



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I**
2100 RENAISSANCE BOULEVARD, SUITE 100
KING OF PRUSSIA, PENNSYLVANIA 19406-2713

December 10, 2012

Mr. Joseph E. Pacher, Site Vice President
R. E. Ginna Nuclear Power Plant, LLC
1503 Lake Road
Ontario, NY 14519

**SUBJECT: R. E. GINNA NUCLEAR POWER PLANT - NRC INITIAL OPERATOR
LICENSING EXAMINATION REPORT 05000244/2012301**

Dear Mr. Pacher:

On October 18, 2012, the U.S. Nuclear Regulatory Commission (NRC) completed an examination at R. E. Ginna Nuclear Power Plant. The enclosed report documents the examination findings, which were discussed on November 28, 2012, with you and other members of your staff.

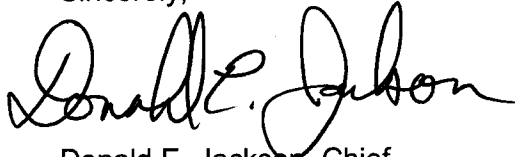
The examination included the evaluation of 4 applicants for reactor operator licenses, 5 applicants for instant senior reactor operator licenses, and 2 applicants for upgrade senior reactor operator licenses. Written and operating examinations were developed using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 9, Supplement 1. The license examiners determined that 4 of the 11 applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses were issued on November 28, 2012.

No findings were identified during this examination.

Two instant senior reactor operator license applicants failed the operating portion of the exam and were denied licenses. One instant senior reactor operator license applicant failed the SRO-only portion of the written exam and was denied a license. Two reactor operator license applicants failed the written exam and were denied licenses. Two instant SRO license applicants passed the exam but their licenses are being held based on their written exam grades. Licenses for applicants with overall written exam passing grades of 82 percent or below or with SRO-only written exam passing grades of 74 percent or below are normally held for review until those applicants who failed the examination have had an opportunity to appeal their license denials.

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 Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams/web-based.html> (the Public Electronic Reading Room).

Sincerely,

A handwritten signature in black ink, appearing to read "Donald E. Jackson". The signature is fluid and cursive, with the first name "Donald" being more prominent.

Donald E. Jackson, Chief
Operations Branch
Division of Reactor Safety

Docket No. 50-244
License No. DPR-18

Enclosure:
NRC Initial Operator Licensing Examination Report 05000244/2012301
w/Attachment: Supplemental Information

cc w/encl:
S. Glenn, INPO
M. Geckle, Manager, Nuclear Training

cc w/encl: Distribution via ListServ

J. Pacher

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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 Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams/web-based.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Donald E. Jackson, Chief
Operations Branch
Division of Reactor Safety

Docket No. 50-244
License No. DPR-18

Enclosure:
NRC Initial Operator Licensing Examination Report 05000244/2012301
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DOCUMENT NAME: G:\DRS\Operations Branch\Presby\Exam FY12-Ginna Oct 12(U01857)\EXAM REPORT.docx
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EXAMINATION REPORT

**U.S. NUCLEAR REGULATORY COMMISSION
REGION I**

Dockets: 50-244

Licenses: DPR-18

Report : 05000244/2012301

Licensee: Constellation Energy Nuclear Group, LLC

Facility: R. E. Ginna Nuclear Power Plant

Location: 1503 Lake Road
Ontario, NY 14519

Dates: October 1 to October 5, 2012 (Operating Test Administration)
October 18, 2012 (Written Examination Administration)
October 31, 2012 (Licensee Submitted Post Exam Package)
October 8 to November 19, 2012 (NRC Examination Grading)
November 28, 2012 (Licenses Issued)

Examiners: P. Presby, Chief Examiner, Operations Branch
B. Fuller, Operations Engineer
J. Tomlinson, Operations Engineer
B. Litkett, Reactor Systems Engineer

Approved By: Donald E. Jackson, Chief
Operations Branch
Division of Reactor Safety

Summary of Findings

ER 05000244/2012301; October 1, 2012 through November 28, 2012; R. E. Ginna Nuclear Power Plant; Initial Operator Licensing Examination Report.

NRC examiners evaluated the competency of 4 applicants for reactor operator licenses, 5 applicants for instant senior reactor operator licenses and 2 applicants for upgrade senior reactor operator licenses at R. E. Ginna Nuclear Power Plant. The facility licensee developed the examinations using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 9, Supplement 1. The written examination was administered by the facility on October 18, 2012. NRC examiners administered the operating tests on October 1-5, 2012. The license examiners determined that 4 of the 11 applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses have been issued. Two additional instant SRO license applicants passed the exam but their licenses are being held based on their written exam grades. Licenses for applicants with overall written exam passing grades of 82 percent or below or with SRO-only written exam passing grades of 74 percent or below are normally held for review until those applicants who failed the examination have had an opportunity to appeal their license denials.

A. NRC-Identified and Self-Revealing Findings

No findings were identified.

B. Licensee-Identified Violations

None.

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA5 Other Activities (Initial Operator License Examination)

.1 License Applications

a. Examination Scope

The examiners reviewed all 11 license applications submitted by the licensee to ensure the applications reflected that each applicant satisfied relevant license eligibility requirements. The applications were submitted on NRC Form 398, "Personal Qualification Statement," and NRC Form 396, "Certification of Medical Examination by Facility Licensee." The examiners also audited 3 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 Operator Knowledge and Performance

a. Examination Scope

On October 18, 2012, the licensee proctored the administration of the written examinations to all 11 applicants. The licensee staff graded the written examinations, analyzed the results, and presented their analysis to the NRC on October 31, 2012.

The NRC examination team administered the various portions of the operating examination to all 11 applicants on October 1-5, 2012. The 4 applicants for reactor operator licenses participated in two dynamic simulator scenarios, in a control room and facilities walkthrough test consisting of 11 system tasks, and an administrative test consisting of 4 administrative tasks. The 5 applicants seeking an instant senior reactor operator license participated in 3 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 2 applicants for upgrade senior reactor operator licenses participated in 2 dynamic simulator scenarios, a control room and facilities walkthrough test consisting of 5 system tasks, and an administrative test consisting of 5 administrative tasks.

b. Findings

Six of the applicants passed all parts of the examination. Two of the applicants for instant senior reactor operator licenses failed the administrative portion of the facilities walkthrough and failed the facilities walkthrough test overall. Two reactor operator

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applicants failed the written examination. One instant senior reactor operator applicant failed the SRO-only portion of the written exam. For the written examinations, the reactor operator applicants' average score was 82.66 percent and ranged from 76.00 to 89.33 percent, the senior reactor operator applicants' average score was 85.42 percent and ranged from 80.00 to 90.00 percent. The overall written examination average score was 84.42 percent.

The NRC examiners completed the final grading of the written examination on November 19, 2012, and conducted a review of each missed question to determine the accuracy and validity of the examination questions. Chapter ES-403 and Form ES-403-1 of NUREG 1021 require the licensee to analyze the validity of any written examination questions that were missed by half or more of the applicants. The licensee determined the 5 questions that were missed by half or more of the applicants were valid. The licensee conducted a performance analysis for all 100 questions. Based on their review and analysis, on October 31, 2012, the licensee submitted post-examination comments recommending acceptance of two correct answers on each of 6 questions.

The NRC reviewed the facility's post-exam comment submittal package and accepted the facility recommendation on 1 of the 6 questions. The key for Question #55 was changed to accept Choice "A" in addition to original Key Answer "B." The NRC did not accept the proposed second correct answers for any of the other 5 questions. Questions #4, 26, 31, 54, and 100 remained as originally approved. The text of the examination questions and the licensee's post-examination comments may be accessed in the ADAMS system under the accession numbers noted in Attachment 1. In accordance with current NRC policy, the release of this written examination in ADAMS to the public will be delayed for two years.

3. Initial Licensing Examination Development

a. Examination Scope

The facility licensee developed the examinations in accordance with NUREG-1021, Revision 9, Supplement 1. All licensee facility training and operations staff involved in examination preparation and validation was listed on a security agreement. The facility licensee submitted both the written and operating examination outlines on June 29, 2012. The chief examiner reviewed the outlines against the requirements of NUREG-1021, and provided comments to the licensee. The facility licensee submitted the draft operating examination package on August 17, 2012 and the draft written examination on August 20, 2012. The chief examiner reviewed the draft examination package against the requirements of NUREG-1021, and provided comments to the licensee on the examination on August 31, 2012. The NRC conducted an onsite validation of the operating examinations and provided further comments during the week of September 3, 2012. The licensee satisfactorily completed comment resolution for the operating examination on September 26, 2012 and for the written examination on October 17, 2012.

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b. Findings

The NRC approved the initial examination outline and advised the licensee to proceed with the operating examination development.

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

The examiners determined that the written examination initially submitted by the licensee was not within the range of acceptability expected for a proposed written examination. More than 20 percent of the initial draft written examination questions were unsatisfactory, with 43 percent overall (42.7 percent of RO questions, 44 percent of SRO-only questions) requiring significant modification or replacement. Flaws included multiple implausible distractors, more than one correct answer, K/A mismatches and some SRO-only questions that did not meet SRO-only criteria. The overall submittal was outside the acceptable quality range expected by the NRC. The NRC expects future examination submittals to incorporate any lessons learned from this effort.

.4 Simulation Facility Performance

a. Examination Scope

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

b. Findings

Several simulator deficiencies were identified and are documented in Attachment 2, Simulator Fidelity Report.

.5 Examination Security

a. Examination Scope

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

b. Findings

There were two exam security near-miss situations identified. Neither situation resulted in an exam compromise.

In the first situation, an individual on the exam security agreement reviewed a training program comprehensive written exam developed for the license class and provided comments to the developer. The problem was identified prior to administration of that

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comprehensive exam. All of the validation comments by this individual were also made by another validator of the same exam who was not on the security agreement. While it was inappropriate for an individual on the exam security agreement to evaluate a program exam for the license class, it was determined there was no breach of exam security. This issue is documented in CR-2012-005736.

In the second situation, the surrogate STA involved during administration of NRC exam scenarios was stationed as planned in a common training lunchroom area. The applicant crew was aware that the STA was simulated "out in the plant" and was expected to call him into the simulated control room at some point during the scenario if his presence was required, just as they would in the real plant. The near-miss security situation arose from the fact that the surrogate carried a radio with him. Had the crew called out to the STA on the radio, any communication between the applicant crew and the surrogate would have been audible to anyone in the vicinity of the lunchroom. The problem was identified early in the first scenario. No communication had occurred and all applicants were under control of exam security proctors. The STA was immediately re-stationed in the simulator booth, an exam-secure area, until required to report to the control room. This issue is documented in CR-2012-006633.

4OA6 Meetings, including Exit

The chief examiner presented the examination results to you and other members of your staff on November 28, 2012. Your staff did not identify any information or materials used during the examination as proprietary.

ATTACHMENTS:

1. SUPPLEMENTAL INFORMATION
2. SIMULATOR FIDELITY REPORT

Enclosure

ATTACHMENT
SUPPLEMENTAL INFORMATION
KEY POINTS OF CONTACT

Licensee Personnel

M. Geckle, Nuclear Training Manager
K. Garnish, General Supervisor, Operations Training
J. List, Supervisor Operations Continuing Training
D. Dean, Operations Exam Reviewer (SRO)
P. Landers, Lead Exam Developer
S. Reed, Nuclear Training Instructor
L. Mireles, Nuclear Training Instructor

NRC Personnel

N. Perry, Senior Resident Inspector

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

NONE

Opened and Closed

NONE

Closed

NONE

Discussed

NONE

ADAMS DOCUMENTS REFERENCED

Accession No. ML12332A107 – FINAL-Written Exam (Note: In accordance with current NRC policy, the release of this written examination in ADAMS to the public will be delayed for two years.)
Accession No. ML12332A110 – FINAL-Operating Exam
Accession No. ML12339A257 – FINAL-Post Exam Comments, Resolutions, and Technical References

ES-501**Simulator Fidelity Report****Attachment 2**

Facility Licensee: R. E. Ginna
 Facility Docket No.: 50-244
 Operating Test Administered on: October 1 – 5, 2012

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 IP 71111.11, are not indicative of noncompliance with 10 CFR 55.46. No licensee action is required in response to these observations.

While developing and conducting the simulator portion of the operating tests, examiners observed the following items:

Item	Description
SDR-2012-109	Turbine speed did not increase in response to GO command after setter adjusted to 1801 rpm.
SDR-2012-108	Manual knob for Boric Acid Blender Flow Control Valve Controller HCV-110A had no hard stop. Hardware issue. Knob replaced.
SDR-2012-111	PRT level did not respond tank inflow when RHR RV-203 lifted on intersystem leakage.
SDR-2012-110	During scenario validation, an RCS leak resulted in flow in excess of what should be expected for the malfunction severity value entered.
SDR-2012-117	Simulator aborted during an exam scenario. Had to remove the applicant crew and re-start simulator at current conditions.