



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

July 23, 2004

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

SUBJECT: SEQUOYAH NUCLEAR PLANT - NRC EXAMINATION REPORT
NOS. 05000327/2004301 AND 05000328/2004301

Dear Mr. Singer:

During the period June 7-14, 2004 the Nuclear Regulatory Commission (NRC) administered operating examinations to employees of your company who had applied for licenses to operate the Sequoyah Nuclear Plant. The examiners discussed the examination questions and preliminary findings with those members of your staff identified in the enclosed report on June 15, 2004. The written examination was administered by your staff on June 16, 2004.

Seven Reactor Operator and four Senior Reactor Operator applicants passed both the written and operating examinations. There were no post examination comments. A Simulation Facility 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 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).

Sincerely,

/RA/

Michael E. Ernstes, Chief
Operator Licensing and
Human Performance Branch
Division of Reactor Safety

Docket Nos.: 50-327, 50-328
License Nos.: DPR-77, DPR-79

Enclosures: (See page 2)

Enclosures: 1. Report Details
2. Simulation Facility Report

cc w/encls:

Ashok S. Bhatnagar
Senior Vice President
Nuclear Operations
Tennessee Valley Authority
Electronic Mail Distribution

James E. Maddox, Vice President
Engineering and Technical Services
Tennessee Valley Authority
Electronic Mail Distribution

Randy Douet
Site Vice President
Sequoyah Nuclear Plant
Electronic Mail Distribution

General Counsel
Tennessee Valley Authority
Electronic Mail Distribution

Thomas J. Niessen, Acting General
Manager
Nuclear Assurance
Tennessee Valley Authority
Electronic Mail Distribution

Mark J. Burzynski, Manager
Nuclear Licensing
Tennessee Valley Authority
Electronic Mail Distribution

Pedro Salas, Manager
Licensing and Industry Affairs
Sequoyah Nuclear Plant
Tennessee Valley Authority
Electronic Mail Distribution

David A. Kulisek, Plant Manager
Sequoyah Nuclear Plant
Tennessee Valley Authority
Electronic Mail Distribution

Lawrence E. Nanney, Director
TN Dept. of Environment & Conservation
Division of Radiological Health
Electronic Mail Distribution

County Mayor
Hamilton County Courthouse
Chattanooga, TN 37402-2801

Ann Harris
341 Swing Loop
Rockwood, TN 37854

James H. Bassham, Director
Tennessee Emergency Management
Agency
Electronic Mail Distribution

Mr. Ronald J. Burno
Training Manager
Sequoyah Training Center
Igou Ferry Road
Soddy-Daisy, TN 37379

Distribution w/encls:

R. Anand, NRR

C. Evans (Part 72 Only)

L. Slack, RII EICS

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NUCLEAR REGULATORY COMMISSION

Enclosure 1

REGION II

Docket Nos.: 50-327, 50-328

License Nos.: DPR-77, DPR-79

Report Nos.: 05000327/2004301 and 05000328/2004301

Licensee: Tennessee Valley Authority (TVA)

Facility: Sequoyah Nuclear Plant Units 1 & 2

Location: Sequoyah Access Road
Soddy-Daisy, TN 37379

Dates: Operating Tests - June 7-14, 2004
Written Examination - June 16, 2004

Examiners: L. Miller, Chief Examiner
R. Monk, Operations Engineer
S. Rose, Operations Engineer

Approved by: M. Ernstes, Chief
Operator Licensing and Human Performance Branch
Division of Reactor Safety

SUMMARY OF FINDINGS

ER 05000327/2004301, 05000328/2004301; 6/7-14/2004; Sequoyah Nuclear Power Plant, Units 1 and 2; Licensed Operator Examinations.

The NRC examiners conducted operator licensing initial examinations in accordance with the guidance of NUREG-1021, Operator Licensing Examination Standards for Power Reactors, Draft Rev. 9. 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 June 7-14, 2004. Members of the Sequoyah Nuclear Plant training staff administered the written examination on June 16, 2004. The operator licensing initial written examinations and operating tests were developed by the licensee. Seven Reactor Operator (RO) and four Senior Reactor Operator (SRO) applicants passed both the written and operating examinations and were issued operator licenses commensurate with the level of examination administered.

Report Details

4. OTHER ACTIVITIES (OA)

4OA5 Operator Licensing Initial Examinations

a. Inspection Scope

The licensee developed operating tests and written examinations in accordance with NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Draft Revision 9. The NRC examination team reviewed the proposed examinations. 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 seven RO and four SRO applicants who were being assessed under the guidelines specified in NUREG-1021. They administered the operating tests during the period June 7-14, 2004. Members of the Sequoyah Nuclear Plant training staff administered the written examination on June 16, 2004. The evaluations of the applicants and review of documentation were performed to determine if the applicants, who applied for licenses to operate the Sequoyah Nuclear Plant, met requirements specified in 10 CFR Part 55.

b. Findings

The licensee did not initially have an authorized representative of the facility licensee approve the written examination and operating test before they were submitted to the NRC for review as required by 10 CFR 50.40(b)(3) and NUREG-1021, "Operator Licensing Examination Standards for Power Reactors", ES-201, "Initial Operator Licensing Examination Process". When the chief examiner met with the licensee training staff to deliver NRC review comments, it was revealed that the written examination had continued to be reviewed and modified by the licensee after it was submitted.

Following discussions with the licensee, the required authorization letter stating that the materials were complete and ready-to-use was provided with the second submittal of the draft written examination material. However, documentation supporting changes made to the draft written examination did not capture all changes made to the examination. This required a second complete review of the draft written examination and additional NRC comments.

The licensee's second draft examination submittal was within the range of acceptability expected for a proposed examination. Seven ROs and four SROs passed both the operating test and written examination. The licensee submitted no post examination comments concerning the written or operating examinations. The RO and SRO written

examinations, and examination references may be accessed in the ADAMS system (ADAMS Accession Number ML041890467, ML041890490, ML041890476).

The simulator experienced several problems which resulted in delayed the administration of the operating test. These problems are captured in the Simulation Facility Report (Enclosure 2).

One in-plant Job Performance Measure (JPM) had to be replaced after being used for two applicants, due to a 10 year maintenance activity being conducted in the area of the JPM, this resulted in delaying the administration of the operating test. The new JPM was performed the second week to allow development and approval of the replacement JPM.

40A6 Meetings

Exit Meeting Summary

On June 15, 2004, the Chief Examiner discussed generic applicant performance and examination development issues with members of licensee management.

The inspectors 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

D. Kulisek, Plant Manager
 M. Gillman, Operations Manager
 J. Reynolds, Operations Superintendent
 P. Salas, Licensing and Industrial Affairs Manager
 J. Smith, Licensing Supervisor
 J. Bajraszewski, Licensing Engineer
 R. Bruno, Training Manager
 M. Peterson, Operations Training Manager
 S. Poteet, Operations Training

NRC

S. Shaeffer, Senior Project Engineer

SIMULATION FACILITY REPORT

Facility Licensee: Sequoyah Nuclear Station

Facility Docket No.: 05000327/05000328

Operating Tests Administered on: June 7-14, 2004

This form is to be used only to report observations. These observations do not constitute audit or inspection findings and are not, without further verification and review, indicative of noncompliance with 10 CFR 55.45(b). These observations do not affect NRC certification or approval of the simulation facility other than to provide information that may be used in future evaluations. No licensee action is required in response to these observations.

While conducting the simulator portion of the operating tests, the following items were observed:

| <u>ITEM</u> | <u>DESCRIPTION</u> |
|---------------------------------|--|
| Remove Annunciator from Service | During the JPM the alarm printer would not function. The printer function was restored after several minutes. |
| Beta Box for SER disabling | Some applicants were surprised to find the key in the Beta Box for SER disabling. The JPM was not setup in accordance with plant procedure which has the key removed. Discussion with some applicants indicate that some crews may allow the key to remain inserted in the Beta Box. |
| IC would not reset | During the operating test when an IC would not reset for one of the JPMs. Attempting to reset to the IC caused a lockup of the ICS program. The resolution was to reshoot the JPM in another IC. |
| IC could not be found | An IC developed for a JPM could not be located. It was unknown if the IC was loaded properly or lost as a result of a simulator fault. The IC was reloaded. |
| Annunciator Beta horn failure | A circuit board failure resulted in an annunciator Beta horn failure. The circuit board was repaired. |

Enclosure 2