



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
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August 30, 2004

Randall K. Edington, Vice  
President-Nuclear and CNO  
Nebraska Public Power District  
P.O. Box 98  
Brownville, NE 68321

**SUBJECT: MIDCYCLE PERFORMANCE REVIEW AND INSPECTION PLAN - COOPER  
NUCLEAR STATION (CNS)**

Dear Mr. Edington:

On August 5, 2004, the NRC staff completed its midcycle plant performance assessment of CNS. The midcycle review for CNS involved the participation of all technical divisions in evaluating performance for the first half of the calendar year 2004 assessment cycle. The process included a review of your performance, including the performance indicators (PIs) for the most recent quarter and the inspection results over the previous 12 months. 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 so that you will have an opportunity to prepare for these inspections and to inform us of any planned inspections that may conflict with your plant activities.

This performance review and inspection plan does not include physical protection information. A separate letter designated and marked as "Exempt from Public Disclosure in Accordance with 10 CFR 2.390" will include the physical protection review and resultant inspection plan.

Plant performance for the most recent quarter could be assessed as within the Regulatory Response column of the NRC's Action Matrix if you do not factor in our assessment of your actions to improve performance that led you to initiate a strategic improvement plan with actions confirmed in our January 30, 2003, Confirmatory Action Letter (CAL). This is based on a White finding issued in March 2004 for a high failure rate on the licensed operator biennial requalification written examinations. As discussed in the following paragraphs, we have assessed that our oversight of your performance should be equal to that eliciting NRC response consistent with the Multiple/Repetitive Degraded Cornerstone column of the NRC's Action Matrix.

At the beginning of the 2004 assessment cycle, CNS was in the Multiple/Repetitive Degraded Cornerstone column of the NRC's Action Matrix because there were three White emergency preparedness findings that had existed for more than four quarters. During the second quarter of 2004, the NRC closed these White findings on the basis of the correction of the underlying performance deficiencies. However, NRC concluded that additional NRC oversight was warranted while Nebraska Public Power District (NPPD) completes the actions specified in the CAL. Accordingly, on May 3, 2004, the Executive Director for Operations approved a deviation from the Action Matrix to authorize the NRC to maintain the level of oversight of CNS consistent

with the Multiple/Repetitive Degraded Cornerstone column of the Action Matrix. This enhanced level of oversight includes continued NRC assessment of the strategic improvement plan, continued assessment of the effectiveness of the CAL actions and senior NRC management involvement in site visits and other assessment activities. This increased oversight will continue until NPPD has demonstrated, and the NRC has verified, that the improvement plan actions addressed by the CAL have resulted in sustained improvement in plant performance. The details of this decision were communicated to NPPD in a letter dated July 2, 2004.

On May 7, 2004, the NRC completed a supplemental inspection to assess the causes for and actions taken related to the PI for unplanned scrams per 7000 critical hours. This PI crossed the threshold from Green to White in the fourth quarter of 2003 and returned to Green in first quarter of 2004. The NRC concluded that CNS performed thorough evaluations for each of the three scrams, including a thorough root cause analysis, extent of cause, and extent of condition review to identify and implement corrective actions in response to these scrams.

On May 12, 2004, the NRC completed another supplemental inspection conducted in response to the White finding for the high failure rate on the licensed operator biennial requalification written examinations. The NRC determined that NPPD's root cause analyses of the finding was appropriately evaluated and understood. The corrective actions identified as a result of the NPPD evaluations addressed the root and contributing causes and should correct the requalification program weaknesses provided the corrective actions are consistently implemented. However, the inspection also concluded that NPPD's extent of condition and extent of cause evaluations of the high failure rate were not completed at the time of the inspection and that other areas of the root cause lacked in-depth evaluation, including the adequacy of operator knowledge and the establishment of objective criteria to evaluate effectiveness of the corrective actions. A followup inspection will be conducted in the fourth quarter of 2004 to verify the effectiveness of NPPD's additional corrective actions.

In the first two quarters of 2004, the NRC completed two quarterly inspections of the implementation, including effectiveness, of the CAL actions. These inspections were performed to assess your progress in addressing regulatory performance issues in the areas of emergency preparedness, human performance, material condition/equipment reliability, plant modifications/configuration control, corrective action programs, and engineering programs. The second inspection completed in 2004 confirmed that you have taken the actions confirmed by the CAL. These inspections were also conducted to confirm whether these actions have resulted in sustained improved performance within the six CAL focus areas. On the basis of these and other inspections, the NRC determined that the actions taken within the emergency preparedness area have resulted in sustained improved performance.

In other CAL focus areas, our inspections identified a number of positive actions that have been implemented, but that sustained improved performance has not been achieved as of the end of our midcycle review period. Specifically, in the area of material condition and equipment reliability, actions completed to date have provided the necessary processes for improvement. Numerous equipment improvements have been recently completed; however, there are a number of long-standing or repetitive problems that have not been fully resolved. In the area of plant modifications and configuration control, progress in operability determination screening and lessons learned training has provided the potential for enhancing the ability to prioritize and

perform operability determinations by emphasizing knowledge based tools. In the area of engineering programs, actions taken to date have resulted in several positive performance trends.

The remaining two CAL focus areas are also addressed by two substantive crosscutting issues in problem identification and resolution, as well as human performance. In our annual assessment letter dated March 3, 2004, we provided you an assessment of these substantive crosscutting issues. Performance in these areas continues to be of concern based on the inspection findings identified during the past 12 months.

In the area of problem identification and resolution, our March 3, 2004, annual assessment letter noted that your staff adequately identified issues and that you have implemented a number of actions with the goal of improving the implementation effectiveness of your corrective action, self-assessment, and operating experience review programs. We also noted, however, that there were a number of Green findings involving instances of inadequate corrective actions. Common themes associated with these findings included: inadequate extent of condition reviews, inappropriate symptom-based problem solving, inadequate treatment of plant-specific and industry operating experience, and failures to implement planned corrective actions. Since that time, you have implemented a number of other initiatives to increase management ownership of the corrective action program and improve the timeliness of correction actions. We have observed that the implementation of these improvements has resulted in more timely program reviews of operating experience and more timely closure of significant condition reports. However, a number of plant problems, particularly those involving systems and components, have not been fully resolved. Accordingly, we plan to continue to focus our baseline and CAL followup inspection efforts in this area to determine whether your actions have resulted in overall improved corrective action effectiveness.

In the human performance area, our annual assessment letter recognized that your staff had implemented actions to improve human performance and that some improvement had been observed. Notwithstanding these improvements, we indicated that there were instances in which plant staff members failed to follow procedures. Since the beginning of the year, your staff has continued to implement ongoing initiatives, as well as undertake additional actions. In recent months, however, there have been a number of component manipulation errors, one of which is potentially significant. As a result, we will continue to focus baseline and CAL followup inspection efforts in this area to determine whether your actions have resulted in improved performance, particularly in the areas of procedural compliance and the reinforcement of expectations and standards in the performance of work.

On August 12, 2004, the NRC staff issued an inspection report with a preliminary Greater Than Green finding. The finding involved the misalignment of the service water system that rendered one train of service water system inoperable for a period of 21 days. A regulatory conference is scheduled for September 27, 2004, at the NRC Region IV office to allow you to provide additional information regarding the significance of this issue. This finding does not present a current safety concern because the valve lineup was restored to the normal configuration.

On August 18, 2004, a meeting was held between NRC and NPPD. At that meeting you provided the results of your self-assessment of the effectiveness of the actions that NPPD has taken in response to the CAL. You also discussed the actions you have taken or planned in response to this self-assessment. We will consider the information provided at this meeting as part of our ongoing and future oversight activities.

The enclosed inspection plan details the inspections, except those related to physical protection, scheduled through March 31, 2006. In addition to the supplemental inspection discussed previously, the NRC will conduct inspections associated with the CAL. Also, the plan contains an inspection using Temporary Instruction (TI) 2515/159, "Review of Generic Letter 89-13, Service Water System Problems Affecting Safety-Related Equipment." This TI is in response to the Davis-Besse Reactor Vessel Head Degradation Lessons-Learned Task Force and is being performed at a sampling of nuclear power plants across the country.

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 because of their ongoing and continuous nature. The inspections in the last 12 months of the inspection plan are tentative and may be revised at the end-of-cycle review meeting.

In accordance with 10 CFR 2.390 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 the inspection plan, we will contact you to discuss the change as soon as possible. Please contact Kriss M. Kennedy at 817-860-8144 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA/

Bruce S. Mallett  
Regional Administrator

Dockets: 50-298  
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Enclosure:  
Cooper Nuclear Station Inspection/Activity Plan

cc:

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ADAMS:  Yes     No    Initials:   wcw    
 Publicly Available     Non-Publicly Available     Sensitive     Non-Sensitive

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RIV:SPR:DRP\C	C:DRP\C	D:DRS	D:DRP	DRA
WCWalker;mjs;dlf	KMKennedy	DDChamberlain	ATHowell	TPGwynn
/RA/	<b>WCWalker for</b>	<b>VLOrdaz for</b>	/RA/	/RA/
8/18/04	8/18/04	8/25/04	8/27/04	8/27/04

RA				
BSMallett				
/RA/				
8/27/04				

**Cooper**  
**Inspection / Activity Plan**  
**08/01/2004 - 03/31/2006**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start	Planned Dates End	Inspection Type
	<b>CAL COA - CAL CLOSEOUT ASSESSMENT</b>		<b>4</b>			
1	IP 95003	Inspection For Repetitive Degraded Cornerstones, Multiple Degraded Cornerstones, Multiple		05/10/2004	09/04/2004	Supplemental Program
	<b>TI-SW - TI-2515/159 - REVIEW OF GL 89-13</b>		<b>2</b>			
1	IP 2515/159	Review of Generic Letter 89-13: Service Water System Problems Affecting Safety-Related E		09/07/2004	09/16/2004	Safety Issues
	<b>PEB-07B - HX &amp; HEAT SINK PERFORMANCE TESTING</b>		<b>1</b>			
1	IP 7111107B	Heat Sink Performance		09/13/2004	09/17/2004	Baseline Inspections
	<b>ACCESS - ACRSA &amp; PIV</b>		<b>1</b>			
1	IP 7112102	ALARA Planning and Controls		09/13/2004	09/17/2004	Baseline Inspections
	<b>OB-EP EX - EP EXERCISE</b>		<b>3</b>			
1	IP 7111401	Exercise Evaluation		09/20/2004	09/24/2004	Baseline Inspections
1	IP 7111404	Emergency Action Level and Emergency Plan Changes		09/20/2004	09/24/2004	Baseline Inspections
1	IP 71151	Performance Indicator Verification		09/20/2004	09/24/2004	Baseline Inspections
	<b>OB-INIT - INITIAL EXAM</b>		<b>4</b>			
1	X02288	COOPER (06/05) - INITIAL EXAM		05/09/2005	05/14/2005	Not Applicable
1	X02288	COOPER (06/05) - INITIAL EXAM		06/06/2005	06/17/2005	Not Applicable
	<b>OB-RQ - REQUAL INSP</b>		<b>1</b>			
1	IP 7111111B	Licensed Operator Requalification Program		11/01/2004	11/05/2004	Baseline Inspections
	<b>ALARA - ALARA PLANNING AND CONTROLS</b>		<b>1</b>			
1	IP 7112101	Access Control to Radiologically Significant Areas		11/29/2004	12/03/2004	Baseline Inspections
	<b>EB08G - ISI</b>		<b>1</b>			
1	IP 7111108G	Inservice Inspection Activities - BWR		01/24/2005	01/28/2005	Baseline Inspections
	<b>ACRSA - ACCESS CONTROLS TO RAD SIGNIFICANT AREAS</b>		<b>1</b>			
1	IP 7112101	Access Control to Radiologically Significant Areas		01/24/2005	01/28/2005	Baseline Inspections
	<b>ALARA2 - ALARA PLANNING AND CONTROLS</b>		<b>1</b>			
1	IP 7112102	ALARA Planning and Controls		04/11/2005	04/15/2005	Baseline Inspections
	<b>EB21/02 - SSD&amp;PCI/50.59</b>		<b>5</b>			
1	IP 7111121	Safety System Design and Performance Capability		05/02/2005	05/06/2005	Baseline Inspections
1	IP 7111102	Evaluation of Changes, Tests, or Experiments		05/16/2005	05/20/2005	Baseline Inspections
1	IP 7111121	Safety System Design and Performance Capability		05/16/2005	05/20/2005	Baseline Inspections
	<b>OB-EP2 - EMERG PREPAREDNESS PROGRAM INSPECTION</b>		<b>1</b>			
1	IP 7111402	Alert and Notification System Testing		05/16/2005	05/20/2005	Baseline Inspections
1	IP 7111403	Emergency Response Organization Augmentation Testing		05/16/2005	05/20/2005	Baseline Inspections
1	IP 7111404	Emergency Action Level and Emergency Plan Changes		05/16/2005	05/20/2005	Baseline Inspections
1	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies		05/16/2005	05/20/2005	Baseline Inspections
1	IP 71151	Performance Indicator Verification		05/16/2005	05/20/2005	Baseline Inspections

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

**Cooper**  
**Inspection / Activity Plan**  
**08/01/2004 - 03/31/2006**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates		Inspection Type
				Start	End	
<b>RP TEAM - RADIATION SAFETY TEAM INSPECTION</b>			<b>4</b>			
1	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		06/06/2005	06/10/2005	Baseline Inspections
1	IP 7112201	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems		06/06/2005	06/10/2005	Baseline Inspections
1	IP 7112202	Radioactive Material Processing and Transportation		06/06/2005	06/10/2005	Baseline Inspections
1	IP 7112203	Radiological Environmental Monitoring Program		06/06/2005	06/10/2005	Baseline Inspections
<b>PEB-PIR - PIR INSPECTION</b>			<b>3</b>			
1	IP 71152B	Identification and Resolution of Problems		06/13/2005	06/17/2005	Baseline Inspections
1	IP 71152B	Identification and Resolution of Problems		06/20/2005	06/24/2005	Baseline Inspections
<b>ALARA3 - ALARA PLANNING AND CONTROLS</b>			<b>1</b>			
1	IP 7112102	ALARA Planning and Controls		08/22/2005	08/26/2005	Baseline Inspections
<b>OB-RQ - REQUAL INSPECTION</b>			<b>2</b>			
1	IP 711111B	Licensed Operator Requalification Program		11/14/2005	11/18/2005	Baseline Inspections