

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

May 2, 2013

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 EXAMINATION REPORT 05000390/2013301

Dear Mr. Shea:

During the period of March 18 - 27, 2013, the Nuclear Regulatory Commission (NRC) administered operating tests to employees of your company who had applied for licenses to operate the Watts Bar 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 April 3, 2013.

Two Reactor Operator (RO) and five Senior Reactor Operator (SRO) applicants passed both the operating test and written examination. Two RO and five SRO applicants failed the 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 NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site 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) 997-4550.

Sincerely,

/**RA**/

Malcolm T. Widmann, 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: (See page 3)

If you have any questions concerning this letter, please contact me at (404) 997-4550.

Sincerely,

/**RA**/

Malcolm T. Widmann, Chief Operations Branch 1 Division of Reactor Safety

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

Enclosures:

- 1. Report Details
- 2. Simulator Fidelity Report

ADAMS: X Yes ACCESSION NUMBER:

cc: (See page 3)

X PUBLICLY AVAILABLE

□ NON-PUBLICLY AVAILABLE

□ SENSITIVE X□ NON-SENSITIVE

□ SUNSI REVIEW COMPLETE □ FORM 665 ATTACHED

OFFICE	RII:DRS	RII:DRS	RII:DRS				
SIGNATURE	RA	RA	RA				
NAME	MBates	KSchaaf	WIDMANN				
DATE	05/ 2 /2013	05/ 2 /2013	05/ 2 /2013				
E-MAIL COPY?	<u>YES</u> NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: G:\OLEXAMS\WATTS BAR EXAMINATIONS\INITIAL EXAM 2013-301\CORRESPONDENCE\WATTS BAR EXAM REPORT 2013-301 REV 2.DOCX CC:

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Senior Resident Inspector U.S. Nuclear Regulatory Commission Watts Bar Nuclear Plant 1260 Nuclear Plant Road Spring City, TN 37381-2000

Ann Harris 341 Swing Loop Rockwood, TN 37854

Tennessee Valley Authority ATTN: Ms. Betsy Eiford-Lee Training Manager Watts Bar Nuclear Plant P. O. Box 2000 Spring City, TN 37381 Letter to Joseph W. Shea from Malcolm T. Widmann dated May 2, 2013.

SUBJECT: WATTS BAR NUCLEAR POWER PLANT - NRC EXAMINATION REPORT 05000390/2013301

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U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.:	50-390
License No.:	NPF-90
Report No.:	05000390/2013301
Licensee:	Tennessee Valley Authority
Facility:	Watts Bar
Location:	Spring City, Tennessee
Dates:	Operating Test – March 18-27, 2013 Written Examination – April 3, 2013
Examiners:	M. Bates, Chief Examiner, Senior Operations Examiner K. Schaaf, Chief Examiner Under Instruction, Operations Examiner J. Kellum, Senior Reactor Operations Engineer
Approved by:	Malcolm T. Widmann, Chief Operations Branch 1 Division of Reactor Safety

SUMMARY OF FINDINGS

ER 05000390/2010301; Operating test, March 18 - 27 2013, & Written exam, April 3, 2013; Watts Bar; 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 Watts Bar Nuclear Power Plant staff developed both the operating tests and the written examination. The NRC developed the written examination outlines.

The NRC administered the operating tests during the period of March 18 - 27, 2013. Members of the Watts Bar Nuclear Power Plant staff administered the written examination on April 3, 2013. One RO applicant and four SRO applicants passed both the operating test and written examination, and were issued licenses commensurate with the level of examination administered.

Two RO and Five SRO applicants failed the written examination

One RO and one SRO applicant passed the operating test, but passed the written examination with scores 81.33 percent and 80.00 percent (overall) respectively. Each of these applicants were issued a letter stating that they passed the examination and issuance of their license has been delayed pending any written examination appeals that may impact the licensing decision for their application.

There were no post-examination comments.

No findings were identified.

Report Details

4. OTHER ACTIVITIES

4OA5 Operator Licensing Initial Examinations

a. Inspection Scope

Members of the Watts Bar Nuclear Power Plant staff developed both the operating tests and the written examination. All examination material was developed in accordance with the guidelines contained in Revision 9, Supplement 1, of NUREG-1021, "Operator Licensing Examination Standards for Power Reactors." 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 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 examiners evaluated four Reactor Operator (RO) and ten Senior Reactor Operator (SRO) applicants using the guidelines contained in NUREG-1021. The examiners administered the operating tests during the period of March 18-27, 2013. Members of the Watts Bar Nuclear Power Plant staff administered the written examination on April 3, 2013. Evaluations of applicants and reviews of associated documentation were performed to determine if the applicants, who applied for licenses to operate the Watts Bar Nuclear Power Plant, met the requirements specified in 10 CFR Part 55, "Operators' Licenses."

b. Findings

No findings were identified. 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 four SRO applicants passed both the operating test and written examination, and were issued licenses commensurate with the level of examination administered.

Two RO and Five SRO applicants failed the written examination

One RO and one SRO applicant passed the operating test, but passed the written examination with scores 81.33 percent and 80.00 percent (overall) respectively. Each of these applicants were issued a letter stating that they passed the examination and issuance of their license has been delayed pending any written examination appeals that may impact the licensing decision for their application.

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

There were no post exam comments. A copy of the final written examination and answer key may be accessed not earlier than April 3, 2015, in the ADAMS system (ADAMS Accession Number ML13106A196 and ML13106A201).

40A6 Meetings

Exit Meeting Summary

On March 28, 2013, the NRC examination team discussed generic issues associated with the operating test with Mr. Tim Cleary, Site Vice President, and members of his staff. The examiners asked the licensee if any of the examination material was proprietary. No proprietary information was identified.

PARTIAL LIST OF PERSONS CONTACTED

Licensee personnel

- T. Cleary, Site Vice President
- R. Dittmer, Operations Superintendent
- W. Preratt, Operations Manager
- B. Eiford-Lee, Training Director
- R. Fruth, Initial License Training Supervisor
- W. Smith, License Operator Regual Supervisor
- R. Joplin, Corporate Exam Program Manager
- R. Fernandes, Corporate Duty Officer-Operations
- B. Kaye, Operations Training Supervisor
- J. Kecy, Simulator
- B. Delvin, Director Safety & Licensing
- D. Holt, Operations Training
- J. Deal, QA Manager
- S. Smith, Facility Representative

NRC personnel

R. Monk, Senior Resident Inspector

SIMULATOR FIDELITY REPORT

Facility Licensee: Watts Bar Nuclear Plant

Facility Docket No.: 05000390/2013-301

Operating Test Administered: March 18-27, 2013.

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.

While conducting the simulator portion of the operating test, examiners observed the following:

ltem	Description
The ERCW pressure and flow balance does not match the plant.	During scenario validation it was discovered that ERCW pressure and flow balance do not match the same parameters in the plant. DR 3522 was written to address the issue.
A simulator hand switch would not work.	During a scenario, ERCW Handswitch 1-HS-1-139A would not operate its component. The applicant attempted operation several times and eventually contacted an AUO to operate the component locally. DR 3524 was written to address the issue.
A simulator hand switch would not work.	During a scenario, Handswitch 2-HS-67-68A would not operate its component. The applicant attempted operation a second time which succeeded. DR 3525 was written to address the issue.