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

May 14, 2019

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

SUBJECT: MILLSTONE POWER STATION, UNITS 2 AND 3 – INTEGRATED INSPECTION REPORT 05000336/2019001 AND 05000423/2019001

Dear Mr. Stoddard:

On March 31, 2019, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Millstone Power Station, Units 2 and 3. On April 9, 2019 the NRC inspectors discussed the results of this inspection with Mr. John Daugherty, Site Vice President, and other members of your staff. The results of this inspection are documented in the enclosed report.

NRC inspectors documented one finding of very low safety significance (Green) in this report. This finding involved a violation of NRC requirements.

If you contest the violation or 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 Millstone.

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 Millstone.

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

Sincerely,

/RA/

Daniel L. Schroeder, Chief
Reactor Projects Branch 2
Division of Reactor Projects

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

Enclosure:
Inspection Report 05000336/2019001 and 05000423/2019001

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SUBJECT: MILLSTONE POWER STATION, UNITS 2 AND 3 – INTEGRATED INSPECTION REPORT 05000336/2019001 AND 05000423/2019001 DATED MAY 14, 2019

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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:	05000336/2019001 and 05000423/2019001
Enterprise Identifier:	I-2019-001-0046
Licensee:	Dominion Energy Nuclear Connecticut, Inc.
Facility:	Millstone Power Station, Units 2 and 3
Location:	P. O. Box 128 Waterford, CT 06385
Inspection Dates:	January 1, 2019 to March 31, 2019
Inspectors:	J. Fuller, Senior Resident Inspector L. McKown, Resident Inspector P. Boguszewski, Resident Inspector K. Mangan, Senior Reactor Inspector S. Pindale, Senior Reactor Inspector A. Rosebrook, Senior Project Engineer M. Orr, Reactor Inspector
Approved By:	Daniel L. Schroeder, Chief Reactor Projects Branch 2 Division of Reactor Projects

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting a Quarterly inspection at Millstone 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. Findings and violations being considered in the NRC's assessment are summarized in the table below.

List of Findings and Violations

Inadequate maintenance procedures led to both control room emergency ventilation trains declared inoperable and unable to perform their safety function			
Cornerstone	Significance	Cross-cutting Aspect	Report Section
Barrier Integrity	Green NCV 05000336/2019001-01 Open/Closed	[P.6] - Self-Assessment	71153
A self-revealing Green NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified when inadequate maintenance procedures for control room boundary doors and ventilation equipment resulted in both control room emergency ventilation trains inoperable and unable to perform their safety function.			

Additional Tracking Items

Type	Issue number	Title	Report Section	Status
LER	05000336,05000423/2018001-00	Loss of Both Trains of Control Room Emergency Ventilation Resulting in the Loss of Safety Function	71153	Closed
URI	05000336/2017002-01	Potential Untimely Corrective Action for Anchor Darling Double Disc Gate Valves	71152	Closed
URI	05000336, 05000423/2018011-01	Reviews of Incoming Industry Operation Experience Not Completed	71152	Closed

PLANT STATUS

Unit 2 operated at or near rated thermal power for the entire inspection period.

Unit 3 operated at or near rated thermal power until March 25 when the unit began coasting down towards a scheduled refueling outage.

INSPECTION SCOPES

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

REACTOR SAFETY

71111.01 - Adverse Weather Protection

Impending Severe Weather Sample (IP Section 03.03) (2 Samples)

(1) The inspectors evaluated readiness for impending severe weather conditions for winter weather with high winds and rain on January 24, 2019
(2) The inspectors evaluated readiness for impending adverse weather conditions for a severe wind storm on February 25, 2019, and evaluated subsequent corrective actions to repair damage to the Unit 3 refueling water storage tank insulation

71111.04 - Equipment Alignment

Partial Walkdown (IP Section 02.01) (6 Samples)

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

(1) Unit 2 auxiliary feed water flow-path lineup verification on January 7, 2019
(2) Unit 2 'A' emergency diesel generator (EDG) on January 10, 2019
(3) Unit 3 'B' and 'D' service water pump (SWP) train alignment on January 7, 2019
(4) Unit 3 #3 vital battery on January 16, 2019
(5) Unit 3 'B' EDG jacket water cooling system piping on February 12, 2019
(6) Unit 3 'A' charging pump and piping on March 13, 2019

71111.05A - Fire Protection (Annual)

Annual Inspection (IP Section 03.02) (1 Sample)

The inspectors evaluated fire brigade performance during an unannounced drill at Unit 3 in the normal switchgear room, which contains the Appendix R batteries, on March 13, 2019.

71111.05Q - Fire Protection

Quarterly Inspection (IP Section 03.01) (6 Samples)

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

(1) Unit 2 'A' EDG room (Fire Area A-15) on January 3, 2019
(2) Unit 2 intake building - pump room, sodium hypochlorite room, and motor control center room (Fire Areas I-1A, I-1B-, I-1C) on January 4, 2019
(3) Unit 2 turbine building DC switch-gear area and auxiliary battery room (Fire Zones T-1D and T-1E) on January 9, 2019
(4) Unit 2 turbine building generator shaft bearings (Fire Area T-1) on January 16, 2019
(5) Unit 3 west fuel oil vault (Fire Area EG-2) and in-process test of the carbon dioxide suppression system on January 16, 2019
(6) Unit 3 24' elevation west motor control center and rod control area (Fire Area AB-6A) on March 13, 2019

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 licensed operator performance in the Unit 2 control room during the replacement of the facility 2 main steam isolation actuation module on February 6, 2019.
(2) The inspectors observed and evaluated licensed operator performance in the Unit 3 control room with several surveillance tests in-progress at the same time, including the trip actuating device operational test for 4 kV safety-related bus 34D undervoltage on March 21, 2019.

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

(1) The inspectors observed and evaluated Unit 3 licensed operator requalification program simulator examination on January 15, 2019.
(2) The inspectors observed and evaluated Unit 2 licensed operator requalification program simulator training on March 13, 2019.

71111.12 - Maintenance Effectiveness

Quality Control (IP Section 02.02) (1 Sample)

The inspectors evaluated maintenance and quality control activities associated with the following equipment performance issues:

(1) Replacement of ASME Class 1 pressure boundary flange bolting for the Unit 2 pressurizer power operated relief valves on March 28, 2019

Routine Maintenance Effectiveness Inspection (IP Section 02.01) (4 Samples)

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

(1) Review of Dominion's (a)(3) Periodic Evaluation for the period of January 1, 2017 to June 30, 2018
(2) Unit 3 EDG lube oil heating on January 14, 2019
(3) Unit 3 reactor plant closed cooling water pumps on February 8, 2019
(4) Unit 3 service water pumps on February 14, 2019

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Risk Assessment and Management Sample (IP Section 03.01) (9 Samples)

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

(1) Unit 2 medium risk plan for pressurizer proportional heater calibration and pressurizer bypass spray flow troubleshooting on January 24, 2019
(2) Unit 2 high risk plan for the replacement of reactor protection system (RPS) trip bi-stable TU-B-5 on January 26, 2019
(3) Unit 2 high risk plan for the online replacement of the facility 2 main steam isolation actuation module of engineered safety feature actuation system on February 6, 2019
(4) Unit 2 emergent change in risk due to fuel oil leak on 'A' EDG on March 1, 2019
(5) Unit 3 emergent change in risk due to 'D' SWP packing failure during 'A' SWP testing on January 7, 2019
(6) Unit 3 high risk plan for 15G-14T-2 breaker gas add following 'A' EDG lube oil low temperature failure on January 11, 2019
(7) Unit 3 risk assessment of 'B' EDG jacket water leakage repair concurrent with severe winter weather on January 24, 2019
(8) Unit 3 elevated risk due to expanded scope of emergent repair of 15G-14T-2 345 kV breaker on February 4, 2019
(9) Unit 3 elevated risk impact of emergent offsite line instability (Line 310) concurrent with a planned outage of offsite line 371 on February 25, 2019

71111.15 - Operability Determinations and Functionality Assessments

Sample Selection (IP Section 02.01) (12 Samples)

The inspectors evaluated the following operability determinations and functionality assessments:

(1) Unit 2 excessive leakage on Loop 1B safety injection header check valve (2-SI-227) associated with the safety injection tank on January 3, 2019
(2) Unit 2 pressurizer spray bypass flow less than expected, which resulted in unexpected alarm for pressurizer spray loop 1B low temperature (CR1112178) on January 3, 2019

(3) Unit 2 main steam safety valve leakage (2-MS-253) on January 22, 2019
(4) Unit 2 condition report number CR 1115549 for the failure of the main steam isolation actuation module on February 6, 2019
(5) Unit 2 condition report number CR1115653 for the station blackout diesel surveillance test failure and impact upon offsite power source availability on February 7, 2019
(6) Unit 2 operability evaluation for CR1117646 and CR1117153 associated with the engineered safety feature actuation system automatic actuation logic test inserter on March 11, 2019
(7) Unit 3 condition report number CR1113467 for potential failure of 'D' SWP packing on January 8, 2019
(8) Unit 3 condition report number CR1113841 for 'A' EDG lube oil heater power supply relay failure on January 11, 2019
(9) Unit 3 condition report number CR1114202 for 'B' EDG manual stop lever found in off-normal position on January 23, 2019
(10) Unit 3 condition report number CR1115548 for 'A' EDG jacket water leak and common mode failure review on other EDG February 6, 2019
(11) Unit 3 condition report number CR1115751 for 'C' component cooling water pump seal leakage that resulted in the 'A' train declared inoperable on February 8, 2019
(12) Unit 3 condition report number CR1117550 for station blackout diesel functionality following failure of the uninterruptible power supply (UPS), which impacted the 'A' EDG 14 day allowed outage time on March 11, 2019

71111.17T - Evaluations of Changes, Tests, and Experiments

Sample Selection (IP Section 02.01) (29 Samples)

From February 4-8, 2019, the inspectors reviewed and verified that the following evaluations, screenings, and/or applicability determinations for Millstone Units 2 and 3 were performed in accordance with 10 CFR 50.59:

(1) MPS2-EVAL-2017-0001, Analytical Bases Supporting the Introduction of the AREVA Standard CE14 HTP Fuel, Revision 0
(2) MPS2-EVAL-2017-0002, Implementation of Revised Millstone 2 FSAR Chapter 14 Safety Analysis with a Corrected Axial Shape Index Tolerance, Revision 0
(3) MPS2-EVAL-2018-0002, Revised Safety Analysis for Post-Scram Main Steam Line Break with assumed Loss of Offsite Power, Revision 0
(4) MPS2-EVAL-2018-0003, Replace Solid State Inverters INV1, and INV3, and The Associated Static Transfer Switches (VS1, VS3) and the Maintenance Bypass Switches, Revision 0
(5) MPS2-EVAL-2018-0006, Generator Backup Audio-Tone Equipment Replacement, Revision 0
(6) MPS2-EVAL-2018-0007, Add NUPIPE II Computer Code to Perform Structural Analysis for MPS2 Flanged PORV Design Change (UFSAR Appendix 5E.VI), Revision 0
(7) MPS2-EVAL-2018-0010, Incore Detection System Functional Evaluation, Revision 0
(8) MPS3-EVAL-2016-003, Final Resolution of Westinghouse Nuclear Safety Advisory Letter 14-5, Revision 0
(9) MPS3-EVAL-2017-0001, The Loading and Operation of Eight AXIOM Cladding Lead Test Assemblies in Millstone U3, Revision 0
(10) MPS3-EVAL-2018-0011, Replacing NSST Transformers 3STX-XNS-A (4.16kv) and 3STX-XNS-B (6.9kv), Revision 0

(11) MPS2-SCRN-2016-0245, Remove Requirement to Test the Individual Actuation Relays in the MP2 Engineered Safety Feature Actuation System, Revision 0
(12) MPS2-SCRN-2017-0028, Multiple SIDs (scaffolds over 90-days), Revision 0
(13) MPS2-SCRN-2017-0041, MP2 Calorimetric – Use of External LEFM Flows to Correct Venturi Flows In Calorimetric, Revision 0
(14) MPS2-SCRN-2017-0099, MP2 TDAFW Sentinel Valve Removal, Revision 0
(15) MPS2-SCRN-2017-0189, Modify Service Water Strainer Control Circuit, Revision 0
(16) MPS2-SCRN-2017-0206, Install High Point Vent Valve on 'A' Low Pressure Safety Injection Pump P-42 Discharge Piping, Revision 0
(17) MPS2-SCRN-2018-0028, Removal of RCP Motor Lube Oil Strainer and Pressure Differential Indicator from P40C and Spare Motor, Revision 0
(18) MPS2-SCRN-2018-0086, Steam Generator Increased Moisture Carryover, Revision 0
(19) MPS2-SCRN-2018-0225, Failed Pressurizer Backup Heater B3C5, Revision 0
(20) MPS2-SCRN-2018-0299, Restore Degraded Group 1 Proportional Heater Capacity Using A Backup Heater, Revision 0
(21) MPS3-SCRN-2017-0035, MP3 TDAFW (3FWA*P2) Governor Rack Setting, Revision 0
(22) MPS3-SCRN-2017-0117, MP3 TDAFW Pump Control Valve 3MSS*MCV5 Reliability Enhancement, Revision 0
(23) MPS3-SCRN-2017-0156, EDG Intercooler and Jacket Water Heat Exchanger Plastocor Coating, Revision 0
(24) MPS3-SCRN-2017-0208, Perform Static Test (QSS) on Various Motor-Operated Valves, Revision 1
(25) MPS3-SCRN-2018-0004, MPS3 SPU P-8 Setpoint Analysis, Revision 0
(26) MPS3-SCRN-2018-0017, Standing Order SO-18-05, Revision 1
(27) MPS3-SCRN-2018-0025, OP 3260A and OU-M3-201 RCS Inventory Requirements, Revision 0
(28) MPS3-SCRN-2018-0074, Acceptance of Motor Overhaul for 3SWP*M1B, S/N CPJ301019, Revision 0
(29) MPS3-SCRN-2018-0107, Setpoint Change for Emergency Diesel Generator Starting Air Compressors, Revision 0

71111.19 - Post Maintenance Testing

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

The inspectors evaluated the following post maintenance tests:

(1) Unit 2 post maintenance testing for group 1 pressurizer proportional heater calibration and troubleshooting on January 24, 2019
(2) Unit 2 post maintenance testing for the replacement of RPS trip bistable TU-B-5 on January 26, 2019
(3) Unit 2 post maintenance testing of the main steam isolation actuation module AM632 replacement on February 7, 2019
(4) Unit 2 post maintenance testing of the 'A' EDG after fuel oil piping repair on March 2, 2019
(5) Unit 3 post maintenance testing for 53203237731 - 'D' SWP after packing re-pack and adjustments on January 8, 2019
(6) Unit 3 post maintenance testing of 53203238036 - 'A' EDG lube oil heater power supply relay failure and subsequent maintenance on January 11, 2019

(7) Unit 3 post maintenance testing of 53203236951 - 'B' EDG after repair of lube oil leak at circulating oil / keep-warm pump discharge flex coupling on January 25, 2019
(8) Unit 3 post maintenance testing of 53203239739 - emergent 'A' EDG Jacket Water Leak repair and Common Cause Analysis on February 6, 2019
(9) Unit 3 post maintenance testing of 53203240378 - 'A' EDG jacket water piping supplemental weld reinforcement to partial joint penetration welds on March 6, 2019

71111.20 - Refueling and Other Outage Activities

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

The inspectors evaluated Unit 3 refueling outage (3R19) preparations during this quarter.

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

In Service Testing (IST) (IP Section 03.01) (1 Sample)

(1) Unit 3 SP 3622.3 - Auxiliary Feedwater Pump 3FWA*P2 Operational Readiness Test performed on January 2, 2019

Reactor Coolant System (RCS) Leak Detection (IP Section 03.01) (1 Sample)

(1) Unit 3 increased un-identified reactor coolant system leakage rate documented in condition report number CR1117539

Surveillance Testing (IP Section 03.01) (6 Samples)

(1) Unit 2 'A' auxiliary feedwater pump and recirculation check valve in-service test on January 3, 2019
(2) Unit 2 azimuthal power tilt surveillances from January 23 - 24, 2019
(3) Unit 2 engineered safety feature actuation system (ESAS) block permissive logic combination functional test on January 28, 2019
(4) Unit 2 calibration and functional test of the engineered safety feature actuation system under-voltage, reserve station service transformer and sequencer instrumentation on March 14, 2019
(5) Unit 3 SP 3626.4 - Service Water Pump 3SWP*P1A Operability Test performed on January 7, 2019
(6) Unit 3 trip actuating device operational test for the safety-related 4 kV Bus 34D undervoltage, loss of voltage, and grid degraded voltage on March 21, 2019

71114.06 - Drill Evaluation

Drill and/or Simulator-Based Licensed Operator Requalification Training (IP Section 02.01) (1 Sample)

The inspectors evaluated:

(1) Unit 3 simulator based licensed operator requalification training with event classification on January 15, 2019.

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

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

(1) Unit 2 (January 1 - December 31, 2018)
(2) Unit 3 (January 1 - December 31, 2018)

BI02: RCS Leak Rate Sample (IP Section 02.11) (2 Samples)

(1) Unit 2 (January 1 - December 31, 2018)
(2) Unit 3 (January 1 - December 31, 2018)

71152 - Problem Identification and Resolution

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

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

(1) URI 05000336/2017002-01, "Potential Untimely Corrective Action for Anchor Darling Double Disc Gate Valves"
(2) URI 05000336/05000423/2018011-01, "Reviews of Incoming Industry Operation Experience Not Completed"

71153 - Followup of Events and Notices of Enforcement Discretion

Event Report (IP Section 03.02) (1 Sample)

The inspectors evaluated the following licensee event report (LER) which can be accessed at https://lersearch.inl.gov/LERSearchCriteria.aspx:

(1) LER 05000336/2018-001-00, Loss of both trains of control room emergency ventilation resulting in the loss of safety function (ADAMS Accession No. ML19022A263). The circumstances surrounding this LER are documented in the Results section

Reporting (IP Section 03.05) (1 Sample)

The inspectors reviewed the retraction of NRC Event Number EN53752, loss of control room envelope due to a control room boundary door failure on November 24, 2018. The inspectors reviewed the licensee's evaluation that the control room boundary door failure to close and latch did not result in air in-leakage that would have exceeded the limits established by the control room habitability program, and therefore did not result in a loss of safety function.

INSPECTION RESULTS

Unresolved Item (Closed)	Potential Untimely Corrective Action for Anchor Darling Double Disc Gate Valves 05000336/2017002-01	71152

Description: As documented in URI 05000336/2017002-01, Potential Untimely Corrective Action for Anchor Darling Double Disc Gate Valves, the inspectors identified that Dominion Energy had not implemented corrective actions to address potential substantial safety hazards associated with six safety-related risk-significant valves, four high risk and two medium risk, at Millstone Unit 2 reported in a 10 CFR Part 21 Notification titled "Wedge Pin Failure of an Anchor/Darling Double Disc Gate Valve at Browns Ferry Nuclear Plant Unit 1" letter dated, February 25, 2013. Specifically, after establishing a corrective action plan including performance monitoring and ultimately stem inspection and replacement, as of 2017 Dominion Energy had not implemented actions to either evaluate or inspect susceptible valves. The inspectors established an unresolved item associated with the need to compare actions taken to Dominion Energy's CAP requirements and review industry recommendations to address the Part 21 letter to determine if this represented a performance deficiency or violation of NRC requirements.

During the fall 2018 Unit 2 refueling outage, the inspectors observed that Dominion Energy performed stem replacement of the four high risk locations and performance monitoring consistent with industry best practices for the two remaining medium risk locations. Upon disassembly of the high risk locations Dominion Energy did not discover any degraded conditions. Furthermore, valve performance monitoring of the remaining locations did not discover any adverse conditions.

Minor Performance Deficiency: Having reviewed Dominion Energy's CAP requirements and industry recommendations to address the Part 21 letter, the inspectors have determined that Dominion Energy's failure to implement timely corrective actions associated with six safety-related risk-significant Anchor/Darling Double Disc Gate Valves prior to the fall 2018 refueling outage was a performance deficiency reasonably within the licensee's ability to foresee and prevent.

Screening: This performance deficiency was not more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," dated January 1, 2018. Based upon the corrective maintenance performed and valve condition monitoring assessed during the fall 2018 refueling outage, this performance deficiency did not adversely impact a cornerstone objective, cannot be viewed as a precursor to a more significant event, would not lead to a more significant safety concern, and does not relate to a performance indicator threshold.

Based upon completion of comparison of actions taken and the assessment of a minor performance deficiency, unresolved item URI 05000336/2017002-01, Potential Untimely Corrective Action for Anchor Darling Double Disc Gate Valves is closed.

Corrective Action References: CA3018512, CA3018522, CA3018527, CA3018528, CA3018531, CA3018533, 53102909962, 53102909963, 53203148328, 53203148329, 53102909966, 53102909967

Unresolved Item (Closed)	Reviews of Incoming Industry Operation Experience Not Completed 05000336,05000423/2018011-01	71152

Description: During the 2018 Millstone Biennial Problem Identification and Resolution Team Inspection, the team identified a programmatic weakness with the implementation of the Operational Experience Program as described in Dominion Procedure PI-AA-100-1007. The inspectors noted that a performance improvement report (PIR) is automatically created for the Dominion fleet whenever an OPEX report is received (regardless of its source). Once the corporate PIR is generated, each site is required to check a box that it was received and also disposition it. The PIR remains opened until each site has completed this action. Prior to 2015, the corporate Operating Experience Coordinator would perform an applicability review and assign the remaining items to the site for further evaluation. When the corporate organization was reorganized, the headquarters review of OPEX became mostly administrative and the individual sites were expected to conduct an applicability review within 30 days and if applicable complete an evaluation of the PIR within 90 days. However, this action was never directly assigned to any of the Millstone staff. As a result, since 2015, more than 1600 OPEX records were discovered that required disposition for Millstone contrary to PI-AA-100-1007.

The inspectors recognized that several parallel processes existed for identifying operational experience and industry events, so unresolved item (URI) 50-336 & 50-423/2018-011-01 was opened to allow Dominion to perform a thorough review of the open PIRs before any regulatory decisions were made. This review was completed in February 2019. The inspectors reviewed Dominion's condition reports, self-assessments, and other documents associated with this review and independently sampled a number of the evaluations completed for the PIRs. Approximately 1000 PIRs were applicable to Millstone in some degree. In most cases, the evaluations of these items demonstrated that the conditions adverse to quality were being appropriately addressed via current Dominion processes and procedures and no additional actions were required. However, some applicable PIRs did identify applicable conditions adverse to quality at Millstone which required more detailed evaluations to be performed. Most of these evaluations did not require any additional actions. However, two examples did require corrective actions.

PIR 1074265 documents a 2017 South Texas Project event where RCS water level instrumentation was reading inaccurately due to installation of a reactor vessel head vent cover foreign material exclusion barrier which was not vented. This caused the RCS level instruments to read falsely high during reduced inventory evolutions during a refueling outage. Dominion's review of this PIR in 2019 identified that Millstone Unit 2's procedures contained a note to ensure that the reactor head vent cover was vented; however Millstone Unit 3's procedures did not. Thus the procedure could have been followed correctly and this vulnerability introduced. Had Dominion reviewed this event in a timely manner, this guidance would have been in place prior to the fall 2017 Unit 3 refueling outage. CR 1112057 was written to address this gap and the Unit 3 procedures are being revised prior to the spring 2019 refueling outage.

PIRs 1102340, 1087453, 1018322, 1101980, and 1045542 discuss a number of fuel transfer cart issues which have occurred at various plants during fuel handling evolutions. Millstone's review of these PIRs identified that Millstone Unit 2 has a maintenance procedure for the cart (Fuel Handling-222) which has requirements for preventive maintenance activities and periodic inspection prior to use. However, Millstone Unit 3 does not have any procedure

requiring these actions. CR 1113308 was written to develop these Unit 3 procedures and work orders have been developed for the Unit 3 spring 2019 refueling outage.

IMC 0612, Appendix E, "Examples of Minor Issues," examples 3k and 3J discuss the threshold for a programmatic deficiency to be more than minor: "More than minor if significant programmatic deficiencies were identified with the issue that could lead to worse errors if uncorrected." While this performance deficiency does represent significant programmatic deficiency as evidenced by over 1600 PIRs not being formally reviewed, the second part of the criteria would be realized if there was evidence that a number of conditions adverse to quality requiring corrective actions at Millstone had not been identified through some other means. As discussed in Inspection Report 2018-011, INPO Consolidated Event System reports were being sent to station personnel, specifically system engineers. There was further evidence that these reports were being used in daily shift briefings and pre job briefs. Significant operational experience issues such as reactor coolant pump seals failures and vessel tie rods degradation had been placed in the CAP via parallel processes and were addressed in a timely manner. Of the two examples where actions were required, PIR 1074265, the South Texas reactor vessel head vent issue, posed the only potential operability concern and only during the 2017 refueling outage. While there is no evidence that RCS level instrumentation had been rendered inoperable in 2017, the vulnerability should have been addressed prior to the 2017 Unit 3 refueling outage. However, in the remaining cases where additional amounts of evaluation was required, the review resulted in no actions being required and/or there was no reasonable question of equipment operability. Therefore, the inspectors concluded that the Appendix E more than minor criteria was not met based upon alternate methods proving successful at identifying operational experience conditions adverse to quality. Therefore this performance deficiency was of minor risk significance and URI 2018-011-01 will be closed. Dominion documented the inspectors' observations in CR 1118834.

Corrective Actions to revise the procedural guidance in PI-AA-100-1007, communication of this issue to station personal, and completion of a robust self-assessment appear appropriate and a sample of operational experience PIRs issued since this issue was identified did not identify any additional concerns.

URI 2018-011-01 is closed.

Corrective Action Reference: CR 1118834

Inadequate maintenance procedures led to both control room emergency ventilation trains declared inoperable and unable to perform their safety function			
Cornerstone	Significance	Cross-cutting Aspect	Report Section
Barrier Integrity	Green NCV 05000336/2019001-01 Open/Closed	[P.6] - Self-Assessment	71153
A self-revealing Green NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified when inadequate maintenance procedures for control room boundary doors and ventilation equipment resulted in both control room emergency ventilation trains inoperable and unable to perform their safety function.			

Description: During surveillance testing on October 23, 2018, with Millstone Power Station Unit 2 (MPS2) in Mode 6, operators discovered that control room envelope (CRE) air in-leakage exceeded the allowable limit of the Control Room Habitability Program (CRHP). Since the in-leakage did not meet the CRHP requirement as required by the plant's technical specifications, both trains of control room emergency ventilation (CREV) were declared inoperable as a result of an inoperable CRE boundary. Technical Specification Action Statement 3.7.6.1.e was entered for two inoperable trains of CREV, and the required technical specification actions were completed. This event was reported via an 8 hour prompt report (NRC Event Notice EN 53688) as an event that at the time of discovery could have prevented the fulfillment of the safety function of SSCs that are needed to mitigate the consequences of an accident. Additionally, LER 2018-001-00 was submitted to the NRC on December 19, 2018.

Technical Specification 6.27, “Control Room Envelope Habitability Program,” requires that a control room envelope habitability program be established and implemented to ensure that CRE occupants can maintain the reactor in a safe condition following a radiological event, hazardous chemical release, or a smoke challenge. The CRHP establishes the air in-leakage limits and provides requirements for maintaining the CRE boundary in its design condition including configuration control and preventative maintenance. The CRHP also requires that periodic self-assessments be performed every three years to assess the effectiveness of the control room envelope maintenance program activities between periodic in-leakage surveillance tests.

The CRE boundary is the combination of walls, floor, roof, ducting, doors, penetrations and equipment that physically form the CRE. The operability of the boundary must be maintained to assure that the unfiltered in-leakage will not exceed the limit assumed in the licensing basis.

Following the failed surveillance testing on October 23, 2018, the licensee identified the following equipment conditions that contributed to the failed CRE air in-leakage surveillance:

- The access door to the 'B' control room air conditioning ductwork was not fully closed and latched
- Degradation (e.g., corrosion and several small holes) of the drain pan for the ‘B’ refrigeration cycle fan suction cooling coil
- Three control room access doors were found to not close tightly and with degraded seals and gaskets
- The common drain line from the ‘A’ and ‘B’ air handlers was drawing in unfiltered air because the loop seal was not present
- Four charcoal filter test canisters were noted to be leaking air

The licensee assessed the effects of the degraded control room in-leakage on calculated dose consequences resulting from a design basis accident and concluded that the potential dose to the plant operators, based on actual plant conditions over the last three years, would have been within regulatory limits. The licensee also determined that the CRE in-leakage did not exceed the maximum permissible air in-leakage limit for accidental chemical releases and smoke.

Corrective Actions: The event was documented in the station's corrective action system. Repairs were made to the CRE and subsequent air in-leakage testing on October 26, 2018, indicated the CRE boundary was restored. Dominion completed a level of effort evaluation and determined the cause to be "the aggregate effect of multiple maintenance activities that

did not have adequate post-maintenance restoration methods. Corrective actions included the addition of specific job steps incorporated into maintenance procedures associated with door and ventilation work to verify that the control room boundary was properly sealed and conformed to specified requirements. Additionally, the licensee will revise the control habitability program periodic self-assessment to include a walk-down inspection of the CRE pressure boundary with an equipment checklist to verify the integrity of boundary doors, seals, ductwork, and loop seals.

Corrective Action References: CR1108281 and CA7415773 (Level of effort evaluation)

Performance Assessment:

Performance Deficiency: Dominion's failure to establish adequate maintenance procedures to verify that control room boundary equipment, on which maintenance was performed, conformed to control envelope habitability program requirements, as required by 10 CFR Part 50, Appendix B, Criterion V, was determined to be a performance deficiency.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Configuration Control attribute of the Barrier Integrity cornerstone. The failure to preserve the control room envelope boundary adversely affected the cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events.

Significance: The inspectors assessed the significance of the finding using Appendix A, "Significance Determination of Reactor Inspection Findings for At - Power Situations." The finding was screened using Exhibit 3 - Barrier Integrity Screening Questions. The finding screened as Green because it only represented a degradation of the radiological barrier function provided for the control room.

Cross-cutting Aspect: P.6 - Self-Assessment: The organization routinely conducts self-critical and objective assessments of its programs and practices. The inspectors noted that the periodic self-assessment of the Unit 2 CRE, performed every three years between the in-leakage surveillance tests, was not effective in identifying the degraded condition of the CRE.

Enforcement:

Violation: 10 CFR Part 50, Appendix B, Criterion V, "Instruction, Procedures, and Drawings," states, in part, that Instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished.

Section 5.5, Quality Standards Commitment, of the Dominion Energy Nuclear Facility Quality Assurance Program Description (DOM-QA-1), states that additional requirements regarding the content of procedures for specific activities delineated in NQA-1-1994, Part II will also be implemented as appropriate to the activity.

Section 2.7, Verification of Maintenance Work, of Subpart 2.18, Quality Assurance Requirements for Maintenance of Nuclear Facilities, of ASME NQA-1-1994 Edition, Part II, states that "verification shall be performed, as appropriate, to ensure that equipment on which maintenance has been performed conforms to specified requirements. This verification shall include inspection, testing, or document review as necessary."

Contrary the above, on October 23, 2018, Dominion failed establish adequate maintenance procedures with appropriate qualitative or quantitative acceptance criteria to determine that maintenance activities performed on control room access doors and ventilation equipment were satisfactorily accomplished. Specifically, Dominion failed to perform adequate verification that control room boundary equipment, on which maintenance was performed, conformed to control room envelope habitability program requirements. As a result, both trains of the CREV system were rendered inoperable and unable to perform their safety function when the control room envelope air in-leakage exceeded the allowable limit of the CRHP.

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 April 9, 2019, the inspectors presented the quarterly resident inspector inspection results to Mr. John Daugherty, Site Vice President, and other members of the Dominion staff.

DOCUMENTS REVIEWED

71111.01 - Adverse Weather Protection

Procedures
AOP 3569, Severe Weather Conditions (MPS3), Revision 024
C OP 200.13, Seasonal Weather Operations, Revision 006
C OP 200.13-003, Unit 3 Cold Weather Preparation Checklist, Revision 001-01

Condition Reports
1116725

71111.04 - Equipment Alignment

Procedures
SP 2610CO-001, Auxiliary Feed Water Flow Path Lineup Verification, Revision 001, completed on January 7, 2019

Condition Reports

530075	574298	1003249	1044034
1055338	1057936	1058155	1061971
1088226	1096116	1111548	1112956
1113467			

Work Orders
53103113782
53103113783

Miscellaneous
25212-26904, PID Chemical & Volume Control, Sheet 1, Revision 54
25212-004-001, Installation, Operation and Maintenance of Service Water Pumps, Revision 1
P-MILL-432664, MP3 Service Water Pump Packing Check
25212-26933, PID Service Water, Sheet 1 of 4, Revision 44
25212-26916, PID Emergency Diesel Generator A Lube Oil & Cooling Water, Sheet 1, Revision 47
25212-30076, One Line Diagram, 125VDC & 120 VAC Distribution System Composite, Revision 31

71111.05 - Fire Protection

Miscellaneous
U2-24-FFS, Millstone Unit 2 Fire Fighting Strategies, Revision 0
Millstone Unit 2 Fire Hazard Analysis, Revision 11
U3-24-FFS, Millstone Unit 3 Fire Fighting Strategies, Revision 0
Millstone Unit 3 Fire Protection Evaluation Report, Revision 21.3

71111.12 - Maintenance Effectiveness

Miscellaneous
PIR1101801 Maintenance Rule (a)(3) Self-assessment for the period of January 1, 2017 to June 30, 2018

Receipt inspection report package for 0045923043-00001-000000191547; Batch # 0000133164
ETE-MP-2018-1091, Evaluation of MPS2 PORV Inlet Flange Stud Inspection and Replacement
MP 3744KA, Reactor Plant Cooling Pump Maintenance, Revision 007
25212-336-001, Installation, Operation and Maintenance of Reactor Plant Component Cooling Pumps, Revision 1
25212-004-001, Installation, Operation and Maintenance of Service Water Pumps, Revision 1
P-MILL-432664, MP3 Service Water Pump Packing Check

Work Orders

53102462693	53102561146	53102750975	53102878639
53103124673	53203148318	53203228636	53203232016
53203237731			

Condition Reports

89732	552986	1049552	1051678
1057789	1057936	1058860	1060557
1061971	1080038	1088226	1089679
1095440	1095966	1096116	1096161
1105526	1108723	1108857	1112956
1113467	1115751		

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Procedures
NF-AA-PRA-370, Probable Risk Assessment Procedures and Methods: MRule (a)(4) Risk Monitor Guidance, Revision 16

Condition Reports
1117034

Work Orders
53203239039

Miscellaneous
High risk plan for RPS trip bistable replacement, dated January 26, 2019
EOOS Version 4.1 for Millstone Unit 3 on January 7,2019
EOOS Version 4.1 for Millstone Unit 3 on January 24, 2019
EOOS Version 4.1 for Millstone Unit 3 on February 4, 2019
EOOS Version 4.1 for Millstone Unit 3 on February 23, 2019

71111.15 - Operability Determinations and Functionality Assessments

Condition Reports

1058155	1089679	1095440	1095966
1096161	1105526	1108857	1111689
1112178	1115548	1117153	1117646
530075	CA7461448	CA7470343	

Work Orders

53102462693	53102561146	53102750975	53102878639

53103113782 53103113783 53103124673 53203148318
53203228636

Miscellaneous
High risk troubleshooting plan for M2ATI, dated March 12, 2019
25212-004-001, Installation, Operation and Maintenance of Service Water Pumps, Revision 1
MP 3744KA, Reactor Plant Cooling Pump Maintenance, Revision 007

71111.17 - Evaluations of Changes, Tests and Experiments

Condition Reports (*initiated in response to inspection)
1115727* 0513413 0567828 1072271
1084116 1094298 1095111 1105337
1109468

Design Changes/Engineering Evaluations
12-227, Equivalent Thermal Performance of the Unit 3 EDG Heat Exchangers for UHS Temperature Increase, Revision 2
A-MP-FE-0001, Millstone 2 Secondary Calorimetric Power Measurement Uncertainty Analysis, Revision 1
ER-M2-THM-201, Determining Feed Flow Correction Factors for MP Unit 2, Revision 2
ETE-MP-2015-1030, Engineered Safety Feature Actuation System UFSAR Response Time Change, Revision 1
ETE-MP-2016-1129, MP3 TDAFW (3FWA*P2) Governor Rack Setting, Revision 0
ETE-MP-2017-1008, Using External LEFM System Data to Correct Feedflow Values in the Plant Calorimetric, Revision 0
ETE-MP-2018-1031, Technical Justification for Utilizing New Steam Quality Values in the Millstone Unit 2 Calorimetric, Revision 0
ETE-MP-2018-1037, Acceptance of Motor Overhaul for 3SWP*M1B, Revision 0
ETE-NAF-2017-001, Implementation of the Analysis Supporting the AREVA Standard CE14 HTP Fuel at Millstone Unit 2 and Cycle 25, Revision 0
ETE-NAF-2017-0169, Implementation of Revised Millstone 2 FSAR Chapter 14 Safety Analysis with a corrected ASI tolerance, Revision 0
ETE-NAF-2017-0170, Implementation of Basis for Millstone Unit 3 Permissive-8 Setpoint at the SPU Power Level of 3650 MWt, Revision 0
ETE-NAF-2018-0019, Implementation of Post-Scram Main Steam Line Break Analysis for Millstone Unit 2, Revision 0
EVAL-ENG-RSE-M3C19, Reload Safety Evaluation Millstone Unit 3 Cycle 19, Rev 0
MP2-14-01130, MP2 Inverter Replacements (INV1, INV3, INV5), Revision 10
MP2-17-00128, Install Vent Valve on ‘A’ LPSI Pump P42A Discharge Line, Revision 0
MP2-17-00178, Millstone 2 Pressurizer Power Operated Relief Valve Replacement, Revision 2
MP2-17-01046, MP2 TDAFW Pump Sentinel Relief Valve Removal, Revision 1
MP2-18-00102, Generator Backup Audio-Tone Equipment Replacement, Revision 2
MP2-18-00201, Temporary Removal of Failed Pressurizer Proportional Heater, Revision 0
MP2-18-00209, Restore Degraded Group 1 Proportional Heater Capacity Using A Backup Heater, Revision 0
MP2-18-01002, Removal of RCP Motor Lube Oil Strainer and Pressure Differential Indicator from P40C and spare motor (S/N 8384973), Revision 0
MP2-18-01093, Disconnect Group 3 Pressurizer Failed Backup Heaters B3C5 and B3A10, Revision 0

MP2-UCR-2017-017, Update of FSAR Chapter 14 DNB LCO Verification Results, dated 12/21/17
MP2-UCR-2018-008, Removal of Reactor Coolant Pump lube oil strainers per DC MP2-18-01002, dated 4/5/18
MP2-UCR-2018-011, Unit 2 FSAR Change: Generator Backup Transfer Trip Digital Teleprotection Units, dated 8/1/18
MP2-UCR-2018-015, Add NUPIPE II computer code to UFSAR Appendix 5E.VI, dated 8/9/18
MP3-16-01121, MP3 NSSTs 3STX-XNS-A and 3STV-XNS-B Replacement Project, Revision 9
MP3-16-01145, MP3 TDAFW Pump Control Valve 3MSS*MCV5 Reliability Enhancement, Revision 1
MP3-18-00150, Setpoint Change 'A' EDG Starting Air, Revision 0
MP3-18-00151, Setpoint Change 'B' EDG Starting Air, Revision 0
MP3-UCR-2018-006, Unit 3 FSAR Change: Setpoint Change 'A' and 'B' EDG Starting Air, dated 6/7/18
STI-M2-2015-002, Surveillance Test Interval Evaluation, dated 3/22/17
TCC-MP-2017-026, Temporary Disabling of the Service Water Pump 'A' Strainer Trouble Annunciator and Light, Revision 0

Drawings
25203-26015, Low Pressure Safety Injection System, Revision 50
25203-30002, Sh. 1, Reserve Station Service Transformer, Revision 1

Maintenance Orders/Work Orders
53103031305 53203162310 53203220257 53203220258

Miscellaneous
17-212, Exemption from the Requirements of 10 CFR 50.46 and Appendix K of 10 CFR Part 50, to allow The Use of Axiom Cladding Material In Lead Test Assemblies – Millstone Power Station Unit 3, dated 5/10/17
487E-3-4-IM, SEL-487E-3, -4 Relay, Current Differential and Voltage Protection Instruction Manual, dated 8/22/13
Audit Report 16-05: Design Control & Engineering Programs, dated 7/21/16
Audit Report 18-05: Design Control & Engineering Programs, dated 8/27/18
BAW-10240(P)-A, Incorporation of M5 Properties in Framatone ANP Approved Methods, dated 5/04
Dominion Energy 50.59 Quality Review Team Quarterly Summaries for 2017
Dominion Energy 50.59 Quality Review Team Quarterly Summaries for 2018
EMF-2310(P)(A), SRP Chapter 15 Non-LOCA Methodology for Pressurized Water Reactors, dated 5/04
LBDCR 18-MP2-007, Functionality Definition Change for the Incore Detector Instrumentation, dated 11/28/18
License Amendment No. 319, Areva M5 Allow Clad Fuel Assemblies, dated 5/18/15
License Amendment No. 327, Technical Specification Changes for Spent Fuel Storage – Millstone Power Station No. 2, dated 6/23/16
License Amendment No. 330, Revision of the Spent Fuel Pool Decay Heat Analysis Description, dated 11/29/16
Millstone Power Station Unit 2 Facility Operating License/Safety Technical Specifications, Amendment No. 335, dated 9/25/18
Millstone Power Station Unit 2 Final Safety Analysis Report, Revision 36.2
Millstone Power Station Unit 3 Facility Operating License/Safety Technical Specifications, Amendment No. 271, dated 3/21/18

Millstone Power Station Unit 3 Final Safety Analysis Report, Revision 31.2
Millstone Power Station Units 1, 2, 3, and ISFSI 10 CFR 50.59, 10 CFR 72.48 Change Report for 2017, and Commitment Change Report for 2017, dated 6/21/18
Millstone Unit 2 Technical Requirements Manual, Change No. 179, dated 11/29/18
Millstone Unit 3 Technical Requirements Manual, Change No. 196, dated 7/12/18
NEU-14-11, Letter, Westinghouse Electric Company to Dominion, NSAL-14-5, 6/19/14
NEU-15-29, Letter, Westinghouse Electric Company to Dominion, Resolution Plan and Technical Basis for NSAL-14-5, dated 11/25/15
NF-NEU-17-49, Westinghouse Axiom Lead Test Assemblies – Revised 10 CFR 50.59 Input, dated 8/23/17
NOTEBK-PRA-MPS2-RA.PR.3.A, Millstone Power Station U2 PRA Risk Summary, Revision 3
NOTEBK-PRA-MPS3-RA.PR.3.A, Millstone Power Station U3 PRA Risk Summary, Revision 4
NRC Information Notice 98-24: Stem Binding in Turbine Governor Valves in Reactor Core Isolation Cooling (RCIC) and Auxiliary Feedwater (AFW) Systems, dated 6/26/98
Report on Sizing Curved Spring Washer for Live Load Packing in Bonnet Assembly P/N 801290-702, dated 9/25/17

Procedures
CM-AA-400, 10 CFR 50.59 and 10 CFR 72.48 - Changes, Tests, and Experiments, Revision 11
EN 21002, Core Heat Balance, Revision 19
MA-AA-105, Scaffolding, Revision 20
MP-24-MOV-PRG, Millstone MOV Program Manual, Revision 1
OP 3260A, Conduct Of Outages, Revision 22
OU-M3-201, Shutdown Safety Assessment Checklist, Revision 26
SP 2401I, Local Power Density Test, Revision 13
SP 2604PA, Facility 1 ESF Equipment Response Time Testing, Revision 1
SP 3622.3, Auxiliary Feedwater Pump 3FWA*P2 Operational Readiness Test, Revision 23

71111.19 - Post-Maintenance Testing

Procedures
SP 2402PB, Channel “B” SPEC 200 Safety Parameters Functional Test, Revision 004
SP 2401D, RPS Matrix Logic and Trip Path Relay Test, Revision 016

Condition Reports
1117034

Maintenance Orders/Work Orders

53203236951	53203237731	53203238036	53203239039
53203239738	53203239739	53203240299	53203241148

Miscellaneous
SP 2613K-001, Periodic DG Slow start Operability Test, Facility 1 (Loaded Run), dated March 2, 2019
OP 2346A-004, “A” DG Data Sheet, dated March 2, 2019
Pressure test parameter worksheets for WO 53203240299 associated with Unit 3 ‘A’ EDG jacket water piping weld repairs

71111.22 - Surveillance Testing

Procedures
SP 2403BB, Facility 2 ESAS UV, RSST and Sequencer Calibration and Functional Test, Revision 4
SP 2403I, ESAS Block Permissive Logic Combination Functional Test Modes 1, 2, and 3, Revision 001-08
C OP200.15, RCS Leakage Trending and Investigation, Revision 003
SP 31447VB, Trip Actuating Device Operational Test for 4 KV Bus 34D Undervoltage, Revision 1
SP 3622.3, Auxiliary Feedwater Pump 3FWA*P2 Operational Readiness Test performed on January 2, 2019
SP 3626.4, Service Water Pump 3SWP*P1A Operability Test performed on January 7, 2019

Work Orders
53203220266

Condition Reports

1113796	1114741	1117153	1117539

71151 - Performance Indicator Verification

Procedures
SP 2602A, Reactor Coolant Leakage, Revision 11

Miscellaneous
2018 Monthly Leakage Spreadsheet for Units 2 and 3
2018 RCS Activity Spreadsheet for Units 2 and 3

Surveillance Test Reports
SP3855-001, Reactor Coolant Analysis for Dose Equivalent I-131, dated December 17, 2018
SP3855-001, Reactor Coolant Analysis for Dose Equivalent I-131, dated February 12, 2018
SP3855-001, Reactor Coolant Analysis for Dose Equivalent I-131, dated September 10, 2018

71152 - Problem Identification and Resolution

Condition Reports (*initiated in response to inspection)

CA3018512	CA3018522	CA3018527	CA3018528
CA3018531	CA3018533		

Work Orders

53102909962	53102909963	53102909966	53102909967
53203148328	53203148329		

71153 – Followup of Events and Notices of Enforcement Discretion

Procedures
ER-MP-CRH-102, Millstone Unit 2 Control Room Habitability Program, Revision 3

Condition Reports (*initiated in response to inspection)

1100587	1108281	1111142	1111142
CA7415773	CA7454333	CA7454333	

Miscellaneous

Memorandum from engineering to Millstone Licensing, Subject: Control room door 204-36-008 reportability support assessment for CR1111142, dated December 6, 2018

Memorandum from engineering to Millstone licensing, Subject: Millstone 2 – Control Room Habitability Envelope In-Leakage Rate and Accidental Chemical Release Analysis, dated November 19, 2018