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

July 11, 2008

Tennessee Valley Authority
ATTN: Mr. William R. Campbell
Chief Nuclear Officer and
Executive Vice President
6A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

SUBJECT: WATTS BAR NUCLEAR PLANT - NRC OPERATOR LICENSE EXAMINATION REPORT 05000390/2008301

Dear Mr. Campbell:

During the period of May 12-15, 2008, 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 the 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 June 3, 2008.

One Reactor Operator and five Senior Reactor Operator (SRO) applicants passed both the operating test and written examination. One RO applicant failed the operating test. There was one post examination comment. This comment and the NRC resolution of this comment are summarized in Enclosure 2. A Simulation Facility Report is included in this report as Enclosure 3.

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). Should 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. NRC Post Examination Comment Resolution
3. Simulation Facility Report

(cc: w/encl - See page 3)

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DATE	07/10/2008	07/11/2008	07/11/2008				
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OFFICIAL RECORD COPY DOCUMENT NAME: O:\WATTS BAR EXAMINATIONS\INITIAL EXAM 2008-301\CORRESPONDENCE\WATTS BAR EXAM REPORT 2008-301 REV 1 (GWL).DOC

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ATTN: Mr. William Thompson
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Watts Bar Nuclear Plan
P.O. Box 2000
Spring City, TN 37381

Letter to William R. Campbell, Jr. from Malcolm T. Widmann dated July 11, 2008

SUBJECT: WATTS BAR NUCLEAR PLANT - NRC INTEGRATED INSPECTION REPORT 05000390/2008 AND 05000391/2008

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B. Moroney, NRR (PM: SEQ, WB)

NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.:	50-390
License No.:	NPF- 90
Report No.:	05000390/2008301
Licensee:	Tennessee Valley Authority (TVA)
Facility:	Watts Bar Nuclear Plant, Unit 1
Location:	TVA Watts Bar Nuclear Plant Spring City, TN 37381
Dates:	Operating Test – May 12 -15, 2008 Written Examination – June 3, 2008
Examiners:	G. Laska, Chief Examiner, Senior Operations Examiner P. Capehart, Operations Engineer C. Kontz, Operations Engineer
Approved by:	Malcolm T. Widmann, Chief Operations Branch Division of Reactor Safety

Enclosure 1

SUMMARY OF FINDINGS

ER 05000390/2008301, 05/12-15/2008 and 06/03/2008; Watts Bar Nuclear Plant, Unit 1; Licensed Operator Examinations.

The NRC examiners conducted operator licensing initial examinations in accordance with the guidance in NUREG-1021, Revision 9, Supplement 1, "Operator Licensing Examination Standards for Power Reactors." This examination implemented the operator licensing requirements of 10 CFR §55.41, §55.43, and §55.45.

The NRC administered the operating tests during the period of May 12-15, 2008. Members of the Watts Bar Nuclear Plant training staff administered the written examination on June 3, 2008. The written examinations and the operating tests were developed by the Watts Bar Nuclear Plant training staff.

One Reactor Operator (RO) and five Senior Reactor Operator (SRO) applicants passed both the written and operating examinations. One RO applicant failed the operating test. One RO and five SRO applicants were issued operating licenses.

There was one post examination comment.

REPORT DETAILS

4. OTHER ACTIVITIES

4OA5 Operator Licensing Initial Examinations

a. Inspection Scope

The Watts Bar Nuclear Plant training staff developed the written examinations and the operating test. NRC regional examiners reviewed the proposed examination material to determine whether it was developed in accordance with NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 9, Supplement 1. Examination changes agreed upon between the NRC and the licensee were made according to NUREG-1021 and incorporated into the final version of the examination materials.

The examiners reviewed the licensee's examination security measures while preparing and administering the examinations to ensure examination security and integrity complied with 10 CFR 55.49, "Integrity of Examinations and Tests."

The examiners evaluated two RO applicants and five SRO applicants who were being assessed under the guidelines specified in NUREG-1021. The examiners administered the operating tests during the period of May 12 - 15, 2008. Members of the Watts Bar Nuclear Plant training staff administered the written examination on June 3, 2008. The evaluations of the applicants and review of documentation were performed to determine if the applicants, who applied for licenses to operate the Watts Bar Nuclear Plant, met requirements specified in 10 CFR Part 55, "Operators' Licenses."

b. Findings

The NRC determined that the details provided by the licensee for the walkthrough and simulator tests were within the range of acceptability expected for a proposed examination.

One RO applicant and five SRO applicants passed both the operating test and written examination. One RO applicant failed the operating test.

The final RO and SRO written examinations with knowledge and abilities (K/As) question references/answers, examination references, and licensee's post examination comments may be accessed in the ADAMS system (ADAMS Accession Numbers, ML081900150, ML081900165, ML081900145, ML081900169, and ML081900136.)

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

4OA6 Meetings

Exit Meeting Summary

On May 15, 2008, the examination team discussed generic issues associated with the operating test with Mr. M. Lorek, Plant Manager, and members of the Watts Bar Nuclear Plant staff. The examiners asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

PARTIAL LIST OF PERSONS CONTACTED

Licensee personnel

M. Lorek, Plant Manager
A. Scales, Operations Manager
S. Smith, Operations Superintendent
C. Riedl, Site Licensing Supervisor
J. Bushnell, Licensing Engineer
W. Thompson, Training Manager
T. Newman, Operations Training Manager
S. Reininghaus, Initial License Training Supervisor
D. Hensley, Operations Training Instructor
D. Hughes, Operations Training Instructor
D. LeGrand, Operations Training Instructor
N. Good, Simulator Services Manager
W. Boegley, Simulator Engineer

NRC personnel

B. Monk, Senior Resident Inspector
M. Pribish, Resident Inspector

NRC RESOLUTION TO THE WATTS BAR POST EXAMINATION COMMENT

A complete text of the licensee's post-exam comment can be found in ADAMS under Accession Number ML 081900136.

Test Item

Written Examination Question Number 89 (SRO)

Facility Comment

Licensee stated that the key was incorrect. The key had "C" as the correct answer. This answer stated that the battery was inoperable and the diesel generator was not required in this mode, so no other technical specification entry was required. The licensee contends that the questions states that the plant is in Mode 4, and that the diesel is required to be operable in Mode 4. Therefore, the licensee recommended changing the key to show that the correct answer is "D."

NRC Resolution

Recommendation accepted. In a review of the applicable technical specifications, Watts Bar Technical Specification 3.8.1 clearly states that Four Diesel Generators (DGs) capable of supplying the onsite Class 1E AC Electrical Power Distribution System shall be operable in Modes 1- 4. Key was changed to show that the correct answer is "D."

SIMULATION FACILITY REPORT

Facility Licensee: Watts Bar Nuclear Plant

Facility Docket Nos.: 05000390

Operating Tests Administered on: May 12-15, 2008

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 IP 71111.11, are not indicative of noncompliance with 10 CFR 55.46. No licensee action is required in response to these observations.

During the performance of two scenarios with reactor power at approximately 2%, the simulator exhibited condenser vacuum anomalies. Upon the admission of steam to the condenser, condenser vacuum began to decrease in the "A" portion of the condenser in the first scenario, and during the second scenario condenser vacuum began to decrease in the "B" portion of the condenser. At this power level, admission of steam to the condensers should not cause condenser vacuum to decrease. Furthermore, the effect of admitting steam to the condenser was not consistent between scenarios.

During the performance of a scenario, the overpower alarm annunciated during a time that it appeared it should have been inhibited.

During the preparation week of the operating test several Initial Condition (IC) snaps had Circulating Water system temperature issues (temperature too high, affecting condenser vacuum).

Rod Step indicators did not always indicate the required values when the simulator IC was loaded.

The Licensee initiated PERs WBN 138223, 144939, and Simulator Problem Reports 2744, 2745, 2746, and 2748.