### APPENDIX

# U. S. NUCLEAR REGULATORY COMMISSION REGION IV

NRC Inspection Report: 50-298/84-07 License: DPR-46 Docket: 50-298 Licensee: Nebraska Public Power District (NPPD) P. O. Box 499 Columbus, Nebraska 68601 Facility Name: Cooper Nuclear Station (CNS) Inspection At: Brownville, Nebraska Inspection Conducted: April 16-20, 1984 Inspector: Radiation Specialist Approved: Chief Facilities Radiation rav rotection Section.

Ceu . Jaudon, Chief, ect Section A Reactor Project Branch 1

Inspection Summary

Inspection Conducted April 16-20, 1984 (Report 50-298/84-07)

Areas Inspected: Routine, unannounced inspection of the licensee's transportation and solid radioactive waste (radwaste) activities including: management controls, training, audit program, quality assurance (QA), procurement and selection of packages, preparation of packages for shipment, delivery of completed packages to carrier, receipt of packages, periodic maintenance of packages, records and reports, and 10 CFR Parts 20 and 61 requirements. The inspection involved 41 inspector-hours onsite by one NRC inspector.

Results: Within the 11 areas inspected, no violations or deviations were identified.

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### DETAILS

#### 1. Persons Contacted

# NPPD

- \*K. Wire, Operations Manager
- B. Beilke, Training Manager
- D. Boyle, Project Engineer
- G. Bray, Auxiliary Equipment Supervisor
- G. Bridgewater, Utility Foreman
- L. Chapin, Lead Utility Manager
- \*C. Goings, Regulatory Compliance Specialist
- C. Kern, QA Specialist
- J. Kuttler, Health Physicist
- B. McDonald, Chemistry and Health Physics (HP) Supervisor
- \*J. Meacham, Technical Manager
- J. Mehser, Radwaste Operator
- V. Welslenholm, QA Manager

#### Other Personnel

- \*D. Carpenter, Visiting Resident Inspector, USNRC
- \*D. Dubois, Senior Resident Inspector, USNRC

The NRC inspector also interviewed other licensee and contractor personnel.

\*Denotes those present at the exit interview.

### 2. Management Control

The NRC inspector reviewed the licensee's radioactive material management controls for compliance with IE Bulletin 79-19. The NRC inspector reviewed the licensee's transportation and solid radwaste management controls and found them as described in Administrative Procedure 1.2, "Station Organization and Responsibility." Section 1.2.11 designates the chemistry and HP supervisor as having the responsibility to ensure the proper shipment and receipt of all radioactive material to and from the plant. The organizational structure and staffing appeared to be sufficient to meet the requirements for the routine performance of the transportation and solid radwaste activities. Management approved instructions (procedures) had been written to perform the various transportation and solid radwaste activities which included authorized revisions and appropriate distribution.

The licensee's organization in this area had not changed since the last transportation inspection performed in December 1983.

# 3. Training

The NRC inspector reviewed the licensee's training program for personnel performing transportation and solid radwaste activities against the requirements of IE Bulletin 79-19.

The NRC inspector reviewed documentation of this training program and training completed by operations, maintenance, and HP personnel assigned to radwaste processing and transportation activities. Segments of this program are under revision and improvement as part of the development of the radwaste operator qualification/training program mentioned in NRC Inspection Report 50-298/84-06.

No violations or deviations were identified.

# 4. Audits

The NRC inspector reviewed the licensee's audit program for transportation and solid radwaste activities to determine compliance with 10 CFR Part 71.137.

The NRC inspector determined the latest audit, Audit No. 83-08, conducted for transportation activities of radwaste had been reviewed in NRC Inspection Report 50-298/83-33. The licensee had initiated and was in the process of completing an audit of these areas during the period of this inspection. No program deficiencies were identified.

No violations or deviations were identified.

# 5. QA Program

The NRC inspector reviewed the licensee's QA program regarding transportation and solid radwaste activities to determine compliance with 10 CFR Part 50, Appendix B, Parts 71.101-.135, and the recommendations of ANSI N18.7-1976 and Regulatory Guides 1.33 and 1.144.

The NRC inspector examined selected QA radwaste shipment surveillances for low specific activity (LSA) shipments.

The licensee does not perform maintenance on leased packaging. Whenever repairs were required, the owner was notified and repairs were performed by owner personnel.

# 6. Procurement and Selection of Packages

The NRC inspector reviewed the licensee's program for procurement and selection of packages used for storage and transport of radioactive materials to determine compliance with 10 CFR Parts 71.12, .16, and .88 and 49 CFR Part 173.415. The licensee had not purchased or fabricated any packages that required NRC certification. Radioactive material shipments which required the use of an NRC certified package were made in vendor-supplied packages.

The NRC inspector noted that the licensee had received prior approval from the NRC's Office of Nuclear Material Safety and Safeguards for those NRC certified packages used. The licensee had current copies of the certificate of compliance.

The NRC inspector noted the licensee used stee, boxes as a strong, tight container or steel drums manufactured in accordance with DOT Specification 17H for shipments of LSA radioactivity waste.

No violations or deviations were identified.

# 7. Preparation of Packages for Shipment

The NRC inspector reviewed the licensee's program for preparation of radioactive material packages for shipment to determine compliance with the requirements of 10 CFR Parts 71.85 and .87, 49 CFR Parts 172.300-.310, 173.412, .474, and .475, and the recommendations of Regulatory Guides 7.1 and 7.4 and ANSI Standards N14.5-1974 and N14.10.3-1975.

The licensee had developed and implemented procedures for the preparation of radwaste for shipment. The procedures require a visual inspection of the package prior to filling and loading, instructions for closing and sealing the package, marking requirements of the package's weight and contents, labeling requirements for the appropriate type of package, and the radiation and contamination limits for packages.

No violations or deviations were identified.

### 8. Delivery of Completed Packages to Carrier

The NRC inspector reviewed the licensee's program for delivery of completed packages to the carrier for transport to determine compliancy with the requirements of 10 CFR Parts 71.89 and .97, and 49 CFR Parts 172.203, .204, .506, .508, 173.435, and 177.842.

The NRC inspector compared the licensee's procedures with the regulatory requirements to determine if they covered the work being performed. The NRC inspector also reviewed licensee records to verify adherence to procedural requirements.

The NRC inspector observed the loading of a cask with 14 steel drums containing LSA radwaste. The shipment was made on a flatbed transport vehicle consigned for exclusive use only.

No violations or deviations were identified.

# 9. Receipt of Packages

The licensee's program for the receipt of packages containing radioactive materials was reviewed for compliance with the requirements of 10 CFR Part 20.205 and the recommendations of Regulatory Guide 7.3. CNS Procedure 9.5.1, "Receival of Radioactive Material," governs the licensee's receipt of radioactive material. The procedures and selected records of shipments received were reviewed.

No violations or deviations were identified.

### 10. Periodic Maintenance of Packages

The NRC inspector reviewed the licensee's program for performance of periodic maintenance of packages to determine compliance with 10 CFR Part 71.87 and 49 CFR Part 173.475 requirements.

The licensee does not routinely perform maintenance on packages. Previous maintenance has consisted of gasket repair or replacement by vendor personnel and procedures. The licensee maintains records and notifies the vendor of all maintenance activities performed on packages.

No violations or deviations were identified.

#### 11. Records and Reports

The NRC inspector reviewed the licensee's program of records and reports to determine compliance with the requirements of 10 CFR Parts 20.206, 71.85, 71.87, 71.91, 71.95, and 71.135 and 49 CFR Parts 171.15, 171.16, 173.415, 173.469, and 173.476.

The NRC inspector reviewed the records of the radwaste shipments made by the licensee since the last radwaste inspection, NRC Inspection Report 50-298/83-33. These shipments were adequately documented including the radiation surveys of the transportation vehicles. The licensee maintains the records of all radwaste material shipments for a period in excess of the 2-year requirement.

### 12. 10 CFR Parts 20 and 61 Requirements

The licensee's program, recently instituted to satisfy the requirements of 10 CFR Parts 20 and 61, appeared to be adequate and the licensee had implemented the necessary items as stated in NRC Inspection Report 50-298/83-33 on January 25, 1984. The licensee did not ship any radwaste material from the effective date, December 27, 1983, for 10 CFR Parts 20.311, 61.55, and 61.56 until their program had been established.

No violations or deviations were identified.

# 13. Low-Level Radioactive Waste Storage Facility

The licensee is presently constructing a new building onsite. Preliminary proposals for this new building included using a portion of it for a low-level radioactive waste storage facility. The NRC inspector contacted a licensee representative in the corporate offices and was informed that the new structure will not be used for a low-level radioactive waste storage facility and its primary function will be to accommodate the approaching pipe modification work.

The NRC inspector concluded from this inspection the same results as in NRC Inspection Report 50-298/83-33, that the licensee will need a low-level storage facility in the near future. The NRC inspector expressed concern in the exit meeting about the possibility of the licensee modifying the new building after the pipe refitting work is completed to become a low-level storage facility. This concern is that there are QA and safety considerations (10 CFR Part 50.59, IE Circular 80-18, August 22, 1980) and design guidance recommendations (Regulatory Guide 1.143 and NUREG 0800, Appendix 11.4-A) that need to be addressed during construction of a facility to be converted to a low-level storage area at a later date and not circumvented during a later modification of a differently designed building.

No violations or deviations were identified.

### 14. Spent Fuel Shipments

The NRC inspector partially reviewed the licensee's proposed spent fuel shipment program and found it as stated in NRC Inspection Report 50-298/83-33. The licensee had not completed the procedures for the spent fuel shipments. The licensee had plans to begin shipping spent fuel in mid 1984, approximately 720 spent fuel elements may be shipped over a 5-year period. The shipments will consist of two casks per load with 18 fuel elements per cask.

# 15. Exit Interview

The NRC inspector met with the licensee representatives and the NRC resident inspector identified in paragraph 1 on April 19, 1984. The NRC inspector summarized the scope and findings of this inspection.

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