



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TEXAS 76011-4005**

March 16, 2004

George A. Williams, Site Vice President  
Grand Gulf Nuclear Station  
Entergy Operations, Inc.  
P.O. Box 756  
Port Gibson, MS 39150

**SUBJECT: GRAND GULF NUCLEAR STATION - NRC INITIAL EXAMINATION  
REPORT 05000416/2004-301**

Dear Mr. Williams:

On February 12, 2004, the NRC completed an initial examination at your Grand Gulf Nuclear Station. The enclosed report documents the examination findings, which were discussed on February 12, 2004, with members of your staff.

The examination included the evaluation of five applicants for senior operator licenses. The written and operating examinations were developed using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 8, Supplement 1. We determined that all of the applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses have been issued.

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).

Sincerely,

/RA/

Anthony T. Gody, Chief  
Operations Branch  
Division of Reactor Safety

Docket: 50-416  
License: NPF-29

Entergy Operations, Inc.

-2-

Enclosure:  
NRC Inspection Report  
05000416/2004-301

cc w/enclosure:  
Senior Vice President  
and Chief Operating Officer  
Entergy Operations, Inc.  
P.O. Box 31995  
Jackson, MS 39286-1995

Wise, Carter, Child & Caraway  
P.O. Box 651  
Jackson, MS 39205

Winston & Strawn  
1400 L Street, N.W. - 12th Floor  
Washington, DC 20005-3502

Jay Barkley, Chief  
Energy & Transportation Branch  
Environmental Compliance and  
Enforcement Division  
Mississippi Department of  
Environmental Quality  
P.O. Box 10385  
Jackson, MS 39289-0385

President, District 1  
Claiborne County Board of Supervisors  
P.O. Box 339  
Port Gibson, MS 39150

General Manager  
Grand Gulf Nuclear Station  
Entergy Operations, Inc.  
P.O. Box 756  
Port Gibson, MS 39150

The Honorable Charles C. Foti, Jr.  
Attorney General  
Department of Justice  
State of Louisiana  
P.O. Box 94005  
Baton Rouge, LA 70804-9005

Entergy Operations, Inc.

-3-

Governor Haley Barbour  
Office of the Governor  
State of Mississippi  
Jackson, MS 39201

Mike Moore, Attorney General  
Frank Spencer, Asst. Attorney General  
State of MS  
P.O. Box 22947  
Jackson, MS 39225

Dr. Brian W. Amy  
State Health Officer  
State Board of Health  
P.O. Box 1700  
Jackson, MS 39215

Robert W. Goff, Program Director  
Division of Radiological Health  
Mississippi Dept. of Health  
P.O. Box 1700  
Jackson, MS 39215-1700

Michael A. Krupa, Director  
Nuclear Safety & Licensing  
Entergy Operations, Inc.  
1340 Echelon Parkway  
Jackson, MS 39213-8298

Director, Nuclear Safety  
and Regulatory Affairs  
Entergy Operations, Inc.  
P.O. Box 756  
Port Gibson, MS 39150

Entergy Operations, Inc.

-4-

Electronic distribution by RIV:

Regional Administrator **(BSM1)**

DRP Director **(ATH)**

DRS Director **(DDC)**

Senior Resident Inspector **(TLH4)**

Branch Chief, DRP/A **(WDJ)**

Senior Project Engineer, DRP/A **(TRF)**

Staff Chief, DRP/TSS **(PHH)**

RITS Coordinator **(KEG)**

Debby Jackson, OEDO RIV Coordinator **(DAJ1)**

GG Site Secretary **(MJS)**

ADAMS: ☐ Yes ☐ No Initials: \_\_\_\_\_

☐ Publicly Available ☐ Non-Publicly Available ☐ Sensitive ☐ Non-Sensitive

SOE:OB	SOE:OB	OE:OB	C:OB	C:PBA	C:OB
TOMcKernon/lmb	PCGage	JDrake	ATGody	WDJohnson	ATGody
/RA/	/RA/	/RA/	/RA/	/RA/	/RA/
03/11/04	03/16/04	03/11/04	03/12/04	03/12/04	03/16/04

OFFICIAL RECORD COPY

T=Telephone

E=E-mail

F=Fax

**ENCLOSURE**

U.S. NUCLEAR REGULATORY COMMISSION  
REGION IV

Docket: 50-416  
License: NPF-29  
Report No.: 05000416/2004-301  
Licensee: Entergy Operations, Inc.  
Facility: Grand Gulf Nuclear Station  
Location: Port Gibson, MS  
Dates: February 6-12, 2004  
Examiners: Tom O. McKernon, Chief Examiner, Operations Branch  
Paul Gage, Senior Operations Engineer, Operations Branch  
Jim Drake, Operations Engineer, Operations Branch  
Approved By: Anthony T. Gody, Chief  
Operations Branch  
Division of Reactor Safety

## SUMMARY OF FINDINGS

ER 05000416/2004-301, on 02/6-20/2004, Entergy Operations, Inc.;Grand Gulf Nuclear Station, Initial Examination of Applicants for Senior Operator Licenses.

An NRC examination team evaluated the competency of five applicants for senior operator licenses at the Grand Gulf Nuclear Station. The facility developed the written and operating examinations using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 8, Supplement 1. The written examinations were administered to all applicants on February 6, 2004, by facility proctors in accordance with instructions provided by the chief examiner. The NRC examiners administered the operating tests on February 9-12, 2004. All applicants passed all portions of the written and operating test. The appropriate licenses were issued. No findings of significance were identified (40A4.1).

## Examination Details

### 4. **OTHER ACTIVITIES**

#### 4OA4 Initial License Examinations

##### .1 Operator Knowledge and Performance

###### a. Examination Scope

On February 6, 2004, the licensee proctored the administration of the written examinations to all five applicants. The licensee's staff graded the written examinations, analyzed the results, and presented their analysis to the NRC examination team on February 20, 2004.

The NRC examination team administered the various portions of the operating examination to the five applicants on February 9-12, 2004. The two applicants for instant senior operator licenses participated in 2 dynamic simulator scenarios, a control room and facilities walkthrough test consisting of 10 system tasks, and an administrative test consisting of 5 administrative tasks. The applicants that were upgrading from a reactor operator license to a senior operator license participated in 1 dynamic simulator scenario, a control room and facilities walkthrough test consisting of 5 system tasks, and an administrative test consisting of 5 administrative tasks.

###### b. Findings

All applicants passed the operating test and the written examination. The appropriate licenses were issued.

During the operating test, the applicants demonstrated good 3-way communications, alarm response, procedure usage, and peer checking. No generic training or operating weaknesses were noted.

The licensee conducted a performance analysis for the written examinations with emphasis on questions missed by any of the applicants. The licensee concluded that there were no commonalities in the knowledge deficiencies. However, the licensee recommended some changes to the grading of the written examination, which were reviewed by the chief examiner and accepted. The average score on the examination was 87.5 percent and individual scores ranged from 80.6 to 95.9 percent. The text of the examination questions and the licensee's post-examination recommendations may be accessed in the ADAMS system as noted in the attachment.

The licensee submitted Question 64 and requested that the answer choice be changed to Choice C in lieu of Choice B. The chief examiner reviewed the question and determined that there was only one choice as the correct answer, Choice C. The chief examiner accepted the licensee's recommendation. The error to the answer key was missed during the examination validation.

The licensee submitted Questions 30 and 55 and recommended deletion of the questions because of three possible correct answers. The chief examiner reviewed the questions and agreed with the licensee's explanation. The two questions were deleted.

The licensee submitted Question 27 and recommended that two answer choices were correct based upon whether operator actions were taken. During the examination, the proctor cued two of the candidates that operator actions were taken. The other examinees based their answers on no operator actions, which made Choice B correct. The chief examiner reviewed records of examinee questions and proctor responses during the examination to verify that different or no responses were given to separate examinees. The chief examiner accepted the recommendation so that answer Choices B or C were correct.

No findings of significance were identified.

.2 Initial Licensing Examination Development

a. Examination Scope

The licensee developed the written and operating examinations in accordance with NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 8, Supplement 1, using the facility training and operations staff specified on the security agreement.

The facility licensee submitted the operating examination outlines on October 12, 2004. The chief examiner reviewed the submittal against the criteria of NUREG-1021, Revision 8, Supplement 1, and provided comments to the licensee. The facility licensee submitted the draft operating examination package on December 11, 2004. The chief examiner reviewed the draft submittal against the criteria of NUREG-1021, Revision 8, Supplement 1, and provided comments to the licensee on the examinations on December 21, 2004. The chief examiner conducted an onsite validation of the operating examinations and provided further comments during the week of January 5, 2004. The licensee satisfactorily completed comment resolution on January 14, 2004.

b. Findings

Region IV management approved the initial examination outline and advised the licensee to proceed with the examination development.

The examiners determined that the written and operating examinations initially submitted by the licensee were within the range of acceptability expected for a proposed examination.

No findings of significance were identified.



.3 Simulation Facility Performance

a. Examination Scope

The examiners observed simulator performance with regard to plant fidelity during the examination validation and administration.

b. Findings

No findings of significance were identified.

.4 Examination Security

a. Examination Scope

The examiners reviewed examination security both during the onsite preparation week and examination administration week for agreement with NUREG-1021 criteria. Plans for simulator security and applicant control were reviewed.

b. Findings

No findings of significance were identified.

40A5 Management Meetings

Exit Meeting Summary

The chief examiner presented general observations and evaluations of operator performance to Mr. G. Sparks, Operations Manager, and other members of the licensee's staff at the conclusion of the examination on February 12, 2004. The licensee's management acknowledged the observations presented.

The licensee's management did not identify as proprietary any information or materials examined during the examination.

## ATTACHMENT

### Key Persons Contacted

#### Licensee

M. Chase, Supervisor, Operations Training, Initial Licensing  
T. Errington, Assistant Operations Manager  
T. McIntyre, Supervisor, Operations Training, LOR  
J. Miller, Training Manager  
M. Rasch, Operations Initial Licensing Instructor  
S. Reeves, Sr. Operations Training Instructor  
G. Sparks, Operations Manager

#### NRC

T. Hoeg, Senior Resident Inspector

### ADAMS DOCUMENTS REFERENCED

#### Accession No.:

Accession No. ml040690940 - Final Reference Examination

Accession No. ml040690943 - Written post examination comments and performance analysis