



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
612 EAST LAMAR BLVD, SUITE 400
ARLINGTON, TEXAS 76011-4125

October 26, 2011

Christopher J. Schwarz, Site Vice President
Arkansas Nuclear One
Entergy Operations, Inc.
1448 SR 333
Russellville, AR 72802-0967

SUBJECT: ARKANSAS NUCLEAR ONE, UNIT 1 - NRC EXAMINATION REPORT
05000313/2011302

Dear Mr. Schwarz:

On August 31, 2011, the U.S. Nuclear Regulatory Commission (NRC) completed an initial operator license examination at Arkansas Nuclear One, Unit 1. The enclosed report documents the examination results and licensing decisions. The preliminary examination results were discussed on August 31, 2011, with Mr. Karl Jones, Manager of Operations, and other members of your staff. A telephonic exit meeting was conducted on September 19, 2011, with Mr. Randal Martin, Superintendent of Operations Training, who was provided the NRC licensing decisions.

The examination included the evaluation of four applicants for reactor operator licenses and four applicants for upgrade senior reactor operator licenses. The license examiners determined that all of the 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 to this letter contains the details of this report.

No findings were identified during this examination.

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/

Mark S. Haire, Chief
Operations Branch
Division of Reactor Safety

Entergy Operations, Inc.

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Docket: 50-313

License: DPR-51

Enclosure:

NRC Examination Report 05000313/2011302

cc: w/enclosure

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U.S. NUCLEAR REGULATORY COMMISSION

REGION IV

Docket: 50-313

License: DPR-51

Report: 05000313/2011302

Licensee: Entergy Operations, Inc.

Facility: Arkansas Nuclear One, Unit 1

Location: Junction of Hwy. 64W and Hwy. 333 South
Russellville, Arkansas

Dates: August 26 to September 19, 2011

Inspectors: S. Hedger, Chief Examiner, Operations Engineer
G. Apger, Operations Engineer
S. Garchow, Senior Operations Engineer

Approved By: Mark Haire, Chief
Operations Branch
Division of Reactor Safety

SUMMARY OF FINDINGS

ER05000313/2011302; August 26 to September 19, 2011; Arkansas Nuclear One, Unit 1; Initial Operator Licensing Examination Report.

NRC examiners evaluated the competency of four applicants for reactor operator licenses and four applicants for upgrade senior reactor operator licenses at Arkansas Nuclear One, Unit 1.

The 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 licensee on August 26, 2011. NRC examiners administered the operating tests on week of August 29, 2011.

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

A. NRC-Identified and Self-Revealing Findings

No findings were identified.

B. Licensee-Identified Violations

None.

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

40A5 Other Activities (Initial Operator License Examination)

.1 License Applications

a. Scope

NRC examiners reviewed all license applications submitted to ensure each applicant satisfied relevant license eligibility requirements. The 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

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

b. Findings

No findings were identified.

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

NRC examiners determined that the initial submittal for the reactor operator applicants' written exam was within the range of acceptability expected for a proposed examination.

NRC examiners determined that the written examination for the senior reactor operator applicants and the operating tests initially submitted by the licensee were outside the acceptable quality range expected for a proposed examination. Common weaknesses with the written exam submittal involved submitted questions that tested only a reactor operator level of knowledge, as well as questions with multiple correct answers or no correct answers. For the operating test, common weaknesses involved Job Performance Measures (JPMs) submitted that didn't have complete and correct evaluation criteria, as well as JPMs that had one or less observable action that could be used as evaluation criteria for licensing decisions. Corrective actions by the licensee are documented in Condition Report CR-ANO-C-2011-02273.

.3 Operator Knowledge and Performance

a. Scope

On August 26, 2011, 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 September 5, 2011.

The NRC examination team administered the various portions of the operating tests to all eight applicants on week of August 29, 2011.

b. Findings

No findings were identified.

All of the applicants passed the written examination and all parts of the operating test. The final written examinations (on delayed release schedule) 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 identified several generic weaknesses with procedural content during the examination development process that needed to be addressed. These procedure issues have been documented for corrective action in Procedure Improvement Forms (PIFs) 1-11-0527 through 1-11-0531.

.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.

A discrepancy was found in the simulator during validation of operating test simulator scenario content. The licensee documented with Simulator Discrepancy Report 11-0068, and it is described in Attachment 2 of this report.

.5 Examination Security

a. Scope

The NRC examiners reviewed examination security 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.

40A6 Meetings, Including Exit

The chief examiner presented the preliminary examination results to members of the plant staff on August 31, 2011. A telephonic exit was conducted on September 19, 2011, between Messrs. Sean D. Hedger, Chief Examiner, and Randal Martin, Superintendent of Operations Training.

The licensee did not identify any information or materials used during the examination as proprietary.

ATTACHMENT 1: SUPPLEMENTAL INFORMATION
ATTACHMENT 2: SIMULATOR FIDELITY REPORT

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

R. Martin, Superintendent, Training
D. James, Director of Nuclear Safety Assurance
S. Pyle, Manager of Licensing
K. Jones, Manager of Operations
A. Clinkingbeard, Assistant Operations Manager - Training Unit 1
S. Cupp, Superintendent, Simulator and Training Support
J. Cork, Operations Training Instructor, Unit 1

NRC Personnel

A. Sanchez, Senior Resident Inspector
J. Rotton, Resident Inspector
W. Shaup, Resident Inspector

ADAMS DOCUMENTS REFERENCED

Accession No. ML11262A142 - FINAL WRITTEN EXAMS (delayed release until August 26, 2013)
Accession No. ML11284A126 – FINAL OPERATING TEST
Accession No. ML11262A021 - POST EXAM ANALYSIS

Facility Licensee: Arkansas Nuclear One, Unit 1Facility Docket No.: 50-313Operating Test Administered on: August 29-31, 2011

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

Item	Description
Main Generator Exciter Tripped Following Heater Drain Pump Trip	The generator exciter tripped following a heater drain pump trip above 90% power. The heater drain pump trip was initiated by motor winding temperatures exceeding the trip set point (DR Number 11-0068).