



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

December 15, 2017

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

SUBJECT: NINE MILE POINT – PROBLEM IDENTIFICATION AND RESOLUTION  
INSPECTION REPORT 05000220 AND 05000410/2017009

Dear Mr. Hanson:

On November 17, 2017, the U.S. Nuclear Regulatory Commission (NRC) completed a problem identification and resolution inspection at Nine Mile Point Nuclear Station, Units 1 & 2. On that date, the NRC inspection team discussed the results of this inspection with Mr. Peter Orphanos, Site Vice President, and other members of your staff. The results of this inspection are documented in the enclosed report.

The NRC inspection team reviewed the station's corrective action program and the station's implementation of the program to evaluate its effectiveness in identifying, prioritizing, evaluating, and correcting problems, and to confirm that the station was complying with NRC regulations and licensee standards for corrective action programs. Based on the samples reviewed, the team determined that your staff's performance in each of these areas adequately supported nuclear safety.

The team also evaluated the station's processes for use of industry and NRC operating experience information and the effectiveness of the station's audits and self-assessments. Based on the samples reviewed, the team determined that your staff's performance in each of these areas also adequately supported nuclear safety.

Finally the team reviewed the station's programs to establish and maintain a safety-conscious work environment, and interviewed station personnel to evaluate the effectiveness of these programs. Based on the team's observations and the results of these interviews, the team found no evidence of challenges to your organization's safety-conscious work environment. Your employees appeared willing to raise nuclear safety concerns through at least one of the several means available. The NRC inspectors did not identify any finding or violation of more than minor significance.

B. Hanson

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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 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

**/RA/**

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

Docket Nos.: 50-220 and 50-410  
License Nos.: DPR-63 and NPF-69

Enclosure:  
Inspection Report 05000220 and 05000410/2017009  
w/Attachment: Supplementary Information

cc w/encl: Distribution via ListServ

SUBJECT: NINE MILE POINT – PROBLEM IDENTIFICATION AND RESOLUTION  
INSPECTION REPORT 05000220 AND 05000410/2017009 DATED  
DECEMBER 15, 2017

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**U.S. NUCLEAR REGULATORY COMMISSION****REGION I**

Docket Nos.: 50-220 and 410

License Nos.: DPR-63 and NPF-69

Report Nos.: 05000220 and 05000410/2017009

Licensee: Exelon – Nine Mile Point, LLC

Facility: Nine Mile Point Units 1 & 2

Location: Oswego, New York

Dates: October 30 – November 17, 2017

Team Leader: R. Barkley, PE, Senior Project Engineer

Inspectors: J. Schoppy, Senior Reactor Inspector  
J. Schussler, Resident Inspector, Ginna  
R. Rolph, Acting Resident Inspector, Nine Mile Point

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

Enclosure

## **SUMMARY**

IR 05000220 and 05000410/2017009 - Biennial Baseline Inspection of Problem Identification and Resolution.

This NRC team inspection was performed by two regional inspectors and two resident inspectors. No findings were identified during the inspection. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 6.

### **Problem Identification and Resolution**

The inspectors concluded that Exelon was generally effective in identifying, evaluating, and resolving problems. Exelon personnel identified problems, entered them into the corrective action program at a low threshold, and prioritized issues commensurate with their safety significance. Exelon appropriately screened issues for operability and reportability, and performed causal analyses that appropriately considered extent of condition, generic issues, and previous occurrences. The inspectors also determined that Exelon typically implemented corrective actions to address the problems identified in the corrective action program (CAP) in a timely manner.

The inspectors concluded that Exelon adequately identified, reviewed, and applied relevant industry operating experience to Nine Mile Point Unit 1 & 2 operations. In addition, based on those items selected for review, the inspectors determined that Nine Mile Point self-assessments and audits were thorough, and trending of relevant information was performed.

Based on the interviews the inspectors conducted over the course of the inspection, observations of plant activities, and reviews of individual CAP and employee concerns program (ECP) issues, the inspectors did not identify any indications that site personnel were unwilling to raise safety issues nor did they identify any conditions that could have had a negative impact on the site's safety conscious work environment.

## REPORT DETAILS

**4. OTHER ACTIVITIES (OA)****4OA2 Problem Identification and Resolution (71152B – 1 sample)**

This inspection constitutes one biennial sample of problem identification and resolution (PI&R) as defined by Inspection Procedure 71152. All documents reviewed during this inspection are listed in the Attachment to this report.

**.1 Assessment of Corrective Action Program Effectiveness****a. Inspection Scope**

The inspectors reviewed the procedures that described Exelon's CAP at Nine Mile Point Station. To assess the effectiveness of the CAP, the inspectors reviewed performance in three primary areas: problem identification, prioritization and evaluation of issues, and corrective action implementation. The inspectors compared performance in these areas to the requirements and standards contained in Title 10 of the *Code of Federal Regulations* (CFR) Part 50, Appendix B, Criterion XVI, "Corrective Action," and Exelon's procedure for Condition Reporting (PI-AA-120, "Issue Identification and Screening Process," Revision 7). For each of these areas, the inspectors considered risk insights from the station's risk analysis and reviewed condition reports selected across the seven cornerstones of safety in the NRCs Reactor Oversight Process (ROP). Additionally, the inspectors attended multiple Station Oversight Committee (SOC) and Management Review Committee (MRC) meetings. The inspectors selected items from the following functional areas for review: engineering, operations, maintenance, emergency preparedness, radiation protection, chemistry, physical security, and oversight programs.

**(1) Effectiveness of Problem Identification**

In addition to the items described above, the inspectors reviewed system health reports, a sample of completed corrective and preventative maintenance work orders, completed surveillance test procedures, and periodic trend reports. The inspectors also completed field walkdowns of various areas of the site, including many areas inside and outside the radiologically controlled areas (RCAs) at Unit 1 & 2. Additionally, the inspectors reviewed a sample of issue reports (IRs) written to document issues identified through internal self-assessments, audits, emergency preparedness drills, and the operating experience program. The inspectors completed this review to verify that Exelon entered conditions adverse to quality into their corrective action program as appropriate.

**(2) Effectiveness of Prioritization and Evaluation of Issues**

The inspectors reviewed the evaluation and prioritization of a sample of condition reports issued since the last NRC Biennial PI&R inspection completed in the Fall of 2015. The inspectors also reviewed issue reports that were assigned lower levels of significance that did not include formal cause evaluations to ensure that they were properly classified. The inspectors' review included the appropriateness of the assigned significance, the

scope and depth of the causal analysis, and the timeliness of resolution. The inspectors assessed whether the evaluations identified likely causes for the issues and developed appropriate corrective actions to address the identified causes.

Further, the inspectors reviewed equipment operability determinations, reportability assessments, and extent-of-condition reviews for selected problems to verify these processes adequately addressed equipment operability, reporting of issues to the NRC, and the extent of the issues.

(3) Effectiveness of Corrective Actions

The inspectors reviewed Exelon's completed corrective actions through documentation review and, in some cases, field walkdowns to determine whether the actions addressed the identified causes of the problems. The inspectors also reviewed condition reports for adverse trends and repetitive problems to determine whether corrective actions were effective in addressing the broader issues. The inspectors reviewed Exelon's timeliness in implementing corrective actions and effectiveness in precluding recurrence for significant conditions adverse to quality. The inspectors also reviewed a sample of condition reports associated with selected non-cited violations and findings to verify that Exelon personnel properly evaluated and resolved these issues. In addition, the inspectors expanded the corrective action review to five years to evaluate Exelon actions related to elements of the Nine Mile Point Unit 2 Division I & II electrical system.

b. Assessment

(1) Effectiveness of Problem Identification

Based on the selected samples, plant walkdowns, and interviews of site personnel in multiple functional areas, the inspectors determined that Exelon identified problems and entered them into the CAP at a low threshold. Exelon staff initiated over 20,000 issue reports between July 2015 and September 2017, of which approximately one third were later classified as Non-Corrective Action Program (NCAP) items. The inspectors observed supervisors at the SOC and MRC meetings appropriately questioning and challenging condition reports to ensure clarification of the issues. Based on the samples reviewed, the inspectors determined that Exelon trended many equipment and programmatic issues, and appropriately identified problems in issue reports. The inspectors verified that conditions adverse to quality identified through this review were entered into the CAP as appropriate. Additionally, inspectors concluded that personnel were identifying trends at low levels. In general, inspectors did not identify any issues or concerns that had not been appropriately entered into the CAP for evaluation and resolution. In response to several questions and minor equipment observations identified by the inspectors during plant walkdowns, Exelon personnel promptly initiated condition reports or removed old deficiency tags for issues that had since been corrected.

(2) Effectiveness of Prioritization and Evaluation of Issues

The inspectors determined that, in general, Exelon appropriately prioritized and evaluated issues commensurate with the safety significance of the identified problem. Exelon screened condition reports for operability and reportability, categorized the condition reports by significance, and assigned actions to the appropriate department for evaluation and resolution. The condition report screening process considered human performance issues, radiological safety concerns, repetitiveness, adverse trends, and potential impact on the safety conscious work environment.

Based on the sample of condition reports reviewed, the inspectors noted that the guidance provided by Exelon's CAP implementing procedures appeared sufficient to ensure consistency in the categorization of issues. Operability and reportability determinations were generally performed when conditions warranted and in most cases, the evaluations supported the conclusion. Causal analyses appropriately considered the extent of condition or problem, generic issues, and previous occurrences of the issue. However, the team did note one observation in Exelon's prioritization and evaluation of the following issues:

Trending of Issue Report Data by the Radiation Protection Department

The inspectors noted that the Radiation Protection (RP) department had not trended Issue Reports related to the department's activities for several years. This hampered the department's ability to promptly identify adverse trends in RP equipment or staff performance. For example, several Issue Reports were written about personnel clearing the ARGOS radiation monitors at the restricted area (i.e. RCA) boundary, but then alarming the portal contamination monitors at the security exit due to differences in the sensitivity of these monitors to specific radioactive isotopes. IRs 02539294 and 02544667 in 2015 and IRs 02685216 and 03955573 in 2016 are examples of individuals clearing the ARGOS monitors at the RCA egress point, but alarming portal monitors at the security exit. Another IR (#02723359 in 2016) involved an individual from Nine Mile Point alarming a portal monitor at the exit of another Exelon facility even though they did not enter the RCA of that facility. The inspector was concerned that this difference in detection sensitivity by the ARGOS monitors allowed for the possible spread of small amounts of radioactive contamination on personal clothing outside of the RCA. In response to the inspector's concern, IR 04070089 was issued on November 2, 2017, to address enhancements to the ARGOS detection capabilities to ensure that contamination is properly detected at the RCA boundary first. The inspectors noted that the RP department recently issued four other trend reports as they now have an individual assigned to perform such analyses.

(3) Effectiveness of Corrective Actions

The inspectors concluded that corrective actions for identified deficiencies were generally timely and adequately implemented. For significant conditions adverse to quality, Exelon identified actions to prevent recurrence. The inspectors concluded that corrective actions to address the sample of NRC non-cited violations and findings since the last problem identification and resolution inspection were timely and effective. The team noted the



following minor violation of NRC regulations while performing this portion of the inspection:

In inspection report 05000220/2016001 and 05000410/2016001, the NRC identified a Green non-cited violation of Title 10 of the *Code of Federal Regulations* (10 CFR) 50.65(a)(4), when Exelon did not assess and manage the risk for online maintenance activities. Specifically, Exelon did not manage the risk associated with the unavailability of 'A' residual heat removal minimum flow valves, which elevated plant risk from green to yellow. Exelon entered the violation into its CAP as IR 02673672. The inspectors reviewed the corrective actions associated with AR 02673672, which stated in part that a procedure change to both N2-TTP-RHS-4Y003 and N2-TTP-RHS-4Y002, 'A' and 'B' Residual Heat Removal System Heat Exchanger Performance monitoring (suppression pool cooling mode) procedures respectively, was to be implemented. The procedure change generated against N2-TTP-RHS-4Y003 added steps to capture component and system availability/unavailability relating to plant risk. The corrective action involving the change to the above two procedures was signed complete on August 11, 2016. Upon review of the procedures, the inspectors noted that there was not a procedure change request implemented for procedure N2-TTP-RHS-4Y002 due to an administrative oversight; only procedure N2-TTP-RHS-4Y003 was changed. However, the inspectors found that the unchanged procedure had not been used since the deficiency was identified.

The inspectors independently evaluated the deficiency for significance in accordance with the guidance in Inspection Manual Chapter (IMC) 0612, Appendix B, "Issue Screening" and Appendix E, "Examples of Minor Issues." The inspectors determined that not completely implementing the corrective action committed to was a deficiency of minor significance since the procedure had not been used since the deficiency was identified. As a result it is not subject to enforcement action in accordance with the NRC's enforcement policy. This issue was captured in Exelon's CAP as IR 04074701.

c. Findings

No findings were identified.

.2 Assessment of the Use of Operating Experience

a. Inspection Scope

The inspectors reviewed a sample of condition reports associated with the review of industry operating experience to determine whether Exelon appropriately evaluated the operating experience information for applicability to Nine Mile Point 1 and/or 2 and had taken appropriate actions, when warranted. The inspectors also reviewed evaluations of operating experience documents associated with a sample of NRC generic communications to ensure that Exelon adequately considered the underlying problems associated with the issues for resolution via its CAP. In addition, the inspectors observed various plant activities to determine if the station considered industry operating experience during the performance of routine and infrequently performed activities.

b. Assessment

The inspectors determined that Exelon appropriately considered industry operating experience information for applicability, and used the information for corrective and preventive actions to identify and prevent similar issues when appropriate. The inspectors determined that operating experience was appropriately applied and lessons learned were communicated and incorporated into plant operations and procedures when applicable. The inspectors also observed that industry operating experience was routinely discussed and considered during various meetings and pre-job briefings.

c. Findings

No findings were identified.

.3 Assessment of Self-Assessments and Audits

a. Inspection Scope

The inspectors reviewed a sample of audits, including the most recent audit of the CAP and departmental functional area assessments. Inspectors performed these reviews to determine if Exelon entered problems identified through these assessments into the CAP, when appropriate, and whether Exelon initiated corrective actions to address identified deficiencies. The inspectors evaluated the effectiveness of the audits and assessments by comparing audit and assessment results against self-revealing and NRC-identified observations made during the inspection.

b. Assessment

The inspectors concluded that self-assessments, audits, and other internal Exelon assessments were generally critical and thorough, and in several cases effective in identifying issues. The inspectors observed that Exelon personnel knowledgeable in the subject completed these audits and self-assessments in a methodical manner. Exelon completed these audits and some self-assessments to a sufficient depth to identify issues which were then entered into the CAP for evaluation. In general, the station implemented corrective actions associated with the identified issues commensurate with their safety significance.

c. Findings

No findings were identified.

#### .4 Assessment of Safety Conscious Work Environment

##### a. Inspection Scope

During interviews with station personnel, the inspectors assessed the safety conscious work environment at Nine Mile Point. Specifically, the inspectors interviewed personnel to determine whether they were hesitant to raise safety concerns to their management and/or the NRC. The inspectors also interviewed the station ECP manager to determine what actions were implemented to ensure employees were aware of the program and its availability with regards to raising safety concerns. The inspectors reviewed selected ECP files to ensure that Exelon entered issues into the corrective action program when appropriate.

##### b. Assessment

During interviews with individual team members, Nine Mile Point staff expressed a willingness to use the CAP to identify plant issues and deficiencies and stated that they were willing to raise safety issues. The inspectors noted that no one interviewed stated that they personally experienced or were aware of a situation in which an individual had been retaliated against for raising a safety issue. All persons interviewed demonstrated an adequate knowledge of the CAP and the ECP. The 2015 safety culture survey (the most recent available) was also reviewed and it also reflected a willingness of employees to raise safety concerns.

While the site's issue reporting system does not afford employees the opportunity to submit condition reports anonymously, a majority of the individuals surveyed thought that such reports could be submitted. However, none felt the need to submit an IR in such a manner. If an individual contacts the ECP program, it is possible for the ECP Manager to submit an IR anonymously on their behalf. Exelon moved to communicate this misconception to its staff upon identification.

In addition, NRC allegation activity at Nine Mile Point since the last PI&R has remained low. Based on these limited interviews as well as the survey data and a review of the ECP case history since 2015, the inspectors concluded that there was no evidence of an unacceptable safety conscious work environment and no significant challenges to the free flow of information.

##### c. Findings

No findings were identified.

#### 4OA6 Meetings, Including Exit

On November 17, 2017, the inspectors presented the inspection results to Mr. Peter Orphanos, Site Vice President, and other members of the Nine Mile Point staff. The inspectors verified that no proprietary information was retained by the inspectors or documented in this report.

ATTACHMENT: SUPPLEMENTARY INFORMATION

**SUPPLEMENTAL INFORMATION**

**KEY POINTS OF CONTACT**

Exelon Personnel

S. Baldwin, Supervisor Maintenance, NMP Mechanical Maintenance  
M. Bond, Mechanic, NMP Mechanical Maintenance  
G. Carter, U1 Operations Shift Manager  
B. Deets, Equipment Operator, U2 Operations  
P. Fischer, Security Programs Lead  
P. Foti, Senior Reactor Operator, U2 Operations  
R. Franklin, Senior Engineer  
W. Goss, Chief Electrician, NMP Electrical Maintenance  
C. Grapes, U1 Operations Shift Manager  
J. Hamlin, ECP Manager  
K. Higgins-Asmus, Senior Reactor Operator, U1 Operations  
B. Hinckley, Reactor Operator, U1 Operations  
S. Homoki, Senior Engineer  
K. Johnson, Senior Engineer  
C. Jones, U2 Operations Shift Manager  
J. McMahon, Equipment Operator, U1 Operations  
D. Pokon, Senior Engineer  
R. Pritchard, Regulatory Assurance  
T. Proud, Operations Department CAPCO  
S. Regan, I & C Technician, NMP Instrument Maintenance  
T. Sprouse, Engineer  
R. Staley, Senior Engineering Analyst  
E. Vosbury, Site CAP Manager, Senior Regulatory Specialist  
K. Yurken, EP Manager

NRC Personnel

E. Miller, Senior Resident Inspector

**LIST OF ITEMS OPENED, CLOSED AND DISCUSSED**

Opened/Closed

None

**LIST OF DOCUMENTS REVIEWED**Audits and Self-Assessments

2015 Safety Culture Survey Results – NMP by Department/Summary  
 02490360, Radiation Worker Performance  
 02490382, Radwaste  
 02500043-05, Clearance and Tagging Check-In Self-Assessment, dated 5/30/15  
 02525361-04, Fin Team Effectiveness Check-In Self-Assessment, dated 10/8/15  
 02530575, Assessment of OR survey analysis  
 02530580, Radiochemistry Self-Assessment  
 02644440, Maintenance Rule Assessment 10 CFR 50.65 (a)(3)  
 02635978, Security Equipment Performance  
 02656171-04, Operations Decision Making Process Closures Check-In Self-Assessment, dated 7/27/16  
 02669959-04, Nine Mile Point Pre-NRC 71111.11 Inspection Licensed Operator Requalification Training Focused Area Self-Assessment, dated 8/12/16  
 02638529, ALARA  
 03986195-05, Nine Mile Point Pre-NRC 71111.11 Inspection Licensed Operator Requalification Training Self-Assessment, dated 8/31/17  
 03995382-04, Operator Fundamentals Self-Assessment, dated 6/30/17  
 03995750, Preparation for NRC Problem Identification and Resolution (PI&R) Inspection  
 03995384, Operational Decision Making Process Closed Prior Year  
 04000450, Source Controls  
 04000334, REMP/GWPP  
 04029126-04, Nine Mile Point Inventory Controls, Access, and Handling of Measuring and Test Equipment (M&TE) Self-Assessment, dated 8/31/17  
 NOSA-NMP-15-04 (AR 2461720), Nine Mile Point Nuclear Station Corrective Action Program Audit Report, dated 5/15/15  
 Nuclear Safety Review Board Meeting Minutes (February 2016, June 2016, October 2016 and April 2017)

Corrective Action Issue Reports (IRs)

1700489	2474206	2539294
1700507	2490360	2539305
1700553	2490382	2539894
1700700	2494255	2540369
2001345	2504790	2541814
2003523	2518760	2541964
2089232	2518807	2542251
2345059	2521023	2542429
2386719	2525555	2542512
2386824	2530580	2542662
2398641	2536549	2542798
2399307	2536896	2543464
2424231	2537562	2543622
2424330	2537606	2544311
2440695	2537875	2544606
2457182	2538107	2544667
2467780	2538567	2544716

2544831	2594893	2654591
2545720	2595951	2657646
2546284	2597860	2658498
2546325	2598351	2658635
2546344	2599704	2659704
2547469	2602088	2660269
2548030	2603710	2660314
2549594	2604264	2663433
2550985	2605229	2664015
2551180	2606372	2664436
2554233	2606939	2664686
2555608	2608885	2665936
2556182	2609697	2667607
2556799	2610687	2667837
2558130	2610917	2668118
2558313	2611041	2671545
2558721	2611943	2672502
2559336	2616065	2673682
2560607	2616701	2673693
2560924	2616859	2676801
2562133	2617915	2681035
2562141	2620173	2681779
2562144	2621872	2681978
2563826	2626247	2685216
2563844	2630027	2686601
2564333	2632989	2687092
2566554	2635309	2693244
2567066	2636677	2696979
2567587	2638529	2697384
2568820	2639049	2698136
2572122	2639893	2700181
2574279	2640675	2702640
2574691	2643997	2703822
2574692	2644551	2703982
2575005	2644997	2704938
2577169	2646502	2706289
2581271	2647109	2708480
2581361	2647182	2708918
2583335	2648466	2709003
2584642	2648513	2712071
2585132	2649443	2718027
2586239	2650061	2718603
2588029	2652634	2718643
2588035	2653570	2722520
2588044	2654234	2723359
2590293	2654241	2725133

2725715	4000334	4049296
2725718	4000450	4049398
2726323	4001461	4050028
2731502	4002221	4051085
2733518	4002224	4051195
2734152	4003358	4051543
2736753	4004334	4053818
2740450	4005437	4053919
3943490	4005756	4053921
3945336	4010145	4054006
3946222	4011092	4056273
3946970	4015559	4056333
3950231	4015807	4054006
3951525	4016305	4054078
3951631	4019787	4054381
3951638	4022328	4056298
3952997	4022700	4064093
3955573	4028886	4065059
3959797	4029199	4065059
3960649	4029359	4065291
3963138	4029500	4065777
3963144	4030526	4067195
3963439	4030557	4067657
3965961	4030640	4068339
3968963	4030659	4068552
3970165	4030679	4068561
3970882	4031083	4068564
3978881	4031685	4069293
3984101	4033123	4069594
3984355	4033792	4069725
3986005	4041217	4069726
3986379	4043130	4071120
3986996	4043204	4071733
3988314	4043323	4072049
3988870	4043680	4072966
3988927	4044367	4073892
3990132	4044577	4074013
3994179	4044967	4074014
3995002	4045062	4074508
3996373	4046074	4074662
3996624	4046116	4074690
3997443	4046543	4074694
3998902	4047457	4075125
3999675	4047888	4068988*
3999699	4047993	4068992*
4000272	4048325	4069233*
	4049024	4074283*
	4049291	4074508*



4074509*	4074701*	4075115*
4074662*	4074735*	4075125*
4074690*	4074901*	4075161*
4074694*	4075080*	4075390*

\*IR initiated as a result of this inspection.

#### Evaluations and Risk Assessments

2440695, ACE, Unplanned internal Dose Assignment >10 mRem  
2541814-01, Adverse Trend Control Room Narrative Logs Work Group Evaluation  
2544311-01, Evaluation of Belt Related Issues for Belt-Driven Fans Common Cause Evaluation  
2551180, RCR, Automatic SCRAM at NMP1 due to closure of MSIV 01-03  
2586239-01, October 2015 Operations Low Level Trend Work Group Evaluation  
2606939-07, Unit 1 Hydrogen Chemistry System Trip due to Improper HU Behaviors during Bulb Replacement Apparent Cause Evaluation  
2615869, Collective Effectiveness review Deemed Ineffective  
2616859-02, Unit 1 Reactor Building Closed Loop Cooling Configuration Control Event Apparent Cause Evaluation  
2644551-01, Declining Trend in Large Pump Maintenance Work Group Evaluation  
2648466-01, Emerging Trend in Overdue M&TE Work Group Evaluation  
2660269-01, Emerging Trend Identified in FME Work Group Evaluation  
2698136, ACE, UPS 162B Transferred to Bypass Supply  
2702640-01, Green NCV of Unit 2 Technical Specification (TS) 3.5.1 and TS 3.5.3 Work Group Evaluation  
2708918-01, Increasing Trend of Chromium in Lube Oil for Div I Diesel Work Group Evaluation  
2718603-06, Investigation of Rosemount Trip Unit E21-N652 Failure Apparent Cause Evaluation  
3951077, Diesel Generator Building Ventilation System Maintenance Rule (a)(1) Action Plan  
3951631, ACE, Outboard Main Steam Isolation Valve Failure to Close (IV-01-04)  
3963439, ACE, Voltage Perturbations on Uninterruptible Power Supply (UPS) 172A  
3987881, AFI EP.3, Gaps in Dose Assessment Team Performance  
4005756-02, Trend in Lost, Late, and Damaged M&TE Requires Action Work Group Evaluation  
4029500-01, Emergent Trend in Scaffold Issues Work Group Evaluation  
4038003-09, Emergency Service Water Pump 12 Tripped during Surveillance Testing Corrective Action Program Evaluation  
4039435-05, U2 Automatic High Reactor Pressure Scram Root Cause Evaluation  
4043130-04, Three Out-of-the-Box Evaluation Failures and Six Drill Exercise Performance Failures during Training Cycle 1704 Corrective Action Program Evaluation  
4051834, CAPE, Silent Half Scram – RPS Power Source Selector Switch at Unit 2  
ECP-09-00026 EPU Vibration Monitoring Program 50.50 Applicability Screen  
EVAL-NMP-SS/197-03910, Regulatory Guide 1.97 and Indicators Maintenance Rule (a)(1) Action Plan  
NMP-86230, Exelon PowerLabs Failure Analysis of Rosemount, 510DU137031A005, Master Trip Unit, s/n 11219, SCN N932460, AR/CR/WO: 02718603, for Nine Mile  
ODM NMP-1-2017-0450, ESW Pump 12  
ODM NMP-2-2017-0459, Unit 2 Hi Pressure Scram

Functional, Surveillance, and Modification Acceptance Testing

N1-ST-M4B, Emergency Diesel Generator 103 and PB 103 Operability Test, performed 8/10/17  
 N1-ST-Q1B, CS121 Pump, Valve and SDC Water Seal Check Valve Operability Test, performed 8/23/17  
 N1-ST-Q13, Emergency Service Water Pump and Check Valve Operability Test, performed 8/2/17  
 N2-OSP-EGS-M@001, Diesel Generator and Diesel Air Start Valve Operability Test – Division I and II, performed 8/31/17  
 N2-OSP-RHS-Q@004, RHR System Loop A Pump & Valve Operability Test, System Integrity Test and ASME XI Pressure Test, performed 7/21/17

Maintenance Work Orders

C91265639	C93116321	C93586813
C91983573	C93209721	C93588583
C92054710	C93281808	C93589158
C92258339	C93299334	C93593816
C92804552	C93313784	C93610391
C92863371	C93399827	C93634517
C92878326	C93413987	
C92936309	C93586812	
C93644879		

Non-Cited Violations

05000220/2016001-03, Inadequate Tagout Results in Reactor Building Closed-Loop Cooling Drain Down Event, 1<sup>st</sup> QTR 2016  
 05000410/2016001-02, 50.65(a)(4) Risk Evaluation Not Properly Performed Prior to Residual Heat Removal Heat Exchanger Testing, 1<sup>st</sup> QTR 2016  
 05000410/2016002-02, Failure to Identify Wide Range Level Indication Impacts Operability of HPCS and RCIC, 2nd QTR 2016  
 05000410/2015009-01, Failure to Identify and Correct a Condition Adverse to Quality Associated with Secondary Containment Leakage  
 05000220/2015009-02, Inadequate Maintenance Rule Monitoring of Unit 1 600 VAC Breaker Super System)  
 05000410/2016001-01, Inadequate Procedure Leading to Failure to Manage Elevated Risk during Preventive Maintenance  
 05000220/2017001-01, Deficient Design Control of Outboard MSIV Pilot Valve Instrument Air Supply  
 05000410/2017002-01, Inadequate Extent of Condition results in Unplanned Yellow Risk Condition  
 05000220/2015002-01, Change in work scope not communicated to RP (IR 02440695)  
 05000410/2016002-03, Job Scope and Rad Conditions not communicated from/to workers and RP (IR 02654591)

### Operating Experience

02089232-01, OE – Vendor Letter: Update to Pre-1987 C25 Capacitor Failure Evaluation for NMP Units 1 and 2, dated 11/19/99  
 02539894, Vogtle Notice of Unusual Event  
 02593375-06, GEH SIL 678, Susceptibility of Original Directional Control Valve Cap Screw N170P23012C6 to Stress Corrosion Cracking OPEX Evaluation, dated 1/20/15  
 02603750, OPXR-Sequoyah-OE # 320381 – Buried Pipe Leak  
 02605784, Notification of a Potential 10 CFR Part 21  
 02605902, OPEX – SOE 15-115 FERMI 2 AIM Security System Software Issue  
 02621972, Security Computer Changes Resulting From OE# 15-115  
 02701295, INPO AFIs for Potential Lessons Learned  
 03999675-02, OPEX 52649 – Cook Loss of All Control Room Annunciators, dated 6/15/17  
 04030557, 10 CFR Part 21, Potential Minimum Wall Thickness  
 04019787, Potential 10 CFR Part 21 Notification, NRC Log No. 2017-32-00  
 04022328-03, OPEX 52649 (NMP IT Review), dated 7/3/17  
 EN 35844, 10 CFR Part 21 Report Regarding Potential Need for Capacitor Replacement in Specific Trip/Calibration Systems, dated 6/18/99  
 RICSIL No. 076, Rosemount Analog Trip Unit Intermittent Failure, dated 2/29/96  
 SIL No. 468R1, Rosemount 510DU and 710DU Trip Units, dated 10/17/88  
 SIL No. 520, Transistor Degradation in Rosemount 510DU Trip Units, dated 8/10/90

### Procedures

ER-AA-200-1001, Equipment Classification, Revision 3  
 ER-AA-425, Implementation of the Technical Specification Surveillance Frequency Control Program, Revision 1  
 ER-AA-425-1001, Surveillance Test Interval (STI) Evaluation Form, Revision 1  
 ER-AA-425-1002, Engineering Evaluation of Proposed Surveillance Test Interval Changes, Revision 1  
 MA-AA-716-017, Station Rework Reduction Program, Revision 7  
 N1-PM-S1, Operator's Rounds Guide, Revision 34  
 N2-OSP-RHS-Q@005, RHR System Loop B Pump and Valve Operability Test, System Integrity Test and ASME XI Pressure Test, Revision 10  
 N2-TTP-RHS-4Y003, Residual heat removal system heat exchanger (2RHS\*E1A) performance monitoring (suppression pool cooling mode), Revision 00400  
 N2-TTP-RHS-4Y003, Residual heat removal system heat exchanger (2RHS\*E1B) performance monitoring (suppression pool cooling mode), Revision 00202  
 NMPNS-SBI-001, Nine Mile Point Nuclear Station Unit 1 and Unit 2, Revision 03  
 OP-AA-101-111, Roles and Responsibilities of On Shift Personnel, Revision 10  
 OP-AA-102-107-1001, Operations On-Line Work Management, Revision 1  
 OP-AA-108-115, Operability Determinations (CM-1), Revision 19  
 OP-NM-108-117, Protected Equipment Program at Nine Mile Point, Revision 5  
 PI-AA-1, Performance Improvement, Revision 0  
 PI-AA-1, Nuclear Safety Culture, Revision 0  
 PI-AA-101-1001, Performance Monitoring and Analysis Manual, Revision 0  
 PI-AA-115, Operating Experience Program, Revision 2  
 PI-AA-120, Issue Identification and Screening Process, Revision 7  
 PI-AA-125, Corrective Action Program (CAP) Procedure, Revision 5  
 PI-AA-125-1001, Root Cause Analysis Manual, Revision 3  
 PI-AA-125-1004, Effectiveness Review Manual, Revision 2  
 PI-AA-126, Self-Assessment and Benchmark Program, Revision 2  
 PI-AA-127, Passport Action Tracking Management Procedure, Revision 2  
 S-EPM-GEN-066, MOV Gear Case Lube Inspection and Stem Lubrication, Revision 00600

S-MMP-SDM-001, Site Doors Maintenance, Revision 00700  
 WC-AA-106, Work Screening and Processing, Revision 17

#### System Health Reports, Walkdown Reports, & Trending

Fundamental Report November 2016 (Maintenance), dated 12/15/16  
 Maintenance 4th QTR 2015 Performance Monitoring Data, dated 3/16/16  
 Maintenance Department Crew Clock Resets, dated 10/1/15 – 2/24/17  
 Maintenance Department Observations (1/1/16 – 3/31/16) Fundamental Report, dated 4/6/16  
 Maintenance Department Observations (4/1/16 – 4/30/16) Fundamental Report, dated 5/4/16  
 Maintenance Department Observations (5/1/16 – 5/24/16) Fundamental Report, dated 5/24/16  
 Maintenance Department Observations (7/1/16 – 7/31/16) Fundamental Report, dated 9/6/16  
 Maintenance Department Observations (8/1/16 – 8/31/16) Fundamental Report, dated 9/22/16  
 Maintenance Department Paired Observations, dated 6/20/17 – 9/13/17  
 Maintenance Monthly Trending Report (February 2017), dated 3/27/17  
 Maintenance Monthly Trending Report (July 2016), dated 9/27/16  
 Maintenance Monthly Trending Report (October 2016), dated 12/15/16  
 NMP Quarterly Performance Assessment Reports – 4Q2016 & 1Q2017  
 Operations & Operational Focus QPAR (1st Quarter 2017), dated 6/6/17  
 Operations & Operational Focus QPAR (3<sup>rd</sup> Quarter 2016), dated 10/12/16  
 Operations Monthly Trending Report (August 2017), dated 9/27/17  
 Operations Monthly Trending Report (May 2017), dated 6/28/17  
 Operations Monthly Trending Report (October 2016), dated 11/29/16  
 Operations Performance Data (April 2016), dated 5/26/16  
 Operations Performance Data (December 2015), dated 2/1/16  
 Operations Performance Data (June 2016), dated 7/7/16  
 NMP Quarterly Performance Assessment Report 2Q16, dated 7/25/16

#### **LIST OF ACRONYMS**

ADAMS	Agencywide Documents Access and Management System
ACE	Apparent Cause Evaluation
CAP	Corrective Action Program
CAPCO	Corrective Action Program Coordinator
CCE	Common Cause Evaluation
CFR	Code of Federal Regulations
ECP	Employee Concerns Program
IMC	Inspection Manual Chapter
IR	Issue Report
MRC	Management Review Committee
NCAP	Non-Corrective Action Program
NRC	Nuclear Regulatory Commission
PI&R	Problem Identification and Resolution
RCA	Radiation Control Area
RCE	Root Cause Evaluation
RP	Radiation Protection
ROP	Reactor Oversight Program
SOC	Station Oversight Committee
SW	Service water