



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

September 3, 2015

Mr. Joseph W. Shea
Vice President, Nuclear Licensing
Tennessee Valley Authority
1101 Market Street, LP 3D-C
Chattanooga, TN 37402-2801

**SUBJECT: WATTS BAR NUCLEAR POWER PLANT – NRC OPERATOR LICENSE
EXAMINATION REPORT 05000390/2015301**

Dear Mr. Shea:

During the period of July 20 - 22, 2015, the Nuclear Regulatory Commission (NRC) administered operating tests to employees of your company who had applied for licenses to operate the Watts Bar Unit 1 Nuclear Power 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 July 29, 2015.

One Senior Reactor Operator (SRO) and three Reactor Operator (RO) applicants passed both the operating test and written examination. There were no post-administration comments concerning the written examination. 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 10.

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) 997-4551.

Sincerely,

/RA/

Gerald J. McCoy, Chief
Operations Branch 1
Division of Reactor Safety

Docket No: 50-390
License No: NPF-90

Enclosures:

1. Report Details
2. Simulator Fidelity Report

cc: Distribution via Listserv

Tennessee Valley Authority
ATTN: Ms. Colleen T. Ware
Training Director
Watts Bar Nuclear Plant
P.O. Box 2000
Spring City, TN 37381

If you have any questions concerning this letter, please contact me at (404) 997-4551.

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

OFFICE	RII:DRS	RII:DRS	RII:DRS	RII:DRS		
SIGNATURE	JXV3 VIA EMAIL	MGD1 VIA EMAIL	PGC VIA EMAIL	GJM1		
NAME	JViera	MDonithan	PCapehart	GMcCoy		
DATE	8/28/2015	9/ 1 /2015	8/31/2015	9/3/ 2015		
E-MAIL COPY?	YES NO	YES NO	YES NO	YES		

U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.: 50-390

License No.: NPF-90

Report No.: 05000390/2015301

Licensee: Tennessee Valley Authority

Facility: Watts Bar

Location: Spring City, Tennessee

Dates: Operating Test – July 20 - 22, 2015
Written Examination – July 29, 2015

Examiners: P. Capehart, Chief Examiner, Senior Operations Engineer
M. Donithan, Operations Engineer
J. Viera, Operations Engineer
J. Bundy (in training status)

Approved by: Gerald J. McCoy, Chief
Operations Branch 1
Division of Reactor Safety

SUMMARY

ER 05000390/2015301; Operating Test, July 20 - 22, 2015, & Written Examination, July 29, 2015; Watts Bar Nuclear Power Plant; Operator License Examinations.

Nuclear Regulatory Commission (NRC) examiners conducted an initial examination in accordance with the guidelines in Revision 10 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 Watts Bar Nuclear Power Plant staff developed both the operating test and the written examination. The NRC developed the written examination outline. 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 of July 20 - 22, 2015. Members of the Watts Bar Nuclear Power Plant training staff administered the written examination on July 29, 2015. One SRO and three RO applicants passed both the operating test and written examination, and 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

NRC examiners administered the operating test during the period of July 20 - 22, 2015. They evaluated one Senior Reactor Operator (SRO) and three Reactor Operator (RO) applicants using the guidelines contained in Revision 10 of NUREG-1021, "Operator Licensing Examination Standards for Power Reactors." Members of the Watts Bar Nuclear Power Plant training staff administered the written examination on July 29, 2015. Evaluations of applicants and reviews of associated documentation were performed to determine if the applicants met the requirements specified in 10 CFR Part 55, "Operators' Licenses."

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. The percentage of submitted test items that were unacceptable was compared to the acceptance criteria of NUREG-1021, "Operator Licensing Examination 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 evaluated the performance and fidelity of the simulation facility during preparation and conduct of the operating test.

b. Findings

No findings were identified.

The NRC developed the written examination sample plan outline. Members of the Watts Bar training staff developed both the operating test and the written examination. All examination material was developed in accordance with the guidelines contained in NUREG-1021. The NRC examination team reviewed the proposed examination. All examination changes agreed upon between the NRC and your staff were made per NUREG-1021 and incorporated into the final version of the examination materials.

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

One SRO and three RO applicants passed both the operating test and written examination. All applicants were issued licenses. Copies of all individual examination

reports were sent to the facility Training Director for evaluation of weaknesses and determination of appropriate remedial training.

The licensee submitted no post-examination comments concerning the written or operating tests. A copy of the final written examinations and answer keys may be accessed not earlier than July 29, 2017, in the ADAMS system (ADAMS Accession Numbers ML15222A546 and ML15222A548).

40A6 Meetings, Including Exit

Exit Meeting Summary

On July 22, 2015, the NRC examination team discussed generic issues associated with the operating test with Mr. Walt Smith, Operations Training Manager, and other members of the Watts Bar Nuclear Power Plant staff. The examiners asked the licensee if any of the examination material was proprietary; no proprietary information was identified.

On August 19, 2015, the NRC examination team discussed the final exam results via phone call with Mr. Walt Smith, Operations Training Manager.

KEY POINTS OF CONTACT

Licensee personnel

M. Bottorff, Operations Superintendent
 S. Connors, Plant Manager
 L. Cross, Assistant Operations Manager
 R. Fruth, Initial License Training Supervisor
 T. Gabosch, Initial License Training Instructor
 D. Hoffman, Operating Test Developer
 D. Jackson, Operations Training
 R. Joplin, Corporate Training Program Manager
 J. Keczy, Simulator Manager
 B. McInay, Operations
 J. O'Dell, Site Licensing Supervisor
 M. Petersen, Non-Licensed Operator Training Supervisor
 J. Shea, Site Vice President
 K. Skubisz, Principal Exam Author
 W. Smith, Operations Training Manager
 B. Sprinkle, Operations Support Superintendent
 J. Thompson, Instructor
 J. Weiss, Instructor

SIMULATOR FIDELITY REPORT

Facility Licensee: Watts Bar Nuclear Power Plant

Facility Docket No.: 50-390

Operating Test Administered: July 20 - 22, 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.