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

February 2, 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 05000317/2020004 AND 05000318/2020004 AND INDEPENDENT SPENT FUEL STORAGE INSTALLATION INSPECTION REPORT 07200008/2020002

Dear Mr. Rhoades:

On December 31, 2020, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Calvert Cliffs Nuclear Power Plant, Units 1 and 2. On January 19, 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.

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

X /RA/

Signed by: Matthew R. Young

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

Docket Nos. 05000317, 05000318
and 07200008
License Nos. DPR-53 and DPR-69

Enclosure:
As stated

cc w/ encl: Distribution via LISTSERV®

SUBJECT: CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2 – INTEGRATED INSPECTION REPORT 05000317/2020004 AND 05000318/2020004 AND INDEPENDENT SPENT FUEL STORAGE INSTALLATION INSPECTION REPORT 07200008/2020002 DATED FEBRUARY 2, 2021

DISTRIBUTION:
DLew, RA (R1ORAMAIL Resource)
RLorson, DRA (R1ORAMAIL Resource)
DCollins, DRP (R1DRPMAIL Resource)
BPham, DRP (R1DRPMAIL Resource)
PKrohn, DRS (R1DRSMAIL Resource)
MFerdas, DRS (R1DRSMAIL Resource)
MYoung, DRP
LCline, DRP
KChambliss, DRP
RClagg, DRP, SRI
SObadina, DRP, RI
CFragman, DRP, AA
RSkokowski, RI OEDO
RidsNrrPMCalvertCliffs Resource
RidsNrrDorlLpl1 Resource
ROPReports Resource

DOCUMENT NAME: https://usnrc.sharepoint.com/teams/Region-I-Branch-5/Shared Documents/Inspection Reports/Calvert Cliffs/2020 Inspection Reports/2020-004 IR.docx
ADAMS ACCESSION NUMBER: ML21033A585

☑ SUNSI Review		☑ Non-Sensitive ☐ Sensitive		☑ Publicly Available ☐ Non-Publicly Available	
OFFICE	RI/DRP	RI/DRP	RI/DRP		
NAME	RClagg	LCline	MYoung		
DATE	2/1/21	2/2/21	2/2/21		

OFFICIAL RECORD COPY

U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report

Docket Numbers:	05000317, 05000318, and 07200008
License Numbers:	DPR-53 and DPR-69
Report Numbers:	05000317/2020004, 05000318/2020004 and 07200008/2020002
Enterprise Identifier:	I-2020-004-0069 I-2020-002-0114
Licensee:	Exelon Generation Company, LLC
Facility:	Calvert Cliffs Nuclear Power Plant, Units 1 and 2
Location:	Lusby, MD
Inspection Dates:	October 1, 2020 to December 31, 2020
Inspectors:	H. Anagnostopoulos, Senior Health Physicist E. Bousquet, Resident Inspector R. Clagg, Senior Resident Inspector J. Nicholson, Senior Health Physicist S. Obadina, Resident Inspector P. Ott, Operations Engineer
Approved By:	Matt R. Young, Chief Reactor Projects Branch 5 Division of Reactor Projects

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.

List of Findings and Violations

Failure to Promptly Identify and Correct a Condition Adverse to Quality for Unit 2 Service Water Heat Exchanger Inlet Valve			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000318/2020004-01 Open/Closed	[P.3] - Resolution	71152
The inspectors identified a Green finding and associated non-cited violation of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, Appendix B, Criterion XVI, "Corrective Action," when the licensee failed to correct a condition adverse to quality. Specifically, the licensee failed to correct saltwater intrusion into the valve actuator for 2-CV-5150, 21 A/B service water heat exchanger inlet valve, which resulted in the failure of the valve to fully close during testing on September 19, 2019.			

Additional Tracking Items

None.

PLANT STATUS

Unit 1 began the inspection period at rated thermal power. On December 12, 2020, the unit was down powered to 80 percent to support main turbine valve testing. The unit was returned to rated thermal power on December 12, 2020, and remained at or near rated thermal power for the remainder of the 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 performed plant status activities described in IMC 2515, Appendix D, "Plant Status," and conducted routine reviews using IP 71152, "Problem Identification and Resolution." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards. Starting on March 20, 2020, in response to the National Emergency declared by the President of the United States on the public health risks of the coronavirus (COVID-19), resident and regional inspectors were directed to begin telework and to remotely access licensee information using available technology. During this time the resident inspectors performed periodic site visits each week, increasing the amount of time on site as local COVID-19 conditions permitted. As part of their 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 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 cold temperatures for the Units 1 and 2 intake structures and Units 1 and 2 emergency diesel generators on December 16, 2020.

71111.04 - Equipment Alignment

Partial Walkdown Sample (IP Section 03.01) (3 Samples)

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

(1) Units 1 and 2, 12 main control room heating, ventilation, and air conditioning train during 11 main control room heating, ventilation, and air conditioning train out of service for maintenance, November 17, 2020
(2) Unit 1, 1A emergency diesel generator during maintenance and troubleshooting for 1H1102, 13.8 kilovolt automatic voltage regulator, after the loss of the 11 4 kilovolt safety related bus, December 8, 2020
(3) Unit 2, 21 and 22 saltwater trains during 23 saltwater pump out of service for maintenance, December 10, 2020

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

(1) The inspectors evaluated system configurations during a complete walkdown of the Unit 2 instrument air system on December 11, 2020.

71111.05 - Fire Protection

Fire Area Walkdown and Inspection Sample (IP Section 03.01) (3 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, cable chase 1A, 1B, 2A, 2B, and control room complex, fire areas 20-24, December 8, 2020
(2) Units 1 and 2, refueling water tanks, fire areas 29 and 44, December 15, 2020
(3) Units 1 and 2, 11-13 and 21-23 charging pump rooms, fire areas 5-7 and 8-10, December 16, 2020

71111.11A - Licensed Operator Requalification Program and Licensed Operator Performance

Requalification Examination Results (IP Section 03.03) (1 Sample)

(1) The inspectors reviewed and evaluated the licensed operator annual requalification results for the annual operating exam on December 10, 2020.

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 the loss of the 11 4 kilovolt bus and automatic actuation of the 1A emergency diesel generator, December 3, 2020.

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

(1) The inspectors observed and evaluated a simulator training event involving loss of all communication with the NRC, 13 saltwater pump malfunction, indication of steam leak from steam generator to penetration room, reducing power, reactor scram, and trip of the reactor coolant pumps resulting in a Site Area Emergency declaration on October 13, 2020.

71111.12 - Maintenance Effectiveness

Maintenance Effectiveness (IP Section 03.01) (3 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 2, AR04390574, 250 volts direct current 23 battery low specific gravity unsatisfactory, December 18, 2020
(2) Unit 1, AR04391365, tornado damper not opening correctly, December 21, 2020
(3) Unit 2, WO C93769867, 23 saltwater pump high thrust bearing temperatures, December 31, 2020

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Risk Assessment and Management Sample (IP Section 03.01) (3 Samples)

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

(1) Unit 1, elevated risk condition due to 1B emergency diesel generator out of service for planned maintenance and testing in conjunction with a tornado watch, December 2, 2020
(2) Unit 2, elevated risk condition due to 23 saltwater pump out of service for planned maintenance, December 10, 2020
(3) Unit 1, elevated risk condition due to loss of the 11 4 kilovolt emergency bus and automatic start of the 1A emergency diesel generator, December 29, 2020

71111.15 - Operability Determinations and Functionality Assessments

Operability Determination or Functionality Assessment (IP Section 03.01) (5 Samples)

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

(1) Unit 2, AR04379171, 23 saltwater pump thrust bearing temperature reached 244 degrees, November 4, 2020
(2) Unit 2, AR04382535, 21 auxiliary feedwater pump governor oil level high, November 9, 2020
(3) Unit 1, AR04383082, 12 auxiliary feedwater pump excessive seal leakage, November 10, 2020
(4) Units 1 and 2, AR04384715, 12 diesel fire pump oil filter leak, November 16, 2020
(5) Unit 2, AR04385978, reactor protection system channel A failed low, December 18, 2020

71111.18 - Plant Modifications

Temporary Modifications and/or Permanent Modifications (IP Section 03.01 and/or 03.02) (2 Samples)

The inspectors evaluated the following temporary or permanent modifications:

(1) Units 1 and 2, Engineering Change Package-20-000378, temporary change for Units 1 and 2 control element assembly position display system backup display computer disconnected, November 17, 2020
(2) Unit 1, Temporary Configuration Change-20-0097, remove component cooling water temperature high alarm on 11B reactor coolant pump, November 18, 2020

71111.19 - Post-Maintenance Testing

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

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

(1) Unit 1, WO C93724232, inspect and adjust packing 12 service water pump, November 9, 2020
(2) Unit 1, WO C93721814, lubricate 12 low pressure safety injection pump motor, November 10, 2020
(3) Unit 2, WO C93773616, 23 saltwater pump motor replacement, December 9, 2020
(4) Unit 1, WO C93773751, 11 4 kilovolt bus automatic voltage regulator replacement, December 10, 2020
(5) Unit 1, WO C93728555, 1B emergency diesel generator maintenance and testing, December 29, 2020

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

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

(1) Unit 2, STP-O-5A23-2, "23 Auxiliary Feedwater Pump Quarterly Surveillance Test," Revision 0, November 2, 2020
(2) Unit 1, STP-O-73I-1, "High Pressure Safety Injection Pump and Check Valve Quarterly Operability Test," Revision 11, November 2, 2020

Inservice Testing (IP Section 03.01) (1 Sample)

(1) Unit 1, STP-O-073A1-1, "A-Train Saltwater Pump and Check Valve Quarterly Surveillance Test," Revision 3, October 21, 2020

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 conduct of an emergency preparedness drill involving a loss of shutdown cooling and lowering reactor coolant system level resulting in a General Emergency declaration on December 9, 2020.

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

The inspectors evaluated:

(1) The inspectors observed and evaluated the conduct of a simulator training event involving a pressurizer level transmitter failing low, charging pump flange leak, circulating water pump and auxiliary feedwater pump trips, loss of offsite power, and failure of the 1A emergency diesel generator to start resulting in a Site Area Emergency declaration on November 23, 2020.

RADIATION SAFETY

71124.04 - Occupational Dose Assessment

Source Term Characterization (IP Section 03.01) (1 Sample)

(1) The inspectors evaluated licensee performance as it pertains to radioactive source term characterization.

External Dosimetry (IP Section 03.02) (1 Sample)

(1) The inspectors evaluated licensee performance as it pertains to external dosimetry that is used to assign occupational dose.

Internal Dosimetry (IP Section 03.03) (1 Sample)

The inspectors evaluated the following internal dose assessments for actual internal exposures:

(1) Dose assessment for individual with facial contamination during steam generator work in November 2019.

Special Dosimetric Situations (IP Section 03.04) (1 Sample)

The inspectors evaluated the following special dosimetric situations:

(1) Routine whole body count and associated forms for a declared pregnant worker.

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

IE01: Unplanned Scrams per 7000 Critical Hours Sample (IP Section 02.01) (2 Samples)

(1) Unit 1, October 1, 2019 - September 30, 2020
(2) Unit 2, October 1, 2019 - September 30, 2020

IE03: Unplanned Power Changes per 7000 Critical Hours Sample (IP Section 02.02) (2 Samples)

(1) Unit 1, October 1, 2019 - September 30, 2020
(2) Unit 2, October 1, 2019 - September 30, 2020

IE04: Unplanned Scrams with Complications (USwC) Sample (IP Section 02.03) (2 Samples)

(1) Unit 1, October 1, 2019 - September 30, 2020
(2) Unit 2, October 1, 2019 - September 30, 2020

OR01: Occupational Exposure Control Effectiveness Sample (IP Section 02.15) (1 Sample)

(1) Units 1 and 2, October 1, 2019 - September 30, 2020

PR01: Radiological Effluent Technical Specifications/Offsite Dose Calculation Manual Radiological Effluent Occurrences (RETS/ODCM) Radiological Effluent Occurrences Sample (IP Section 02.16) (1 Sample)

(1) Units 1 and 2, October 1, 2019 - September 30, 2020

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.

Annual Follow-up of Selected Issues (IP Section 02.03) (2 Samples)

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

(1) Unit 2, review the evaluation and corrective actions for AR04280446, "2-CV-5150 did not fully stroke during STP-O-65N-2." Repeated failures of 2-CV-5150 to pass its quarterly in-service testing surveillance from 2017 through 2019, December 4, 2020
(2) Units 1 and 2, review additional problem identification and resolution samples with a focus on corrective action program evaluation products, December 17, 2020

OTHER ACTIVITIES – TEMPORARY INSTRUCTIONS, INFREQUENT AND ABNORMAL

60854.1 - Preoperational Testing of Independent Spent Fuel Storage Facility Installation at Operating Plants

Preoperational Testing of Independent Spent Fuel Storage Facility Installation at Operating Plants (1 Sample)

(1) The inspectors evaluated Calvert Cliffs Nuclear Power Plant's performance during NRC observed preoperational dry run activities that were performed in order to fulfill requirements in the Certificate of Compliance No. 1032, Amendment 1, Condition 9. The inspectors observed dry run activities on August 3–5, 2020. Specifically, the inspectors observed or reviewed the following activities:

- hydrostatic testing of the closure weld
- blowdown and vacuum drying of the canister
- simulated radiological field surveys and radiation protection coverage of canister processing activities
- helium backfilling of the canister

INSPECTION RESULTS

<table>
<tr><td colspan="4">Failure to Promptly Identify and Correct a Condition Adverse to Quality for Unit 2 Service Water Heat Exchanger Inlet Valve</td></tr>
<tr><td>Cornerstone</td><td>Significance</td><td>Cross-Cutting Aspect</td><td>Report Section</td></tr>
<tr><td>Mitigating Systems</td><td>Green
NCV 05000318/2020004-01
Open/Closed</td><td>[P.3] - Resolution</td><td>71152</td></tr>
<tr><td colspan="4">The inspectors identified a Green finding and associated non-cited violation of Title 10 of the Code of Federal Regulations (10 CFR) Part 50, Appendix B, Criterion XVI, “Corrective Action,” when the licensee failed to correct a condition adverse to quality. Specifically, the licensee failed to correct saltwater intrusion into the valve actuator for 2-CV-5150, 21 A/B service water heat exchanger inlet valve, which resulted in the failure of the valve to fully close during testing on September 19, 2019.</td></tr>
<tr><td colspan="4">Description: On September 19, 2019, during the performance of STP-O-065N-2, "21 Saltwater Subsystem Valve Quarterly Operability Test,” Revision 12, 2-CV-5150 failed to stroke closed, binding in the 75% open position. The licensee declared 2-CV-5150 and the 21 saltwater subsystem inoperable and entered the appropriate technical specifications limiting conditions for operation. The licensee initiated AR04280446 and completed operability evaluation 19-003, which confirmed the ability of 2-CV-5150 to remain open and provide the required amount of saltwater cooling flow to the 21 A/B service water heat exchangers. The operability evaluation also established compensatory measures to maintain the safety-related function of 2-CV-5150 to be closed when the emergency overboard operation mode of the saltwater system is required. The licensee subsequently exited the applicable technical specifications limiting conditions for operation associated with the 21 saltwater subsystem.

The inspectors reviewed the corrective action program history of 2-CV-5150 and noted multiple action requests, beginning in March 2003, that documented conditions adverse to quality related to 2-CV-5150. Specifically, the inspectors noted documentation of:</td></tr>
</table>

- Multiple instances of identification that 2-CV-5150 was mounted upside down or its actuator being mounted under the valve
- Multiple instances of 2-CV-5150 having active packing leaks or evidence of packing leakage
- Multiple instances of saltwater intrusion into the actuator for 2-CV-5150
- Multiple instances of 2-CV-5150 stroke time in the closed direction being in the inoperable range, the alert range, or approaching the high alert limit

The inspectors noted that sometime between October 2017 and October 2018, 2-CV-5150 was scheduled to be replaced and reoriented during the Unit 2 2019 refueling outage, as documented in AR04066760 and AR04142922. The inspectors also noted that the replacement of 2-CV-5150 was not completed during the Unit 2 2019 refueling outage. The inspectors determined, based on discussions with licensee staff, that the work was not deferred in accordance with the work planning process. The inspectors concluded that the corrective action process, which allows items to be closed to the work planning process, did not ensure that these corrective actions were completed in a timely manner.

The inspectors reviewed AR04226918, AR04227341, AR04228587, and AR04258394, initiated following the Unit 2 2019 refueling outage, and noted the documentation of continued saltwater intrusion into the valve's actuator and increasing stroke times in the closed direction until the failure of the valve to fully close during testing on September 19, 2019, and the 21 saltwater subsystem was declared inoperable.

The inspectors concluded that the saltwater intrusion into the actuator of 2-CV-5150 was a condition adverse to quality. The inspectors reviewed licensee procedure PI-AA-125, "Corrective Action Program (CAP) Procedure," Revision 6, Attachment 3, and noted that it states, corrective actions are actions that restore a condition adverse to quality and corrective action due dates should be established based on risk associated with the condition, but should typically be done within 90 calendar days of issue identification. If action cannot be completed until plant conditions permit, schedule reference should be defined. The inspectors concluded that rescheduling the valve replacement and reorientation from the Unit 2 2019 refueling outage to the Unit 2 2021 refueling outage did not meet the standards established in the licensee's corrective action program procedure for timely correction of a condition adverse to quality. This resulted in continued degradation of the valve actuator and the failure of the valve to fully close during testing on September 19, 2019.

Corrective Actions: The licensee completed an evaluation and assigned the close safety function of 2-CV-5150 to adjacent valves which were also part of the inservice testing program and performing within the acceptance criteria.

Corrective Action References: AR04280446

Performance Assessment:

Performance Deficiency: The inspectors determined that the licensee's failure to correct a condition adverse to quality as required by licensee procedure, PI-AA-125, "Corrective Action Program (CAP) Procedure," Revision 6, was a performance deficiency.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Equipment 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, failure to correct a condition adverse to quality resulted in the inoperability of 2-CV-5150.

Significance: The inspectors assessed the significance of the finding using Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." The inspectors determined that this finding is of very low safety significance (Green) since it did not affect the design or qualification of a mitigating structure, system, or component and it did not represent the loss of any system, function, or train of equipment for greater than 24 hours or the technical specification allowed outage time.

Cross-Cutting Aspect: P.3 - Resolution: The organization takes effective corrective actions to address issues in a timely manner commensurate with their safety significance. The inspectors determined that this finding has a cross-cutting aspect in the area of Problem Identification, Resolution. Specifically, the licensee failed to correct a condition adverse to quality associated with 2-CV-5150 in a timely manner as required by licensee procedures.

Enforcement:

Violation: 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," requires in part that, "measures shall be established to assure conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment and non-conformances are promptly identified and corrected."

Contrary to the above, from March 19, 2003 to September 19, 2019, the licensee failed to correct a condition adverse to quality. Specifically, saltwater intrusion into the valve actuator for 2-CV-5150, 21 A/B service water heat exchanger inlet valve, which resulted in the failure of the valve to fully close during testing on September 19, 2019.

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

EXIT MEETINGS AND DEBRIEFS

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

- On January 19, 2021, the inspectors presented the integrated inspection results to Mr. Thomas Haaf, Site Vice President, and other members of the licensee staff.
- On December 16, 2020, the inspectors presented the Independent Spent Fuel Storage Installation inspection results to Mr. Joseph Dougherty, Senior Program Manager, Dry Cask Storage, and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
60854.1	Miscellaneous	Certificate of Compliance (CoC) No. 1032	HI-STORM Flood/Wind (FW) Multipurpose Canister (MPC) Storage System	Amendment 1
		RRTI No. 2847-006-R2	Response to Request for Technical Information, Holtec International, Holtec Project No.2847	11/24/2020
	Procedures	HPP-2847-300	MPC Sealing, Drying, and Backfilling	
	Work Orders	WO C93736388	ISFSI Campaign Dry Run Phases 1 and 2 Cask Sealing, Drying, and Backfilling	
71152	Corrective Action Documents	AR 04225640	Hydraulic crane tipped while lifting load	
		AR 04225806	2CV4260, Requires further investigation due to local leak rate testing result	
		AR 04244433	Spent fuel handling machine grapple actuator compare fault	
		AR 04253533	Loss of 2Y04	
		AR 04257060	1CV5211 Stroked open slow in the alert range	
		AR 04269643	12 service water header out of service due to debris in strainers	
		AR 04287069	Unit 1 Group 5 CEA #35 rod dropped to rod bottom	
		AR 04320560	Higher than anticipated dose rate alarm during in core instrumentation removal	
		AR 04325903	Unit 1 CEA #55 dropped during startup	
		AR 04343324	22 Salt Water pump seized	
		AR 04361393	Adverse trend identified from work group evaluation	