

APPENDIX

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-298/87-23

Operating License: DPR-46

Docket: 50-298

Licensee: Nebraska Public Power District (NPPD)
P.O. Box 499
Columbus, NE 68601

Facility Name: Cooper Nuclear Station (CNS)

Inspection At: CNS Site, Brownville, Nebraska

Inspection Conducted: November 18-20, 1987

Inspector:

Blaine Murray

for R. E. Baer, Radiation Specialist, Facilities
Radiological Protection Section

12/22/87
Date

Approved:

Blaine Murray

B. Murray, Chief, Facilities/Radiological
Protection Section

12/22/87
Date

Inspection Summary

Inspection Conducted November 18-20, 1987 (Report 50-298/87-23)

Areas Inspected: Routine, unannounced inspection of the licensee's solid radioactive waste and radioactive materials transportation programs.

Results: Within the areas inspected, no violations or deviations were identified. One unresolved item is discussed in paragraph 2.

DETAILS

1. Persons Contacted

NPPD

G. R. Horn, Division Manager, Nuclear Operations
*R. L. Beilke, Radiological Support Supervisor
*L. E. Bray, Regulatory Compliance Specialist
T. J. Chard, Health Physicist
*J. W. Dutton, Training Manager
R. D. Hogrefe, Station Operator
J. H. Kutler, Health Physics Specialist
*J. M. Meacham, Acting Division Manager, Nuclear Operations
J. A. Mehser, Radwaste Operator
C. H. Putnam, Jr., Quality Assurance (QA) Specialist
*J. V. Sayer, Radiological Manager
*G. E. Smith, QA Manager
*P. R. Windham, Technical Training Supervisor

NRC

*W. R. Bennett, Senior Resident Inspector
*E. A. Plettner, Resident Inspector

*Denotes those present during the exit interview on November 20, 1987.

The NRC inspector also interviewed several other licensee employees, including health physics, maintenance, operations, and administrative personnel.

2. Unresolved Item

An unresolved item is a matter about which more information is required in order to ascertain whether it is an acceptable item, an open item, a deviation, or a violation. An unresolved item identified during this inspection is discussed in paragraph 5.

3. Open Items Identified During This Inspection

An open item is a matter that requires further review and evaluation by the NRC inspector. Open items are used to document, track, and ensure adequate followup on matters of concern to the NRC inspector. The following items were identified:

Open Item (298/8723-02): Spent Resin Dewatering System - This item involves the lack of permanently installed piping between the radwaste and spent resin dewatering system. (See paragraph 5)

Open Item (298/8723-03): Quality Assurance Program for Transportation Activities - This item involves the expiration of the QA program. (See paragraph 10)

4. Organization and Management Controls (83722/83522)

The NRC inspector reviewed the licensee's staff functional assignments including: organization; responsibilities; authorities; staffing; identification and correction of weaknesses; audits and appraisals; communication to employees; and documentation and implementation relating to solid radioactive waste and transportation programs to determine compliance with Inspection and Enforcement (IE) Bulletin 79-19 and Technical Specification (TS) Section 6.1, and commitments in Chapter 13 of the Updated Safety Analysis Report (USAR).

The NRC inspector reviewed those procedures listed in the attachment and documents listed below.

Documents Reviewed

QAP-1200, Radwaste Audit 87-07, Radioactive Waste Treatment and Disposal, dated May 1 through July 27, 1987

SC-1200-03, Surveillance Checklist for Radwaste Shipments

SC-1200-03b, NuPac Dewatering Process

SC-1200-01, Solid Wet Radwaste Packaging and Storage

SC-1200-06, Radwaste Stability Test - 10 CFR 61.56

No violations or deviations were identified.

5. Training and Qualifications (83723/83523)

The NRC inspector reviewed the licensee's training program including: adequacy of training; employee knowledge; qualification requirements; new employees; INPO accreditation; audits and appraisals; training not covered by INPO; and transportation/radwaste training for personnel involved in the transportation of radioactive material and solid radioactive waste activities to determine compliance with the requirements of IE Bulletin 79-19 and TS 6.1.4; and commitments in Chapter 13 of the USAR.

The NRC inspector discussed with licensee representatives and reviewed the training records of personnel in operations, maintenance, quality assurance, and health physics who are assigned to radioactive waste processing and transportation activities. Certain training requirements for transportation activities are specified in I&E Bulletin 79-19. The licensee stated that they believed that the training identified in Bulletin 79-19 had been completed; however, the licensee was unable to

locate the necessary training records. The NRC inspector stated this would be considered an unresolved item pending location of the necessary training records (298/8723-01).

No violations or deviations were identified.

6. Solid Radioactive Waste (84722/84522)

The NRC inspector reviewed the licensee's solid radioactive waste program including: processing and storage; audits and appraisals; program changes; construction and installation of solid waste system; liquid leakage; overflow; spillage; sampling; preoperational test program; completion of preoperational test, procedures; disposition of low-level waste; and installation, calibration, and testing of process monitors to determine compliance with commitments in Chapter 9 of the USAR.

The NRC inspector discussed with licensee representatives the prolonged use of a temporary rubber hose used to connect the permanent radwaste transfer piping system to the liner and dewatering equipment. This same condition was described in NRC Inspection Report 50-298/86-19. The licensee stated that this temporary hose will be replaced with permanent piping during the next scheduled outage. The NRC inspector stated that this matter is considered an open item (298/8723-02).

The NRC inspector had previously reviewed Special Test Procedure 85-14, "CNS/Nuclear Packaging Onsite Radwaste Procedure," which the licensee had developed for the temporary spent resin dewatering system. This procedure included the vendor/supplier procedure for system operation. The NRC inspector expressed concern that the licensee had not completed testing and developed station operating procedures for the spent resin dewatering system.

No violations or deviations were identified.

7. Low-Level Radioactive Waste Storage Facility (65051)

The NRC inspector reviewed the status of the low-level radioactive waste (LLRW) storage facility program including: basis for construction; QA program; procedures for construction; organization and staffing; training and qualifications; procedures; and effluent monitoring for compliance with CNS license conditions and the recommendations of NRC Generic Letter 81-38, IE Circular 80-18, Regulatory Guide 1.143, and NUREG-U800.

The NRC inspector determined that the licensee had not completed an onsite LLRW facility. The licensee had designated an area of the Multi-Purpose Building for LLRW storage and was in the process of installing a ventilation stack monitor in this building.

No violation or deviations were identified.

8. Radioactive Waste Management (84850)

The NRC inspector reviewed the licensee's program for disposal of LLRW including: management controls; quality control program; manifests; classification; form and characterization; shipment labeling; tracking of shipments; and disposal site license conditions to determine compliance with the requirements of 10 CFR Parts 20.311, 61.55, and 61.56.

The licensee was in the process of completing a special test procedure for verification of the stability for solidified wet waste.

No violations or deviations were identified.

9. Transportation (86721)

The NRC inspector reviewed the licensee's program for transportation of radioactive materials including: audits and appraisals; procedures; procurement and lease of packaging; implementation of the transportation program; and transportation incidents to determine compliance with the requirements of 10 CFR Part 71.

The licensee was a registered user and had available the certificate of compliance for all packages used for the transport of radioactive material. The licensee had not experienced any transportation incidents which caused a reduction in the effectiveness of packagings since the previous inspection.

No violations or deviations were identified.

10. Transportation Activities (86740)

The NRC inspector reviewed the licensee's transportation activities program including: management controls; training program; audits and reviews; procurement and selection of packaging; quality assurance program, preparation of packages for shipment; delivery of completed packages to carrier; receipt of packages; periodic maintenance of packaging; and records and reports to determine compliance with the requirements of 10 CFR Parts 20 and 71, and Department of Transportation (DOT) Regulations 40 CFR Parts 170-189.

The NRC inspector determined that the licensee had submitted a QA program for approval to the NRC to comply with 10 CFR Part 71, Subpart H. The licensee had received NRC Form 311, Quality Assurance Program Approval, approval No. 0485, Revision 1, expiration date - November 30, 1987. The NRC inspector discussed with licensee representatives the status for renewal of the QA program approval. The licensee provided the NRC inspector a copy of a November 17, 1987, letter to the NRC's Nuclear Materials Safety and Safeguards (NMSS) Division requesting the staff renew approval of the "Quality Assurance Program for Operation" for use in

Part 71 activities at CNS. The NRC inspector noted the licensee's letter was sent in response to a letter from NMSS advising that the QA program for Part 71 activities was due to expire.

The NRC inspector stated that the licensee's renewal request was not considered timely and that no shipments of radioactive material greater than type A quantities should be made after November 30, 1987, unless the licensee receives approval from NRC. This is considered an open item pending the QA program renewal (298/8723-03).

11. Exit Interview

The NRC inspector met with the licensee representatives denoted in paragraph 4 at the conclusion of the inspection on November 20, 1987. The NRC inspector summarized the scope of the inspection and discussed the inspection findings.

ATTACHMENT

PROCEDURES REVIEWED

- 9.2.4 "Surveying Material for Release Off-Site," Revision 1, dated July 1, 1987
- 9.5.1 "Receival of Radioactive Materials," Revision 4, dated June 5, 1986
- 9.5.3.1 "Radioactive Waste Shipment for Burial," Revision 5, dated June 12, 1986
- 9.5.3.2 "Radioactive Material Shipment," Revision 3, dated June 5, 1986
- 9.5.3.3 "Condensate Cleanup Waste Resins and Spent Resin Classification and Listing," Revision 4, dated August 18, 1987
- 9.5.3.4 "RWCU Waste Resins Classification and Listing," Revision 3, dated August 6, 1987
- 9.5.3.5 "Dry Radioactive Waste Classification and Listing," Revision 4, dated September 17, 1987
- 9.5.3.6 "Completion of Waste Manifest Instructions," Revision 2, dated February 20, 1987
- 8.5.3.8 "Waste Sludge Classification and Listing," Revision 1, dated August 6, 1987
- 9.5.3.9 "Absorbing and Packaging Contaminated Liquids for Burial," Revision 1, dated November 20, 1986
- 9.5.3.10 "Waste Stream Sampling," Revision 0, dated November 20, 1986
- 7.9.2 "Filling Radwaste Containers With Waste," Revision 11, dated August 6, 1987
- 2.5.4.1 "Solid Wet Waste Packaging, Storage, and Transfer System," Revision 14, dated June 26, 1986
- 2.5.4.3 "Radwaste Drum Mixer Operation," Revision 6, dated September 25, 1986
- 3.5 "Special Test Procedure/Special Procedures," Revision 3, dated October 8, 1987