

APPENDIX

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-298/90-10

Operating License: DPR-46

Docket: 50-298

Licensee: Nebraska Public Power District (NPPD)
P.O. Box 499
Columbus, Nebraska 68602-0499

Facility Name: Cooper Nuclear Station (CNS)

Inspection At: NPPD Offices, Columbus, NE

Inspection Conducted: March 19-23, 1990

Inspector:

J. E. Bess
J. E. Bess, Reactor Inspector, Operational
Programs Section, Division of Reactor Safety

4/12/90
Date

Approved:

J. E. Gagliardo
J. E. Gagliardo, Chief, Operational Programs
Section, Division of Reactor Safety

4/12/90
Date

Inspection Summary

Inspection Conducted March 19-23, 1990 (Report 50-298/90-10)

Areas Inspected: Routine, announced inspection consisting of the engineering and technical support capabilities and activities for CNS which were provided by the NPPD offsite staff. This inspection concentrated mainly on the procurement, construction, and engineering departments. The inspector evaluated the organization for staff size, workload, qualification, procedural controls, and training. The quality assurance (QA) audits of the engineering and technical support organization were also reviewed.

Results: The NPPD engineering organization and procedural controls were acceptable. QA audits and surveillances were of sufficient scope to detect engineering division weakness. The inspector discussed the training task force status with NPPD management and was informed that the task force was on schedule to implement a formal training program for all NPPD personnel.

DETAILS

1. PERSONS CONTACTED

NPPD

K. Walden, Licensing and Safety Manager
D. R. Robinson, QA Manager
G. A. Trevors, Division Manager, Nuclear Support
B. Velie, Nuclear Training Specialist
S. McClure, Manager, Nuclear Engineering
L. G. Kunc1, Nuclear Power Group Manager
A. P. Heymer, Manager, Configuration Management
L. P. Kehles, Manager, Nuclear Projects and Construction
G. E. Smith, Manager, QA

The above personnel attended the exit interview conducted on March 23, 1990.

The inspector also contacted and interviewed other licensee employees during the course of the inspection.

2. LICENSEE ACTION ON PREVIOUS INSPECTION FINDINGS (92701)

(Closed) Violation (298/8824-02): Failure to Review Procedure Changes Adequately. The violation was the result of the licensee's misinterpretation of what constitutes a safety evaluation for changes to procedures. The licensee had stated that the "safety evaluation applicability review" conducted on every procedure change constituted a safety evaluation and under CNS Technical Specification 6.2.1.B.4.a these evaluations must be provided to and reviewed by the Safety Review and Audit Board (SRAB).

During this inspection, the inspector reviewed the licensee's response to this violation and verified through document review that corrective actions had been implemented; these corrective actions included:

- ° CNS Procedure 0.4, "Preparation, Review, and Approval of Procedure," was revised to clarify the purpose of and the difference between a preliminary and a detailed safety evaluation.
- ° Preliminary and detailed safety evaluations are being presented to the SRAB for review.

This item is considered closed.

3. ENGINEERING AND TECHNICAL SUPPORT ACTIVITIES

The inspector evaluated the effectiveness of the NPPD offsite support staff. The evaluation consisted of documentation reviews and personnel interviews in the areas of procurement, construction, and engineering. This review verified that administrative controls had been established which described the

responsibilities, authority, and lines of communication for personnel performing support functions.

3.1 Procurement (40703)

The inspector evaluated the effectiveness of the CNS procurement and purchasing program in the areas of staffing level, experience, and training. The evaluation consisted of personnel interviews and documentation reviews.

The inspector interviewed selected personnel in the procurement and purchasing department and each individual appeared to be aware of their assigned functions and responsibilities. The purchasing and procurement department has a staff of 24 individuals, and each staff member has, as a minimum, a Bachelor's degree in business. The average experience level for the staff is about 5 years, and the experience of the supervisory staff averages 10 years at CNS. The inspector noted that there is no formal training program for staff members. The licensee uses the Purchasing Procedure Manual as a training aid for staff personnel. The licensee stated that other training methods used by the purchasing and procurement department are on-the-job training (OJT) and procedure review. The turnover rate for this group has been minimal, and within the past year, only three vacancies have existed. One of these vacancies was created because of a transfer, and two vacancies occurred because of the creation of new positions. There is presently no staff job vacancy in the purchasing and procurement department. The licensee stated that the workload is not a burden on the staff.

The inspector examined several procedures (delineated in Attachment 1) and job descriptions to verify that the purchasing and procurement department had administrative procedures which described the responsibilities and authorities of the staff personnel.

No violations or deviations were identified in the review of this program area.

3.2 Nuclear Projects and Construction Department (40703)

The Nuclear Project and Construction Department, which interfaces with the Nuclear Engineering Department (NED), has the responsibility to provide offsite technical support to CNS.

The Nuclear Projects and Construction Department is organized under a matrix structure. The Nuclear Projects and Construction Department is one of four departments (the others are Nuclear Configuration Department, Nuclear Engineering Department, and Nuclear Fuels Department) which reports to the nuclear engineer and construction division manager.

The Nuclear Projects and Construction Department is staffed by 11 individuals with specialized skills. The inspector noted that all staff positions were staffed by a person with a technical degree, and several positions were staffed by individuals with advanced degrees.

The turnover rate has been negligible during the past year. The inspector noted that this was a senior group of technical specialists with an average of approximately 13 years of experience each at CNS.

The licensee informed the inspector that there is no formal training program for staff members, but each individual is required to be knowledgeable of division administrative procedures and nuclear power group directives, which delineate duties and responsibilities to staff members.

The licensee stated that when consultants are used, senior engineers from NED are assigned to and interface with them. The project workload did not appear to overburden the group. It was noted that if on occasion the workload did become excessive, the NED would supplement the construction group with the needed resources.

The inspector conducted interviews; examined administrative directives (see Attachment 1), procedures, and records; and verified that the offsite construction support staff functions were being performed by qualified personnel.

No violations or deviations were identified in the review of this program area.

3.3 Nuclear Engineering Department (NED)

The inspector evaluated the NED to ascertain whether the offsite technical support staff functions were performed by qualified personnel and in accordance with the licensee approved administrative controls.

The NED is one of four departments in the Nuclear Power Group for which the Vice President, Production, has direct responsibility. The NED provides offsite technical support to CNS, generates design change packages, reviews all modification packages from CNS, and provides technical support and manpower to the Nuclear Projects and Construction Department. All engineering work request for plant, equipment, and systems are evaluated by the NED.

The NED is comprised of six major disciplines. These disciplines include instrumentation and control engineering, electrical engineering, mechanical engineering, technical support, civil and structural engineering, and site support.

The NED is allocated 67 staff positions. These positions are generally filled with personnel who at a minimum have a Bachelor's degree in engineering. The average experience level for the staff is approximately 5 years. The inspector noted that of the 67 staff positions authorized, 62 positions were presently filled. The licensee stated that a concerted effort by management is being implemented to fill the five unfilled vacancies.

The inspector verified that the NED workload level appeared to be manageable. Consultants are often used on an "as needed" basis. The use of consultants is more evident prior to and during refueling for the purpose of preparing outage packages. The licensee also stated that consultants are used in certain specialized areas such as equipment qualification (EQ).

The inspector reviewed the licensee's training program for the offsite technical staff in the NED. The licensee stated that all new engineering staff members are assigned a task book during their initial assignment with the NED. Each individual's supervisor determines which parts of the task book are applicable to his department, and the employee must complete the assignments accordingly. Informational training also includes required attendance of video seminars on various systems at the CNS. Design engineers are strongly encouraged to spend time at CNS in order to walkdown and to understand systems and components with which they are involved.

The inspector noted that a formal, auditable training program is being implemented for all technical personnel in NED. A random review of training records by the inspector verified that some NED personnel had completed training in courses such as: Industry Events, General Employee Training (GET), and 10 CFR 50.59.

On February 28, 1990, licensee management met with regional management to discuss training issues. During these discussions, the licensee stated that a training task force was being implemented to address the NRC concerns about the lack of a training program for individuals working in offsite support positions.

During this inspection, the inspector met with the licensee to discuss the status of the training task force. The licensee stated that the training task force recommendations to the staff will be completed by April 1, 1990. By July 1, 1990, the licensee stated that each NPPD department manager will have completed a matrix which identifies each job position within their area of responsibility, if that job has interface with the Nuclear Power Group and/or CNS. The training task force will complete a training program description (TPD) for each member of the Nuclear Power Group by December 1, 1990. The licensee informed the inspector that the training task force plans are on schedule and the scheduled date of December 1, 1990, to have a formal training program in place will be met.

No violations or deviations were identified in the review of this program area.

3.4 Quality Assurance Audits (40703)

The inspector performed an inspection of the licensee's QA audits conducted during 1989 that were applicable to offsite activities. The inspector selected four audits for review to verify that annual audits were performed, that audit findings were reported to senior management, and that timely corrective actions were implemented. The four audit reports selected were:

- ° Audit No. 89-04; Training, dated May 9, 1989
- ° Audit No. 89-09; Training, dated April 20, 1989
- ° Audit No. 89-05; Design Control, dated April 25, 1989
- ° Audit No. 89-24; Procurement Control Audit, dated October 3, 1989

The scope of the audits were generally defined. The audit findings were reported to senior management, and the resolution to negative findings were considered thorough. Corrective action for the audit findings was timely.

No violations or deviations were identified in the review of this program area.

4. EXIT INTERVIEW (30703)

The inspector met with the licensee personnel identified in paragraph 1 on March 28, 1990, to discuss the findings and conclusions reached during this inspection. No information was presented to the inspector that was identified by the licensee as proprietary.

ATTACHMENT

List of Documents Reviewed

Procedure 0.30	Revision 2	ASME Section XI, "Repair/Replacement"
Procedure 0.51	Revision 1	"Nonconformance and Corrective Actions"
Procedure 0.29	Revision 2	"Control of License Amendments"
Procedure 1.4	Revision 1	"Requisitioning"
Procedure 3.3	Revision 4	"Station Safety Evaluation"
Procedure 3.4	Revision 6	"Station Modification"
Procedure 501	Revision 2	"Procedure Preparation, Distribution and Revision"
Procedure NTD-02	Revision 5	"Training Program Description"
Procedure NTP-03	Revision 5	"Certification"
NPG-Directives 2.2		"Position Description"
NPG-Directives 1.3		"Goals and Objectives"
NPG-Directives 1.2		"Organization Responsibilities"
NPG-Directives 3.3		"Nuclear Training and Indoctrination"