

ENCLOSURE 1

NOTICE OF VIOLATION

Nebraska Public Power District
Cooper Nuclear Station

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

During an NRC inspection conducted on August 12 through October 3, 1996, six violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the violations are listed below:

- A. 10 CFR Part 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," as described in 10 CFR 50.65(b)(2) requires, in part, that the scope of the monitoring program include nonsafety-related structures, systems, and components: (i) that are used in plant emergency operating procedures; (ii) whose failure could prevent safety-related structures, systems, and components from fulfilling their safety-related function; or (iii) whose failure could cause a reactor scram.

Contrary to the above, as of August 12, 1996, the following nonsafety-related structures, systems, and components were not included in the licensee's 10 CFR Part 50.65 monitoring program scope:

- The building, room, and ventilation system radiation monitors described in Function RMV-F01 that are utilized in plant emergency operating procedures.
- The air ejector off gas system radiation monitors described in Function RMP-F02 that could cause a reactor scram if a monitor failed.
- The auxiliary steam for heating the reactor building, control and office buildings, diesel generator rooms, and the intake structure as described in Functions AS-F04, AS-F07, AS-F013, and AS-F014. The loss of auxiliary steam heating system in these areas could prevent safety-related structures, systems, and components from fulfilling their safety-related functions.
- The gaitronics communication system that is used in plant emergency operating procedures, described in Function IC-F01.

This is a Severity Level IV violation (Supplement 1) (50-298/9612-01).

- B. 10 CFR 50.65(a)(2) states, in part, that monitoring under (a)(1) is not required where it has been demonstrated that the performance or condition of a structure, system, or component has been effectively controlled through the performance of appropriate preventive maintenance of the structure, system, or component, and that the structure, system, or component remains capable of performing its intended function.

Regulatory Guide 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Revision 1, endorses NUMARC 93-01, "Industry Guidelines for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," as an acceptable method for implementing the requirements of 10 CFR 10.65. Regulatory Guide 1.160 states, that the methods described in the guide will be used in the evaluation of the effectiveness of maintenance activities of licensees who are required to comply with 10 CFR 50.65 unless a licensee has proposed an acceptable alternative method for compliance. The licensee subscribed to the NUMARC 93-01 methodology in Administrative Procedure 0.27, "Maintenance Rule Program," Revision 1, Section 2.2.

NUMARC 93-01, Section 9.3.2, states, in part, that performance criteria for risk significant structures, systems, and components should be established to assure that reliability and availability assumptions used in the plant-specific probabilistic risk assessment, individual plant examination, or other risk determining analysis are maintained or adjusted when necessary.

Contrary to the above, the licensee had not established performance criteria for structures, systems, and components commensurate with safety by failing to demonstrate that the performance criteria used for reliability preserved the assumptions used in the probabilistic risk assessment. The licensee had only used two maintenance preventable functional failures as the general reliability performance criterion.

This is a Severity Level IV violation (Supplement 1) (50-298/9612-02).

- C. 10 CFR 50.65(a)(2) states, in part, that monitoring under (a)(1) is not required where it has been demonstrated that the performance or condition of a structure, system, or component has been effectively controlled through the performance of appropriate preventive maintenance of the structure, system, or component, and that the structure, system, or component remains capable of performing its intended function.

Regulatory Guide 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Revision 1, January 1995, endorses NUMARC 93-01, "Industry Guidelines for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," as an acceptable method for implementing the requirements of 10 CFR 10.65. Regulatory Guide 1.160 states, that, the methods described in the guide will be used in the evaluation of the effectiveness of maintenance activities of licensees who are required to comply with 10 CFR 50.65 unless a licensee has proposed an acceptable alternative method for compliance.

To satisfy NUMARC 93-01 methodology, performance is established from historical data going back two fuel cycles or 3 years. Then, performance criteria are established and, if the criteria are not met, the bases for the criteria are reviewed to determine if goal setting is required. The licensee subscribed to the

NUMARC 93-01 methodology in Administrative Procedure 0.27, "Maintenance Rule Program," Revision 1, Section 2.2. NUMARC 93-01 defines availability as the time that a structure, system, or component is capable of performing its intended function as a fraction of the total time that the intended function may be demanded. Unavailability is defined as the numerical complement of availability. As a measure of the ability of certain safety-related systems to perform the intended functions, the licensee chose to monitor against a performance criteria of 2.5 percent unavailability.

Contrary to the above, the licensee failed to monitor the unavailability of the functions performed by the automatic depressurization, emergency diesel generator, high pressure coolant injection, and residual heat removal systems when the functions were required to be available, and the reactor was shutdown.

This is a Severity Level IV violation (Supplement 1) (50-298/9612-03).

- D. 10 CFR 50, Appendix B, Criterion V requires, in part, that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings.

10 CFR 50.65 (a)(3) requires, in part, that in performing monitoring and preventive maintenance activities, an assessment of the total plant equipment that is out of service should be taken into account to determine the overall effect on performance of safety functions. Regulatory Guide 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Revision 1, January 1995, endorses NUMARC 93-01, "Industry Guidelines for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," as an acceptable method for implementing the requirements of 10 CFR 10.65. The licensee subscribed to NUMARC 93-01 methodology in Administrative Procedure 0.49, "Schedule Risk Assessment," Section 8.1, Revision 1, which contains the guidance for evaluating the risk associated with taking structures, systems, and components out of service for monitoring or preventive maintenance.

Contrary to the above, the licensee did not provide adequate instructions regarding guidance and responsibility for ensuring that risk assessments were performed when removing safety-related equipment from service for monitoring or preventive maintenance. As a result, several safety-related components were removed from service without the prior performance of a risk assessment.

This is a Severity Level IV violation (Supplement 1) (50-298/9612-04).

- E. 10 CFR 50, Appendix B, Criterion V requires, in part, that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures or drawings.

10 CFR 50.65 (a)(3) requires, in part, that in performing monitoring and preventive maintenance activities, an assessment of the total plant equipment that is out of service should be taken into account to determine the overall effect on performance of safety functions. Regulatory Guide 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Revision 1, January 1995, endorses NUMARC 93-01, "Industry Guidelines for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," as an acceptable method for implementing the requirements of 10 CFR 10.65. The licensee's requirement for performing risk assessment associated with removing safety-related equipment from service is contained in Administrative Procedure 0.49, "Schedule Risk Assessment," Revision 1, Step 8.1.7, which requires the performance of a risk-significant window checklist.

Contrary to the above, on July 17, 1996, an activity affecting quality was not accomplished in accordance with the procedure in that the No. 2 emergency diesel generator was removed from service for planned maintenance without a risk-significant window checklist being initiated.

This is a Severity Level IV violation (Supplement 1) (50-298/9612-05).

- F. 10 CFR 50.65(a)(2) states, in part, that monitoring under (a)(1) is not required where it has been demonstrated that the performance or condition of a structure, system, or component has been effectively controlled through the performance of appropriate preventive maintenance of the structure, system, or component, such that the structure, system, or component remains capable of performing its intended function.

Regulatory Guide 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Revision 1, endorses NUMARC 93-01, "Industry Guidelines for Monitoring Effectiveness of Maintenance at Nuclear Power Plants," as an acceptable method for implementing the requirements of 10 CFR 50.65. Regulatory Guide 1.160 states that the methods described in the regulatory guide will be used in the evaluation of the effectiveness of maintenance activities of licensees who are required to comply with 10 CFR 50.65 unless a licensee has proposed an acceptable alternative method for compliance. The licensee subscribed to the NUMARC 93-01 methodology in Administrative Procedure 0.27, "Maintenance Rule Program," Revision 1, Section 2.2. NUMARC 93-01, Section 9.4.4, states, in part, that a cause determination is required for a failure of a risk-significant structure, system, or component, and for any repetitive maintenance preventable functional failure of equipment within the scope of the Maintenance Rule, and that the cause determination identify the cause of the failure and any corrective action to preclude recurrence. Section 9.2.2 of Administrative Procedure 0.5, "Problem Identification and Resolution," Revision 8, implements this NUMARC 93-01 requirement and specifies that if the condition has affected Maintenance Rule equipment, the condition report must address the root cause or apparent cause of the failure and corrective action.

Contrary to the above, the problem identification reports listed below were not dispositioned in accordance with Section 9.2.2 of Administrative Procedure 0.5 in that root cause or apparent root cause evaluations for failures of equipment under the scope of the Maintenance Rule were not required to be performed.

- Problem Identification Report 2-04776, dated July 22, 1996, identified excessive stroke time of air-operated Control Room Ventilation Valve HV-AO-261.
- Problem Identification Report 2-04779, dated July 23, 1996, identified an excessive moisture condition in the instrument air system.

This is a Severity Level IV violation (Supplement 1) (50-298/9612-06).

Pursuant to the provisions of 10 CFR 2.201, Nebraska Public Power District is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

Dated at Arlington, Texas
this day of 1996