

ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Inspection Report: 50-285/95-10

License: DPR-40

Licensee: Omaha Public Power District
Fort Calhoun Station FC-2-4 Adm.
P.O. Box 399, Hwy. 75 - North of Fort C
Fort Calhoun, Nebraska

Facility Name: Fort Calhoun Station

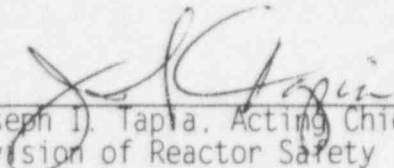
Inspection At: Fort Calhoun, Nebraska

Inspection Conducted: October 16-20, 1995

Inspectors: Mr. T. O. McKernon, Reactor Engineer, Operations Branch
Division of Reactor Safety

Accompanying Personnel: Mr. R. Pugh, Consultant

Approved:


Joseph I. Tapia, Acting Chief, Operations Branch
Division of Reactor Safety

11/9/95
Date

Inspection Summary

Areas Inspected: Routine, announced inspection of the licensed operator requalification program.

Results:

Plant Operations

- Reactor operators exhibited good communication skills during the examination (Section 1.2).
- Operator performance during the requalification examination was generally good, with minor exceptions (Section 1.2 and 1.3).
- Evaluator performance during the examination was good. The evaluators used a systematic approach in their examination evaluation process (Section 1.2 and 1.3).

- There was an effective feedback system to the training program and a good working relationship between the operations and training departments (Section 1.5).
- Some potential training program weaknesses were identified in that requalification examination scenarios did not have a formalized systematic up-front review to verify scenario complexity and level of difficulty (Section 1.1).
- Overall, the inspectors concluded that the licensed operator requalification program was acceptable and effectively implemented (Sections 1.1-1.7).

Plant Support

- Plant housekeeping and material condition observed during the walkthrough portion of the examination were good (Section 1.3).

Summary of Inspection Findings:

- No inspection findings were assigned tracking numbers.

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 2 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 an operating and staff crew during dynamic simulator scenarios and plant walkthroughs, and an assessment of the facility evaluators' effectiveness in conducting examinations.

1.1 Licensed Operator Requalification Examination Preparation

This part of the inspection was conducted to determine the training department's methodology used to develop the requalification examinations and assess the effectiveness of the examinations to measure the examinee's subject knowledge and identify retraining needs.

The inspectors reviewed the licensee's job performance measures and simulator scenarios used in the examination period assessed. The administrative procedures for developing, administering, grading, and evaluating the examinations were also reviewed. The inspectors also conducted interviews with training management, operators, and instructors.

The licensee's licensed operator requalification training program was delineated by Training Administrative Procedure 13, Revision 31, which referenced Training Administrative Guideline 30, Revision 3, and NUREG-1021, "Operator Licensing Examiner Standards," for guidance in development of the job performance measures and the simulator scenarios. The job performance measures were developed using clear and well-defined critical task acceptance criteria for measuring the examinee's performance. The job performance measures adequately supported topic areas (job-task codes) from the licensed operator requalification program 2-year training plan.

The simulator scenarios were also developed using the guidance of the training department procedures and NUREG-1021. Overall, the scenarios were realistic and consisted of related events. However, the inspectors identified some potential training program weaknesses related to examination simulator scenario development and the level of difficulty of the scenarios. The licensee's requalification training staff did not utilize a formalized systematic method in developing the scenarios in that quantitative attributes, such as the number of emergency operating procedures or contingency procedures used during the scenarios were not verified up front to conform with the guidance provided in NUREG-1021, Examiner Standard 604, Attachment 3.

No internal review and documentation existed to ensure scenarios used for requalification examination meet minimum facility quantitative and qualitative requirements. Other scenarios used during previous requalification examinations were reviewed and also verified similar marginal emergency operating procedure usage. Twelve facility scenarios were reviewed against internal requirements and the guidance given in NUREG-1021. Of these scenario's, 4 failed to enter an emergency operating procedure other than E-0 (Reactor Trip). Eight of the scenario's failed to require actions of any contingency procedures (as defined in NUREG-1021, Examiner Standard 604).

The inspectors also observed that some scenarios contained inconsequential malfunctions, which required the operators to only acknowledge the annunciator rather than recognizing and taking compensatory corrective actions. Similarly, some scenarios used during the examination were not very complex, in that the crew was not challenged with multiple event casualties which would require the lead senior operator to prioritize the crew's actions or place reliance upon diminished coping capabilities (e.g., loss of a vital bus). The inspectors reviewed other scenarios and held discussions with requalification examination evaluators to verify the evaluation adequacy of other crews examined. The inspectors did not identify any specific instances in which the evaluation of crews or individuals was questionable. The inspectors discussed the concern with the licensee and characterized the failure to meet required quantitative requirements as a weakness which had the potential to result in the improper evaluation of crews by the training department.

1.2 Dynamic Simulator Examinations

The inspectors observed one operating and one staff crew each consisting of a shift supervisor, a lead senior operator, a primary reactor operator, a secondary operator, and a shift technical advisor. The operating crew was examined using two scenarios while the staff crew was evaluated on three scenarios using the Fort Calhoun Station plant-specific simulation facility and training department evaluators in their function of assessing the crew's competencies. The evaluators rated the examinees' competencies by comparing actual performance during the scenarios against expected performance in accordance with NUREG-1021, Section 303, Revision 7, and as required by Training Administrative Procedure 13, Revision 31.

The inspectors observed that the evaluators used a systematic approach in assessing the examinees' competencies. The evaluators were thorough in their assessments of the operators' performances and their findings were sufficiently detailed to assist in future training and in debriefing the crews and individual examinees. The examinees were briefed and sequestered at times in order to maintain examination security. The examinees demonstrated good communication skills and were knowledgeable and proficient in the use of the emergency operating procedures and the functional recovery procedures. The

shift technical advisors reviewed the safety function checklists periodically and provided necessary input to the lead senior operator's decision making. The shift supervisors were effective in oversight of the crews and timely in declaring emergency action levels. Both the evaluated operating crew and the staff crew passed the dynamic simulator portion of the operating examination.

1.3 Walkthrough Examinations

The inspectors observed the licensee evaluators and the requalification examinees during the conduct of system-oriented job performance measures related to job tasks within the scope of their potential duties. This included nonlicensed 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 material condition of the plant to be good. Communication between the examinees and the evaluators was also observed to be good. The inspectors noted that the facility evaluators thoroughly reviewed the results of the individual walkthroughs. A couple of staff examinee's failed one of the simulator job performance measures, but none of the examinees failed the overall job performance measure portion of the examination.

1.4 Remediation

The remedial training program was effective. A sampling check of operator requalification training scores, remedial training, and additional actions taken was performed. During this review, the remedial training requirements for two individuals whose weekly test scores required remedial action and removal from shift were examined. Remediation was found to be properly documented and appropriate actions were taken in accordance with the training department's Administrative Procedure TAP-13, Section 3.8.

1.5 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 internal mechanisms existed to ensure program evaluation and revision based on operator, trainer, and supervisor input in accordance with 10 CFR 50.4. Facility staff (operators, supervision, training staff, and management) were interviewed regarding current feedback and evaluation processes. All personnel interviewed believed the current administrative feedback processes worked well to provide proper evaluation and revision to the training program. Personnel felt that their inputs were evaluated fairly and that timely and appropriate actions were taken in response to their inputs. Several completed request for

training forms were reviewed. All requests had been reviewed by the training department and actions taken were in accordance with internal administrative requirements. Additionally, several training feedback forms (TAP-6A) were reviewed. Timely action was taken in accordance with internal administrative guidance and policies required to address the feedback items.

In addition to the request for training and feedback form methods of input to the feedback process, the licensee used the operations performance enhancement program meetings, training advisory committee meetings, periodic management oversight reviews of training, and daily communications between the operations and training departments to provide inputs to the training process. The licensed operator requalification program contained sufficient feedback mechanisms to provide for timely and adequate program evaluation and revision.

1.6 Licensed Operator License Conformance

The inspectors reviewed the licensee's records for tracking licensed operators' qualifications, status, and recent internal audits of the program. These included training attendance records, required manipulations, and medical records surveillances. Also, internal documents which chronicled reactivation of three licenses were reviewed for compliance with internal administrative requirements (TAP-13). All documents were found to be in order. The inspectors concluded that the licensee's program met the requirements of 10 CFR 55.53(e)(f)(i).

1.7 Simulator Fidelity

Discussions with the coordinator of simulator support, instructors, and reactor operators indicated that existing simulator fidelity problems were known and appropriate corrective action initiated. The total backlog of simulator-related items was 130, of which 30 items were related to simulator modeling problems. Through discussions with operators and instructors, the inspectors were informed that the simulator fidelity problems did not have a negative impact on training. Problems related to simulator fidelity and modeling did not affect the observed operating examinations.

ATTACHMENT 1

1 PERSONS CONTACTED

1.1 Licensee Personnel

- *R. Andrews, Division Manager, Nuclear Services
- *J. Chase, Plant Manager
- *S. Gambhir, Division Manager, Engineering
- *J. Gasper, Manager, Training
- *W. Gates, Vice President, Nuclear
- *G. Guliani, Supervisor, Operations Training
- *L. Kusek, Manager, Nuclear Safety Review
- *L. Labs, Operations Training Specialist
- *M. Lazar, Supervisor, Operations and Technical Training
- *B. Matherson, Operations Quality Assurance
- *E. Matzke, Licensing
- *W. Orr, Manager, Quality Assurance/ Quality Control
- *T. Patterson, Division Manager, Nuclear Operations
- *M. Tesar, Manager, Corrective Action
- *J. Tills, Assistant Plant Manager-Operations
- *D. Trausch, Manager, Licensing

1.2 NRC Personnel

- *W. Walker, Senior 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 October 20, 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: Omaha Public Power District (Ft. Calhoun Station)

Facility Docket: 50-285

Requalification Operating Test Administered on: October 16-19, 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.

No malfunctions of the simulator were observed.