



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION I
2100 RENAISSANCE BOULEVARD, SUITE 100
KING OF PRUSSIA, PENNSYLVANIA 19406-2713

May 5, 2021

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

SUBJECT: NINE MILE POINT NUCLEAR STATION – INTEGRATED INSPECTION
REPORT 05000220/2021001 AND 05000410/2021001

Dear Mr. Rhoades:

On March 31, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Nine Mile Point Nuclear Station. On April 27, 2021, the NRC inspectors discussed the results of this inspection with Peter Orphanos and other members of your staff. The results of this inspection are documented in the enclosed report.

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

A licensee-identified violation which was determined to be of very low safety significance is documented in this report. We are treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2 of the Enforcement Policy.

If you contest the violation or the significance or severity of the violation documented in this inspection report, 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 Inspector at Nine Mile Point Nuclear Station.

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."

D. Rhoades

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Sincerely,

X /RA/

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

Docket Nos. 05000220 and 05000410
License Nos. DPR-63 and NPF-69

Enclosure:
As stated

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SUBJECT: NINE MILE POINT NUCLEAR STATION – INTEGRATED INSPECTION
REPORT 05000220/2021001 AND 05000410/2021001 DATED MAY 5, 2021

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

Docket Numbers: 05000220 and 05000410

License Numbers: DPR-63 and NPF-69

Report Numbers: 05000220/2021001 and 05000410/2021001

Enterprise Identifier: I-2021-001-0098

Licensee: Exelon Nuclear

Facility: Nine Mile Point Nuclear Station

Location: Oswego, NY

Inspection Dates: January 01, 2021 to March 31, 2021

Inspectors: G. Stock, Senior Resident Inspector
J. Dolecki, Resident Inspector
B. Sienel, Resident Inspector
S. Haney, Resident Inspector
J. Kulp, Senior Reactor Inspector
M. Patel, Senior Reactor Inspector

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

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an integrated inspection at Nine Mile Point Nuclear Station, 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. A licensee-identified non-cited violation is documented in report section: 71152.

List of Findings and Violations

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

Additional Tracking Items

None.

PLANT STATUS

Unit 1 began the inspection period at rated thermal power. On February 4, 2021, the unit was downpowered to approximately 70 percent for a control rod pattern adjustment. Power was restored to rated thermal power on February 5, 2021. On February 13, 2021, the unit was downpowered to approximately 70 percent for a rod pattern adjustment. Operators restored power to approximately 100 percent on February 14, 2021. On February 26, 2021, the unit was downpowered to 92 percent for a rod pattern adjustment to achieve all rods out. Rated thermal power was restored on February 27, 2021. On March 10, 2021, Unit 1 began end-of-cycle coastdown. On March 12, 2021, while at 98 percent power, reactor recirculation pump 13 tripped while attempting to remove it from service during a planned downpower. Power decreased to 86 percent as a result. On March 13, 2021, power was restored to approximately 94 percent to continue end-of-cycle coastdown. On March 22, 2021, the unit was shut down from 91 percent power for a planned refueling outage (N1R26). Unit 1 remained shut down for the rest of the inspection period.

Unit 2 began the inspection period at rated thermal power. On February 5, 2021, the unit was downpowered to 40 percent to repair an oil leak on the 'B' recirculation pump motor. The unit was returned to rated thermal power on February 6, 2021. On February 7, 2021, power was reduced to 95 percent to perform a load line adjustment. Power was restored to rated thermal power later that day. On March 5, 2021, the unit was downpowered to 75 percent for a rod pattern adjustment, scram time testing, and turbine valve testing. Power was restored to rated thermal power on March 6, 2021. Unit 2 remained at or near rated thermal power for the rest 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.

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 and regional 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, increasing the amount of time on site as local COVID-19 conditions permitted. As part of their on-site activities, resident inspectors conducted plant status activities as described in IMC 2515, Appendix D; observed risk-significant activities; and completed on site portions of IPs. In addition, resident and regional baseline inspections were evaluated to determine if all or portion 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 inspection procedures.

REACTOR SAFETY

71111.01 - Adverse Weather Protection

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

- (1) The inspectors evaluated readiness for impending adverse weather for a lake effect snow warning on February 10, 2021.

71111.04 - Equipment Alignment

Partial Walkdown Sample (IP Section 03.01) (5 Samples)

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

- (1) Unit 2 Division I residual heat removal system on January 7, 2021
- (2) Unit 2 reactor core isolation cooling system on January 20, 2021
- (3) Unit 1 emergency diesel generator 102 on March 25, 2021
- (4) Unit 1 Line 1 and backfeed through Lines 8 and 9 on March 25, 2021
- (5) Unit 1 shutdown cooling system on March 29, 2021

71111.05 - Fire Protection

Fire Area Walkdown and Inspection Sample (IP Section 03.01) (5 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) Unit 2 control building 288' relay and computer rooms, fire area 24, on February 4, 2021
- (2) Unit 1 main steam tunnel, fire area T1A, on March 22, 2021
- (3) Unit 1 drywell, fire area 3, on March 23, 2021
- (4) Unit 1 turbine condenser area, fire area T1, on March 24, 2021
- (5) Unit 1 feedwater heater bay area, fire area T1, on March 24, 2021

71111.11Q - Licensed Operator Requalification Program and Licensed Operator Performance

Licensed Operator Performance in the Actual Plant/Main Control Room (IP Section 03.01) (2 Samples)

- (1) The inspectors observed Unit 1 operations personnel during a process computer power supply transfer on January 4, 2021, and during shutdown activities in preparation for a refueling outage on March 21, 2021.
- (2) The inspectors observed Unit 2 operations personnel during a downpower to 40 percent to repair an oil leak on the 'B' recirculation pump motor on February 5, 2021.

Licensed Operator Requalification Training/Examinations (IP Section 03.02) (2 Samples)

- (1) The inspectors observed a Unit 1 simulator evaluation that included seismic events, a turbine trip, a failure to scram, a main steam line break, and fuel failure on February 9, 2021.
- (2) The inspectors observed a Unit 2 simulator evaluation that included an inadvertent high pressure core spray injection, an electrical bus fault, and a loss of coolant accident on February 23, 2021.

71111.12 - Maintenance Effectiveness

Maintenance Effectiveness (IP Section 03.01) (2 Samples)

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

- (1) B.5.b equipment
- (2) FLEX equipment

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) Unit 1 elevated risk during a plant process computer power supply transfer on January 6, 2021
- (2) Unit 1 emergent work for emergency diesel generator 103 fuel oil system maintenance on January 25, 2021
- (3) Unit 2 emergent work for a 'B' recirculation pump motor oil leak on February 5, 2021
- (4) Unit 1 elevated risk during reactor cavity flood up on March 24, 2021
- (5) Unit 1 elevated risk during Line 4 and powerboard 103 planned maintenance on March 25, 2021
- (6) Unit 1 elevated risk during 115-kilovolt relay testing on March 26, 2021

71111.15 - Operability Determinations and Functionality Assessments

Operability Determination or Functionality Assessment (IP Section 03.01) (10 Samples)

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

- (1) Unit 1 emergency diesel generator 102 due to direct-current turbo lube oil pump not running on January 11, 2021
- (2) Unit 1 emergency diesel generator 103 following identification of an empty fuel oil bubbler on January 19, 2021

- (3) Unit 2 automatic depressurization system due to background noise changes identified during a quarterly surveillance on January 27, 2021
- (4) Unit 1 control rod 18-15 loss of manual control on February 10, 2021
- (5) Site technical support center functionality due to loss of cooling to the area on March 1, 2021
- (6) Unit 2 'F' service water strainer rising differential pressure on March 10, 2021
- (7) Unit 1 feedwater pump 12 following operation with no seal water flow on March 24, 2021
- (8) Unit 1 core spray loop 12 following low topping pump discharge pressure during a surveillance on March 24, 2021
- (9) Unit 2 automatic depressurization system following receiver tank low pressure on March 31, 2021
- (10) Unit 1 electromatic relief valves with degradation identified on guide posts and plunger legs on March 31, 2021

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) Temporary Modification: Unit 2 50.59 screening number 2020-0203, revise control building ventilation system procedure to permit use of manual globe valve, 2SWP*V222A(B), to control chiller condenser temperature
- (2) Permanent Modification: ECP-18-000035, Unit 1 Digital Feedwater Level Control System Upgrade
- (3) Permanent Modification: ECP-20-000486, Unit 1 Electronic Pressure Regulator MOOG Valve Servoamplifier Upgrade

71111.19 - Post-Maintenance Testing

Post-Maintenance Test Sample (IP Section 03.01) (5 Samples)

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

- (1) Unit 2 'B' recirculation pump motor oil leak repair on February 6, 2021
- (2) Unit 1 control rod select relay replacements on February 18, 2021
- (3) Unit 2 Division II emergency diesel generator air start pressure regulator replacement on March 11, 2021
- (4) Unit 1 IV-39-07R, emergency cooling steam isolation valve 11 motor testing on March 25, 2021
- (5) Unit 1 IV-39-08R, emergency cooling steam isolation valve 12 motor testing on March 30, 2021

71111.20 - Refueling and Other Outage Activities

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

- (1) (Partial)
The inspectors evaluated Unit 1 refueling outage N1R26 activities from March 21 - 31, 2021.

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

Surveillance Tests (other) (IP Section 03.01) (2 Samples)

- (1) N1-ST-M4B, Emergency Diesel Generator 103 and Powerboard 103 Operability Test, on March 1, 2021
- (2) N2-ESP-ENS-Q731, Quarterly Channel Functional Test of Low Pressure Core Spray/Low Pressure Coolant Injection Pumps A, B, and C (Normal and Emergency Power) Auto Start Time Delay Relays, on March 11, 2021

Inservice Testing (IP Section 03.01) (5 Samples)

- (1) N2-OSP-RHS-Q@005, Residual Heat Removal Loop B Pump and Valve Operability Test, on January 7, 2021
- (2) N1-ST-Q6C, Containment Spray System Loop 112 Quarterly Operability Test, on January 28, 2021
- (3) N1-ST-Q13, Emergency Service Water Pump and Check Valve Operability Test, on February 3, 2021
- (4) N1-ST-Q28, Containment Spray Raw Water Inter-Tie Check Valve, on March 17, 2021
- (5) N1-ST-R9A, Core Spray Loop 11 Operability Test Using Demineralized (Condensate Storage Tank) Water, on March 22, 2021

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

- (1) N1-ST-TYC-001, Main Steam Isolation Valve Type C Leak Rate Tests, Attachment 16, on March 22, 2021

71114.06 - Drill Evaluation

Drill/Training Evolution Observation (IP Section 03.02) (1 Sample)

The inspectors evaluated:

- (1) A Unit 1 simulator evaluation, conducted during an emergency preparedness drill, which included a seismic event, a high power failure to scram, and the declaration of an Alert and a Site Area Emergency on February 9, 2021.

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

IE01: Unplanned Scrams per 7000 Critical Hours Sample (IP Section 03.01) (2 Samples)

- (1) Unit 1 (January 1, 2020 – December 31, 2020)
- (2) Unit 2 (January 1, 2020 – December 31, 2020)

IE03: Unplanned Power Changes per 7000 Critical Hours Sample (IP Section 03.02) (2 Samples)

- (1) Unit 1 (January 1, 2020 – December 31, 2020)
- (2) Unit 2 (January 1, 2020 – December 31, 2020)

IE04: Unplanned Scrams with Complications (USwC) Sample (IP Section 03.03) (2 Samples)

- (1) Unit 1 (January 1, 2020 – December 31, 2020)
- (2) Unit 2 (January 1, 2020 – December 31, 2020)

71152 - Problem Identification and Resolution

Annual Follow-up of Selected Issues (IP Section 02.03) (3 Samples)

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

- (1) IR 04385984 - Unit 1 Cable Spreading Room Fire Detectors Inadvertently Disarmed During Maintenance
- (2) IR 04351358 - NDE Final Exam and Weld Not Approved Per ASME Requirements Prior to Returning the System to Service
- (3) IR 04324166 - Review of Corrective Actions and Extent of Condition Review for Spurious NSSSS Isolation Signal That Resulted in Loss of Shutdown Cooling

71153 - Followup of Events and Notices of Enforcement Discretion

Personnel Performance (IP Section 03.03) (1 Sample)

- (1) The inspectors evaluated the licensee's response to a Unit 1 loss of power boards 101 and 12 and one train of spent fuel pool cooling on March 30, 2021

INSPECTION RESULTS

Licensee-Identified Non-Cited Violation	71152
<p>This violation of very low safety significance was identified by the licensee and has been entered into the licensee corrective action program and is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.</p>	
<p>Violation: Nine Mile Point Unit 1 Renewed License Number DPR-63, Condition 2.d(7), Fire Protection, requires, in part, that the licensee shall implement and maintain in effect all provisions of the approved fire protection program that comply with Title 10 of the <i>Code of Federal Regulations</i> (10 CFR) 50.48(a) and 10 CFR 50.48(c), "National Fire Protection Standard NFPA 805." Exelon failed to comply with compensatory action requirements for non-functional fire protection equipment as required by NFPA 805 Section 3.2.3(2). NFPA-805 Section 3.2.3, "Procedures" states, in part, that procedures shall be established to implement compensatory actions when fire protection systems and other systems credited by the fire protection program and this standard cannot perform their intended function and limits on impairment duration. The procedure that defines compensatory measures for the Unit 1 fire protection program is OP-NM-201-105, Compensatory Measures for Inoperable Fire Protection Systems and Components. Step 4.2.1 of this procedure states, in part, "When the number of detectors operable is less than the minimum number required... within 1 hour, establish a fire watch patrol to inspect the zone with inoperable detectors." From November 18 to November 23, 2020, all detection in the Unit 1 cable spreading room, which is identified in Table 1 in OP-NM-201-105, was non-functional requiring hourly fire watch patrols. The non-functional detectors were not discovered until November 23. The required hourly fire watch patrols were not completed during that time.</p>	
<p>Significance/Severity: Green. The inspectors assessed the significance of the finding using Inspection Manual Chapter (IMC) 0609, Appendix F, "Fire Protection Significance Determination Process." The inspectors determined that this issue was associated with fixed fire protection systems, both detection and suppression. A low degradation rating could not be assigned in accordance with Step 1.3.1-A as the affected detectors would have failed to function and initiate suppression. The inspectors determined, in accordance with Step 1.4.2-A, the deficiency of non-functional detection and fixed suppression systems adversely affected the ability of the systems to protect equipment important to safe shutdown.</p>	
<p>In accordance with Step 1.5, the Region I senior reactor analyst (SRA) noted that Exelon had a fire probabilistic risk assessment (PRA) model capable of evaluating the risk significance of this Nine Mile Point, Unit 1, finding. This model was used by Exelon to develop N1-SDP-004, Revision 1, "SDP Evaluation for 11/18/2020 Nine Mile Point Unit 1 Detection/Suppression OOS," to provide a best estimate assessment of the finding. This finding was associated with the inadvertent disarming of fire detection and suppression within several fire zones. The specific zones affected included the cable spreading room and the T3B fire zone, which is a subsection of the turbine building that surrounds the turbine generator and condenser. Exelon's detailed risk evaluation based on their PRA model determined the increase in core damage frequency (CDF) and large early release frequency (LERF) for the affected areas for the out-of-service exposure time of 4.5 days.</p>	
<p>The SRA reviewed the evaluation and determined that Exelon had used the model with appropriate assumptions and methods to determine a best estimate risk review for the issue. The conditional increase in CDF was calculated to be 7E-7/yr or of very low safety significance (Green). The LERF increase was calculated to be 6.5E-9/yr, also of very low</p>	

safety significance. The SRA noted the largest contributor to the increase in conditional risk for this finding was associated with postulated high energy arc faults (HEAFs) within fire zone T3B. The dominant core damage sequence was associated with loss of injection in station blackout event scenarios involving failure to align portable chargers, long-term emergency condenser (EC) makeup failure, failure of emergency diesel generator recovery due to fire, and failure of offsite power recovery due to failure of supply breakers. The SRA referenced IMC 0609 Appendix F, Attachment 1, and determined that Exelon's basis for the risk review was acceptable and therefore concurred with the risk determination of very low safety significance.

Corrective Action References: IR 04385984

Observation: Unit 1 Cable Spreading Room Fire Detectors Inadvertently Disarmed During Maintenance	71152
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The inspectors reviewed the corrective actions associated with IR 04385984, which described an issue where the Unit 1 cable spreading room fire detectors were inadvertently disarmed on November 18, 2020, while an operator was attempting to disarm different detectors in preparation for city water maintenance. The controls for these detectors were all located on local fire panel 1. The issue was identified by the fire brigade leader on November 23, 2020 during a fire panel walkdown. Exelon performed a work group evaluation to identify the cause of the disarming of the detectors. The cause was determined to be the failure of the individual performing the task to implement appropriate human performance tools when met with unexpected challenges when manipulating the fire panel.

Since May 2020, a modification that was done on fire panel 1 resulted in frequent trouble alarms coming in every 5 to 10 seconds. When the trouble alarm would come in, whatever activity was being done on the fire panel 1 computer would be interrupted and the operator would have to begin the action again. This had been done successfully prior to November 18, however the numerous alarms did pose a challenge to operators manipulating controls on the panel. On November 18, the operator expeditiously attempted to disarm the detectors required for a planned maintenance activity on the city water system before the next trouble alarm came in. In doing so, the operator inadvertently disarmed additional detectors, most importantly, both fire detectors in the Unit 1 cable spreading room.

Exelon's immediate corrective actions included requiring peer checks on activities performed on local fire panels, and the input to local fire panel 1 that was resulting in the frequent trouble alarms was defeated. Exelon's long term corrective actions included evaluating why these detectors are disarmed by the fire panel computer as opposed to another means that is more controllable. Also, they prioritized deficiencies in the fire protection system and assigned resources to address the fire protection system maintenance backlog. The disarming of the cable spreading room detection requires an hourly fire watch for the duration of the activity. In this case, since the site was unaware of this condition, the fire watches were not performed. This constituted a licensee-identified violation that is documented in the results section of this report. The inspectors did not identify any additional performance deficiencies as a result of this issue.

Observation: Evaluation of Corrective Actions and Extent of Condition for IR 04351358	71152
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The inspectors reviewed the corrective actions associated with IR 04351358, which described an issue where the required non-destructive evaluation (NDE) examinations were not performed following a repair to the Class 3 section of the Unit 2 'C' service water strainer drain line. Exelon nuclear oversight staff identified the problem via an audit where they determined the scope of physical work changed from installation of a coupling to cutting and rewelding the drain line. This change was made when field technicians identified that the work package could not be performed as written. The technical scope of the ASME repair package changed from a replacement activity to a repair activity which, in turn, changed the final NDE examination requirements. Maintenance planners were not notified of the change in work scope, so the work package was not updated to include the required NDE examinations.

The inspectors determined Exelon's corrective actions included evaluating the operability of the strainer, performing a work group evaluation, successfully performing the required surface examination of the affected weld, adopting the use of the Exelon ASME repair/replacement plan form (Attachment 3 of ER-AA-033-009, ASME Section XI Repair/Replacement Plan) instead of using alternative documentation, and reviewing a similar job performed on a different service water strainer to ensure the proper NDE was performed. Considering Exelon staff reviewed one similar work package, the inspectors independently reviewed all Class 3 piping repairs performed since 2018 (four work packages) to determine if the proper NDE examination was performed. The inspectors did not identify additional examples where the required NDE examinations were not performed.

Observation: Review of Corrective Actions and Extent of Condition Review for Spurious NSSSS Isolation Signal That Resulted in a Loss of Shutdown Cooling	71152
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The inspectors reviewed Exelon's evaluation and corrective actions associated with loss of shutdown cooling that occurred on March 5, 2020, while installing jumpers per N2-OP-83, Primary Containment Isolation System, Attachment 5. Specifically, inspectors focused on the corrective actions and extent of condition review associated with the upcoming Unit 1 refuel outage. The sample was selected due to the importance of shutdown cooling during the refueling outage.

Exelon's evaluation determined that the loss of shutdown cooling, while performing Attachment 5 to defeat the Residual Heat Removal (RHR) High Reactor Pressure Isolation (Group 5), was due to a latent degraded Pomona jack connection which shorted to ground causing the Group 5 isolation logic to actuate closure of shutdown cooling isolation valves.

The inspectors reviewed the evaluation, extent of condition review, procedures, manufacturer's failure analysis, relevant issue reports and interviewed the licensee subject matter expert on the topic. Based on the documents reviewed and discussions with personnel, the inspectors determined Exelon's evaluation of the issue was adequate and provided corrective actions commensurate with the safety significance of the problem. No performance deficiencies were identified.

EXIT MEETINGS AND DEBRIEFS

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

- On April 27, 2021, the inspectors presented the integrated inspection results to Peter Orphanos and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.01	Procedures	N1-OP-64	Meteorological Monitoring	02000
		N2-OP-102	Meteorological Monitoring	02700
		OP-AA-108-111-1001	Severe Weather and Natural Disaster Guidelines	22
71111.04	Drawings	C-18018-C	P&I Diagram Reactor Shutdown Cooling	32
		PID-035A	Piping and Instrumentation Diagram, Reactor Core Isolation Cooling	17.01
		PID-31A	Piping and Instrumentation Diagram, Residual Heat Removal System	27
	Procedures	N1-OP-33A	115 KV System	03500
		N1-OP-4	Shutdown Cooling System	05200
		N1-OP-45	Emergency Diesel Generators	04900
		N2-OP-31-LINEUPS	Residual Heat Removal System - Lineups	00300
		N2-OP-35-LINEUPS	Reactor Core Isolation Cooling - Lineups	00100
71111.05	Fire Plans	N1-PFP-0101	Unit 1 Pre-Fire Plans	00600
		N2-FPI-PFP-0201	Unit 2 Pre-Fire Plans	06
	Miscellaneous	DCD-805	Nine Mile Point Unit 1 NFPA 805 Design Criteria	3
71111.11Q	Corrective Action Documents	04394769		
		04394769		
	Procedures	N1-OP-43C	Plant Shutdown	02900
		N2-OP-29	Reactor Recirculation System	03200
		N2-SOP-29	Sudden Reduction in Core Flow	0170
N2-SOP-29.1	Reactor Recirculation Pump Seal Failure	00700		
71111.12	Corrective Action Documents	04220760		
		04279288		
		04292027		
		04348659		
		04361005		
		04361315		

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		04368830		
		04368830		
		04391305		
		04402147		
	Procedures	CC-NM-118	Site Implementation of Diverse and Flexible Coping Strategies (FLEX) and Spent Fuel Pool Instrumentation Program	004
		CC-NM-118-101	Beyond Design Basis Administrative Controls	00500
71111.13	Corrective Action Documents	04393835		
	Procedures	N1-OP-42A	Plant Process Computer Uninterruptible Power Supply UPS175	00002
		OP-AA-108-117	Protected Equipment Program	006
		OP-NM-108-117	Protected Equipment Program at Nine Mile Point	00500
71111.15	Corrective Action Documents	04311183		
		04391839		
		04391999		
		04395078		
		04396609		
		04399846		
		04401927		
		04405677		
		04407069		
		04410775		
		04411289		
		04411303		
		04411666		
		04412000		
		04413060		
	Procedures	EP-AA-112-200-F-41	TSC/OSC Relocation Guidance	B
		EP-AA-112-200-F-72	NMP TSC Ventilation Lineup	A

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		EP-AA-120-1006	EP Reportability - Loss of Emergency Preparedness Capabilities	6
		N1-OP-66	TSC Ventilation System	0
		N1-ST-R9B	Core Spray Loop 12 Operability Test using Demineralized (CST) Water	00000
		N2-ISP-SVV-R102	Operating Cycle Channel Calibration of Safety Relief Valve Acoustic Monitor Position Indication Channels	01000
	Work Orders	C93715846		
		C93738505		
		C93775941		
71111.18	Corrective Action Documents	02082685		
		02485219		
		02559436		
		04244521		
	Procedures	N1-MFT-117	Electrical Pressure Regulator Transient Test	00400
		N1-MFT-138	MOOG Valve Servo Amplifier Modification Acceptance Testing	0
		N2-OP-53A	Control Building Ventilation System	02000
		N2-OP-53A	Control Building Ventilation System	02100
Work Orders	C93766514			
71111.19	Corrective Action Documents	04399968		
		04400694		
		04401234		
	Procedures	N1-ST-W1	Control Rod Exercising Operability Test	02200
		N2-OSP-EGS-M@001	Diesel Generator and Diesel Air Start Valve Operability Test - Division I and II	02200
		S-EPM-GEN-063	MOV Diagnostic Testing	01300
	Work Orders	C93617215		
		C93622797		
		C93713968		
		C93727861		
C93736605				
		C93779687		

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		C93780413		
71111.20	Procedures	N1-PM-34A	Reactor Cavity Flood Up	00000
		OU-NM-103-101	Shutdown Safety Management Program	00500 and 00600
71111.22	Corrective Action Documents	04409500		
	Drawings	C-180120C	Reactor Containment Spray Raw Water System P & I Diagram	26
	Procedures	N1-ST-M4B	Emergency Diesel Generator 103 and Powerboard 103 Operability Test	02500
		N1-ST-Q13	Emergency Service Water Pump and Check Valve Operability Test	23
		N1-ST-Q28	Containment Spray Raw Water Inter Tie Check Valve	01400
		N1-ST-R9A	Core Spray Loop 11 Operability Test Using Demineralized (CST) Water	00000
		N1-ST-TYC-001	MSIV Type C Leak Rate Tests	00300
		N2-ESP-ENS-Q731	Quarterly Channel Functional Test of LPCS/LPCI Pumps A, B, and C (Normal and Emergency Power) Auto Start Time Delay Relays	00900
		N2-OSP-RHS-Q@005	RHR System Loop B Pump and Valve Operability Test, System Integrity Test and ASME XI Pressure Test	01500
		N2-OSP-RHS-R@005	RHS Pressure Isolation Valve Leakage Test	00501
71152	Corrective Action Documents	04324166		
		04351358		
		04351358		
	Corrective Action Documents Resulting from Inspection	04401711		
	Procedures	ER-AA-330-009	ASME Section XI Repair/Replacement Plan	Revision 17
		MA-AA-1070	Worker Guidance for Test Leads, Jumpers, Lifting and Landing Field Leads	2
N1-OP-4		Shutdown Cooling System	05000	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		N2-OP-83	Primary Containment Isolation System	18
	Work Orders	C93755125		
71153	Corrective Action Documents	04351358		
	Procedures	N1-SOP-30.2	Loss of Power Board 12	00700