

APPENDIX

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Operator Licensing Examination Report: 50-368/OL 90-02

Operating License: NPF-6

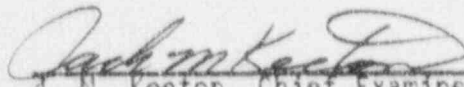
Docket: 50-368

Licensee: Entergy Operations, Inc.
Route 3, Box 137G
Russellville, AR 72801

Facility Name: Arkansas Nuclear One - Unit 2

Examination at: ANO 2

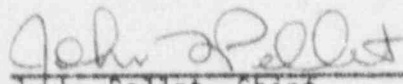
Chief Examiner:



J. M. Keeton, Chief Examiner
Operator Licensing Section
Division of Reactor Safety

1/10/91
Date

Approved by:



J. L. Pellet, Chief
Operator Licensing Section
Division of Reactor Safety

1/10/91
Date

Summary

NRC Administered Examinations Conducted During the Week of December 10, 1990
(NRC Report 50-368/OL 90-02)

NRC administered examinations to six reactor operator (RO) applicants. All of the applicants passed all sections of the examination and have been issued the appropriate licenses. The examinations were conducted in accordance with NUREG 1021, Revision 6.

The sets of material supplied to the examination team were incomplete; however, the items that were missing were promptly sent after notifying the facility. The material that was supplied was not tabbed or indexed, which made it difficult to use for examination development. The student training manuals (STMs) were out-of-date, and use of them in development of the examination resulted in extensive changes to the written examination and job performance measure (JPM) questions.

The cooperation and professionalism exhibited by the training staff and operations was commendable during examination preparation and administration.

DETAILS

1. PERSONS EXAMINED

		<u>RO</u>	<u>SRO</u>	<u>Total</u>
Licensee Examinations:	Pass -	6	0	6
	Fail -	0	0	0

2. EXAMINERS

J. M. Keeton, Chief Examiner
N. E. Maguire-Mofitt
K. D. Ihnen
B. Hughes

3. EXAMINATION REPORT

Performance results for individual candidates are not included in this report because examination reports are placed in the NRC Public Document Room. Individual performance results are not subject to public disclosure.

3.1 Examination Review Comment/Resolution

In general, editorial comments or changes made as a result of facility reviews prior to the examination, during the examination, or subsequent grading reviews are not addressed by this resolution action. All facility licensee preexamination comments were incorporated into the examination. No post-examination comments were made by the facility licensee.

3.2 Site Visit Summary

The facility licensee was provided a copy of the examination and answer key for the purpose of commenting on the examination content validity.

An exit meeting was held December 12, 1990, with the following persons in attendance:

NRC

J. Keeton
E. Hughes
K. Ihnen

FACILITY

J. Yelverton
R. Fenech
J. Swailes
E. Force
G. King
D. Boyd
D. Wagner
D. Sealock
R. Espolt
J. Hatman

3.3 General Comments

3.3.1 Comments on Examination Preparation

The sets of material supplied to the examination team were incomplete; however, the items that were missing were promptly sent after notifying the facility. The material that was supplied was not tabbed or indexed, which made it difficult to use for examination development. The student training manuals (STMs) were out-of-date, and use of them in development of the examination resulted in extensive changes to the written examination and job performance measure (JPM) questions.

3.3.2 Observations During Exam Administration

The cooperation and professionalism exhibited by the training staff and operations was commendable during examination preparation and administration.

Only minor candidate weaknesses were observed during the examinations. These included knowledge of the requirements of Procedure 1015.1, "Conduct of Operations," specifically, the power requirement for having an operator in the "operating area," when at power and knowledge of operation of the saturation margin monitor. These weaknesses were identified to the training staff.

An observation related to the procedures in general was that they did not contain detailed steps for resetting equipment and actuation logics. This item was also brought to the attention of the facility staff.

3.4 Master Examination and Answer Key

The facility had no post-examination comments on the written examination.

3.5 Simulation Facility Fidelity Report

All items on the attached fidelity report were previously identified in Examination Report 50-368/OL 89-01. They were, again, brought to the attention of the facility staff.

SIMULATION FACILITY FIDELITY REPORT

Facility Licensee: Entergy Operations, Inc.

Facility Licensee Docket No.: 50-368

Operating Tests Administered at: Arkansas Nuclear One - Unit 2

Operating Tests given on: December 11, 1990

This report does not constitute an audit or inspection and is not, without further verification and review, indicative of noncompliance with 10 CFR 55.45(b). These observations do not affect NRC certification or approval of the simulation facility other than to provide information which may be used in future evaluations. No licensee action is required in response to these observations.

During the conduct of the simulator portion of the operating tests identified above, the following apparent performance and/or human factors discrepancies were observed:

1. Letdown back pressure control has large fluctuations when boration is started. This is not representative of true plant conditions and could result in negative training.
2. The isophase bus alarm routinely annunciates about 5 minutes after starting the simulator on 100 percent power initial conditions.