



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, ILLINOIS 60532-4352

April 6, 2022

Mr. David Rhoades
Senior Vice President
Constellation Energy Generation, LLC
President and Chief Nuclear
Officer (CNO)
Constellation Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: BRAIDWOOD STATION, UNITS 1 AND 2—NRC INITIAL LICENSE EXAMINATION
REPORT 05000456/2022301 AND 05000457/2022301

Dear Mr. Rhoades:

On March 30, 2022, the U.S. Nuclear Regulatory Commission (NRC) completed the initial operator licensing examination process for license applicants employed at your Braidwood Station. The enclosed report documents the results of those examinations. Preliminary observations noted during the examination process were discussed on March 17, 2022, with Mr. G. Gule, Site Vice President, and other members of your staff. An exit meeting was conducted by telephone on April 5, 2022, with Mr. J. Petty, Acting Site Vice President, other members of your staff, and Mr. R. Baker, Chief Operator Licensing Examiner, to review the final grading of the written examination for the license applicants. The NRC also confirmed that the station submitted documentation noting that there were no post-examination comments for consideration during NRC grading of the examination.

The NRC examiners administered an initial license examination operating test during the weeks of March 7 and March 14, 2022. The written examination was administered by Braidwood Station training department personnel on March 18, 2022. Five Senior Reactor Operator and six Reactor Operator applicants were administered license examinations. The results of the examinations were finalized on April 5, 2022. Eleven applicants passed all sections of their respective examinations. Five applicants were issued senior operator licenses and six applicants were issued operator licenses.

The administered written examination and operating test, as well as documents related to the development and review (outlines, review comments and resolution, etc.) of the examination will be withheld from public disclosure until March 30, 2024.

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 Title 10 of the *Code of Federal Regulations*, Part 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,



Signed by Pelke, Patricia
on 04/06/22

Patricia J. Pelke, Chief
Operations Branch
Division of Reactor Safety

Docket Nos. 50-456; 50-457
License Nos. NPF-72; NPF-77

Enclosures:

1. OL Examination
Report 05000456/2022301
and 05000457/2022301
2. Simulator Fidelity Report

cc: Distribution via LISTSERV®
C. Rocha, Senior Manager
Site Training

Letter to David Rhoades from Patricia J. Pelke dated April 6, 2022.

SUBJECT: BRAIDWOOD STATION, UNITS 1 AND 2—NRC INITIAL LICENSE EXAMINATION
REPORT 05000456/2022301 AND 05000457/2022301

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: 05000456; 05000457

License No: NPF-72; NPF-77

Report No: 05000456/2022301; 05000457/2022301

Enterprise Identifier: L-2022-OLL-0020

Licensee: Constellation Energy Generation, LLC

Facility: Braidwood Station, Units 1 and 2

Location: Braceville, IL

Dates: March 7, 2022 through March 30, 2022

Examiners: R. Baker, Senior Operations Engineer, Chief Examiner
G. Roach, Senior Operations Engineer, Examiner
J. Robbins, Operations Engineer, Examiner
L. Rodriguez, Operations Engineer, Examiner

Examination Authors: J. Robbins, Operations Engineer, Examiner
L. Rodriguez, Operations Engineer, Examiner

Approved by: P. Pelke, Chief
Operations Branch
Division of Reactor Safety

SUMMARY

Examination Report 05000456/2022301; 05000457/2022301; 03/07/2022–03/30/2022; Constellation Energy Generation, LLC; Braidwood Station, Units 1 and 2; Initial License Examination Report.

The announced initial operator licensing examination was conducted by regional U.S. Nuclear Regulatory Commission examiners in accordance with the guidance of NUREG-1021, “Operator Licensing Examination Standards for Power Reactors,” Revision 11.

Examination Summary

Eleven applicants passed all sections of their respective examinations. Five applicants were issued senior operator licenses and six applicants were issued operator licenses. (Section 40A5.1)

REPORT DETAILS

40A5 Other Activities

.1 Initial Licensing Examinations

a. Examination Scope

The U.S. Nuclear Regulatory Commission (NRC) examiners and members of the facility licensee's staff used the guidance prescribed in NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 11, to develop, validate, administer, and grade the written examination and operating test. The written examination outlines and operating test outlines were prepared by the NRC staff and were transmitted to the facility licensee's staff for review. The NRC staff developed the written examination for the purpose of examiner qualifications, and the NRC staff and members of the facility licensee's staff developed the operating test, using the NRC prepared outlines. The NRC examiners validated the proposed examination during the week of January 31, 2022, with the assistance of members of the facility licensee's staff. During the onsite validation week, the examiners audited one reactor operator and one senior reactor operator license applications for accuracy. The NRC examiners, with the assistance of members of the facility licensee's staff, administered the operating test, consisting of job performance measures and dynamic simulator scenarios, during the period of March 7, 2022, through March 15, 2022. The facility licensee administered the written examination on March 18, 2022.

b. Findings

(1) Written Examination

During the validation of the written examination, several questions were modified or replaced. All changes made to the written examination were documented on Form ES-401-9, "Written Examination Review Worksheet," used primarily for the documentation of metrics for the NRC developed written examination. The Form ES-401-9, the written examination outlines (ES-401-1 and ES-401-3), and both the proposed and final written examinations, will be available electronically in the NRC Public Document Room or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS) on March 30, 2024, (ADAMS Accession Numbers ML20140A267, ML20140A264, ML20140A265, and ML20140A271, respectively).

On March 30, 2022, the licensee submitted documentation noting that there were no post-examination comments for consideration by the NRC examiners when grading the written examination. The NRC examiners graded the written examination on April 1, 2022 and conducted a review of each missed question to determine the accuracy and validity of the examination questions.

(2) Operating Test

The NRC examiners determined that the operating test, developed using the NRC prepared outlines, was within the range of acceptability expected for a proposed examination.

During the review and validation of the operating test, minor modifications were made to several job performance measures, and some minor modifications were made to the dynamic simulator scenarios. All changes made to the operating test were documented on Form ES-301-7, "Operating Test Review Worksheet." The Form ES-301-7, the operating test outlines (ES-301-1, ES-301-2, and ES-D-1s), and both the proposed and final operating tests, will be available electronically in the NRC Public Document Room or from the Publicly Available Records component of NRC's ADAMS on March 30, 2024, (ADAMS Accession Numbers ML20140A267, ML20140A264, ML20140A265, and ML20140A271, respectively).

The NRC examiners completed operating test grading on April 4, 2022.

(3) Examination Results

Five applicants at the Senior Reactor Operator level and six applicants at the Reactor Operator level were administered written examinations and operating tests. Eleven applicants passed all portions of their examinations and were issued their respective operating licenses on April 5, 2022.

.2 Examination Security

a. Scope

The NRC examiners reviewed and observed the licensee's implementation of examination security requirements during the examination validation and administration to assure compliance with Title 10 of the *Code of Federal Regulations*, Part 55.49, "Integrity of Examinations and Tests." The examiners used the guidelines provided in NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," to determine acceptability of the licensee's examination security activities.

b. Findings

None.

40A6 Management Meetings

.1 Debrief

The chief examiner presented the examination team's preliminary observations on March 17, 2022, to Mr. G. Gogle, Site Vice President, and other members of the Braidwood Station staff.

.2 Exit Meeting

The chief examiner conducted an exit meeting on April 5, 2022, with Mr. J. Petty, Acting Site Vice President, and other members of the Braidwood Station staff, by telephone. The chief examiner asked the licensee whether any of the material used to develop or administer the examination should be considered proprietary. Proprietary or sensitive information identified during the examination or debrief/exit meetings will be handled in accordance with the applicable requirements.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

G. Gogle, Site Vice President
J. Petty, Plant Manager
C. Rocha, Senior Manager Site Training
R. Schliessmann, Acting Regulatory Assurance Manager
D. Hudak, Operations Director
A. Grabowski, Manager Operations Services
J. Taff, Operations Training Manager
J. Beard, Lead Exam Developer
E. Steinberg, Operations Training

U.S. Nuclear Regulatory Commission

P. Pelke, Operations Branch Chief
D. Kimble, Senior Resident Inspector
P. Smagacz, Resident Inspector
R. Baker, Senior Operations Engineer, Chief Examiner
G. Roach, Senior Operations Engineer, Examiner
J. Robbins, Operations Engineer, Examiner
L. Rodriguez, Operations Engineer, Examiner

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened, Closed, and Discussed

None

LIST OF ACRONYMS USED

ADAMS	Agencywide Document Access and Management System
NRC	U.S. Nuclear Regulatory Commission

SIMULATOR FIDELITY REPORT

Facility Licensee: Braidwood Station
Facility Docket No: 050-456; 050-457
Operating Tests Administered: March 7, 2022 through March 15, 2022

The following documents observations made by the U.S. Nuclear Regulatory Commission examination team during the initial operator license examination. These observations do not constitute audit or inspection findings and are not, without further verification and review, indicative of non-compliance with Title 10 of the *Code of Federal Regulations*, Part 55.45(b). These observations do not affect U.S. Nuclear Regulatory Commission certification or approval of the simulation facility other than to provide information which may be used in future evaluations. No licensee action is required in response to these observations.

During the conduct of the simulator portion of the operating tests, the following items were observed:

ITEM	DESCRIPTION
None	N/A