



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
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ARLINGTON, TEXAS 76011-4005

August 31, 2007

Stewart B. Minahan, Vice
President-Nuclear and CNO
Nebraska Public Power District
72676 648A Avenue
Brownville, NE 68321

SUBJECT: MID-CYCLE PERFORMANCE REVIEW AND INSPECTION PLAN -
COOPER NUCLEAR STATION

Dear Mr. Minahan:

On August 9, 2007, the NRC staff completed its performance review of the Cooper Nuclear Station (CNS) for the first half of the calendar year 2007 assessment cycle. Our technical staff reviewed performance indicators for the most recent quarter and 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.

This performance review and enclosed inspection plan do not include security information. A separate letter designated and marked as "Official Use Only--Security Information" will include the security cornerstone review and resultant inspection plan.

Plant performance at CNS for the most recent quarter was assessed as being within the Regulatory Response Column of the NRC's Action Matrix. During the first quarter of 2007, the Mitigating Systems Performance Index (MSPI) for Emergency AC Power Systems turned White and remained White at the end of the assessment period. This performance indicator turned White following a January 18, 2007, surveillance test in which Emergency Diesel Generator 2 (EDG 2) failed to run. As discussed in our August 17, 2007, letter (ADAMS ML072290167), this issue also resulted in a White finding because it involved a failure to promptly identify a significant condition adverse to quality that resulted in the reduced reliability of EDG 2.

Consistent with the guidance in NRC Inspection Manual Chapter 0305, "Operating Reactor Assessment Program," Section 06.06.b, the NRC staff is currently performing a review of the EDG failure that was common to both the White performance indicator result and the White finding (i.e., a failed diode in the voltage regulator circuit of EDG 2) to determine whether or not the circumstances associated with this issue constitute "double counting" of a performance indicator and an inspection finding as currently defined by our guidance. The results of this determination will be provided to you in an assessment followup letter.

The NRC has determined that a substantive cross-cutting issue in the area of human performance will remain open from the previous assessment period; although, the component or basis that resulted in the issue has changed. In our annual performance assessment letter dated March 2, 2007, we advised you of a substantive cross-cutting issue in the area of human

performance pertaining to a cross-cutting theme involving the aspect of procedural compliance. During this assessment period, we noted the effectiveness of your corrective actions appeared adequate to address this issue as demonstrated by a reduction in the number of procedural compliance findings. On the basis of improved performance involving procedural compliance, the NRC will no longer conduct focused baseline inspections of this particular aspect of human performance.

During this assessment period the NRC staff identified a new cross-cutting theme in the human performance component of resources related to the aspect of procedural guidance adequacy. There were 14 Green inspection findings having cross-cutting aspects associated with human performance. Six of these findings involved the aspect of procedural adequacy and affected the Mitigating Systems, Initiating Events, and Occupational Radiation Safety Cornerstones. These inadequate procedures resulted in: the failure to perform adequate maintenance on a reactor protection system motor generator set resulting in a failed voltage regulator and a subsequent loss of shutdown cooling event; control room operators inappropriately entering the stability exclusion region of the power to flow map during a transition to single loop operation; the failure to adequately isolate a hydraulic control unit prior to maintenance activities resulting in an unisolable steam leak and subsequent manual reactor scram; and the failure to implement appropriate as low as reasonably achievable radiation protection practices resulting in increased occupational radiation dose to workers. The NRC noted this adverse trend was previously identified by your staff and entered into the CNS corrective action process on February 15, 2007. However, specific corrective actions to address the problem were not developed and implemented. Your recent discovery of this deficiency was also entered into the corrective action process on July 27, 2007. As of the end of the assessment period, it does not appear that CNS has taken or scheduled appropriate corrective actions to address this cross-cutting theme. As a result, this substantive cross-cutting issue will remain open until we determine, through implementation of focused baseline inspections, that future corrective actions have resulted in sustained improved performance.

The enclosed inspection plan details the inspections, except those related to security, scheduled through December 31, 2008. The inspection plan is provided to allow for the resolution of any scheduling conflicts and personnel availability issues well in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections in the last nine months of the inspection plan are tentative and may be revised at the end-of-cycle review.

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).

The NRC is currently evaluating the scope and frequency of all baseline inspection procedures. If the results of the evaluation, or any other circumstances, cause us to change the inspection plan, we will contact you to discuss the change as soon as possible. Please contact Michael Hay, Chief, Division of Reactor Projects, at (817) 860-8144 with any questions you may have regarding this letter or the inspection plan.

Sincerely,



Bruce S. Mallett
Regional Administrator

Docket: 50-298
License: DPR-46

Enclosure:
Cooper Nuclear Station Inspection/Activity Plan

cc w/enclosure:

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SUNSI Review Completed: __MCH__ ADAMS: ☒ Yes ☐ No Initials: __MCH__
☒ Publicly Available ☐ Non-Publicly Available ☐ Sensitive ☒ Non-Sensitive

R:_REACTORS\EOC and Midcycle\Midcycle Assessment Letters\2007\CNS Rev 3.wpd

RIV/SPE/DRP/C	SRI	C:DRP/C	D:DRS	D:DRP
WCWalker*	NHTaylor	MCHay*	DDChamberlain*	ATHowell III
/RA/	/RA/	/RA/	/RA/	
08/16/07	08/20 /07	08/16/07	08/16/07	08/20/07
RA				
BSMallett				
<i>BSM</i>				
8/21/07				

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T=Telephone

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*Previous Concurrence

Cooper

Inspection / Activity Plan

09/01/2007 - 12/31/2008

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start End	Inspection Type
	EB2-52B - PIR TEAM INSPECTION		3		
1	IP 71152B	Identification and Resolution of Problems		09/17/2007 09/21/2007	Baseline Inspections
	EB1-21 - CDB		5		
1	IP 7111121	Component Design Bases Inspection		10/01/2007 10/05/2007	Baseline Inspections
1	IP 7111121	Component Design Bases Inspection		10/22/2007 11/02/2007	Baseline Inspections
	95001 - 95001 SUPP		1		
1	IP 95001	Supplemental Inspection For One Or Two White Inputs In A Strategic Performance Area		09/24/2007 09/28/2007	Supplemental Progra
	EXAM - INITIAL EXAMINATION		4		
1	X02375	COOPER NUCLEAR-INITIAL EXAM(04/2008)		03/10/2008 03/14/2008	Not Applicable
1	X02375	COOPER NUCLEAR-INITIAL EXAM(04/2008)		04/07/2008 04/15/2008	Not Applicable
	EP1 - EP EXERCISE		3		
1	IP 7111401	Exercise Evaluation		03/31/2008 04/04/2008	Baseline Inspections
	RP-ORS1 - OCCUPATIONAL RADIATION SAFETY - ACCESS		1		
1	IP 7112101	Access Control to Radiologically Significant Areas		04/14/2008 04/18/2008	Baseline Inspections
1	IP 7112102	ALARA Planning and Controls		04/14/2008 04/18/2008	Baseline Inspections
1	IP 71151-OR01	Occupational Exposure Control Effectiveness		04/14/2008 04/18/2008	Baseline Inspections
1	IP 71151-PR01	RETS/ODCM Radiological Effluent		04/14/2008 04/18/2008	Baseline Inspections
	EB1-2/17 - 50.59 & PERMANENT PLANT MODS		1		
1	IP 7111102	Evaluation of Changes, Tests, or Experiments		05/26/2008 05/30/2008	Baseline Inspections
1	IP 7111117B	Permanent Plant Modifications		05/26/2008 05/30/2008	Baseline Inspections
	EB2-07B - BIENNIAL HEAT SINK INSPECTION		1		
1	IP 7111107B	Heat Sink Performance		08/18/2008 08/22/2008	Baseline Inspections
	RP-ORS2 - OCCUPATIONAL RADIATION SAFETY - ALARA		1		
1	IP 7112101	Access Control to Radiologically Significant Areas		09/29/2008 10/03/2008	Baseline Inspections
1	IP 7112102	ALARA Planning and Controls		09/29/2008 10/03/2008	Baseline Inspections
1	IP 71151-OR01	Occupational Exposure Control Effectiveness		09/29/2008 10/03/2008	Baseline Inspections
1	IP 71151-PR01	RETS/ODCM Radiological Effluent		09/29/2008 10/03/2008	Baseline Inspections
	EB2-12T - TRIENNIAL MAINTENANCE RULE INSPECTION		1		
1	IP 7111112B	Maintenance Effectiveness		10/27/2008 10/31/2008	Baseline Inspections
	REQUAL - BIENNIAL REQUAL		3		
1	IP 7111111B	Licensed Operator Requalification Program		12/15/2008 12/19/2008	Baseline Inspections

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