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

November 8, 2018

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 – BIENNIAL PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION REPORT 05000336/2018011 AND 05000423/2018011

Dear Mr. Stoddard:

On September 27, 2018, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Millstone Power Station (Millstone), Units 1 and 2. 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.

The NRC inspection team reviewed the station's corrective action program and the station's implementation of the program to evaluate its effectiveness in identifying, prioritizing, evaluating, and correcting problems, and to confirm that the station was complying with NRC regulations and licensee standards for corrective action programs. Based on the samples selected for review, the team determined that the implementation of the corrective action program and overall performance related to evaluating and resolving problems was effective. In most cases, Dominion identified issues and entered them into the corrective action program at a low threshold, prioritized and evaluated concerns appropriately, and implemented corrective actions to resolve problems in a timely manner, commensurate with the safety significance of the issues.

In addition to implementation of the corrective action program, the inspectors also reviewed Dominion's use of operating experience, conduct of self-assessments, and safety conscious work environment at the station. Based on the samples selected for review, the inspectors concluded that the self-assessments reviewed were generally effective in identifying issues and improvement opportunities. The inspectors did determine there were deficiencies with Dominion's use of industry operating experience at Millstone. Specifically, Millstone staff was not ensuring the industry operating experience was reviewed for applicability and evaluated, and corrective actions developed where necessary.

Finally, the inspectors found no evidence of significant challenges to Millstone's safety conscious work environment. Based on the inspectors' observations, Millstone staff are willing to raise nuclear safety concerns through at least one of the several means available.

The NRC inspectors did not identify any finding or violation of more than minor significance.

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 the NRC Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR), Part 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

/RA/

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

Docket Numbers: 50-336 and 50-423
License Numbers: DPR-65 and NPF-49

Enclosure:
Inspection Report 05000336/2018011 and
05000423/2018011

cc w/encl: Distribution via ListServ

SUBJECT: MILLSTONE POWER STATION – BIENNIAL PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION REPORT 05000336/2018011 AND 05000423/2018011 DATED NOVEMBER 8, 2018

DISTRIBUTION: (via email)
DLew, RA (R1ORAMAIL Resource)
RLorson, DRA (R1ORAMAIL Resource)
DPelton DRP (R1DRPMAIL Resource)
PKrohn, DRP (R1DRPMAIL Resource)
JYerokun, DRS (R1DRSMAIL Resource)
BWelling, DRS (R1DRSMAIL Resource)
DSchroeder, DRP
TSetzer, DRP
MHenrion, DRP
MRossi, DRP
JFuller, DRP, SRI
LMcKown, DRP, RI
CHighley, DRP, RI
ARancourt, DRP, AA
CCook, RI OEDO
RidsNrrPMMillstone Resource
RidsNrrDorlLpl1 Resource
ROPReports Resource

DOCUMENT NAME: \\nrc.gov\nrc\R1\Office\DRP\BRANCH2\a - Millstone\Inspection Reports\2018\Millstone 2018 PI&R\MS_IR 2018-011_final.docx
ADAMS ACCESSION NUMBER: **ML18313A007**

☑ SUNSI Review		☑ Non-Sensitive ☐ Sensitive		☑ Publicly Available ☐ Non-Publicly Available	
OFFICE	RI/DRP	RI/DRP			
NAME	ARosebrook via email	DSchroeder			
DATE	11/7/18	11/8/18			

OFFICIAL RECORD COPY

U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report

Docket Numbers:	50-336 and 50-423
License Numbers:	DPR-65 and NPF-49
Report Numbers:	05000336/2018011 and 05000423/2018011
Enterprise Identifier:	I-2018-011-0030
Licensee:	Dominion Energy Nuclear Connecticut, Inc. (Dominion)
Facility:	Millstone Power Station (Milstone), Units 2 and 3
Location:	P.O. Box 128 Waterford, CT 06385
Inspection Dates:	September 10 to September 27, 2018
Inspectors:	A. Rosebrook, Senior Project Engineer, Team Leader A. Turilin, Project Engineer C. Highley, Millstone Resident Inspector D. Beacon, Project Engineer
Approved By:	Daniel L. Schroeder, Chief Reactor Projects Branch 2 Division of Reactor Projects

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring Dominion's performance at Millstone, Units 2 and 3 by conducting the biennial problem identification and resolution inspection 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.

Based on the samples selected for review, the team determined that the implementation of the corrective action program and overall performance related to evaluating and resolving problems was effective. In most cases, Dominion identified issues and entered them into the corrective action program at a low threshold, prioritized and evaluated concerns appropriately, and implemented corrective actions to resolve problems in a timely manner, commensurate with the safety significance of the issues.

In addition to implementation of the corrective action program, the inspectors also reviewed Dominion's use of operating experience, conduct of self-assessments, and safety conscious work environment at the station. Based on the samples selected for review, the inspectors concluded that the self-assessments reviewed were generally effective in identifying issues and improvement opportunities. The inspectors did determine there were deficiencies with Dominion's use of industry operating experience at Millstone. Specifically, Millstone staff was not ensuring the industry operating experience was reviewed for applicability and evaluated, and corrective actions developed where necessary.

Finally, the inspectors found no evidence of significant challenges to Millstone's safety conscious work environment. Based on the inspectors' observations, Millstone staff are willing to raise nuclear safety concerns through at least one of the several means available.

No findings or more-than-minor violations were identified.

Additional Tracking Items

Type	Issue number	Title	Inspection Results Section	Status
URI	05000336 & 05000423/2018-011-01	Reviews of Incoming Industry Operation Experience Not Completed	71152B	Open

INSPECTION SCOPES

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

OTHER ACTIVITIES – BASELINE

71152 - Problem Identification and Resolution

Biennial Team Inspection (1 Sample)

The inspectors performed a biennial assessment of the licensee's corrective action program, use of operating experience, self-assessments and audits, and safety conscious work environment. The assessment is documented below.

(1) Corrective Action Program Effectiveness – The inspection team evaluated Dominion's effectiveness in identification, prioritization and evaluation, and correcting problems, and verified the station complied with NRC regulations and Dominion's standards for corrective action programs. A five year look back was performed for the Unit 2 core spray and containment spray systems and the Unit 3 emergency diesel generator system.

(2) Operating Experience – The team evaluated the station's effectiveness in its use of industry and NRC operating experience information and verified the station complied with Dominion's standards for the use of operating experience.

(3) Self-Assessments and Audits – The team evaluated the effectiveness of the station's audits and self-assessments and verified the station complied with Dominion's standards for the use of self-assessments and audits.

(4) Safety Conscious Work Environment – The team reviewed the station's programs to establish and maintain a safety-conscious work environment, and interviewed station personnel to evaluate the effectiveness of these programs.

INSPECTION RESULTS

Evaluation of the Millstone Problem Identification and Resolution Program	71152B

Based on the samples selected for review, the team determined that the implementation of the corrective action program and overall performance related to evaluating and resolving problems was effective. In most cases, Dominion identified issues and entered them into the corrective action program at a low threshold, prioritized and evaluated concerns appropriately, and implemented corrective actions to resolve problems in a timely manner, commensurate with the safety significance of the issues. The inspectors did identify a potential vulnerability in the area of timely and effective corrective actions. Specifically, the team identified numerous examples of corrective action program products where the documented corrective actions did not fully address or correct the condition or identified cause.

In addition to implementation of the corrective action program, the inspectors also reviewed Dominion's use of operating experience, conduct of self-assessments, and safety conscious work environment at the station. Based on the samples selected for review, the inspectors concluded that the self-assessments reviewed were generally effective in identifying issues and improvement opportunities. The inspectors did determine there were deficiencies with Dominion's use of industry operating experience at Millstone. Specifically, Millstone staff was not ensuring the industry operating experience was reviewed for applicability and evaluated, and corrective actions developed where necessary.

Finally, the inspectors found no evidence of significant challenges to Millstone's safety conscious work environment. Based on the inspectors' observations, Millstone staff are willing to raise nuclear safety concerns through at least one of the several means available.

Unresolved Item (Open)	Reviews of Incoming Industry Operation Experience (OPEX) Not Completed	71152B

Description: The inspectors identified that Millstone could not demonstrate that incoming industry operational experience reports (ICES) since 2015 had been properly reviewed for applicability to Millstone and for those items that were applicable, were evaluated and corrective actions developed as necessary as required by program guidance. A population of over 1600 ICES reports were identified where it could not be determined if required reviews were complete. Because there are parallel processes which may have reviewed these items, additional review is necessary to determine whether this issue represents a performance deficiency that is of more than minor significance. Therefore, this item is characterized as an unresolved item (URI). The purpose of the operational experience program is to identify conditions adverse to quality (CAQs) found at other plants, evaluate whether the concern is applicable to either Millstone unit, and evaluate and develop corrective actions for those CAQs when necessary.

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 fully disposition the report. Since

2015, more than 1600 OPEX records were discovered that required disposition for Millstone. These records were still open and no records exist to show whether reviews were completed. Therefore it is uncertain if all applicable ICES reports were reviewed.

Planned Closure Actions: The NRC will conduct a problem identification and resolution annual sample using NRC IP 71152 once Dominion has notified the NRC that they have completed their review of the 1600 ICES reports.

Licensee Actions: Dominion wrote Condition Report (CR) 1105042 to capture the issue, conducted an investigation, and developed a plan to review the 1600 ICES reports which have no documented reviews. Dominion anticipates this review will be completed by the end of the first quarter of 2019.

Corrective Action Reference: CR 1105042

NRC Tracking Number: 05000336 & 05000423/2018-011-01

Observations	71152B

Corrective Action Program Effectiveness: The team determined that the implementation of the corrective action program and overall performance related to evaluating and resolving problems was effective. In most cases, Dominion identified issues and entered them into the corrective action program at a low threshold, prioritized and evaluated concerns appropriately, and implemented corrective actions to resolve problems in a timely manner, commensurate with the safety significance of the issues. However, some weaknesses were noted below. Additionally, the inspectors identified a potential vulnerability in the area of timely and effective corrective actions.

1. Dominion failed to identify and evaluate a CAQ associated with the failure of the Unit 3 'A' emergency diesel generator annunciator panel on September 12, 2018. Specifically, following replacement of the failed power supply, a second pre-tested safety-related power supply was installed and also failed in the same location, but this was only documented in the work order details. A total of three power supplies have now failed in this safety-related annunciator, which may indicate an application or design issue. Dominion agreed with this observation, wrote a CR, and initiated an evaluation. This observation is related to the assessment of the Corrective Action Program Area of Problem Identification. (CR 1105938)

2. The team identified that Dominion's program may have failed to ensure boric acid control inspectors had a valid eye exam to support their qualifications. Specifically, current eye examination information was not entered into the Learning Management System (LMS), which is used to verify qualification status. As a result, LMS incorrectly showed some boric acid control inspectors as not qualified due to expired eye exams. Also, the inspectors did not verify their qualifications in LMS prior to performing inspections which would have led to the identification of the issue. The team verified that this error was administrative and all required inspections were performed by qualified personnel. Dominion agreed with this observation, wrote a CR, initiated an evaluation, verified all inspections were performed by qualified inspectors, and corrected LMS. This observation is related to the assessment of the Corrective Action Program Area of Problem Identification. (CR 1105794)

3. The team identified that Dominion failed to comply with Title 10 of the *Code of Federal Regulations* (10 CFR) 26.165, "Testing Split Specimens and Retesting Single Specimens," when Dominion failed to provide a sample to a third party laboratory within the required 1 working day after the donor had made the request. It was recognized the medical review officer was not familiar with Title 10 requirements such as 10 CFR 26.165 and 10 CFR 55.25 and was trained on timeliness or reporting requirements. The results of the second sample, when tested, matched the results of the first. This observation is related to the assessment of the Corrective Action Program Area of Problem Identification (CR 1046251)

4. The team identified the root cause evaluation performed for non-cited violation (NCV) 2017-004-01, Exceeding of Technical Specification Pressure-Temperature Curve Limits During Solid Plant Operations, did not identify a relevant contributing cause for this event. The portion of the Technical Specification Pressure Temperature Curve the plant was in at the time, the Technical Specification Low Temperature Overpressure System does not provide automatic pressure relief capability via power operated relief valves or residual heat removal system relief valves until the Pressure Temperature Curve limit has been exceeded. Thus operator action and configuration control are the only barriers in place to ensure the limits are not exceeded. Had plant staff been more aware of this fact, the risk perception likely would have resulted in challenges by operators and reviewers prior to the event. Dominion agreed with this observation, wrote a CR, and took prompt action to add a caution statement to the applicable procedure to raise awareness. This observation is related to the assessment of the Corrective Action Program Area of Problem Evaluation. (CR 1105194)

5. The team identified that the review of two security NCVs had contributing causes of the corrective action program not being implemented properly: (1) NCV 50-336&50-423/2016403-02: In 2015, CR 576193 was developed to address a security equipment problem. A security staff member raised a concern about whether the action would be effective. However, the staff member only documented the concern in the notes for the corrective action assignment, stating that the action would not be effective. A new CR should have been written to ensure the concern received the appropriate level of management attention and review. The ineffective corrective action resulted in a subsequent Green NCV (NCV 50-336&50-423/2016403-03). In 2007, Millstone staff had conducted a root cause evaluation (CR-07-05432) and developed a corrective action to prevent recurrence (CAPR) for a security issue. Between 2008 and 2016, this CAPR was effective. In 2016 some security shifts inappropriately discontinued the CAPR. After the practice established by the CAPR was stopped, the security issue recurred and Millstone received a Green NCV.

The team identified a potential vulnerability in the Corrective Action Program Area of Timely and Effective Corrective Actions where corrective actions were being closed without being able to demonstrate actions were actually taken to correct the identified condition or cause. This was typically seen for issues where corrective actions were closed to work orders or other processes and those items were subsequently cancelled, changed, or deferred. Care must be taken to ensure when an item that a corrective action is closed to is completed or closed that the original condition or cause was actually addressed. The team identified numerous examples from all parts of the organization to support this observation. Dominion was able to demonstrate that those examples were administrative, therefore there was no violation of NRC requirements identified.

Each of the above items were evaluated using NRC IMC 0612, Appendix B, “Issue Screening,” and NRC IMC 0612, Appendix E, “Examples of Minor Issues,” and determined to be of minor significance. Dominion has entered each of the observations discussed above in their corrective action program and documented corrective actions to be taken.

Observations	71152B

Operating Experience and Part 21 Reviews: The inspectors determined there were deficiencies with Dominion’s use of industry operating experience at Millstone. Specifically, Millstone staff was not ensuring the industry and Part 21 operating experience was reviewed for applicability and evaluated, and corrective actions developed where necessary.

The inspectors noted that a 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 fully disposition the report. Following the reorganization, the Millstone Operational Experience coordinator set up Institute of Nuclear Power Operations (INPO) Automailers for each system engineer in 2016 for OPEX. The coordinator believed that the applicable system engineers would take the first review of operating experience as it came out daily, and would complete the required PIR action and submit CRs if needed. Therefore, the coordinator concluded that he did not need to take any actions regarding OPEX PIRs. While the system engineers do get an opportunity to review the operating experience that comes in their email, they had no role or assignment to take actions to review or document there review of the PIRs. While the system engineers do document through Engineering eSOMS logs once per month what operating experience was reviewed for their system, the system engineers do not have any responsibility for dispositioning the OPEX PIRs and none of the assignments were marked as complete. This programmatic weakness applied to both Part 21 and industry OPEX. URI 05000336 & 05000423/2018-011-01 is related to this observation.

In addition, Dominion identified a minor performance deficiency contrary to station procedures related to the review of 10 CFR Part 21 reports. A self-assessment identified that several applicability reviews for Part 21 reports were either inaccurate or incomplete. Examples included Part 21 reports 2017-01-00, 2017-01-01, and 2017-01-02 (Bellefonte Unit 2 Containment Vertical Tendon (V281) Failure 50.55(e) First, Second and Third Interim Reports). Millstone’s applicability review for these Part 21 reports stated Millstone does not have containment tendons and the Part 21 was not applicable. This is incorrect since Millstone Unit 2 has tendons. However, station engineering staff had previously evaluated this concern and as a result no corrective actions were needed thus no violation of NRC requirements occurred.

Observations	71152B
Self-Assessments and Audits: The team determined that Dominion's Audit and Self-Assessment programs at Millstone were effective at identifying issues and potential adverse trends and ensuring they were entered into the corrective action program and corrected. The pre-problem identification and resolution inspection self-assessment identified two issues of note. 1. Dominion staff identified untimely corrective actions for the 2016 failures of the solenoid valves associated with Unit 3 air operated valve 194A, Train 'A' reactor plant component cooling water non safety header return auto isolation valve. A corrective action was developed to replace the solenoids in service and to send the replaced solenoids to the vendor for analysis. Dominion's self-assessment identified that, although the solenoids had been removed from the system in the Fall of 2017, they had had not been sent to the vendor for analysis. Dominion wrote a CR, and sent the solenoids to the vendor in September 2018. This observation is an example of an effective self-assessment and a weakness in the area of Corrective Action Program Effectiveness- Timely and Effective Corrective Actions. 2. Dominion staff also identified the Part 21 applicability review discussed in the Operating Experience and Part 21 section above.	

Observations	71152B
Safety Conscious Work Environment: The team found no evidence of challenges to Dominion's organizational safety-conscious work environment. Site employees appeared willing to raise nuclear safety concerns through at least one of the several means available.	

Observations	71152B
Review of Corrective Actions Related to Greater-than-Green Findings That Were Not Completed by the End of the Associated Supplemental Inspection: The team reviewed the long term corrective actions and effectiveness reviews associated with multiple failures of the Unit 3 turbine driven auxiliary feedwater pump open at the time of completion of the documented IP 95001 Supplemental Inspection Report 05000423/2014013 (ADAMS Accession No. ML15015A078), dated January 15, 2015. The team verified these corrective actions had been completed as scheduled. The team did not identify any new performance deficiencies and did not document any additional observations. Note: The team did not review corrective actions for Green Notice of Violation, VIO 05000423/2016001-01, Repetitive Failures to Correct Unit 3 Turbine Driven Auxiliary Feedwater Pump Performance Issues. This review will be completed and documented in a separate inspection report.	

EXIT MEETINGS AND DEBRIEFS

The inspectors confirmed that proprietary information was controlled to protect from public disclosure.

- On September 27, 2018, the inspectors presented the biennial problem identification and resolution inspection results to Mr. John Daugherty, Site Vice President and other members of the Dominion staff.

DOCUMENTS REVIEWED

71152

Procedures

AP-2-18-01, Unit 2 Dry Fuel Storage (ISFSI) ALARA Plan
CM-AA-400, “10 CFR 50.59 and 10 CFR 72.48 – Changes, Tests, and Experiments,” Rev. 11
CM-AA-DDC-201, Design Change, Revision 17
CM-AA-RSK-1001, Engineering Risk Assessment, Revision 14
DNES-AA-GN-1005, Failure Modes and Effects Analysis (FMEA), Revision 3
ER-AA-MRL-100, Implementing Maintenance Rule, Revision 11
ER-MP-CRH-102, Millstone Unit 2 Control Room Habitability Program, Revision 3
MA-AA-105, “Scaffolding,” Rev. 17
MP-GARDMP-000-OP-AA-102-1001, Development of Technical Basis to Support Operability
MP-GARDMP-000-PI-AA-300-3000, Emergent Issue Response, Revision 6
MP-GARDMP-000-PI-AA-300-3001, Root Cause Evaluation, Revision 13
MP-GARDMP-000-PI-AA-300-3004, Cause Evaluation Methods, Revision 7
MP-GARDMP-000-PI-AA-300-3007, Level of Effort Evaluation, Revision 0
MP-PROC-000-NO-AA-102, Internal Auditing and Millstone Inspection, Revision 2
MP-PROC-000-NO-AA-IAP-101, Internal Audit Program, Revision 1
MP-PROC-000-OP-AA-102, Operability Determination, Revision 15
MP-PROC-000-PI-AA-200, Corrective Action, Revision 34
MP-PROC-000-PI-AA-300, Cause Evaluation, Revision 16
MP-PROC-000-WM-AA-100, Work Management, Revision 31
MP-PROC-ENG-U2-24-FFS-BAP01-TB-Map, Revision 1
MP-PROCESS-000-WM-AA-10, Work Management, Revision 1
MS-AA-PTE-401 attachment 5, Commercial Grade Item Evaluation for Procurement Technical Evaluation 10000054868
NF-AA-PRA-370, Probabilistic Risk Assessment Procedures and Methods: MRule (a)(4) Risk Monitor Guidance, Revision 19
OP 2345A, A Emergency Diesel Generator sections 4.4 through 4.6, revision 034
OP-AA-1500, Operational Configuration Control, Revision 15
OP-M2-MOP-VEN-006, West 125 Volt DC Vital Switchgear Room Cooling (FEG 2315D00), Revision 2
SP 2613A, Diesel Generator Operability Tests, Facility 1, Revision 25
SP 2613B, Diesel Generator Operability Tests, Facility 2, Revision 26
SP 3622.8-005, 3FWA*P2 Discharge Isolation Valves Stroke Time Test, Revision 000-06
SP 3622.8-012, TDAFW Pump Control Valves Stroke Time, Revision 02
SP 3626.14, RSS Heat Exchanger SW Supply Piping Flush, Revision 4
SP 3646A.1, Emergency Diesel Generator ‘A’ Operability Test, Revision 20
SP 3646A.2, Emergency Diesel Generator ‘B’ Operability Test, Revision 22
SP3646A.22-001, Emergency Diesel Generator B Operability Tests, Revision 026
SP3646A.22-002, Train B EDG Air System Check Valve Test, Revision 001-02
SP3646B.6-002, Diesel Fuel Oil Storage Tank 1B to EDG A Day Tank Test, Revision 006
U2-24-FFS, Millstone Unit 2 Fire Fighting Strategies, Revision 0
U2-24-FFS-BAP01-CB-MAP Millstone Unit 2 Fire Fighting Strategies for 480 Volt Load Center Rooms
U3-24-FFS-BAP01-ESF-MAP Millstone Unit 3 Fire Fighting Strategies for Engineered Safety Features Building
WM-AA-20, Risk Assessment of Maintenance Activities, Revision 2

Condition Reports (*initiated in response to inspection)

CA3053744
CR1064323
CR1041301
CR1042287
CR1076005
CR1066291
CR1041881
CR1039762
CR1058241
CR1068069
CR1080842
CR1052697
CR1054792
CR1078348
CR1092863
CR1038873
CR1038919
CR1038948
CR1039851
CR1042037
CR1056042
CR1087536
CR1101571
CR1039144
CR1039312
CR1039993
CR1040001
CR1040449
CR1040994
CR1040996
CR1041950
CR1040775
CR1042270
CR1055657
CR1056216
CR1058064
CR1040069
CR1041081
CR1088507
CR1100013
CR1102414
CR1040729
CR1046256
CR1047300
CR1061480
CR1066733
CR1068705
CR1080881
CR1089381
CR1046560
CR1054280
CR1060588
CR1071314
CR1084142
CR1098088
CR592112
CR567120
CR549280
CR547559
CR547435
CR545970
CR545428
CR545314
CR545134
CR529392
CR1104252
CR1096791
CR1090662
CR1086623
CR1078830
CR1082596
CR1066793
CR1061966
CR1061135
CR1055104
CR1054285
CR1052491
CR1040578
CR1040452
CR1020277
CR1041881
CR1048799
CR1048876
CR1049057
CR1052431
CR1054643
CR1056068
CR1058155
CR1058934
CR1064337
CR1065064
CR1071755
CR1073151
CR1074559
CR1075006
CR1075077
CR1075374
CR1075953
CR1076382
CR1076837
CR1083725
CR1083739
CR1084171
CR1085107
CR1087072
CR1087078
CR1087212
CR1088497
CR1089572
CR1089988
CR1092202
CR1092742
CR1095019
CR1095438
CR1095752
CR1095757
CR1095822
CR1096085
CR1096125
CR1096287
CR1096300
CR1096359
CR1096362
CR1096363
CR1096430
CR1096791
CR1096885
CR1096886
CR1101853
CR1102932
CR1103813
CR1038921
CR1038978
CR1039153
CR1039554
CR1040963
CR1041171
CR1041968
CR1042748
CR1042827
CR1043104
CR1043538
CR1043650
CR1043895
CR1044214
CR1044415
CR1044634
CR1044853
CR1044984
CR1045328

CR1045458	CR1050804	CR1097969
CR1046251	CR1054058	CR1076280
CR1042185	CR1054681	CR1054992
CR1082243	CR1066935	CR1105005*
CR1083716	CR1067384	CR1105042*
CR1092287	CR1069537	CR1105173*
CR1038846	CR1073335	CR1105194*
CR1038877	CR1075440	CR1105604*
CR1038943	CR1075530	CR1105612*
CR1039157	CR1077942	CR1105646*
CR1039278	CR1080824	CR1105766*
CR1039595	CR1083288	CR1105794*
CR1039637	CR1084165	CR1105795*
CR1040136	CR1086509	CR1105884*
CR1040143	CR1090171	CR1105887*
CR1040256	CR1090858	CR1105930*
CR1040304	CR1092726	CR1105938*
CR1040472	CR1092939	CR1105979*
CR1040727	CR1093443	
CR1042273	CR1094937	
CR1043240	CR1096840	

Maintenance Orders/Work Orders

WO53102971281	WO53103143959	WO 43102194931
WO53103015045	WO53103143960	WO 53102194929
WO53103028210	WO53103145376	
WO53103042702	WO53203164218	

Engineering Evaluations

50.59 screenings MPS3-SCRN-2018-0181-0 and MPS3-SCRN-2016-0195-0
ETE-MP-2015-1157, Revision 1, MP3 Reactor Coolant System Structural Integrity Evaluation Following October 13, 2017 Overpressurization Event
Calculation M3-LOE-00281EM, Revision 5, Millstone 3: Pressure/Temperature Limits for 32 EFPY

Drawings

25212-26930 Sheet 2, Piping and Instrumentation Diagram Feedwater System, Revision 49
25212-30001, Main One Line Phasing Diagram Power Distribution System, Revision 26
25212-26933, Sheet 1, Service Water System, Revision 44
25212-26902, Sheet 3, Reactor Coolant System, Revision 26
25212-26913, Sheet 1, PID High Pressure Safety Injection System, Revision 33
25212-26913, Sheet 2, PID High Pressure Safety Injection System, Revision 42
25212-26914, Safety Injection Pump Cooling System, Revision 18

Self-Assessment and Audits

PIR1050333	PIR1079909	PIR1011919
PIR1059882	PIR1044038	PIR1058977
PIR1062504	PIR1044036	PIR1089958
PIR1074474	PIR1011917	PIR1089989

PIR1089991	PIR1098156	PIR1089677
PIR1097498	PIR1097702	PIR1057404
PIR1098384	PIR1094309	

50.59 Quality Review Team Quarterly Summaries 2016-Q4, 2017-Q4, and 2018-Q2

NRC NCVs Reviewed

NCV-2016-003-01	NCV-2016-403-04	NCV-2018-001-01
NCV-2016-003-02	NCV-2017-001-01	NCV-2018-001-02
NCV-2016-004-01	NCV-2017-001-02	NCV-2018-001-03
NCV-2016-004-02	NCV-2017-003-01	NCV-2018-010-01
NCV-2016-009-01	NCV-2017-004-01	NCV-2018-010-02
NCV-2016-009-02	NCV-2017-007-01	NCV-2018-010-03
NCV-2016-009-03	NCV-2017-403-01	NCV-2018-010-04
NCV-2016-403-01	NCV-2017-403-02	NCV-2018-410-01
NCV-2016-403-02	NCV-2017-403-03	
NCV-2016-403-03	NCV-2017-403-04	

Miscellaneous

50.59 Applicability and Screening Training Slideshows

ASME Paper: PVP-Vol. 481, RPV Integrity and Facture Mechanics, July 25-29, 2004, San Diego, CA, PVP2004-2724, Probabilistic Assessment of Margins in Appendix G Methodology, by K. K. Yoon, H. P. Gunawardane and S. Rosinksi.

CAP-002 Change Management detailed notice.

Dominion Nuclear Facility Quality Assurance Program Description Topical Report DOM-QA-1 Revision 27

Follow-up Documentation related to CA3093134 (Vendor Invoice)

List of Qualifications Required of Staff for 50.59 Applicability, Screens, and Evaluations

Millstone CAART Report for Thursday, September 13, 2018

Millstone CRT Report for Wednesday, September 12, 2018

MP-DC-000-MPG-18-00139, “Resolution of Part 21 Impacting Foxboro Model N-2ARPS Series Multinest Power Supplies” 5/3/18

MPG-18-00139 Implementation Status Tracking Spreadsheet

Quarterly Surveillances for the Unit 3 ‘C’ Charging Pump: 2017-04, 2017-08, 2017-11, 2018-01, 2018-02, 2018-05, and 2018-08

Scaffolding Tracking Spreadsheet/Database

Tech Spec 3/4.4.9 (including Figure 3.4-3). Reactor Coolant System Pressure/Temperature Limits