

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

Report No. 50-285/80-04

Docket No. 50-285

License No. DPR-40

Licensee: Omaha Public Power District (OPPD)
1623 Harney Street
Omaha, Nebrasks 68102

Facility Name: Ft. Calhoun Station

Inspection at: Washington County, Nebraska

Inspection conducted: February 12-15, 1980

Inspector: *R. J. Everett* 3/3/80
R. J. Everett, Radiation Specialist Date

Approved by: *G. D. Brown* 3/5/80
G. D. Brown, Chief, Fuel Facility and Material Safety Branch Date

Inspection Summary

Inspection on February 12-15, 1980 (Report No. 50-285/80-04)

Areas Inspected: Routine, unannounced inspection of the licensee's Radiation Protection Program during refueling operations including Health Physics Procedures; Advanced Planning; Training; Internal and External Exposure Control; Surveys; Control of Radioactive Material; Respiratory Protection Program; and a tour of facilities involved in refueling. The inspection involved 25 inspector-hours by one NRC inspector. The inspector also included an investigation into an allegation of deficiencies in the licensee's training program. (See paragraph 4).

Results: Of the eight (8) areas inspected, four items of noncompliance were identified in one area; (1) failure to barricade and control high radiation areas, an infraction (see paragraph 1); (2) failure to barricade and control very high radiation areas, an infraction (see paragraph 1); (3) failure to label containers containing radioactive material - a deficiency (see paragraph 1); (4) failure to post documents required by 10 CFR 19.11, a deficiency (see paragraph 1). Three open items were identified during the inspection and are described in paragraphs 2 and 8.

DETAILS1. Persons ContactedOmaha Public Power District (OPPD)

*W. C. Jones, Division Manager, Production Operations
 *R. L. Andrews, Section Manager, Operations
 *K. J. Morris, Manager, Administrative Services
 *S. C. Stevens, Station Manager, Ft. Calhoun
 *R. L. Jaworski, Manager, Technical Services
 *J. M. Gloschen, QA Engineer
 F. F. Franco, Supervisor, Chemistry and Health Physics
 J. B. Nicholas, Radiochemist
 M. F. Cassada, Plant Health Physicist
 J. Gass, Training Coordinator

*Denotes those present during the exit interview. The inspector also interviewed and contacted several other licensee and contractor personnel during the inspection.

2. Radiation Protection Program and Procedures

The licensee's radiation protection program is described in the plant radiation protection manual. Procedures related to health physics activities at the plant are found in the radiation protection manual, training manual, calibration procedures, chemistry procedures and administrative procedures. The inspector reviewed the radiation protection and training manual. This review and a tour of radiation restricted areas revealed two activities not covered sufficiently in procedures. The movement of contaminated trash/debris from use areas to final barreling is not covered by a written procedure (80-04/01). The procedure describing the use of respiratory protective equipment does not discuss the field testing of half mask each time the mask is donned (80-04/02). In order to take protection factors for half mask use the field test must be conducted. The inspector stated these items would remain open pending licensee action.

No items of noncompliance or deviations were identified.

3. Advanced Planning for Refueling

The inspector inquired as to the amount and type of pre-planning that took place prior to refueling. The licensee stated that the permanent Radiation Protection (RP) staff consists of:

1-plant health physicist

2-chief technician

3-shift technicians

3-technicians

14 technicians, 9 senior technicians and 5 junior technicians were added to the RP staff as temporary help during refueling. The training for the temporary staff began in November, 1979. The outage work force consists of about 350 contractor and 150 OPPD personnel. Other areas covered during pre-planning were:

- . supplies and equipment
- . training
- . laundry personnel
- . ALARA committee review of certain re-fueling jobs and revision of man-rem estimates
- . generation and completion of a punch list of items from the previous refueling.
- . whole body counts and respiratory training

The inspector had no further questions in this area.

4. Radiation Protection Training

The inspector reviewed records and interviewed personnel in order to determine compliance with 10 CFR 19.12 and FSAR requirements. The following areas were reviewed:

- . test scores and type of badge issued
- . workers tests and training records
- . training manual
- . interviews with new contractor personnel
- . interviews with NP instructors

refresher training

No items of noncompliance or deviations were noted.

On about February 1, 1980 the NRC Region IV office received a call from an individual who made certain allegations of improper conduct in the training of new personnel at plant. The inspector along with the resident inspector*met with the alleger on February 12, 1980 in order to clarify the allegations and obtain a written statement. The statement is attached to this report. The allegation consists of three main elements as follows:

1. Failure of Gene Snowden to pass the H. P. exam and he was given badge anyway. Further, Snowden was observed in a radiation controlled area.
2. If personnel fail to pass the H. P. exam, the answers are supplied by instructors. Further, information is left on the blackboard that helps on the exam.
3. No opportunity for questions and answers during the training film (H.P. Training film).

The inspector reviewed Mr. Snowden's training records in detail. On January 12, 1980 he passed the security exam and failed the H.P. exam. He was given a green badge. The Green badge allows entry into radiation controlled areas only with and escort and access to uncontrolled areas without escort. Mr. Snowden stated that he has not entered a radiation controlled area at any time, with or without an escort. Upon questioning the alleger further, he could not remember seeing Snowden in a radiation area. Therefore, Mr. Snowden's badge and access to radiation controlled areas appears appropriate.

With respect to allegation No. 2, the alleger's time of testing was determined and the assigned instructor identified. The instructor's statement is attached to this report. The instructor stated that the only information on the blackboard pertained to exposure limits and there was no questions on the test about exposure limits. The instructor stated further that persons who failed the H.P. test were taken aside and retrained and retested. The licensee stated that this procedure was consistent with company policy and the object of the training and testing process was to transmit information. The inspector stated that taking persons aside and "retraining" might give the impression that specific answers were being given in order for a person to pass. The licensee stated that this aspect of the training and the number of times a person could fail the test

* D. L. Kelley

would be examined and revised if necessary to preclude giving the impression that specific answers to questions are being given.

With respect to Allegation No. 3, the instructor stated that the time for questions on the training tape was delayed since the session was long and the people weary. After break, he states, ample opportunity was given for all questions. The inspector interviewed two new employees on February 14, 1980. One stated that he wanted more details on the effects of radiation on the body while the other person wanted less information and more on the practical aspects of radiation control. The inspector concluded that sufficient time is being given to questions and answers during the training process.

5. External/Internal Exposure Control

The inspector reviewed selected records for permanent staff, contractor and OPPD personnel to determine compliance with the following requirements:

10 CFR 20.101(a)&(b)

10 CFR 20.102

10 CFR 20.103

10 CFR 20.202

10 CFR 20.401(a)

No items of noncompliance or deviations were noted.

6. Respiratory Protection Program

The inspector reviewed three elements of the licensee's program; the fitting and testing of respirators; the use of respirators in a radiation controlled area; the cleaning and maintenance of respirators. The inspector noticed the improper use of half mask previously noted in paragraph. Since the workers were using the masks as a precaution and airborne levels were below applicable limits, the loss of the protection factor had no significance.

No items of noncompliance or deviations were noted.

7. Posting and Control

The inspector visited several plant areas during the period February 13-15, to observe refueling and waste packaging operations. Attention was given to the following areas:

- . Radiation Work Permits
- . Housekeeping
- . Supplies and equipment
- . Protective clothing requirements
- . Laundry operations
- . Access control to restricted areas
- . Posting and control of high radiation, contamination and airborne radioactivity areas
- . Movement of contaminated tools, trash and laundry
- . Radioactive waste packaging and storage
- . Independent measurements by the inspector

On February 13 the inspector toured the containment building and observed the absence of barricades and conspicuous posting of a high radiation area in the passageway adjacent to the pressurizer and the very high radiation area at the top of the B steam generator. The inspector observed workers entering these areas without dose rate measuring instruments and each entry not under the positive control of someone knowledgeable in radiation protection procedures. The inspector stated that these conditions constituted two items of noncompliance against technical specifications 5.11.1 and 5.11.2. The inspector stated further that the locking of very high radiation areas within containment was not required as long as positive control was exercised at the personnel entry way to containment.

On February 14, the inspector toured the Auxillary building and observed drums of compacted and solidified waste stored in work areas that were not labeled to identify their radioactive contents. The inspector also observed bags of trash, tools, respirators, etc., stored in corridor 26 that did not have a radioactive label. The inspector stated that these conditions constituted noncompliance with 10 CFR 20.203(f).

On February 15, the inspector visited all bulletin boards within the plant to observe required postings. The inspector found that the documents required by 10 CFR 19.11(a) were not posted nor the notice required by 10 CFR 19.11(b).

8. Contaminated Material Control

The inspector followed the movement of contaminated materials from containment to trash compaction and storage. The inspector observed the compaction operation and the use of exhaust air from the compaction enclosure through HEPA filtration to the main vent. The operator did not wear respiratory equipment and depended upon the exhaust unit to remove any airborne contamination. The inspector observed that the unit did not have any indication of air flow on ΔP across the HEPA. The inspector stated that good practice would require this indication and considered the issue to be an open item (80-04/03).

No items of noncompliance or deviations were noted.

9. Surveys

The inspector reviewed radiation level and contamination surveys posted inside containment as well as special surveys for noble gas and iodine activities in containment. The inspector review indicated compliance with 10 CFR 20.201, 10 CFR 20.401(b) and applicable plant procedures.

10. Exit Interview

The inspector met with OPPD representatives (denoted in paragraph 1) at the Omaha offices at the conclusion of the inspection on February 15, 1980. The inspector summarizes the purpose and scope of the inspection, and discussed the inspection findings.