



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
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March 4, 2002

David L. Wilson, Vice President of  
Nuclear Energy  
Nebraska Public Power District  
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**SUBJECT: ANNUAL ASSESSMENT - COOPER NUCLEAR STATION  
(REPORT 50-298/02-01)**

Dear Wilson:

On February 12, 2002, the NRC staff completed its end-of-cycle plant performance assessment of Cooper Nuclear Station. The end-of-cycle review for Cooper Nuclear Station involved the participation of all technical divisions in evaluating performance indicators for the most recent quarter and inspection results for the period from April 1 through December 31, 2001. The purpose of this letter is to inform you of our assessment of your safety performance during this period and our plans for future inspections at your facility. This will provide you an opportunity to prepare for these inspections and to inform us of any planned inspections which may conflict with your plant activities.

As discussed in our previous annual assessment letter, dated May 29, 2001, this inspection and assessment cycle consisted of three quarters (i.e., the second, third, and fourth quarters of Calendar Year 2001) instead of the usual four quarters. This change was implemented in order to align the inspection and assessment cycle with the calendar year beginning on January 1, 2002.

Overall, the Cooper Nuclear Station operated in a manner that preserved public health and safety, and met all cornerstone objectives with moderate degradation in safety performance. Plant performance for all three quarters was within the Degraded Cornerstone Column of the NRC's Action Matrix based on White findings in the Emergency Preparedness Cornerstone.

Cooper Nuclear Station began the assessment period in the Regulatory Response Column of the Action Matrix, as a result of a White finding in the Emergency Preparedness cornerstone identified during the previous assessment period. This White finding resulted from NPPD's failure to identify performance problems that occurred during a biennial emergency preparedness exercise. Region IV conducted a supplemental inspection during this assessment period and concluded that appropriate corrective actions had been identified by NPPD to address the root and contributing causes for this White issue. However, as a result of a second White finding in the Emergency Preparedness cornerstone, identified during the first quarter of the assessment period, Cooper entered the Degraded Cornerstone Column of the Action Matrix. This finding involved the ineffective corrective actions NPPD implemented to prevent recurrence of a dose assessment performance weakness. A supplemental inspection

determined that the root causes of the two White findings were ultimately understood, and the corrective actions resulting from the evaluations of the findings appropriately addressed the identified causes. However, the NRC has concluded that additional inspection effort is required to adequately assess the extent of the condition of these problems. As a result, the White inspection finding identified during the first quarter of the assessment period will remain open pending the completion of additional NRC inspection and review.

Additional White findings (actual and potential) were identified during the last two quarters of the assessment period. First, two more White findings were identified in the Emergency Preparedness cornerstone. These White findings related to NPPD's actions following the declaration of an Alert in response to a fire affecting the station startup transformer on June 25, 2001. Specifically, NPPD failed to perform timely offsite notifications and failed to activate their emergency response facilities within approximately one hour. A supplemental inspection will be conducted during this assessment period as a result of these findings. The purpose of this supplemental inspection will be to provide assurance that the root and contributing causes for the findings are understood, to independently assess the extent of condition for these findings, and to provide assurance that NPPD's corrective actions are sufficient to address the root and contributing causes and prevent their recurrence.

Second, a preliminary White finding in the Mitigating System cornerstone has been identified. This finding involved NPPD's failure to take immediate compensatory actions following identification of a compromise of the 2000 Biennial Requalification Written Examinations. The significance of this finding is currently under review. Once finalized, the Agency's actions will be communicated by a separate letter.

An additional result of the White findings identified in the Emergency Preparedness cornerstone are that Cooper Nuclear Station will enter the Repetitive Degraded Cornerstone Column of the Action Matrix on April 1, 2002. A Repetitive Degraded Cornerstone is a cornerstone that is degraded (two White inputs or one Yellow input) for five or more consecutive quarters. In response to the Repetitive Degraded Cornerstone, supplemental inspection will be conducted to:

- Provide the NRC additional information to be used in deciding whether the continued operation of Cooper Nuclear Station is acceptable and whether additional regulatory actions are necessary to arrest declining plant performance;
- Provide an independent assessment of the extent of risk significant issues to aid in the determination of whether an unacceptable margin of safety exists;
- Independently assess the adequacy of the programs and processes used by NPPD to identify, evaluate, and correct performance issues;
- Independently evaluate the adequacy of programs and processes in the affected strategic performance areas;
- Provide insight into the overall root and contributing causes of identified performance deficiencies.

This supplemental inspection will be conducted during the year 2002 assessment period. The schedule for this, and the other supplemental inspections discussed above, will be communicated via separate correspondence.

The staff has also identified adverse trends in the crosscutting areas of Problem Identification and Resolution and Human Performance. Numerous findings were identified during this assessment period in both of these areas.

In the area of Problem Identification and Resolution, the staff identified a general lack of understanding and ownership of the programs and procedures for identifying and resolving issues at the Cooper Nuclear Station, and that efforts at correcting these deficiencies over the past year were not effective. Inspection of this area identified a number of implementation problems, such as issues being improperly characterized and classified; management meetings associated with the corrective action process that were less than fully effective; poor documentation of planned and completed corrective actions; weak engineering justifications for changes to the facility; the development of unrealistic issue resolution dates; ineffective corrective actions associated with conducting operability determinations and evaluations. The Cooper Nuclear Station's quality assurance audits and assessments were found to be critical of the problem identification and resolution program. However, the issues identified by these audits were not being corrected effectively, as evidenced by repeat findings in similar areas. Weaknesses in the implementation of this program contributed to a number of the NRC's findings identified during the assessment period, including the White findings previously discussed.

In our annual assessment letter dated May 29, 2001, we advised you of a potential adverse trend in the crosscutting area of Problem Identification and Resolution. Weaknesses in identifying environmental qualification deficiencies, and a number of NRC identified examples of lack of a questioning attitude among operators when evaluating operability of degraded or nonconforming conditions, indicated an adverse trend in this area. As discussed above, NPPD did not adequately address this adverse trend and continued to experience problems during the assessment period.

In the area of Human Performance, personnel performance issues and errors contributed to a number of the findings identified during the assessment period. These included the findings for failing to perform timely offsite notifications; failing to activate the emergency response facilities within approximately one hour following the declaration of an Alert; and failing to take immediate compensatory actions following identification of a compromise of the 2000 Biennial Requalification Written Examinations.

Immediately following the terrorist attacks on the World Trade Center and the Pentagon, the NRC issued safeguards advisories recommending that nuclear power plant licensees go to the highest level of security, and all promptly did so. With continued uncertainty about the possibility of additional terrorist activities, the Nation's nuclear power plants, including Cooper Nuclear Station, remain at a high level of security. On February 25, 2002, the NRC issued an Order to all nuclear power plant licensees, requiring them to take certain additional interim compensatory measures to address the generalized high-level threat environment. These additional compensatory requirements will provide the NRC with reasonable assurance that public health and safety and the common defense and security continue to be adequately

protected in the current generalized high-level threat environment. These requirements will remain in effect pending notification from the Commission that a significant change in the threat environment occurs or until the Commission determines that other changes are needed following a more comprehensive re-evaluation of current safeguards and security programs. To date we have monitored NPPD's actions in response to the terrorist attacks through a series of audits. With the issuance of the Order, we will evaluate NPPD's compliance with these interim requirements.

The enclosed inspection plan details the inspections currently scheduled through March 31, 2003. The inspection plan is provided to minimize the resource impact on your staff and to allow for scheduling conflicts and personnel availability to be resolved in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The last 6 months of the inspection plan are tentative and may be revised at the Midcycle Review meeting. Please note that the schedule for the supplemental inspections discussed in this letter will be communicated via separate correspondence.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made 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/reading-rm/adams.html> (the Public Electronic Reading Room).

If circumstances arise which cause us to change this inspection plan, we will contact you to discuss the change as soon as possible. Please contact Mr. Kriss Kennedy at (817) 860-8144 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

*/RA/*

Ellis W. Merschoff  
Regional Administrator

Docket: 50-298  
License: DPR-46

Enclosure:  
Cooper Nuclear Station  
Inspection/Activity Plan

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Nebraska Public Power District

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2/25/02	2/27/02	3/4/02	NA	3/4/02

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**Cooper**  
**Inspection / Activity Plan**  
**03/01/2002 - 03/30/2003**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates		Inspection Type
				Start	End	
	<b>EMB</b>	<b>- MAINTENANCE RULE BIENNIAL</b>	<b>1</b>			
1	IP 711112B	Maintenance Rule Implementation		02/25/2002	03/01/2002	Baseline Inspections
	<b>PSB-RP7</b>	<b>- ALARA PLANNING AND CONTROLS</b>	<b>1</b>			
1	IP 7112102	ALARA Planning and Controls		02/25/2002	03/01/2002	Baseline Inspections
	<b>EMB</b>	<b>- MODIFICATIONS BIENNIAL</b>	<b>2</b>			
1	IP 711117B	Permanent Plant Modifications		04/15/2002	04/19/2002	Baseline Inspections
	<b>RP-1</b>	<b>- ACRSA AND PIV</b>	<b>1</b>			
1	IP 7112101	Access Control to Radiologically Significant Areas		05/13/2002	05/17/2002	Baseline Inspections
1	IP 71151	Performance Indicator Verification		05/13/2002	05/17/2002	Baseline Inspections
	<b>EMB</b>	<b>- HEAT SINK PERF</b>	<b>1</b>			
1	IP 7111107B	Heat Sink Performance		06/17/2002	06/21/2002	Baseline Inspections
	<b>OB-IN</b>	<b>- INITIAL EXAM PREP WEEK</b>	<b>3</b>			
1	X02229	COOPER INITIAL EXAM (08/02)		07/15/2002	07/29/2002	Not Applicable
	<b>OB-IN</b>	<b>- INITIAL EXAM</b>	<b>4</b>			
1	X02229	COOPER INITIAL EXAM (08/02)		08/05/2002	08/09/2002	Not Applicable
	<b>PSB-EP1</b>	<b>- EP EXERCISE BASELINE INSPECTION</b>	<b>3</b>			
1	IP 7111401	Exercise Evaluation		08/26/2002	08/30/2002	Baseline Inspections
1	IP 7111404	Emergency Action Level and Emergency Plan Changes		08/26/2002	08/30/2002	Baseline Inspections
1	IP 71151	Performance Indicator Verification		08/26/2002	08/30/2002	Baseline Inspections
	<b>PSB-S1</b>	<b>- ACCESS AUTH/CONTROL, SEC PLAN &amp; PIV</b>	<b>1</b>			
1	IP 7113001	Access Authorization Program (Behavior Observation Only)		09/09/2002	09/13/2002	Baseline Inspections
1	IP 7113002	Access Control (Search of Personnel, Packages, and Vehicles: Identification and Authorizator		09/09/2002	09/13/2002	Baseline Inspections
1	IP 7113004	Security Plan Changes		09/09/2002	09/13/2002	Baseline Inspections
1	IP 71151	Performance Indicator Verification		09/09/2002	09/13/2002	Baseline Inspections
	<b>RP-3</b>	<b>- ALARA</b>	<b>1</b>			
1	IP 7112102	ALARA Planning and Controls		09/09/2002	09/13/2002	Baseline Inspections
	<b>OB-PIR</b>	<b>- CNS PIR INSPECTION</b>	<b>4</b>			
1	IP 71152B	Identification and Resolution of Problems		01/26/2003	01/30/2003	Baseline Inspections
1	IP 71152B	Identification and Resolution of Problems		02/09/2003	02/13/2003	Baseline Inspections
	<b>RP-1</b>	<b>- ACRSA</b>	<b>1</b>			
1	IP 7112101	Access Control to Radiologically Significant Areas		03/17/2003	03/21/2003	Baseline Inspections
1	IP 71151	Performance Indicator Verification		03/17/2003	03/21/2003	Baseline Inspections

This report does not include INPO and OUTAGE activities.  
This report shows only on-site and announced inspection procedures.