities be determined and evaluated in an effort to minimize and to mitigate plant risk.

The inspectors assessed Exelon's problem identification threshold, and the prioritization and timeliness of Exelon's corrective actions to determine whether Exelon was appropriately identifying, characterizing, and correcting problems associated with this issue, and whether the completed corrective actions were appropriate. The inspectors compared the actions taken to the requirements of Exelon's CAP and 10 CFR Part 50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants." In addition, the inspectors interviewed operations and work management personnel to assess the effectiveness of the implemented corrective actions.

b. Findings and Observations

No findings were identified.

While none of the issues identified in the ARs represents a performance deficiency, the sheer volume of ARs related to this one area did raise concern. Exelon determined that the most probable cause of the high number of ARs associated with work week risk was a number of changes taking place during 2016. First, the operations management began ensuring the shift manager on duty during the work week was the one involved in planning the work conducted that week, which is largely based on how that work impacts plant risk. In addition, Ginna has moved from one risk analysis computer program (EOOS) to another (PARAGON). Finally, the work week managers have been trained on the importance of verifying the actual plant equipment that is running is the equipment taken credit for in their risk model prior to work execution. While there were a few instances where it was not identified until just prior to work performance that the risk determined in the proposed work package did not reflect the actual plant risk, no instances were identified where work was started with an inaccurate work risk assessment. As a result there was no violation of NRC requirements identified.

4OA6 Meetings, Including Exit

On October 24, 2016, the inspectors presented the inspection results to Mr. Joseph Pacher, 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.

ATTACHMENT: SUPPLEMENTARY INFORMATION

SUPPLEMENTARY INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

J. Pacher, Site Vice President
W. Carsky, Plant Manager
D. Blankenship, Director, Site Operations
J. Bowers, Radiation Protection General Supervisor
V. Cwietniewicz, Manager, Emergency Preparedness, Mid-Atlantic
R. Everett, Director, Site Engineering
K. Garnish, Senior Manager, Operations Support and Services
K. Gould, Manager, Radiation Protection
T. Harding, Manager, Site Regulatory Assurance
S. Holmes, Radwaste Supervisor
J. Jackson, Director, Emergency Preparedness
P. Swift, Director, Site Work Management
S. Wihlen, Director, Site Maintenance

LIST OF ITEMS OPENED, CLOSED, DISCUSSED, AND UPDATED

Opened/Closed

05000244/2016003-01	NCV	Failure to Perform Drills Required by the Site Emergency Plan (Section 1EP3)
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LIST OF DOCUMENTS REVIEWED

Section 1R01: Adverse Weather Protection

Procedures

ER-SC.1, Adverse Weather Plan, Revision 024
O-23, Hot Weather Seasonal Readiness Walkdown, Revision 013

Action Request

02703057

Section 1R04: Equipment Alignment

Procedures

STP-O-30.1, Safety Injection System Valve and Breaker Position Verification, Revision 00105
STP-O-30.2, RHR System Valve and Breaker Position Verification, Revision 00003

Drawings

33013-1247, Auxiliary Coolant Residual Heat Removal, Revision 47
33013-1248, Auxiliary Cooling Spent Fuel Pool Cooling Piping and Instrumentation Drawing
(P&ID), Revision 45
33013-1262, Safety Injection and Accumulators, Sheet 1 of 2, Revision 34
33013-1262, Safety Injection and Accumulators, Sheet 2 of 2, Revision 8
33013-1607, Fire Protection System Yard Loop, Revision 5

Section 1R05: Fire Protection

Procedures

CNG-MN-1.01-1005, Scaffold Control, Revision 00400
FRP-5.0, Auxiliary Building Intermediate Floor, Revision 011
FRP-12.0, Intermediate Building Main Steam Header Floor, Revision 009
FRP-27.0, Secondary Hydrogen Bottle House, Revision 007
FRP-31.0, Screen House Operating Floor, Revision 09
FRP-32.0, Transformer Yard, Revision 007
MA-AA-716-025, Scaffold Installation, Modification, and Removal Request Process, Revision 12

Drawings

21488-0100, Fire Barrier General Arrangement Drawing Fire, Smoke and Pressure Barriers Plan
View Elevation 271 feet 0 inches, Revision 23
21488-0120, Fire Barrier General Arrangement Sheet Intermediate Building Clean Side Floor
Plan Penetration and Pyrocrete Locations Floor Elevation 278 feet 4 inches, Sheet 6,
Revision 11
21488-0120, Fire Barrier General Arrangement Sheet Intermediate Building Clean Side
Section C-C North Wall Penetration and Pyrocrete Locations Floor Elevation 278 feet
4 inches, Sheet 7, Revision 7
21488-0120, Fire Barrier General Arrangement Sheet Intermediate Building Clean Side
Section A-A South Wall, Section B-B West Wall Penetration and Pyrocrete Locations Floor
Elevation 278 feet 4 inches, Sheet 8, Revision 5
33013-2546, Fire Response Plan Auxiliary Building, Revision 4

33013-2552, Fire Response Plan Containment Structure and Intermediate Building Plan –
Operations Floor Elevation 278 feet 4 inches and 274 feet 6 inches, Revision 8
33013-2560, Fire Response Plan Transformer Yard, Revision 7
33013-2560, Fire Response Plan Turbine Building, Revision 15
33013-2571, Fire Response Plan Screen House, Revision 6

Action Requests

02709038 02710624

Miscellaneous

DA-ME-98-004, Combustible Loading Analysis, Revision 15
ESR-16-0215, Technical Evaluation, Revision 0000

Section 1R06: Flood Protection Measures

Miscellaneous

UFSAR, Chapter 3, Design of Structures, Components, Equipment, and Systems, Revision 23

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

Procedures

HU-AA-1211, Pre-Job Briefings, Revision 011
OP-AA-101-113-1006, 4.0 Crew Critique Guidelines, Revision 007
PRI-27-02-XFMR12B, Protective Relay Trip Test Transformer 12B, Revision 00501

Section 1R12: Maintenance Effectiveness

Procedures

AR-E-11, Control Room HVAC Isolation, Revision 02300
CPI-ANALYZER-234, Control Room Train ‘A’ Toxic Gas Analyzers Calibration, Revision 01304
ER-AA-310, Implementation of the Maintenance Rule, Revision 009
ER-AA-310-1001, Maintenance Rule – Scoping, Revision 004
ER-AA-310-1002, Maintenance Rule Functions – Safety Significance Classification, Revision 003
ER-AA-310-1003, Maintenance Rule – Performance Criteria Selection, Revision 005
ER-AA-310-1004, Maintenance Rule – Performance Monitoring, Revision 013
ER-AA-310-1005, Maintenance Rule – Dispositioning Between (A)(1) and (A)(2), Revision 007
LS-AA-104-1003, 50.59 Screening Form, Revision 4
STP-O-17.7AQ, Control Room Toxic Gas Monitor Train ‘A’ Operability, Revision 00002

Action Requests

02649359	02674849	02677137	02678534
02680604	02682945	02685427	02695299
02695617	02702341	02704389	

Miscellaneous

DA-NS-2000-053, Control Room Toxic Hazards Analysis, Revision 1
Maintenance Rule Expert Panel Meeting Agenda: 16-13 on September 30, 2016
Performance Criteria Selection: System 12
R.E. Ginna Nuclear Power Plant Technical Requirements Manual

Section 1R13: Maintenance Risk Assessments and Emergent Work ControlProcedures

OP-A-108-117, Protected Equipment Program, Revision 004
 OPG-PROTECED-EQUIPMENT, Operations Protected Equipment Program, Revision 016
 STP-O-13.1, Annual Fire Pump Insurance Surveillance Test, Revision 00304
 WC-AA-104, Integrated Risk Management, Revision 023

Section 1R15: Operability Determinations and Functionality AssessmentsProcedures

ER-AA-2003, System Performance Monitoring and Analysis, Revision 013
 ER-AA-2011, Degraded Equipment Tracking in PlantIQ, Revision 004
 MA-AA-716-230-1002, Vibration Analysis/Acceptance Guideline, Revision 004
 OP-AA-102-104, Pertinent Information Program, Revision 002

Action Requests

02702099	02703057	02705315	02709964
02710347			

Miscellaneous

Engineering Change Package (ECP)-16-000635-309-101-01, Technical Evaluation,
 Revision 0000
 ESR-16-000629-309-101-01, Technical Evaluation, Revision 0000
 ESR-16-0215, Technical Evaluation, Revision 0000
 OPEVAL-16-005, Intermediate Building Cold Side Higher Than Normal Ambient Temperatures,
 Revision 0
 OPEVAL-16-006, Intermediate Range Nuclear Instrumentation Calibration, Revision 000

Section 1R18: Plant ModificationsDrawings

330130638, SFP Discharge Siphon Breaker, Revision 0
 33013-1248, Auxiliary Cooling Spent Fuel Pool Cooling P&ID, Revision 37

Miscellaneous

ECP-10-000687, Auxiliary Cooling Spent Fuel Pool Cooling P&ID, Revision 37
 ECP-13-000807-15-9-01, Installation and Testing Instructions, Revision 0000
 ESR-11-0480 ESR(000), Replace SFP Discharge Siphon-Breaker With Enhanced Design,
 Revision 0000

Section 1R19: Post-Maintenance TestingProcedures

STP-O-2.1-COMP-A, Safety Injection Pump 'A' Comprehensive Test, Revision 010
 STP-O-3QB, Containment Spray Pump 'B' Quarterly Test, Revision 00700
 STP-O-13, Fire Pump Operation and System Alignment, Revision 003
 STP-O-17.7AQ, Control Room Toxic Gas Monitor Train 'A' Operability Test, Revision 00002
 STP-O-40.5, NFPA Diesel Generator (KDG09) Run Test, Revision 007

Action Requests

02702977 02703851 02704041

Section 1R22: Surveillance Testing

Procedures

STP-E-12.3, Security Emergency Diesel Test, Revision 00902
STP-I-9.1.14, Undervoltage Protection – 480 Volt Safeguard Bus 14, Revision 00904
STP-O-12.1, Emergency Diesel Generator 'A', Revision 020
STP-O-13.18, Satellite Station 'C' Battery Backup Test, Revision 00001
STP-O-16QT, Auxiliary Feedwater Turbine Pump – Quarterly Review, Revision 01100

Action Request

02513756

Miscellaneous

R.E. Ginna Nuclear Power Plant TSs

Section 1EP2: Alert and Notification System Evaluation

Procedures

EP-AA-1012, Exelon Nuclear Radiological Emergency Plan Annex for Ginna Station,
Revision 003
EP-MA-121-1003-F-01, Testing/Activating the Ginna Sirens from the Technical Support Center,
Revision A
EP-MA-121-1003-F-02, Testing/Activating the Ginna Sirens from the County Activation Points,
Revision A
EP-MA-121-1004, Alert and Notification Maintenance System Program, Revision 009

Miscellaneous

ANS Maintenance Records, 2014, 2015, and 2016
ANS Testing Records, June 2014 to June 2016
ANS Design Report, Revision 0, dated March 1, 2013

Section 1EP3: Emergency Response Organization Staffing and Augmentation System

Procedures

EP-AA-122-100, Drill and Exercise Planning and Scheduling, Revision 006
EP-AA-122-100-F-14, Drive-In Drill Checklist, Revision C
EP-AA-1000, Exelon Nuclear Standardized Radiological Emergency Plan, Revision 028
EP-AA-1012, Exelon Nuclear Radiological Emergency Plan Annex for Ginna Station,
Revision 003
EP-AA-1102, ERO Fundamentals, Revision 010
TQ-AA-113, ERO Training and Qualification, Revision 029

Miscellaneous

2016 ERO Duty Roster
Call-In Augmentation Drill Reports

Section 1EP5: Maintenance of Emergency PreparednessProcedures

EP-AA-120-1001, 10 CFR 50.54(q) Change Evaluation, Revision 008
 EP-CE-121-1003, Ginna Equipment Matrix, Revision 002
 LS-AA-104, Exelon 50.59 Review Process, Revision 010

Action Requests

01701657	01963139	02383588	02436491
02437243	02437246	02440103	02442269
02458306	02458978	02460134	02469410
02473417	02482597	02539981	02572373
02597437	02616010		

Miscellaneous

Drill and Exercise Reports, 2015 and 2016
 Emergency Plan Letters of Agreement/Memoranda of Understanding, 2016
 Graded Exercise Evaluation Report dated April 28, 2015
 KLD TR0777, Development of Evacuation Time Estimates 2015 dated October 15, 2015
 NOSA-GIN-15-03, EP Audit Report
 NOSA-GIN-16-03, EP Audit Report

Section 2RS2: Occupational ALARA Planning and ControlsProcedures

RP-AA-16, ALARA Program Description, Revision 000
 RP-AA-400, ALARA Program, Revision 013
 RP-AA-400-1001, Establishing Collective Radiation Exposure Annual Business Plan Goals, Revision 004
 RP-AA-400-1002, Dose Equalization, Revision 002
 RP-AA-400-1003, Work Group Radiological Excellence Plans, Revision 002
 RP-AA-400-1004, Emergent Dose Control and Authorization, Revision 008
 RP-AA-400-1005, ALARA Suggestion Program, Revision 002
 RP-AA-400-1006, Outage Exposure Estimating and Tracking, Revision 005
 RP-AA-400-1007, Elevated Dose Rate Response Planning, Revision 002
 RP-AA-400-1008, Exposure Goal Recovery Plans, Revision 002
 RP-AA-400-1009, Remote Monitoring System, Revision 002
 RP-AA-400-2000, Department Dose Advocate, Revision 002
 RP-AA-401, Operational ALARA Planning and Controls, Revision 021
 RP-AA-401-1001, Dose Reporting Guidance, Revision 006
 RP-AA-401-1002, Radiological Risk Management, Revision 009
 RP-AA-403, Administration of the Radiation Work Permit Program, Revision 008
 RP-AA-410, Selection, Use, and Control of Protective Clothing, Revision 007
 RP-AA-441, Evaluation and Selection Process for Radiological Respirator Use, Revision 006
 RP-AA-4003, Guidelines for Daily Radiation Protection Outage Report, Revision 007

Action Requests

02580006	02580017	02612821	02625219
02661307	02682247	02689229	02705992
02712646	02712682		

Miscellaneous

ALARA Committee Meeting Minutes dated September 4 and 11, 2015; October 26 and 29, 2015; and November 2, 2015

ALARA Plans 2015-0011, 2015-1000, 2015-1005, 2015-1009, and 2015-1014

ALARA Post-Job Reviews, ALARA Plans 2015-0011, 2015-1000, 2015-1005, 2015-1009, and 2015-1014

ALARA Work-In Progress Reviews, ALARA Plans 2015-0011, 2015-1000, 2015-1005 (50 and 80 percent), 2015-1009, and 2015-1014

Benchmarking Report, AR 02434376 dated March 27, 2015

Check-In Self-Assessment, AR 02583197 dated June 17, 2016

Dose Excellence Plan 2016 to 2020 dated April 14, 2016

EPRI SMRP (Reactor Coolant Loop Piping) Radiological Survey dated April 30, 2014, and October 22, 2015

G1R39 RFO Exposure Summary

G1R39 RFO 2015 Report dated December 17, 2015

NOSA-GIN-15-11, RP Report dated October 1, 2015

NOSCPA-GN-15-11, RP Report dated October 1, 2015

Post-Shutdown in the Reactor Containment Radiological Survey dated October 29, 2015

RP Fleet Performance Summary Report dated April 24, 2015

Total Effective Dose Equivalent ALARA Evaluation Screening Worksheets, ALARA Plans 2015-0011, 2015-1000, 2015-1005, 2015-1009, and 2015-1014

Section 40A1: Performance Indicator Verification

Procedure

EP-AA-125-1001, EP Performance Indicator Guidance, Revision 008

Miscellaneous

ANS Reliability PI Data, April 2015 to June 2016

Drill and Exercise PI Data, April 2015 to June 2016

ERO Drill Participation PI Data, April 2015 to June 2016

NEI 99-02, Regulatory Assessment Performance Indicator Guideline, Revision 7

Section 40A2: Problem Identification and Resolution

Procedures

EP-MA-121-1003-F-01, Testing/Activating the Ginna Sirens from the Technical Support Center, Revision A

EP-MA-121-1003-F-02, Testing/Activating the Ginna Sirens from the County Activation Points, Revision A

OPG-OPERATIONS-ON-LINE-WORK-MANAGEMENT, Operations On-Line Work Management, Revision 001

PI-AA-125, Corrective Action Program (CAP) Procedure, Revision 004

PI-AA-127, Passport Action Tracking Management Procedure, Revision 002.01

WC-AA-104, Integrated Risk Management, Revision 023

Action Requests

02458306	02458978	02460134	02598650
02600289	02610024	02615094	02615431
02620545	02621969	02623253	02626888
02630233	02632456	02633728	02635818
02637278	02640554	02650630	02652107
02653734	02653758	02658868	02662376
02664308	02667209	02669662	02673308
02678548	02678694	02698549	02704846
02705958	02713448	02714018	02715012
02715075	02717091	02719121	02720155
02720665			

Miscellaneous

Siren Silent Testing Polling Failures, Federal Emergency Management Agency Sheet

LIST OF ACRONYMS

10 CFR	Title 10 of the <i>Code of Federal Regulations</i>
AFW	auxiliary feedwater
ALARA	as low as reasonably achievable
ANS	alert and notification system
AR	action request
CAP	corrective action program
ECP	engineering change package
EDG	emergency diesel generator
EOF	emergency operations facility
EP	emergency preparedness
ERF	emergency response facility
ERO	emergency response organization
IMC	Inspection Manual Chapter
NCV	non-cited violation
NEI	Nuclear Energy Institute
NFPA	National Fire Protection Association
NRC	Nuclear Regulatory Commission, U.S.
P&ID	pipng and instrumentation drawing
PI	performance indicator
RECS	radiological emergency communications system
RFO	refueling outage
RP	radiation protection
RWP	radiation work permit
SFP	spent fuel pool
SSC	structure, system, and component
TS	technical specification
TSC	technical support center
UFSAR	Updated Final Safety Analysis Report
WO	work order