



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
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:

Gene Mace  
Nuclear Asset Manager  
Nebraska Public Power District  
P.O. Box 98  
Brownville, NE 68321

John C. McClure, Vice President  
and General Counsel  
Nebraska Public Power District  
P.O. Box 499  
Columbus, NE 68602-0499

David Van Der Kamp,  
Acting Licensing Manager  
Nebraska Public Power District  
P.O. Box 98  
Brownville, NE 68321

Michael J. Linder, Director  
Nebraska Department of  
Environmental Quality  
P.O. Box 98922  
Lincoln, NE 68509-8922

Chairman  
Nemaha County Board of Commissioners  
Nemaha County Courthouse  
1824 N Street  
Auburn, NE 68305

Julia Schmitt, Manager  
Radiation Control Program  
Nebraska Health & Human Services  
Dept. of Regulation & Licensing  
Division of Public Health Assurance  
301 Centennial Mall, South  
P.O. Box 95007  
Lincoln, NE 68509-5007

H. Floyd Gilzow  
Deputy Director for Policy  
Missouri Department of Natural Resources  
P. O. Box 176  
Jefferson City, MO 65102-0176

Director, Missouri State Emergency  
Management Agency  
P.O. Box 116  
Jefferson City, MO 65102-0116

Chief, Radiation and Asbestos  
Control Section  
Kansas Department of Health  
and Environment  
Bureau of Air and Radiation  
1000 SW Jackson, Suite 310  
Topeka, KS 66612-1366

Daniel K. McGhee, State Liaison Officer  
Bureau of Radiological Health  
Iowa Department of Public Health  
Lucas State Office Building, 5th Floor  
321 East 12th Street  
Des Moines, IA 50319

Melanie Rasmussen, Radiation Control  
Program Director  
Bureau of Radiological Health  
Iowa Department of Public Health  
Lucas State Office Building, 5th Floor  
321 East 12th Street  
Des Moines, IA 50319

Ronald D. Asche, President  
and Chief Executive Officer  
Nebraska Public Power District  
1414 15th Street  
Columbus, NE 68601

Ronald L. McCabe, Chief  
Technological Hazards Branch  
National Preparedness Division  
DHS/FEMA  
9221 Ward Parkway  
Suite 300  
Kansas City, MO 64114-3372

Melanie Rasmussen  
Radiation Control Program Director  
Bureau of Radiological Health  
Iowa Department of Public Health  
Lucas State Office Building, 5<sup>th</sup> Floor  
321 East 12<sup>th</sup> Street  
Des Moines, IA 50319

P.V. Fleming, Director of  
Nuclear Safety Assurance  
Nebraska Public Power District  
P.O. Box 98  
Brownville, NE 68321

John F. McCann, Director, Licensing  
Entergy Nuclear Northeast  
Entergy Nuclear Operations, Inc.  
440 Hamilton Avenue  
White Plains, NY 10601-1813

Keith G. Henke, Planner  
Division of Community and Public Health  
Office of Emergency Coordination  
930 Wildwood, P.O. Box 570  
Jefferson City, MO 65102

Institute of Nuclear Power Operations (INPO)  
Records Center  
700 Galleria Parkway SE, Suite 100  
Atlanta, GA 30339

Electronic distribution by RIV:  
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 Senior Project Engineer, DRP/C (**WCW**)  
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 C. Lyon, NRR Project Manager (**CFL**)  
 D. Pelton, OEDO RIV Coordinator (**DLP1**)  
 E. Collins, Director, DI&RS, NRR (**EEC**)  
 RidsNrrDirslpab@nrc.gov

SUNSI Review Completed:   MCH   ADAMS:  Yes     No    Initials:   MCH    
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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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\*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	Planned Dates End	Inspection Type
1	<b>EB2-52B - PIR TEAM INSPECTION</b>		3	09/17/2007	09/21/2007	Baseline Inspections
	IP 71152B	Identification and Resolution of Problems				
1	<b>EB1-21 - CDB</b>		5	10/01/2007	10/05/2007	Baseline Inspections
	IP 7111121	Component Design Bases Inspection				
1	IP 7111121	Component Design Bases Inspection		10/22/2007	11/02/2007	Baseline Inspections
1	<b>95001 - 95001 SUPP</b>		1	09/24/2007	09/28/2007	Supplemental Progra
	IP 95001	Supplemental Inspection For One Or Two White Inputs In A Strategic Performance Area				
1	<b>EXAM - INITIAL EXAMINATION</b>		4	03/10/2008	03/14/2008	Not Applicable
	X02375	COOPER NUCLEAR-INITIAL EXAM(04/2008)				
1	X02375	COOPER NUCLEAR-INITIAL EXAM(04/2008)		04/07/2008	04/15/2008	Not Applicable
1	<b>EPI - EP EXERCISE</b>		3	03/31/2008	04/04/2008	Baseline Inspections
	IP 7111401	Exercise Evaluation				
1	<b>RP-ORS1 - OCCUPATIONAL RADIATION SAFETY - ACCESS</b>		1	04/14/2008	04/18/2008	Baseline Inspections
	IP 7112101	Access Control to Radiologically Significant Areas				
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
1	<b>EB1-2/17 - 50.59 &amp; PERMANENT PLANT MODS</b>		1	05/26/2008	05/30/2008	Baseline Inspections
	IP 7111102	Evaluation of Changes, Tests, or Experiments				
1	IP 711117B	Permanent Plant Modifications		05/26/2008	05/30/2008	Baseline Inspections
1	<b>EB2-07B - BIENNIAL HEAT SINK INSPECTION</b>		1	08/18/2008	08/22/2008	Baseline Inspections
	IP 7111107B	Heat Sink Performance				
1	<b>RP-ORS2 - OCCUPATIONAL RADIATION SAFETY - ALARA</b>		1	09/29/2008	10/03/2008	Baseline Inspections
	IP 7112101	Access Control to Radiologically Significant Areas				
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
1	<b>EB2-12T - TRIENNIAL MAINTENANCE RULE INSPECTION</b>		1	10/27/2008	10/31/2008	Baseline Inspections
	IP 711112B	Maintenance Effectiveness				
1	<b>REQVAL - BIENNIAL REQVAL</b>		3	12/15/2008	12/19/2008	Baseline Inspections
	IP 711111B	Licensed Operator Requalification Program				