



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION III  
2443 WARRENVILLE RD. SUITE 210  
LISLE, ILLINOIS 60532-4352

August 14, 2018

EA-18-035

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

**SUBJECT: LASALLE COUNTY STATION, UNITS 1 AND 2—NRC INTEGRATED  
INSPECTION REPORT 05000373/2018002; 05000374/2018002 AND EXERCISE  
OF ENFORCEMENT DISCRETION**

Dear Mr. Hanson:

On June 30, 2018, the U.S. Nuclear Regulatory Commission (NRC) completed an integrated inspection at your LaSalle County Station, Units 1 and 2. On July 9, 2018, the NRC inspectors discussed the results of this inspection with Mr. W. Trafton and other members of your staff. The results of this inspection are documented in the enclosed report.

A violation of the licensee's current site-specific licensing basis for tornado-generated missile protection was identified. Because this violation was identified during the discretion period covered by Enforcement Guidance Memorandum 15-002, "Enforcement Discretion for Tornado Missile Protection Noncompliance" and because the licensee was implementing compensatory measures, the NRC is exercising enforcement discretion by not issuing an enforcement action for the violation and allowing continued reactor operation.

Based on the results of this inspection, the NRC has identified three issues that were evaluated under the risk significance determination process as having very low safety significance (Green). The NRC has also determined that one violation was associated with these issues. Because the licensee initiated condition reports to address these issues, the violation is being treated as Non-Cited Violation (NCV), consistent with Section 2.3.2 of the Enforcement Policy. The NCV is described in the subject inspection report. Further, inspectors documented a licensee-identified violation which was determined to be of very low safety significance in this report. The NRC is treating this violation as non-cited violation (NCV) consistent with Section 2.3.2.a of the Enforcement Policy.

If you contest the violations or significance of these NCVs, 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 III; the Director, Office of Enforcement; and the NRC Resident Inspector at the LaSalle County Station.

If you disagree with a cross-cutting aspect assignment or a finding not associated with a regulatory requirement in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region III; and the NRC resident inspector at the LaSalle County 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 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

***/RA/***

Billy Dickson, Chief  
Branch 5  
Division of Reactor Projects

Docket Nos. 50-373; 50-374  
License Nos. NPF-11; NPF-18

Enclosure:  
IR 05000373/2018002; 05000374/2018002

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Letter to Bryan C. Hanson from Billy Dickson dated August 14, 2018

SUBJECT: LASALLE COUNTY STATION, UNITS 1 AND 2—NRC INTEGRATED  
INSPECTION REPORT 05000373/2018002; 05000374/2018002 AND EXERCISE  
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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Numbers: 50–373; 50–374

License Numbers: NPF–11; NPF–18

Report Numbers: 05000373/2018002; 05000374/2018002

Enterprise Identifier: I–2018–002–0028

Licensee: Exelon Generation Company, LLC

Facility: LaSalle County Station, Units 1 and 2

Location: Marseilles, IL

Dates: April 1 through June 30, 2018

Inspectors: W. Schaup, Senior Resident Inspector  
J. Havertape, Resident Inspector  
M. Holmberg, Reactor Inspector  
A. Nguyen, Senior Resident Inspector, Dresden  
R. Ng, RIII Project Engineer  
G. Roach, RIII Senior Operations Engineer

Approved by: B. Dickson, Chief  
Branch 5  
Division of Reactor Projects

Enclosure

## SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring licensee's performance by conducting an integrated quarterly inspection at LaSalle Units 1 and 2 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. Findings and violations being considered in the NRC's assessment are summarized in the table below. A Licensee-identified non-cited violation is documented in report section: Follow-up of Events and Notices of Enforcement Discretion.

### List of Findings and Violations

Failure to Implement a Preventative Maintenance Strategy for Residual Heat Removal Service Water Pump Shorting Relays			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green FIN 05000373/2018002-01 Closed	None	71111.18— Plant Modifications
A self-revealed Green finding of very low safety significance was identified for the licensee's failure to implement a preventative maintenance (PM) strategy for the residual heat removal service water (RHRSW) pump shorting relays in accordance with procedure MA-AA-716-210, "Performance Centered Maintenance (PCM) Process", Revision 11. Specifically, a PCM template was issued in 2002 that required periodic as-found testing and calibration for control and timing relays, but a maintenance strategy was never implemented. As a result, one of the normally closed contacts on the Unit 1 'D' RHRSW pump shorting relay developed a high contact resistance and prevented the Unit 1 'D' RHRSW pump from starting.			

Failure to Follow Procedure and Perform Database Revision Review Requirements			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green FIN 05000373/2018002-02 Closed	None	71153— Follow-Up of Events and Notices of Enforcement Discretion
The inspectors identified a Green finding of very low safety significance for the licensee's failure to follow station procedure NSWP-WM-03, "Predefine Database Revisions," Revision 0, for retiring station procedure LES-GM-108, "Inspection of 480V Motor Control Center Equipment," that performed bus bar inspection on Division 3 motor control centers. Specifically, instead of completing step 6.5 "Database Revision Review Requirements," of NSWP-MW-03, to retire the bus bar inspections for Division 3 motor control centers the licensee retired the procure based solely on having previously retiring the bus bar inspections for Division 1 and Division 2 in 2002 without the required review.			

### Additional Tracking Items

Type	Issue Number	Title	Report Section	Status
LER	05000374/2017-004-00; 05000374/2017-004-01; 05000374/2017-004-02	Two Main Steam Safety Relief Valves Failed Inservice Lift Inspection Pressure Test	71153	Closed
LER	05000373/2018-002-00	Damaged Bus Bar Identified Potentially Affecting High Pressure Core Spray System	71153	Closed
EA	18-035	Licensee Implementation of Enforcement Guidance Memorandum 15-002, "Enforcement Discretion for Tornado-Generated Missile Protection Noncompliance	71111.15	Discussed
LER	05000373/2018-001-00; 05000374/2018-001-00	Unanalyzed Condition Affecting Accident Mitigation for Tornado Generated Missile Protection Non-Conformance	71153	Closed

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## PLANT STATUS

Unit 1 operated at or near rated thermal power for the entire inspection period.

Unit 2 began the inspection period at rated thermal power. On April 29, 2018, the unit was down powered to 65 percent for economic dispatch. The unit was returned to rated thermal power on April 30, 2018. Later on April 30, 2018, the unit was down powered to 70 percent for economic dispatch. The unit was returned to rated thermal power on May 1, 2018. On May 5, 2018, the unit was down powered to 90 percent for economic dispatch. The unit was returned to rated thermal power on May 6, 2018 and remained at or near rated thermal power for the remainder of the inspection period.

## INSPECTION SCOPES

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

## REACTOR SAFETY

### 71111.01—Adverse Weather Protection

#### Summer Readiness (1 Sample)

The inspectors evaluated summer readiness of offsite and alternate alternating current (AC) power systems.

### 71111.04—Equipment Alignment

#### Partial Walkdown (4 Samples)

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

- (1) Unit 1 standby gas treatment system during maintenance on the Unit 2 standby gas treatment system;
- (2) Unit 2 high pressure core spray (HPCS) following room cooler maintenance window;
- (3) Unit 1 reactor core isolation cooling system (RCIC) with HPCS inoperable and unavailable; and
- (4) Unit 1 'A' emergency diesel generator.



#### Complete Walkdown (1 Sample)

The inspectors evaluated system configurations during a complete walkdown of the Unit 1 low pressure core spray system on June 28, 2018.

#### 71111.05Q—Fire Protection Annual/Quarterly

##### Quarterly Inspection (5 Samples)

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

- (1) Unit 1 Reactor Building, Elevation 740', fire zone 2F;
- (2) Unit 2 Auxiliary Building, Elevation 731', Division 2 switchgear room, fire zone 4E4;
- (3) Unit 1 Reactor Building, Elevation 673', fire zone 2I2;
- (4) Unit 1, Elevation 710', Division 1 switchgear room, fire zone 4F1; and
- (5) Unit 2, Elevation 687'0", high pressure core spray switchgear room, fire zone 5D2.

#### 71111.11—Licensed Operator Requalification Program and Licensed Operator Performance

##### Operator Requalification (1 Sample)

The inspectors observed and evaluated simulator Out-of-the-Box Evaluation, OBE 18–2–2, on April 24, 2018.

##### Operator Performance (1 Sample)

The inspectors observed and evaluated control room activities on May 20, 2018.

#### 71111.12—Maintenance Effectiveness

##### Routine Maintenance Effectiveness (2 Samples)

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

- (1) Unit 1 'D' RHRSW pump failure to start, unavailability tracking for LES–DC–103A/B; and
- (2) Hydrogen recombiner Maintenance Rule availability criteria exceeded.

#### 71111.13—Maintenance Risk Assessments and Emergent Work Control (6 Samples)

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

- (1) Unit 1 online risk yellow due to 'B/C' residual heat removal (RHR) pump room cooler fan breaker replacement;
- (2) Online work management risk assessment for downpower due to grid conditions;
- (3) Unit 1 online risk orange risk due to Unit 1 motor-driven reactor feed pump maintenance window in conjunction with thunderstorm warning;
- (4) Unit 1 and Unit 2 online risk yellow due to replacement of the unit common diesel fuel oil transfer pump breaker;

- (5) Unit 2 online risk yellow for emergent work on 'B/C' RHR pump room cooler coil; and
- (6) Unit 1 and Unit 2 online risk yellow due to a severe thunderstorm warning.

#### 71111.15—Operability Determinations and Functionality Assessments (6 Samples)

The inspectors evaluated the following operability determinations and functionality assessments:

- (1) Unit 1 Division 3 bus 143–1 degraded phase on breaker 2B;
- (2) Standby gas treatment upstream HEPA filter could not be tested;
- (3) Unit 1 reactor core isolation cooling discharge piping void;
- (4) Unit 1 safety relief valve snubber failed functional test;
- (5) 'A' train control room HVAC following downscale failure of 'C' radiation monitor; and
- (6) Unit 1 'B/C' RHR pump room cooler coil pipe patch.

#### 71111.18—Plant Modifications (2 Samples)

The inspectors evaluated the following temporary or permanent modifications:

- (1) Operability Evaluation (OE) 05–004, emergency lighting pack on cart; and
- (2) Engineering Change (EC) 380786, multiple spurious operations modification for pumps.

#### 71111.19—Post Maintenance Testing (5 Samples)

The inspectors evaluated the following post maintenance tests:

- (1) Unit 1 standby gas treatment system testing;
- (2) Unit 2 HPCI room cooler testing;
- (3) Unit 2 RCIC system testing;
- (4) Unit 1 'A' RHR room cooler testing; and
- (5) Unit 1 turbine stop valve #3 limit switch testing.

#### 71111.22—Surveillance Testing

The inspectors evaluated the following surveillance tests:

##### Routine (4 Samples)

- (1) LOS–DG–R0, common diesel generator, 0DG01K, twenty-four hour run surveillance;
- (2) LIS–NB–219A, Unit 2 reactor vessel low water level alternate rod insertion/anticipated transient without SCRAM instrument channel A&C calibration;
- (3) LOS–RD–SR12, Unit 1 SCRAM insert times; and
- (4) LOS–AA–W1, Technical Specification weekly surveillances.

##### In-service (1 Sample)

- (1) LOS–LP–Q1, Unit 1 low pressure core spray system in-service test.

## 71114.06—Drill Evaluation

### Emergency Planning Drill (2 Samples)

- (1) The inspectors evaluated a site emergency preparedness drill, initiated from the site simulator with a licensed operator crew that staffed the Technical Support Center and Operations Support Center on 5/30/2018; and
- (2) The inspectors evaluated a site emergency preparedness drill, initiated from the site simulator with a licensed operator crew that staffed Technical Support Center and Operations Support Center on 6/6/2018.

## **OTHER ACTIVITIES – BASELINE**

### 71151—Performance Indicator Verification (2 Samples)

The inspectors verified licensee performance indicators submittals listed below:

- (1) BI02: RCS Leak Rate Sample—2 Samples (April 1, 2017 – March 31, 2018).

### 71152—Problem Identification and Resolution

#### Semiannual Trend Review (1 Sample)

The inspectors reviewed the licensee's corrective action program for trends that might be indicative of a more significant safety issue.

#### Annual Follow-Up of Selected Issues (1 Sample)

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

- (1) Leak Detection Capabilities for RCIC Steam Supply.

### 71153—Follow-Up of Events and Notices of Enforcement Discretion

#### Licensee Event Reports (5 Samples)

The inspectors evaluated the following licensee event reports (LERs) which can be accessed at <https://lersearch.inl.gov/LERSearchCriteria.aspx>:

- (1) LER 05000374/2017–004–00, –01 and –02, Two Main Safety Relief Valves Failed Inservice Lift Inspection Pressure Test;
- (2) LER 05000374/2018–001–00, Unanalyzed Condition Affecting Accident Mitigation for Tornado-Generated Missile Protection Non-Conformances; and
- (3) LER 05000374/2018–002–00, Damaged Bus Bar Identified Potentially Affecting High Pressure Core Spray System.

## INSPECTION RESULTS

### 71111.18—Plant Modifications

Failure to Implement a Preventative Maintenance Strategy for Residual Heat Removal Service Water Pump Shorting Relays			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green FIN 05000373/2018002-01 Closed	None	71111.18— Plant Modifications
<p>A self-revealed finding of very low safety significance was identified for the licensee's failure to implement a PM strategy for the RHRSW pump shorting relays in accordance with procedure MA-AA-716-210, "Performance Centered Maintenance (PCM) Process," Revision 1. Specifically, a PCM template was issued in 2002 that required periodic as-found testing and calibration for control and timing relays, but the maintenance strategy was never implemented. As a result, the Unit 1 'D' RHRSW pump shorting relay developed a high contact resistance on one of the normally closed contacts that prevented the Unit 1 'D' RHRSW pump from starting.</p>			
<p><u>Description:</u></p> <p>On February 5, 2018, when operators attempted to start the Unit 1 'D' RHRSW pump from the main control room, the pump immediately tripped. The licensee declared the system inoperable and entered TS 3.7.1 for one RHRSW subsystem inoperable and TS 3.6.2.3 for one suppression pool cooling subsystem being inoperable. Subsequent troubleshooting determined that normally closed contact 3-7 on control relay 1E12-K300D indicated open when it should have been closed. This caused the relay to block the start signal from the main control room hand switch. However, the licensee still has the ability to start the pump locally or from the remote shutdown panel. The licensee could also throttle the Unit 1 'C' RHRSW pump to partially make up for the loss of Unit 1 'D' RHRSW flow to the heat exchanger. The relay was replaced and the Unit 1 'D' RHRSW pump was declared operable on February 6, 2018.</p> <p>Normally, shorting relay 1E12-K300D does not prevent the RHRSW pump from starting. In the event of a hot short due to a fire in the control room, the "shorting circuit" would open the normally closed contact 3-7 and blocks a start signal to the RHRSW pump to prevent damage to the pump. The licensee completed an equipment apparent cause evaluation and determined that high resistance across contact 3-7 caused the failure of the 1 'D' RHRSW pump to start. Additionally, the evaluation determined that EC 380786, "MSO [Multiple Spurious Operations] Mod for Pumps 1E12-C300C and D," implemented on January 9, 2012, did not include a component classification for shorting relay 1E12-K300D. Therefore, by default, shorting relay 1E12-K300D had a run to failure PM strategy resulting in a buildup of surface contamination and eventual failure of the pump to start.</p> <p>The inspectors conducted a review of the RHRSW MSO modification performed by the licensee under EC 380786. During this review, the inspectors noted that steps 7 and 8, of CC-AA-102-F-10B, "Plant Engineering Configuration Change Review Process," Revision 1, "Plant Engineering Configuration Change Review Process," that provide instructions to classify new components and designate an appropriate PM strategy were annotated as completed on April 25, 2011. However, the inspector concluded that the evaluation was</p>			

performed adequately. Had the shorting relays been classified in accordance with MA-AA-716-210, "Performance Centered Maintenance (PCM) Process," Attachment 1, "Component Classification," they would have been classified as critical per step 1.B as a relay failure would result in a TS shutdown clock of 7 days or less. Further, the classification of critical would have resulted in the development of a PCM template since a run to failure PM strategy is not permitted by MA-AA-716-210 for critical components. The prevailing guidance at the time of the modification for PCM templates associated with control and timing relays required periodic as-found testing and calibration for control and timing relays on a recommended periodicity of 6 to 8 years.

Corrective Actions: The licensee conducted extent of condition inspections for the Unit 1 and Unit 2 RHRSW pump shorting relays, classified the shorting relays as critical components, and implemented an 8-year as-found inspection and calibration PM template. Additionally, the licensee verified that shorting circuits installed under a similar modification, EC 380792, were properly classified and evaluated for appropriate PM strategy.

Corrective Action Reference: AR 4100844

Performance Assessment:

Performance Deficiency: The inspectors determined that the failure to implement a PM strategy for RHRSW pump shorting relays in accordance with procedure MA-AA-716-210, "Performance Centered Maintenance (PCM) Process," was a performance deficiency. Specifically the licensee did not implement a PCM strategy that required as-found testing and calibration for the Unit 1 'D' RHRSW pump shorting relay, resulting in the pump failing to start on February 5, 2018.

Screening: The inspectors determined the performance deficiency was more than minor because it adversely affected the equipment performance attribute of the mitigating systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the performance deficiency resulted in the inoperability of the Unit 1 'D' RHRSW pump.

Significance: Using IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power," issued June 19, 2012, the finding was screened against the Mitigating Systems cornerstone and determined to be of very low safety significance (Green) because the answer to each of the screening questions was "no".

Cross-cutting Aspect: No cross cutting aspect was assigned to this finding because the inspectors determined the finding did not reflect present licensee performance.

Enforcement:

The inspectors did not identify a violation of regulatory requirements associated with this finding.

## 71152—Problem Identification and Resolution

Observation	IP 71152—Problem Identification and Resolution
<p data-bbox="203 331 1360 363"><u>Annual Followup of Selected Issues:</u> Leak Detection Capabilities for RCIC Steam Supply</p> <p data-bbox="203 394 1393 632">The inspectors performed a selected review of the licensee's correction action program documents; specifically, AR 4091820, "Non-Tech Spec Flow Switch Broke Causing RCIC Isolation," and AR 1435575, "Spurious Isolation of RCIC on High Steam Flow." The inspectors performed walkdowns and verified the completion of and assessed the adequacy of the corrective actions taken in response to a spurious closure signal from a RCIC steam supply break detection system flow switch, 1E31–N007BA, which resulted in an unintended isolation of the RCIC steam supply valve on January 9, 2018.</p> <p data-bbox="203 663 1409 900">The inspectors' review and evaluation was focused on the licensee's corrective actions to ensure that consideration of the extent of condition, generic implications, common cause, and previous occurrences was taken and the licensee classified and prioritized the resolution of the problem commensurate with safety significance. Of particular interest to the Inspectors was the isolation of flow switch 1E31–N007BA by the licensee upon system restoration from the unplanned period of inoperability on January 9, 2018, and the impact of this configuration on the current licensing basis for the RCIC leak detection system.</p> <p data-bbox="203 932 1398 1199">The inspectors noted that the licensee had previously evaluated isolating 1E31–N007BA as part of AR 1435575, assignment 12, "Present Abandonment Option of 1E31–N007 Switches to Plant Health Committee," on August 6, 2014. This evaluation concluded that the switches were required to monitor an approximately 80 foot section of piping for breaks, and therefore could not be abandoned. The inspectors discussed the conclusion of AR 01435575–12 with the licensee. The licensee subsequently provided additional information, EC 623398, "1(2)E31–N007BA Flow Switch Evaluation," to support compliance with the current licensing basis.</p> <p data-bbox="203 1230 1419 1497">The licensee documented in EC 623398 that isolation of 1E31–N007BA was acceptable given that it was originally installed to provide break detection for RHR steam condensing mode piping. This mode of operation was removed from the LaSalle UFSAR in 1992, and the equipment associated with this function was removed from TS in 1998 (U1) and 1999 (U2). The physical piping associated with the RHR steam condensing mode was isolated with a blind flange. For leak detection in RCIC steam piping that were unmonitored for steam flow, EC 623398 stated that the system fulfills this safety design basis function utilizing steam pressure and area temperature indications.</p> <p data-bbox="203 1528 1398 1698">The inspectors reviewed the associated licensee corrective action documents, license amendment request, and safety evaluation related to the current configuration of the RCIC leakage detection system instrumentation. Following this review, the inspectors consulted with individuals in the respective NRC headquarters program office and have concluded that the licensee appears to be in full compliance with their current licensing basis.</p>	

## 71153—Follow-Up of Events and Notices of Enforcement Discretion

Failure to Follow Procedure and Perform Database Revision Review Requirements			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green FIN 05000373/2018002-02 Closed	None	71153— Follow-up of Events and Notices of Enforcement Discretion
<p>The inspectors identified a Green finding of very low safety significance for the licensee's failure to follow procedure NSWP-WM-03, "Predefine Database Revisions," Revision 0, for retiring procedure LES-GM-108, "Inspection of 480V Motor Control Center Equipment," that performed bus bar inspection on Division 3 motor control centers. Specifically, instead of completing NSWP-MW-03, step 6.5, "Database Revision Review Requirements," to retire the bus bar inspections for Division 3 motor control centers, the licensee retired the procedure based solely on having previously retiring the bus bar inspections for Division 1 and Division 2 in 2002, and did not perform the required review.</p>			
<p><u>Description:</u></p> <p>On February 16, 2018, the main control room received plant process computer alarm B823, "D/G 1B Oil Pump M/C Pwr Not Available," in addition to other Division 3, Unit 1 'B' diesel generator alarms. The AC circulating oil pump was found not running and hot to the touch. Approximately 15 minutes later, the Unit 1 'B' DG trouble alarm annunciated and the local panel alarm for low oil pressure was identified. The licensee documented the events in AR 04105079.</p> <p>The licensee commenced troubleshooting and identified low voltage on one phase of the circulating oil pump motor. The low voltage condition resulted in the electricians performing an inspection at motor control center (MCC) 143-1 that houses the power supply breaker [1AP79E-2B] for the pump motor. When the electricians removed the MCC bucket from the bus, it was identified that the 'A' phase of the bus bar had localized damage where the bucket connects to the bus bar. Approximately 25 percent of the bus bar material thickness was degraded and the 'A' phase bucket clip was found degraded. These conditions were determined to be the reason for the circulating oil pump failure.</p> <p>The licensee performed a corrective action program evaluation that determined the apparent cause of the degraded bus bar clip connection was due to relaxation of the bucket clip over time. The licensee did an extent of condition review on the remaining MCC 143-1 cubicles and noted ten discrepancies where less than optimal clip to bus bar contact was identified for the remaining 25 cubicles. Additionally, through the review of the PM performed on MCC 143-1, the licensee found that the last visual inspection of the bucket clip to bus bar connection was performed in March of 1996. The PM had an eight year frequency and was retired in 2006.</p> <p>The inspectors discovered that in 2002, the Division 1 and Division 2 MCC bus bar inspections were retired per service request (SR) 00012103 in accordance with procedure NSWP-WM-03, "Predefine Database Revisions," Revision 0. The retirement was based upon the MCCs not having to meet environmental qualification requirements and the PMs</p>			

were not required by the PCM template for MCC bucket/breaker cubicle inspection. In 2006, the Division 3 MCC bus bar inspections were retired per SR 00043977 based on a note that stated "Per discussion with CMO the bus bar inspection PM is no longer required. The Division 1 and 2 inspections were already retired. Division 3 was accidentally overlooked."

It is important to note that the Division 1 and Division 2 MCCs were manufactured by International Switchboard Corporation with General Electric components that use a similar but different cubicle to bus connection than the Division 3 MCCs that were manufactured by Klockner-Moeller. The Klockner-Moeller design incorporates a spring on each of the bucket clips to maintain bus bar contact in addition to the spring tension provided by the clip material. The International Switchboard design relies on only the spring tension of the material.

Based upon the available documentation and the difference between the clip designs, the inspectors determined that the Division 3 bus bar inspections had been retired without performing procedure NSWP-WM-03, step 6.5, "Database Revision Review Requirements." The inspectors could not determine if the original service request intentionally omitted the Division 3 bus bars from deletion and that sufficient justification was provided in the subsequent service request to document completion of the database revision review for the Division 3 bus bars.

Corrective Actions: A temporary modification was prepared and approved to supply temporary power to the loads supplied by breaker 1AP79E-2B utilizing a spare cubicle in MCC 143-1. The original breaker was repaired and installed into the spare cubicle with the power cables located in the original cubicle extended to reach the spare. The licensee completed post maintenance testing to ensure equipment function was restored. The discrepant clips identified during the extent of condition review were addressed by reforming the clips, followed by visual inspection to ensure each clip to bus bar connection was restored to line contact. Resistance checks were also performed. The licensee has reinitiated the PM to inspect the bus bars for the Division 3 MCCs.

Corrective Action Program Reference: AR 04105079

Performance Assessment:

Performance Deficiency: The inspectors determined that failing to follow procedure NSWP-WM-03, "Database Revision Review Requirements," step 6.5 and not completing the database revision review for retiring the Division 3 bus bar inspections was a performance deficiency. Specifically, since the review was not performed, it is uncertain whether the conclusion to retire the Division 3 bus bar inspections had been accidentally left out.

Screening: The performance deficiency was more than minor because it adversely affected the procedure quality attribute of the Mitigating Systems cornerstone to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, not performing reviews in accordance with station procedures could retire preventative maintenance that would reduce the availability, reliability or capability of systems or lead to a more safety significant event.

Significance: Using IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power," issued June 19, 2012, the finding was screened against the Mitigating Systems cornerstone and determined to be of very low safety significance (Green) because the answer to each of the screening questions was "no".



Cross-cutting Aspect: No cross cutting aspect was assigned to this finding because the inspectors determined the finding did not reflect present licensee performance.

Enforcement:

The inspectors did not identify a violation of regulatory requirements associated with this finding.

Licensee Identified Non-Cited Violation	71153—Follow-up of Events and Notices of Enforcement Discretion												
This violation of very low safety significant 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>Violation: Technical Specification LCO 3.4.4 (applicable for Modes 1, 2 and 3) states: The safety function of 12 safety relief valves (S/RVs) shall be OPERABLE,” and Action Statement A states that “One or more required S/RVs inoperable—A.1 be in mode 3 in 12 hours and A.2 be in Mode 4 in 36 hours.” Technical Specification SR 3.4.4.1 states that “Verify the safety function lift setpoints of the required S/RVs are as follows:</p> <table> <tr> <th>Number of S/RVs</th><th>Setpoint (psig)</th></tr> <tr> <td>2</td><td>1205 ± 36.1</td></tr> <tr> <td>3</td><td>1195 ± 35.8</td></tr> <tr> <td>2</td><td>1185 ± 35.5</td></tr> <tr> <td>4</td><td>1175 ± 35.2</td></tr> <tr> <td>2</td><td>1150 ± 34.5”</td></tr> </table> <p>Contrary to the above, during portions of previous Unit 1 and 2 operating cycles from 2012 through January of 2017, two main steam S/RVs did not meet these lift pressure setpoint requirements. Specifically S/RV 2B21–F013C lifted at 1131 psig instead of from 1139.8 to 1210.2 psig and S/RV 2B21–F013L lifted at 1130 psig instead of from 1159.2 to 1230.8 psig (reference: Licensee Event Report 05000374/2017–004–00; –01, Two Main Safety Relief Valves Failed Inservice Lift Inspection Pressure Test.)</p> <p>Significance/Severity: This licensee identified finding affected the Initiating Events Cornerstone and was screened in accordance with Exhibit 1 of IMC 0609, Appendix A, “The Significance Determination Process for Findings At Power.” The two affected SRVs lifted low outside of their setpoint band, which was conservative with respect to maintaining the reactor coolant system overpressure protection safety function of these valves. Therefore, the inspectors determined that this finding is of very low safety significance (Green) because after a reasonable assessment of degradation, the finding would not have resulted in exceeding the reactor coolant system leak rate for a small LOCA and did not affect other systems used to mitigate a loss-of-coolant accident.</p> <p>Corrective Action Reference: AR 3974669</p>		Number of S/RVs	Setpoint (psig)	2	1205 ± 36.1	3	1195 ± 35.8	2	1185 ± 35.5	4	1175 ± 35.2	2	1150 ± 34.5”
Number of S/RVs	Setpoint (psig)												
2	1205 ± 36.1												
3	1195 ± 35.8												
2	1185 ± 35.5												
4	1175 ± 35.2												
2	1150 ± 34.5”												

Minor Violation	71153—Follow-up of Events and Notices of Enforcement Discretion
<p>Minor Violation: For S/RV 2B21–F013L, serial number N63790–05–0012 (hereafter referred to as S/RV 12), the licensee completed a work group evaluation as documented in AR 03975216—ACIT No. 3 to investigate the cause for two S/RVs that failed a set pressure lift test out of specification low. For ACIT No. 3, the licensee staff incorporated a vendor letter that documented the results of the S/RV vendor’s review of the S/RV 12 condition and which</p>	

recorded an out of tolerance spring condition. It stated that “The spring was measured and rate tested. The free height was found to be below the minimum original equipment manufacturer specified tolerance.” The licensee’s vendor subsequently replaced the nonconforming spring with a new spring. In prior vendor correspondence with the licensee (reference E-mail dated June 24, 2015), the vendor stated that “Typically we contribute a low as-found lift to an out-of-tolerance spring rate or free height dimension.” Therefore, the nonconforming spring free height dimension may have caused the low as-found lift setpoint failure for this valve and as such was relevant (e.g. material) to the determination of a failure cause that was reported in LER 05000374/2017–004–00 and –01. However, the licensee failed to identify this during their cause investigation and erroneously reported in LER 05000374/2017–004–00 and –01 that “The vendor reported for both valves that all the spring tolerances were within the acceptance limits.” The licensee documented this violation in AR 04134591, “Potential Minor Violation for Unit 2 LER 2017–04–01.” The licensee also submitted a revision to the LER as LER 05000374/2017–004–02.

Screening: The significance determination process does not specifically consider the regulatory process impact in its assessment of licensee performance. Therefore, it is necessary to address this violation which could impede the NRC’s ability to regulate using traditional enforcement to adequately deter non-compliance. The inspectors determined that this issue was a Severity Level IV violation based on Example 6.9.d.10 in the NRC Enforcement Policy which states, “A failure to identify all applicable reporting codes on a Licensee Event Report that may impact the completeness or accuracy of other information (e.g. performance indicator data) submitted to the NRC.” In accordance with the Section 2.2.1.c of the NRC enforcement policy, the severity level of a violation involving the failure to make a required report to the NRC will depend on the significance of and the circumstances surrounding the matter that should have been reported. The NRC had not relied on information in this LER report to make a regulatory decision, and the inspector answered “no” to each of the more than minor screening questions in Appendix B of IMC 0612 for the issue of concern. Therefore, the NRC determined this was a minor violation because it was associated with a minor performance deficiency.

Violation: Failure to comply with 10 CFR 50.9 “Completeness and accuracy of information” and accurately report the nonconforming S/RV 12 spring tolerance in LER 05000374/2017–004–00 and –01 to the NRC constitutes a minor violation that is not subject to enforcement action in accordance with the NRC’s Enforcement Policy.

Observation	71153—Follow-Up of Events and Notices of Enforcement Discretion
The licensee issued LER 2018–001–00, “Unanalyzed Condition Affecting Accident Mitigation for Tornado Generated Missile Protection Non-Compliance,” in accordance with Enforcement Guidance Memorandum (EGM) 15–002, “Enforcement Discretion For Tornado Generated Missile Protection Non-Compliance,” issued on June 10, 2015 (ML15111A269) and revised on February 7, 2017 (ML16355A286). The LER documented tornado generated missile protection non-compliances which resulted in violations of NRC requirements. This issue has received enforcement discretion and has already been documented in NRC inspection report 05000373/2018001 and 05000374/2018001 (ML18131A300).	
Basis for Discretion: The NRC exercised enforcement discretion in accordance with Section 2.3.9 of the Enforcement Policy and EGM 15–002 because the licensee initiated initial compensatory measures that provided additional protection such that the likelihood of tornado missile effects were lessened. In addition, the licensee implemented more comprehensive	

compensatory measures to address the nonconforming conditions within the required 60 days. These comprehensive actions were to remain in place until permanent repairs were completed, which for LaSalle County Station were required to be completed by June 10, 2018, or until the NRC dispositioned the non-compliance in accordance with a method acceptable to the NRC such that discretion was no longer needed. On March 20, 2018, the licensee submitted a request to extend the period of enforcement discretion (ML18079B139). On April 12, 2018, the NRC approved the extension until June 10, 2020 (ML18094A250).

The disposition of this enforcement discretion closes LER 05000373/374/2018-001-00.

## EXIT MEETINGS AND DEBRIEFS

The inspectors confirmed that proprietary information was controlled to protect from public disclosure. No proprietary information was documented in this report.

- On July 9, 2018, the inspectors presented the quarterly integrated inspection results to Mr. W. Trafton and other members of the licensee staff.

## DOCUMENTS REVIEWED

### 71111.01—Adverse Weather Protection

- LOA-AP-101; Unit 1 AC Power Systems Abnormal; Revision 58
- LOA-AP-201; Unit 2 AC Power Systems Abnormal; Revision 52
- LOA-LOOP-101-201; Loss of Off-Site Power; Revision 6
- OP-AA-108-107-1001; Station Response to Grid Capacity Conditions; Revision 7
- OP-AA-108-107-1002; Interface Procedure Between BGE/COMED/PECO and Exelon Generation (Nuclear/Power) for Transmission Operations; Revision 11

### 71111.04—Equipment Alignment

- AR 4039087; "CCP—Configuration Control Recommendation"
- AR 4082868; "U2 LPCS/A RHR Water Leg Pump Degrading"
- AR 4112499; "LPCS Pump Failed to Start During RTT"
- AR 4119655; "1A TDRFP Min Flow Valve Position Indication Issue"
- AR 4146322; "1E21-N413 Switch is Not Like for Like"
- LOP-HP-02E; Unit 2 High Pressure Core Spray Electrical Checklist; Revision 5
- LOP-HP-02M; Unit 2 High Pressure Core Spray Mechanical Checklist; Revision 18
- LOP-HP-03; Preparation for Standby Operation of High Pressure Core Spray System (HPCS); Revision 19
- LOP-LP-01M; Unit 1 Low Pressure Core Spray Mechanical Checklist; Revision 13
- LOP-RI-05; Preparation for Standby Operation of the Reactor Core Isolation Cooling System; Revision 34
- LOP-VG-01; Preparation for Standby Operation of the Standby Gas Treatment System; Revision 12
- LOP-VG-01E; Unit 1 Standby Gas Treatment System Electrical Checklist; Revision 6
- LOP-VG-01M; Unit 1 Standby Gas Treatment System Mechanical Checklist; Revision 6
- LP-1; Training Diagram, Low Pressure Core Spray System; Revision 0
- M-101; P&ID Reactor Core Isolation Coolant (RCIC); Revision BH
- M-140; P&ID; Low Pressure Core Spray (L.P.C.S.); Revision AP

- M-141; P&ID High Pressure Core Spray (HPCS); Revision AS

#### 71111.05AQ—Fire Protection Annual/Quarterly

- FZ 4E4; Aux. Bldg. 731'–0" Elev. U2 Division 2 Essential Switchgear Room; Revision 2
- FZ 2F; Rx. Bldg. 740'–0" Elev. U1 General Area & CRD Repair Room; Revision 1
- FZ 2I2; Rx Bldg. 673'–4" Elev. U1 HPCS Cubicle
- FZ 4F1; Aux. Bldg. 710'–0" Elev. U1 Division 1 Essential Switchgear Room
- LSCS–FPR, Fire Protection Report, Appendix H, Fire Hazards Analysis; Revision 8
- AR 414390; NRC Identified Missing Signatures in W/O 1886493–01
- M-1388; Aux Bay Vent & A/C System Elevation 710'–6 Revision U
- LMS–FP–22; Fire Damper Surveillance Log (Part 1) For PMID 00097162 01; 12/14/2015
- LMS–FP–22; Fire Damper Surveillance Log (Part 1) For PMID 00097162 01; 5/9/2018
- Fire Zone 5D2, HPCS Switchgear Room
- LSCS–FPR H.3–84; Unit 2 Division 2 Essential Switchgear Room—Fire Zone 4E4; Revision 8
- LSCS–FPR H.3–1; Fire Zone Safety-Related Equipment Table; Revision 8
- LSCS–FPR H.3–2; Combustible Loading and Extinguishing Capability Table; Revision 8
- LSCS–FPR H.3–14; Combustible Materials FZ 2F; Revision 8
- LSCS–FPR H.3–16; Combustible Materials FZ 2G; Revision 8

#### 71111.11—Licensed Operator Requalification Program and Licensed Operator Performance

- AR 4130643; "NRC Identified Issue—Training"
- AR 4138286; "Div I Post LOCA Gross Gamma Rad Monitro Failed"
- LaSalle Unit 1—L1C18 May Sequence Exchange; 5/20/2018
- LGA–001; RPV Control; 2018
- LGA–003; Primary Containment Control; 2018
- LGP–3–1; Power Changes; Revision 66
- LGP–3–2; Reactor Scram; Revision 73
- LOA–AP–1010; Unit 1, AC Power System Abnormal; Revision 58
- LOA–EH–101; Unit 1 EHC Abnormal; Revision 35
- LOA–PWR–101; Unit 1 Unplanned Reactivity Addition; Revision 14
- LOA–RM–101; Unit 1 RCMS Abnormal Situations; Revision 20

#### 71111.12—Maintenance Effectiveness

- AR 4122070; "LAS–2–HG–03 (2–1) MRule Availability Criteria Exceeded"
- ER–AA–310–1003, Maintenance Rule – Performance Criteria Selection, Revision 5
- Maintenance Rule System Basis Document, Function LAS–1(2)–HG–03
- Maintenance Rule Performance Criteria Selection LAS–1(2)–HG–03, 5/31/18
- Maintenance Rule Monthly Evaluation, Function LAS–1(2)–HG–03, 5/31/18
- Maintenance Rule Expert Panel Meeting Minutes, 5/31/18

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

- AR 4013471; Oversight of Risk Management Process
- AR 03981990; "Op Risk Activities Review ATWS/RRCS/ARI PMS"
- AR 4039087; "CCP—Configuration Control Recommendation"
- AR 4041051; "NWS Issues Thunderstorm Warning—OnLine Risk Yellow U1/U2"
- AR 4041051; NWS Issues Thunderstorm Warning—Online Risk Yellow U1/U2
- AR 4043747; "OPS May Be Challenged in Determining On Line Risk"

- AR 4132872; "4.0 Critique for First-Time Load Following on Unit 2"
- AR 4133171; "Potential Missile Hazards in/near U1 Transformer Yard"
- AR 4137631; "LOA-TORN-001 Entered Due to Severe Thunderstorm Warning"
- Emergency Procedures Postings; Emergency Messages; 4/30/2017–5/1/2018
- LOA-TORN-001; High Winds / Tornado; Revision 23
- OMB 3150-0011; GL 2006-02, Grid Reliability and the Impact on Plant Risk and the Operability of Offsite Power, ML060180352; 2/1/2006
- OP-AA-102-101; Management of Nuclear Generation; Revision 15
- OP-AA-108-107-1001/ WC-AA-101; Work Management Guide for Weather Related Alerts Procedural Guidance; Undated
- OP-AA-108-107-1001; Station Response to Grid Capacity Conditions; Revision 7
- OP-AA-108-117; Protected Equipment Program; Revision 5
- OP-LA-101-111-1002; Main Generator Voltage Changes; Revision 32
- U1 Ops Rounds Checklist, Control Room Rounds; undated
- WC-AA-101; On-Line Work Control Cycle / Factors List; Revision 27
- WC-AA-101; On-Line Work Control Process; Revision 27
- WC-AA-101; On-Line Work Control Process; Revision 27ER-AA-310; Implementation of the Maintenance Rule; Revision 11
- WC-AA-104; Integrated Risk Management; Revision 25
- WC-AA-2000; Emergent Issue Response; Revision 8

#### 71111.15—Operability Determinations and Functionality Assessments

- 1E-0-4432BE; Schematic Diagram Control Room HVAC System "VC" Part 29; Revision R
- 1E-0-4569AB; Internal/External Wiring Diagram Control Room HVAC Intake Monitoring Panel OPM14J Part 2; Revision 0
- 1E-1-4218ZA; Loop Schematic Diagram Process Radiation Monitoring System "PR" (D18); Revision G
- AR 2679808; "Leakage Identified on Supply Header for Lower Coil 2VY03A"
- AR 2690060; "New IR Needed for WGE for 2VY03A Leak"
- AR 4104994; "1B DG AC Circulating Oil Pump Tripped"
- AR 4114241; "Need High Point Vents in ECCS Systems"
- AR 4122233; "NRC Questions on RCIC Piping Void Calculation"
- AR 4139831; "Water Leak on Piping Inside VY Cooler (2VY03A)"
- AR 4140182; "Limitation for 2VY03A per EC 624352 Evaluation"
- AR 4141032; "Rad Monitor 1D18-K751C Failed Downscale"
- ASME IX-1000; Mandatory Appendix IX, 2007 Section XI, Division 1
- ASME Section XI Repair/Replacement Plan, 02/2VY03A; 5/22/2018
- EC 337814; Loss of Either the Circulating Oil Pump or the Turbocharger Soak Back Oil Pump
- EC 364833; Evaluation of Allowable L2R11 Line Stop Leakage During Testing; Revision 0
- EC 624352; 2VY03A Cooler Tubing Inlet Riser Repair Evaluation; Revision 000
- ISI-RI-1006; Inservice Inspection Isometric Reactor Core Isolation Coolant System; Revision A
- L-004047; Allowable Gas Accumulation in Susceptible RCIC Piping; Revision 1
- LOA-PR-101; Unit 1 Process Radiation Monitoring System Abnormal; Revision 17
- Operations Log, 5/24/2018
- WO 1341616-01; Chemical Cleaning of Waterside of 2VY03A Cooler; 10/24/2011

#### 71111.18—Plant Modifications

- (Draft) Failure Analysis Report, Fuse OT15, FirstEnergy BETA, Laboratory Services Section, Undated
- 1E-1-4220AF; Schematic Diagram Residual Heat Removal System "RH" (E12) Part 657; Revisions O, P
- 1E-1-4220CJ; Schematic Diagram Residual Heat Removal System "RH" (E12) Part 57; Revisions R, Q
- 1E-1-4220CJ; Schematic Diagram Residual Heat Removal System "RH" (E12) Part 57; Revision T
- ANSI/ANS-3.2-1988; Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants; 6/23/2008
- AR 1321386; "Comple Open Attributes for EC 380792"
- AR 361872; "Provide Temporary ELBP to Support Operations Evaluation 05-004 Compensatory Actions"
- AR 4101058; "Fuse Replacement for D RHR WS Breaker"
- AR 4123073; "Emergency Light on Cart in Support Operations Evaluation 05-004"
- AR 4125627; "NRC Follow-up Question"
- CC-AA-206; Fuse Control; Revision 11
- CC-AA-206-1000; Fuse Replacement; Revision 2
- CR 2016-02048, Perry, Casual Investigation for Loss of Division 1 EH11 4160 Volt Bus; 2016
- EC 380786; 50.59 Review, MSO Mod for Pumps 1E12-C300C and D (Scenarios 5D, 16 and 22); Revision 000
- ER-AA-200-1001; Equipment Classification; Revision 4
- IR 4100844, Assignment 16; Quality Signoff, System Engineer to Classify Relays & Initiate PMMRs, as Required; 5/18/2018
- IR 4100844; MRC Investigation Review of 1D RHRSW Pump Auto Tripped on Start; 3/30/2018
- L11-52; EC 380786; 50.59 Screening of Installation of Protective Circuitry to Prevent RHR SW Pump Damage; Revision 000
- LER 05000-440/2016-003-00; Loss of Safety Related Electrical Bus Results in a Loss of Shutdown Cooling; 4/8/2016
- LOP-AP-04; Racking in a G.E. 4160 Volt Motor Operated Air Circuit Breaker; Revision 15
- MA-AA-716-210; Document Site and Corporate Approval Forms, Performance Centered Maintenance (PCM) Process; 1/10/2011 and 3/16/2011
- MA-AA-723-601; Inspection, Maintenance, and Replacement of GE Type HMA Relays; Revision 5
- PMMR PMC-18-107934; Equipment Listing K300 Relays (RHR Service Water Pump); 6/5/2018
- Relays—Control Timining, As-Found Testing; 1/21/2002
- SRRS 1B.100; MA-AA-716-210; Performance Centered Maintenance (PCM) Process; 1/10/2011

#### 71111.19—Post Maintenance Testing

- AR 2537256; "10 CFR Part 21 Involving Limit Switches EA180 & EA170"
- AR 2713703; "RCIC Trip and Throttle Valve Tripped"
- AR 2729757; "U-1 RCIC Trip on Low Suction Pressure"
- AR 2742254-05; "Document RCR"
- AR 3952068; "U2 RCIC Governor (*sic*) Controls"
- AR 3972964; "Failed PMT on 2B21-F430B for Loss of Valve Position Lights"
- AR 3985811; "Maintenance Rule (A)(1) Determination for LAS-0-DG-01"

- AR 4137633; "Trending Valve Position changes for Div 1 VY Area Coolers"
- AR 4139358; "Switch 1C71–N006C Took Too Long to Actuate"
- AT 2742254–XX; Root Cause: EG–R Failed Due to Inadequate Management of its Preventive Maintenance Strategy; 5/30/2017
- SM–AA–102; Receipt 220049, Quality Receipt Inspection for: Controller, Basic, Refurbished; 1/31/2017
- WO 01923082–36; 2VY02A Cooler Leak and Flow Check; 04/18/2018
- WO 01923082–37; Differential Pressure Test Cooler 2VY02A; 04/18/2018
- WO 1471593–01; U2 RCIC Discharge Flow Controller (Rebuild/Replace); 1/3/2018
- WO 2537256–02; M. Musser Note: Supply/Procurement Engineering Applicability Review—Determine Station Impact of Affect Namco Switches; 5/2018
- WO 4622688–15; Chemical Cleaning of Waterside of 1VY01A Cooler; 5/19/2018
- WO 4684002–02; Troubleshoot U1 TSV; 5/20/2018
- WO 4759096–01; LOS–RP–Q2 U1 Turbine Stop Valves Att 1A; 5/20/2018

#### 71111.22—Surveillance Testing

- 1E–2–4205AB; Schematic Diagram Reactor Recirculation System "RR" (B33) Part 2; Revision T
- 1E–2–4207BD; Schematic Diagram Alternate Rod Insertion Alarms System "RD" (C22) Part 4; Revision D
- 1E–2–4207BE; Schematic Diagram Alternate Rod Insertion Alarms Sys. RD (C22) Part 5; Revision A
- 1E–2–4655AB; Internal/External Wiring Diagram Alternate Rod Insertion Div. 1 Control Panel 2H14–P800; Revision I
- 1E–2–4656AE; Internal/External Wiring Diagram Alternate Rod Insertion Div. 2 Control Panel 2H13–P801; Revision F
- AR 4090577; "Opportunity to Re-classify Piping"
- AR 4093219; "ODG023A Failed PMT After Repairs Under WO# 01933262–01"
- AR 4109393; "Minor Oil Leak from 0 DG Lube Oil Cooler"
- AR 4135717; "Inst. OOT, 1C11–N013A, Trend Code B3"
- AR 4137624; "RM—Unexpected Alarm 1H13–P603–A403 CRD HYD Temp Hi 30–31"
- AR 4139347; "RM—U1 Rod 38–35 Notch 45 and 39 Within 90% of T.S. Limit"
- AR 4139371; "RM—U1 Channel Distortion Testing Results"
- EC 405467, Revise Acceptance Criteria for Quarterly "Group B" and "Biennial Comprehensive" Pump Test on LPCS Pump 1E21–C001, Revision 0
- Figure 11–3; Fuel Oil System Non-HPCS Diesels (Training); 8/24/1999
- IST Program Plan, Technical Position TP–06, Categorization of IST Pumps (Group A or B), Revision 1
- LIS–NB–219A; Unit 2 Reactor Vessel Low Water Level 2 ARI/ATWS Instrument Channels A & C Calibration; Revision 11
- LOS–DG–RO; "0" Diesel Generator 24 Hour Testing; 4/11/2018
- LOS–LP–Q1, LPCS System Inservice Test, Revision 58
- PMRQ 91306–01; Surveillance History Report for RX Low Water Level 2 ARI/ATWS Channels A & C
- WO 1876429; RX Low Water Level 2 ARI/ATWS Channels A & C; 4/27/2018
- WO 1876429–01; RX Low Water Level 2 ARI/ATWS Channels A–C; 4/26/2018
- WO 4762072–01; Tech Spec Surveillance SCRAM Time / 10% of Rods/Every 120 Days, LOS–RD–SR12; 5/21/2018
- WO 4658557–01, U1 LPCS Biennial Comprehensive IST Pump Test, 6/13/18

#### 71114.06—Drill Evaluation

- 2Q18 Paper Driven Drill Scenario; 5/30/2018
- AR 4142614; “2Q Drill Set F&E Issues—PA Speakers and R\*Time”
- SRRS-5B.100; Shift Emergency Directory Checklist, EP-AA-112-100-F-01; Revision Z

#### 71151—Performance Indicator Verification

- LOS-AA-S101; Unit 1 Shiftly Surveillance; Revision 105
- LOS-AA-S201; Unit 2 Shiftly Surveillance; Revision 103
- LS-AA-2100; Monthly Date Elements for NRC Reactor Coolant System (RCS) Leakage; Revision 6

#### 71153—Follow-Up of Events and Notices of Enforcement Discretion

- AR 04134585, Potential Finding Regarding Compliance With GE Design; 05/04/2018
- AR 04134591, Potential Minor Violation for Unit 2 LER 2017-04-01; 05/04/2018
- AR 04134599, Potential Green NCV for not Meeting OM Code Requirement; 05/05/2018
- AR 04133521, NRC Question Regarding SILs Related to SRVs; 05/02/2018
- AR 02452723, 2B21-F013M Fails Set Pressure Test for IST; 02/14/2015
- AR 02450121, 2B21-F013S - SRV S Solenoid Valve; 02/10/2015
- AR 03974669, 2B21-F013C Fails Set-Pressure Test; 02/16/2017
- AR 03975216, 2B21-F013L Fails Set-Pressure Test; 02/17/2017
- AR 00039378, DRV 2B21-F013A Failed Bench Test; 11/24/2000
- General Electric Design Specification DCA22A6441; Revision 3.
- General Electric RICSIL 44; 06/25/1989
- General Electric RICSIL 57; 04/02/1991
- General Electric RICSIL 563; 07/22/1993
- Licensee Event Report, 05000374/2017-004-01, Two Main Safety Relief Valves Failed Inservice Lift Inspection Pressure Test, 07/14/2017
- NWS Technology, Letter; LaSalle SRV s/n N63790-05-0012—As Found Failure; Undated
- NWS Technology, Letter; LaSalle SRV s/n N63790-05-0077—As Found Failure; Undated
- NWS Technology, Customer Equipment Anomalies Report 17-344; 10/24/2017
- NWS Technology, Spring Data Sheet Valve Serial Number N63790-05-0012; 05/08/2017
- Purchase Order 00487681; Revision 13.
- QAI-3224 Supplement 1, Crosby Quality Assurance Instruction ASME Section III Class 1, Revision 23
- AR 04105079; Damage to Bus 143-1
- LES-GM-108; Inspection of 480V Motor Control Center Equipment (International Switchboard/GE); Revision 24
- EC 623373; MCC 143-1 Bus Bar Damage Extent of Condition Recommended Actions for L1R17; Revision 001
- WO 04747663-08; Perform LES-GM-108 Attachment 2 for 1AP79E; dated 02/19/2018