



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION III
2443 WARRENVILLE RD. SUITE 210
LISLE, IL 60532-4352

July 14, 2017

Mr. Dean Curtland
Director of Site Operations
NextEra Energy Duane Arnold, LLC
3277 DAEC Road
Palo, IA 52324-9785

**SUBJECT: DUANE ARNOLD ENERGY CENTER – NRC INITIAL LICENSE EXAMINATION
REPORT 05000331/2017301**

Dear Mr. Curtland:

On June 21, 2017, the U.S. Nuclear Regulatory Commission (NRC) completed the initial operator licensing examination process for license applicants employed at your Duane Arnold Energy Center. The enclosed report documents the results of those examinations. Preliminary observations noted during the examination process were discussed on June 14, 2017, with yourself and other members of your staff. An exit meeting was conducted by telephone on July 5, 2017, between Mr. C. Hill of your staff and Mr. R. Baker, Senior Operator Licensing Examiner, to review the proposed final grading of the written examination for the license applicants.

The NRC examiners administered an initial license examination operating test during the weeks of June 5 and June 12, 2017. The written examination was administered by Duane Arnold Energy Center training department personnel on June 14, 2017. Nine Senior Reactor Operator and three Reactor Operator applicants were administered license examinations. The results of the examinations were finalized on July 11, 2017. Twelve applicants passed all sections of their respective examinations; nine applicants were issued a senior operator license and three applicants were issued an operator license.

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 June 14, 2019.

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* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

/RA/

Robert J. Orlikowski, Chief
Operations Branch
Division of Reactor Safety

Docket No. 50-331
License No. DPR-49

Enclosures:

1. OL Examination Report 05000331/2017301
2. Simulation Facility Fidelity Report

cc: Distribution via LISTSERV®
C. Hill, Training Manager, Duane Arnold
Energy Center

Letter to Dean Curtland from Robert Orlikowski dated July 14, 2017

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REPORT 05000331/2017301

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REGION III

Docket No: 50-331
License No: DPR-49

Report No: 05000331/2017301

Licensee: NextEra Energy Duane Arnold, LLC

Facility: Duane Arnold Energy Center

Location: Palo, IA

Dates: June 5 – June 21, 2017

Inspectors: M. Bielby, Senior Operations Engineer - Chief Examiner
R. Baker, Senior Operations Engineer - Examiner
C. Zoia, Senior Operations Engineer - Examiner

Approved by: R. Orlikowski, Chief
Operations Branch
Division of Reactor Safety

SUMMARY

Examination Report 05000301/2017301; 06/05/2017 – 06/21/2017; NextEra Energy Duane Arnold, LLC; Duane Arnold Energy Center; Initial License Examination Report.

The announced initial operator licensing examination was conducted by regional Nuclear Regulatory Commission examiners in accordance with the guidance of NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 10.

Examination Summary:

Twelve of Twelve applicants passed all sections of their respective examinations. Nine applicants were issued senior operator licenses and three applicants were issued operator licenses. (Section 4OA5.1).

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 10, to develop, validate, administer, and grade the written examination and operating test. Members of the facility licensee's staff prepared the outline and developed the written examination and operating test. The NRC examiners validated the proposed examination during the week of May 8, 2017, with the assistance of members of the facility licensee's staff. During the on-site validation week, the examiners audited two 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 June 5 through June 13, 2017. The facility licensee administered the written examination on June 14, 2017.

b. Findings

(1) Written Examination

The NRC examiners determined that the written examination, as proposed by the licensee, was within the range of acceptability expected for a proposed examination. Less than 20% of the proposed examination questions were determined to be unsatisfactory and required modification or replacement.

During the validation of the written examination, several questions were modified or replaced. All changes made to the written examination were made in accordance with NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," and documented on Form ES-401-9, "Written Examination Review Worksheet." The Form ES-401-9, the written examination outlines (ES-401-2 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 June 14, 2019, (ADAMS Accession Numbers ML16308A452, ML16308A457, ML16308A458, and ML16308A454, respectively).

On June 21, 2017, 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 June 22, 2017, 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, as originally proposed by the licensee, was within the range of acceptability expected for a proposed examination.

Following the review and validation of the operating test, minor modifications were made to several Job Performance Measures (JPMs), and some minor modifications were made to the dynamic simulator scenarios. All changes made to the operating test were made in accordance with NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," and were documented in a document titled, "Operating Test Comments." The "Operating Test Comments" document, 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 June 14, 2019 (ADAMS Accession Numbers ML16308A452, ML16308A457, ML16308A458, and ML16308A454, respectively).

The NRC examiners completed operating test grading on July 11, 2017.

(3) Examination Results

Nine applicants at the Senior Reactor Operator level and three applicants at the Reactor Operator (RO) level were administered written examinations and operating tests. Twelve applicants passed all portions of their examinations and were issued their respective operating licenses on July 11, 2017.

.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*, Section 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

The NRC examiners reviewed three issues involving examination security that were identified during the examination administration. The first issue was observed one time, and was identified at the start of a scenario. Written information from the previous day's scenario was contained on the back of a pre-scenario crew briefing sheet. The information did not relate to the scenario being administered.

A second examination scenario administration security issue occurred one time, and was identified by an examiner who observed pen markings on a plastic covered switchyard lineup drawing located on the top of the Instructor Display Terminal. The markings were left over from the previously administered scenario and were related to an event to be administered. The markings were erased before being identified by the crew being examined.

A third examination security issue was identified during the administration of an administrative JPM. A reference procedure used by one applicant contained markings of exact information required by the applicant to address the JPM. The applicant initially identified the markings and informed the examiner. Another administrative JPM from the RO examination was identified as an adequate replacement and was administered to the applicant.

None of the three issues resulted in a compromise of the examination material or significant advantage to any of the applicants. These issues were of minor significance and were documented in Corrective Action CR02210092.

4OA6 Management Meetings

.1 Debrief

The chief examiner presented the examination team's preliminary observations and findings on June 14, 2017, to Mr. D. Curtland, Director of Site Operations, and other members of the Duane Arnold Energy Center staff.

.2 Exit Meeting

The chief examiner conducted an exit meeting on July 5, 2017, with Mr. C. Hill, Training Manager, and other members of the Duane Arnold Energy Center staff, by telephone. The examiners asked the licensee whether any of the material used to develop or administer the examination should be considered proprietary. No proprietary or sensitive information was identified during the examination or debrief/exit meetings.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

D. Curtland, Site Director
A. Beaumier, Operations Instructor
J. Dills, Operations Instructor
D. Finch, Operations Instructor
J. Ford, Operations Training Supervisor
C. Hill, Training Manager
J. Miell, Assistant Operations Manager
E. Murray, Operations Training Supervisor
B. Ryan, Operations Instructor
R. Spading, Assistant Operations Manager
S. Speirs, Assistant Operations Manager
M. Strobe, Operations Director
S. Vick, Operations Instructor
M. Walter, General Supervisor Operations Training

U.S. Nuclear Regulatory Commission

C. Norton, Senior Resident Inspector
J. Steffes, Resident Inspector
M. Bielby, Chief Examiner
R. Baker, Examiner
C. Zoia, Examiner

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened, Closed, Discussed

None

LIST OF ACRONYMS USED

ADAMS	Agencywide Document Access and Management System
JPM	Job Performance Measures
NRC	U.S. Nuclear Regulatory Commission
RO	Reactor Operator

SIMULATION FACILITY FIDELITY REPORT

Facility Licensee: Duane Arnold Energy Center

Facility Docket No: 50-331

Operating Tests Administered: June 5 – 9; 12 – 13, 2017

The following documents observations made by the NRC 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* 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 Identified.	None Identified.