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

November 2, 2015

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

SUBJECT: MILLSTONE POWER STATION, UNIT 3 - NRC INITIAL OPERATOR LICENSING EXAMINATION REPORT 05000423/2015301

Dear Mr. Heacock:

On September 21, 2015, the U.S. Nuclear Regulatory Commission (NRC) completed an examination at the Millstone Power Station, Unit 3. The enclosed report documents the examination findings, which were discussed on October 15, 2015, with Mr. David Llewellyn, Training Manager, and other members of your staff.

The examination included the evaluation of four applicants for reactor operator licenses and five applicants for instant senior operator licenses. The written and operating examinations were developed using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 10. The license examiners determined that all applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses were issued on October 15, 2015.

No findings were identified during this examination.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC’s document system Agencywide Documents Access and Management System (ADAMS).

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Sincerely,

/RA/

Donald E. Jackson, Chief
Operations Branch
Division of Reactor Safety

Docket No.: 50-423
License No.: NPF-49

cc w/encl: Distribution via ListServ

Enclosure:
NRC Initial Operator Licensing Examination Report
05000423/2015301
w/Attachment: Supplemental Information

ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Donald E. Jackson, Chief
Operations Branch
Division of Reactor Safety

Docket No.: 50-423
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Enclosure:
NRC Initial Operator Licensing Examination Report
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EXAMINATION REPORT

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Docket:	50-423
License:	NPF-49
Report:	05000423/2015301
Licensee:	Dominion Resources
Facility:	Millstone Power Station, Unit 3
Location:	P. O. Box 128 Waterford, CT 06385
Dates:	September 14-18, 2015 (Operating Test Administration) September 21, 2015 (Written Examination Administration) September 21 - October 9, 2015 (NRC Examination Grading) October 15, 2015 (Licenses Issued)
Examiners:	D. Silk, Chief Examiner, Operations Branch M. Patel, Operations Engineer J. D'Antonio, Sr. Operations Engineer C. Lally, Operations Engineer
Approved By:	Donald E. Jackson, Chief Operations Branch Division of Reactor Safety

SUMMARY OF FINDINGS

ER 05000423/2015301; September 14-18, 2015 and September 21, 2015; Millstone Power Station, Unit 3; Initial Operator Licensing Examination Report.

NRC examiners evaluated the competency of four applicants for reactor operator licenses and five applicants for instant senior operator licenses at Millstone, Unit 3. The facility licensee developed the examinations using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 10. NRC examiners administered the operating tests on September 14-18, 2015. The written examination was administered by the facility on September 21, 2015. The NRC examiners determined that all applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses have been issued.

No findings were identified.

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REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA5 Other Activities (Initial Operator License Examination)

.1 License Applications

a. Scope

The examiners reviewed all nine license applications submitted by the licensee to ensure the applications reflected that each applicant satisfied relevant license eligibility requirements. The applications were submitted on NRC Form 398, "Personal Qualification Statement," and NRC Form 396, "Certification of Medical Examination by Facility Licensee." The examiners also audited three of the license applications in detail to confirm that they accurately reflected the subject applicant's qualifications. This audit focused on each applicant's experience and on-the-job training, including control manipulations that provided significant reactivity changes.

b. Findings

No findings were identified.

.2 Operator Knowledge and Performance

a. Examination Scope

On September 21, 2015, the licensee proctored the administration of the written examinations to all nine applicants. The licensee staff graded the written examinations, analyzed the results, and presented their analysis to the NRC on September 29, 2015.

The NRC examination team administered the various portions of the operating examination to all nine applicants September 14-18, 2015. The four applicants for reactor operator licenses participated in at least two dynamic simulator scenarios, in a control room and facilities walkthrough test consisting of 11 system tasks, and an administrative test consisting of four administrative tasks. The five applicants seeking an instant senior operator license participated in at least two dynamic simulator scenarios, a control room and facilities walkthrough test consisting of 10 system tasks, and an administrative test consisting of five administrative tasks.

b. Findings

All of the applicants passed all parts of the operating test and the written examination. For the written examinations, the reactor operator applicants' average score was 92.32 percent and ranged from 90.66 to 94.66 percent; the senior operator applicants' average score was 90.80 percent and ranged from 85.00 to 99.00 percent. The text of the examination questions may be accessed in the ADAMS system under the accession numbers noted in Attachment 1. In accordance with current NRC policy, the release of this written examination in ADAMS to the public will be delayed for 2 years. Chapter ES-403 and Form ES-403-1 of NUREG 1021 require the licensee to analyze the validity of any written examination questions that were missed by half or more of the applicants. The licensee conducted this performance analysis and submitted the analysis to the chief examiner.

.3 Initial Licensing Examination Development

a. Examination Scope

The facility licensee developed the examinations in accordance with NUREG-1021, Revision 10. All facility licensee training and operations staff involved in examination preparation and validation were listed on a security agreement. The facility licensee submitted both the written and operating examination outlines on June 11, 2015. The chief examiner reviewed the outlines against the requirements of NUREG-1021, and provided comments to the licensee. The facility licensee submitted the draft examination package on July 16, 2015. The chief examiner reviewed the draft examination package against the requirements of NUREG-1021, and provided comments to the licensee. The NRC conducted an onsite validation of the operating examinations and provided further comments during the week of July 20, 2015. The licensee satisfactorily completed comment resolution on August 20, 2015.

b. Findings

The NRC approved the initial examination outline and advised the licensee to proceed with examination development.

The examiners determined that the written and operating examinations initially submitted by the licensee were within the range of acceptability expected for a proposed examination.

No findings were identified.

.4 Simulation Facility Performance

a. Examination Scope

The examiners observed simulator performance with regard to plant fidelity during the examination validation and administration.

b. Findings

No findings were identified.

.5 Examination Security

a. Examination Scope

The examiners reviewed examination security for examination development and during both the onsite preparation week and examination administration week for compliance with NUREG-1021 requirements. Plans for simulator security and applicant control were reviewed and discussed with licensee personnel.

b. Findings

No findings were identified.

4OA6 Meetings, Including Exit

The chief examiner presented the examination results to Mr. David Llewellyn, Training Manager, and other licensee staff on October 15, 2015. The licensee acknowledged the findings presented.

The licensee did not identify any information or materials used during the examination as proprietary.

Attachment:
Supplemental Information

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel
D. Llewellyn, Training Manager
C. Walsh, Supervisor, Initial License Training
J. Go, Training Director
M. Siebert, Supervisor, Nuclear Training
R. Royce, Nuclear Training Instructor (Exam Developer)
J. Follett, Nuclear Training Instructor (Exam Developer)

ITEMS OPENED, CLOSED, AND DISCUSSED

None

ADAMS DOCUMENTS REFERENCED

Accession No. ML15281A148 – Written Exam (Note: In accordance with current NRC policy, the release of this written examination in ADAMS to the public will be delayed for 2 years.)
Accession No. ML15281A140 – Operating Exam

ES-501	Simulator Fidelity Report	Attachment 2

Facility Licensee: Millstone Unit 3

Facility Docket No.: 50-423

Operating Test Administered on: September 14-18

This form is to be used only to report observations. These observations do not constitute audit or inspection findings and, without further verification and review in accordance with IP 71111.11, are not indicative of noncompliance with 10 CFR 55.46. No licensee action is required in response to these observations.

While conducting the simulator portion of the operating tests, examiners observed the following items:

Item	Description
Slow Condenser Backpressure Response	Malfunction FW01 was used to raise condenser backpressure above 5 inHgA during the 2015 NRC ILT Exam to simulate condenser in-leakage. FW01 was removed with backpressure indicating less than 6 inHgA to simulate leak repair. NRC Examiners noted that the backpressure took too long to return below 5 inHgA since no leak was present, and crew had to reduce turbine load from 74 to 50% power. DR# 2015-3-0057
Incorrect Gland Seal Pressure Setpoint	Gland Seal Regulator Pressure Setpoint in Foxboro DCS set to 0.0 psig when a value of 3 to 4 psig was expected. Gland Seal was lost when turbine power was reduced below the self-sealing value, causing condenser vacuum to be lost. Incorrect setpoint identified in IC-18, IC-356 and IC-358. DR# 2015-3-0059
Sporadic Aux Building Fan Switch Operation	VPl Fan Switches 3HVR-FN7 and 3HVR-HVU2B are not operating reliably. Red operating lights came on when switch was held in the START position, but extinguished when the switch was released after as much as 15 seconds. Switches had to be repeatedly operated until proper operation could be achieved. Switches failed several times over 2 hours of use. DR# 2015-3-0060