

APPENDIX

U. S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-285/84-08

License: DRP-40

Docket: 50-285

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

Facility Name: Fort Calhoun Station (FCS)

Inspection At: FCS, Blair, Nebraska

Inspection Conducted: March 26-30, 1984

Inspectors: Blaine Murray 4/19/84
for W. Holley, Radiation Specialist, FRPS Date

Blaine Murray 4/19/84
B. Murray, Chief, Facilities Radiation Protection Section Date

Approved: Blaine Murray 4/19/84
B. Murray, Chief, Facilities Radiation Protection Section Date

W.D. Johnson 4/23/84
W. D. Johnson, Chief, Reactor Project Section A Date
Reactor Project Branch 2

Inspection SummaryInspection Conducted March 26-30, 1984 (Report 50-285/84-08)

Areas Inspected: Routine, unannounced inspection of the licensee's radiation protection program during a refueling outage which included: advanced planning, training, external and internal exposure control, posting and control, surveys, radioactive and contaminated material control, and ALARA programs.

The inspection involved 86 inspector-hours onsite by two NRC inspectors.

Results: Within the eight areas inspected, no violations or deviations were identified.

DETAILS1. Persons ContactedOPPD

- *W. C. Jones, Division Manager, Production Operations
- *W. G. Gates, Plant Manager
- M. R. Christensen, Chemistry and Radiation Protection (C&RP) Group
Training Coordinator
- T. Christensen, Health Physics (HP) Shift Coordinator
- C. Crawford, ALARA Coordinator
- M. E. Ellis, Specialist, Instrumentation and Control
- *F. Franco, Manager, Radiological Health and Emergency Planning
- *R. L. Jaworski, Section Manager, Technical Services
- *M. E. Kallman, Supervisor, Administrative and Security Services
J. Mattice, Plant Health Physicist
- *K. J. Morrise, Manager, Administrative Services
- *G. L. Roach, Supervisor, C&RP
F. Smith, Plant Chemist
- *F. A. Thurtell, Division Manager, Quality Assurance and Regulatory
Affairs

Others

- *L. A. Yandell, NRC Senior Resident Inspector

The NRC inspectors also interviewed other licensee and contractor personnel.

*Denotes those present at the exit interview on March 30, 1984.

2. Licensee Action on Previous Inspection Findings

(Closed) Open Item (285/8016-31): Testing Program for Auxiliary Building HEPA Filters - This item involved the lack of a testing program for the auxiliary building HEPA filters in order to satisfy the recommendations of Regulatory Guide 1.140. During a management meeting July 6-7, 1983, a Region IV management representative stated it would not be necessary for the licensee to establish a testing program to verify the capability of this filter system. This item is considered closed.

(Closed) Open Item (285/8016-32): Calibration of Effluent Monitors - This item involved the lack of a comprehensive calibration program for gaseous and liquid effluent monitors. The NRC inspectors determined that the revised calibration procedures for effluent monitoring are adequate to resolve the previously identified concerns. This item is considered closed.

(Closed) Open Item (285/8226-02): Airborne Radioactivity Monitoring Program - This item involved the use of improper collection media for the analysis of airborne alpha concentrations. The licensee has made the necessary revisions to their air sampling program to resolve the identified concerns. This item is considered closed.

(Closed) Open Item (285/8226-05): Management Control of Transportation Activities - This item involved the lack of written program to designate management responsibilities for transportation activities. The NRC inspectors noted that recent revisions to Procedure HP-3, assignment of a full-time radwaste coordinator, and the implementation of a radwaste audit program is sufficient corrective action to resolve previous concerns. This item is considered closed.

(Closed) Open Item (285/8226-07): Preparation of Packages for Shipment - This item involved the lack of a detailed quality control program regarding the packaging of radioactive material for shipment. The NRC inspectors verified that an adequate program had been implemented to resolve concerns in this area. This item is considered closed.

(Closed) Open Item (285/8226-09): Prior Notification of Radioactive Shipments - This item was discussed during a management meeting July 6-7, 1983. It was agreed during this meeting that the licensee's program was adequate to resolve concerns in this area. This item is considered closed.

(Closed) Open Item (285/8226-11): Generation of Radwaste/Inspection of Packages - This item involved lack of a defined program to evaluate the generation of radwaste and the processing of stored wastes. Revisions to Procedure HP-3 and training operators of radwaste compactors is considered adequate to resolve previous concerns. This item is considered closed.

(Closed) Open Item (285/8226-12): Shipping Records - This item involved the lack of detailed shipping records that would demonstrate that applicable DOT and NRC requirements were satisfied prior to a radioactive shipment. Revisions to Procedures HP-3, HP-21A, and Form FC-218 resolve the previously identified concerns. This item is considered closed.

(Closed) Open Item (285/8226-13): Solid Waste Packaging and Transportation - The concerns for this item were included in the resolution of Open Item 285/8226-12. This item is considered closed.

3. Advanced Planning and Preparation

The NRC inspectors reviewed the HP organization and determined the the site staff was augmented by 18 contractor HP technicians. The NRC inspectors reviewed the resumes and work histories of the contract HP technicians and determined that the senior technicians were ANSI qualified.

During this inspection, the NRC inspectors conducted several plant tours and interviews with contractor and licensee personnel. It was determined that shortages had occurred for short periods regarding the availability of anti-contamination clothing, rubber shoe covers, and cloth hoods.

The NRC inspectors were concerned regarding the shortage of portable dose rate survey instruments. Although this shortage did not compromise the health and safety of personnel, jobs had been delayed for short periods of time because instruments were not available to perform the necessary surveys. The licensee's representative committed in the exit meeting to make an effort to rectify this concern.

No violations or deviations were identified.

4. Training

The NRC inspectors reviewed a portion of the licensee's training program associated with the outage. The radiation worker training was reviewed and found to meet the requirements of 10 CFR 19.12. Selected respiratory protection training records were reviewed and found adequate.

The NRC inspectors reviewed the qualifying-evaluation examinations the licensee gave initially to the contract HP technicians upon their arrival for the outage. Also, the licensee's training presented to the contract HP technicians and the associated evaluations were reviewed by the NRC inspectors.

No violations or deviations were noted.

5. Exposure Control

a. External

The NRC inspectors reviewed the licensee's programs for external radiation exposure control to determine compliance with the requirements of 10 CFR 20.101, 20.102, and 20.202.

The NRC inspectors reviewed selected records of jobs performed by the licensee and contractors that required other than routine exposure monitoring, such as multibadging with TLDs. A selection of licensee and contractor NRC Forms 4 and 5 were reviewed and found to be adequate.

No violations or deviations were identified.

b. Internal

The licensee's internal exposure program was reviewed to determine compliance with 10 CFR 20.103 and the recommendations of ANSI N343-1978 NRC Regulatory Guides 8.9, 8.15, and 8.26, and NUREG-0041.

The NRC inspectors reviewed selected whole body counting records, MPC-hr log books, and calibration results for the whole body counter. The NRC inspectors also reviewed a portion of the licensee's respiratory protection program which involved medical certifications, pulmonary function tests, mask-fit tests, and respiratory protection training.

During this inspection, the NRC inspectors noted that the same concerns existed as discussed in Open Item 285/8303-05. These concerns involved lack of respiratory issuance control to ensure that only qualified users are provided respiratory protection equipment. Therefore, Open Item 285/8303 remains open pending further review. The licensee stated during the exit interview on March 30, 1983, that additional reviews would be conducted in order to resolve the inspectors' concerns.

No violations or deviations were identified.

6. Posting and Control

The NRC inspectors examined the licensee's posting and control of radiation, high radiation, very high radiation, airborne, and radioactivity material storage areas against the requirements of 10 CFR 19.11, 20.203, 20.204, and 20.207.

The NRC inspectors noted during plant tours that the licensee had established an adequate program for identifying, posting, controlling, and providing routine surveillance of station areas. The licensee's Radiation Work Permit (RWP) program specified the necessary protective measures to adequately protect personnel.

The NRC inspectors noted that some of the stickers used to post "hot spots" were old and worn. The NRC inspectors communicated this concern to the licensee which gave assurance that the problem would be rectified.

No violations or deviations were identified.

7. Surveys

The NRC inspectors reviewed the licensee's program for implementing and performing radiation, contamination, and airborne radioactivity surveys to determine compliance with the requirements of 10 CFR 20.103, 20.201, and 20.401.

The licensee's survey program was adequate for obtaining surface, air, and radiation surveys for prework evaluation of radiological conditions as well as radiological conditions during and following completion of work. The NRC inspectors continued to have a concern that was originally discussed in Open Item 285/8303-05 regarding documentation of alpha airborne survey results. The NRC inspectors also had a concern about the lack of control of a large area traversed by personnel exiting the containment area before arriving at a frisking checkpoint. The licensee stated during the exit interview that these items would be reviewed in order to satisfy the inspectors' concerns.

No violations or deviations were identified.

8. Radioactive and Contaminated Material Control

The licensee's program for radioactive material labeling and controls was examined to determine compliance with 10 CFR 20.203(f).

During plant tours, the NRC inspectors visited various areas used to store radioactive tools, equipment, and materials. These areas were properly posted and containers properly marked with labels that identified the radioactive contents. It was also noted that the licensee maintained good housekeeping practices as the plant was clean and the trash cleaned up in a timely manner.

No violations or deviations were identified.

9. ALARA Program

The licensee's ALARA program was reviewed to determine compliance with the requirements of 10 CFR 20.1 and the recommendations in NRC Regulatory Guides 8.8 and 8.10.

The NRC inspectors reviewed various ALARA job packages, ALARA committee meetings, RWPs, and other aspects of the ALARA program. The NRC inspectors expressed their concern about the lack of a formal corporate ALARA review and/or ALARA reviews by the plant ALARA coordinator for jobs that are designed by corporate departments. This concern was originally discussed in Open Item 285/8218-01. The licensee stated during the exit interview that their corporate ALARA program would be reviewed to ensure jobs such as design changes and modifications receive proper ALARA reviews during early stages of development.

No violations or deviations were identified.

10. Exit Interview

The NRC inspectors met with the licensee representatives denoted in paragraph 1 at the conclusion of the inspection on March 30, 1984, and discussed the scope and findings of the inspection.

INSPECTOR'S REPORT
 Office of Inspection and Enforcement

HOLLEY, Wesley L.
 REVIEWER
 Murray, B.

INSPECTORS
 Holley
 Murray

LICENSEE/VENDOR	TRANSACTION TYPE	DOCKET NO. (8 digits) OR LICENSE NO. (BY PRODUCT) (13 digits)	REPORT		NEXT INSP. DATE	
			NO.	SEQ.	MO.	YR.
Omaha Public Power District	<input checked="" type="checkbox"/> I - INSERT <input type="checkbox"/> M - MODIFY <input type="checkbox"/> D - DELETE <input type="checkbox"/> R - REPLACE	05000285	8408	A		

PERIOD OF INVESTIGATION/INSPECTION						INSPECTION PERFORMED BY						ORGANIZATION CODE OF REGION/HQ CONDUCTING ACTIVITY (See IEMC 0530 "Manpower Reporting - Weekly Manpower Reporting" for code)					
FROM			TO			1 - REGIONAL OFFICE STAFF			2 - RESIDENT INSPECTOR			OTHER			REGION	DIVISION	BRANCH
MO.	DAY	YR.	MO.	DAY	YR.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	LL	B	A
03	26	84	03	30	84												

REGIONAL ACTION (Check one box only)		TYPE OF ACTIVITY CONDUCTED (Check one box only)													
<input type="checkbox"/> 1 - NRC FORM 591	<input checked="" type="checkbox"/> 2 - REGIONAL OFFICE LETTER	<input checked="" type="checkbox"/> 02 - SAFETY	<input type="checkbox"/> 03 - INCIDENT	<input type="checkbox"/> 04 - ENFORCEMENT	<input type="checkbox"/> 05 - MGMT. AUDIT	<input type="checkbox"/> 06 - MGMT. VISIT	<input type="checkbox"/> 07 - SPECIAL	<input type="checkbox"/> 08 - VENDOR	<input type="checkbox"/> 09 - MAT. ACCT.	<input type="checkbox"/> 10 - PLANT SEC.	<input type="checkbox"/> 11 - INVENT. VER.	<input type="checkbox"/> 12 - SHIPMENT/EXPORT	<input type="checkbox"/> 13 - IMPORT	<input type="checkbox"/> 14 - INQUIRY	<input type="checkbox"/> 15 - INVESTIGATION

INSPECTION INVESTIGATION FINDINGS (Check one box only)				TOTAL NUMBER OF VIOLATIONS AND DEVIATIONS				ENFORCEMENT CONFERENCE HELD				REPORT CONTAIN 2,790 INFORMATION				LETTER OR REPORT TRANSMITTAL DATE					
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A	B	C	D	A	B	C	D	A	B	C	D	MO.	DAY	YR.	MO.	DAY	YR.
1 - CLEAR	2 - VIOLATION	3 - DEVIATION	4 - VIOLATION & DEVIATION													APR	21	1984			

MODULE INFORMATION												MODULE INFORMATION													
REC. ORD.	MODULE NUMBER INSP.				PRIORITY	DIRECT INSPEC. EFFORT IN STAFF HOURS EXPENDED THIS INSPECTION	PERCENTAGE COMPLETED TO DATE	STATUS	MODULE REQ. FOLLOWUP				REC. ORD.	MODULE NUMBER INSP.				PRIORITY	DIRECT INSPEC. EFFORT IN STAFF HOURS EXPENDED THIS INSPECTION	PERCENTAGE COMPLETED TO DATE	STATUS	MODULE REQ. FOLLOWUP			
TYPE	NUMBER	PHASE	MANUAL CHAPTER	PROCEDURE NUMBER	LEVEL	SEC.			PHASE	MANUAL CHAPTER	PROCEDURE NUMBER	LEVEL	TYPE	NUMBER	PHASE	MANUAL CHAPTER	PROCEDURE NUMBER	LEVEL	SEC.			PHASE	MANUAL CHAPTER	PROCEDURE NUMBER	LEVEL
B	530703	B			B	A	0.6						B												
B	592791	B			B	A	0.1		584724				B												
B	583172	B			B	A	79	90					B												

* CIRCLE SEQUENCE IF VIOLATION OR DEVIATION