



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
1600 EAST LAMAR BOULEVARD
ARLINGTON, TEXAS 76011-4511

March 31, 2020

Mr. Eric Larson, Site Vice President
Entergy Operations, Inc.
Grand Gulf Nuclear Station
P.O. Box 756
Port Gibson, MS 39150

SUBJECT: GRAND GULF NUCLEAR STATION - NRC INITIAL OPERATOR LICENSING
EXAMINATION REPORT 05000416/2020301

Dear Mr. Larson:

On February 10, 2020, the U.S. Nuclear Regulatory Commission (NRC) completed an initial operator license examination at your Grand Gulf Nuclear Station, Unit 1. The enclosed report documents the examination results and licensing decisions. The preliminary examination results were discussed on February 6, 2020, with Mr. Robert Franssen, General Manager Plant Operations, and other members of your staff. A telephonic exit meeting was conducted on February 28, 2020, with Mr. Tracy Tharp, Operations Training Supervisor, who was provided the NRC licensing decisions.

The examination included the evaluation of six applicants for reactor operator licenses, and two applicants for instant senior reactor operator licenses. The license examiners determined that all applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses have been issued. There were no post-examination comments submitted by your staff. The enclosure contains details of this report.

No findings were identified during this examination.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document

E. Larson

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Room in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

Gregory E. Werner, Chief
Operations Branch
Division of Reactor Safety

Docket No. 50-416
License No. NPF-29

Enclosure:
Examination Report 05000416/2020301
w/attachment: Supplemental Information

cc: Electronic Distribution to Grand Gulf
Nuclear Station

GRAND GULF NUCLEAR STATION - NRC INITIAL OPERATOR LICENSING EXAMINATION
REPORT 05000416/2020301 – MARCH 31, 2020

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NRC-002

OFFICE	SOE:OB	SOE:OB	OE:OB	OE:OB	C:PBC	C:OB
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SIGNATURE	/RA/	/RA/	/RA/	/RA/	/RA-E/	/RA/
DATE	03/16/2020	03/16/2020	03/16/2020	03/16/2020	03/30/2020	03/31/2020

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U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report

Docket Number: 05000416

License Number: NPF-29

Report Number: 05000416/2020301

Enterprise Identifier: L-2020-OLL-0011

Licensee: Entergy Operations, Inc.

Facility: Grand Gulf Nuclear Station, Unit 1

Location: Port Gibson, Mississippi

Inspection Dates: February 3, 2020, to February 28, 2020

Inspectors: C. Osterholtz, Chief Examiner, Senior Operations Engineer
K. Clayton, Senior Operations Engineer
M. Doyle, Operations Engineer
M. Hayes, Operations Engineer

Approved By: Gregory E. Werner
Chief, Operations Branch
Division of Reactor Safety

Enclosure

SUMMARY

ER 05000416/2020301; February 3-28, 2020; Grand Gulf Nuclear Station, Unit 1; Initial Operator Licensing Examination Report

The NRC examiners evaluated the competency of six applicants for reactor operator licenses and two applicants for instant senior reactor operator licenses at Grand Gulf Nuclear Station, Unit 1.

The licensee developed the examinations using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 11. The written examination was administered by the licensee on February 10, 2020. The NRC examiners administered the operating tests on February 3-6, 2020.

The NRC examiners determined that all the applicants satisfied the requirements of 10 CFR Part 55 and the appropriate licenses have been issued.

A. NRC-Identified and Self-Revealing Findings

None.

B. Licensee-Identified Violations

None.

REPORT DETAILS

OTHER ACTIVITIES – INITIAL LICENSE EXAM

.1 License Applications

a. Scope

The NRC examiners reviewed all license applications submitted to ensure each applicant satisfied relevant license eligibility requirements. The NRC examiners also audited two of the license applications in detail to confirm that they accurately reflected the subject applicant's qualifications. This audit focused on the applicant's experience and on-the-job training, including control manipulations that provided significant reactivity changes.

b. Findings

No findings were identified.

.2 Examination Development

a. Scope

The NRC examiners reviewed integrated examination outlines and draft examinations submitted by the licensee against the requirements of NUREG-1021. The NRC examiners conducted an onsite validation of the operating tests.

b. Findings

The NRC examiners provided outline, draft examination, and post-validation comments to the licensee. The licensee satisfactorily completed comment resolution prior to examination administration.

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

.3 Operator Knowledge and Performance

a. Scope

On February 10, 2020, the licensee proctored the administration of the written examinations to all eight applicants. The licensee staff graded the written examinations, analyzed the results, and presented their analysis to the NRC on February 12, 2020.

The NRC examination team administered the various portions of the operating tests to all applicants on February 3-6, 2020.

b. Findings

No findings were identified.

All applicants passed the written examination and all parts of the operating tests. The final written examinations and post-examination analysis may be accessed in the ADAMS system under the accession numbers noted in the attachment. There were no post-examination comments as indicated in the licensee submittal.

The examination team noted no generic weaknesses associated with applicant performance on the operating tests. Post-examination analysis revealed nine generic weaknesses associated with applicant performance on the written examination:

- availability of the containment and drywell cooling systems during a loss of instrument air
- emergency operating procedure steps and containment design limits
- local power range monitors feeding an average power range monitor channel
- status of reactor recirculation pumps and breakers
- alarm colors and meaning
- actions for an anticipated transient without scram below 5 percent power
- technical specification actions for a missed surveillance
- actions required to secure a drywell purge compressor with a start signal present
- required presence of senior operator in the control room in Modes 4 and 5

These weaknesses were captured in the licensee's corrective action program as Condition Reports CR-GGN-2020-01440 and CR-GGN-2020-02447. Copies of all individual examination reports were sent to the facility training manager for evaluation and determination of appropriate remedial training.

.4 Simulation Facility Performance

a. Scope

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

b. Findings

No findings were identified.

.5 Examination Security

a. Scope

The NRC examiners reviewed examination security for examination development during both the onsite preparation week and examination administration week for compliance with 10 CFR 55.49 and NUREG-1021. Plans for simulator security and applicant control were reviewed and discussed with licensee personnel.

b. Findings

No findings were identified.

EXIT MEETINGS AND DEBRIEFS

Exit Meeting Summary

The chief examiner presented the preliminary examination results to Mr. R. Franssen, General Manager Plant Operations, and other members of the staff on February 6, 2020. A telephonic exit was conducted on February 28, 2020, between Mr. C. Osterholtz, chief examiner, and Mr. T. Tharp, Operations Training Supervisor. The licensee did not identify any information or materials used during the examination as proprietary.

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

R. Franssen, General Manager Plant Operations
E. Eilola, Director, Regulatory and Performance Improvement
M. Ellis, NRC Exam Developer
R. Gibson, Manager, Training
E. Limbeck, Superintendent, Operations Training
S. Reeves, Lead NRC Exam Developer
A. Watson, Supervisor, Operations Initial Training
B. Wertz, Manager, Operations

NRC Personnel

C. Young, Senior Project Engineer

ADAMS DOCUMENTS REFERENCED

Accession No. ML 20058H624 - FINAL WRITTEN EXAMS
Accession No. ML 20058H621 - FINAL OPERATING TEST
Accession No. ML 20058J810 - POST-EXAMINATION ANALYSIS