



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION II  
SAM NUNN ATLANTA FEDERAL CENTER  
61 FORSYTH STREET, SW, SUITE 23T85  
ATLANTA, GEORGIA 30303-8931

July 6, 2009

Mr. Preston D. Swafford  
Chief Nuclear Officer and Executive Vice President  
Tennessee Valley Authority  
3R Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801

**SUBJECT: WATTS BAR NUCLEAR PLANT – NRC OPERATOR LICENSE EXAMINATION  
REPORT 05000390/2009301**

Dear Mr. Swafford:

During the period May 18-21, 2009, the Nuclear Regulatory Commission (NRC) administered operating tests to employees of your company who had applied for licenses to operate the Watts Bar Nuclear Plant Unit 1. 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 May 27, 2009.

Two RO applicants and four SRO applicants passed both the operating test and written examination. One RO applicant passed the operating test but did not pass the written examination. There were no post-examination comments. A Simulator Fidelity Report is included in this report as Enclosure 2.

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) 562-4550.

Sincerely,

/RA/

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

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

Enclosures: 1. Report Details  
2. Simulator Fidelity Report

(cc: w/encl – See Page 3)

If you have any questions concerning this letter, please contact me at (404) 562-4550.

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(cc: w/encl – See Page 3)

X PUBLICLY AVAILABLE       NON-PUBLICLY AVAILABLE       SENSITIVE      X  NON-SENSITIVE  
 ADAMS: X  Yes    ACCESSION NUMBER: \_\_\_\_\_      X  SUNSI REVIEW COMPLETE

OFFICE	RII:DRS	RII:DRS	RII:DRS				
SIGNATURE	/RA/	/RA/	/RA/	MMeeks/ra/for			
NAME	Ronald Aiello	Michael Meeks	Malcolm Widmann	RMonk			
DATE	06/24/2009	06/24/2009	7/ /2009	06/24/2009	7/ /2009	7/ /2009	7/ /2009
E-MAIL COPY?	YES    NO	YES    NO	YES    NO	YES    N	YES    NO	YES    NO	YES    NO

cc: w/encl

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(cc: w/encl – See Page 4)

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County Mayor  
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TN Dept. of Environment & Conservation  
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James H. Bassham  
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Ann Harris  
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Tennessee Valley Authority  
ATTN: Mr. William Thompson  
Training Manager  
Watts Bar Nuclear Plant  
P.O. Box 2000  
Spring City, TN 37381

**U.S. NUCLEAR REGULATORY COMMISSION**

**REGION II**

Docket No.: 50-390

License No.: NPF-90

Report No.: 05000390/2009301

Licensee: Tennessee Valley Authority

Facility: Watts Bar

Location: Spring City, Tennessee

Dates: Operating Test – May 18-21, 2009  
Written Examination – May 27, 2009

Examiners: Ronald F. Aiello, Chief Examiner, Senior Operations Engineer  
Robert L. Monk, Senior Resident Inspector, Watts Bar  
Michael K. Meeks, Operations Engineer

Approved by: Malcolm T. Widmann, Chief  
Operations Branch  
Division of Reactor Safety

## **SUMMARY OF FINDINGS**

ER 05000390/2009301; operating test, May 18-21, 2009 & written exam, May 27, 2009; 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 training 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 May 18-21, 2009. Members of the Watts Bar training staff administered the written examination on May 27, 2009. Two RO applicants and four SRO applicants passed both the operating test and written examination. One RO applicant passed the operating test but did not pass the written examination. One RO applicant and three SRO applicants were issued licenses. One RO and one SRO license were held pending NRC doctor's medical determination.

There were no post-examination comments.

No findings of significance were identified.

## REPORT DETAILS

### 4. OTHER ACTIVITIES

#### 4OA5 Operator Licensing Examinations

##### a. Inspection Scope

Members of the Watts Bar training staff developed both the operating tests and the written examination. The NRC developed the written examination outlines. 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 three Reactor Operator (RO) and four Senior Reactor Operator (SRO) applicants using the guidelines contained in NUREG-1021. The examiners administered the operating tests during the period May 18-21, 2009. Members of the Watts Bar training staff administered the written examination on May 27, 2009. 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 Plant, met the requirements specified in 10 CFR Part 55, "Operators' Licenses."

##### b. Findings

No findings of significance were identified. The NRC determined, using NUREG-1021, that the licensee's examination submittal was within the range of acceptability expected for a proposed examination.

Two RO applicants and four SRO applicants passed both the operating test and written examination. One RO applicant passed the operating test but did not pass the written examination. One RO applicant and three SRO applicants were issued licenses. One RO and one SRO license were held pending NRC doctor's medical determination.

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 RO and SRO written examination answer key along with one SRO reference, with all changes incorporated, may be accessed in the ADAMS system (ADAMS Accession Numbers ML091740220, ML091740225, and ML091740212).



**4OA6 Meetings, Including Exit****Exit Meeting Summary**

On May 21, 2009, the NRC examination team discussed generic issues associated with the operating test with Mike Skaggs, Site Vice President, and members of the Watts Bar 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**

G. Boerschig, Plant Manager  
M. Brandon, Licensing  
J. Bushnell, Licensing  
R. Crews, Operations Training Manager  
J. Dolton, Initial Licensing Supervisor  
N. Good, Simulator Supervisor  
D. Hensley, Exam Lead Developer  
D. Hoffman, Exam Developer  
T. Newman, Operations Training Contractor  
A. Scales, Operations Manager  
M. Skaggs, Site Vice President  
S. Smith, Operations  
B. Thompson, Training Manager

**NRC personnel**

R. Monk, Senior Resident Inspector

## **SIMULATOR FIDELITY REPORT**

Facility Licensee: Watts Bar

Facility Docket No.: 50-390

Operating Test Administered: May 18-21, 2009

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.