



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

April 4, 2011

Mr. R. M. Krich
Vice President, Nuclear Licensing
Tennessee Valley Authority
1101 Market Street, LP 3R-C
Chattanooga, TN 37402-2801

SUBJECT: BROWNS FERRY NUCLEAR PLANT- NRC OPERATOR LICENSING
EXAMINATION REPORT 05000259/2011301, 05000260/2011301, AND
05000296/2011301

Dear Mr. Krich:

During the period February 7-16, 2011, the Nuclear Regulatory Commission (NRC) administered operating tests to employees of your company who had applied for licenses to operate the Browns Ferry 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 February 18, 2011.

Six Reactor Operator (RO) and Six Senior Reactor Operator (SRO) applicants passed both the operating test and written examination. One RO applicant passed the operating test but failed 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 enclosure 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 Nos.: 50-259, 50-260, 50-296
License Nos.: DPR-33, DPR-52, DPR-68

Enclosures: 1. Report Details
2. Simulator Fidelity Report

(cc w/encls: - See Page 2)

April 4, 2011

Mr. R. M. Krich
Vice President, Nuclear Licensing
Tennessee Valley Authority
1101 Market Street, LP 3R-C
Chattanooga, TN 37402-2801

SUBJECT: BROWNS FERRY NUCLEAR PLANT- NRC OPERATOR LICENSING
EXAMINATION REPORT 05000259/2011301, 05000260/2011301, AND
05000296/2011301

Dear Mr. Krich:

During the period February 7-16, 2011, the Nuclear Regulatory Commission (NRC) administered operating tests to employees of your company who had applied for licenses to operate the Browns Ferry 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 February 18, 2011.

Six Reactor Operator (RO) and Six Senior Reactor Operator (SRO) applicants passed both the operating test and written examination. One RO applicant passed the operating test but failed 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 enclosure 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 Nos.: 50-259, 50-260, 50-296
License Nos.: DPR-33, DPR-52, DPR-68

Enclosures: 1. Report Details
2. Simulator Fidelity Report

(cc w/encls: - See Page 2)

X PUBLICLY AVAILABLE NON-PUBLICLY AVAILABLE SENSITIVE X NON-SENSITIVE
ADAMS: Yes ACCESSION NUMBER: ml110940423 SUNSI REVIEW COMPLETE

OFFICE	RII:DRS	RIV:DRS	RI:NSIR	RII:DRS	RII:DRP		
SIGNATURE	RA	RA	RA	RA	RA		
NAME	RAiello	JMunro	GJohnson	MWidmann	EGuthrie		
DATE	04/ 1 /2011	04/ 1 /2011	04/ 1 /2011	04/ 4 /2011	04/ 4 /2011		
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

TVA

2

cc w/encls:

K. J. Polson
Vice President
Browns Ferry Nuclear Plant
Tennessee Valley Authority
Electronic Mail Distribution

C.J. Gannon
General Manager
Browns Ferry Nuclear Plant
Tennessee Valley Authority
Electronic Mail Distribution

J. E. Emens
Manager, Licensing
Browns Ferry Nuclear Plant
Tennessee Valley Authority
Electronic Mail Distribution

T. C. Matthews
Manager, Corporate Nuclear Licensing -
BFN
Tennessee Valley Authority
Electronic Mail Distribution

State Health Officer
Alabama Dept. of Public Health
RSA Tower - Administration
Suite 1552
P.O. Box 30317
Montgomery, AL 36130-3017

E. J. Viglucci
Assistant General Counsel
Tennessee Valley Authority
Electronic Mail Distribution

Chairman
Limestone County Commission
310 West Washington Street
Athens, AL 35611

James L. McNees, CHP
Director
Office of Radiation Control
Alabama Dept. of Public Health
P. O. Box 303017
Montgomery, AL 36130-3017

Senior Resident Inspector
U.S. Nuclear Regulatory Commission
Browns Ferry Nuclear Plant
U.S. Nuclear Regulatory Commission
10833 Shaw Road
Athens, AL 35611-6970

Jeff D. Morris
Training Manager
Browns Ferry Nuclear Plant
Tennessee Valley Authority
P.O. Box 2000
Decatur, AL 35609-2000

Letter to Mr. R. M. Krich from Malcolm T. Widmann dated April 4, 2011

SUBJECT: BROWNS FERRY NUCLEAR PLANT- NRC OPERATOR LICENSING
EXAMINATION REPORT 05000259/2011301, 05000260/2011301, AND
05000296/2011301

Distribution w/encls:

C. Evans, RII

RIDSNRDIRS

PUBLIC

RidsNrrPMBrowns FerryResource

U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos.: 50-259, 50-260, and 50-296

License Nos.: DPR-33, DPR-52, and DPR-68

Report Nos.: 05000259/2011301, 05000260/2011301, and 05000296/2011301

Licensee: Tennessee Valley Authority (TVA), LLC

Facility: Browns Ferry Nuclear Plant, Units 1, 2, and 3

Location: Athens AL, 35611

Dates: Operating Tests – February 7-16, 2011
Written Examination – February 18, 2011

Examiners: R. Aiello, Chief, Senior Operations Engineer, RII/DRS/OLB
J. Munro, Senior Reactor Operations Engineer, NRR/IOLB
G. Johnson, Operations Engineer, RII/DRS/OLB

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

SUMMARY OF FINDINGS

ER 05000259/2011301, 05000260/2011301, and 05000296/2011301; 02/07/2011 – 02/16/2011; Browns Ferry Nuclear Plant, Units 1, 2, and 3 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 Browns Ferry Nuclear Station staff developed both the operating tests and the written examination.

The NRC administered the operating tests during the period of February 7-16, 2011. Members of the Browns Ferry Nuclear Plant training staff administered the written examination on February 18, 2011. Six Reactor Operator (RO) and Six Senior Reactor Operator (SRO) applicants passed both the written examination and operating test. One RO applicant passed the operating test but failed the written examination. Twelve applicants were issued licenses commensurate with the level of examination administered.

There were no post examination comments.

No findings of significance were identified.

Report Details

4. OTHER ACTIVITIES

4OA2 Problem Identification and Resolution

Annual Sample Review

a. Inspection Scope

The inspectors selected Problem Evaluation Report (PER) 324228 for a detailed review. The PER was initiated because the inspector identified several procedure issues during NRC Exam 2011-301 that lacked clear procedure guidance thus making them difficult to follow. The facility has committed to reviewing their current practices and procedures to better clarify or specify the applicable procedures in question. These procedures need to be strengthened to ensure that the actions operators take are clear and easy to follow. The inspectors checked that this issue had been completely and accurately identified in the licensee's Corrective Action Program (CAP) and properly classified and prioritized for resolution. Corrective actions have not been verified complete.

b. Findings

No findings of significance were identified.

4OA5 Operator Licensing Initial Examinations

a. Inspection Scope

Members of the Browns Ferry Nuclear 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 Seven Reactor Operator (RO) and Six Senior Reactor Operator (SRO) applicants using the guidelines contained in NUREG-1021. The examiners administered the operating tests during the period of February 7-16, 2011. Members of the Browns Ferry Nuclear Plant training staff administered the written examination on February 18, 2011. Evaluations of applicants and reviews of associated documentation were performed to determine if the applicants, who applied for licenses to operate the Browns Ferry Nuclear Station, 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.

Six SRO and six RO applicants passed both the written examination and operating test. One RO applicant passed the operating test but failed the written examination. Twelve applicants were issued licenses commensurate with the level of examination administered.

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-examination comments. A copy of the final written examination, answer key, and references with all changes incorporated, may be accessed not earlier than February 28, 2013, in the ADAMS system (ADAMS Accession Numbers ML110760682 and ML110760683).

4OA6 MeetingsExit Meeting Summary

On February 16, 2011, the NRC examination team discussed generic issues associated with the operating test with Mr. Jay Miller, Operations Manager, 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

J. Davenport, Regulatory Compliance
 J. Emens, Licensing Manager
 C. Gannon, Plant Manager
 M. Gibson, Operations Training
 D. Malinowski, Operations Training Manager
 J. Miller, Operations Manager
 J. Morris, Training Manager
 M. Nash, Operations Shift Manager
 J. Ruby Operations Training
 L. Miller, Operations Training
 D. Zielinski, Operations Training

NRC personnel

T. Ross, Senior Resident Inspector
 C. Stancil, Resident Inspector

SIMULATOR FIDELITY REPORT

Facility Licensee: Browns Ferry Nuclear Station

Facility Docket Nos.: 05000259/2011301, 05000260/2011301, and 05000296/2011301

Operating Test Administered: February 7-16, 2011

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 no simulator fidelity or configuration issues.