

U. S. NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT  
REGION IV

Report No. 50-285/81-02

License No. DPR-40

Cocket No. 50-285

Licensee: Omaha Public Power District  
1623 Harney Street  
Omaha, Nebraska 68012

Facility Name: Fort Calhoun Station, Unit 1

Inspection at: Fort Calhoun Station, Blair, Nebraska

Inspection conducted: January 12-15, 1981

Inspectors: D. M. Hunnicutt 2/5/81  
for M. I. Aneshansley, Reactor Inspector Date

D. M. Hunnicutt 2/5/81  
for L. A. Yandell, Reactor Inspector Date

Reviewed by: D. M. Hunnicutt 2/5/81  
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Reactor Projects Section No. 2

Inspection Summary

Inspection conducted during the period of January 12-15, 1981 (Report No. 50-285/81-02)

Areas Inspected: Routine, unannounced inspection of the Tests and Experiments Program, Training and Requalification Training. The inspection involved forty-eight (48) inspector hours on-site by two NRC inspectors.

Results: Within the three areas inspected, four violations were identified as follows:

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- (1) Test and Experiments Program, (Failure to follow reporting requirements of 10 CFR 50.59, paragraph 2).
- (2) Training, (Failure to follow commitments made in the training program, paragraph 3).
- (3) Requalification Training, (Failure to meet requalification requirements, paragraph 4).
- (4) Requalification Training, (Failure to provide records of activities affecting quality, paragraph 4).

DETAILS1. Persons Contacted

\*W. Jones, Division Manager, Production Operations  
 \*F. Thurtell, Division Manager, Environmental and Regulatory Affairs  
 \*R. Andrews, Section Manager, Operations  
 \*K. Morris, Manager, Administrative Services.  
 \*G. Peterson, Supervisor, Maintenance (also acting Manager, FCS)  
 \*T. Patterson, Licensing Administrator  
 J. Gass, Training Supervisor  
 M. McEwan, Training Coordinator  
 T. Chapman, Health Physicist  
 A. Richard, Plant Engineer

The inspectors also talked with and interviewed other licensee employees including craftsmen, engineers and office personnel.

2. Tests and Experiments Program

The inspector reviewed Ft. Calhoun Station Procedure G-3, Special Procedures and Special Order No. 20 to verify that the licensee has established a program to (1) handle requests for performing plant tests and experiments, (2) ensure that tests and experiments are performed using approved written procedures, (3) verify that all proposed test and experiments are reviewed to determine whether they are described in the FSAR, (4) verify that a written safety evaluation pursuant to 10 CFR 50.59 is done for those tests and experiments not described in the FSAR, and (5) ensure that all tests and experiments conducted pursuant to 10 CFR 50.59 are formally reported to the NRC in a timely manner.

The following special procedures were reviewed;

| <u>Procedure</u> | <u>Title</u>   | <u>Date Performed</u> |
|------------------|--|-----------------------|
| SP-CONT-2,       | Containment Purge Supply and Exhaust Penetrations (M-88 & M-87) Type C Leak Rate Test  | 7/13/79               |
| SP-CPTP-12,      | Variable Tavg. Test Using Center CEA   | 8/27/79               |
| SP-CV-1,         | Leak Test of Primary Coolant System  | 6/5/80                |
| SP-SOBS-2,       | Performance of Ultrasonic Examination and/or Liquid Penetrant Examination on Welds in Stagnant, Oxygenated and Borated Systems | 1/6/80                |

|                |   |         |
|----------------|---|---------|
| SP-RCS-TEMP-1, | RCS Temperature Rise with<br>Shutdown Cooling Secured | 4/9/80  |
| SP-RPS-5,      | Excore Detector Symmetric<br>Offset Recalibration     | 8/20/80 |

The inspector reviewed the monthly reports from August 1979 through September 1980 that contained periodic reports of tests and experiments. Section (2)(b) of 10 CFR 50.59 requires that holders of a license provide a report to the appropriate NRC Regional Office on the performance of any "tests or experiments not described in the safety analysis report," and that this report contain "a brief description of such . . . tests and experiments, including a summary of the safety evaluation of each." Contrary to the above, the licensee failed to provide a summary of the safety evaluation done on each test and experiment. This is an apparent violation for failure to meet the reporting requirements of 10 CFR 50.59. (8102-01).

### 3. Training

The inspector reviewed program elements and records of the licensee's general training and retraining program for employees and contractors. Based on the Ft. Calhoun Station Training Manual, this review addressed the areas of (1) General Employee Training (radiation protection, site security, emergency plan/fire drills, first aid, safety meetings, and QA/QC), (2) Department Training, (annual lectures and on-the-job training), (3) Emergency Duty Officer and Emergency Monitoring Team Training, and (4) Fire Brigade Training. In addition, the inspector interviewed several members of the plant staff regarding the training they've received and reviewed the Site Security and Radiation Protection Training Report dated January 6, 1981. As a result of these reviews, the inspector determined that the licensee had failed to meet the following commitments made in the Training Manual.

- a. Section B.2.1 requires "an annual refresher training session and an examination" in radiation protection, but contrary to the above, approximately 250 OPPD personnel, holding current badges for the Ft. Calhoun Station, have gone more than one year without this training.
- b. Section B.2.1 requires that those personnel "who have security classifications which allow unescorted access to the Ft. Calhoun Station" be given "Site Security refresher training each calendar year in order to maintain their classification." Contrary to the above, approximately 375 OPPD personnel holding current badges for the Ft. Calhoun Station failed to undergo refresher training in 1980.
- c. Section B.2.4 requires that the licensee schedule and conduct "quarterly fire drills involving the entire plant staff." Contrary to the

above, Ft. Calhoun Station had no plant-wide fire drills scheduled for 1980, and had only one fire incident that involved the entire plant staff that was recorded for training purposes.

- d. Section B.2.8 requires that "an annual schedule detailing General Training and Retraining, Departmental Training and Retraining and special training events" be prepared and "published each December for the following year." The inspector reviewed the schedule for Departmental Training and Retraining, and special training events that was recently published for 1981, but contrary to the above, no annual schedule for General Training and Retraining had been issued.
- e. Sections C.4.1.1 and C.4.2.1 require the licensee to schedule "approximately 30 hours of lecture" each year for the Mechanical and Electrical crafts, respectively. Contrary to the above, no schedule for this type training was issued for 1980.
- f. Sections C.4.1.1 and C.4.2.1 require that craftsmen "attend an annual lecture series consisting of topics from the following:

- Appropriate Technical Topics
- Plant Systems and Components
- Administrative Procedures
- Technical Specifications
- Changes to Facility Design
- Changes to the Facility License
- Quality Assurance and Control"

Contrary to the above, a review of selected training records of five craftsmen and interviews by the inspector indicated that craftsmen had not been attending required departmental training lectures. Specifically, the inspector determined that (1) all but one craftsmen were overdue for Radiation Protection refresher training, and (2) none of the craftsmen had the required 30 hours of departmental lecture training.

Note: Two of the individuals interviewed had no entries for departmental training, but it was determined that they had attended some lectures. The problem seems two-fold: first, that craftsmen were not getting the required 30 hours departmental training; and second, that proper records were not being kept on the lectures they did attend.

- g. Section D.2.1 requires that persons selected as Emergency Duty Officers be "instructed in the entire Emergency Plan," be given an "examination prepared by the Supervisor-Chemistry and Radiation Protection," and demonstrate their "ability to perform the duties of EDO under drill conditions" as documented on "an Emergency Duty Officer Training Checklist." In addition, Section D.2.5.2 requires that the Supervisor-Chemistry and Radiation Protection (C&RP) prepare "an examination on the Emergency Plan for Emergency Duty Officer training." Contrary to the above, three licensee personnel were identified by position on Figure V.1 of the FCS Emergency Plan as Emergency Duty Officers but had not received the training as outlined above. The licensee pointed out that these individuals were not considered EDO's at present and that Figure V.1 reflects qualifications to be obtained as part of a specific position. The inspector stated that when requesting a list of qualified EDO's from the licensee, Figure V.1 from the Emergency Plan had been given to him. This remains a matter of confusion because no other list of qualified EDO's exists in the plant files. In addition, the Supervisor - C&RP has not prepared an examination on the Emergency Plan for EDO training.

This is an apparent violation for failure to follow commitments made in the Ft. Calhoun Station Training Program. (8102-02).

The inspector expressed concern with the licensee at the overall weakness of the general employee training. One item of concern identified was the apparent unfamiliarity of plant personnel with the training program and its published requirements. Much of this stems from the fact that only three copies of the Training Manual are available at the Ft. Calhoun site, and the document is not in general circulation. A second item of concern resulted from the review of Ft. Calhoun Station QA audit report 23-80 dated July 23, 1980, that identified items to be corrected, but were still present at the time of this inspection.

The inspector had the opportunity to review the department training schedules for 1981, and to sit in on one of the system lectures. It appears that the 1981 program will be capable of meeting the requirements for departmental training as set forth in Section C of the Training Manual.

#### 4. Licensed Operator Requalification Training

The purpose of this inspection was to determine that the licensed operator requalification training program was effective and in conformance with regulatory requirements. The inspector reviewed all aspects of the requalification program for calendar year 1980 including the annual examination, results and evaluation.

a. Annual RO and SRO Requalification Examination

A review of the annual requalification examination indicated that the following subjects were covered on the SRO examination:

- (1) Reactor Theory
- (2) Radioactive Material Handling, Disposal and Hazards
- (3) Specific Operating Characteristics
- (4) Fuel Handling and Core Parameters
- (5) Administrative Procedures, Conditions and Limitations

The Ft. Calhoun Technical Specification 5.4.1 requires that the requalification program meet or exceed the requirements of 10 CFR 55, Appendix A. 10 CFR 55, Appendix A, requires that the operator and senior operator written examination cover the following subjects:

- (1) Theory and Principles of Operation
- (2) General and Specific Operating Characteristics
- (3) Plant Instrumentation and Control Systems
- (4) Plant Protection Systems
- (5) Engineered Safety Systems
- (6) Normal, Abnormal and Emergency Operating Procedures
- (7) Radiation Control and Safety
- (8) Technical Specification
- (9) Applicable portions of 10 CFR

The failure to include all subjects in the annual examination for SROs is an apparent violation against Technical Specification 5.4.1 and 10 CFR 55, Appendix A. (8102-03)

10 CFR 55, Appendix A, further requires that the requalification program include written examinations which determine licensed operators' and senior operators' knowledge of subjects covered in the requalification program and provide a basis for evaluating their knowledge of abnormal and emergency procedures. This has been implemented by

Fort Calhoun in their training manual which states, "Following the examination, a report will be issued summarizing weak topical areas and a list of those personnel, if any, who fail the examination. In addition, individuals who score less than 80% in particular categories will be required to attend the appropriate lectures. Periodic written quizzes will be given to all lecture participants to evaluate their knowledge on topics covered by these lectures." The inspector determined that the report on the 1980 requalification exam had not been prepared. The licensee's failure to provide the report of the evaluation of the examination is another example of the apparent violation against the requirements of the requalification program. Further, one licensed operator scored less than 80% on the annual examination (Radiation Safety and Control Section), did not attend any retraining in this area and was not reexamined in this area as required. This is another example of the apparent violation on the failure to meet the requirements of the requalification program.

The inspector reviewed the results of examinations given to several SROs and ROs and was concerned that these examinations had not been graded in a professional manner. There seemed to be an inconsistency in the acceptance criteria (exam key) and the responses given by the operators.

This apparent lack of "attention-to-detail" in the grading of the examinations is considered an unresolved item (8102-04). The inspector will provide copies of the examinations, examination keys and the responses to NRC headquarters and ask that they be reviewed and further guidance provided.

The inspector determined that only one version of the RO and SRO examination was given. In the case of the SRO, it required approximately six weeks to administer the examination to all personnel. In the case of the RO examination it required approximately 12 weeks to administer the examination. The licensee had taken no special precautions to prevent the examination from being compromised. This will be identified as an open item (open item 8102-05) and the methods utilized to prevent compromising examinations will be discussed with the licensee in a future inspection.

On-the-job training 10 CFR, Part 55, paragraph 3, requires the requalification program to include on-the-job training so that:

- (1) "Each licensed operator and senior operator is cognizant of facility design changes, procedure changes, and facility license changes, and
- (2) "Each licensed operator and senior operator reviews the contents of all abnormal and emergency procedures on a regularly scheduled basis."

The inspector reviewed individual training records, shift training packages and lesson plans in an effort to determine that these requirements had been met. It was determined that the licensee had not developed a method to ensure that all licensed operators and senior operators review the contents of all abnormal and emergency procedures on a regular basis and that the reviews had not been conducted. The failure to conduct these procedure reviews on a regularly scheduled basis is another example of the apparent violation of the requalification program requirements.

Through discussions with the training coordinator, the inspector determined that the licensed operators and senior operators were cognizant of facility design changes, procedure changes and license amendments. This was accomplished through training sessions, "night orders," operations superintendent memos and shift training. However, there was no documentation that all licensed operators and senior operators had been made cognizant of procedure changes and facility license changes 48, 49, 50, 51, 52 and 53. Technical Specification 5.10.2 states, "The following records shall be retained for the duration of the Facility Operating License:

"i. Records of Quality Assurance Activities required by the QA Manual"

Quality Assurance Procedure (QAP) #7, paragraph 3.1, states, "Records shall be retained that furnish evidence of activities affecting quality." Paragraph 3.3 states, "The records listed in Appendix A (to QAP #7) shall be accumulated and handled in a controlled manner. Appendix A (to QAP #7) lists records of individual plant staff members qualification, experience, training and retraining as a quality assurance record. The licensee's failure to maintain records that document licensed operators cognizant of procedure changes, facility design changes and facility license changes is an apparent violation. (8102-06)

During the audit, the inspector identified several errors in the licensee's training records. These are listed below:

- (1) The Operations Requalification Summary sheet contained in ten individual training records had not been completed. Spaces which indicate position title, license effective date, type license and requalification examination results had not been completed for 1980.
- (2) Shift training packages 80-02, 80-07-2, 80-07-4 and 80-5-2 had not been signed by the shift supervisor.

- (3) Six drill evaluation forms contained in shift training package 80-08-1 had not been signed.
- (4) Three drill evaluations contained in shift training package 80-08-2 were carbon copies, i.e., the evaluation of three operators responses were carbon copies with different names at the top.

10 CFR 55, Appendix A, paragraph 4.c. states, "The requalification program shall include systematic observation and evaluation of the performance of licensed operators and senior operators by supervisors and/or training staff members including evaluation of actions taken or to be taken during actual or simulated abnormal and emergency conditions.

The inspector discussed these evaluations with the acting plant manager and it was determined that the annual company performance evaluation, drill evaluations and simulator reports were used to conduct these evaluations. However, a review of the drill evaluations indicated that an evaluation of the performance of seven licensed operators had not been conducted. Further, the report issued by Combustion Engineering merely stated that the OPPD personnel had attended the simulator and had performed ten reactivity manipulations. The report did not contain an evaluation of operator performance and/or competency. The licensee's failure to systematically evaluate the performance and competency of licensed operators is another example of the failure to meet the requirements of the requalification program.

##### 5. Exit Interview

An exit interview was conducted on January 15, 1981, with those OPPD personnel denoted in paragraph 1 of this report to summarize the scope of the inspection and the findings.