



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION III  
2443 WARRENVILLE RD. SUITE 210  
LISLE, IL 60532-4352

April 26, 2017

Mr. Charles Arnone  
Vice President, Operations  
Entergy Nuclear Operations, Inc.  
Palisades Nuclear Plant  
27780 Blue Star Memorial Highway  
Covert, MI 49043-9530

**SUBJECT: PALISADES NUCLEAR PLANT – NRC INITIAL LICENSE EXAMINATION  
REPORT 05000255/2017301**

Dear Mr. Arnone:

On March 13, 2017, the U.S. Nuclear Regulatory Commission (NRC) completed the initial operator licensing examination process for license applicants employed at your Palisades Nuclear Plant. The enclosed report documents the results of those examinations. Preliminary observations noted during the examination process were discussed on February 22, 2017, with you and other members of your staff. An exit meeting was conducted by telephone on March 16, 2017, between Mr. W. Nelson, Training Manager, and Mr. R. Baker, Chief Operator Licensing Examiner, to review the proposed final grading of the written examination for the license applicants. During the telephone conversation, the NRC confirmed that the station had no post-examination comments that required resolution.

The NRC examiners administered an initial license examination operating test during the weeks of February 13 and February 20, 2016. The written examination was administered by the NRC, with the assistance of the Palisades Nuclear Plant Training Department personnel, on February 21, 2017. A total of eight Senior Reactor Operator (SRO) and two Reactor Operator (RO) applicants were administered license examinations. The results of the examinations were finalized on April 11, 2017. One of the SRO applicants failed a portion of the operating test and was issued a proposed license denial letter. The remaining seven SRO and two RO applicants passed all sections of their respective examinations and were issued applicable Licenses.

The written examination and operating tests, as well as other related written examination and operating test documentation, will be withheld from public disclosure for 24 months. However, because one of your applicants failed a portion of the job performance measure (JPM) section of the operating test, the applicant has been provided a copy of that portion of the test. You should consider that portion of the JPM section of the operating test as publicly available.

In accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding," of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection

in the NRC's Public Document Room or from the Publicly Available Records component of the 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).

Sincerely,

**/RA/**

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

Docket No. 50-255  
License No. DPR-20

Enclosures:

1. OL Examination Report 05000255/2017301
2. Simulation Facility Fidelity Report

cc: Distribution via LISTSERV®  
W. Nelson, Training Manager,  
Palisades Nuclear Plant

Letter to Charles Arnone from Robert J. Orlikowski dated April 26, 2017

SUBJECT: PALISADES NUCLEAR PLANT – NRC INITIAL LICENSE EXAMINATION  
REPORT 05000255/2017301

DISTRIBUTION:

Jeremy Bowen  
RidsNrrPMPalisades Resource  
RidsNrrDorLpl3  
RidsNrrDirslrib Resource  
Cynthia Pederson  
Darrell Roberts  
Richard Skokowski  
Allan Barker  
Carole Ariano  
Linda Linn  
DRPIII  
DRSIII  
Nancy Salgado  
Colleen Schmidt

ADAMS Accession Number: ML17116A589

OFFICE	RIII	RIII	RIII	RIII
NAME	RBaker:jw	ROrlikowski		
DATE	04/26/17	04/26/17		

**OFFICIAL RECORD COPY**

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: 50-255  
License No: DPR-20

Report No: 05000255/2017301

Licensee: Entergy Nuclear Operations, Inc.

Facility: Palisades Nuclear Plant

Location: Covert, MI

Dates: February 13 through March 13, 2017

Inspectors: R. Baker, Operations Engineer, Chief Examiner  
R. K. Walton, Senior Operations Engineer, Examiner  
J. Kellum, Senior Reactor Engineer, Examiner  
B. Bergeon, Operations Engineer, Examiner Certification

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

## **SUMMARY**

Examination Report 05000255/2017301; 02/13/2017 - 03/13/2017; Entergy Nuclear Operations, Inc.; Palisades Nuclear Plant; 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

Eight Senior Reactor Operator (SRO) and two Reactor Operator (RO) applicants were administered license examinations. One SRO applicant failed a portion of the operating test and was issued a proposed license denial letter. The remaining seven SRO and two RO applicants were issued Licenses. (Section 4OA5.1).

## **REPORT DETAILS**

### 4OA5 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. NRC examiners prepared the outline and developed the written examination and operating test. The NRC examiners validated the proposed examination, with the assistance of members of the facility licensee's staff, during the week of January 16, 2017. During the on-site validation week, the examiners audited all of the 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 (JPMs) and dynamic simulator scenarios, during the period of February 13 through February 22, 2017. The NRC examiners, with the assistance of members of the facility licensee's staff, administered the written examination on February 21, 2017.

##### 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 made in accordance with NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," and were 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) in 24 months. (ADAMS Accession Numbers ML17037C873, ML17037C879, ML17037C881, and ML17037C872, respectively.)

On March 13, 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 March 15, 2017, and conducted a review of each missed question to determine the accuracy and validity of the examination questions.

## (2) Operating Test

During the validation of the operating test, modifications were made to several JPMs, and some 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 in 24 months. (ADAMS Accession Numbers ML17037C873, ML17037C879, ML17037C881, and ML17037C872 respectively.)

During the administration of the walk-through portion of the operating test, one of the senior reactor operator (SRO) administrative JPMs required the use of an administrative procedure which contained inaccurate information. Use of the inaccurate information resulted in the applicants' inability to successfully complete the task standard. Although the applicants did not accomplish the task standard, the applicant's performance was judged to be satisfactory for this JPM because follow-up questioning revealed that the failure was caused by the deficiency in Administrative Procedure 4.11, "Safety Function Determination Program," a factor beyond applicant's control, as annotated above. The facility has placed the procedural issue into their corrective action program, as document CR-PLP-2017-00652, dated February 23, 2017, for resolution.

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

## (3) Examination Results

The eight applicants at the SRO level and the two applicants at the reactor operator (RO) level were administered written examinations and operating tests. One SRO applicant failed a portion of the operating test and was issued a proposed license denial letter. The remaining seven SRO and two RO applicants passed all portions of their examinations and were issued their respective operating licenses on April 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

No findings were identified.

#### 4OA6 Management Meetings

##### .1 Debrief

The chief examiner presented the examination team's preliminary observations and findings on February 22, 2017, to Mr. C. Arnone, Site Vice President, and other members of the Palisades Operations and Training Department staff.

##### .2 Exit Meeting

The chief examiner conducted an exit meeting on March 16, 2017, with Mr. W. Nelson, Training Manager, by telephone. The NRC confirmed there were no post-examination comments. The chief examiner confirmed that no proprietary or sensitive information was identified during the examination or debrief/exit meetings. It was also confirmed that although the written examination, operating tests, outlines, and other related documentation, will be withheld from public disclosure for 24 months, since one of your applicants failed a portion of the JPM section of the operating test, the applicant had been provided a copy of that portion of the test. The licensee should consider that portion of the operating test as publicly available.

ATTACHMENT: SUPPLEMENTAL INFORMATION



## **SUPPLEMENTAL INFORMATION**

### **KEY POINTS OF CONTACT**

#### Licensee

C. Arnone, Site Vice President  
B. Baker, Operations Manager – Shift  
T. Davis, Regulatory Assurance  
W. Nelson, Training Manager  
F. Korfius, Operations Training Supervisor  
V. Mocer, Operations Support Staff  
S. Botimer, Initial License Examination Author

#### U.S. Nuclear Regulatory Commission

A. Nguyen, Senior Resident Inspector  
R. Baker, Chief Examiner

### **ITEMS OPENED, CLOSED, AND DISCUSSED**

#### Opened, Closed, and Discussed

None

## **LIST OF DOCUMENTS REVIEWED**

The following is a partial list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspector reviewed the documents in their entirety, but rather that selected sections or portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

- Admin 4.11; Safety Function Determination Program; Revision 6
- CR-PLP-2017-00652; During the 2017 LOI examination operating test, a potential interpretation issue with use of Administrative Procedure 4.11, Attachment 2, Support / Supported LCO Listing, arose; Dated February 23, 2017

## **LIST OF ACRONYMS USED**

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

## **SIMULATION FACILITY FIDELITY REPORT**

Facility Licensee: Palisades Nuclear Plant

Facility Docket No: 50-255

Operating Tests Administered: February 13 – February 22, 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, Section 55.45(b). These observations do not affect NRC 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:

<b>ITEM</b>	<b>DESCRIPTION</b>
None	None