June 8, 2010

Mr. W. L. Berg
General Manager
Dairyland Power Cooperative
3200 East Avenue South
P.O. Box 817
La Crosse, WI 54602-0817

SUBJECT: NRC INSPECTION REPORT 050-00409/10-01(DNMS) - LA CROSSE BOILING WATER REACTOR

Dear Mr. Berg:

On May 12, 2010, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at the permanently shutdown La Crosse Boiling Water Reactor (LACBWR) facility. The purpose of the inspection was to determine whether decommissioning activities were conducted safely and in accordance with NRC requirements. At the conclusion of the inspection on May 12, 2010, the NRC inspector discussed the results with members of your staff.

The inspection consisted of an examination of activities at the facility as they relate to safety and compliance with the Commission's rules and regulations. Areas examined during the inspection included facility management and control, radiological safety, and spent fuel safety. Within these areas, the inspection consisted of a selective examination of procedures and representative records, field observations of activities in progress, and interviews with personnel.

Based on the results of this inspection, the NRC did not identify any violations.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html.

We will gladly discuss any questions you have concerning this inspection.

Sincerely,

/RA/

Christine A. Lipa, Chief
Materials Control, ISFSI, and
Decommissioning Branch

Docket No. 050-00409
License No. DPR-45

Enclosure:
Inspection Report 050-00409/10-01(DNMS)

cc w/encl: M. Brasel, Plant Manager
B. D. Burks, P.E., Director, Bureau of Field Operations
J. Mettner, Chairman, Wisconsin Public
Service Commission
Spark Burmaster, Coulee Region Energy Coalition
State Liaison Officer
Chief, Radiation Protection Section
WI Department of Health and
Social Services, Division of Health

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DISTRIBUTION w/encl:
B. Watson, FSME
K. L. Banovac, FSME
G. W. Purdy, NSIR
C. Pederson, RIII
S. Reynolds, RIII
P. Louden, RIII
RIII Enf. Coordinator
MCID Staff

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No.:	050-00409
License No.:	DPR-45
Report No.:	050-00409/10-01(DNMS)
Licensee:	Dairyland Power Cooperative 3200 East Avenue South La Crosse, WI 54602
Facility:	La Crosse Boiling Water Reactor (Permanently Shutdown)
Location:	La Crosse Site Genoa, Wisconsin
Dates:	May 11 through 12, 2010
Inspectors:	Peter J. Lee, Ph.D., CHP, Health Physicist
Approved by:	Christine A. Lipa, Chief Materials Controls, ISFSI, and Decommissioning Branch Division of Nuclear Materials Safety

EXECUTIVE SUMMARY

La Crosse Boiling Water Reactor
NRC Inspection Report 050-00409/10-01(DNMS)

This routine decommissioning inspection covered aspects of facility management and control, radiological safety, and spent fuel safety.

Facility Management and Control

- The inspector determined that the licensee properly evaluated the safety impacts of facility changes and modifications and was in compliance with the requirements of Title 10 Code of Federal Regulations (CFR) Part 50.59. (Section 1.1)

- The inspector determined that the licensee's audit and corrective action program were adequately implemented in accordance with its Quality Assurance Program. (Section 1.2)

- The inspector determined that the licensee was adequately controlling decommissioning activities and radiological work areas. (Section 1.3)

Radiological Safety

- The inspector determined that the licensee continued to be effective in controlling radiation worker personal exposure. (Section 2.1)

- The inspector determined that the licensee adequately implemented its effluent monitoring program. (Section 2.2)

- The inspector determined that the licensee complied with regulatory requirements for shipping radioactive materials. (Section 2.3)

Spent Fuel Safety

- The inspector determined that the licensee properly maintained the Spent Fuel Element Storage Well water level, temperature, chemistry, and cleanliness to ensure the safe wet storage of the spent fuel. (Section 3.1)

Report Details[1]

Summary of Plant Activities

The licensee's current activities were focused on routine operations regarding the safe storage of spent fuel in the fuel pool and preparations for the dry fuel storage project.

1.0 Facility Management and Control

1.1 Safety Reviews, Design Changes and Modifications (37801)

a. Inspection Scope

The inspector reviewed the licensee's safety screening reviews of fuel handling to inspect fuel assemblies, resins transfer from spent resin receiving tank to spent resin liner, special nuclear material inventory in spent fuel pool, and conducting radiation survey in spent fuel pool to verify that completed reviews were consistent with the requirements of Title 10 Code of Federal Regulations (CFR) Part 50.59.

b. Observations and Findings

The activities all involved facility changes that did not adversely affect the design functions of the structures, systems, and components (SSCs) as described in the licensee's Decommissioning Plan and none of the facility changes required a formal 10 CFR Part 50.59 safety evaluation.

c. Conclusions

The inspector determined that the licensee properly evaluated the safety impacts of facility changes and was in compliance with the requirements of 10 CFR Part 50.59.

1.2 Self Assessment, Auditing, and Corrective Actions (40801)

a. Inspection Scope

The inspector reviewed the licensee's site program compliance audit (Audit Report No. 01-09-02), which was conducted from December 8 through December 17, 2009.

b. Observations and Findings

The site program compliance audit included the evaluation on audits performed during 2009. The audit resulted in nine non-conformances and three open items and the associated corrective actions. The licensee initiated appropriate corrective actions to resolve the audit findings.

c. Conclusions

The inspector determined that the licensee's audit and corrective action program were adequately implemented in accordance with its Quality Assurance Program.

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[1]NOTE: A list of acronyms used in the report is included at the end of the report.

1.3 Decommissioning Performance and Status Review at Permanently Shut Down Reactors (71801)

a. Inspection Scope

The inspector conducted a plant tour to assess field conditions and decommissioning activities and ensure that radioactively contaminated areas were being controlled.

b. Observations and Findings

During site tours the inspector noted that the material condition of facilities and equipment was commensurate with current decommissioning activities. Work areas were observed to be adequately controlled, postings and boundaries were appropriate, and workers were wearing personal protective clothing that was suitable for the work they were performing.

c. Conclusions

The inspector determined that the licensee was adequately controlling decommissioning activities and radiological work areas.

2.0 Radiological Safety

2.1 Occupational Radiation Exposure (83750)

a. Inspection Scope

The inspector reviewed the external exposure records for the fourth quarter of 2009 and first quarter of 2010. The inspector also reviewed the routine general area air sampling results for the period of September 2009 to May 2010 associated with the reactor and turbine buildings. The inspector reviewed the direct radiation survey and smear sample results from the reactor building and turbine building for the period of September 2009 to May 2010.

b. Observations and Findings

During the inspection, the licensee had completed the inspection of fuel assemblies and started to load several of the most damaged fuel assemblies into the damaged fuel cans. The total external exposures received by the workers during the fuel inspection were about 800 mrem. Most of the external exposures were from the fuel inspection and were well below 10 CFR Part 20 limits. Based on the review of air sampling results, the inspector concluded that the workers received no detectable internal exposure. Based on the review of the survey results, the inspector concluded that the licensee appropriately controlled contaminated areas and contamination levels within the facility had been kept to a minimum.

c. Conclusions

The inspector determined that the licensee continued to be effective in controlling radiation worker personal exposure.

2.2 Radioactive Waste Treatment, and Effluent and Environmental Monitoring (84750)

a. Inspection Scope

The inspector evaluated the licensee's activities to effectively control, monitor, and quantify releases of radioactive materials in liquid, gaseous, and particulate forms to the environment. The inspectors reviewed the licensee's 2009 "Effluent and Environmental Monitoring Reports," and the Offsite Dose Calculation Manual (ODCM).

b. Observations and Findings

The licensee's gaseous effluent monitors and waste water effluent monitor were calibrated and checked for proper operation in accordance with station procedures. The licensee participates in a cross check program with an off-site laboratory to confirm the quality of its analytical data. Results of a cross check of licensee laboratory results completed in calendar year 2009 indicated agreement in all analytical data.

The ODCM was comprehensive and contained the requirements listed in the licensee's technical specifications. The effluent monitoring data indicated that release concentrations were consistent with limits specified in 10 CFR Part 20, Appendix B, Table 2, and that doses to the general public were in conformance with Appendix I of 10 CFR Part 50. Further, environmental sampling results indicated only background radiation levels with no distinct contribution from the shutdown reactor.

c. Conclusions

The inspector determined that the licensee adequately implemented its effluent monitoring program.

2.3 Transportation of Radioactive Materials (86750)

a. Inspection Scope

The inspector reviewed the radioactive materials shipping program and applicable shipping documents. The inspector evaluated whether the licensee was in compliance with NRC and Department of Transportation (DOT) shipping requirements.

b. Observations and Findings

The licensee has processed one waste shipment since the last inspection. The licensee shipped the radiological waste to the Energy Solutions site in Clive, Utah. The licensee's shipping manifest showed that personnel packaged, labeled, and marked each shipping container according to the DOT and 10 CFR Part 71 transportation requirements. The licensee verified that the results of radiation and removable contamination levels were within applicable limits. The waste manifest included all required information.

c. Conclusions

The inspector determined that the licensee complied with regulatory requirements for shipping radioactive materials.

3.0 Spent Fuel Safety

3.1 Spent Fuel Pool Safety at Permanently Shutdown Reactors (60801)

a. Inspection Scope

The inspector reviewed the licensee's activities to ensure the safe wet storage of spent fuel in the Fuel Element Storage Well (FESW). The review included the verification of water temperature, and water level requirements of Technical Specification (TS) 4.1.2, the surveillance requirements of TS 5.1.2, and the water chemistry and cleanliness control requirements of the licensee's Health and Safety Procedure HSP-7.2, for the period of September 2009 to May 2010.

b. Observations and Findings

All parameters reviewed were consistent with limits specified in HSP-7.2, "Sampling of Fuel Element Storage Well." The FESW water level and temperature met the requirements of TS 4.1.2. The FESW water level and temperature had been monitored daily as required by the surveillance requirements of TS 5.1.2.1.

c. Conclusions

The inspector determined that the licensee properly maintained the FESW water level, temperature, chemistry, and cleanliness to ensure the safe wet storage of the spent fuel.

4.0 Exit Meeting

The inspector presented the inspection results to members of the licensee's staff at the conclusion of the inspection on May 12, 2010. The licensee did not identify any of the documents or processes reviewed by the inspectors as proprietary.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

* M. Brasel, Plant Manager
R. Cota, Training/Security Supervisor
J. Henkelman, Quality Assurance Specialist
M. Johnsen, Tech Support Engineer
* L. Nelson, Health and Safety Supervisor
* S. Rafferty, Reactor Engineer
* D. Tesar, Security Supervisor
* D. Egge, Quality Assurance Supervisor
* J. McRill, Tech Support Engineer
* W. Trubilowicz, Tech Support Engineer

* Persons present at the exit meeting.

INSPECTION PROCEDURES USED

IP 37801:	Safety Reviews, Design Changes, and Modifications
IP 40801:	Self-Assessment, Auditing, and Correction Action
IP 60801:	Spent Fuel Pool Safety
IP 71801:	Decommissioning Performance and Status Review
IP 83750:	Occupational Radiation Exposure
IP 86750:	Transportation of Radioactive Materials
IP 84750:	Radioactive Waste Treatment, and Effluent and Environmental Monitoring

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened	None
Closed	None
Discussed	None

INITIALISMS AND ACRONYMS

ADAMS	Agencywide Documents Access and Management System
CFR	Code of Federal Regulations
DNMS	Division of Nuclear Materials Safety
DOT	Department of Transportation
FESW	Fuel Element Storage Well
LACBWR	La Crosse Boiling Water Reactor
NRC	U. S. Nuclear Regulatory Commission
ODCM	Offsite Dose Calculation Manual
SSCs	Structures, Systems, and Components