



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION II  
245 PEACHTREE CENTER AVENUE NE, SUITE 1200  
ATLANTA, GEORGIA 30303-1257

April 23, 2015

Joseph W. Shea  
Vice President, Nuclear Licensing  
Tennessee Valley Authority  
1101 Market Street, LP 3D-C  
Chattanooga, TN 37402

SUBJECT: SEQUOYAH NUCLEAR PLANT – NRC OPERATOR LICENSE EXAMINATION  
REPORT 05000327/2015301 AND 05000328/2015301

Dear Mr. Shea:

During the period March 2-11, 2015, the Nuclear Regulatory Commission (NRC) administered operating tests to employees of your company who had applied for licenses to operate the Sequoyah Nuclear Plant. At the conclusion of the tests, the examiners discussed preliminary findings related to the operating tests and the written examination submittal with those members of your staff identified in the enclosed report. The written examination was administered by your staff on March 18, 2015.

One Reactor Operator (RO) and eight Senior Reactor Operator (SRO) applicants passed both the operating test and written examination. One SRO applicant, who previously passed the operating test, also passed the written examination. One SRO applicant failed the operating test and written examination. There were no post-examination comments. A Simulator Fidelity Report is included in this report as Enclosure 2.

The initial examination submittal was within the range of acceptability expected for a proposed examination. All examination changes agreed upon between the NRC and your staff were made according to NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 9, Supplement 1.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC Website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

If you have any questions concerning this letter, please contact me at (404) 997- 4662

Sincerely,

*/RA/*

Eugene F. Guthrie, Chief  
Operations Branch 2  
Division of Reactor Safety

Docket Nos: 50-327, 50-328  
License Nos: DPR-77, DPR-79

Enclosures: 1. Report Details  
2. Simulator Fidelity Report

cc: Distribution via Listserv

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☒ PUBLICLY AVAILABLE      ☐ NON-PUBLICLY AVAILABLE      ☐ SENSITIVE      ☒ NON-SENSITIVE  
ADAMS:☒ Yes      ACCESSION NUMBER: ML15118A713      ☒ SUNSI REVIEW COMPLETE      ☐ FORM 665 ATTACHED

OFFICE	RII:DRS	RII:DRS	RII:DRS	RII:DRS			
SIGNATURE	<b>BLC2</b>	<b>MGD1</b>	<b>NTL2</b>	<b>GXG</b>			
NAME	CABALLERO	DONITHAN	LACY	GUTHRIE			
DATE	4/20/2015	4/20/2015	4/20/2015	4/23/2015	4/ /2015	4/ /2015	4/ /2015
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY      DOCUMENT NAME: G:\OLEXAMS\SEQUOYAH EXAMINATIONS\INITIAL EXAM 2015-301\CORRESPONDENCE\SQN 2015301 FINAL EXAM REPORT.DOCX

**U.S. NUCLEAR REGULATORY COMMISSION**

**REGION II**

Docket No.: 50-327, 50-328

License No.: DRP-77, DPR-79

Report No.: 05000327/2015301, 05000328/2015301

Licensee: Tennessee Valley Authority (TVA)

Facility: Sequoyah Nuclear Plant, Units 1 & 2

Location: Sequoyah Access Road  
Soddy-Daisy, TN 37379

Dates: Operating Test – March 2 – 11, 2015  
Written Examination – March 18, 2015

Examiners: Bruno Caballero, Chief Examiner, Senior Operations Engineer  
Michael G. Donithan, Operations Engineer  
Newton T. Lacy, Operations Engineer  
Ronald Crews, Senior Reactor Technology Instructor (Observer)

Approved by: Eugene F. Guthrie, Chief  
Operations Branch 2  
Division of Reactor Safety

## **SUMMARY**

ER 05000327/2015301, 05000328/2015301, March 2-11, 2015 & March 18, 2015; Sequoyah Nuclear Plant; Operator License Examinations.

Nuclear Regulatory Commission (NRC) examiners conducted an initial examination in accordance with the guidelines in Revision 9, Supplement 1, of NUREG-1021, "Operator Licensing Examination Standards for Power Reactors." This examination implemented the operator licensing requirements identified in 10 CFR §55.41, §55.43, and §55.45, as applicable.

Members of the Sequoyah Nuclear Plant staff developed both the operating tests and the written examination. The initial operating test, written RO examination, and written SRO examination submittals met the quality guidelines contained in NUREG-1021.

The NRC administered the operating tests during the period March 2-11, 2015. Members of the Sequoyah Nuclear Plant training staff administered the written examination on March 18, 2015. One Reactor Operator (RO) and eight Senior Reactor Operator (SRO) applicants passed both the operating test and written examination. One SRO applicant, who previously passed the operating test, also passed the written examination. Ten applicants were issued licenses commensurate with the level of examination administered.

There were no post-examination comments.

No findings were identified.

## REPORT DETAILS

### 4. OTHER ACTIVITIES

#### 4OA5 Operator Licensing Examinations

##### a. Inspection Scope

The NRC evaluated the submitted operating test by combining the scenario events and JPMs in order to determine the percentage of submitted test items that required replacement or significant modification. The NRC also evaluated the submitted written examination questions (RO and SRO questions considered separately) in order to determine the percentage of submitted questions that required replacement or significant modification, or that clearly did not conform with the intent of the approved knowledge and ability (K/A) statement. Any questions that were deleted during the grading process, or for which the answer key had to be changed, were also included in the count of unacceptable questions. The percentage of submitted test items that were unacceptable was compared to the acceptance criteria of NUREG-1021, "Operator Licensing Standards for Power Reactors."

The NRC reviewed the licensee's examination security measures while preparing and administering the examinations in order to ensure compliance with 10 CFR §55.49, "Integrity of examinations and tests."

The NRC administered the operating tests during the period March 2-11, 2015. The NRC examiners evaluated one Reactor Operator (RO) and nine Senior Reactor Operator (SRO) applicants using the guidelines contained in NUREG-1021. Members of the Sequoyah Nuclear Plant training staff administered the written examination on March 18, 2015. Evaluations of applicants and reviews of associated documentation were performed to determine if the applicants, who applied for licenses to operate the Sequoyah Nuclear Plant, met the requirements specified in 10 CFR Part 55, "Operators' Licenses."

The NRC evaluated the performance or fidelity of the simulation facility during the preparation and conduct of the operating tests.

##### b. Findings

No findings were identified.

Members of the Sequoyah Nuclear Plant training staff developed both the operating test and the written examination. All examination material was developed in accordance with the guidelines contained in Revision 9, Supplement 1, of NUREG-1021. The NRC examination team reviewed the proposed examination. Examination changes agreed upon between the NRC and the licensee were made per NUREG-1021 and incorporated into the final version of the examination materials.

The NRC determined, using NUREG-1021 that the licensee's initial examination submittal was within the range of acceptability expected for a proposed examination.

One RO applicant and eight SRO applicants passed both the operating test and written examination. One SRO applicant, who previously passed the operating test, also passed the written examination. One SRO applicant did not pass the operating test and the written examination. One RO applicant and nine SRO applicants were issued licenses.

Copies of all individual examination reports were sent to the facility Training Manager for evaluation of weaknesses and determination of appropriate remedial training.

The licensee did not submit any post-examination comments. A copy of the final written examination and answer key, with all changes incorporated, may be accessed not earlier than April 15, 2017, in the ADAMS system (ADAMS Accession Numbers ML15092A848 and ML15092A854).

#### 4OA6 Meetings, Including Exit

##### Exit Meeting Summary

On March 11, 2015, the NRC examination team discussed generic issues associated with the operating test with Tim Rieger, Superintendent Nuclear Operations, and members of the Sequoyah Nuclear Plant staff. The examiners asked the licensee if any of the examination material was proprietary. No proprietary information was identified.

### **KEY POINTS OF CONTACT**

#### Licensee personnel

Tim Rieger, Superintendent Nuclear Operations  
 Koda Smith, Director of Training  
 Matthew McMullin, Manager of Operations Training  
 Jeremy Bailey, Initial License Training Supervisor  
 Jim Keczy, Simulator Manager  
 Russell Joplin, Corporate Program Manager  
 Michael Buckner, Lead Exam Writer  
 Joe Welch, Facility SRO Representative  
 Tony Cross, Director Plant Support  
 Jon Johnson, Program Manager  
 James Cross, Emergency Preparedness Manager

## **SIMULATOR FIDELITY REPORT**

Facility Licensee: Sequoyah Nuclear Plant

Facility Docket No.: 50-327, 50-328

Operating Test Administered: March 2-11, 2015

This form is to be used only to report observations. These observations do not constitute audit or inspection findings and, without further verification and review in accordance with Inspection Procedure 71111.11 are not indicative of noncompliance with 10 CFR 55.46. No licensee action is required in response to these observations.

No simulator fidelity or configuration issues were identified.