



Nebraska Public Power District
Nebraska's Energy Leader

NLS2002037
April 1, 2002

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555-0001

Gentlemen:

Subject: Reply to a Notice of Violation
NRC Letter No. EA-01-231
Cooper Nuclear Station, NRC Docket 50-298, DPR-46

Reference: 1. Letter to David L. Wilson (NPPD) from Ellis W. Merschoff (USNRC) dated March 1, 2002, "Final Significance Determination for Two White Findings and Notice of Violation (NRC Inspection Report 50-298/01-09)"

By letter dated March 1, 2002 (Reference 1), the NRC cited Nebraska Public Power District (NPPD) as being in violation of NRC requirements. This letter, including Attachment 1, constitutes NPPD's reply to the referenced Notice of Violation in accordance with 10 CFR 2.201.

The violations concern untimely notification of state and local governmental agencies and staffing of emergency response facilities following an event on June 25, 2001. Cooper Nuclear Station (CNS) recognizes the importance of its responsibilities in emergency preparedness and has taken prompt actions to ensure that the health and safety of the public is protected. NPPD has taken the necessary corrective actions to prevent recurrence of these violations. In addition, NPPD has implemented an Emergency Preparedness Improvement Initiative to ensure that CNS performance in the areas indicated in the Notice of Violation (NOV) continues to improve. NPPD is providing a brief recap of certain performance results to demonstrate its commitment to improved performance.

NPPD's Emergency Plan, Section 5.2, requires that CNS be able to staff the emergency response facilities within approximately one (1) hour following the declaration of an Alert or higher classification. NRC Inspection Procedure 82205 contains the following inspection guidance in Section 03.03 regarding augmentation drills, "If the augmentation goals are not consistently achieved in drills (i.e., the last person capable of all assigned functions arrives more than 15 minutes past the goal), the licensee should be requested to improve either the notification procedures, duty system, or to provide other methods of improving augmentation performance."

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IFD
Add: Rids NRR/DIPM/Eph

NPPD, through its past drill performance, has demonstrated that the Cooper Nuclear Station (CNS) processes and procedures are capable of satisfying the one hour criterion. CNS performance during drills from 2000 through June 2001, prior to the June 25, 2001 event, illustrates that emergency response facility (ERF) activation timing was within the Inspection Procedure criterion in five out of six instances (i.e., not "more than 15 minutes past the goal"). In fact, the average drill performance for ERF augmentation from time of event declaration for 2000 and 2001 prior to the June 25, 2001 event was 66.5 minutes, which is within the 75-minute Inspection Procedure threshold.

For the June 25, 2001 event, operators required over 24 minutes to activate the personnel pagers. This delay resulted in late activation of the Emergency Operations Facility (EOF). However, the other emergency response facilities were activated in a timely manner despite the initial pager activation delay. The actual activation times for the other two facilities were as follows: Technical Support Center (TSC), 73 minutes after the Alert declaration; Operations Support Center (OSC), 71 minutes after the Alert declaration. This data shows that CNS was able to augment the normal station complement of operations personnel in a manner that ensures that an emergency can be effectively addressed. During the June 25, 2001 event, CNS personnel were able to fully control and extinguish the fire and deal with the loss of the 12.5 kV power event.

Since that event, NPPD has taken corrective measures to improve performance so as to prevent any future recurrence of the problems leading to these violations. NPPD has improved the performance of its on-shift and emergency response organization (ERO) staff through the use of simulator drills and augmentation drills in which ERO members respond. For 2000 and 2001 prior to the June 25, 2001 event, the combined pager notification and facility activation times averaged 66.5 minutes. Since the June 25, 2001 event, the average times have been 57 minutes. In summary, the CNS Emergency Preparedness procedures and programs for ERF activation have been demonstrated to be adequate.

NPPD reinforces its commitment to continue improving its emergency planning performance. NPPD accepts the violations and believes it is in full compliance.

Should you have any questions concerning this matter, please contact me.

Sincerely,



David L. Wilson
Vice President of Nuclear Energy

/jrs
Attachment

cc: Regional Administrator w/attachment
USNRC - Region IV

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Senior Project Manager w/attachment
USNRC - NRR Project Directorate IV-1

Senior Resident Inspector w/attachment
USNRC

NPG Distribution w/attachment

REPLY TO MARCH 1, 2002, NOTICE OF VIOLATION
COOPER NUCLEAR STATION
NRC DOCKET NO. 50-298, LICENSE DPR-46

During NRC inspection activities conducted from June 25, 2001, through September 6, 2001, two violations of NRC requirements were identified. The particular violations and NPPD's reply are set forth below:

Restatement of the Violations

A. 10CFR50.54(q) states, in part, that a licensee authorized to possess and operate a nuclear power reactor shall follow and maintain in effect emergency plans which meet the standards in 50.47(b). Cooper Nuclear Station Emergency Plan, Section 6.2.4, "Offsite Authorities and Support Agencies", states, in part, that initial notifications to responsible state and local governmental agencies will be completed within 15 minutes of the declaration of an emergency.

Contrary to the above, on June 25, 2001, the licensee failed to notify the state and local governmental agencies within 15 minutes after declaring an Alert. Specifically, notifications to state and local governmental agencies did not occur until 5:20 a.m., 25 minutes after the Alert declaration.

This violation is associated with a White significance determination process finding (50-298/0109-01)

B. 10CFR50.54(q) states, in part, that a licensee authorized to possess and operate a nuclear power reactor shall follow and maintain in effect emergency plans which meet the standards in 50.47(b). 10CFR50.47(b)(2) requires, in part, that the onsite emergency response plan provide for timely augmentation of response capabilities. Cooper Nuclear Station Emergency Plan, Section 5.2, "Onsite Emergency Organization", states, in part, that the emergency response facilities will be activated within approximately one hour following the declaration or an Alert or higher classification.

Contrary to the above, NPPD's onsite emergency plan did not provide for timely augmentation of response capabilities, in that NPPD experienced recurring problems in activating the automated notification system and staffing the emergency response facilities in a timely manner. Specifically, from January to December of 2000, operators in the control room simulator failed to activate the emergency response personnel pagers within 15 minutes in 10 out of 25 simulator exercises. From February 2000 to March 2001, NPPD failed to demonstrate the ability to staff the emergency response facilities in a timely manner in three of six drills. In addition, following the declaration of an Alert on June 25, 2001, NPPD failed to perform timely augmentation of the emergency response facilities. Specifically, following the declaration of the Alert on June 25, 2001, the EOF did not meet the requirements for activation until 80 minutes following the Alert declaration, the operations support center was not activated until 71 minutes following the Alert declaration, and the technical support center was not activated until 73 minutes following the Alert declaration.

This violation is associated with a White significance determination process finding (50-298/0109-02).

Admission or Denial of Violation

NPPD accepts the violations.

Reason for Violation

Background:

On June 25, 2001, Cooper Nuclear Station experienced a fire and a consequential loss of an off-site power supply. The fire was in a potential transformer on one of the three phases on the Station Service Startup Transformer (SSST). The potential transformer failure resulted in loss of the SSST. The event also resulted in the loss of the T2 auto-transformer which powers the 12.5 kV feeder to the station. This caused a loss of some of the site computer servers, which in turn caused a partial loss the Local Area Network (LAN). Specifically, the LAN equipment (router hub) in the Emergency Operations Facility (EOF) failed. Other portions of the LAN, such as the Computer Room and servers were on a stable power supply and remained functional. Due to the loss of the 12.5 kV system, the EOF LAN equipment was without power. This, in turn, did not allow the Automated Notification System (ANS) to be activated in spite of being powered by its own un-interruptible power supply. The loss of the LAN beyond the EOF router hub with power to the hub or a loss of power to the hub was not accounted for in the ANS software programming.

The fire started at 0424 and an Unusual Event was declared at 0433 (fire lasting greater than 10 minutes). States and counties were notified of the Unusual Event at 0443. The fire was extinguished at 0449. An Alert was declared at 0455 (fire with the potential to cause degradation of a plant safety system required to be operable). This information was provided to the NRC during a phone call that began at 0453. The Control Room Shift Communicator began attempting to activate the personnel pagers using the ANS at 0453 but was not successful. After a number of failed attempts with assistance from the Shift Supervisor/Emergency Director, the backup method was employed and the pagers were successfully activated at 0519, 24 minutes after declaration of the Alert. The states and counties were then notified of the Alert at 0520, 25 minutes after the declaration of the Alert. The Operational Support Center (OSC) was activated at 0606 (71 minutes after declaration of the Alert) and the Technical Support Center (TSC) at 0608 (73 minutes after declaration of the Alert). Minimum staffing was present to activate the Emergency Operations Facility at 0615 (80 minutes after declaration of the Alert). At no time was any radiological release attributable to this event.

CNS Emergency Plan Section 5.2 requires that the emergency response facilities be activated within approximately one hour following the declaration of an Alert or higher classification. NRC Inspection Procedure 82205, which provides inspection guidance relative to emergency preparedness shift staffing and augmentation, indicates that "approximately one hour" should be within 75 minutes. Both the TSC and the OSC were activated within this time period.

Cause for Violation

A formal root cause evaluation determined that the overall reason for the violations was overall inadequate program implementation and maintenance of the Emergency Plan. Personnel errors during the June 25, 2001 event contributed to the violation as follows: (a) the backup method for ANS activation was not employed in accordance with plant procedure when the primary method was not successful; (b) the Shift Supervisor did not prioritize the notification to state and local agencies but instead assisted in attempting to activate the personnel pagers with the primary ANS method; and (c) the EOF was staffed for activation at 71 minutes except for one individual. The position occupied by this individual, Radiological Assessment Supervisor, could have been filled by another individual, but was not.

The 12.5 kV power failure resulted in a condition never experienced with the ANS software which resulted in delays in activation of the personnel pagers and a resulting delay in emergency response facility activation. Once the pagers were activated, personnel did arrive on site in a timely manner to support emergency response facility activations in accordance with station goals.

Notwithstanding the above personnel errors during the June 25, 2001 event, the root cause evaluation identified that corrective actions had been taken for some weaknesses in past drills, but the aggregate effect of these weaknesses on the ability of the emergency response organization to perform effectively was not recognized. NPPD failed to fully correct personnel performance weaknesses in the areas of ANS activation during drills and operator training exercises.

Corrective Steps Taken and the Results Achieved

The following immediate corrective actions were taken to provide assurance that pager activation and emergency response facilities would be activated in a timely manner.

1. An Operations Standing Order was issued prioritizing pager activation followed by state and governmental notifications and indicating when to employ the backup method of pager activation. A lessons learned briefing was conducted regarding this Standing Order.
2. Daily testing of the ANS using the primary method was accomplished to ensure operability. The testing concluded the week of 7/16/2001. The normal testing frequency was then resumed.
3. The Emergency Preparedness Department provided 24-hour staff coverage to assist with staff augmentation for approximately two weeks after the event.
4. The ANS software vendor completed trouble-shooting and the ANS was permanently disconnected from the LAN on 11/7/01.
5. A default ANS message was developed to direct personnel to the Alternate Emergency Operations Facility (AEOF), if necessary.

6. A call-in drill for emergency response personnel was held on the evening of June 25, 2001. Emergency response facility augmentation times met station goals.

In the 4 weeks following the event, the emergency response organization was successfully activated twice during off-hours, confirming that the applicable procedures could be used to satisfy procedural and regulatory requirements.

Corrective Steps That Will Be Taken to Avoid Further Violations

The following corrective actions were undertaken to prevent recurrence of these violations and have been completed.

1. An Emergency Preparedness Improvement Plan was developed identifying actions to correct deficiencies in the areas of organizational effectiveness, accountability, and Emergency Preparedness infrastructure to ensure an effective Emergency Preparedness program at CNS.
2. CNS Procedure 5.7.6, "Notification", was revised to provide guidance to Shift Communicators to activate the ANS prior to notifying state and local agencies of an emergency declaration. The procedure was also revised to provide additional timing guidance for utilizing the backup method of ANS activation should the primary method fail.
3. Information was provided to emergency response personnel to reinforce the fact that the correct time to activate emergency response facilities is based on the time of the emergency declaration and not when personnel pagers are activated.
4. Emergency Directors and EOF Directors were informed of exactly what is required to activate the EOF regarding personnel and turnover requirements per CNS procedure.
5. The current design and licensing basis of the ERF's were reviewed as documented in the Emergency Plan and any CNS licensing commitments to the NRC. The results of that review demonstrated that the Emergency Plan requirements were met.
6. Simulator drills were enhanced to include failed operation of the ANS.
7. With regard to extent of condition, other CNS programs may be subject to inadequate program implementation. CNS management and personnel are responsible for oversight of CNS programs including implementation and effectiveness and are the first barrier in preventing degraded performance. Program implementation consists of those activities necessary for consistently translating the achievement of the program objectives into the required results. It also consists of a means to monitor, measure and adjust the effectiveness of those activities and promptly correct identified problems. A CNS procedure requires that departments perform self-assessments to review various program aspects and capabilities. Another CNS procedure also identifies the major programs and provides standards and expectations for establishing, implementing and maintaining those programs. These procedures provide barriers to assure effective program implementation and maintenance.

Employing audits, surveillances and self-assessments, CNS has identified some programs where improvements were needed. Plans were developed to resolve issues and improve those programs. Some of these areas include training, engineering programs, and environmental qualification. These activities illustrate the effectiveness of CNS efforts in improving its programs. Several non-technical programs not currently listed in the CNS program procedure as a program were also assessed for any degrading performance. None were found.

Date When Full Compliance Will Be Achieved

NPPD believes it is in full compliance.

ATTACHMENT 3 LIST OF REGULATORY COMMITMENTS

Correspondence Number: NLS2002037

The following table identifies those actions committed to by NPPD in this document. Any other actions discussed in the submittal represent intended or planned actions by NPPD. They are described for information only and are not regulatory commitments. Please notify the NL&S Manager at Cooper Nuclear Station of any questions regarding this document or any associated regulatory commitments.

COMMITMENT	COMMITTED DATE OR OUTAGE
Develop an Emergency Preparedness Improvement Plan to identify actions to correct deficiencies in the areas of organizational effectiveness, accountability, and Emergency Preparedness infrastructure to ensure an effective Emergency Preparedness program at CNS	Completed
Revise Procedure 5.7.6, "Notification" to provide guidance to Shift Communicators to activate the ANS prior to notifying state and local agencies of an emergency declaration. Also revise the procedure to provide additional timing guidance for utilizing the backup method of ANS activation should the primary method fail.	Completed
Provide information to emergency response personnel to reinforce the fact that the correct time to activate emergency response facilities is based on the time of the emergency declaration and not when personnel pagers are activated.	Completed
Inform Emergency Directors and EOF Directors of what is required to activate the EOF regarding personnel and turnover requirements per CNS procedure.	Completed
Current design and licensing basis of the emergency response facilities were reviewed as documented in the Emergency Plan and any CNS licensing commitments to the NRC to determine if Emergency Plan requirements were met.	Completed
Simulator drills were enhanced to include failed operation of the ANS.	Completed
The ANS is permanently disconnected from the LAN.	Completed