

ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Inspection Report: 50-458/95-27

License: NPF-47

Licensee: Entergy Operations, Inc.
P.O. Box 220
St. Francisville, Louisiana

Facility Name: River Bend Station

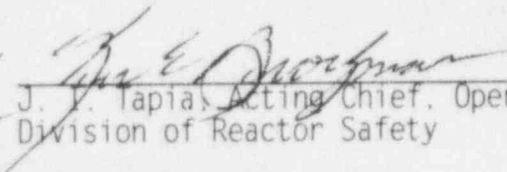
Inspection At: Saint Francisville, Louisiana

Inspection Conducted: November 13-17, 1995

Inspectors: H. F. Bundy, Reactor Engineer, Operations Branch
Division of Reactor Safety

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Division of Reactor Safety

Approved:



J. E. Tapia, Acting Chief, Operations Branch
Division of Reactor Safety

12/5/95
Date

Inspection Summary

Areas Inspected: Routine, announced inspection of the licensed operator requalification program and followup on a previous notice of violation.

Results:

Plant Operations

- The examination materials were high quality and provided a representative sampling of the information presented during the licensed operator requalification training period (Section 1.1).
- Overall operator performance during the requalification examinations was good with 100 percent pass rate and only minor performance problems identified during the dynamic simulator examination (Sections 1.2, 1.3, and 1.4).

- Licensee examination evaluator performance was considered a strength (Sections 1.3 and 1.4).
- The training feedback and remediation programs continued to be effective (Sections 1.5 and 1.6).
- Licensed operators were conforming to license conditions (Section 1.7).
- The plant specific simulation facility was serving training needs well (Section 1.8).

Plant Support

- The housekeeping and material condition of the plant was excellent (Section 1.4).

Management Overview

- Management oversight of and feedback to the training program was a strength (Section 1.6).

Summary of Inspection Findings:

- Violation 458/9506-01. "Validation of Emergency Operating Procedures," was closed (Section 2).

Attachments:

- Attachment 1 - Persons Contacted and Exit Meeting
- Attachment 2 - Simulation Facility Report

DETAILS

1 LICENSED OPERATOR REQUALIFICATION PROGRAM EVALUATION (IP 71001)

During the inspection, the licensee's requalification program was assessed to determine whether the program incorporated appropriate requirements for both evaluating an operator's mastery of training objectives and revising the program in accordance with 10 CFR Part 55. The licensed operator requalification program assessment included a review of training material for the past two years, evaluation of the program's controls to assure a systems approach to training, and evaluation of operating crew performance during annual requalification examinations. This included a review of facility documents, observation of the facility's administration of written examinations, observation of an operating crew during dynamic simulator scenarios and plant walkthroughs, and an assessment of the facility evaluators' effectiveness in conducting examinations.

1.1 Examination Preparation

This portion of the inspection was conducted to determine the effectiveness of the methodology used to develop and construct the requalification examinations and to assess the effectiveness of the examinations administered to identify retraining needs and measure the examinees subject knowledge. The inspectors reviewed the examination sampling plan and interviewed training personnel to ascertain the methods used in developing the examination. The inspectors also reviewed the written examinations, simulator scenarios and job performance measures used in the examination observed. In addition, the inspectors reviewed the licensee's administrative procedures for developing, administering, grading, and evaluating the examinations and conducted interviews with training and operations management, instructors, evaluators, and examinees. The licensee's staff indicated that the guidelines of NUREG-1021, "Operator Licensing Examiner Standards," were utilized for the development and administration of the examinations. The inspectors also determined the validity of the examinations to provide a basis for evaluating the examinee's knowledge of abnormal and emergency operating procedures.

The written examination questions tested at the appropriate level of comprehension and were linked to important learning objectives and the sample plan. The questions were operationally oriented and realistic. The requisite number of questions were taken from subjects not in the current training period. The written examinations were well structured and comprehensive. They had been time validated.

The job performance measures were in accordance with the guidance of NUREG-1021 and contained performance standards that were clear and well defined. The job performance measures adequately supported topic areas from the licensed operator requalification sample plan and included critical task acceptance criteria for measuring the examinee's performance.

The scenarios were developed using the guidance of NUREG-1021 and contained clearly stated objectives. The scenarios had been previously validated by the training staff and allowed the evaluators to measure the examinees' competencies commensurate with the scenario objectives. One minor exception was noted by the evaluators for Critical Task C.2 in Scenario SPS-028-1, "DBA LOCA/Drywell Failure." The intent of the critical task was to inject water into the reactor pressure vessel when the reactor water level could not be determined. However, the critical task also stated that the intent was to maintain reactor pressure vessel pressure above the minimum reactor pressure vessel flooding pressure. Because of the natural progress of the scenario, the latter objective could not be achieved. The evaluators properly reworded this critical task to make it achievable. The inspectors further verified that the examination scenarios had not been used for training the examined crew during the requalification cycle.

Overall, the examination materials were of high quality and provided a representative sampling of the information presented during the licensed operator requalification training period.

1.2 Written Examinations

The inspectors observed the licensee administer the Part A static simulator examination and the Part B classroom examination to two groups of applicants in parallel. The crew was split so that only three applicants were taking an examination at one time. In addition, the applicants were encouraged to start at various questions in the examinations. This enabled the licensee to provide sufficient reference materials to avoid any examinee confusion in obtaining the desired reference. The overall examination security was good. The inspectors determined that the licensee's written examination process was conducted in accordance with the guidelines of NUREG-1021. All of the individuals passed the written examinations.

The inspectors also observed the licensee's post-examination review process. The operators performed well on the written examination with scores ranging from 85.7 percent to 97.1 percent. The written examinations were electronically graded. No generic knowledge deficiency or question validity problems were identified. No questions were missed by more than two individuals.

1.3 Dynamic Simulator Examinations

The inspectors observed one operating crew on two scenarios using the plant-specific simulation facility. The operating crew consisted of a shift superintendent, a control room supervisor, an at-the-controls operator, a balance-of-plant operator, an extra operator, and a shift technical advisor. The extra operator was not evaluated in a given scenario. However, past evaluations were tracked to ensure that each licensed reactor operator was evaluated at-the-controls at least once during each two year training cycle.

Five licensee evaluators rated the crew and individual examinees' competencies by comparing actual performance during the scenarios against expected performance in accordance with guidance in NUREG-1021. Examination security was appropriately maintained at all times.

The operating crew and all individuals performed satisfactorily on the dynamic simulator examinations. Minor performance problems were identified which resulted in the crew being assigned marginal grades in the areas of integrated plant operations and supervisory skills and crew direction. The crew and all individuals passed. However, remediation was planned for evaluator identified deficiencies during the next licensed operator requalification program training period.

The evaluators were professional and systematic in their assessments of individual operators and the crew. Through thorough and insightful discussions, they appropriately identified areas for future remediation. Additional insight was gained in a post-examination debriefing with the examinees. This debriefing provided the examinees a good understanding of their performance problems. Overall, evaluator performance was considered a strength.

1.4 Walkthrough Examinations

The inspectors observed the licensee evaluators and the requalification examinees during the conduct of system-oriented job performance measures related to tasks within the scope of their potential duties. This included non-licensed equipment operator tasks outside the control room and the performance of some tasks in the simulator in the dynamic mode.

During the plant walkthroughs, the inspectors observed housekeeping and the material condition of the plant to be excellent. Communication between the examinees and the evaluators was observed to be good. The inspectors noted that the facility evaluators thoroughly reviewed the results of the individual walkthroughs. Although there were some minor performance problems on Job Performance Measure-909-2, "Parallel and Load Division III Diesel Generator," none of the licensed operators failed a job performance measure. Overall licensed operator performance on the walkthrough portion of the examination was excellent.

1.5 Remediation

Because the remedial training program was thoroughly inspected and found to be effective in January 1995 (Inspection Report 50-458/95-06), a detailed inspection of this area was not performed. However, interviews with licensed operators and trainers indicated that the remedial training program continues to be effective. Remediation plans were jointly developed by the trainer and the operator's immediate supervision. All interviewees expressed satisfaction

with the remediation process. The inspectors observed that remediation plans were sometimes developed and implemented when performance weaknesses, not resulting in examination failures, were identified. One example of this practice is discussed in Section 1.3 above.

1.6 Feedback System

The system for training feedback was reviewed to ascertain if multiple methods of feedback to the training program existed and whether the systems were effective in adjusting the program to meet the needs of the licensed operators. The inspectors determined that adequate mechanisms existed to ensure program evaluation and revision based on feedback from various sources. Facility staff (operators, trainers, evaluators, training and operations management) were interviewed regarding the current feedback and evaluation process. All personnel interviewed believed the current feedback and evaluation processes were working well and provided proper evaluation and revision to the training program. Trainees felt that their inputs were evaluated fairly and that timely and appropriate actions were taken in response to their inputs. The interviewees responded that numerous methods of training feedback existed and all were effective. In addition to course critiques and training request forms, the operators were comfortable with addressing any training problems with the lead instructor assigned to each crew.

Coordination between training and operations was apparent at all levels. The lead instructors worked with the operations shift supervisors for their assigned crews in responding to training needs. Also, the training review group, which included management representatives from both training and operations, addressed overall training needs.

The inspectors observed that management oversight of and feedback to the training program was a strength. A substantial number of management observations were scheduled by the training staff and performed monthly. All members of site management participated in this program. These observations covered classroom, simulation facility, and on-the-job training. A review of completed management observation forms for the past quarter disclosed a significant number of constructive comments for which corrective actions had been implemented or planned.

1.7 Licensed Operator License Conformance

The inspectors interviewed training and operations personnel responsible for tracking licensed operators' qualifications and status. The program for tracking licensed operator status and restrictions was coordinated by the Operations Shift Superintendent in accordance with Operations Policy 20, "Maintenance and Reactivation of NRC Licenses," Revision 0. This policy contained provisions to ensure that licensed individuals either completed the required proficiency shifts or re-established active status in accordance with Procedure ADM-0022, "Conduct of Plant Operations." Individuals were designated in the training department to track the training and medical status

of all licensees and this information was input to the Operations Shift Superintendent. The inspectors reviewed the training department licensed operator qualification status sheets. The overall current status of all licensed operators was posted in the control room as Standing Order 41, dated October 17, 1995. The inspectors concluded that the licensee's program met the requirements of 10 CFR 55.53(e), (f), and (i).

1.8 Simulation Facility

The inspectors discussed simulation facility performance with all interviewees, including the simulation facility supervisor. The consensus was that the simulation facility was serving training needs well. However, certain enhancements were planned for completion in the spring of 1996. These included a new containment model and a new instructor console. Certain responses had to be simulated because of limitations of the current containment model, and the new instructor console will provide additional instructor addressable overrides and malfunctions. There were approximately 126 open simulator problem reports. Many of these were scheduled for resolution in conjunction with the planned simulation facility enhancements. The inspectors reviewed the 25 simulator problem reports which had been open for more than 2 years, and did not find any which would result in a significant negative impact on training.

During the conduct of the licensed operator requalification examination, the inspectors observed some discrepancies in the simulation fidelity, as documented in Attachment 2. The observed discrepancies did not impact examination validity.

2 FOLLOWUP IN THE OPERATIONS AREA (92901)

(Closed) Violation 458/9506-01: Validation of Emergency Operating Procedures

This violation involved the adequacy of an emergency operating procedures Enclosure 17 to specify the type of tools required to perform a local operator action. Additionally, the concern addressed other examples related to verification and validation for emergency operating procedures and abnormal operating procedures.

During this inspection, the inspectors verified that the licensee had completed a number of corrective action items related to this violation as described in the licensee's Reply to Notice of Violation dated April 7, 1995. As part of the corrective actions, Enclosure 17 was revised to specify the pre-staged tools. The licensee also implemented quarterly audits of pre-staged emergency operating procedure related equipment to ensure the continued presence of the tools. Additionally, the licensee initiated a comprehensive emergency operating procedure improvement plan. The improvement plan included revision of the writer's guide, revision of the verification and validation procedure, revision of emergency operating procedure flow charts and others. The inspectors reviewed quarterly audit surveillances performed

in May and August 1995. Additionally, emergency operating procedure human factors verification checklists used for validation of emergency operating procedure enclosures were reviewed. The inspectors noted that discrepancies noted have either been corrected or have been designated for incorporation into the next emergency operating procedure revision scheduled for May 1996. While the licensee had not fully completed all action items, the inspectors concluded sufficient corrective action item progress was evident to warrant closure of the violation.

ATTACHMENT 1

PERSONS CONTACTED AND EXIT MEETING

1 PERSONS CONTACTED

1.1 Licensee Personnel

E. Beshears, Senior Operations Instructor
G. Bush, Operations Shift Superintendent
*J. Fisicaro, Director, Nuclear Safety
M. Jones, Senior Operations Instructor
B. Kelley, Nuclear Control Operator
*M. Krupa, Manager, Operations
P. LeFort, Supervisor, Technical Training
*G. Lewis, Manager, Training
*D. Lorfing, Supervisor, Licensing
*J. McGaha, Vice President, Operations
*M. Sellman, General Manager, Plant Operations
*J. Summers, Licensing Specialist
*W. Trudell, Supervisor, Operations Training
*M. Wagner, Senior Instructor
L. Woods, Operations Shift Superintendent
*T. Wymore, Control Room Supervisor

1.2 NRC Personnel

D. Proulx, Resident Inspector

In addition to the personnel listed above, the inspectors contacted other personnel during this inspection period.

*Denotes personnel that attended the exit meeting.

2 EXIT MEETING

An exit meeting was conducted on November 17, 1995. During this meeting, the inspectors reviewed the scope and findings of the inspection. The licensee acknowledged the inspection findings as they were presented. The licensee did not identify as proprietary any information provided to, or reviewed by, the inspectors.

ATTACHMENT 2

SIMULATION FACILITY REPORT

Facility Licensee: Entergy Operations, Inc. (River Bend Station)

Facility Docket: 50-458

Requalification Operating Test Administered on: November 13-17, 1995

These observations do not constitute audit or inspection findings and are 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.

<u>ITEM</u>	<u>DESCRIPTION</u>
Valve Position Status	During a Rod Drift/Steam Leak into Secondary Containment scenario, the MSIVs and MSSVs had blinking valve position status lights (red & green) making the position indeterminate without verifying other parameters (i.e., steam flow)
ERIS and DRMS Computers	During a DBA LOCA/ Drywell Failure scenario, the ERIS (emergency response information system) and DRMS (Digital Radiation Monitoring System) computers became unexpectedly inoperable. The operators were required to use other instrumentation and sources of information to verify plant conditions.

The above simulator problems did not affect the validity of the scenarios used during the licensed operator requalification examination.