



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV

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

DEC 1 1995

Nebraska Public Power District
ATTN: Guy R. Horn, Vice President - Nuclear
1414 15th Street
Columbus, Nebraska 68601

SUBJECT: NRC INSPECTION REPORT 50-298/95-98

This refers to the inspection conducted by Mr. C. J. Paulk and Ms. L. J. Smith of this office on August 16-17, 1995, at the Cooper Nuclear Station facility. This initiative was prompted by recurring failures of safety-related steam turbine-driven standby pumps at several facilities in Region IV. We concurrently performed this inspection at most Region IV facilities to better understand the scope of design, maintenance, and testing practices related to safety-related steam turbines, which were supplied by the Terry Corporation. We also examined several aspects of various experience review processes to determine why similar failures continued to occur. On November 9, 1995, at the conclusion of the in-office review, the findings were discussed with those members of your staff identified in the enclosed report.

Areas examined during the inspection are identified in the report. Within these areas, the inspection consisted of selective examinations of procedures, representative records, and interviews with personnel. The combined results of this inspection for each of the Region IV facilities are documented in the enclosed report and executive summary.

With respect to your facility, the inspection identified several conditions that were precursors to mechanical overspeed trips of safety-related steam turbine-driven standby pumps at other facilities. Your staff was not filtering turbine or governor oil in accordance with the vendor recommendations. We also found that your staff had not established a preventive maintenance program for the turbine governor, steam traps, or drains. The inspection also noted that your staff performed an inadequate inspection when governor valve stem corrosion was suspected; they had no method to dynamically trend governor valve performance; and, they stopped weekly manual stroke testing in May 1995. At the exit interview, your staff stated that they plan to inspect the reactor core isolation cooling turbine governor valve stem during November 1995.

We noted that your use of a lubricant with vapor-phase inhibitors was consistent with vendor recommendations. However, use of this oil at other facilities with high standby temperatures has resulted in governor speed control problems, and improper operation of the overspeed trip tappet. While you have not experienced any problems related to the use of this type of lubricant, your turbine would become susceptible if your steam admission valves leaked significantly. We encourage you to review these conditions to

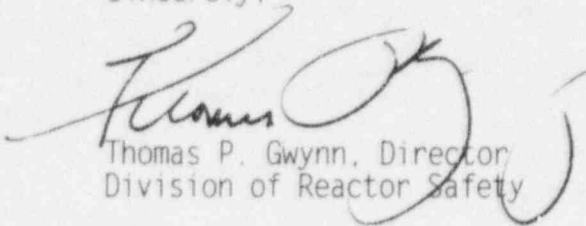
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ensure continued reliable operation of the reactor core isolation cooling pump turbine.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be placed in the NRC Public Document Room.

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

Sincerely,



Thomas P. Gwynn, Director
Division of Reactor Safety

Docket: 50-298
License: DPR-46

Enclosure:
NRC Inspection Report
50-298/95-98 w/attachments

cc w/enclosure:
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Kansas Radiation Control Program Director

E-Mail report to D. Nelson (DJN)
E-Mail report to NRR Event Tracking System (IPAS)

bcc to DMB (IE01)

bcc distrib. by RIV:

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11/29/95	11/22/95	11/22/95	12/1/95	11/30/95	12/1/95	

*previously concurred

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E-Mail report to D. Nelson (DJN)
E-Mail report to NRR Event Tracking System (IPAS)

bcc to DMB (IE01)

bcc distrib. by RIV:

L. J. Callan
Branch Chief (DRP/C)
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Resident Inspector
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