



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
2100 RENAISSANCE BLVD., Suite 100
KING OF PRUSSIA, PENNSYLVANIA 19406-2713**

January 29, 2019

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

**SUBJECT: R.E. GINNA NUCLEAR POWER PLANT, LLC: INTEGRATED INSPECTION
REPORT 05000244/2018004**

Dear Mr. Hanson:

On December 31, 2018, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at R.E. Ginna Nuclear Power Plant. On January 16, 2019, the NRC inspectors discussed the results of this inspection with Mr. Paul Swift, Plant General Manager, and other members of 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. The finding did not involve a violation of NRC requirements.

If you disagree with a 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, 20555-0001; with copies to the Regional Administrator, Region I, and the NRC Resident Inspector at R.E. Ginna.

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

Sincerely,

/RA/

Erin Carfang, Chief
Reactor Projects Branch 1
Division of Reactor Projects

Docket Number: 50-244
License Number: DPR-18

Enclosure:
Inspection Report 05000244/2018004

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SUBJECT: R.E. GINNA NUCLEAR POWER PLANT, LLC: INTEGRATED INSPECTION
REPORT 05000244/2018004 DATED JANUARY 29, 2019

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U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report

Docket Number: 50-244

License Number: DPR-18

Report Number: 05000244/2018004

Enterprise Identifier: I-2018-004-0065

Licensee: Exelon Generation Company, LLC

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

Location: Ontario, New York

Inspection Dates: October 1, 2018, to December 31, 2018

Inspectors: N. Perry, Senior Resident Inspector
J. Schussler, Acting FitzPatrick Senior Resident Inspector
S. Obadina, Acting Resident Inspector
S. Grahieb, Acting Resident Inspector
H. Anagnostopoulos, Senior Health Physicist
J. DeBoer, Emergency Preparedness Inspector
T. Fish, Senior Operations Engineer
A. Rosebrook, Senior Project Engineer
A. Turilin, Resident Inspector

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

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring Exelon's performance at Ginna by conducting the baseline inspections described in this report 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. NRC identified and self-revealed findings, violations, and additional items are summarized in the table below.

List of Findings and Violations

Inadequate implementation of troubleshooting plan causes a loss of bus 12A and Engineered Safety Feature (ESF) actuation			
Cornerstone	Significance	Cross-Cutting Aspect	Inspection Results Section
Initiating Events	Green FIN 05000244/2018-004-01 Closed	H.11 – Human Performance – Challenge the Unknown	71153
The inspectors identified a Green, self-revealed finding for Exelon's failure to adequately implement a troubleshooting plan, in accordance with MA-AA-716-004, Attachment 1 "Troubleshooting Log". Specifically, on October 26, 2018, Exelon staff did not follow troubleshooting instructions, which led to the loss of bus 12A and an ESF actuation.			

Additional Tracking Items

Type	Issue number	Title	Inspection Results Section	Status
LER	05000244/2018-002-00	Loss of Offsite Power to Vital Bus Due to Human Error causes Automatic Actuation of Emergency Diesel Generator 'A'	71153	Closed

PLANT STATUS

Ginna began the inspection period at rated thermal power. On October 22, 2018, the unit was taken off line for refueling outage 1GR41. The unit was synchronized to the grid on November 8, 2018, was returned to rated thermal power on November 11, 2018, 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 Exelon's performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

REACTOR SAFETY

71111.01 - Adverse Weather Protection

Seasonal Extreme Weather (1 Sample)

The inspectors evaluated readiness for seasonal extreme weather conditions prior to seasonal cold temperatures on December 31, 2018.

71111.04 - Equipment Alignment

Partial Walkdown (5 Samples)

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

- (1) Turbine driven auxiliary feedwater on October 5, 2018
- (2) 'B' residual heat removal on October 26, 2018
- (3) Valve alignment for reactor head lift, core component movement, and periodic status checks on October 26, 2018
- (4) Containment spray on November 6, 2018
- (5) 'C' safety injection on December 28, 2018

Complete Walkdown (1 Sample)

The inspectors evaluated system configurations during a complete walkdown of the 'A' and 'B' spent fuel pool cooling system on October 31, 2018.

71111.05AQ - Fire Protection Annual/Quarterly

Quarterly Inspection (6 Samples)

The inspectors evaluated fire protection program implementation in the following selected areas:

- (1) Air handling room on October 12, 2018
- (2) Containment operating floor on October 31, 2018
- (3) Containment intermediate floor on October 31, 2018
- (4) Containment basement floor on October 31, 2018
- (5) Fire suppression systems associated with missed surveillances on December 17, 2018
- (6) Auxiliary building operating floor on December 31, 2018

71111.07 - Heat Sink Performance

Heat Sink (2 Samples)

The inspectors evaluated Exelon's monitoring and maintenance of the 'A' emergency diesel generator heat exchangers and the 'B' motor driven auxiliary feedwater lube oil heat exchanger performance.

71111.08 - Inservice Inspection Activities (1 Sample)

The inspectors evaluated pressurized water reactor non-destructive examination and welding activities by reviewing the following examinations from October 29 to November 7, 2018:

- (1) Volumetric Examinations
 - a) Manual ultrasonic testing on chemical and volume control system (CVCS) charging system welds 2BCH52501-21G and 21H.
 - b) Manual ultrasonic testing of ASME Section XI category B-O 14.20 welds on control rod drive housing 28 and 37.
 - c) Manual ultrasonic testing of pressurizer safety nozzle #1 inside radius weld TRC01.
- (2) Visual Examinations
 - a) Visual Examination (VT-3) of moisture liner located at azimuth 10 degrees to 70 degrees.
 - b) General visual examination of containment liner.
- (3) Surface Examination (PT/MT)
 - a) Liquid penetrant tests of weld W11 in the CVCS.
- (4) The inspectors reviewed the welding activities associated with the repair of the leaking CVCS inlet piping elbow between valves AOV-427 and V-200A in the CVCS (weld W11).
- (5) The inspectors evaluated Exelon's boric acid corrosion control program performance.
- (6) The inspectors performed an independent walkdown of accessible portions of the containment liner and moisture barrier.

- (7) The inspectors did not review steam generator tube or reactor vessel head examination activities because none were performed during this refueling outage.

71111.11 - Licensed Operator Regualification Program and Licensed Operator Performance

Operator Regualification (1 Sample)

The inspectors observed and evaluated a crew of licensed operators in the plant's simulator during licensed operator regualification involving a scenario containing, but not limited to, a component cooling water leak, a pressurizer power operated relief valve leak, a large steam line break, and a loss of offsite power on December 11, 2018.

Operator Performance (1 Sample)

The inspectors observed shutdown activities on October 22, 2018, and startup activities on November 8, 2018.

71111.11A - Licensed Operator Regualification Program and Licensed Operator Performance (Annual)

Operator Regualification Exam Results (Annual) (1 Sample)

The inspector's reviewed and evaluated regualification examination results (operating test, only) on December 21, 2018.

71111.11B - Licensed Operator Regualification Program and Licensed Operator Performance (Biennial)

Operator Regualification Program and Operator Performance (Biennial) (1 Sample)

The inspectors reviewed and evaluated operator performance, evaluator performance, and simulator performance during the regualification examinations completed on November 16, 2018.

71111.12 - Maintenance Effectiveness

Routine Maintenance Effectiveness (3 Samples)

The inspectors evaluated the effectiveness of routine maintenance activities associated with the following equipment and/or safety significant functions:

- (1) Reactor coolant system on October 17, 2018
- (2) Reactor vessel level indicating system indication on November 28, 2018
- (3) CVCS blender on November 28, 2018

Quality Control (1 Sample)

The inspectors evaluated maintenance and quality control activities associated with the following equipment performance issues:

- (1) Turbine driven auxiliary feedwater lube oil accumulator replacement on November 6, 2018

71111.13 - Maintenance Risk Assessments and Emergent Work Control (5 Samples)

The inspectors evaluated the risk assessments for the following planned and emergent work activities:

- (1) 'C' and 'D' standby auxiliary feedwater system planned maintenance on October 10, 2018
- (2) Shutdown phase 2 on October 26, 2018
- (3) Shutdown phase 3 on October 29, 2018
- (4) Residual heat removal (RHR) motor operated valve 700 emergent maintenance on November 7, 2018
- (5) 'B' emergency diesel generator planned maintenance on November 27, 2018

71111.15 - Operability Determinations and Functionality Assessments (6 Samples)

The inspectors evaluated the following operability determinations and functionality assessments:

- (1) Service water reduced flow to 'B' auxiliary feedwater pump on October 4, 2018
- (2) RHR motor operated valve (MOV) 851B failed motor on November 7, 2018
- (3) RHR MOV 700 tripped on overcurrent on November 8, 2018
- (4) Fire barrier penetrations missed surveillance on November 30, 2018
- (5) Pressurizer power operated relief valve 431C leaking by on November 20, 2018
- (6) Component cooling water MOV 738A failed to open on December 13, 2018

71111.18 - Plant Modifications (2 Samples)

The inspectors evaluated the following temporary or permanent modifications:

- (1) NFPA Panel and main steamline isolation valve diverse closure modification ECP-15-000528 on November 5, 2018
- (2) Quad seal for containment side flange of fuel transfer tube ECP-17-000519 on December 18, 2018

71111.19 – Post-Maintenance Testing (7 Samples)

The inspectors evaluated post maintenance testing for the following maintenance/repair activities:

- (1) 'D' standby auxiliary feedwater system planned maintenance on October 12, 2018
- (2) RHR motor operated valve 704B planned maintenance on October 30, 2018
- (3) BUS 18 under-voltage protection 480 volt planned maintenance on October 30, 2018
- (4) BUS 18 unit 31B for Bus 18 supply breaker planned maintenance on October 31, 2018
- (5) CVCS hand controlled valve-123 unplanned maintenance on November 2, 2018
- (6) 'B' emergency diesel generator planned maintenance on November 29, 2018
- (7) 'B' safety injection system planned maintenance on December 20, 2018

71111.20 - Refueling and Other Outage Activities (1 Sample)

The inspectors evaluated refueling outage activities from October 22 through November 11, 2018.

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

Routine (4 Samples)

- (1) STP-O-16QT, Turbine driven auxiliary feedwater quarterly surveillance on October 3, 2018
- (2) STP-O-R-2.2-TR-A, Diesel generator load and safeguard sequence test-train A on October 23, 2018
- (3) STP-O-R-2.1-TR-A, Safety injection functional test – train A on November 4, 2018
- (4) STP-O-16QT, Auxiliary feedwater turbine pump-quarterly on December 3, 2018

Containment Isolation Valve (1 sample)

- (1) STP-O-23.44, Local leak rate test of mini purge supply penetration 309 on October 24, 2018 and STP-O-23.54, Local leak rate test of fuel transfer flange penetration 29 on November 2, 2018

71114.04 - Emergency Action Level and Emergency Plan Changes (1 Sample)

The inspectors verified that the changes made to the emergency plan were done in accordance with 10 CFR 50.54(q)(3), and any change made to the Emergency Action Levels, Emergency Plan, and its lower-tier implementing procedures, had not resulted in any reduction in effectiveness of the Plan. This evaluation does not constitute NRC approval.

71114.06 - Drill Evaluation

Drill/Training Evolution (1 Sample)

The inspectors evaluated a simulator drill involving an Alert declaration due to a large steamline break resulting in extensive damage to the intermediate building, on December 11, 2018.

RADIATION SAFETY

71124.01 - Radiological Hazard Assessment and Exposure Controls

Radiological Hazard Assessment (1 Sample)

The inspectors evaluated radiological hazards assessments and controls.

Instructions to Workers (1 Sample)

The inspectors evaluated worker instructions.

Contamination and Radioactive Material Control (1 Sample)

The inspectors evaluated contamination and radioactive material controls.

Radiological Hazards Control and Work Coverage (1 Sample)

The inspectors evaluated radiological hazards control and work coverage.

High Radiation Area and Very High Radiation Area Controls (1 Sample)

The inspectors evaluated risk-significant high radiation area and very high radiation area controls.

Radiation Worker Performance and Radiation Protection Technician Proficiency (1 Sample)

The inspectors evaluated radiation worker performance and radiation protection technician proficiency.

71124.02 - Occupational As Low As Reasonably Achievable (ALARA) Planning and ControlsRadiation Worker Performance (1 Sample)

The inspectors evaluated radiation worker and radiation protection technician performance.

71124.03 - In-Plant Airborne Radioactivity Control and MitigationUse of Respiratory Protection Devices (1 Sample)

The inspectors evaluated respiratory protection.

OTHER ACTIVITIES – BASELINE71151 - Performance Indicator Verification

The inspectors verified Exelon's performance indicators submittals listed below for the period from September 2017 through November 2018. (2 Samples)

- (1) Occupational exposure control effectiveness
- (2) RETS/ODCM radiological effluent

71152 - Problem Identification and ResolutionSemiannual Trend Review (1 Sample)

The inspectors reviewed Exelon's corrective action program for trends that might be indicative of a more significant safety issue on November 1, 2018

Annual Follow-up of Selected Issues (1 Sample)

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

(1) Repair and evaluation of component cooling water socket weld (W11) leak

71153 - Follow-up of Events and Notices of Enforcement Discretion

Licensee Event Reports (1 Sample)

The inspectors evaluated the following licensee event report (LER):

LER 05000244/2018-002-00, Loss of Offsite Power to Vital Bus Due to Human Error Causes Automatic Actuation of Emergency Diesel Generator 'A' on October 26, 2018. (ADAMS accession: ML18361A569)

The circumstances surrounding this LER are documented in report Section 71153.

INSPECTION RESULTS

Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Initiating Events	Green FIN 05000244/2018-004-01	H.11 – Human Performance – Challenge the Unknown	71153
The inspectors identified a Green, self-revealed finding for Exelon's failure to adequately implement a troubleshooting plan, in accordance with MA-AA-716-004, Attachment 1 "Troubleshooting Log". Specifically, on October 26, 2018, Exelon staff did not follow troubleshooting instructions, which led to the loss of bus 12A and an ESF actuation.			
<p>Description: On October 26, 2018, Ginna was in Mode 6 of its refueling outage with the refueling cavity flooded and shutdown cooling being provided by residual heat removal. Exelon was in the process of preparing for preventive maintenance on bus 12A, which is one of the 4160V buses. The normal configuration for the offsite lines includes two lines (7T and 767) each providing 50 percent power to the site. Technical specifications require only one offsite line. The station auxiliary transformers (SATs), 12A and 12B, step down the voltage for each line. Both SATs have normal (12AY and 12BX) and alternate (12AX and 12BY) feeds for electrical power. The system is designed such that when the alternate feed closes, the normal feed automatically opens. In addition, if the alternate feed opens, the normal feed does not automatically close. Ginna has the option of transitioning to a 100/0 lineup, where only one offsite line will provide 100 percent power to the site.</p> <p>During this event, Exelon was in the process of preparing for preventive maintenance on bus 12A. The preparation includes transitioning to a 100/0 line-up with regards to the offsite power lines. From the main control board, control room operators proceeded to close breaker 12BY, which is the alternate feed for bus 12A and allows transition to the 100/0 lineup. As mentioned previously, when the alternate feed closes, the normal feed automatically opens (make before break). However, the alternate feed breaker did not close and a disagreement light was illuminated on the main control board. This was due to the fact that breaker 12BY remained open even though there was a demand signal to close.</p> <p>Exelon stopped work and developed a troubleshooting plan, in accordance with MA-AA-716-004, Attachment 1 "Troubleshooting Log", to determine the cause for the condition. Exelon dispatched electricians to breaker 12BY with specific instructions from the troubleshooting plan. The inspectors reviewed the troubleshooting plan and noted that it directed the</p>			

electricians to rack out the breaker for visual inspection. The breaker has to be tripped before racking it out, which requires the trip pushbutton to be depressed. However, the electricians inadvertently closed breaker 12BY. When the electrician closed the breaker (12BY), the breaker for normal feed (12AY) opened. This is what Exelon originally needed to transition to the 100/0 lineup. The electrician then proceeded to correct the mistake of closing the 12BY breaker by tripping the breaker. However, when the electrician tripped 12BY, 12AY did not automatically close, which resulted in the loss of bus 12A. Bus 12A normally powers safeguards buses 14 and 18. Since there was an under voltage signal on the safeguards buses, the 'A' emergency diesel generator started and powered the safeguards buses. Exelon notified the NRC per 10 CFR 50.72 due to an ESF actuation. In addition, the plant lost power to the control room radiation monitor for 2hrs 10min, which was a major loss of emergency preparedness capabilities. Shutdown cooling was maintained throughout the event since it was being supplied by the opposite safeguards train.

Corrective Actions: Exelon entered the issue into its corrective action program, replaced and retested breaker 12BY with a prepared spare, and placed the offsite power in a 100/0 lineup. An evaluation was conducted and the electrician was remediated.

Corrective Action Reference(s): AR 04188285

Performance Assessment:

Performance Deficiency: The inspectors determined that Exelon's failure to implement the troubleshooting plan, in accordance with MA-AA-716-004, Attachment 1 "Troubleshooting Log", was a performance deficiency within Exelon's ability to foresee and correct and should have been prevented. Specifically, Exelon did not follow the troubleshooting plan as developed and attempted to restore the breaker configuration once an error was made, which resulted in the loss of bus 12A and an ESF actuation (i.e., the EDG started and loaded safety buses 14 and 18).

Screening: The inspectors determined the performance deficiency was more than minor because it adversely affected the human performance attribute of the Initiating Events cornerstone and the cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, human error resulted in a partial loss of offsite power (LOOP) and required an ESF system to respond. Additionally, this issue is similar to Example 4.b of IMC 0612, Appendix E, "Examples of Minor Issues," issued October 1, 2018, because an operator error led to a plant transient, the loss of 2 of 4 vital AC buses and an ESF actuation.

Significance: The inspectors assessed the significance of the finding using IMC 0609 Attachment 4, "Initial Characterization of Findings," and IMC 0609, Appendix G, "Shutdown Operations Significance Determination Process." Using Appendix G, Attachment 1, Exhibit 2, "Initiating Events Screening Questions," the finding was not a shutdown initiator or loss of coolant accident, was a LOOP event when the refuel cavity was flooded, was not a LOOP when the time to boil off RCS inventory to the top of active fuel was shorter than the time to recover offsite power, was not a loss of RHR or level control event, did not occur when reactor level was in reduced inventory, and did not increase the likelihood of fire or flooding. Therefore, the inspectors determined the finding to be of very low safety significance (Green).

Cross-Cutting Aspect: In accordance with IMC 0310, the finding has a cross-cutting aspect in the area of Human Performance, Challenge the Unknown, because Exelon staff did not stop, when faced with uncertain conditions, and evaluate/manage risk before proceeding.

Specifically, Exelon staff did not stop work when the incorrect button was pushed on breaker 12BY and evaluate/manage risk before taking additional actions. (H.11)

Enforcement:

The inspectors did not identify a violation of regulatory requirements associated with this finding. The disposition of this finding closes LER 05000244/2018-002-00.

Observations	71152 Semi Annual Trend Review
<p>The inspectors performed a semi-annual review of site issues to identify any potential trends that might indicate the existence of more significant safety concerns. As part of the review, the inspectors reviewed Exelon's Corrective Action Program (CAP) database for the third quarter of 2018 to assess action requests (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. The inspectors reviewed Exelon's quarterly trend reports for the third quarter of 2018 to verify that Exelon personnel had appropriately evaluated and trended adverse conditions in accordance with applicable procedures.</p> <p>The inspectors evaluated a sample of issues and events that occurred over the course of the third quarter of 2018 to determine whether issues were appropriately considered as emerging or adverse trends. The inspectors verified that these issues were appropriately addressed within the scope of the CAP.</p> <p>The evaluation did not reveal any new trends that could indicate a more significant safety issue. The inspectors determined that Exelon personnel had identified trend issues at a low threshold, entered them into the CAP for resolution and had appropriately prioritized investigation reviews. The inspectors noted minor adverse trends identified by Exelon staff in the areas of microprocessor rod position indication (MRPI), vital battery bank grounds, lube oil additions to the EDGs, failures of lube oil heaters, deficiencies related to fire door coordinators, and welds not meeting acceptance criteria.</p> <p>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 had properly identified adverse trends at Ginna before they became more significant safety problems. The inspectors 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>	

Observations	71152 Follow-up of selected issues
<p><u>Repair and evaluation of Component Cooling Water (CCW) socket weld leak</u></p> <p>The inspectors reviewed Exelon's evaluations and corrective actions to address a very small (unquantifiable) leak from a one half inch socket weld in CCW piping upstream of the V-727R valve as documented in AR 4122699 and 4125094. Exelon staff entered the issue into their</p>	

CAP and implemented a temporary repair (mechanical clamp). Exelon staff also evaluated the piping and implemented a pipe class change from safety related Code Class 3 to non-safety related. In regard to the extent of the problem, Exelon staff considered operating experience from similar leaks and concluded the likely cause of the leak involved an original construction weld defect with lack of fusion at the weld root. Exelon staff performed a visual system operational leak check of other CCW lines less than one inch with socket welds between the non-regenerative heat exchanger and the location where the seal water heat exchanger CCW return line ties back in the system. The extent of condition did not identify any operational leakage on the inspected welds. The inspectors reviewed Exelon's evaluation of the basis and implementation of the piping reclassification and did not identify any issues of concern. Exelon's staff evaluated the flow rate for a postulated circumferential branch failure of the reclassified piping and concluded that it is within the postulated CCW leakage analysis described in FSAR 9.2.2.4.1.3. The inspectors determined that Exelon's corrective actions involving extent of condition review, mechanical clamp installation and subsequent repair during the refueling outage were commensurate with the safety significance of the issue. No issues of concern were identified.

EXIT MEETINGS AND DEBRIEFS

The inspectors confirmed that proprietary information was controlled to protect from public disclosure.

- On November 7, 2018, the inspectors presented the IP 71111.08 and IP 71152 inspection results to Ms. M. McGraw, Acting Programs Manager, and other members of Exelon's staff
- On November 8, 2018, the inspectors presented the inspection results to Mr. J. Bement, Radiation Protection Manager, and other members of the Exelon staff.
- On January 16, 2019, the inspectors presented the quarterly resident inspector inspection results to Mr. P. Swift, Plant General Manager, and other members of the Ginna staff.

DOCUMENTS REVIEWED**71111.12 - Maintenance Effectiveness**Work Orders

C93623984

C93623985

C93638894

Procedures

ER-AA-310-1001, Maintenance Rule-Scoping

ER-AA-310-1004, Maintenance Rule-Performance Monitoring

ER-AA-310-1006, Maintenance Rule Expert Panel Roles and Responsibilities, Rev. 7

71111.19 - Post-Maintenance TestingProcedures

ER-AA-335-002, Liquid Penetrant (PT) Examination, Revision 10

ER-AA-335-018, Visual Examination of ASME IWE Class MC and Metallic Liners of IWL Class CC Components, Revision 13

ER-AA-335-031, Ultrasonic Examination of Austenitic Piping Welds, Revision 8

ER-AA-335-048, Ultrasonic Examination in Accordance with ASME Section XI, Appendix III, Revision 1

ER-GI-335-205, Manual Ultrasonic (UT) Examination of Vessel-To-Nozzle Inside Radius Sections (Non-Appendix VIII), Revision 1

ER-AP-331-1001, Boric Acid Corrosion Control (BACC) Inspection Locations, Implementation and Inspections Guidelines, Revision 11

ER-AP-331-1002, Boric Acid Corrosion Control Program Identification, Screening and Evaluation, Revision 9

Condition Reports

04056704

04097619

04140962

04064392

04097770

04141619

04077758

04098287

04186843

Maintenance Order/Work Order

C93654311

NDE Reports

18GU002, UT Examination Report for 21G, dated October 24, 2018

18GU003, UT Examination Report for 21H, dated October 24, 2018

18GU014, UT Examination Report for CRD #28, dated October 27, 2018

18GU015, UT Examination Report for CRD #37, dated October 27, 2018

18GU016, UT Examination Report for SAFNOZ #1, dated October 25, 2018

18GV313, VT Examination Report for Liner, dated October 25, 2018

BOP-PT-18-020, PT Examination Report for 200A, dated October 27, 2018

BOP-PT-18-021, Liquid Penetrant Examination Report for 200A, dated October 27, 2018

BOP-PT-18-022, Liquid Penetrant Examination Report for 200A, dated October 27, 2018

Miscellaneous

R.E. Ginna Nuclear Power Plant Owner's Activity Report for Refueling Outage (RFO) 40, dated July 11, 2017

0192-AST-101038, R. E. Ginna Unit 1 End of Cycle 39 Steam Generator Degradation Assessment, Revision 001

0192-AST-101215, R. E. Ginna Unit 1 End of Cycle 39 Steam Generator Condition Monitoring and Operational Assessment, Revision 000

NOSA-GIN-18-09 (AR 4161075), Inservice Inspection, Inservice Testing, and Appendix J Audit Report, dated October 3, 2018

71111.52 – Problem Identification and ResolutionCondition Reports

04122699 04125094

Maintenance Order/Work Order

C93662374 C93662390

71153 – Follow –up of Events and Notices of Enforcement DiscretionProcedures

CME-50-04-52/12BY, Powell 4160V Vacuum Circuit Breaker, Series P-50000 POWL-VAC Bus 12A Alternate Power Source Bus PPSA, Unit 4 Maintenance for 52/12BY, Revision 01500

MA-AA-716-004, Attachment 1, Troubleshooting log, Revision 15

Condition Reports

04188186 04188285

Miscellaneous

C93601796 Event Notification 53696

Section 1EP4: Emergency Action Level and Emergency Plan Changes

Evaluation 18-101, EP-AA-121-F-12, Ginna Equipment Matrix, Revision 0

Evaluation 18-104, EP-MA-121-1003-F-01, Testing/Activating the Ginna Sirens from the Technical Support Center (TSC)