



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
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March 3, 2008

Stewart B. Minahan, Vice
President-Nuclear and CNO
Nebraska Public Power District
72676 648A Avenue
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SUBJECT: ANNUAL ASSESSMENT LETTER - COOPER NUCLEAR STATION
(NRC INSPECTION REPORT 05000298/2008001)

Dear Mr. Minahan:

On February 7, 2008, the NRC staff completed its performance review of the Cooper Nuclear Station for the calendar year 2007 assessment cycle. Our technical staff reviewed performance indicators for the most recent quarter and inspection results for the period from January 1 through December 31, 2007. 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 Cooper Nuclear Station for the most recent quarter was within the Regulatory Response Column of the NRC's Action Matrix. During the first quarter of 2007, the Mitigating Systems Performance Index for Emergency AC Power Systems turned White. This performance indicator remained White throughout the end of the assessment period.

On August 17, 2007, the NRC staff issued a White finding involving the failure to promptly identify and correct a significant condition adverse to quality that resulted in the reduced reliability of Emergency Diesel Generator 2. Consistent with the guidance in NRC Inspection Manual Chapter 0305, "Operating Reactor Assessment Program," Section 06.06.b, the NRC staff performed a review of the emergency diesel generator failures that were common to both the White performance indicator result and the White finding. We determined that the root causes were similar and, as a result, should not be counted as two separate inputs for the purposes of determining the level of NRC oversight in accordance with the NRC's Action Matrix. On the basis of this assessment, we conducted Supplemental Inspection 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area," beginning on December 10, 2007. This inspection reviewed your corrective actions associated with the White performance indicator for the Mitigating Systems Performance Index, Emergency AC Power Systems, and the White finding. Based on the results of the 95001 Supplemental Inspection the White finding will be removed from the NRC Action Matrix at the end of the first quarter of 2008.

In our midcycle performance assessment letter dated August 31, 2007, we advised you of a substantive crosscutting issue in the human performance component of resources involving the aspect of procedural guidance adequacy. During this assessment period, we noted an increase

in findings related to this aspect. The NRC staff identified that there were 14 Green inspection findings having crosscutting aspects associated with human performance. Nine of these findings involved the aspect of procedural adequacy and affected the Mitigating Systems, Initiating Events, Occupational Radiation Safety, Public Radiation Safety, and Emergency Preparedness Cornerstones. These inadequate procedures resulted in: 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; the failure to implement appropriate as low as reasonably achievable radiation protection practices resulting in increased occupational radiation dose to workers; incomplete procedures for implementing emergency plan implementing procedures; an inadequate post maintenance test procedure resulting in an inoperable emergency diesel generator, and the failure to maintain complete and accurate design basis documentation. As of the end of the assessment period, it does not appear that corrective actions initiated by Cooper Nuclear Station have been effective in addressing this crosscutting theme. As a result, this substantive crosscutting issue will remain open until we determine, through implementation of focused baseline inspections, that corrective actions result in improved performance.

The enclosed inspection plan details the inspections, except those related to security, scheduled through June 30, 2009. 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 midcycle 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).

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 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,



Dwight Chamberlain, Director
Division of Reactor Projects

Docket: 50-298
License: DPR-46

Enclosure:
Cooper Nuclear Station Inspection/Activity Plan

cc w/enclosure:

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| Unit Number | Inspection Activity | Title | No. of Staff on Site | Planned Dates Start End | Inspection Type |
|-------------|---|---|----------------------|-------------------------|------------------------|
| 1 | 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 |
| 1 | EB1-08 - INSERVICE INSPECTION | | 3 | | |
| 1 | IP 7111108G | Inservice Inspection Activities - BWR | | 04/21/2008 04/25/2008 | Baseline Inspections |
| 1 | EB2-07T - TRIENNIAL HEAT SINK INSPECTION | | 1 | | |
| 1 | IP 7111107B | Heat Sink Performance | | 08/18/2008 08/22/2008 | Baseline Inspections |
| 1 | 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 |
| 1 | EP1 - EP EXERCISE | | 3 | | |
| 1 | IP 7111401 | Exercise Evaluation | | 11/17/2008 11/21/2008 | EP Baseline Inspection |
| 1 | IP 7111404 | Emergency Action Level and Emergency Plan Changes | | 11/17/2008 11/21/2008 | EP Baseline Inspection |
| 1 | IP 71151-EP01 | Drill/Exercise Performance | | 11/17/2008 11/21/2008 | Baseline Inspections |
| 1 | IP 71151-EP02 | ERO Drill Participation | | 11/17/2008 11/21/2008 | Baseline Inspections |
| 1 | IP 71151-EP03 | Alert & Notification System | | 11/17/2008 11/21/2008 | Baseline Inspections |
| 1 | EB1-17T - 50.59 & PERMANENT PLANT MODS | | 3 | | |
| 1 | IP 7111102 | Evaluation of Changes, Tests, or Experiments | | 11/17/2008 12/05/2008 | Baseline Inspections |
| 1 | IP 7111117B | Evaluations of Changes, Tests, or Experiments & Permanent Plant Modifications | | 11/17/2008 12/05/2008 | Baseline Inspections |
| 1 | REQUAL - BIENNIAL REQUAL | | 5 | | |
| 1 | IP 7111111B | Licensed Operator Requalification Program | | 11/17/2008 11/21/2008 | Baseline Inspections |
| 1 | EP2 - EP PROGRAM INSPECTION | | 1 | | |
| 1 | IP 7111402 | Alert and Notification System Testing | | 02/02/2009 02/06/2009 | EP Baseline Inspection |
| 1 | IP 7111403 | Emergency Response Organization Augmentation Testing | | 02/02/2009 02/06/2009 | EP Baseline Inspection |
| 1 | IP 7111404 | Emergency Action Level and Emergency Plan Changes | | 02/02/2009 02/06/2009 | EP Baseline Inspection |
| 1 | IP 7111405 | Correction of Emergency Preparedness Weaknesses and Deficiencies | | 02/02/2009 02/06/2009 | EP Baseline Inspection |
| 1 | EB2-52B - BIENNIAL PI&R INSPECTION | | 4 | | |
| 1 | IP 71152B | Identification and Resolution of Problems | | 03/23/2009 03/27/2009 | Baseline Inspections |
| 1 | IP 71152B | Identification and Resolution of Problems | | 04/06/2009 04/10/2009 | 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
 03/01/2008 - 06/30/2009

14:54:11

| Unit Number | Inspection Activity | Title | No. of Staff on Site | Planned Dates Start | Planned Dates End | Inspection Type |
|-------------|--|---|----------------------|---------------------|-------------------|----------------------|
| | RP-ORS3 - OCCUPATIONAL RADIATION SAFETY - ALARA | | 1 | | | |
| 1 | IP 7112101 | Access Control to Radiologically Significant Areas | | 04/13/2009 | 04/17/2009 | Baseline Inspections |
| 1 | IP 7112102 | ALARA Planning and Controls | | 04/13/2009 | 04/17/2009 | Baseline Inspections |
| 1 | IP 71151 | Performance Indicator Verification | | 04/13/2009 | 04/17/2009 | Baseline Inspections |
| | EB1-21T - CDBI | | 6 | | | |
| 1 | IP 7111121 | Component Design Bases Inspection | | 05/18/2009 | 05/22/2009 | Baseline Inspections |
| 1 | IP 7111121 | Component Design Bases Inspection | | 06/01/2009 | 06/12/2009 | Baseline Inspections |
| | RPTEAM - RADIATION SAFETY TEAM INSPECTION | | 5 | | | |
| 1 | IP 7112103 | Radiation Monitoring Instrumentation and Protective Equipment | | 05/11/2009 | 05/15/2009 | Baseline Inspections |
| 1 | IP 7112201 | Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems | | 05/11/2009 | 05/15/2009 | Baseline Inspections |
| 1 | IP 7112202 | Radioactive Material Processing and Transportation | | 05/11/2009 | 05/15/2009 | Baseline Inspections |
| 1 | IP 7112203 | Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control Program | | 05/11/2009 | 05/15/2009 | Baseline Inspections |

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

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