



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION I
2100 RENAISSANCE BLVD., SUITE 100
KING OF PRUSSIA, PA 19406-2713

September 1, 2015

Mr. David Heacock
President and Chief Nuclear Officer
Dominion Resources
5000 Dominion Boulevard
Glen Allen, VA 23060-6711

**SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR MILLSTONE POWER STATION
UNITS 2 AND 3 (REPORT 05000336/2015005 AND 05000423/2015005)**

Dear Mr. Heacock:

On August 11, 2015, the U.S. Nuclear Regulatory Commission (NRC) completed its mid-cycle performance review of Millstone Power Station (Millstone) Units 2 and 3. The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from July 1, 2014, through June 30, 2015. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility.

The NRC determined that overall, Millstone operated in a manner that preserved public health and safety and met all cornerstone objectives. The NRC determined the performance at Millstone Unit 2 during the most recent quarter was within the Licensee Response Column of the NRC's Reactor Oversight Process (ROP) Action Matrix because all inspection findings had very low (i.e., Green) safety significance, and all PIs indicated that your performance was within the nominal, expected range (i.e., Green). Therefore, the NRC plans to conduct ROP baseline inspections at your facility.

The NRC determined the performance at Millstone Unit 3 during the most recent quarter was within the Regulatory Response Column of the NRC's ROP Action Matrix because of one Greater-than-Green Security cornerstone finding as described in NRC Inspection Report 05000423/2015405, dated April 2, 2015 (ADAMS Accession No. ML15092A408). Additionally, a low to moderate safety significance finding (White) under the Mitigating Systems cornerstone carried into this assessment period. On April 2, 2015, your staff informed the NRC of your readiness for a supplemental inspection for this White finding. Subsequently, the NRC completed a supplemental inspection pursuant to Inspection Procedure (IP) 95001, "Supplemental Inspection for One or Two White inputs in a Strategic Performance Area." Based on the guidance in Inspection Manual Chapter (IMC) 0305, "Operating Reactor Assessment Program," and the objectives of this inspection having been met, the White finding under the Mitigating Systems cornerstone was closed, effective at the beginning of the third calendar quarter of 2015, as described in NRC Inspection Report 05000423/2015010, dated July 22, 2015 (ML15202A473).

As a result of the Greater-than-Green security finding, in addition to ROP baseline inspections at Millstone Unit 3, the NRC plans to conduct a supplemental inspection in accordance with IP 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area," after notification of your readiness for this inspection. This inspection is conducted to provide assurance that the root causes and contributing causes of risk-significant performance issues are understood, the extent of condition and cause were identified, and the corrective actions are sufficient to prevent recurrence.

The enclosed inspection plan lists the inspections scheduled through June 30, 2017. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the last nine months of the inspection plan are tentative and may be revised at the end-of-cycle performance review. In addition, the NRC will perform IP 60855, "Operation of an Independent Spent Fuel Storage Installation at Operating Plants"; IP 92702, "Follow-up on Traditional Enforcement Actions Including Violations, Deviations, Confirmatory Action Letters, Confirmatory Orders, and Alternate Dispute Resolution Confirmatory Orders"; Temporary Instruction (TI) 2515/190, "Inspection of the Licensee's Proposed Interim Actions as a Result of the Near-term Task Force Recommendation 2.1 Flooding Reevaluation"; and TI 2515/191, "Inspection of the Implementation of Mitigation Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communication/Staffing/Multi-Unit Dose Assessment Plans." The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes. This inspection plan does not include security-related inspections, which will be sent via separate, non-publicly available correspondence.

In response to the accident at Fukushima, the Commission issued Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," which requires licensees to develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities following a beyond-design-basis external event. Additionally, the Commission issued Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," which requires licensees to have a reliable means of remotely monitoring wide-range spent fuel pool levels to support effective prioritization of event mitigation and recovery actions in the event of a beyond-design-basis external event. The NRC is conducting audits of licensee efforts towards compliance with these Orders. The onsite portion of the audit has been completed at Millstone Units 2 and 3, and the information gathered will aid staff in development of the Final Safety Evaluation for the site. After the NRC staff receives the Final Compliance letter for the site, the Final Safety Evaluation will be issued. Then, the NRC staff will confirm, through inspections scheduled in May of 2016, the full implementation of the orders mentioned above performing TI 2515/191, "Inspection of the Implementation of Mitigation Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communication/Staffing/Multi-Unit Dose Assessment Plans."

D. Heacock

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In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Please contact Raymond R. McKinley at 610-337-5150 with any questions you have regarding this letter.

Sincerely,

/RA/

Michael L. Scott, Director
Division of Reactor Projects

Docket Nos. 50-336 and 50-423
License Nos. DPR-65 and NPF-49

Enclosure:
Millstone Inspection/Activity Plan

cc w/encl: Distribution via ListServ

D. Heacock

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DOCUMENT NAME: S:\ROP Assessment Meetings\ROP-16 Mid-Cycle Review\Branch 5\Millstone\Millstone Mid-Cycle Letter.docx
ADAMS Accession No. **ML15239A647**

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|--|--------------|---|------------|---|--|
| <input checked="" type="checkbox"/> SUNSI Review | | <input checked="" type="checkbox"/> Non-Sensitive <input type="checkbox"/> Sensitive | | <input checked="" type="checkbox"/> Publicly Available <input type="checkbox"/> Non-Publicly Available | |
| OFFICE | RI/DRP | RI/DRP | RI/DRP | | |
| NAME | SShaffer/SWS | RMckinley/RRM | MScott/MLS | | |
| DATE | 08/19/15 | 08/20/15 | 08/25/15 | | |

OFFICIAL RECORD COPY

Millstone
Inspection / Activity Plan
07/01/2015 - 06/30/2017

| Unit Number | Planned Dates | | Inspection Activity | Title | No. of Staff on Site |
|-------------|---------------|------------|---|---|----------------------|
| Start | End | | | | |
| | | | 9/7EXAM - U3 INITIAL OL EXAM | | 4 |
| 3 | 08/17/2015 | 08/21/2015 | U01903 | FY15-MS3 INITIAL OPERATOR LICENSING EXAM | |
| 3 | 09/14/2015 | 09/18/2015 | U01903 | FY15-MS3 INITIAL OPERATOR LICENSING EXAM | |
| | | | 711111B - U3 REQUAL INSP W/ P/F RESULTS | | 2 |
| 3 | 08/24/2015 | 08/28/2015 | IP 711111B | Licensed Operator Requalification Program | |
| | | | 71003 - U2 LR COMMITMENT PHASE 3 | | 1 |
| 2 | 07/06/2015 | 07/10/2015 | IP 71003 | Post-Approval Site Inspection for License Renewal | |
| | | | 71124 - RADIATION SAFETY INSPECTION - ALARA | | 1 |
| 2 | 07/27/2015 | 07/31/2015 | IP 71124.02 | Occupational ALARA Planning and Controls | |
| | | | EP - EP PROGRAM INSPECTION | | 1 |
| 2, 3 | 08/03/2015 | 08/07/2015 | IP 7111402 | Alert and Notification System Testing | |
| 2, 3 | 08/03/2015 | 08/07/2015 | IP 7111403 | Emergency Preparedness Organization Staffing and Augmentation System | |
| 2, 3 | 08/03/2015 | 08/07/2015 | IP 7111405 | Correction of Emergency Preparedness Weaknesses and Deficiencies | |
| | | | 92702 - 92702 FOR FEEDWATER ISOLATION VALVES NOV | | 3 |
| 3 | 09/21/2015 | 09/25/2015 | IP 92702 | Followup On Corrective Actions For Violations And Deviations | |
| | | | 71124 - RADIATION SAFETY INSPECTION | | 1 |
| 2 | 10/05/2015 | 10/09/2015 | IP 71124.01 | Radiological Hazard Assessment and Exposure Controls | |
| | | | 7111108P - U2 INSERVICE INSPECTION | | 1 |
| 2 | 10/12/2015 | 10/23/2015 | IP 7111108P | Inservice Inspection Activities - PWR | |
| | | | 71124 - RADIATION SAFETY INSPECTION - DOSE | | 1 |
| 2, 3 | 11/16/2015 | 11/20/2015 | IP 71124.04 | Occupational Dose Assessment | |
| 2, 3 | 11/16/2015 | 11/20/2015 | IP 71151 | Performance Indicator Verification | |
| | | | BI - RADIOLOGICAL SAFETY - RAD HAZARDS | | 1 |
| 2, 3 | 04/18/2016 | 04/22/2016 | IP 71124.01 | Radiological Hazard Assessment and Exposure Controls | |
| 2, 3 | 04/18/2016 | 04/22/2016 | IP 71124.02 | Occupational ALARA Planning and Controls | |
| 2, 3 | 04/18/2016 | 04/22/2016 | IP 71124.03 | In-Plant Airborne Radioactivity Control and Mitigation | |
| | | | ISI - U3 INSERVICE INSPECTION | | 1 |
| 3 | 04/18/2016 | 04/29/2016 | IP 7111108P | Inservice Inspection Activities - PWR | |
| | | | EXM8/8 - MILLSTONE 2 INITIAL EXAMINATION | | 4 |
| 2 | 08/08/2016 | 08/12/2016 | U01927 | FY16-MS2 INITIAL OPERATOR LICENSING EXAM | |
| 2 | 09/05/2016 | 09/09/2016 | U01927 | FY16-MS2 INITIAL OPERATOR LICENSING EXAM | |
| | | | TI-191 - FUKUSHMIA LESSONS-LEARNED | | 1 |
| 2, 3 | 05/16/2016 | 05/20/2016 | IP 2515/191 | Inspection of Licensee's Responses to Order EA-12-049, EA-12-051 & EP Info Request March 12, 2012 | |

This report does not include INPO and OUTAGE activities.
This report shows only on-site and announced inspection procedures.

Enclosure

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|-------------|----------------------------|---|---|-------------------------|
| | | BI - RADIOLOGICAL SAFETY - AIRBORNE | | 1 |
| 2, 3 | 05/23/2016 05/27/2016 | IP 71124.03 | In-Plant Airborne Radioactivity Control and Mitigation | |
| | | 7111107T - TRIENNIAL HEAT SINK | | 1 |
| 2, 3 | 06/13/2016 06/17/2016 | IP 7111107T | Heat Sink Performance | |
| | | 71152BI - PI&R BIENNIAL | | 4 |
| 2, 3 | 06/13/2016 06/17/2016 | IP 71152B | Problem Identification and Resolution | |
| 2, 3 | 06/27/2016 07/01/2016 | IP 71152B | Problem Identification and Resolution | |
| | | EP - EP EXERCISE EVALUATION | | 4 |
| 2, 3 | 08/15/2016 08/19/2016 | IP 7111401 | Exercise Evaluation | |
| | | TRI FI - TRIENNIAL FIRE PROTECTION | | 4 |
| 2, 3 | 07/25/2016 07/29/2016 | IP 7111105T | Fire Protection [Triennial] | |
| 2, 3 | 08/08/2016 08/12/2016 | IP 7111105T | Fire Protection [Triennial] | |
| | | BI - RADIOLOGICAL SAFETY - EXT EXPOSURE | | 1 |
| 2, 3 | 08/01/2016 08/05/2016 | IP 71124.04 | Occupational Dose Assessment | |
| | | 7111111B - MS2 REQUAL INSP WITH P/F RESULTS | | 2 |
| 2 | 09/26/2016 09/30/2016 | IP 7111111B | Licensed Operator Requalification Program | |
| | | 7111117T - PERMANENT PLANT MODIFICATIONS | | 3 |
| 2, 3 | 10/31/2016 11/04/2016 | IP 7111117T | Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications | |
| 2, 3 | 11/14/2016 11/18/2016 | IP 7111117T | Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications | |
| | | BI - RADIOLOGICAL SAFETY - RAD HAZ & PIV | | 1 |
| 2, 3 | 11/14/2016 11/18/2016 | IP 71124.01 | Radiological Hazard Assessment and Exposure Controls | |
| 2, 3 | 11/14/2016 11/18/2016 | IP 71151-OR01 | Occupational Exposure Control Effectiveness | |
| 2, 3 | 11/14/2016 11/18/2016 | IP 71151-PR01 | RETS/ODCM Radiological Effluent Occurrences | |
| | | 71124 - RADIOLOGICAL SAFETY - ALARA | | 1 |
| 2, 3 | 01/23/2017 01/27/2017 | IP 71124.02 | Occupational ALARA Planning and Controls | |
| | | 71124.08 - RADWASTE | | 1 |
| 2, 3 | 02/06/2017 02/10/2017 | IP 71124.08 | Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation | |
| | | 71124 - RADIATION SAFETY - RAD HAZ PIV | | 1 |
| 2, 3 | 04/10/2017 04/14/2017 | IP 71124.01 | Radiological Hazard Assessment and Exposure Controls | |
| 2, 3 | 04/10/2017 04/14/2017 | IP 71151-OR01 | Occupational Exposure Control Effectiveness | |
| 2, 3 | 04/10/2017 04/14/2017 | IP 71151-PR01 | RETS/ODCM Radiological Effluent Occurrences | |
| | | 7111108P - U2 INSERVICE INSPECTION | | 1 |
| 2 | 04/17/2017 04/28/2017 | IP 7111108P | Inservice Inspection Activities - PWR | |

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|--|---------------|------------|---------------------|---|----------------------|
| Start | End | | | | |
| ISFSI - ISFSI OPERATIONS INSPECTION | | | | | |
| 2, 3 | 04/24/2017 | 04/28/2017 | IP 60855 | Operation Of An ISFSI | 1 |
| 2, 3 | 04/24/2017 | 04/28/2017 | IP 60855.1 | Operation of an Independent Spent Fuel Storage Installation at Operating Plants | |

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