UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

October 3, 2000

J. H. Swailes, Vice President of
Nuclear Energy
Nebraska Public Power District
P.O. Box 98
Brownville, Nebraska 68321

SUBJECT: NRC INSPECTION REPORT NO. 50-298/00-12

Dear Mr. Swailes:

This refers to the inspection conducted on August 13 through September 23, 2000, at the Cooper Nuclear Station facility. The enclosed report presents the results of this inspection. The results of this inspection were brought to the attention of the plant manager and the licensing manager, and they declined to have a formal exit meeting.

The inspectors examined activities conducted under your license as they relate to safety and to compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspectors examined a selection of procedures and representative records, observed activities, and conducted interviews with personnel.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/NRC/ADAMS/index.html (the Public Electronic Reading Room).

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

/RA/

Charles S. Marschall, Chief
Project Branch C
Division of Reactor Projects

Docket No.: 50-298
License No.: DPR-46

Enclosure:
NRC Inspection Report No.
50-298/00-12

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Only inspection reports to the following:
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Dale Thatcher **(DFT)**

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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket No.:	50-298
License No.:	DPR 46
Report No.:	50-298/00-12
Licensee:	Nebraska Public Power District
Facility:	Cooper Nuclear Station
Location:	P.O. Box 98 Brownville, Nebraska
Dates:	August 13 through September 23, 2000
Inspectors:	J. Clark, Senior Resident Inspector M. Hay, Resident Inspector
Approved By:	C. Marschall, Chief, Project Branch C Division of Reactor Projects

ATTACHMENTS:
1. Supplemental Information
2. NRC's Revised Reactor Oversight Process

Report Details

At the beginning of the inspection period, the plant was operating at 100 percent power. From September 9 through September 17, 2000, the plant operated at approximately 73 percent power to perform repairs and testing of the digital electrohydraulic control system. The plant operated at 100 percent power for the remainder of the period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R04 Equipment Alignments

a. Inspection Scope

The inspectors performed a partial walkdown inspection of the reactor core isolation cooling system while scheduled on-line maintenance was being performed on the high pressure coolant injection system. Plant procedures and drawings were used to verify that the reactor core isolation cooling system was properly aligned.

b. Findings

There were no significant findings identified during this inspection.

1R05 Fire Protection

a. Inspection Scope

The inspectors performed routine plant tours to assess the material condition of fire protection equipment and proper control of transient combustibles. The specific risk-significant areas inspected included the cable expansion room, cable spreading room, and the 250 Vdc battery rooms.

b. Findings

There were no significant findings identified during this inspection.

1R11 Operator Requalification

.1 Quarterly Simulator Training Review

a. Inspection Scope

The inspectors observed an operating crew during an evaluated requalification scenario in the simulator. During the scenario the following activities were observed:

- Formality in communications between crew members
- Appropriate and timely actions taken to place the plant in a safe condition
- Ability of crew personnel to prioritize, interpret, and verify alarms

- Correct use of implementing procedures
- Shift supervisor oversight and direction of crew activities

b. Findings

There were no significant findings identified during this inspection.

1R12 Maintenance Rule Implementation

a. Inspection Scope

The inspectors reviewed the licensee's maintenance rule implementation for the following systems:

- Division 1 core spray system
- Division 1 residual heat removal system

The inspectors verified that engineering personnel were adequately tracking and trending failures and performance data for these systems. The inspectors also reviewed selected problem identification reports associated with these systems to determine if licensee staff had properly captured potential maintenance rule issues.

b. Findings

There were no significant findings identified during this inspection.

1R13 Maintenance Risk Assessments and Emergent Work Control

a. Inspection Scope

The inspectors reviewed risk assessments performed for selected planned maintenance activities and emergent work. The risk assessments were reviewed to verify that the licensee effectively controlled risk significant configurations. The inspectors verified that work control and operations personnel were aware of risk categories and applicable contingency actions. The inspectors verified that the licensee properly controlled troubleshooting and repairs associated with emergent work activities. Specifically, the following activities were reviewed:

- Replacement of Service Water Booster Pump C
- Troubleshooting and repairs on the digital electrohydraulic control system
- Service Water Pump D upper motor bearing replacement

b. Findings

There were no significant findings identified during this inspection.

1R14 Nonroutine Plant Evolutions

a. Inspection Scope

The inspectors reviewed licensee event reports for potential human errors and evaluation of risk significance. The following report was reviewed and administratively closed for the reasons provided:

- LER 2000-009-00 Failure to Recognize Entry Condition for Limiting Condition for Operation

  This event was previously reviewed by the resident inspectors as documented in NRC Inspection Report 50-298/00-11. A noncited violation was documented at that time.

- Findings

There were no significant findings identified during this inspection.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed the adequacy of Operability Evaluation PIR 4-09880 pertaining to the operability of the "Z" sump operating with a degraded Hi-Hi level switch and discussed this subject with operations personnel.

The inspectors also reviewed Operability Determination PIR 4-11294 pertaining to Surveillance Procedure 6.RCIC.308, performed on September 8, 2000. The licensee identified that the surveillance procedure failed to include a complete logic system functional test of the reactor water level high channel. Operations personnel and system engineers demonstrated that the channel was operable based on the performance of Surveillance Test 6.1RPS.707 that verified the circuit was functional on April 16, 2000.

b. Findings

There were no significant findings identified during this inspection.

1R19 Postmaintenance Testing

a. Inspection Scope

The inspectors observed or evaluated postmaintenance testing performed on the following equipment to determine whether the tests adequately confirmed equipment operablity:

- Tests performed on Service Water Pump D following upper bearing replacement

- Postmaintenance leakage testing of diesel generator Starting Air Relief Valve DGSA-RV-16RV
- Tests performed on Reactor Equipment Cooling 1A starter following replacement of contactors

b. Findings

There were no significant findings identified during this inspection.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors observed or reviewed the following tests:

- Surveillance Procedure 6.RCIC.308, “RCIC Turbine Trip and Initiation Logic Functional Test,” Revision 6
- Surveillance Procedure 6.HPCI.103, “HPCI IST and 92-Day Test Mode Surveillance Operation,” Revision 14C1

b. Findings

There were no significant findings identified during this inspection.

OTHER ACTIVITIES

4OA6 Meetings

.1 Exit Meeting Summary

The results of the inspection were brought to the attention of the plant manager and the licensing manager, and they declined to have a formal exit meeting.

ATTACHMENT 1

PARTIAL LIST OF PERSONS CONTACTED

Licensee

M. Boyce, Risk and Regulatory Affairs Manager
B. Dettman, Manager, Security
C. Fidler, Assistant Maintenance Manager
M. Gillan, Outage Manager
B. Houston, Quality Assurance Operations Manager
M. Kaul, Operations Support Specialist
W. Macecevic, Operations Manager
S. Mahler, Assistant Licensing Manager
E. McCutchen, Senior Licensing Engineer
J. McDonald, Plant Manager
B. Rash, Senior Engineering Manager

ITEMS OPENED, CLOSED, AND DISCUSSED

Previous Item Closed

50-298/00009-00	LER	Failure to Recognize Entry Condition for Limiting Condition for Operation

DOCUMENTS REVIEWED

Surveillance Procedures

2.2.67A	Reactor Core Isolation Cooling System Component Checklist, Revision 14
0.27	Maintenance Rule Program, Revision 10
6.1RPS.707	Reactor Vessel Low-High Water Level Channel Functional Test (Div 1), Revision 3
6.2SW.101	Service Water Surveillance Operation (Div 2) (IST), Revision 9
6.SUMP.101	Z Sump and Air Ejector Holdup Line Drain Operability Test (IST), Revision 7

ATTACHMENT 2

NRC's REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) recently revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting and assessing safety performance at NRC licensed plants.

The new process monitors licensee performance in three broad areas (called strategic performance areas): reactor safety (avoiding accidents and reducing the consequences of accidents if they occur), radiation safety (protecting plant employees and the public during routine operations), and safeguards (protecting the plant against sabotage or other security threats). The process focuses on licensee performance within each of seven cornerstones of safety in the three areas:

Reactor Safety	Radiation Safety	Safeguards
● Initiating Events	● Occupational	● Physical Protection
● Mitigating Systems	● Public	
● Barrier Integrity		
● Emergency Preparedness		

To monitor these seven cornerstones of safety, the NRC uses two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection findings will be evaluated according to their potential significance for safety, using the significance determination process, and assigned colors of GREEN, WHITE, YELLOW, or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent very low safety significance. WHITE findings indicate issues that are of low to moderate safety significance. YELLOW findings are issues that are of substantial safety significance. RED findings represent issues that are of high safety significance with a significant reduction in safety margin.

Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing varying levels of performance and incremental degradation in safety: GREEN, WHITE, YELLOW, or RED. GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections. WHITE corresponds to performance that may result in increased NRC oversight. YELLOW represents performance that minimally reduces safety margin and requires even more NRC oversight. RED indicates performance that represents a significant reduction in safety margin but still provides adequate protection to public health and safety.

The assessment process integrates performance indicators and inspection so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner which regulatory actions should be taken based on a licensee's performance. The NRC's actions in response to the significance (as represented by the color) of issues will be the same for performance indicators as for inspection findings. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, which can include shutting down a plant, as described in the Action Matrix.

More information can be found at: http://www.nrc.gov/NRR/OVERSIGHT/index.html.