



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

March 5, 2002

Craig G. Anderson, Vice President,
Operations
Arkansas Nuclear One
Entergy Operations, Inc.
1448 S.R. 333
Russellville, Arkansas 72801-0967

SUBJECT: ARKANSAS NUCLEAR ONE, UNIT 2, INITIAL EXAMINATION REPORT
NO. 50-368/02-301

Dear Mr. Anderson:

On February 15, 2002, the NRC completed examinations at the Arkansas Nuclear One, Unit 2. The enclosed report documents the results of the examination which were discussed on February 15, 2002, with you and other members of your staff.

The examination included the evaluation of 6 applicants for reactor operator licenses and 10 applicants for senior operator licenses. We determined that 15 of the 16 applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses have been issued.

In accordance with 10 CFR 2.790 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

DocketsNo.: 50-368
License No.: NPF-6

Enclosure:
NRC Inspection Report
50-368/02-301

Entergy Operations, Inc.

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cc w/enclosure:

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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket No.: 50-368
License No.: NPF-6
Report No.: 50-368/02-301
Licensee: Entergy Operations, Inc.
Facility: Arkansas Nuclear One, Unit 2
Location: Junction of Hwy. 64W and Hwy. 333 South
Russellville, Arkansas
Dates: February 15, 2002
Inspectors: Paul C. Gage, Senior Operations Engineer, Operations Branch
Thomas O. McKernon, Senior Operations Engineer, Operations Branch
Greg E. Werner, Operations Engineer, Operations Branch
Michael E. Murphy, Senior Operations Engineer, Operations Branch
Approved By: Anthony T. Gody, Chief
Operations Branch
Division of Reactor Safety

SUMMARY OF FINDINGS

IR 05000368-02-301, on 2/11-15/2002, Entergy Operations, Inc., Arkansas Nuclear One, Unit 2, initial examination of applicants for operator licenses.

An NRC examination team evaluated the competency of 6 applicants for reactor operator and 10 applicants for senior operator licenses at the Arkansas Nuclear One, Unit 2. 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 8, 2002, by facility proctors in accordance with instructions provided by the chief examiner. The NRC examiners administered the operating tests February 11-15, 2002.

The significance of most findings is indicated by their color (Green, White, Yellow, Red) using IMC 609, "Significance Determination Process." The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at <http://www/nrc.gov/NRR/Oversight/index.html>. Findings for which the Significance Determination Process does not apply are indicated by "No Color" or by the severity level of the applicable violation.

- No findings of significance were identified.

Report Details

4. OTHER ACTIVITIES

4OA4 Initial License Examinations

.1 Operator Knowledge and Performance

a. Inspection Scope

On February 8, 2002, the licensee proctored the administration of the written examination to all 16 applicants. The licensee staff graded the written examinations, analyzed the results, and presented their analysis to the NRC on February 15, 2002.

The NRC examination team administered the various portions of the operating examination to the applicants on February 11-15, 2002. The 6 applicants for reactor operator licenses participated in two dynamic simulator scenarios, a control room and facilities walkthrough test consisting of 10 system tasks, and an administrative test consisting of two administrative tasks and 6 administrative questions. The 8 of the 10 applicants that were upgrading from a reactor operator license to a senior operator license participated in two dynamic simulator scenarios, while two of the applicants participated in one dynamic scenario. All 10 of the senior operator license applicants participated in a control room and facilities walkthrough test consisting of five system tasks, and an administrative test consisting of three administrative tasks and four administrative questions.

b. Findings

Fifteen of the sixteen applicants passed all parts of the examinations. One applicant failed the administrative section of the operating test. The applicants demonstrated good 3-way communications, alarm response, and peer checking. For the written examinations, the reactor operator applicants average score was 91 and ranged from 86 to 97. The scores for the senior operator applicants averaged 92.6 and ranged from 87 to 98. The overall written examination average was 92. The text of the examination questions may be accessed in the ADAMS system under accession number noted in the attachment.

The licensee conducted a performance analysis for the written examinations with emphasis on seven questions missed by half or more of the applicable applicants. The licensee concluded that there were no commonalities in the knowledge deficiencies. The licensee recommended that no questions be modified to accept other answers or deleted from the written examination. The chief examiner reviewed the licensee's analysis and applicant performance and found the conclusions to be technically valid.

No findings of significance were identified.

.2 Initial Licensing Examination Development

The licensee developed the written and operating examinations in accordance with NUREG-1021, Revision 8, Supplement 1, using facility training and operations staff on the security agreement.

.2.1 Examination Outline and Examination Package

a. Inspection Scope

The facility licensee submitted the operating examination outlines on October 12, 2001. The chief examiner reviewed the submittal against the requirements of NUREG-1021, Revision 8, Supplement 1, and provided comments to the licensee. The facility licensee submitted the draft operating examination package on December 14, 2001. The chief examiner reviewed the draft submittal against the requirements of NUREG-1021, Revision 8, Supplement 1, and provided comments to the licensee on the operating examination on December 21, 2001. The NRC conducted an onsite validation of the operating examinations and provided further comments during the period of January 14-18, 2002. The licensee satisfactorily completed comment resolution on January 18, 2002. The licensee submitted a letter dated January 30, 2002, which contained the written examination comments. Questions, which were referenced in the licensee's letter, may be accessed in the ADAMS system under the accession number noted in the attachment.

b. Findings

Region IV approved the initial examination outline and advised the licensee to proceed with the operating 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. Inspection 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. Scope

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

b. Observations and Findings

No findings of significance were identified.

40A5 Management Meetings

.1 Exit Meeting Summary

The chief examiner presented the examination results to Mr. C. Anderson, Vice President, Operations and facility staff personnel at the conclusion of the examination on February 15, 2002. The licensee acknowledged the findings presented.

The licensee identified no information or materials during the examination as proprietary.

ATTACHMENT

SUPPLEMENTAL INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Licensee

B. Bement, General Manager
R. Byford, Supervisor Training
S. Cotten, Training Manager
C. Eubanks, Maintenance Manager
J. Giles, Unit 1 Training Supervisor
J. Hatman, Simulator Training Instructor
J. Hoffpauir, Plant Manager
T. Mayfield, Unit 2 Training Supervisor
M. McKinney, Acting Manager, Nuclear Engineering
J. Miller, Unit 1 Operations Manager
R. Partridge, Superintendent, Chemistry
D. Sealock, Supervisor, Unit 2 Simulator Support
J. Sigle, Acting Operations Manager
C. Tyrone, Quality Assurance Manager
C. Zimmerman, Plant Manager Support

NRC

R. Bywater, Senior Resident Inspector

ADAMS DOCUMENTS REFERENCED

Accession No.:

ML 020640138	Final Reference Exam
ML 020640158	Licensee examination comments