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

May 10, 2022

Mr. Daniel G. Stoddard
Senior Vice President and Chief Nuclear Officer
Dominion Energy, Inc.
Innsbrook Technical Center
5000 Dominion Blvd.
Glenn Allen, VA 23060-6711

SUBJECT: MILLSTONE POWER STATION, UNITS 2 AND 3 – INTEGRATED INSPECTION REPORT 05000336/2022001 AND 05000423/2022001

Dear Mr. Stoddard:

On March 31, 2022, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Millstone Power Station, Units 2 and 3. On April 21, 2022, the NRC inspectors discussed the results of this inspection with Mr. Michael O'Connor, Site Vice President, and other members of your staff. The results of this inspection are documented in the enclosed report.

No findings or violations of more than minor significance were identified during this inspection.

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: 2022.05.10 14:21:56 -04'00'

Matt R. Young, Chief
Projects Branch 2
Division of Operating Reactor Safety

Docket Nos. 05000336 and 05000423
License Nos. DPR-65 and NPF-49

Enclosure:
As stated

cc w/ encl: Distribution via LISTSERV®

SUBJECT: MILLSTONE POWER STATION, UNITS 2 AND 3 – INTEGRATED INSPECTION REPORT 05000336/2022001 AND 05000423/2022001 DATED MAY 10, 2022

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U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report

Docket Numbers:	05000336 and 05000423
License Numbers:	DPR-65 and NPF-49
Report Numbers:	05000336/2022001 and 05000423/2022001
Enterprise Identifier:	I-2022-001-0054
Licensee:	Dominion Energy Nuclear Connecticut, Inc.
Facility:	Millstone Power Station, Units 2 and 3
Location:	Waterford, CT 06385
Inspection Dates:	January 1, 2022, to March 31, 2022
Inspectors:	J. Fuller, Senior Resident Inspector E. Allen, Acting Senior Resident Inspector E. Bousquet, Resident Inspector J. Ambrosini, Senior Emergency Preparedness Inspector J. Brand, Reactor Inspector K. Mangan, Senior Reactor Inspector J. Schoppy, Senior Reactor Inspector T. Siddiky, Reactor Inspector S. Wilson, Senior Health Physicist
Approved By:	Matt R. Young, Chief Projects Branch 2 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 Millstone Power Station, Units 2 and 3, 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

No findings or violations of more than minor significance were identified.

Additional Tracking Items

Type	Issue Number	Title	Report Section	Status
URI	05000423/2022001-01	Unit 3 Charging Pump and Component Cooling Water Pump Area Exhaust Fan (3HVR*FN13B) Bearing Failure	71153	Open
LER	05000336/2021-001-00	LER 2021-001-00 for Millstone Power Station, Unit 2, Incorrectly Placed Spent Fuel Assemblies in Unit 2 Spent Fuel Pool	71153	Closed
LER	05000336/2021-002-00	LER 2021-002-00 for Millstone Power Station, Unit 2, Failed Check Valve Resulting in Unanalyzed and Operation Prohibited by Technical Specifications	71153	Closed

PLANT STATUS

Unit 2 began the inspection period at 100 percent rated thermal power (RTP). On January 23, 2022, the unit was shut down for unscheduled maintenance on the reactor building closed cooling water supply to the 'C' reactor coolant pump. The unit returned to RTP on January 30, 2022. The unit operated the remainder of the inspection period at or near RTP.

Unit 3 began the inspection period at 100 percent RTP and operated at or near RTP for 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 activities described in IMC 2515, Appendix D, "Plant Status," conducted routine reviews using IP 71152, "Problem Identification and Resolution," observed risk significant activities, and completed on-site portions of IPs. 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

Impending Severe Weather (IP Section 03.02) (1 Sample)

(1) The inspectors evaluated the adequacy of the overall preparations to protect risk-significant systems from an impending severe weather winter storm bringing snow accumulation, high winds, and cold temperatures on January 29, 2022.

71111.04 - Equipment Alignment

Partial Walkdown (IP Section 03.01) (5 Samples)

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

(1) Units 2 and 3 electric and diesel fire pumps and fire water supply to Unit 2 on January 12, 2022
(2) Unit 3 system alignment on 'A' train of charging and reactor plant component cooling (CCP) area ventilation system after failure of exhaust fan 3HVR*FN13B on January 23, 2021
(3) Unit 3 system alignment on 'B' train of the main steam system prior to local operation test of 'A' train steam generator atmospheric relief bypass valves (MSS*MOV74A and MSS*MOV74C) on February 4, 2022

(4) Unit 3 line up of the spent fuel pool system normal fill method from the refueling water storage tank during spent fuel cooling system valve replacement on March 10, 2022
(5) Unit 2 safety injection tanks outlet valve power supply, #2 fill and drain valve (SI-621), and drain stop valve (HIC-628) following level change anomalies on March 30, 2022

71111.05 - Fire Protection

Fire Area Walkdown and Inspection (IP Section 03.01) (7 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) Unit 3 cable spreading area on the 24'-6" elevation (fire area CB-8) on January 3, 4, and 12, 2022
(2) Unit 3 fire pump house on the 14'-6" elevation (fire area FP-1) on January 6, 2022
(3) Unit 3 technical support center on the 13'-6" and 26'-8" elevation (fire area TS-1) on January 10, 2022
(4) Unit 2 air handling units on the 38'-6" elevation of the auxiliary building (fire area A-32) on January 19, 2022
(5) Unit 3 waste disposal building on the 24'-6" elevation (fire area WDB-1A) on January 21, 2022
(6) Unit 3 auxiliary building on the 66'-6" elevation (fire area AB-1, zone F) including hot work (grinding) associated with the installation and replacement of auxiliary building charging and CCP area exhaust fan (3HVR*FN13B) on January 26, 2022
(7) Unit 2 reactor building component cooling water and heat exchanger area on the 25'-6" elevation of the auxiliary building (fire area A-1B) on February 2, 2022

Fire Brigade Drill Performance (IP Section 03.02) (1 Sample)

(1) The inspectors evaluated the on-site fire brigade training and performance during an announced fire drill on January 13, 2022.

71111.07A - Heat Exchanger/Sink Performance

Annual Review (IP Section 03.01) (1 Sample)

The inspectors evaluated readiness and performance of:

(1) Unit 2 'B' emergency diesel generator jacket water cooler (M2X45B) and air coolers (M2X53B and M2X83B) on March 15, 2022

71111.11Q - Licensed Operator Requalification Program and Licensed Operator Performance

Licensed Operator Performance in the Actual Plant/Main Control Room (IP Section 03.01) (2 Samples)

(1) The inspectors observed and evaluated operator performance in the Unit 2 control room during a reactivity dilution, 'B' emergency diesel generator surveillance, entry into annunciator response procedure C-5 for loss of voltage regulator exciter voltage,

and operability determination of a coolant leak from the 'B' emergency diesel generator on January 19 and 20, 2022.

(2) The inspectors observed and evaluated operator performance in the Unit 3 control room involving reactivity manipulations, pre-job brief, and reactor coolant system leakage calculation on March 24, 2022.

Licensed Operator Requalification Training/Examinations (IP Section 03.02) (2 Samples)

(1) The inspectors observed and evaluated operator performance in the Unit 2 simulator involving steam dump bypass valve failure, steam generator tube rupture, and engineered safeguards actuation system cabinet failure on January 11, 2022.

(2) The inspectors observed and evaluated operator performance in the Unit 3 simulator exercise involving reactor trip, loss of offsite power, and failure of diesel generator on January 11, 2022.

71111.12 - Maintenance Effectiveness

Maintenance Effectiveness (IP Section 03.01) (1 Sample)

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

(1) Unit 2 maintenance rule evaluation for the reserve station transformer broken circumferential weld on the reserve station transformer disconnect (15G-10T-4) (CA8520749) on January 19, 2022

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Risk Assessment and Management (IP Section 03.01) (5 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 medium risk plan associated with increased plant trip risk during planned maintenance on the 'A' circulating water and 'A' service water pumps from January 3 to 6, 2022

(2) Unit 2 elevated risk and associated mitigation actions for the 14-day allowed outage time after the unplanned inoperability of the 2A emergency diesel generator when it tripped during a monthly surveillance test on January 6, 2022

(3) Unit 3 elevated risk and associated mitigation actions during planned spent fuel pool cooling outages on January 14 and March 11, 2022

(4) Unit 3 increased risk due to emergent failure of the auxiliary building charging and CCP area exhaust fan (3HVR*FN13B) on January 23, 2022

(5) Unit 3 elevated risk due to planned circulating water and service water systems maintenance on March 29, 2022

71111.15 - Operability Determinations and Functionality Assessments

Operability Determination or Functionality Assessment (IP Section 03.01) (6 Samples)

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

(1) Unit 3 reasonable assurance of safety associated with the failure of the #2 steam generator wide range level transmitter (LT-1124A) that could not be restored prior to the expiration of the 60-day action statement specified by Technical Requirements Manual, Section 7.1, on January 5, 2022 (CR1185041 and CA9179003)
(2) Unit 2 'A' emergency diesel generator operability assessment due to failure to load on January 5, 2022 (CR1188862)
(3) Unit 2 increased reactor building component cooling water system leakage to containment sump operability assessment and standing order on January 10, 2022 (CR1188911 and CR1188454)
(4) Unit 3 operability evaluation for demineralized water level and supply to the auxiliary feedwater system on January 18, 2022 (CR1189352)
(5) Unit 3 'D' service water blowdown valve (3SWP*MOV24D) on March 11, 2022 (CR1193445)
(6) Unit 2 safety injection tank #2 operability assessment of level change anomalies on level indication (L321) on March 29, 2022 (CR1194472)

71111.17T - Evaluations of Changes, Tests, and Experiments

Sample Selection (IP Section 02.01) (37 Samples)

The inspectors reviewed the following evaluations, screenings, and/or applicability determinations for 10 CFR 50.59 from February 14 to 17, 2022:

List of Safety Evaluations Reviewed

(1) MPS2-EVAL-2018-0007, Install New Target Rock Pz PORVs (2-RC-402 and 2-RC-404), Revision 0
(2) MPS3-EVAL-2019-0002, Implementation of Safety Analyses for the Dominion Methods Transition at Millstone Unit 3, dated 2/12/2019
(3) MPS2-EVAL-2019-0004, ¼" SS Tubing Lithium-6 Hydroxide Injection Point, Revision 0
(4) MPS3-EVAL-2019-0005, Replace Solid State Inverters INV2, INV4, and Static Transfer Switches VS2, VS4, and By-pass Switches, Revision 0
(5) MPS3-EVAL-2019-0006, Safety Analysis for the Inadvertent Operation of the Emergency Core Cooling System, dated 6/13/2019
(6) MPS3-EVAL-2019-0007, Implementation of the Measurement Uncertainty Recapture Anticipated Transients without Scram Analysis for Millstone Unit 3, dated 10/10/2019
(7) MPS3-EVAL-2019-0008, MP3 EDG New Allowable Jacket Water Leakage, Revision 0
(8) MPS3-EVAL-2020-001, Digital Protection Relay Replacement for Reserve Station Service Transformer, Revision 0
(9) ETE-NAF-2020-0057, Implementation of PWROG-17034-P-A into the Millstone Unit 3 Containment Analysis, Revision 0

(10) MPS3-ETE-NAF-2020-070, Implementation of the Millstone Unit 3 Station Blackout Analysis 50.59 Evaluation, dated 9/17/2020
(11) MPS3-EVAL-2010-0010, ETE-NAF-2019-0110, MPS-UCR-2019-024, and CRE Boundary Integrity Evaluation, Revision 0
(12) MP3-18-01084, MP3 Screen Wash Discharge Reroute, Revision 0

List of Applicability Reviews and Screenings Reviewed

(13) MP-DC-MP2-16-0021, Replace Valve 2-SW-3-1A with AL-6XN Material, Revision 0
(14) MP-DC-MP3-18-01086, MS Safety Valve Spindle Material Change, Revision 0
(15) MP-PACKAGE-FSC-MP2-UCR-2019-001, Updated Main Steam Line Break and Steam Generator Tube Rupture Dose Consequences 50.59 Applicability Review, dated 9/24/2020
(16) MP-PACKAGE-FSC-MP2-UCR-2019-007 (50.59 SC), Permanently Bypass RFM Aux. Hoist Load Cell Interlock, M2H12, Revision 0
(17) MP-PACKAGE-FSC-MP3-UCR-2019-016, Millstone Unit 3 Spent Fuel Pool Criticality and New Fuel Storage Area Analysis 50.59 Applicability Review, dated 7/16/2019
(18) MP-ETE-000-ETE-NAF-2019-0110, Implementation of Fuel Handling Accident Control Room Envelope Integrity Sensitivity Studies, Revision 0
(19) MP-DC-MP2-19-01025, Replacement of RCP Electrical Penetrations M2SEX-A471 and M2SEX-A8-T3, Revision 0
(20) MP-ETE-2019-01043, Implementation of Calculation 3443E12-01443E2, Which Revises the Time Response Methodology, Revision 1
(21) MP-ETE-000-ETE-MP-2019-1084 (50.59 AP 50.59 SC), MP3 Service Water - Elimination of Thermal Performance Testing, Revision 0
(22) MP-ETE-000-NAF-2020-0033, Implementation of the Dominion Energy Reload Physics Testing Program at Millstone Unit 3 50.59 Screen, dated 8/25/2020
(23) MPS2-SCRN-2019-0214-0, Increasing the TRM Required Diesel Fuel Oil Storage for T-148 50.59 Screen, dated 1/23/2020
(24) MP-PROC-ENG-SP 31022, Spent Fuel Pool Criticality Requirements 50.59 Screen, dated 10/5/2020
(25) MP-DC-000-MP3-20-01032, MP3 Small Bore Service Water Piping Replacement 'B' Safety Injection Cooler Restricting Orifice 50.59 Screen, dated 2/24/2021
(26) MP-ETE-000-2020-1047, P43B 'B' Containment Spray Pump PPV Surveillance Test 50.59 Screen, dated 5/22/2020
(27) MP-ETE-000-2020-1057, Millstone Unit 3 EDG Surveillance Testing Requirements Licensing Discrepancy Resolution 50.59 Screen, dated 12/18/2020
(28) MP-PACKAGE-FSC-MP2-UCR-2020-009 (50.59 SC), MP2 Battery Charger Replacement (201A/DC1), Revision 0
(29) MP-ETE-2020-1050, Acceptance of Bearing Clearance for U-2 'A' RBCCW Pump, Revision 0
(30) MP3-20-01075, MP3 Pz Spray Valve Redundant Solenoid, Revision 0
(31) ETE-MP-2020-01086, Pen Seals at RWST Trench Lines 18" HCB-1, Revision 0
(32) MP-DC-000-MP2-20-01087 (50.59 SC), MOVS 2-SI-615, 2-SI-625, 2-SI-635, and 2-SI-645 Need to Be Re-geared to Increase Margin, Revision 0
(33) MP-ETE-000-ETE-MP-2020-1110 (50.59 AP 50.59 SC), Repair to Improve Sealing Capability of Damper 3HVV*MOD51C, Revision 0
(34) MP-ETE-000-ETE-MP-2020-1117 (50.59 SC), MP3 Charging Cubicle Removable Walls Plug - Justification for Revised Minimum Thread Engagement for 3/4 Inch Richmond Inserts, Revision 0

(35) MP-ETE-000-ETE-MP-2020-1139 (50.59 AP 50.59 SC), Millstone 2 - Evaluation of Elevated Service Water Strainer Differential Pressure and Basis for ARP 2590E-028/029/030, Revision 0
(36) MP-PACKAGE-FSC-MP2-UCR-2021-002 (50.59 AP), Update MP2 FSAR Accident Monitoring Instrument TABLE 7.5-3, Revision 0
(37) MP-DC-000MP3-21-01018, Temp Change to Disable MB4A (3-5) Pz RV Discharge Temp HI, Revision 0

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) Unit 3 permanent modification of the motor and fan housing of the axillary building charging and CCP area exhaust fan (3HVR*FN13B) on January 27, 2022 (DM3-04-0094-07)

Severe Accident Management Guidelines (SAMG) Update (IP Section 03.03) (1 Sample)

(1) The inspectors verified Unit 2 and Unit 3 Severe Accident Management Guidelines were updated in accordance with the Pressurized Water Reactor Owners' Group generic severe accident technical guidelines and validated in accordance with Nuclear Energy Institute 14-01, “Emergency Response Procedures and Guidelines for Beyond Design Basis Events and Severe Accidents,” Revision 1, on March 3, 2022.

71111.19 - Post-Maintenance Testing

Post-Maintenance Test (IP Section 03.01) (7 Samples)

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

(1) Unit 2 operability test following service water strainer overhaul on January 6, 2022 (WO53203261024 and WO53203295117)
(2) Unit 2 'A' emergency diesel generator overspeed trip test following replacement of the overspeed micro switch on January 7, 2022 (WO53203229815)
(3) Unit 2 operability test of the reactor building component cooling water piping repair to 'C' reactor coolant pump lower bearing cooler on January 23, 2022 (WO53203338958)
(4) Unit 3 ventilation system operability test after replacement of the axillary building charging and CCP area exhaust fan (3HVR*FN13B) due to bearing failure on January 28, 2022 (WO53203339011)
(5) Unit 3 'B' service water operability test following replacement of the strainer drain valve (3SWP*V993) with temporary spool piece on March 10, 2022 (WO53203342331)
(6) Unit 3 spent fuel pool cooling system restoration, valve cycle, and visual examination following the 'B' spent fuel cooling pump discharge valve (3SFC-V979) replacement on March 13, 2022 (WO53203288972)

(7) Unit 2 'B' service water valve alignment and visual examination of the emergency diesel generator cooler (M2X45B, M2X53B, and M2X83B) following biological fouling cleaning on March 15, 2022 (WO53203342656)

71111.20 - Refueling and Other Outage Activities

Refueling/Other Outage (IP Section 03.01) (1 Sample)

(1) The inspectors evaluated Unit 2 forced outage activities associated with the repair of a leak on the reactor building closed cooling water system piping to the ‘C’ reactor coolant pump from January 22 to January 28, 2022.

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance testing activities to verify system operability and/or functionality:

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

(1) Unit 2 'A' emergency diesel generator slow start operability test on January 5, 2022 (WO53203229815)
(2) Unit 3 technical specification (TS) weekly battery inspection and acid wicking evaluation on February 3, 2022 (WO53203316748)

Inservice Testing (IP Section 03.01) (1 Sample)

(1) Unit 3 'A' service water pump (3SWP*P1A) periodic verification test (WO53203297845)

Reactor Coolant System Leakage Detection Testing (IP Section 03.01) (1 Sample)

(1) Unit 3 reactor coolant system leakage detection surveillance on March 24, 2022

71114.06 - Drill Evaluation

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

The inspectors evaluated:

(1) Unit 2 licensed operator requalification examination on January 11, 2022.

RADIATION SAFETY

71124.06 - Radioactive Gaseous and Liquid Effluent Treatment

Sampling and Analysis (IP Section 03.02) (1 Sample)

The inspectors evaluated the following effluent samples, sampling processes, and compensatory samples:

(1) Unit 2 liquid effluent discharge flow transmitter number DSN006 storm drain release point; reviewed work order for repair and evaluated the licensee's compensatory measures employed during the period of inoperability

Dose Calculations (IP Section 03.03) (2 Samples)

The inspectors evaluated the following dose calculations:

(1) 2020 Radioactive Effluent Release Report, Serial No. 21-121, Section 5; errata - gaseous release dose updates for the years 2005 and 2007 to 2019
(2) 2020 Radioactive Effluent Release Report, Serial No. 21-121, Table 1-3; direct shine dose to the maximally exposed individual

Abnormal Discharges (IP Section 03.04) (2 Samples)

The inspectors evaluated the following abnormal discharges:

(1) Unit 3 steam leak on the main steam valve building; radiation protection analysis or calculation sheet number RP-19-12
(2) Unit 3 condensate surge tank leak; radiation protection analysis or calculation sheet number RP-20-15

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

BI01: Reactor Coolant System Specific Activity (IP Section 02.10) (2 Samples)

(1) Unit 2 (January 1, 2021, through December 31, 2021)
(2) Unit 3 (January 1, 2021, through December 31, 2021)

BI02: Reactor Coolant System Leak Rate (IP Section 02.11) (2 Samples)

(1) Unit 2 (January 1, 2021, through December 31, 2021)
(2) Unit 3 (January 1, 2021, through December 31, 2021)

71152A - Annual Follow-up Problem Identification and Resolution

Annual Follow-up of Selected Issues (Section 03.03) (2 Samples)

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

(1) CR1177643, Unit 2 spent fuel pool qualification calculational error resulted in incorrect placement of four spent fuel assemblies in the Unit 2 spent fuel pool
(2) Dresser Part 21.21.b Information Report for Masoneilan Air Operated Valves

71153 - Follow Up of Events and Notices of Enforcement Discretion

Event Report (IP Section 03.02) (2 Samples)

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

(1) LER 05000336/2021-001-00, Incorrectly Placed Spent Fuel Assemblies in the Unit 2 Spent Fuel Pool (ADAMS Accession No. ML21267A024): The inspection conclusions associated with this LER are documented in this report under Inspection Results, Section 71153, Minor Violation.

(2) LER 05000336/2021-002-00, Failed Check Valve Resulting in an Unanalyzed Condition and Operation Prohibited by Technical Specifications (ADAMS Accession No. ML22011A160): The inspection conclusions associated with this LER are documented in Millstone Power Station, Units 2 and 3 - Integrated Inspection Report 05000336/2021004 and 05000423/2021004 (ADAMS Accession No. ML22041A419) under Inspection Results, Section 71111.15, NCV 05000336/2021004-04.

Notice of Enforcement Discretion (NOED) (IP Section 03.04) (1 Partial)

(1) (Partial)
The inspectors evaluated the licensee's actions and completed portions 03.04 items a and b of the inspection (unique identifier EA-22-008) which can be accessed at http://www.nrc.gov/reading-rm/doc-collections/enforcement/notices/noedreactor.html on January 26, 2022.

INSPECTION RESULTS

Observation: Masoneilan Air Operated Valve Diaphragm Revised Effective Area Evaluation	71152A
The inspectors reviewed Dominion's corrective actions that had been performed or planned associated with a 10 CFR 50.21.21.b report from the valve vendor. In June 2021, Dominion staff were informed of a Part 21 for Masoneilan air operated valves by an industry peer during a self-assessment audit at another power plant. After being informed of the Part 21, Dominion staff at Millstone entered the Part 21 deficiency into their corrective action program (CR1164613). The Part 21 document informed purchasers that Masoneilan model 37 and 38 diaphragm actuators previously provided information regarding the effective area of the diaphragms was incorrect and valve owners should review the revised effective areas to determine if the valves would operate as required. Dominion staff reviewed the information and identified 42, Unit 2, safety-related valves potentially impacted by the Part 21 information. Dominion staff's evaluation of the valves determined, based on the current valve configuration and design basis assumptions, six valves would not operate as required and entered this issue into their corrective action program (CR1166221). Dominion staff performed operability assessments of these valves; and based on field testing data, determined the valves remained capable of responding to design basis events. Dominion staff revised the valve setup configuration including supply air pressure, lower and upper bench sets, and allowable valve setup uncertainties to restore margin in the valve design basis calculations (CR1181664). Finally, Dominion staff took action to determine whether this Part 21 related correspondence was received by the appropriate Dominion points of contact. The inspectors reviewed Dominion's corrective actions to evaluate the Part 21 information, assessment of operability for effected valves, corrective actions to restore design margin to	

the valves, and Dominion's evaluation that determined a substantial safety hazard did not exist for their facility as a result of the information. No findings were identified.

Unresolved Item (Open)	Unit 3 Charging Pump and Component Cooling Water Pump Area Exhaust Fan (3HVR*FN13B) Bearing Failure URI 05000423/2022001-01	71153

Description: On January 23, 2022, at 11:18 a.m., the ventilation exhaust fan (3HVR*FN13B) for the charging pumps and reactor plant component cooling water pumps area within the auxiliary building tripped at Unit 3. The operating crew entered EOP 3509, "Fire Emergency," Limiting Condition for Operation (LCO) 3.5.2 "Emergency Core Cooling Systems," and LCO 3.7.3 "Reactor Plant Component Cooling Water System."

During the subsequent troubleshooting and repair activities, technicians found that the motor shaft had bent, causing the fan blades to make contact with the housing. Due to the extent of damage, the motor and fan blade assembly were replaced. As corrective maintenance progressed, restoration of the ventilation system was forecasted to extend beyond the original TS 72-hour allowed outage time.

On January 26, 2022, at 8:30 a.m., the licensee orally requested that a notice of enforcement discretion (NOED) be issued. The enforcement discretion period requested to be effective for 72 hours past the TS 3.5.3 and TS 3.7.3 LCO action statement expirations, i.e., until January 29, 2022, at 11:18 a.m. On January 27, 2022, at 8:50 p.m., the licensee exited the LCOs for TS 3.5.2 and TS 3.7.3. As a result, the NOED terminated at 8:50 p.m. on January 27, 2022, within the period of the enforcement discretion.

Planned Closure Actions: This unresolved item was opened to determine if there is a performance deficiency associated with the cause of the failed bearing. The inspectors will review the licensee's causal evaluation (LEE 10834266), which was in-progress at the end of the inspection period.

Licensee Actions: The licensee will complete a level of effort evaluation (LEE) to determine the proximate cause of the 3HVR*FN13B bearing failure.

Corrective Action References: CR1189937, CR1190090, WO53102255098, WO53203339011, LEE 10834266

Minor Violation	71153

Minor Violation: A minor violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," occurred due to a calculational error, PM-2067, Revision 0, "Qualification of Millstone Unit 2 Fuel for Placement in Spent Fuel Pool as of Cycle 26 12750 MWD/MTU," which over projected the end of cycle burnup for the spent fuel assemblies, resulting in a lower measured burn up than the minimum burn up requirement for the Millstone Unit 2 spent fuel pool region 3 storage. The calculation affected four spent fuel assemblies within region 3, which violated TSs, resulting in entry of TS 3.9.18, Spent Fuel Pool - Storage.

Immediate actions required moving the non-complying fuel assembly or non-standard fuel configuration to an acceptable location. The four affected spent fuel assemblies were immediately moved to an acceptable location in region 1 of the Millstone Unit 2 spent fuel pool, and the TS 3.9.18 action statement was exited.

Screening: The inspectors determined the performance deficiency was minor. The performance deficiency did not adversely affect the Barrier Integrity cornerstone objective to provide reasonable assurance that physical design barriers (fuel cladding, reactor coolant system, and containment) protect the public from radionuclide releases caused by accidents or events. The inspectors determined that the burnup values used in the calculation were well within the bounds of the criticality safety analysis, which includes analysis of a misloading event with multiple assemblies assumed to be well below the TS minimum burnup values. The misload did not exceed any safety limits and the regulatory requirement for keff < 0.95 remains met even with this condition. The current Millstone Unit 2 spent fuel pool remains within the scope of the Millstone Unit 2 spent fuel pool analysis conditions.

Enforcement: 10 CFR Part 50, Appendix B, Criterion III, requires, in part, that measures shall be established to assure that applicable regulatory requirements and the design basis, as defined in § 50.2 and as specified in the license application, for those structures, systems, and components to which this appendix applies are correctly translated into specifications, drawings, procedures, and instructions. Contrary to this requirement, from July 15, 2021, to July 21, 2021, adequate measures were not established to assure that the design basis was correctly translated into specifications, drawings, procedures, and instructions. The station documented the issue in CR1177643 and corrected the condition. This failure to comply with the design requirements constitutes a minor violation that is not subject to enforcement action in accordance with the NRC's Enforcement Policy.

The disposition of this violation closes LER 05000336/2021-001-00, Incorrectly Placed Spent Fuel Assemblies in the Unit 2 Spent Fuel Pool.

EXIT MEETINGS AND DEBRIEFS

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

- On January 13, 2022, the inspectors presented the radiological gaseous and liquid effluent treatment inspection results to Mr. John Daugherty, Site Vice President (former), and other members of the licensee staff.
- On February 17, 2022, the inspectors presented the 50.59 triennial team inspection results to Mr. Michael O'Connor, Site Vice President, and other members of the licensee staff.
- On April 21, 2022, the inspectors presented the integrated inspection results to Mr. Michael O'Connor, Site Vice President, and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.01	Procedures	C OP 200.6	Storms and Other Hazardous Phenomena (Preparation and Recovery)	Revision 10
71111.04	Drawings	25203-26011	Piping & Instrument Diagram Fire Protection System	Revision 58
		25203-26015	Piping & Instrumentation Diagram Safety Injection Tanks	Revision 31
		25203-26022	Piping & Instrument Diagram RBCCW	Revision 45
		25203-26030	Piping & Instrument Diagram Water Treatment System	Revision 55
		25212-26911	Piping & Instrument Diagram Fuel Pool Cooling & Purification System	Revision 39
		25212-26970	Piping & Instrument Diagram Fire Protection System	Revision 14
	Miscellaneous		Standing Order SO-21-016 SI-227	Revision 1
			Tagout 2306X00-0002	
	Procedures	OP 2306O	Safety Injection Tanks, RCS >1,750 psi	Revision 011
		OP 2306O-002	Safety Injection Tanks	Revision 4
		OP 2330A	RBCCW System	Revision 29
		OP 3305	Fuel Pool Cooling and Purification	Revision 029
	Work Orders	53203288972		
71111.05	Fire Plans	MP-PROC-ENG-U2-24-FFS-BAP01-AB-MAP	Aux Building Fire Strategy Map	Revision 2
		MP-PROC-ENG-U2-24-FFS-BAP01-AB-MAP	MPS2 Fire Fighting Strategies Aux Building 14 to 38	Revision 3
71111.07A	Corrective Action Documents	CR1191616 CR1193712		
	Procedures	ER-AA-HTX-1002	Heat Exchanger Program Visual and Leak Testing	Revision 6
		SP 2670	DG ‘B’ HX D/P Determination	Revision 18
	Work Orders	53203342656		
71111.12	Corrective Action Documents	CR1175387		
71111.13	Drawings	25212-26911	Piping & Instrumentation Diagram Fuel Pool Cooling & Purification System	Revision 39

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Miscellaneous		Troubleshooting Plan Will Be Performed to Remove Both Trains of Spent Fuel Pool Cooling from Service	01/13/2022
	Procedures	OP-3305	Fuel Pool Cooling and Purification	Revision 029
		OP-MP-601	Protected Equipment	Revision 37
		WM-AA-103	Unit 2 A Circ Bay Outage, WW2201	01/05/2022
	Work Orders	53203288972		
71111.15	Calculations	ETE-CME-2014-1020	Allowable External Leak Rate	2014
	Corrective Action Documents	CA9179003		
		CR1134682		
		CR1185041		
		CR1188454		
		CR1188911		
		CR1188959		
		CR1189352		
		CR1193445		
		CR1194472		
	Operability Evaluations	CA9200809	Operability Determination RBCCW Leakage Exceeding 0.117 GPM	01/10/2022
	Procedures	OP-AA-102	Operability Determination	Revision 15
		SO-20-003	Standing Order	
		SO-21-16	Standing Order	Revision 1
	Work Orders	53203343156		
71111.17T	Calculations	97-DES-01787-M2	Minimum Level Required in MP2 Diesel Oil Storage Tank T-47A to Support 7-Day EDG Run	Revision 4 Addendum 5
		NL-033	Millstone 3 Emergency Generator Loading & Starting KVA Calculation	Revision 5
		RA-0085	Radiological Consequences of a Main Steam Line Break at Millstone Power Station Unit 2 Based on the Alternate Source Term	Revision 0
		S-04231S3	Station Blackout Calculation for NUMARC 87-00, Millstone Unit 3	Revision 2

		SM-1842	Millstone Unit 3 Inadvertent Operation of the Emergency Core Cooling System (IOECCS) Analysis	Revision 0
	Corrective Action Documents	CR1082357 CR1091289 CR1115219 CR1118623 CR1135980 CR1147900		
	Corrective Action Documents Resulting from Inspection	CR1191354 CR1191483		
71111.18	Procedures	EP-AA-504	Severe Accident Management (SAM) Program Administration	Revision 3
	Self-Assessments		Course Completion Status: NANTEL C-II - Evaluator SAMG Initial Training	03/03/2022
		MMAR21TD	Millstone Station Unit 3 Training Drill	03/30/2021
71111.19	Corrective Action Documents	CR1191616 CR1193712		
	Drawings	25212-26933	Piping & Instrumentation Diagram Service Water, Sheet 1	Revision 45
	Procedures	MP-20-WP-GDL40	Pre- and Post-Maintenance Testing	Revision 14
		SP 2612A	A Service Water Pump Tests	Revision 23
	Work Orders	53203229815 53203261024 53203288972 53203295117 53203342331 53203342656		01/04/2022
71111.22	Procedures	C SP 750	Battery Weekly and Quarterly Surveillance	Revision 011
		SP 2613K	Diesel Generator Slow Start Operability Test Facility 1	Revision 11
		SP 2661A	'A' Emergency Diesel Generator Over Speed Trip Test	Revision 5
		SP 3601F.6	Reactor Coolant System Water Inventory Measurement	Revision 1
	Work Orders	53203229815		

71152A	Calculations	04-AOV-04121M2	Millstone Unit 2 - Bench and Regulator Setting 2-MS-220A/B, 2-RB-68.1A/B, 2-SI-659/660	Revision 0 Addendum 3
		CBM 114	Testing and Adjustment of Air Operated Valves Utilizing AOV Diagnostic Test Equipment	Revision 010
	Corrective Action Documents	CR1164613 CR1164615 CR1166221 CR1181664		
	Engineering Changes	ETE-MP-2021-1016	Impact of Masoneilan EDA Changes on Millstone AOV Population	Revision 0
	Procedures	LI-AA-301	Implementation of 10 CFR 21, Reporting of Defects and Noncompliance	Revision 3
71153	Corrective Action Documents	CA8816983		
	Miscellaneous	EPID: L-2022-LLD-0000	Reissued - Notice of Enforcement Discretion for Millstone Power Station, Unit 3	02/03/2022