



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
1600 EAST LAMAR BOULEVARD  
ARLINGTON, TEXAS 76011-4511

October 13, 2020

Mr. Fadi Diya, Senior Vice President  
and Chief Nuclear Officer  
Ameren Missouri  
Callaway Plant  
8315 County Road 459  
Steedman, MO 65077

SUBJECT: CALLAWAY PLANT - NRC EXAMINATION REPORT 05000483/2020301

Dear Mr. Diya:

On October 1, 2020, the U.S. Nuclear Regulatory Commission (NRC) completed an initial operator license examination at your Callaway Plant. The enclosed report documents the examination results and licensing decisions. The preliminary examination results were discussed on September 3, 2020, with Mr. M. McLachlan, Senior Director, Nuclear Plant Support, and other members of your staff. A telephonic exit meeting was conducted on October 1, 2020, with Mr. J. Czeschin, Operations Training Manager, who was provided the NRC licensing decisions.

The examination included the evaluation of five applicants for reactor operator licenses, three applicants for instant senior reactor operator licenses, and two applicants for upgrade senior reactor operator licenses. The license examiners determined that all ten applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses have either been issued or are pending completion of deferred training requirements. There were no post-examination comments submitted by your staff. The enclosure contains details of this report.

No findings were identified during this examination.

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

F. Diya

2

Room in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

A handwritten signature in cursive script that reads "Gregory E. Werner".

Gregory E. Werner, Chief  
Operations Branch  
Division of Reactor Safety

Docket No. 05000483  
License No. NPF-30

Enclosure:  
Examination Report 05000483/2020301  
w/attachment: Supplemental Information

cc: Electronic Distribution to Callaway Plant

**U.S. NUCLEAR REGULATORY COMMISSION  
Examination Report**

Docket Number: 05000483

License Number: NPF-30

Report Number: 05000483/2020301

Enterprise Identifier: L-2020-OLL-0019

Licensee: Union Electric Company

Facility: Callaway Plant

Location: Steedman, Missouri

Examination Dates: August 31, 2020, to October 1, 2020

Inspectors: T. Farina, Senior Operations Engineer (Chief Examiner)  
K. Clayton, Senior Operations Engineer  
C. Osterholtz, Senior Operations Engineer  
M. Doyle, Operations Engineer

Approved By: Gregory E. Werner  
Chief, Operations Branch  
Division of Reactor Safety

Enclosure

## SUMMARY

Examination Report 05000483/2020301; August 31 – October 1, 2020; Callaway Plant, Unit 1; Initial Operator Licensing Examination

The NRC examiners evaluated the competency of five applicants for reactor operator licenses, three applicants for instant senior reactor operator licenses, and two applicants for upgrade senior reactor operator licenses at Callaway Plant.

The licensee developed the examinations using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 11. The written examination was administered by the licensee on September 9, 2020. The NRC examiners administered the operating tests on August 31–September 3, 2020.

The NRC examiners determined that all applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses have either been issued or are pending completion of deferred training requirements.

A. NRC-Identified and Self-Revealing Findings

None.

B. Licensee-Identified Violations

None.

## REPORT DETAILS

### OTHER ACTIVITIES – INITIAL LICENSE EXAM

#### .1 License Applications

##### a. Scope

The NRC examiners reviewed all license applications submitted to ensure each applicant satisfied relevant license eligibility requirements. The NRC 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 applicants' experience and on-the-job training, including control manipulations that provided significant reactivity changes.

##### b. Findings

No findings were identified.

#### .2 Examination Development

##### a. Scope

The NRC examiners reviewed integrated examination outlines and draft examinations submitted by the licensee against the requirements of NUREG-1021. The NRC examiners conducted an onsite validation of the operating tests.

##### b. Findings

The NRC examiners provided outline, draft examination and post-validation comments to the licensee. The licensee satisfactorily completed comment resolution prior to examination administration.

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

#### .3 Operator Knowledge and Performance

##### a. Scope

On September 9, 2020, the licensee proctored the administration of the written examinations to all ten applicants. The licensee staff graded the written examinations, analyzed the results, and presented their analysis to the NRC on September 16, 2020.

The NRC examination team administered the various portions of the operating tests to all applicants on August 31–September 3, 2020.

b. Findings

No findings were identified.

All applicants passed the written examination and all parts of the operating tests. The final written examinations and post-examination analysis may be accessed in the ADAMS system under the accession numbers noted in the attachment. There were no post-examination comments as indicated in the licensee submittal.

The examination team noted one generic weakness associated with applicant performance on the administrative job performance measures section of the operating tests. The applicants displayed a weakness in calculating hot shutdown boron concentration. Post-examination analysis revealed six questions on the written examination had a miss rate greater than or equal to 50 percent, specifically, questions 21, 22, 27, 39, 66, and 92. Copies of all individual examination reports were sent to the facility training manager for evaluation and determination of appropriate remedial training. These deficiencies were captured in the licensee's corrective action program as Condition Report 202004316.

.4 Simulation Facility Performance

a. Scope

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

b. Findings

No findings were identified.

.5 Examination Security

a. Scope

The NRC examiners reviewed examination security for examination development during both the onsite preparation week and examination administration week for compliance with 10 CFR 55.49 and NUREG-1021. Plans for examination security and applicant control were reviewed and discussed with licensee personnel.

b. Findings

No findings were identified.

## **EXIT MEETINGS AND DEBRIEFS**

### Exit Meeting Summary

- The chief examiner presented the preliminary examination results to Mr. M. McLachlan, Senior Director, Nuclear Plant Support, and other members of the staff on September 3, 2020.
- A telephonic exit was conducted on October 1, 2020, between Mr. T. Farina, chief examiner, and Mr. J. Czeschin, Operations Training Manager. The licensee did not identify any information or materials used during the examination as proprietary.

## **SUPPLEMENTAL INFORMATION**

### **KEY POINTS OF CONTACT**

#### **Licensee Personnel**

J. Czeschin, Operations Training Manager  
P. Swan, Exam Author  
S. Jones, Exam Author

#### **NRC Personnel**

D. Bradley, Senior Resident Inspector

### **ADAMS DOCUMENTS REFERENCED**

Accession No. ML20276A159 - FINAL WRITTEN EXAMS  
Accession No. ML20276A160 - FINAL OPERATING TEST  
Accession No. ML20276A136 - POST-EXAMINATION ANALYSIS



CALLAWAY PLANT - NRC EXAMINATION REPORT 05000483/2020301 – October 13, 2020

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ADAMS ACCESSION NUMBER: ML20283A445

SUNSI Review: ADAMS:  Non-Publicly Available  Non-Sensitive Keyword:  
 By: TJF  Yes  No  Publicly Available  Sensitive NRC-002

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NAME	TFarina	KClayton	COsterholtz	MDoyle	NOKeefe	GWerner
SIGNATURE	TJF	KDC	CCO	MSD	NFO	GEW
DATE	10/2/2020	10/05/2020	10/5/2020	10/05/2020	10/05/2020	10/13/2020

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