

NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos.: 50-424, 50-425

License Nos.: DPR-31, DPR-41

Report No.: 50-424/99-301, 50-425/99-301

Licensee: Southern Nuclear Operating Company, Inc.

Facility: Vogtle Electric Generating Plant Units 1 and 2

Location: 8805 River Road  
Waynesboro, GA 30830

Dates: Operating Tests - December 13 - 16, 1999  
Written Examination - December 21, 1999

Examiners: R. Baldwin, Senior Operations Engineer  
B. Holbrook, Senior Project Engineer  
M. Sykes, Operations Engineer

Approved by: G. Hopper, Acting Chief  
Operator Licensing and Human  
Performance Branch  
Division of Reactor Safety

Enclosure 1

## EXECUTIVE SUMMARY

### Vogtle Electric Generating Plant Units 1 and 2 NRC Examination Report 50-424/99-301, 50-425/99-301

This report documents the results of cooperative effort between the licensee and regional examiners to develop, validate and administer operator licensing initial examinations in accordance with the guidance of Examination Standards, NUREG-1021, Revision 8. This examination implemented the operator licensing requirements of 10 CFR §55.41, §55.43, and §55.45.

Four senior reactor operator candidates and one reactor operator candidate were administered the final, approved written examination and operating test. The NRC administered the operating tests during the week of December 13, 1999. The licensee and NRC administered the written examination on December 21, 1999.

#### Operations

- Four senior reactor operator (SRO) candidates and the one reactor operator (RO) candidate passed the examination. (Section O5.1)
- In general, candidate performance on the written examination and the operating test was good. Candidate knowledge, skill and ability weaknesses were limited and narrowly focused. Each candidate was well prepared for the operator licensing examination. (Section O5.1)

## Report Details

### Summary of Plant Status

During the period of the examinations, both units operated at 100 percent power.

## I. Operations

### **O5 Operator Training and Qualifications**

#### **O5.1 Initial Operator Licensing Examinations**

##### **a. Examination Scope**

NRC examiners administered regular, announced operator licensing examinations developed by the NRC and validated by the licensee in accordance with the guidelines of the Operator Licensing Examination Standards (ES) for Power Reactors, NUREG-1021, Revision 8 during the period December 13-16, 1999. The written examination was administered by the licensee and the NRC on December 21, 1999. Four senior reactor operator (SRO) and one reactor operator (RO) license applicants received the written examination and operating test. The examiners reviewed the results of the written examination and evaluated the candidates' compliance with and use of plant procedures during the simulator scenarios and job performance measures (JPMs).

##### **b. Observations and Findings**

The NRC developed the written examination, one administrative test set (six JPMs), one plant systems test set (10 JPMs), and three simulator scenarios which the licensee reviewed and validated. The examiners validated these test items during a site preparation visit the week of November 29, 1999.

#### Examination Results and Conclusions

All five candidates passed the examination. The average score of the written examination was 90.8 percent (80 percent was required for passing) which indicated that the candidates were well prepared. The licensee did not submit any formal post-examination comments on the written examination.

The NRC conducted a post-examination item analysis of the written examination. The examiners identified only two questions (#s SRO 29 (RO 25) and SRO 67 (RO 70)) which were answered incorrectly by 50 percent or more of the candidates. The examiners confirmed that each question adequately evaluated valid knowledge and ability areas. SRO Question #s, 29 and 67 (RO numbers 25 and 70) were missed by four of the five (80 percent) candidates and may indicate a generic weaknesses in the candidates' understanding of Source/Intermediate Nuclear Instruments and plant efficiency, respectively. The examiners noted that these questions, as written, did not warrant additional clarifying information.

The examiners noted one generic candidate performance weakness during administration of the operating examination (simulator scenarios). Two of two crews while removing a Nuclear Instrument from service did not use the CONTINUOUS USE procedure at the local panel but rather used handwritten steps on a piece of paper to identify the steps the operator was to accomplish.

Details of these and other discrepancies were described in each individual's examination report, Form ES-303-1, "Operator Licensing Examination Report," which have been forwarded under separate cover to the Training Manager. This will allow you to evaluate the weaknesses and provide appropriate feedback and/or remedial training as necessary. This information was also provided so you may evaluate whether a training program oversight in the above mentioned areas may be present.

c. Conclusions

The examiners concluded that overall candidate performance on the written examination and the operating test was good. Candidate knowledge, skill and ability weaknesses were few in number and narrow in scope. Each candidate was well prepared for the operator licensing examination.

## V. Management Meetings

### **X1 Exit Meeting Summary**

The inspectors presented the operating test findings to members of licensee management at the conclusion of the examination on December 17, 1999. The licensee acknowledged the findings presented.

The examiners asked the licensee whether any materials used during the examination should be considered proprietary. No proprietary information was identified.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

- \*B. Brown, Manager, Training and Emergency Preparedness
- \*D. Carter, Supervisor SAER
- \*S. Chesnut, Assistant General Manager, Operations
- \*G. Fredrick, Manager, Operations
- \*P. Rushton, Assistant General Manager, Support
- \*D. Scukanec, Operations Training Supervisor
- \*C. Tippins, Nuclear Specialist
- \*D. Vineyard, Supervisor ISEG

NRC

- \*D. Muller, HQ, OLB, Operations Engineer
- K. O'Donohue, Resident Inspector
- \*G. Wilson, RIII, Operations Engineer
- J. Zeiler, Senior Resident Inspector

\*Attended Exit Meeting

INSPECTION PROCEDURES USED

NUREG-1021, Rev. 8: Operator Licensing Examination Standards for Power Reactors

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

None

Discussed

None

## LIST OF ACRONYMS USED

CFR	Code of Federal Regulations
ES	Examination Standard
JPM	Job Performance Measure
NRC	Nuclear Regulatory Commission
RO	Reactor Operator
SRO	Senior Reactor Operator

## SIMULATION FACILITY REPORT

Facility Licensee: Vogtle Electric Generating Plant Units 1 and 2

Facility Docket Nos.: 50-424, 50-425

Operating Tests Administered on: December 13 - 16, 1999

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 item was observed:

ITEM

DESCRIPTION

NONE