



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

August 5, 2020

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

SUBJECT: R.E. GINNA NUCLEAR POWER PLANT, LLC – INTEGRATED INSPECTION  
REPORT 05000244/2020002

Dear Mr. Hanson:

On June 30, 2020, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at R.E. Ginna Nuclear Power Plant, LLC. On July 27, 2020, the NRC inspectors discussed the results of this inspection with Mr. Paul Swift, Site Vice President and other members of your staff. The results of this inspection are documented in the enclosed report.

The NRC inspectors did not identify any findings or violations of more than minor significance during this inspection.

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 at the NRC Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

X /RA/

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Signed by: Erin E. Carfang  
Erin E. Carfang, Chief  
Reactor Projects Branch 1  
Division of Reactor Projects

Docket No. 05000244  
License No. DPR-18

Enclosure:  
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REPORT 05000244/2020002 DATED AUGUST 5, 2020

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**U.S. NUCLEAR REGULATORY COMMISSION**  
**Inspection Report**

Docket Number: 05000244

License Number: DPR-18

Report Number: 05000244/2020002

Enterprise Identifier: I-2020-002-0043

Licensee: Exelon Generation Company, LLC

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

Location: Ontario, New York

Inspection Dates: April 01, 2020 to June 30, 2020

Inspectors: J. Schussler, Senior Resident Inspector  
S. Monarque, Resident Inspector  
L. Dumont, Reactor Inspector  
S. Shaffer, Senior Health Physicist  
A. Turilin, Reactor Inspector

Approved By: Erin E. Carfang, Chief  
Reactor Projects Branch 1  
Division of Reactor Projects

Enclosure

## **SUMMARY**

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an integrated inspection at R.E. Ginna Nuclear Power Plant, LLC, in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to <https://www.nrc.gov/reactors/operating/oversight.html> for more information.

### **List of Findings and Violations**

No findings or violations of more than minor significance were identified.

### **Additional Tracking Items**

None.

## PLANT STATUS

Ginna began the inspection period at rated thermal power. On April 6, 2020, the unit was taken offline for refueling outage 1GR42. The unit was synchronized to the grid on May 24, 2020, was returned to rated thermal power on May 29, 2020, and remained at or near rated thermal power for the remainder of the inspection period.

## INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors performed plant status activities described in IMC 2515, Appendix D, "Plant Status," and conducted routine reviews using IP 71152, "Problem Identification and Resolution." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase". The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

Starting on March 20, 2020, in response to the National Emergency declared by the President of the United States on the public health risks of the coronavirus (COVID-19), resident inspectors were directed to begin telework and to remotely access licensee information using available technology. During this time the resident inspectors performed periodic site visits each week, conducted plant status activities as described in IMC 2515, Appendix D, observed risk significant activities, and completed on site portions of IPs. In addition, baseline inspections were evaluated to determine if all or portions of the objectives and requirements stated in the IP could be performed remotely. If the inspections could be performed remotely, they were conducted per the applicable IP. In some cases, portions of an IP were completed remotely and on site. The inspections documented below met the objectives and requirements for completion of the IP.

## REACTOR SAFETY

### 71111.01 - Adverse Weather Protection

#### Seasonal Extreme Weather Sample (IP Section 03.01) (1 Sample)

- (1) The inspectors evaluated readiness for seasonal extreme weather conditions prior to the onsite of seasonal summer readiness for offsite and alternate AC power systems, including the switchyard and transformers on June 25, 2020

#### Impending Severe Weather Sample (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated the adequacy of overall preparations to protect risk-significant systems from impending high winds and severe weather during the refueling outage on April 13, 2020

### 71111.04 - Equipment Alignment

#### Partial Walkdown Sample (IP Section 03.01) (6 Samples)

The inspectors evaluated system configurations during partial walkdowns of the following systems/trains:

- (1) As-left safeguard emergency core cooling system valve position verification inside containment during refueling outage, upon completion of safety related components' major maintenance period on April 26, 2020
- (2) Turbine driven auxiliary feedwater pump alignment following maintenance and testing on May 28, 2020
- (3) 'B' motor driven auxiliary feedwater pump alignment following scheduled surveillance testing on June 9, 2020
- (4) 'A' containment spray pump alignment following scheduled surveillance testing on June 12, 2020
- (5) 'B' containment spray pump alignment which was protected during 'A' containment spray system maintenance and testing on June 12, 2020
- (6) 'A' spent fuel pool cooling pump through 'B' spent fuel pool heat exchanger alignment following refueling outage on June 18, 2020

#### Complete Walkdown Sample (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated system configurations during a complete walkdown of the safety injection system after maintenance and prior to low inventory in reactor cavity on April 28, 2020

### 71111.05 - Fire Protection

#### Fire Area Walkdown and Inspection Sample (IP Section 03.01) (10 Samples)

The inspectors evaluated the implementation of the fire protection program by conducting a walkdown and performing a review to verify program compliance, equipment functionality, material condition, and operational readiness of the following fire areas:

- (1) Containment basement level on April 13, 2020
- (2) Containment intermediate level on April 13, 2020
- (3) Containment operating level on April 19, 2020
- (4) Intermediate building north basement on May 13, 2020
- (5) Intermediate building north main steam header floor on May 18, 2020
- (6) 'A' battery room on May 20, 2020
- (7) Standby auxiliary feedwater pump annex building on May 20, 2020
- (8) Screen house building basement on May 23, 2020
- (9) 'A' emergency diesel room on May 23, 2020
- (10) Screen house operating floor on May 27, 2020

#### Fire Brigade Drill Performance Sample (IP Section 03.02) (1 Sample)

- (1) The inspectors observed the performance of the fire brigade during an unannounced fire drill on June 13, 2020

#### 71111.06 - Flood Protection Measures

#### Inspection Activities - Internal Flooding (IP Section 03.01) (1 Sample)

- (1) The inspectors evaluated scheduled functional testing of the circulating water level switches for internal flooding mitigation protection during the refueling outage on June 10, 2020

#### 71111.08P - Inservice Inspection Activities (PWR)

#### PWR Inservice Inspection Activities Sample (IP Section 03.01) (1 Sample)

- (1) The inspectors verified that the reactor coolant system boundary, reactor vessel internals, risk-significant piping system boundaries, and containment boundary are appropriately monitored for degradation and that repairs and replacements were appropriately fabricated, examined and accepted by reviewing the following activities during the Ginna Unit 1 G1R42 refueling outage from April 13, 2020, to June 2, 2020:

##### 03.01.a - Nondestructive Examination and Welding Activities

- Ultrasonic examination of baffle former bolts, RRC01 (GIN-I000870, GIN-I000880) (32-9311747)
- Ultrasonic examination of E reactor coolant system 4-inch pressurizer relief line pipe to elbow weld (20GU018)
- Ultrasonic examination of 23A reactor coolant system 2-inch charging to 'B' cold leg, pipe to coupling weld (20GU011)
- Visual examination (VT3) of lower radial support system/clevis insert (MRP-227) (GIN-I000800 and CR-4335182)
- Ultrasonic thickness examination of containment liner behind elevator shaft, basement 240 to 360 degrees, (BOP-UT-20-094)
- Bare metal visual examination (GV) of reactor pressure vessel (RPV) bottom mounted instrumentation (BMI) penetrations, lower head BMI nozzle to head interface annulus area for pressure boundary leakage and adjacent carbon steel corrosion (N-722-1) (20GV039)

- Magnetic particle examination of PS-B, PEN 403 anchor (INCV) main feedwater integral attachment (20GM001)
- Dye penetrant examination of CVU-413 (IA), CVCS-CHRG integral attachment (20GP003)
- Welding associated with replacement of reactor coolant 3/4 inch 952 valve (92563410)

#### 03.01.b - Pressurized-Water Reactor Vessel Upper Head Penetration Inspection Activities

- Exelon did not perform reactor vessel upper head penetration examinations during this outage. The last head inspection visual examination was in spring 2017 (1GR40) outage. Pursuant to Code Case N-729, heads with nozzles and partial-penetration welds of PWSCC-resistant materials must be inspected every 3 outages or 5 years whichever is less. This correlates to next head inspection scheduled for fall 2021 outage (1GR43).

#### 03.01.c - Pressurized-Water Reactor Boric Acid Corrosion Control Inspection Activities

- Boron on packing of 852C
- Boron on body to bonnet connection of 200A
- Boron buildup on FE-177
- Boron on packing of 878D
- Boron on packing of 892B
- Boron pressure boundary leak from 3/4 inch coupling downstream of 880D

#### 03.01.d - Steam Generator Tube Inspection Activities

- Exelon personnel did not perform steam generator tube examinations during this outage. Based on Condition Monitoring and Operational Assessment (0192-AST-101215 Rev 000) End of Cycle 39, dated May 12, 2017 and Degradation Assessment (0192-AST-101038 Rev 001), the degradation identified in the last outage (EOC39 spring 2017) permits the next scheduled steam generator tube examinations to be scheduled for fall of 2021 (EOC 42, RFO 1GR43).

### 71111.11Q - Licensed Operator Regualification Program and Licensed Operator Performance

#### Licensed Operator Performance in the Actual Plant/Main Control Room (IP Section 03.01) (1 Sample)

- (1) Inspectors observed and evaluated licensed operator performance and procedure use and adherence in the main control room during the following activities: reactor mode changes from 3 to 4 on April 6, 2020, reactor vessel drain down to 80 inches during the refueling outage on April 8, 2020, and April 29, 2020, reactor mode changes from 3 to 2 on May 7, 2020, reactor mode 2 transition to reactor critical on May 23, 2020, and turbine generator syncing to the grid on May 24, 2020.

#### Licensed Operator Regualification Training/Examinations (IP Section 03.02) (1 Sample)

- (1) The inspectors observed and evaluated licensed operator performance in the simulator during licensed operator regualification training on June 16, 2020. The



training involved a scenario that contained, but was not limited to, a pressurizer transmitter failure, non-regenerative heat exchanger reactor coolant leak into component cooling water, feed regulator valve failure, feed pump suction pipe break, reactor trip, and failure of preferred auxiliary feedwater to supply water to the steam generators.

#### 71111.12 - Maintenance Effectiveness

##### Maintenance Effectiveness (IP Section 03.01) (1 Sample)

The inspectors evaluated the effectiveness of maintenance to ensure the following structures, systems, and components remain capable of performing their intended function:

- (1) Service water system on June 24, 2020

##### Quality Control (IP Section 03.02) (1 Sample)

The inspectors evaluated the effectiveness of maintenance and quality control activities to ensure the following structures, systems, and components remain capable of performing their intended function:

- (1) 'D' motor control center seismic mount on June 29, 2020

#### 71111.13 - Maintenance Risk Assessments and Emergent Work Control

##### Risk Assessment and Management Sample (IP Section 03.01) (6 Samples)

The inspectors evaluated the accuracy and completeness of risk assessments for the following planned and emergent work activities to ensure configuration changes and appropriate work controls were addressed:

- (1) Elevated shutdown risk, (yellow), during refueling outage risk phase 2 reactor vessel low inventory drain down to 80 inches to support planned maintenance on April 8, 2020
- (2) Elevated shutdown risk, (yellow), during planned safety related 480 volt bus 16 maintenance on April 15, 2020
- (3) Elevated shutdown risk, (green), during planned safety related 480 volt bus 14 maintenance concurrent with recently off loaded fuel in the spent fuel pool on April 21, 2020
- (4) Elevated shutdown risk, (yellow), during refueling outage risk phase 7 reactor vessel low inventory drain down to 80 inches to support planned maintenance on May 1, 2020
- (5) Elevated online risk, (green), during planned 'A' safety injection pump maintenance on June 8, 2020
- (6) Elevated online risk, (yellow), during unplanned 'B' control room emergency air treatment system maintenance on June 24, 2020

### 71111.15 - Operability Determinations and Functionality Assessments

#### Operability Determination or Functionality Assessment (IP Section 03.01) (7 Samples)

The inspectors evaluated the licensee's justifications and actions associated with the following operability determinations and functionality assessments:

- (1) Motor operated valve 851B actuator extension shaft universal joint degraded rubber boot impact on valve safety function and foreign material threat to residual heat removal system on May 3, 2020
- (2) Lower Radial Support System Clevis and Clevis Insert, Mode 5 and 4 OPEVAL-20-002 on May 5, 2020
- (3) Lower Radial Support System Clevis and Clevis Insert, Mode 3, 2, and 1 OPEVAL-20-002 on May 6, 2020
- (4) 'B' containment shroud fan elevated vibrations on May 26, 2020
- (5) Pressurizer level channel L426, L427, L428 instrument deviation on June 12, 2020
- (6) 'B' component cooling water pump vibrations following outboard bearing replacement on June 17, 2020
- (7) 'B' component cooling water pump outboard bearing leakage following maintenance, OPEVAL-20-003 on June 23, 2020

### 71111.18 - Plant Modifications

#### Temporary Modifications and/or Permanent Modifications (IP Section 03.01 and/or 03.02) (3 Samples)

The inspectors evaluated the following temporary or permanent modifications:

- (1) Rearrange contact layout for the SIB-1 relay, permanent modification, ECP-20-000297 on May 18, 2020
- (2) Modify motor operated valve 700 disc to prevent pressure locking, permanent modification, ECP-19-000306 on May 23, 2020
- (3) Design change to resolve resonant condition on turbine driven auxiliary feedwater pump turbine, permanent modification, ECP-20-000113 on May 28, 2020

### 71111.19 - Post-Maintenance Testing

#### Post-Maintenance Test Sample (IP Section 03.01) (11 Samples)

The inspectors evaluated the following post maintenance test activities to verify system operability and functionality:

- (1) Valve in-service testing including adjustment and open/closed operation at system pressure and temperature of residual heat removal motor operated valve 700 following planned maintenance on March 5, 2020
- (2) Nuclear instrument N-32 detector calibration and surveillance test following unplanned maintenance due to failed response check on April 10, 2020
- (3) Safety related bus 16 under voltage protection surveillance test following safety related motor control center 'D' maintenance, 480 volt circuit breaker maintenance and bus 16 intrusive inspections on May 3, 2020

- (4) Turbine driven auxiliary feedwater pump operational test following planned pump and governor valve repair and maintenance on May 12, 2020
- (5) Turbine overspeed trip test following unplanned maintenance on overspeed trip relays on May 24, 2020
- (6) 'A' safety injection accumulator motor operated valve 841B operational testing following wedge pin replacement planned maintenance on June 8, 2020
- (7) Diesel driven air compressor operational test following unplanned engine cooler replacement and minor engine planned maintenance on June 10, 2020
- (8) 'B' component cooling water pump surveillance test following mechanical seal replacement planned maintenance on June 17, 2020
- (9) 'B' residual heat removal pump suction motor operated valve 704B valve diagnostic testing following actuator, stem and disk planned maintenance on June 19, 2020
- (10) 'A' containment spray pump surveillance test following seal water heat exchanger, system valve packing replacement and motor oil change planned maintenance on June 25, 2020
- (11) 'B' control room emergency air treatment system surveillance and efficiency test following maintenance and unplanned charcoal replacement on June 26, 2020

#### 71111.20 - Refueling and Other Outage Activities

##### Refueling/Other Outage Sample (IP Section 03.01) (1 Sample)

- (1) The inspectors evaluated refueling outage activities from April 6, 2020 through May 24, 2020.

#### 71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

##### Surveillance Tests (other) (IP Section 03.01) (6 Samples)

- (1) CPI-SR-N31, calibration of source range N31 on April 10, 2020
- (2) STP-O-2.2A, residual heat removal system shut down check valve testing on April 13, 2020
- (3) STP-O-2.8Q, 'A' component cooling water pump test on April 27, 2020
- (4) STP-O-R-2.1-TR-B, train 'B' safety injection functional test on May 11, 2020
- (5) STP-O-R-2.1-TR-B, missed surveillance, surveillance frequency extension on May 29, 2020
- (6) STP-O-16QT, turbine driven auxiliary feedwater quarterly test on June 30, 2020

##### Inservice Testing (IP Section 03.01) (1 Sample)

- (1) STP-O-2.10.2, residual heat removal system check valve full and partial flow test on April 14, 2020

##### Containment Isolation Valve Testing (IP Section 03.01) (1 Sample)

- (1) STP-O-23.5, local leak rate of 'B' sump to 'B' reactor coolant drain tank pump penetration 142 on April 22, 2020

## **RADIATION SAFETY**

### 71124.01 - Radiological Hazard Assessment and Exposure Controls

#### Radiological Hazard Assessment (IP Section 03.01) (1 Partial)

- (1) (Partial)  
The inspectors evaluated how Exelon identifies the magnitude and extent of radiation levels and the concentrations and quantities of radioactive materials and how the licensee assesses radiological hazards.

#### Instructions to Workers (IP Section 03.02) (1 Partial)

- (1) (Partial)  
The inspectors evaluated radiological protection-related instructions to plant workers.

## **OTHER ACTIVITIES – BASELINE**

### 71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

#### MS05: Safety System Functional Failures (SSFFs) Sample (IP Section 02.04) (1 Sample)

- (1) Submitted data from April 1, 2019 - March 31, 2020

#### BI01: Reactor Coolant System (RCS) Specific Activity Sample (IP Section 02.10) (1 Sample)

- (1) Submitted data from April 1, 2019 - March 31, 2020

#### BI02: RCS Leak Rate Sample (IP Section 02.11) (1 Sample)

- (1) Submitted data from April 1, 2019 - March 31, 2020

### 71152 - Problem Identification and Resolution

#### Semiannual Trend Review (IP Section 02.02) (1 Sample)

- (1) The inspectors reviewed Exelon's corrective action program for potential adverse trends that might be indicative of a more significant safety issue on June 25, 2020

#### Annual Follow-up of Selected Issues (IP Section 02.03) (2 Samples)

The inspectors reviewed the licensee's implementation of its corrective action program related to the following issues:

- (1) Review of Exelon's evaluation and corrective actions associated with failures of radiation monitors RM-6, RM-11, RM-14, and RM-33. AR 04272518, AR 04283233, AR 04285195, and AR 04273459

- (2) Review of Exelon's evaluation and corrective actions associated with nuclear instrument, power range nuclear instrument N-43 set-point instrument drift. AR 04264766, AR 04256761, and AR 04258657

## INSPECTION RESULTS

|   |       |
|---|-------|
| Observation: Set point drift on Power Range N-43  | 71152 |
| <p>The inspectors reviewed corrective actions, work orders and other documentations associated with the power range N-43 set point drift including equipment surveillances and the vendor technical manual to ensure that Exelon's corrective action program and NRC regulatory requirements were followed as required.</p> <p>Exelon identified during its troubleshooting that the start of the 'A' control room emergency air treatment system fan induced vibration on the nuclear instrumentation system cabinet, which houses the nuclear instrument N-43 power range, caused some unwanted movement in the R312, coarse level adjust potentiometer and the R304, fine gain potentiometer, whose locking nuts were not tightly secured. Subsequently, the potentiometers were replaced and tightened to address the cause of the issue. In addition, an extent of condition action item was created to initiate procedure changes to add a verification of tightness of the locking nuts on applicable power range drawer potentiometers on all four (4) power range drawers. The inspector noted that there had not been any subsequent issues with the power range.</p> <p>Therefore, the inspector determined that Exelon's actions in identifying and resolving the issue were appropriate and timely. 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 that none of the conditions were deficiencies of greater than minor significance and, therefore, are not subject to enforcement action in accordance with the NRC's Enforcement Policy.</p> |       |
| Observation: Failures of Radiation Monitors RM-6, RM-11, RM-14, and RM-33   | 71152 |
| <p>The inspectors performed a review Exelon's action following failures of radiation monitors RM-6, RM-11, RM-14, and RM-33. The inspectors reviewed Exelon's troubleshooting efforts, the corrective actions taken, and the extent of condition. The inspectors assessed Exelon's problem identification threshold, causal analysis, prioritization and timeliness of corrective actions to determine whether Exelon had taken timely and appropriate corrective actions.</p> <p>The inspectors observed that Exelon performed a thorough review of the associated equipment issues. RM-6 (AR 04272518) and RM-33 (AR 04273459) were replaced, after proper engineering reviews, with new digital designs. This allowed the older, more failure prone, analog monitors to be retired. RM-11 (AR 04283233) had an air leak into the monitoring skid, resulting in a failure of the skid. Exelon methodically worked through determining the source of the air in-leakage to be from a viewing window, which was found using an infrared leak detector. The viewing window was repaired in a timely manner. RM-14 (AR 04285195) was having repeated check source alarms due to source decay. The licensee addressed this by expanding the allowed error deviation. This does create a concern with ensuring that the monitor is not drifting from its calibration settings. Exelon performs a monthly response check with procedure STP-O-17.5, "Source Check of High Range Effluent Monitors RM-12A, RM-14A, R-31, R-32, R-47, R-48."</p>   |       |

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 that none of the conditions were deficiencies of greater than minor significance and, therefore, are not subject to enforcement action in accordance with the NRC's Enforcement Policy.

Observation: Corrective Action Semiannual Trend Review

71152

The inspectors reviewed Exelon's corrective action program for trends that might be indicative of a more significant safety issue on June 25, 2020. The inspectors evaluated a sample of issues and events that occurred over the course of the first and second quarters of 2020 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 corrective action program or through department review.

The evaluation did not reveal any new trends that could indicate a more significant safety issue. The inspectors determined that Exelon personnel were identifying trend issues at a low threshold, entered them into the CAP for resolution and had appropriately prioritized corrective actions. The inspectors noted minor adverse trends identified by Exelon staff in the areas of foreign material exclusion, protected equipment, tag out procedure adherence, and component oil level and addition frequencies. The inspectors raised an observation to plant management concerning a potential trend in untimely preparations for summer readiness seasonal extreme temperatures on the steam header elevation level of the intermediate building north.

There were no adverse safety consequences as a result of these low-level trend issues. Based on the overall results of the semiannual trend review, the inspectors determined that Exelon had properly identified 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 that none of the conditions were deficiencies of greater than minor significance and, therefore, are not subject to enforcement action in accordance with the NRC's Enforcement Policy.

## EXIT MEETINGS AND DEBRIEFS

The inspectors verified no proprietary information was retained or documented in this report.

- On June 2, 2020, the inspectors presented the ISI Debrief inspection results to Dave Wilson, Director Site Engineering, and other members of the Exelon staff.
- On June 3, 2020, the inspectors presented the Failures of Radiation Monitors inspection results to James Bement, Sr. Manager Site Radiation Protection, and other members of the Exelon staff.
- On June 25, 2020, the inspectors presented the Power Range N-43 drift issues inspection results to Jarrod Jackson, Sr. Manager Engineering, and other members of the Exelon staff.
- On July 27, 2020, the inspectors presented the integrated inspection results to Mr. Paul Swift, Site Vice President, and other members of the Exelon staff.

## DOCUMENTS REVIEWED

| Inspection Procedure | Type  | Designation   | Description or Title   | Revision or Date |
|----------------------|---|---------------|--|------------------|
| 71111.01             | Work Orders   | C93735088     | Ginna Station 13 Weekly Electrical Equipment Inspection/Minor Maintenance                            | 06/18/2020       |
| 71111.04             | Corrective Action Documents Resulting from Inspection | 04344683      | Small oil leak on SAFW pump outboard bearing   | 05/20/2020       |
|                      |   | 04344689      | Small oil leak on SAFW pump C inboard bearing  | 05/20/2020       |
|                      |   | 04344696      | MOV-9629B has a small oil leak from the motor housing  | 05/20/2020       |
|                      | Procedures  | STP-O-30.4    | Auxiliary Feedwater System Valve and Breaker Position Verification                                   | Revision 007     |
| 71111.05             | Corrective Action Documents Resulting from Inspection | 04346251      | IBN-15 emergency light lamp needs adjustment   | 05/28/2020       |
| 71111.08P            | Corrective Action Documents                           | 04321747      | 2020 NRC PI&R: Potential Missed IWE Examination  | 02/26/2020       |
|                      |   | 04333383      | Boron on Packing of 852C   | 04/07/2020       |
|                      |   | 04333536      | Boron on body to bonnet connection of 200A   | 04/07/2020       |
|                      |   | 04333544      | Boron buildup on FE-177  | 04/07/2020       |
|                      |   | 04333567      | Boron on packing of 878D   | 04/07/2020       |
|                      |   | 04333569      | Boron on packing ring of 892B  | 04/07/2020       |
|                      |   | 04333575      | Boron pressure boundary leak from 3/4 inch coupling downstream of 880D                               | 04/07/2020       |
|                      |   | 04333589      | G1R42 FAC Component M075-30 has low wall thickness   | 04/07/2020       |
|                      |   | 04333599      | G1R42 FAC Component M075-09 has low wall thickness   | 04/07/2020       |
|                      |   | 04334262      | Containment Moisture Barrier inside elevator shaft failed  | 04/09/2020       |
|                      |   | 04334745      | Failed Coating Discovered on Containment Liner Elev Shaft  | 04/11/2020       |
|                      |   | 04335182      | ISI/RVI: Lower Radial Clevis Insert Out of Place   | 04/13/2020       |
|                      |   | 04335337      | Potential damage to containment moisture barrier   | 04/14/2020       |
|                      |   | 04336304      | Uninspectable UT BFB 56-199 bolts  | 04/17/2020       |
|                      |   | 04337298      | Ginna Baffle to Former Bolts (25) not inspectable  | 04/21/2020       |
|                      |   | 04337313      | 25 Rejected bolts (Ginna Baffle to Former Bolts)   | 04/21/2020       |
|                      | Engineering Changes                                   | ESR-19-0214   | Technical Evaluation for Minimum Allowable Wall Thickness for FAC UT inspections during the 2020 RFO | 04/19/2020       |
|                      | Engineering   | 1-GNPP-M75-30 | Engineering Evaluation of UT Inspected Component   | 04/09/2020       |

| Inspection Procedure | Type  | Designation               | Description or Title  | Revision or Date |
|----------------------|---|---------------------------|---|------------------|
|                      | Evaluations   | 32-9311747-000            | BFB Probabilistic Structural Analysis for Ginna Spring 2020 UT Exams              | 05/03/2020       |
|                      | NDE Reports   | 20GM001                   | PS-B, PEN 403 Anchor (INCV)   | 04/11/2020       |
|                      |   | 20GP003                   | CVU-413 (IA), CVCS-CHRG Integral Attachment                                       | 04/15/2020       |
|                      |   | 20GU011                   | 23A, RCS 2-inch charging to 'B' cold leg, Pipe to Coupling weld                   | 04/14/2020       |
|                      |   | 20GU016                   | P29 UT Area   | 04/22/2020       |
|                      |   | 20GU018                   | RCS 4-inch Pressurizer Relief line Pipe to Elbow weld (20GU018)                   | 04/14/2020       |
|                      |   | 20GV039                   | RPV BMI Penetrations  | 04/16/2020       |
|                      |   | BOP-UT-20-094             | Basement 240 to 360 Deg   | 04/16/2020       |
|                      |   | BOP-UT-20-096             | Basement 240 to 360 Deg   | 04/16/2020       |
|                      | Work Orders   | C93713874                 | G1R42 Contingency - Cut Out and Replace FAC HIGH RISK Piping Component M75-09 TEE | 05/26/2020       |
| 71111.12             | Work Orders   | C93273024                 | Perform Preventive Maintenance Inspection of MCCD                                 | 04/14/2020       |
| 71111.13             | Corrective Action Documents Resulting from Inspection | 04342037                  | Operational barriers not posted as required                                       | 05/08/2020       |
|                      |   | 04348915                  | Protected equipment posting   | 06/08/2020       |
|                      | Work Orders   | C92951505                 | CREATS Carbon Filter B  | 06/23/2020       |
| 71111.15             | Corrective Action Documents                           | 04334657                  | Pressurizer level LT428A found OOT during calibration check                       | 04/11/2020       |
|                      |   | 04345279                  | 'B' containment shroud fan vibrations high  | 05/22/2020       |
|                      | Corrective Action Documents Resulting from Inspection | 04340410                  | Degraded joint boot on 851B extension shaft                                       | 05/02/2020       |
|                      | Drawings  | 684J823                   | Lower Radial Support Clevis and Insert Gaging and Assembly                        | Revision 000     |
|                      | Engineering Evaluations                               | OPEVAL 20-003             | Inboard and outboard seals for 'A' and 'B' CCW pump                               | Revision 001     |
|                      |   | OPEVAL-20-002             | Operability Evaluation  | Revision 000     |
| 71111.18             | Engineering Changes                                   | ECP-19-000306-001-F-02-01 | ESR-19-0067 ESR (000) - Modify MOV-700 Disc to Prevent Pressure Locking           | Revision 000     |
|                      | Engineering   | ECP-20-000297             | Rearrange Contact Layout for the SIB-1 Relay                                      | Revision 0       |



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|                      | Evaluations         |                    |  |                  |
| 71111.19             | Calibration Records | CPI-SR-N31         | Calibration of source range N31  | 03/04/2020       |
|                      |                     | CPI-SR-N31         | Calibration of Source Range N31  | 04/09/2020       |
|                      |                     | CPI-SR-N32         | Calibration of Source Range N32  | 03/19/2020       |
|                      |                     | CPI-SR-N32         | Calibration of Source Range N32  | 04/08/2020       |
|                      | Procedures          | GME-42-99-AKL08A/B | Replacement of CREATS Carbon Filter for AKL08A and AKL08B  | Revision 002     |
|                      |                     | GME-50-02-DB50     | Westinghouse, 480V Air Circuit Breaker, Type DB-50 Maintenance for Type DB-50 Breakers                           | Revision 028     |
|                      |                     | P-15.54            | Diesel Air Compressor  | Revision 009     |
|                      |                     | STP-E-37.3A        | Control Room Emergency Air Treatment System (CREATS) Mass Air Flow Check for Train A and Train B                 | Revision 003     |
|                      |                     | STP-E-47.3B        | Control Room Emergency Air Treatment System (CREATS) Train B Filter Inspection and Efficiency Testing            | Revision 006     |
|                      |                     | STP-I-9.1.16       | Undervoltage Protection - 480 volt Safeguard Bus16   | Revision 012     |
|                      |                     | STP-O-17.7BM       | CREATS Filtration Train B Monthly Surveillance   | Revision 003     |
|                      |                     | STP-O-2.4          | Shutdown Motor Operated Valve Surveillance   | Revision 004     |
|                      |                     | STP-O-2.4.1        | Inservice Test of RHR Suction and Discharge Valves   | Revision 004     |
|                      |                     | STP-O-2.8Q         | Component Cooling Water Pump Quarterly Test  | Revision 018     |
|                      |                     | STP-O-6.1          | Source Range Nuclear Instrumentation System Channels N31 and N32   | Revision 004     |
|                      | Work Orders         | C93627913          | Replace Wedge PIN for MOV-841 in accordance with ECP-18-000508   | 04/10/2020       |
|                      |                     | C93686481          | Perform Contractor Inspection and Attempt to Operate Locally and Loosen Packing Slightly as Required for MOV-700 | 04/05/2020       |
|                      |                     | C93689130          | MOV-704B Perform Static Testing per MA-AA-723-300  | 4/13/2020        |
|                      |                     | C93690283          | Perform Limitorque Operator/Valve - 841- Check Grease/Lube Stem  | 04/13/2020       |
|                      |                     | C93698954          | Component Cooling Water Pump B - Replace Inboard/Outboard Mechanical Seals                                       | 04/13/2020       |
|                      |                     | C93700364          | Perform Major Inspection and Stem Replacement for MOV-700  | 04/14/2020       |
|                      |                     | C93710765          | Diesel Air Compressor  | 06/03/2020       |

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| 71111.20             | Corrective Action Documents Resulting from Inspection | C93715724        | Contingency - Replace MOV-700 Actuator   | 04/19/2020       |
|                      |   | 04339739         | NRC identified: Pump starts not logged   | 04/30/2020       |
|                      |   | 04341677         | NRC identified: Missing clip on mirror insulation  | 05/07/2020       |
|                      |   | 04341853         | NRC identified: debris material identified in overhead, containment  | 05/07/2020       |
|                      | Miscellaneous Procedures                              | 04341856         | NRC identified: Inadequate Hemyc wrap in square corner   | 05/07/2020       |
|                      |   | G1R42            | RE Ginna Shutdown Safety Plan  |                  |
|                      |   | O-1.2            | Plant Startup from Hot Shutdown to Full Load   | Revision 218     |
|                      |   | O-15.4           | Draining of Refueling Canal  | Revision 029     |
|                      |   | O-2.3            | Draining the Reactor Coolant System to Lowered Inventory to less than 84 inches but greater than 64 inches | Revision 054     |
|                      |   | PT-34.1          | Initial Criticality and Low Power Physics Testing with DRWM  | Revision 037     |
| 71111.22             | Procedures  | IP-IIT-3.1       | Containment Isolation Valve Leak Rate Testing  | Revision 006     |
|                      |   | STP-O-16QT       | Auxiliary Feedwater Turbine Pump- Quarterly  | Revision 025     |
|                      |   | STP-O-2.10.2     | RHR System Check Valve Full and Partial Flow Test  | Revision 00201   |
|                      |   | STP-O-2.2A       | Residual Heat Removal System S/D Check Valve Testing   | Revision 00300   |
|                      |   | STP-O-2.8Q       | Component Cooling Water Pump Quarterly Test  | Revision 018     |
|                      |   | STP-O-23.5B      | Local Leak Rate Test of Sump B to B RCDT Pump Penetration 142  | revision 003     |
|                      |   | STP-O-R-2.1-TR-B | Safety Injection Functional Test - Train B   | Revision 002     |
| 71152                | Corrective Action Documents                           | 04227891         | Intermittent anomaly noted during N-43B Calibration  | 03/08/2019       |
|                      |   | 04256761         | Power Range Instrument N-43 had step change  | 06/13/2019       |
|                      |   | 04258657         | XE-6852 CR ammonia sensor failed actuating 'A' train CREATS  | 06/21/2019       |
|                      |   | 04264766         | N-43 drifting up when 'A' train CREATS start   | 07/17/2019       |
|                      | Procedures  | CA-AA-204-1001   | Control of Vendor Equipment Manuals Guideline  | Revision 2       |
|                      |   | CC-AA-204        | Control of Vendor equipment Manuals  | Revision 12      |
|                      |   | CPI-AXIAL-N43    | Calibration of Nuclear Instrumentation System Power Range N-43 Axial Offset                                | Revision 047     |
|                      |   | CPI-BISTABLES    | Calibration of Nuclear Instrumentation System Power Range  | Revision 026     |

| Inspection Procedure | Type        | Designation   | Description or Title                               | Revision or Date |
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|                      |             | -N43          | N-43 Bistables and Indicators                      |                  |
|                      |             | ER-AA-200     | Preventive Maintenance Program                     | Revision 5       |
|                      |             | MA-AA-716-004 | Conduct of Troubleshooting                         | Revision 17      |
|                      |             | PI-AA-120     | Issue Identification and Screening Process         | Revision 10      |
|                      |             | PI-AA-125     | Corrective Action Program (CAP) Procedure          | Revision 7       |
|                      | Work Orders | C93632988     | ITS - perform CPI - Bistables - N43 Risk, N-Nolear | 09/22/2019       |
|                      |             | C93653218     | Axial offset Cals for Channel 3 per                | 03/11/2019       |
|                      |             | C93702956     | Replace R303 and R312 potentiometers in N-43B      | 07/22/2019       |
|                      |             | C93702956     | Replace R303 and R312 in N-43B drawer              | 07/22/2019       |
|                      |             |               |  |                  |