



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION I  
475 ALLENDALE RD, STE 102  
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

November 22, 2022

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, UNIT 2 – INITIAL OPERATOR LICENSING  
EXAMINATION REPORT 05000336/2022301

Dear Daniel Stoddard:

On September 21, 2022, the U.S. Nuclear Regulatory Commission (NRC) completed an examination at Millstone Power Station, Unit 2. The enclosed examination report documents the examination results, which were discussed on October 25, 2022, with Angelo Leone, Supervisor, Nuclear Training Millstone 2 Initial License Training, and other members of your staff.

The examination included the evaluation of six applicants for reactor operator licenses, two applicants for instant senior reactor operator licenses, and four applicants for upgrade senior reactor operator licenses. The written and operating examinations were developed using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 12. The license examiners determined that eleven of the twelve applicants satisfied the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 55, and the appropriate licenses were issued on October 25, 2022.

No findings were identified during this examination.

One applicant for a reactor operator license failed the written portion of the exam and was denied a license.

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 Agencywide

Documents Access Management System (ADAMS). ADAMS is accessible from the NRC website <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

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

Docket No. 50-336  
License No. DPR-65

Enclosure:  
Examination Report 05000336/2022301  
w/Attachment: Supplementary Information

cc w/encl: Distribution via ListServ

SUBJECT: MILLSTONE POWER STATION, UNIT 2 – INITIAL OPERATOR LICENSING  
EXAMINATION REPORT 05000336/2022301 DATED NOVEMBER 22, 2022

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## **EXAMINATION REPORT**

### **U.S. NUCLEAR REGULATORY COMMISSION REGION I**

Docket No. 50-336

License No. DPR-65

Report No. 05000336/2022301

Licensee: Dominion Energy Nuclear Connecticut, Inc.

Enterprise Identifier EPID: L-2022-OLL-0007

Facility: Millstone Power Station, Unit 2

Location: Waterford, CT 06385

Dates: September 12–15, 2022 (Operating Test Administration)  
September 21, 2022 (Written Examination Administration)  
September 27, 2022 (Licensee Submitted Post Exam Package)  
September 29, 2022 (NRC Examination Grading)  
October 25, 2022 (Licenses Issued)

Examiners: B. Fuller, Chief Examiner, Operations Branch  
M. Scheetz, Reactor Engineer  
T. Hedigan, Operations Engineer  
S. Elkhiamy, Senior Project Engineer

Approved By: Donald E. Jackson, Chief  
Operations Branch  
Division of Operating Reactor Safety

Enclosure

## SUMMARY

ER 05000336/2022301; September 12 to September 21, 2022; Millstone Power Station, Unit 2; Initial Operator Licensing Examination Report.

Four NRC examiners evaluated the competency of six applicants for reactor operator licenses, two applicants for instant senior reactor operator licenses, and four applicants for upgrade senior reactor operator licenses at Millstone Power Station, Unit 2. The facility licensee developed the examinations using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 12. The written examination was administered by the facility on September 21, 2022. NRC examiners administered the operating tests on September 12–15, 2022. The NRC examiners determined that eleven of the twelve applicants satisfied the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 55, and the appropriate licenses have been issued.

A. NRC-Identified and Self-Revealing Findings

No findings were identified.

B. Licensee-Identified Violations

None.

## REPORT DETAILS

### 4. OTHER ACTIVITIES (OA)

#### 4OA5 Other Activities (Initial Operator License Examination)

##### .1 License Applications

###### a. Scope

The examiners reviewed all of the 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 two of the license applications in detail to confirm that they accurately reflected the subject applicant's qualifications. This audit focused on the 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, 2022, the licensee proctored the administration of the written examinations to all twelve applicants. The licensee staff graded the written examinations, analyzed the results, and presented their analysis to the NRC on September 27, 2022.

The NRC examination team administered the various portions of the operating test to all twelve applicants on September 12–15, 2022. The six applicants for reactor operator licenses participated in two dynamic simulator scenarios, in a control room and facilities walkthrough test consisting of eleven system tasks, and an administrative test consisting of four administrative tasks. The two applicants seeking an instant senior reactor operator license participated in two dynamic simulator scenarios, a control room and facilities walkthrough test consisting of ten system tasks, and an administrative test consisting of five administrative tasks. The four applicants for upgrade senior reactor operator licenses participated in two dynamic simulator scenarios, a control room and facilities walkthrough test consisting of five system tasks, and an administrative test consisting of five administrative tasks.

###### b. Findings

All twelve of the applicants passed all parts of the operating test. One reactor operator applicant failed the written examination. For the written examinations, the reactor operator applicants' average score was 83.3 percent and ranged from 77.3 to 90.7

percent, and the senior operator applicants' average score was 87.5 percent and ranged from 82.8 to 89.8 percent. The overall written examination average was 85.4 percent.

The NRC examiners completed the final grading of the written examination on September 29, 2022, and conducted a review of each missed question to determine the accuracy and validity of the examination questions. In accordance with current NRC policy, the release of this written examination will be delayed for two years. The text of the examination questions, the licensee's examination analysis, and the licensee's post-examination comments may be accessed in the ADAMS system under the accession numbers noted in the Attachment.

ES-4.4 of NUREG-1021 instructs the licensee to evaluate the overall group performance of each written examination question to identify any indications of a problem with the question or a deficiency in the facility licensee training program. The licensee conducted this performance analysis for eight questions that met these criteria and submitted the analysis to the chief examiner. This analysis concluded that one of the questions (question No. 50) needs modification to improve clarity before using it again and one of the questions (question No. 77) has no correct answer. The licensee concluded that performance on six of the questions (question Nos. 24, 26, 30, 34, 75, and 88) is attributed to applicant knowledge gaps. The licensee addressed knowledge gaps related to the questions during the examination review session.

ES-4.4 of NUREG-1021 instructs the licensee to submit all post-examination comments made by the facility licensee and the applicants. The licensee submitted two post-examination comments for the written examination on October 4, 2022. The NRC reviewed the facility's post-examination comment submittal and accepted the facility recommendations both of the questions. Question No. 24 has only one correct answer. Question No. 77 was deleted because there is no correct answer. The text of the examination questions, the licensee's examination analysis, and the licensee's post-examination comments with the NRC resolutions may be accessed in the ADAMS system under the accession numbers noted in the Attachment. In accordance with current NRC policy the release of this written examination will be delayed for two years.

### .3 Initial Licensing Examination Development

#### a. Examination Scope

The facility licensee developed the examinations in accordance with NUREG-1021, Revision 12. All licensee facility training and operations staff involved in examination preparation and validation were listed on a security agreement. The facility licensee submitted the operating examination outline on April 13, 2022. 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 May 26, 2022. The chief examiner reviewed the draft examination package against the requirements of NUREG-1021 and provided comments to the licensee on the examination on July 25, 2022. The NRC conducted an onsite validation of the operating examinations and provided further comments during the week of July 25, 2022. The licensee satisfactorily completed comment resolution on August 22, 2022.

b. Findings

No findings were identified.

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.

.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, Revision 12 requirements. Plans for simulator security and applicant control were reviewed and discussed with licensee personnel.

a. Findings

No findings were identified.

4OA6 Meetings, Including Exit

The chief examiner presented the examination results to Angelo Leone, Supervisor, Nuclear Training, Millstone Unit 2 Initial License Training, and other members of the licensee's management staff on October 25, 2022. The licensee acknowledged the findings presented.

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

**ATTACHMENT: SUPPLEMENTARY INFORMATION**



**SUPPLEMENTARY INFORMATION**

**KEY POINTS OF CONTACT**

**Licensee Personnel**

J. Riley, Exam Author  
D. Funk, Exam Author  
A. Leone, Supervisor ILT

**ITEMS OPENED, CLOSED, AND DISCUSSED**

NONE

**ADAMS DOCUMENTS REFERENCED**

Accession No. ML22312A522 – Administered Written Examination with Answer Key (Note: In accordance with current NRC policy, the release of this written examination in ADAMS to the public will be delayed for two years.)

Accession No. ML22312A529 – Administered Operating Test

Accession No. ML22313A035 – Post Exam Comments and Technical References