



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

September 20, 2017

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

**SUBJECT: CALVERT CLIFFS NUCLEAR POWER PLANT – PROBLEM IDENTIFICATION
AND RESOLUTION INSPECTION REPORT 05000317/2017008 AND
05000318/2017008**

Dear Mr. Hanson

On August 18, 2017, the U.S. Nuclear Regulatory Commission (NRC) completed a biennial problem identification and resolution inspection at the Calvert Cliffs Nuclear Power Plant (CCNPP), Units 1 and 2. The NRC inspection team discussed the results of this inspection with Mr. M. Flaherty, 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 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 Title 10 of the *Code of Federal Regulations* (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. 50-317 and 50-318
License Nos. DPR-53 and DPR-69

Enclosure:
Inspection Report 05000317/2017008 and
05000318/2017008
w/Attachment: Supplementary Information

cc w/encl: Distribution via ListServ

SUBJECT: CALVERT CLIFFS NUCLEAR POWER PLANT – PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION REPORT 05000317/2017008 AND 05000318/2017008 DATED SEPTEMBER 20, 2017

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket Nos.: 50-317 and 50-318

License Nos.: DPR-53 and DPR-69

Report Nos.: 05000317/2017008 and 05000318/2017008

Licensee: Exelon Generation Company, LLC (Exelon)

Facility: Calvert Cliffs Nuclear Power Plant (CCNPP), Units 1 and 2

Location: Lusby, MD

Dates: July 31, 2017, through August 4, 2017, and
August 14, 2017, through August 18, 2017

Team Leader: S. Barber, Senior Project Engineer, Division of Reactor Projects

Inspectors: P. Presby, Senior Operations Engineer, Division of Reactor Safety
C. Roettgen, Resident Inspector, CCNPP
C. Crisden, Enforcement Specialist, Office of the Regional Administrator

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

SUMMARY

IR 05000317/2017008 and 05000318/2017008; July 31, 2017, through August 4, 2017, and August 14, 2017, through August 18, 2017; Calvert Cliffs Nuclear Power Plant (Exelon), Units 1 and 2; Biennial Baseline Inspection of Problem Identification and Resolution.

This NRC team inspection was performed by three regional inspectors and one resident inspector. 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 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 in a timely manner.

The inspectors concluded that, in general, Exelon adequately identified, reviewed, and applied relevant industry operating experience to CCNPP operations. In addition, based on those items selected for review, the inspectors determined that Exelon's self-assessments and audits were thorough.

Based on the interviews the inspectors conducted over the course of the inspection, observations of plant activities, and reviews of individual corrective action program and employee concerns program 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)

This inspection constituted one biennial sample of problem identification and resolution as defined by Inspection Procedure 71152. 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 corrective action program at CCNPP. To assess the effectiveness of the corrective action program, 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 with the requirements and standards contained in 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," and Exelon procedure PI-AA-120, Issue Identification Screening Process, and PI-AA-125, Corrective Action Program. For each of these areas, the inspectors considered risk insights from the station's risk analysis and reviewed issue reports (IRs) selected across the seven cornerstones of safety in the NRCs Reactor Oversight Process. Additionally, the inspectors attended multiple Station Ownership Committee and Management Review Committee 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, operator logs, and periodic trend reports. The inspectors also completed field walkdowns of various systems on site, such as the service water and salt water systems. Additionally, the inspectors reviewed a sample of issue reports written to document issues identified through internal self-assessments, audits, emergency preparedness drills, and the operating experience program. The inspectors completed this review to determine if Exelon had entered conditions adverse to quality into its corrective action program, as appropriate.

(2) Effectiveness of Prioritization and Evaluation of Issues

The inspectors reviewed the evaluation and prioritization of a sample of issue reports initiated since the last NRC biennial Problem Identification and Resolution inspection completed in August 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 determine if 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 issue 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 issue reports associated with selected non-cited violations (NCVs) and findings to verify that Exelon personnel properly evaluated and resolved these issues. In addition, the inspectors expanded the corrective action review to 5 years to evaluate Exelon actions related to component cooling water system deficiencies.

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 corrective action program at a low threshold. Exelon staff at CCNPP initiated approximately 19,700 issue reports between August 1, 2015, and July 1, 2017. The inspectors observed supervisors at the Station Ownership Committee and Management Review Committee meetings appropriately questioning and challenging issue reports to ensure clarification of the deficiencies. Based on the samples reviewed, the inspectors determined that Exelon trended 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 corrective action program, 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 corrective action program for evaluation and resolution. In response to several questions and minor equipment observations identified by the inspectors during plant walkdowns, Exelon personnel promptly initiated issue reports and/or took immediate action to address the issues. However, the inspectors did note some observations in Exelon's identification of the following issue:

Missed Identification of a Change in Salt Water Valve Leakage

The inspectors identified one instance in which station personnel did not properly identify a problem. During a plant walk down, inspectors observed a deficiency tag on 1-SW-5151-CV, 11B Service Water Heat Exchanger Salt Water Strainer Diverter Valve. The valve packing had substantial leakage. A temporary catchment had been rigged under the valve but was improperly positioned such that valve leakage was not contained. Salt water was dripping down onto the valve directly below, 1-SW-5150-CV, 11A&B Service Water Heat Exchanger Inlet Valve, resulting in corrosion of the valve. Both the leak from 1-SW-5151-CV and the resulting corrosion of 1-SW-5150-CV had been previously documented by the licensee. The documentation described the leakage as insubstantial (1 drop every 2 seconds) and the problem was therefore given a low priority. In response to NRC observations, the licensee readjusted the leakage

catchment to stop water from dripping onto 1-SW-5150-CV and generated Condition Reports 04038278 and 04039111 to evaluate the increased leakage and associated corrosion.

The inspectors independently evaluated this issue for significance in accordance with Inspection Manual Chapter (IMC) 0612, Appendix B, "Issue Screening," and IMC 0612, Appendix E, "Examples of Minor Issues." Although the leak and the corrosion were not previously appropriately characterized in the licensee's existing problem documentation, the valves remained operable as there had been no degradation in their performance during recent operability testing. The inspectors considered this issue to be of minor significance, and, as a result, it is not subject to enforcement action in accordance with the NRC's Enforcement Policy.

(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 issue reports for operability and reportability, categorized the issue 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 issue reports reviewed, the inspectors noted that the guidance provided by Exelon corrective action program implementing procedures appeared sufficient to ensure consistency in categorization of issues. Operability and reportability determinations were generally performed when conditions warranted and in the reviewed 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 inspectors did note some observations and minor findings in Exelon's prioritization and evaluation of the following issues:

Weaknesses in an Evaluation of Safety Injection Tanks deficiencies

A work group evaluation (WGE) was used to evaluate IR 03988399 which pertained to miscellaneous deficiencies with Safety Injection Tanks. These deficiencies included lowering fluid levels due to drain valves leaking past their shut seat, fluid leaking past the shut seat of closed check valves, and repetitive calibration issues with tank level instruments. These issues had historically caused operator burden to maintain Safety Injection Tank levels within required limits. The inspectors noted that the WGE only addressed the issue with drain valves leaking past their shut seat, and partially addressed the issue with repetitive calibration issues with tank level instruments. No evaluation was documented for the issue with fluid leaking past the shut seat of closed check valves, nor for a specific concern about ensuring proper plant conditions for post maintenance testing and calibration of level instrumentation. Exelon documented the inspectors' observations in IR 04042142 and performed the WGE again to address the remaining issues raised in the original IR.

Evaluation Weaknesses for Missing Building/Roof Seals

The NRC previously issued a green NCV for Exelon's failure to identify degraded building caulking, seals and expansion joints (NCV 05000317 and 318/2016004-01, Inadequate Inspection of Caulking, Seals, and Expansion Barriers in the Auxiliary

Building). Several safety related auxiliary building caulking, seals, expansion joints, and penetration barriers had been found by the inspectors or had revealed themselves by water intrusion events to be degraded. The violation documented that the licensee had previously identified 17 barriers missing from its barrier control program in IR 02444423, which had been inappropriately closed with no actions taken.

Exelon performed a Corrective Action Program Evaluation (CAPE) in response to the NCV. Inspectors noted that this CAPE (IR 02443423) failed to address the 17 missing barriers. Calvert Cliffs has had prior issues with water intrusion through degraded roof barriers, including the 2010 dual unit trip that resulted from aux building roof leakage into an electrical switchgear room (NCV 0500317 and 318/2010006-01, Failure to Thoroughly Evaluate and Correct Degraded Conditions Associated with Auxiliary Building Roof Leakage). Upon being informed by the NRC that the CAPE did not address some barriers that were missing from their barrier control program, the licensee generated IR 04043033 to perform immediate evaluations of the missing barriers and to add them to the program. Because of these planned actions, it is unlikely that these missed barriers will result in additional plant transients.

The inspectors determined that Exelon's failure to perform an adequate evaluation of these missing barriers per PI-AA-125, Corrective Action Program, was a performance deficiency that was within Exelon's ability to foresee and prevent. This performance deficiency was determined to be minor in accordance with IMC 0612 Appendix B, dated September 7, 2012, because it was not a precursor to a more significant event, it would not have led to a more significant safety concern, it does not relate to a performance indicator, and it does not adversely affect any cornerstone objectives.

(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 NCVs and findings since the last problem identification and resolution inspection were timely and effective.

c. Findings

No findings were identified.

.2 Assessment of the Use of Operating Experience

a. Inspection Scope

The inspectors reviewed a sample of issue reports associated with review of industry operating experience (OPEX) to determine whether Exelon appropriately evaluated the operating experience information for applicability to CCNPP and if the station 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.

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 OPEX was appropriately applied and lessons learned were communicated and incorporated into plant operations and procedures, when applicable. However, the inspectors did note some observations in Exelon's operating experience review for the following issue:

Narrowly Focused Operating Experience Evaluation of a Fort Calhoun Fire

The inspectors reviewed IR 02577779 which pertained to Exelon's operating experience evaluation of Fort Calhoun Station's ability to remotely shutdown the plant during a fire in the control room. This condition was originally reported in NRC Event Notification 51487 and described a vulnerability at Fort Calhoun Station which could render the pressurizer heaters inoperable from the remote shutdown station when required during a plant shutdown during a fire in the main control room. The component that transferred the control of the pressurizer heaters to the remote shutdown station was located in the main control room, which in this hypothetical event would have been the location of the fire and could potentially be inaccessible.

Exelon procedure, OPEX-JIT-003, Just-in-Time Brief Sheet, Level 3 OPEX Evaluations, Revision 3, instructs the operating experience evaluator to look beyond the specifics of an external event and instead focus on the similarities between the external event and the vulnerability of the plant to a similar event. Contrary to the above, in its level three operating experience review Exelon only evaluated for this same condition for the pressurizer heaters. Exelon's evaluation did not assess for similar vulnerabilities in other components required for a remote shutdown during a control room fire. Exelon documented the inspectors' observation in IR 04039041, and evaluated NRC Event Report 51487 again using all components required for remote safe shutdown during a fire in the main control room. The evaluation determined that no components at CCNPP have a similar vulnerability with the pressurizer heaters at Fort Calhoun Station.

Due to this initial observation, the inspectors expanded their original review scope in this area and reviewed five additional similar items. No additional examples of a narrowly limited scope were noted.

The inspectors determined that Exelon's failure to apply an adequate scope during an operating experience evaluation was a performance deficiency, per OPEX-JIT-003, that was within Exelon's ability to foresee and prevent. This performance deficiency was determined to be minor in accordance with IMC 0612 Appendix B, dated September 7, 2012, because it was not a precursor to a more significant event, it would not have led to a more significant safety concern, it does not relate to a performance indicator, and it does not adversely affect any cornerstone objectives. IR 04039041 was written.

b. 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 corrective action program, departmental self-assessments, and assessments performed by independent organizations. Inspectors performed these reviews to determine if Exelon entered problems identified through these assessments into the corrective action program, 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.

Assessment

The inspectors concluded that self-assessments, audits, and other internal Exelon assessments were generally critical, thorough, and 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 self-assessments to a sufficient depth to identify issues which were then entered into the corrective action program for evaluation. In general, the station implemented corrective actions associated with the identified issues commensurate with their safety significance.

b. 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 CCNPP. 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 Employee Concerns Program coordinator to determine what actions are implemented to ensure employees were aware of the program and its availability with regards to raising safety concerns. The inspectors reviewed the majority of Employee Concerns Program files over the last two years ensure that Exelon entered issues into the corrective action program, when appropriate.

Assessment

During group interviews of Security, Radiological Protection, and Maintenance staff, personnel expressed a willingness to use the corrective action program 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 corrective action program and the Employee Concerns Program. Based on these limited interviews, 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.

b. Findings

No findings were identified.

4OA6 Meetings, Including Exit

On August 18, 2017, the inspectors presented the inspection results to M. Flaherty, Site Vice President, and other members of the CCNPP staff. The inspectors verified that no proprietary information was retained by the inspectors or documented in this report.

ATTACHMENT: SUPPLEMENTARY INFORMATION

SUPPLEMENTARY INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

M. Flaherty, Site Vice President
T. Tierney, Plant Manager
H. Daman, Director Site Maintenance
L. Smith, Manager, Site Regulatory Assurance
D. Bensel, Performance Improvement Specialist
K. Greene, Principal Regulatory Engineer
S. Reichard, Regulatory Specialist
R. Kreger, OPEX Coordinator
P. Furio, Principal Regulatory Engineer
S. Williams, Technical Support Coordinator
J. Haydin, Engineering Manager
A. Drake, Senior Engineer
P. Desai, Engineering Manager
C. Dobry, Senior Engineer
E. Schinner, Shift Operations Superintendent
C. Koroglu, Senior Engineer
K. Chenier, Senior Engineer
K. Hummer, Operations Shift Supervisor

NRC Personnel

C. Cahill, Senior Reactor Analyst, Region I
J. Kulp, Senior Reactor Inspector

LIST OF DOCUMENTS REVIEWED

Section 40A2: Problem Identification and Resolution

Audits and Self-Assessments

2016 Radiation Protection Dosimetry Assessment, dated September 9, 2016 (02588485)
2017 Biennial Operating Experience Program Assessment, dated June 9, 2017 (04017328)
2016 Configuration Control Process Self-Assessment, dated August 19, 2016 (02633708)
NOSA-CAL-16-04, Chemistry, Radwaste, Effluent and Environmental Monitoring Audit Report, dated May 24, 2016
NOSA-CAL-17-05, Engineering Design Control Audit Report, Calvert Cliffs Nuclear Power Plant, June 26 to July 14, 2017
NOSA-CAL-17-02, Security Programs Audit Report, Calvert Cliffs Nuclear Power Plant, January 23 to January 27, 2017
NOSA-CAL-17-03, Emergency Preparedness Audit Report (IR 3974711)
Emergency Management Performance Evaluation (EMPE) – EP Program Review (02692038)
Completion of Work Package Preparation Pre-Outage Milestone (2016 RFO) (02550825)
Maintenance and Technical Training Mid-Cycle Comprehensive Self-Assessment (02633117)

Issue Reports (* indicates that issue report was generated as a result of this inspection)

01835962	02559505	02616491	02705837	04014027
01842277	02562191	02617439	02707518	04014988
01842721	02562312	02620349	02714912	04015225
01842724	02568351	02620808	02717572	04015992
01843881	02570697	02621170	02722521	04016463
01846022	02571414	02625943	02723440	04016804
01846187	02577447	02625951	02725172	04017189
02423780	02577779	02625956	02731632	04017584
02423783	02585854	02633053	02741322	04017585
02426070	02586763	02639325	02741388	04019225
02439913	02586773	02643352	03943146	04019226
02443423	02588233	02648066	03956738	04019482
02444423	02589313	02648069	03961127	04024883
02442930	02589648	02649412	03964207	04026465
02519056	02590218	02651290	03964494	04027566
02525958	02590231	02655411	03976328	04030635
02538571	02590315	02669743	03976451	04031384
02548099	02592021	02676088	03981457	04038278*
02549660	02592496	02676774	03983553	04038389*
02551090	02594406	02688409	03988399	04038741*
02552673	02595190	02690168	03989413	04038746*
02553175	02608927	02694715	03990666	04038861*
02553528	02611170	02696690	03999630	04039041*
02553994	02611171	02698078	04004189	04042008*
02554752	02612209	02699917	04005975	04042142*
02555331	02612211	02700147	04013049	04043033*
02555331	02616154	02701255	04013697	

Drawings

60583SH001, Auxiliary Feedwater System (Steam), Revision 68
60700SH001, Main Steam and Reheat Heat, Revision. 55
60708SH0001, Circulating Salt Water Cooling System, Revision 43
60731SH0003, Safety Injection and Containment Spray Systems, Revision 33
60736SH0001, Fuel Oil Storage System, Revision 55
12129-0040, Reactor Protective System Module Assembly Bistable Trip Unit, Trip Unit 1 Thru 7 and 9, Revision 7

Operating Experience

IN 2015-13, Main Steam Isolation Valve Failure Events
IN 2015-05, Inoperability of Auxiliary and Emergency Feedwater Auto-start circuits on Loss of Main Feedwater Pumps
ICES 317086, Failed Classification Timeliness Results in Emergency Preparedness Objective Not Being Met
ICES 318272, Condition That Could Prevent Pressurizer PORV Block Valves from Opening (IR 02573623)
ICES 324773, Main Steam Isolation Valve Failed LLRT (Duane Arnold) (IR 03953306)
15-109 NRC Minor Violation - Protected Area Fence Configuration (IR 02608379)
Main Steam Safety Valves not adequately protected from tornado missiles (IR 02692042)
Exelon Nuclear Event Report (NER) TM-15-013, Drill and Exercise Performance Failure
OPEX Evaluation associated with 02577779-02

Non-Cited Violations and Findings

05000317/2015004-01, Failure to Implement Procedures for the Control of Hazard Barriers During Maintenance
050000317,-318/2016301-01, SRO Upgrade Candidates Performing RO Duties without Completing the Requalification Program
05000317,-318/2015010-01, Untimely Actions to Test or Inspect DFO Check Valves Relied on for Safety
05000317/2015004-02, AFAS Channel Inoperable due to Valve Mispositioning
05000317/2016003-01, Deficient Design Control of Air Pressure Available for Unit 1 Component Cooling Water Air Operated Valves

Procedures

0-102-57-O-M, Revision 201
AD-AA-101-1002, Writer's Guide for Procedures and T&RM, Revision 17
AMBD-0026, Caulk and Seal Program, Revision 0300
AOP-7J-1, Loss of 120 Volt Vital AC or 125 Volt Vital DC, Revision 02400
AOP-7J-1-TB, Loss of 120 Volt Vital AC or 125 Volt Vital DC Basis Document, Revision 15
CC-AA-112, Temporary Configuration Changes, Revision 26
EN-1-135, Control of Barriers, Revision 00400
EOP-5-1, Loss of Coolant Accident, Revision 29
HU-AA-1081, Fundamentals Tool Kit, Revision 4
MN-1-110, Procedure Controlled Activities, Revision 12
OI-26B, 120 Volt AC and Computer AC, Revision 03000
PI-AA-115, Operating Experience Program, Revision 2
PI-AA-115-1003, Processing of Level 3 OPEX Evaluations, Revision 3
PI-AA-120, Issue Identification Screening Process, Revision 7
PI-AA-125, Corrective Action Program, Revision 5
OPEX-JIT-003, Just-in-Time Brief Sheet, Level 3 OPEX Evaluations, Revision 3
STP-F-592-1, Penetration Fire Barrier Inspection, Revision 01303

Root Cause, Apparent Cause, and Common Cause Reports

2RV200 Failed Low Out of Tech Spec (03976328)
Hydraulic Leak at 1HVMSH-105, 12 MSIV Hydraulic 'B' Path Isolation Valve (02639325)
Unit 2 Main Turbine Trip (03949100)
Dissimilar Metal Weld Indication on Pressurizer Safety Relief Nozzle to Safe End Weld (02629063)

Miscellaneous

ECP-15-000583, Revision 0001
ECP-15-000661
ECP-16-000026
ECP-16-000373
2017 Security MSO OBE Scenario #3
SY-AA-101-112, "Did You Know," Exelon Security Search Process
21 MSIV Hydraulic Pressure Rework (IR 03983553)
13 Charging Pump Rework (IR 02690168)
Calvert Cliffs UFSAR, Revision 48 (5.2 Isolation System)
Containment Structure Isolation Valve Arrangement, Figure 5-10, Sheet NO. 24, Revision 15
Calvert Cliffs FSAR, Revision 1/31/1980
Calvert Cliffs – Units 1&2, Discussion of Technical Specification Deviations from NUREG-1432, Section 3.6 – Containment Systems, Revision 11, page 3.6-2

LIST OF ACRONYMS

AFAS	Auxiliary Feedwater Actuation System
CAP	Corrective Action Program
CAPE	Corrective Action Program Evaluation
CCNPP	Calvert Cliffs Nuclear Power Plant
CFR	Code of Federal Regulations
EDG	Emergency Diesel Generator
IR	Issue Report
IMC	Inspection Manual Chapter
LLRT	Local Leak Rate Test
NCV	Non-cited Violation
NRC	Nuclear Regulatory Commission
OPEX	Operating Experience
PARS	Publicly Available Records System
UFSAR	Updated Final Safety Analysis Report
WGE	Work Group Evaluation