



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TEXAS 76011-8064

October 22, 1999

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

SUBJECT: NRC INSPECTION REPORT NO. 50-298/99-12

Dear Mr. Swailes:

On September 30, 1999, the NRC completed an inspection at the Cooper Nuclear Station reactor facility. The results of the inspection were discussed with Mr. P. Caudill and other members of your staff at the completion of the inspection. The enclosed report presents the results of this inspection.

The inspection was an examination of activities under your license as they relate to emergency preparedness and to compliance with the Commission's rules and regulations and with the conditions of your license. Within those areas, the inspection consisted of a selective examination of procedures and representative records, interviews with personnel, and observation of activities in progress. Specifically, this inspection focused on the implementation of your emergency preparedness program. During this inspection, no safety significant findings were identified.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure(s), and your response, if requested, will be placed in the NRC Public Document Room (PDR).

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

Sincerely,

/s/  
Gail M. Good, Chief  
Plant Support Branch  
Division of Reactor Safety

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

Nebraska Public Power District

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Enclosures:

NRC Inspection Report No.  
50-298/99-12

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E-Mail all documents to Jim Isom for Pilot Plant Program (JAI)  
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bcc to DCD (IE06)

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**ENCLOSURE**

U.S. NUCLEAR REGULATORY COMMISSION  
REGION IV

Docket No.: 50-298  
License No.: DPR-46  
Report No.: 50-298/99-12  
Licensee: Nebraska Public Power District  
Facility: Cooper Nuclear Station  
Location: P.O. Box 98  
Brownville, Nebraska  
Dates: September 27-30, 1999  
Inspector: William A. Maier, Senior Emergency Preparedness Inspector  
Plant Support Branch  
Approved By: Gail M. Good, Chief, Plant Support Branch  
Division of Reactor Safety

SUMMARY OF FINDINGS

Cooper Nuclear Station  
NRC Inspection Report No. 50-298/99-12

This announced inspection focused on the licensee's emergency preparedness program and included a review of the emergency preparedness performance indicators.

**Cornerstone: Emergency Preparedness**

C No findings identified

Report Details

**1. REACTOR SAFETY**

1EP2 Alert and Notification System

a. Inspection Scope

The inspector reviewed the licensee's commitments for testing the alert and notification system and discussed the design of siren testing equipment. The inspector reviewed the siren test procedure and observed a routine periodic test of the system. The inspector also verified a "growl" activation of two sirens at their locations. Samples of siren test results and maintenance records for the last four calendar years were reviewed. Corrective actions related to alert and notification system testing were reviewed to ensure that they were properly tracked and action taken as appropriate.

b. Observations and Findings

The licensee tested the sirens by performing a growl test every other week and a three-minute full cycle test annually. Problems were reported to the licensee's communications division, which was tasked with siren maintenance. This division promptly responded to siren problems; correcting them in as little as 2 hours in some cases. Siren maintenance was documented in a system used by the communications division rather than the nuclear division. As a result, work requests in this system were not trended for analysis of repeat failures or evaluated for safety significance, common causes, maintenance effectiveness, and reportability. The testing and maintenance records indicated that:

- On two occasions sirens did not respond during the first test; however, these sirens tested satisfactorily during a retest. The next time the test was performed, the sirens failed again and required maintenance. There was no review of a common failure mechanism in these cases.
- There was one example of a siren that had failed its test due to a communications failure. Communications division personnel replaced a coaxial cable on the siren's radio. The siren passed the maintenance retest but failed the next scheduled test, requiring a radio replacement. The effectiveness of the initial maintenance was not reviewed.
- Failure records from the last 4 years showed five examples of repetitive siren failures for either the same or similar causes.
- Siren retest printouts following maintenance were not recovered for review and evaluation.
- During one test of the sirens from the Atchison County, Missouri emergency operations center, transmitter noise prevented the county from activating the sirens on three successive attempts, the fourth attempt being successful. This failure

was not evaluated for its severity or reportability. The radio exhibited similar transmitter noise the following month, even though the siren activation was successful that month.

Further, during an annual audit, the licensee's quality assurance organization identified that siren failures were not captured on the station's problem identification reporting system. However, the emergency preparedness staff elected not to change its established system of siren repair and failure recording. Additionally, the inspector noted that a peer review performed the month prior to this inspection made a similar observation concerning the failure to document siren failures in the problem identification reporting system.

#### 1EP3 Emergency Response Organization Augmentation

##### a. Inspection Scope

The inspector reviewed the licensee's commitments for the emergency response organization augmentation system, the procedure for and results of the bimonthly augmentation tests, and the call lists used for response augmentation. Corrective actions related to augmentation testing were reviewed to ensure that they were properly tracked and action taken as appropriate.

##### b. Observations and Findings

No inspection findings were identified in this area.

#### 4. **OTHER ACTIVITIES**

#### 4OA2 Performance Indicator Verification

##### Alert and Notification System

##### a. Inspection Scope

The inspector reviewed the supporting data for the Alert and Notification System Reliability performance indicator. The inspector interviewed the licensee's emergency preparedness staff to understand the methodology used to interpret and report the data. Siren testing records for the last two calendar years were reviewed.

##### b. Observations and Findings

No findings were identified.

Emergency Response Organization Drill / Exercise Performance

a. Inspection Scope

The inspector reviewed the supporting data for the Emergency Response Organization Drill/Exercise Performance indicator. The inspector interviewed the licensee's emergency preparedness staff to understand the methodology used to interpret and report the data. The inspector also reviewed drill and exercise scenarios and critique sheets and notification forms for drills and licensed operator requalification simulator scenarios for the second quarter of calendar year 1999.

b. Observations and Findings

No findings were identified.

Emergency Response Organization Readiness

a. Inspection Scope

The inspector reviewed the supporting data for the Emergency Response Organization Readiness performance indicator. The inspector interviewed the licensee's emergency preparedness staff to understand the methodology used to interpret and report the data. The inspector also reviewed drill attendance sheets for two samples of 26 key emergency responders; one sample for the latest calendar quarter and one for the first calendar quarter of the current year.

b. Observations and Findings

The inspector noted one discrepancy with the reported data. The reported drill participation date for one key responder was one year and two weeks after this individual's actual participation date. This was due to the fact that the responder in question was qualified for two emergency response positions, one of which was a key position and one which was not. The date recorded for this individual was the more recent date for participation in the non-key position.

The inspector discussed this discrepancy with the on-site emergency preparedness coordinator. The emergency preparedness coordinator acknowledged that the current methodology for reporting this indicator had not discriminated between the two levels of qualification for the same individual and initiated Problem Identification Report 4-04496. The discovery of this data did not change either the color or value of the performance indicator, because the responder's key position drill participation date was within the 2 year time limit.

40A4 Other

(Closed) Inspection Follow-up Item (IFI) 50-298/9611-01: ability to warn personnel in high-noise areas - The licensee had initiated Condition Adverse to Quality (CAQ)- 96-1045 to

track this issue in its corrective action program. Corrective actions were ongoing and captured in Engineering Project Request 98-018.

(Closed) Inspection Follow-up Item (IFI) 50-298/9812-01: verify emergency plan staffing and augmentation times - The licensee had properly submitted the revision to its emergency plan for this item.

#### 4OA5 Management Meetings

##### Exit Meeting Summary

The inspector presented the inspection results to Mr. P. Caudill and other members of licensee management at an exit meeting on September 30, 1999. The licensee acknowledged the findings presented. No proprietary information was identified.

## PARTIAL LIST OF PERSONS CONTACTED

### Licensee

J. Bednar, Emergency Preparedness Training Coordinator  
P. Caudill, Senior Manager, Technical Services  
M. Hale, Senior Manager, Site Support  
T. Haynes, Emergency Preparedness Specialist  
D. Hitzel, Shift Manager  
B. Houston, Quality Assurance Manager  
J. Kelsay, Emergency Preparedness Off-site Coordinator  
D. Montgomery, Quality Assurance Auditor  
L. Newman, Licensing Manager  
D. Oleson, License Operator Requalification Lead  
J. Pergerson, Emergency Preparedness Scenario Coordinator  
J. Peters, Licensing  
R. Sharma, Licensing Engineer  
A. Shiever, Operations Manager  
S. Stiers, Acting Senior Manager, Site Support  
J. Sumpter, Licensing Supervisor  
C. Sunderman, Emergency Preparedness On-site Coordinator  
R. Zipfel, Emergency Preparedness Manager

### NRC

M. Hay, Resident Inspector

## ITEMS OPENED, CLOSED, AND DISCUSSED

### Opened

None

### Closed

50-298/9611-01	IFI	ability to warn personnel in high-noise areas (Section 4OA4)
50-298/9812-01	IFI	verify emergency plan staffing and augmentation times (Section 4OA4)

### Discussed

None