UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
2100 RENAISSANCE BOULEVARD, SUITE 100
KING OF PRUSSIA, PENNSYLVANIA 19406-2713

August 10, 2021

Mr. David P. Rhoades
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, UNITS 1 AND 2 – INTEGRATED INSPECTION REPORT 05000317/2021002 AND 05000318/2021002

Dear Mr. Rhoades:

On June 30, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Calvert Cliffs Nuclear Power Plant, Units 1 and 2. On July 29, 2021, the NRC inspectors discussed the results of this inspection with Mr. Thomas Haaf, Site Vice President and other members of your staff. The results of this inspection are documented in the enclosed report.

One finding of very low safety significance (Green) is documented in this report. This finding involved a violation of NRC requirements. We are treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2 of the Enforcement Policy.

A licensee-identified violation which was determined to be of very low safety significance and Severity Level IV is documented in this report. We are treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2 of the Enforcement Policy. The NRC will not conduct a follow-up inspection for this violation because it does not involve any of the initiating criteria in Inspection Procedure 92702, “Follow-up on Traditional Enforcement Actions Including Violations, Deviations, Confirmatory Action Letters, and Orders."

If you contest the violations or the significance or severity of the violations documented in this inspection report, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region I; the Director, Office of Enforcement; and the NRC Resident Inspector at Calvert Cliffs Nuclear Power Plant, Units 1 and 2.

If you disagree with a cross-cutting aspect assignment in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk,

Washington, DC 20555-0001; with copies to the Regional Administrator, Region I; and the NRC Resident Inspector at Calvert Cliffs Nuclear Power Plant, Units 1 and 2.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at http://www.nrc.gov/reading-rm/adams.html and at the NRC Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

Matthew R. Young

Digitally signed by Matthew R. Young
Date: 2021.08.10 08:52:56 -04'00'

Matt R. Young, Chief
Projects Branch 5
Division of Operating Reactor Safety

Docket Nos. 05000317 and 05000318
License Nos. DPR-53 and DPR-69

Enclosure:
As stated

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SUBJECT: CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2 – INTEGRATED INSPECTION REPORT 05000317/2021002 AND 05000318/2021002 DATED AUGUST 10, 2021

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U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report

Docket Numbers:	05000317 and 05000318
License Numbers:	DPR-53 and DPR-69
Report Numbers:	05000317/2021002 and 05000318/2021002
Enterprise Identifier:	I-2021-002-0112
Licensee:	Exelon Generation Company, LLC
Facility:	Calvert Cliffs Nuclear Power Plant, Units 1 and 2
Location:	Lusby, MD
Inspection Dates:	April 1, 2021 to June 30, 2021
Inspectors:	H. Anagnostopoulos, Senior Health Physicist D. Beacon, Resident Inspector K. Chambliss, Project Engineer R. Clagg, Senior Resident Inspector S. Obadina, Resident Inspector
Approved By:	Matt R. Young, Chief Projects Branch 5 Division of Operating Reactor Safety

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an integrated inspection at Calvert Cliffs Nuclear Power Plant, 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. A licensee-identified non-cited violation is documented in report section: 71153.

List of Findings and Violations

Failure to Properly Reset the 22 Auxiliary Feedwater Pump Results in Pump Inoperability			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000318/2021002-01 Open/Closed	[H.7] - Documentation	71111.15
The inspectors identified a Green finding and associated non-cited violation of Technical Specification 5.4.1, "Procedures," when the licensee failed to properly reset the 22 auxiliary feedwater pump trip throttle valve as required by site procedures. Specifically, on March 20, 2021, the licensee failed to ensure that the trip throttle valve trip hook and latch-up lever was fully engaged as required by STP-O-5A22-2, "22 Auxiliary Feedwater Pump Quarterly Surveillance Test," Revision 8, which resulted in the inoperability of the 22 auxiliary feedwater pump and failure to take the required actions of Technical Specification Limiting Conditions for Operation 3.7.3.A and 3.7.3.E within the required completion times.			

Additional Tracking Items

Type	Issue Number	Title	Report Section	Status
LER	05000318/2021-001-00	LER 2021-001-00 for Calvert Cliffs Nuclear Power Plant Unit No. 2, Pressure Heater Sleeve Weld Pressure Boundary Leakage Caused by Primary Water Stress Corrosion Cracking	71153	Closed

PLANT STATUS

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

Unit 2 operated at or near rated thermal power for the entire 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 reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards. Starting on March 20, 2020, in response to the National Emergency declared by the President of the United States on the public health risks of the coronavirus (COVID-19), resident and regional inspectors were directed to begin telework and to remotely access licensee information using available technology. During this time, the resident inspectors performed periodic site visits each week, increasing the amount of time on site as local COVID-19 conditions permitted. As part of their onsite activities, resident inspectors conducted plant status activities as described in IMC 2515, Appendix D; observed risk significant activities; and completed on site portions of IPs. In addition, resident and regional baseline inspections were evaluated to determine if all or a portion of the objectives and requirements stated in the IP could be performed remotely. If the inspections could be performed remotely, they were conducted per the applicable IP. In some cases, portions of an IP were completed remotely and on site. The inspections documented below met the objectives and requirements for completion of the IP.

REACTOR SAFETY

71111.01 - Adverse Weather Protection

Seasonal Extreme Weather Sample (IP Section 03.01) (1 Sample)

(1) The inspectors evaluated readiness for seasonal extreme weather conditions prior to the onset of seasonal hot temperatures for the Units 1 and 2 emergency diesel generators and the intake structure on June 15, 2021.

71111.04 - Equipment Alignment

Partial Walkdown Sample (IP Section 03.01) (4 Samples)

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

(1) Unit 2, 21 component cooling heat exchanger during 22 component heat exchanger is out of service for maintenance, April 16, 2021
(2) Unit 2, 23 auxiliary feedwater pump during Unit 1 steam-driven auxiliary feedwater emergency ventilation is out of service for maintenance, May 25, 2021

(3) Unit 2, 23 saltwater pump during 21 saltwater pump is out of service for maintenance, June 4, 2021
(4) Units 1 and 2, emergency diesel generators during 0C diesel generator out of service for maintenance, June 14, 2021

Complete Walkdown Sample (IP Section 03.02) (1 Sample)

(1) The inspectors evaluated system configurations during a complete walkdown of the Unit 1 emergency diesel generators on June 2, 2021.

71111.05 - Fire Protection

Fire Area Walkdown and Inspection Sample (IP Section 03.01) (5 Samples)

The inspectors evaluated the implementation of the fire protection program by conducting a walkdown and performing a review to verify program compliance, equipment functionality, material condition, and operational readiness of the following fire areas:

(1) Units 1 and 2, component cooling water pump rooms, fire areas 12 and 15, May 6, 2021
(2) Units 1 and 2, 5' fan rooms, fire areas 13 and 14, May 6, 2021
(3) Units 1 and 2, emergency diesel generator rooms, fire areas 28, 30 and 31, May 24, 2021
(4) Unit 2, switchgear and purge air rooms, fire areas 18, 18A and 25, June 29, 2021
(5) Unit 1, emergency core cooling system pump rooms, fire areas 3 and 4, June 30, 2021

71111.07A - Heat Sink Performance

Annual Review (IP Section 03.01) (1 Sample)

The inspectors evaluated readiness and performance of:

(1) 21 component cooling heat exchanger maintenance and testing, June 7, 2021

71111.11Q - Licensed Operator Requalification Program and Licensed Operator Performance

Licensed Operator Performance in the Actual Plant/Main Control Room (IP Section 03.01) (1 Sample)

(1) The inspectors observed and evaluated licensed operator performance in the main control room during Unit 1 main turbine valve testing on May 22, 2021.

Licensed Operator Requalification Training/Examinations (IP Section 03.02) (1 Sample)

(1) The inspectors observed a simulator training event involving a super storm, loss of offsite power, and the failure of all diesels to start resulting in the declaration of a Site Area Emergency and the entry into extended loss of alternating current procedure on May 21, 2021.

71111.12 - Maintenance Effectiveness

Maintenance Effectiveness (IP Section 03.01) (2 Samples)

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

(1) Unit 1, compressed air system, June 30, 2021
(2) Unit 2, containment spray system, June 30, 2021

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Risk Assessment and Management Sample (IP Section 03.01) (7 Samples)

The inspectors evaluated the accuracy and completeness of risk assessments for the following planned and emergent work activities to ensure configuration changes and appropriate work controls were addressed:

(1) Unit 2, elevated risk condition due to preventive maintenance on the 22 component cooling heat exchanger, April 15, 2021
(2) Unit 1, elevated risk condition due to preventative maintenance on 11A service water heat exchanger, May 6, 2021
(3) Unit 2, elevated risk condition due to 23 saltwater pump motor replacement, May 21, 2021
(4) Unit 2, elevated risk condition due to preventative maintenance on 21 saltwater pump, June 2, 2021
(5) Units 1 and 2, review of fire risk management actions for 0C diesel generator out of service for maintenance, June 16, 2021
(6) Unit 2, review of risk management actions for charging of the 21 main steam isolation valve nitrogen accumulator, June 16, 2021
(7) Unit 2, elevated risk condition due to 22 steam generator auxiliary feedwater flow control valve maintenance, June 21, 2021

71111.15 - Operability Determinations and Functionality Assessments

Operability Determination or Functionality Assessment (IP Section 03.01) (7 Samples)

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

(1) Unit 1, AR04426678, debris ingestion into 11A/B service water heat exchanger, May 31, 2021
(2) Unit 2, AR04427200, defect in base of 21 steam generator feed pump, June 3, 2021
(3) Unit 1, AR04428393, debris adhered to 12 auxiliary feedwater pump governor valve stem system, June 9, 2021
(4) Unit 1, AR04424010, reactor protection system channel A calibration potentiometer setpoint issue, June 16, 2021
(5) Unit 2, AR04411634, 22 auxiliary feedwater pump trip throttle valve engagement issue, June 22, 2021

(6) Unit 1, AR04425768, 11 control room heating, ventilation, and air conditioning system inoperable due to broken condenser fan motor mounting bolt, June 22, 2021
(7) Unit 1, AR04431830, ultimate heat sink, degrading cooling, 11A service water heat exchanger flow less than 5000 gallons per minute, June 27, 2021

71111.18 - Plant Modifications

Temporary Modifications and/or Permanent Modifications (IP Section 03.01 and/or 03.02) (1 Sample)

The inspectors evaluated the following temporary or permanent modifications:

(1) Units 1 and 2, WO C93776700, installation of nano bubbler in the intake structure, June 30, 2021

71111.19 - Post-Maintenance Testing

Post-Maintenance Test Sample (IP Section 03.01) (9 Samples)

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

(1) Unit 1, WO C93713781, auxiliary feedwater to 12 steam generator flow control valve actuator replacement and testing, May 12, 2021
(2) Unit 1, WO C93793597045, 12 high pressure safety injection pump coupling guard replacement, May 19, 2021
(3) Unit 2, WO C93700861, remove and replace 21 saltwater pump and inspection coupling, June 3, 2021
(4) Unit 2, WO C93780925, 2RV431, 21 shutdown cooling heat exchanger relief valve maintenance testing, June 4, 2021
(5) Unit 2, WO C93696722, 23 saltwater pump motor replacement, June 14, 2021
(6) Units 1 and 2, WO C93707413, replace 0C diesel generator overspeed/speed field flash switches, June 14, 2021
(7) Unit 2, WO C93622313, 2SV5212, 22B service water heat exchanger saltwater outlet valve replacement and testing, June 15, 2021
(8) Unit 2, WO C93704562, 21 component cooling heat exchanger relief valve replacement and testing, June 22, 2021
(9) Unit 1, WO C93748496, 11 saltwater pump breaker maintenance, June 30, 2021

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

Surveillance Tests (other) (IP Section 03.01) (3 Samples)

(1) Unit 1, STP-O-065QB-1, "B Train Safety Injection System Valve Quarterly Operability Test," Revision 5, May 3, 2021
(2) Unit 2, STP-M-502-2, "Calibration Check of #21 4kV Bus LOCI and Shutdown Sequencer," Revision 002, May 5, 2021
(3) Unit 2, STP-O-73A2-2, "B Train Saltwater Pump and Check Valve Quarterly Operability Test," Revision 5, May 12, 2021

Inservice Testing (IP Section 03.01) (2 Samples)

(1) Unit 2, STP-O-5A21-2, "21 Auxiliary Feedwater Pump Quarterly Surveillance Test," Revision 8, May 12, 2021
(2) Unit 2, STP-O-65R-2, "ECCS Valves Powered From MCC-240R Operability Test," Revision 6, June 16, 2021

71114.06 - Drill Evaluation

Select Emergency Preparedness Drills and/or Training for Observation (IP Section 03.01) (1 Sample)

(1) The inspectors observed and evaluated the conduct of an Emergency Preparedness drill involving a loss of offsite power, failure of the 1A emergency diesel generator, steam-driven auxiliary feedwater pump trips, lowering steam generator levels, and a steam leak from containment emergency airlock resulting in a General Emergency declaration on May 12, 2021.

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

The inspectors evaluated:

(1) The conduct of a simulator training evolution involving a solar magnetic disturbance, loss of offsite power, and a reactor trip resulting in a Notice of Unusual Event declaration on June 24, 2021.

RADIATION SAFETY

71124.02 - Occupational ALARA Planning and Controls

Radiological Work Planning (IP Section 03.01) (3 Samples)

The inspectors evaluated the licensee's radiological work planning.

(1) Outage Reactor Head Disassembly/Reassembly (CC-2-21-00613)
(2) Outage Aux/Containment Scaffold (CC-1-20-00505)
(3) DM Weld Repair (CC-2-19-00413)

Verification of Dose Estimates and Exposure Tracking Systems (IP Section 03.02) (3 Samples)

The inspectors evaluated dose estimates and exposure tracking.

(1) ALARA Plan 21R-0010
(2) ALARA Plan 20R0028
(3) ALARA Plan 19RFO-0062

Implementation of ALARA and Radiological Work Controls (IP Section 03.03) (2 Samples)

The inspectors reviewed as low as reasonably achievable practices and radiological work controls.

(1) Routine calibration of the containment hi-range radiation monitors (accident monitors)
(2) Removal of the fuel transfer tube blind flange

Radiation Worker Performance (IP Section 03.04) (1 Sample)

The inspectors evaluated radiation worker and radiation protection technician performance during:

(1) Calibration of the containment hi-range radiation monitors

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

MS05: Safety System Functional Failures (SSFFs) Sample (IP Section 02.04) (2 Samples)

(1) Unit 1, April 1, 2020 - March 31, 2021
(2) Unit 2, April 1, 2020 - March 31, 2021

71152 - Problem Identification and Resolution

Semiannual Trend Review (IP Section 02.02) (1 Sample)

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

71153 - Follow Up of Events and Notices of Enforcement Discretion

Event Report (IP Section 03.02) (1 Sample)

The inspectors evaluated the following licensee event reports (LERs):

(1) LER 05000318/2021-001-00 for Calvert Cliffs Nuclear Power Plant Unit No. 2, Pressure Heater Sleeve Weld Pressure Boundary Leakage Caused by Primary Water Stress Corrosion Cracking. The circumstances surrounding this LER and identified violation are discussed in the Inspection Results section of this report. No additional violations were identified.

INSPECTION RESULTS

Failure to Properly Reset the 22 Auxiliary Feedwater Pump Results in Pump Inoperability			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000318/2021002-01 Open/Closed	[H.7] - Documentation	71111.15
The inspectors identified a Green finding and associated non-cited violation of Technical Specification 5.4.1, "Procedures," when the licensee failed to properly reset the 22 auxiliary feedwater pump trip throttle valve as required by site procedures. Specifically, on March 20,			

2021, the licensee failed to ensure, that the trip throttle valve trip hook and latch-up lever was fully engaged as required by STP-O-5A22-2, "22 Auxiliary Feedwater Pump Quarterly Surveillance Test," Revision 8, which resulted in the inoperability of the 22 auxiliary feedwater pump and failure to take the required actions of Technical Specification Limiting Conditions for Operation 3.7.3.A and 3.7.3.E within the required completion times.

Description: On March 24, 2021, the inspectors identified a misalignment of the 22 auxiliary feedwater pump trip throttle valve trip hook and the latch-up lever. The trip throttle valve is part of the overspeed trip mechanism for the auxiliary feedwater pump and functions to shut off steam to the turbine on an overspeed condition. During normal operation, the trip throttle valve is fully open, and is held open against spring pressure by a tripping latch. The licensee initiated AR04411634 and performed an inspection of the trip hook on March 25, 2021. The licensee conducted an operability evaluation, documented in AR04411634, and determined that the 22 auxiliary feedwater pump would operate and not trip in the as found condition due to sufficient engagement existing to provide reasonable assurance that the pump will perform its intended safety function for the duration of a design basis event. In addition, the licensee reset the 22 auxiliary feedwater pump and confirmed proper engagement of the trip throttle valve trip hook and latch-up lever.

The inspectors reviewed AR04411634 and noted that the operability evaluation was based on engineering judgment and did not include a specification for engagement between the trip throttle valve trip hook and latch-up lever. The inspectors reviewed licensee procedure TURB-004, "AFW Turbine Overspeed Trip Adjustment," Revision 0500, and noted that step 6.1.18 states "ensure latching faces are as follows: (6) Contact is at least 75% of surface area." The inspectors noted that the specification was derived from Electrical Power Research Institute Maintenance Manual, "Terry Turbine Maintenance Guide, AFW Application," TR 1007461. The inspectors reviewed the maintenance manual and noted that it requires proper surface contact and engagement between the trip throttle valve trip hook and latch-up lever, where surface contact is measured across the faces of the trip hook and latch-up lever and engagement is measured by how far the latch-up lever fits into the trip hook from left to right.

The inspectors reviewed the maintenance that was performed on the 22 auxiliary feedwater pump and noted that TURB-004 was satisfactorily completed on March 12, 2021. This procedure is required to be performed prior to overspeed trip testing as part of post-maintenance testing following maintenance activities on the pump. TURB-004 ensures that the 22 auxiliary feedwater pump's overspeed trip mechanism is restored to proper alignment following maintenance, specifically the procedure checks for proper engagement of the trip throttle valve trip hook and latch-up lever as well as proper contact surface area between the latching faces. The inspectors also noted that the 22 auxiliary feedwater pump was tested, after the maintenance activities were completed, on March 20, 2021. The post-maintenance testing of the auxiliary feedwater pump was performed in accordance with STP-O-5A22-2, "22 Auxiliary Feedwater Pump Quarterly Surveillance Test," Revision 8. The inspectors reviewed the completed surveillance procedure and noted that it is used to reset the trip throttle valve trip hook and latch-up lever following post-maintenance testing and verifies that they are fully engaged. Step 6.1.3 of STP-O-5A22-2, states, that the trip throttle valve handwheel should be rotated clockwise until the valve trip/latch lever and trip hook are fully engaged. However, the inspectors determined that the trip hook and latch-up lever were not fully engaged in accordance with procedure. In addition, the inspectors determined that the station could not meet the requirement for 75% contact surface area since there was not enough overlap between the two surfaces (i.e. full engagement between the trip hook and latch-up lever). The inspectors concluded that due to the trip throttle valve and latch-up lever

not being fully engaged and not having at least 75% surface area contact there was reasonable doubt of the 22 auxiliary feedwater pump's operability from March 20, 2021 until March 26, 2021.

Corrective Actions: The licensee's immediate corrective actions included resetting the 22 auxiliary feedwater pump trip mechanism and confirming proper engagement of the trip throttle valve trip hook and latch-up lever. The licensee also revised STP-O-5A22-2, "22 Auxiliary Feedwater Pump Quarterly Surveillance Test," Revision 8, with a picture showing proper engagement of the trip hook and latch-up lever. In addition, the licensee took a video of resetting the 21 auxiliary feedwater pump trip throttle valve during the performance of quarterly surveillance to capture all the aspects that are checked. The video was supplied to training for inclusion in future auxiliary feedwater lesson plans.

Corrective Action References: AR04411634

Performance Assessment:

Performance Deficiency: The inspectors determined the licensee's failure to properly reset the 22 auxiliary feedwater pump trip throttle valve was a performance deficiency. Specifically, on March 20, 2021, the licensee failed to ensure, that the trip throttle valve trip hook and latch-up lever were fully engaged as required by STP-O-5A22-2, "22 Auxiliary Feedwater Pump Quarterly Surveillance Test," Revision 8, which resulted in the inoperability of the 22 auxiliary feedwater pump and failure to take the required actions of Technical Specification Limiting Conditions for Operation 3.7.3.A and 3.7.3.E within the required completion times.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Human Performance attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors reviewed IMC 0612, Appendix B, "Issue Screening," issued on January 1, 2020, and determined that the issue is more than minor because it was associated with the Human Performance attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, on March 20, 2021, the licensee failed to properly reset the trip throttle valve for the 22 auxiliary feedwater pump, which resulted in the inoperability of the pump.

Significance: The inspectors assessed the significance of the finding using Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." The inspectors assessed the significance of the finding using Exhibit 2 of IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power", issued on November 30, 2020, and determined that the finding represented a deficiency affecting the design or qualification of the mitigating structure, system, and component, where the operability of the structure, system, and component was not maintained. However, the degraded condition did not represent a loss of probabilistic risk assessment function of one train of a multi-train technical specification system for greater than its technical specification allowed outage time. Therefore, the inspectors determined the finding to be of very low safety significance (Green).

Cross-Cutting Aspect: H.7 - Documentation: The organization creates and maintains complete, accurate and up-to-date documentation. The inspectors determined that the licensee's surveillance procedure did not provide a complete description for resetting the trip

throttle valve. Specifically, the licensee surveillance procedure did not provide an adequate description of the steps required to ensure the trip throttle valve was fully engaged.

Enforcement:

Violation: The Renewed Facility Operating License for Calvert Cliffs Nuclear Power Plant, Unit 2, Technical Specification 5.4.1 requires, in part, that written procedures shall be established, implemented, and maintained as covered in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978, of which Section 8 requires procedures for surveillance tests of the auxiliary feedwater systems. Technical Specification 3.7.3.A for an inoperable steam-driven auxiliary feedwater pump requires the remaining operable steam-driven pump be aligned for automatic initiating status within 72 hours, and the steam-driven pump brought back to operable status within 7 days or the calculated risk informed completion time or brought to MODE 3 in 6 hours, and MODE 4 in 12 hours.

Contrary to the above, on March 20, 2021, the licensee failed to satisfactorily implement a surveillance test procedure, STP-O-5A22-2. As a result, from March 20, 2021 to March 26, 2021, the 22 auxiliary feedwater pump was inoperable. During this time, with one steam-driven pump inoperable, the licensee did not align the remaining steam-driven pump for automatic initiating status within 72 hours and did not bring the unit to MODE 3 or MODE 4 within the required completion times.

Enforcement Action: This violation is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.

Licensee-Identified Non-Cited Violation	71153

This violation of very low safety significance was identified by the licensee and has been entered into the licensee corrective action program and is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.

Violation: Technical Specification 3.4.13, "RCS Operational Leakage," prohibits pressure boundary leakage. Contrary to this, during planned visual examinations conducted each refueling outage, the licensee identified an inactive boric acid leak at a Unit 2 pressurizer heater sleeve penetration and subsequently determined that the leak most likely existed during plant operation. The inspectors determined that the cause of the violation was not within the licensee's ability to foresee and correct and therefore was not reasonably preventable. As a result, no performance deficiency was identified, and the resulting violation was dispositioned using the traditional enforcement process.

Significance/Severity: Green. Severity Level IV. The NRC Enforcement Policy, Section 2.2.1 states, in part, that, whenever possible, the NRC uses risk information in assessing the safety significance of violations. Accordingly, after considering that the condition was of very low safety significance, the inspectors concluded that the violation would be best characterized as Severity Level IV under the traditional enforcement process. For information, the inspectors screened the significance of the condition using IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power," issued on January 1, 2021, and determined that the condition was of very low safety significance (Green) because the leak did not result in exceeding the reactor coolant system leak rate for a small loss of coolant accident and did not affect systems used to mitigate a loss of coolant accident.

The disposition of this violation closes LER 05000318/2021-001-00.

Corrective Action References: AR04406378

EXIT MEETINGS AND DEBRIEFS

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

- On July 29, 2021, the inspectors presented the integrated inspection results to Mr. Thomas Haaf, Site Vice President and other members of the licensee staff.

THIRD PARTY REVIEWS

Inspectors reviewed Institute on Nuclear Power Operations reports that were issued during the inspection period.