

October 29, 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 NO. 050-00409/10-02(DNMS) - LA CROSSE
BOILING WATER REACTOR

Dear Mr. Berg:

On September 30, 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 the NRC requirements. At the conclusion of the inspection on September 30, 2010, the NRC inspectors 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, spent fuel safety, and decommissioning support activities. 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 Title 10 of the Code of Federal Regulations (10 CFR) 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure 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>.

W. Berg

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

Sincerely,

/RA/ By George M. McCann
For/

Brian J. Kemker, Acting Chief
Materials Control, ISFSI, and
Decommissioning Branch

Docket No. 050-00409

License No. DPR-45

Enclosure:

Inspection Report No. 050-00409/10-02(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, Division of Health,
WI Department of Health and Social Services

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State Liaison Officer
Chief, Radiation Protection Section, Division of Health,
WI Department of Health and Social Services

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No.: 050-00409

License No.: DPR-45

Report No.: 050-00409/10-02(DNMS)

Licensee: Dairyland Power Cooperative
3200 East Avenue South
La Crosse, WI 54602

Facility: La Crosse Boiling Water Reactor

Location: La Crosse Site
Genoa, Wisconsin

Dates: September 29 through 30, 2010

Inspectors: Peter J. Lee, Ph.D., CHP

Approved by: Brian J. Kemker, Acting Chief
Materials Control, ISFSI, and
Decommissioning Branch
Division of Nuclear Materials Safety

Enclosure

EXECUTIVE SUMMARY

La Crosse Boiling Water Reactor (LACBWR) NRC Inspection Report No. 050-00409/10-02(DNMS)

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

Facility Management and Control

- The inspector determined that the licensee staffing was adequate for the decommissioning activities being performed, and that the training requirements of the Decommissioning Plan were being met. (Section 1.1)

Radiological Safety

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

Spent Fuel Safety

- The inspector determined that the licensee properly maintained the FESW water level, temperature, chemistry, cleanliness, and criticality control to ensure the safe wet storage of the spent fuel. (Section 3.1)

Decommissioning Support Activities

- The licensee's maintenance and surveillance activities were consistent with Title 10 of the Code of Federal Regulations (10 CFR) Part 50.65, "Maintenance Rule."

Report Details¹

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, dismantling generator and turbine, and preparations for the dry fuel storage project.

1.0 Facility Management and Control

1.1 Organization, Management and Cost Controls (IP 36801)

a. Inspection Scope

The inspector evaluated the licensee's decommissioning staffing and reviewed the training program and training records for the current calendar year, including the fuel handler training, radiation protection training, and general employee training. The inspector also reviewed the training for the contract workers who were granted unescorted access to conduct work in the restricted area.

b. Observations and Findings

The licensee's staffing was adequate for the level of work being performed and met the requirements of Technical Specifications. A review of the training program and training records identified that the workers had received the required training specified in the Decommissioning Plan.

c. Conclusions

The inspector determined that the licensee staffing was adequate for the decommissioning activities being performed, and that the training requirements of the Decommissioning Plan were being met.

2.0 Radiological Safety

2.1 Occupational Radiation Exposure (83750)

a. Inspection Scope

The inspector reviewed the external exposure records for the first and second quarter of 2010. The inspector also reviewed the operation procedures for placing the damaged fuel assemblies in the damaged fuel can (DFC) and removing fuel assemblies from the DFC.

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

b. Observations and Findings

The licensee originally intended to place DFCs into spent fuel pool rack storage locations. Damaged fuel assemblies could then be loaded into the DFCs, and transferred to the Transportable Storage Canister (TSC) without the concern of dropping fuel fragments. During the initial loading of damaged fuel assemblies into DFCs, the licensee discovered some DFCs were not seated properly into the spent fuel pool rack. The licensee decided to remove eight damaged fuel assemblies from the DFCs and load all the damaged fuel assemblies directly into the TSC.

The licensee completed the removal of eight damaged fuel assemblies from DFCs, and the removal of concrete from the bioshield area for installation of the tank to hold the TSC. The total external exposures received by the workers were about 440 millirem. 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 that 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.

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 June 2010 through September 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, cleanliness, and criticality control to ensure the safe wet storage of the spent fuel.

4.0 Decommissioning Support Activities

4.1 Maintenance and Surveillance (62801)

a. Inspection Scope

The inspector reviewed the licensee maintenance requests and surveillances for 2010, and biannual assessment of maintenance effectiveness of structures, systems, and components (SSCs) during 2008 and 2009, to verify that maintenance and surveillance for SSCs were conducted in a manner that resulted in the safe storage of spent fuel.

b. Observations and Findings

The maintenance and surveillance for SSCs were conducted in accordance with the licensee program that implemented 10 CFR, Part 50.65 "Maintenance Rule." Based on the risk assessment of SSCs, the licensee established 14 functional goals and developed associated monitoring and frequency for each goal. None of the maintenance requests adversely affected SSC design functions and the corrective actions had been taken. The licensee periodic assessments indicated that all functional goals of the SSCs were met.

c. Conclusions

The licensee maintenance and surveillance activities were consistent with 10 CFR, Part 50.65, "Maintenance Rule."

5.0 Exit Meeting

The inspector presented the inspection results to members of the licensee's staff at the conclusion of the inspection on September 30, 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, Operation, Training/Relief Supervisor
- J. Henkelman, Quality Assurance Specialist
- D. Tesar, Tech Support Engineer, Project
- * L. Nelson, Health and Safety/Maintenance Supervisor
- S. Rafferty, Reactor/Radiation Protection Engineer
- * D. Egge, Manager, Quality Assurance
- * J. McRill, Technical Support Engineer, Licensing
- * W. Trubilowicz, Dry Cask Storage Project Support
- L. Peters, Dry Cast Storage Project Manager

* Persons present at the exit meeting.

INSPECTION PROCEDURES USED

- IP 36801: Organization, Management and Cost Controls
- IP 60801: Spent Fuel Pool Safety
- IP 62801: Maintenance and Surveillance
- IP 83750: Occupational Radiation Exposure

ITEMS OPENED, CLOSED, AND DISCUSSED

- | | |
|-----------|------|
| Opened | None |
| Closed | None |
| Discussed | None |

INITIALISMS AND ACRONYMS

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|--------|---|
| ADAMS | Agencywide Documents Access and Management System |
| CFR | Code of Federal Regulations |
| DNMS | Division of Nuclear Materials Safety |
| DFC | Damaged Fuel Can |
| FESW | Fuel Element Storage Well |
| HSC | Health and Safety Procedure |
| LACBWR | La Crosse Boiling Water Reactor |
| MREM | Millirem |
| NRC | U.S. Nuclear Regulatory Commission |
| SSCs | Structures, Systems, and Components |
| TSC | Transportable Storage Canister |
| TS | Technical Specifications |