

U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report No. 50-409/81-01

Docket No. 50-409

License No. DPR-45

Licensee: Dairyland Power Cooperative
2615 East Avenue, South
LaCrosse, WI 54601

Facility Name: La Crosse Boiling Water Reactor

Inspection At: La Crosse Site, Genoa, WI

Inspection Conducted: December 1, 1980 thru January 31, 1981

Inspectors: *W. L. Forney* 2-10-81
M. W. Branch 2-10-81
Approved By: *D. C. Boyd* 2-10-81
Projects Section 4

Inspection Summary

Inspection on December 1, 1980 thru January 31, 1981 (Report No. 50-409/81-01)

Areas Inspected: Routine unannounced inspection of the licensee's Operational Safety; Surveillance; Maintenance; Refueling Activities; Refueling Surveillance; Refueling Maintenance; Followup Action to Open Inspection Items, Bulletins, Circulars and Items of Noncompliances; Review of Core Loading Verification Procedures and Review of Physical Protection Controls. This inspection involved a total of 488 inspector-hours onsite by two NRC inspectors including 70 inspector-hours onsite during off-shifts.

Results: Of the nine areas inspected, no items of noncompliance were noted in the eight areas. Two items of noncompliance were noted in the area of refueling maintenance.

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DETAILS

1. Persons Contacted

- *R. Shimshak, Plant Superintendent
- *J. Parkyn, Assistant Plant Superintendent
- *G. Boyd, Operations Supervisor
- *L. Goodman, Operations Engineer
- *L. Krajewski, Health and Safety Supervisor
- *H. Towsley, Quality Assurance Supervisor
- *S. Rafferty, Reactor Engineer
- W. Angle, Process Engineer
- *M. Polsean, Shift Supervisor
- *W. Nowicki, Supervisor, Instrument and Electric
- *R. Wery, QA Specialist
- *G. Joseph, Security and Fire Protection Supervisor
- *L. Kelley, Assistant Operations Supervisor

*Denotes those present at exit interview.

In addition, the inspector observed and held discussions with other engineers, plant equipment operators, reactor operators, assistants, and plant attendants.

2. General

During this refueling outage plant installed, (ATWS) Anticipated Transient Without Scram, modification. This modification makes LACBWR able to withstand all ATWS events including loss of main condenser as a heat sink.

No fuel damage was noted during this Core 7 fuel shuffle and reload. Following refueling of the core, plant completed type "A" containment leak test satisfactorily.

Plant started Core Physics testing on January 10, 1981 but could not complete until January 31, 1981 because of problems with Feedwater Check Valve and 1B force circulating pump vibration.

3. Operational Safety Verification

The inspector observed control room operations, reviewed applicable logs and conducted discussions with control room operators during the months of December, 1980 and January, 1981. The inspector verified the operability of selected emergency systems, reviewed tagout records and verified proper return to service of affected components. Tours of the reactor building and turbine building were conducted to observe plant equipment conditions, including potential fire hazards, fluid leaks, and excessive vibrations and to verify that maintenance requests had

been initiated for equipment in need of maintenance. The inspector by observation and direct interview verified that the physical security plan was being implemented in accordance with the station security plan.

The inspector observed plant housekeeping/cleanliness conditions and verified implementation of radiation protection controls. During the months of December, 1980 and January, 1981, the inspector walked down the accessible portions of the core spray and boron injection systems to verify operability. The inspector also witnessed portions of the radioactive waste system controls associated with radwaste shipments and barreling.

These reviews and observations were conducted to verify that facility operations were in conformance with the requirements established under technical specifications, 10 CFR, and administrative procedures.

No items of noncompliance were noted.

4. Monthly Maintenance Observation

Station maintenance activities of safety related systems and components listed below were observed/reviewed to ascertain that they were conducted in accordance with approved procedures, regulatory guides and industry codes or standards and in conformance with technical specifications.

The following items were considered during this review: the limiting conditions for operation were met while components or systems were removed from service; approvals were obtained prior to initiating the work; activities were accomplished using approved procedures and were inspected as applicable; functional testing and/or calibrations were performed prior to returning components or systems to service; quality control records were maintained; activities were accomplished by qualified personnel; parts and materials used were properly certified; radiological controls were implemented; and, fire prevention controls were implemented.

Work requests were reviewed to determine status of outstanding jobs and to assure that priority is assigned to safety related equipment maintenance which may affect system performance.

The following maintenance activities were observed/reviewed:

Installation of ATWS modification (FC 50-80-02)
Modification of fire protection equipment

Following completion of maintenance on the ATWS modification, the inspector verified that these systems had been returned to service properly.

No items of noncompliance were noted.

5. Monthly Surveillance Observation

The inspector observed technical specifications required surveillance testing on the Emergency Diesel Generators 1A and 1B and verified that testing was performed in accordance with adequate procedures, that test instrumentation was calibrated, that limiting conditions for operation were met, that removal and restoration of the affected components were accomplished, that test results conformed with technical specifications and procedure requirements and were reviewed by personnel other than the individual directing the test, and that any deficiencies identified during the testing were properly reviewed and resolved by appropriate management personnel.

The inspector also witnessed portions of the following test activities: Bi-weekly surveillance testing of safety systems Channel No. 2 and of area radiation monitors.

6. Licensee Event Reports Followup

Through direct observations, discussions with licensee personnel, and review of records, the following event reports were reviewed to determine that reportability requirements were fulfilled, immediate corrective action was accomplished, and corrective action to prevent recurrence had been accomplished in accordance with technical specifications.

LER 80-13, Excessive Leakage of Electrical Penetration #6
LER 80-14, Excessive Type "C" Leakage of Valve 73-25-021
LER 80-15, Excessive Type "C" Leakage of Valve 54-25-006
LER 80-16, Violation of Fire Barrier
LER 80-17, Failure of Valves 55-26-006 & 55-25-003 to Pass
Type "C" Leak Test

No items of noncompliance were identified.

7. IE Bulletin Followup

For the IE Bulletins listed below the inspector verified that the written response was within the time period stated in the bulletin, that the written response included the information required to be reported, that the written response included adequate corrective action commitments based on information presentation in the bulletin and the licensee's response, that licensee management forwarded copies of the written response to the appropriate onsite management representatives, that information discussed in the licensee's written response was accurate, and that corrective action taken by the licensee was as described in the written response.

80-21, Problems with Valve Yokes Supplied by Malcolm Foundry Co.
80-25, Operating Problems with Target Rock Safety-Relief Valves

No items of noncompliance were identified.

8. Plant Trips

Following the plant trips at 0442 of January 16, 1980 and at 1557 of January 16, 1980 the inspector ascertained the status of the reactor and safety systems by observation of control room indicators and discussions with licensee personnel concerning plant parameters, emergency system status and reactor coolant chemistry. The inspector verified the establishment of proper communications and reviewed the corrective actions taken by the licensee.

All systems responded as expected, and the plant was returned to core physics testing at 0517 of January 16, 1980 and again at 2250 of the same day.

No items of noncompliance were noted.

9. Refueling Activities

The inspector verified that prior to the handling of fuel in the core, all surveillance testing required by the technical specifications and licensee's procedures had been completed; verified that during the outage the periodic testing of refueling related equipment was performed as required by technical specifications; observed four shifts of the fuel handling operations (removal, inspection and insertion) and verified the activities were performed in accordance with the technical specifications and approved procedures; verified that containment integrity was maintained as required by technical specifications; verified that good housekeeping was maintained on the refueling area; and, verified that staffing during refueling was in accordance with technical specifications and approved procedures.

No items of noncompliance were noted.

10. Surveillance - Refueling

The inspector observed the five year overhaul of the diesel high pressure service water fire pumps and the surveillance testing of the source range NI's to verify that the tests were covered by properly approved procedures; that the procedures used were consistent with regulatory requirements, licensee commitments, and administrative controls; that minimum crew requirements were met, test prerequisites were completed, special test equipment was calibrated and in service, and required data was recorded for final review and analysis; that the qualifications of personnel conducting the test were adequate; and that the test results were adequate.

No items of noncompliance were noted.

11. Maintenance - Refueling

The inspector verified maintenance procedures include administrative approvals for removing and return of systems to service; hold points for inspection/audit and signoff by QA or other licensee personnel; provisions for operational testing following maintenance; provisions for special authorization and fire watch responsibilities for activities involving welding, open flame, and other ignition sources; reviews of material certifications; provisions for assuring LCO requirements were met during repair; provisions for housekeeping during and following maintenance; and responsibilities for reporting defects to management.

The inspector observed the maintenance activities listed below and verified work was accomplished in accordance with approved procedures and by qualified personnel.

On December 2 and 3, 1980, during modification to Fire Protection System, plant personnel violated fire barriers in the Turbine Building by drilling holes without establishing the necessary fire watch patrol as required by LACBWR Technical Specification 4.2.19.

This is considered an item of noncompliance

The resident inspectors noted on January 6, 1981 that two LACBWR maintenance personnel entered and exited a High Radiation Area in the full flow demineralizer room violating the following items:

1. Failed to notify control room operator prior to entering and exiting as required by LACBWR's Operating Manual, Volume X, Section 2.7(2).
2. Failed to replace the radiological control barrier when exiting the area.
3. Failed to complete the required information on the reverse side of the Special Work Permit (SWP) when entering and exiting the area, as required by LACBWR's Operating Manual, Volume X, Section 6.5.3.
4. Failed to utilize the radiation monitoring device provided for continuously indicating the dose rate in the area, as required by LACBWR's Technical Specification 3.13.1.a.

This is considered an item of noncompliance.

12. Review of Plant Operation during Refueling and First Startup after Refueling

Prior to plant startup after refueling outage the inspectors performed a walkthrough inspection of the High Pressure Core Spray System and

the Boron Injection System to ascertain that these systems had been returned to service in accordance with approved procedures.

The inspectors also witnessed portions of first reactor startup after the refueling outage and verified that startup was conducted in accordance with technically adequate and approved procedures. The inspector also witnessed plants response to rod motion and verified that core parameters were in accordance with the requirements of the plants Technical Specification.

No items of noncompliance were noted.

13. BWR Core Loading and Verification Procedures TI 2515/40

Reviewed LACBWR's Fuel Reload Procedure and verified that procedure had necessary controls to assure proper fuel orientation. Core 7 reload could not be video taped as desired by procedure because of technical problems that were encountered with the video taping camera and equipment.

14. Review of Licensee Response to IE Bulletin 80-24 (Prevention of Damage Due to Leakage Inside Containment)

- a. LACBWR's response did not completely answer the questions posed in IE Bulletin 80-24 in the following areas:
1. Bulletin asked licensee to identify any "open system" that enters the containment building and provided definition of "open system" as defined in IE Bulletin 80-24.
 2. Bulletin asked for material types of these "open systems" and this information was not provided.
 3. LACBWR's response does not indicate that redundant equipment exists to detect leakage in any given area of containment.
 4. LACBWR's response does not answer question of providing positive means for control room operators to determine flow from Containment Sump.
 5. LACBWR's response does not indicate that licensee is committing to establishing a monthly surveillance program for the presently installed equipment.
 6. LACBWR's response indicates that modification to present Technical Specifications may be necessary to provide enforceable criteria for Bulletin 80-14 compliance.
- b. The above items were provided to licensee and to I&E Headquarters and will be considered as Unresolved Item 81-01-01.

15. Survey to Determine Existence of Adequate Emergency Procedure for Coping with ATWS Events at Operating Power Reactors (TI 2515/46)

The inspectors reviewed Emergency Procedures and interviewed operators to verify satisfactory response to an (ATWS) Event. The following Emergency Procedures were reviewed:

1. Section 3.3 of LACBWR's Operating Manual, Volume I.
2. Section 3.12 of LACBWR's Operating Manual, Volume I.

No items of noncompliance were noted.

16. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, items of non-compliance, or deviations. Unresolved items disclosed during the inspection are discussed in Paragraph 3.

17. Followup on Open Inspection Items

(Closed) OII 80-14-01 ^{1/} The resident inspectors were provided with answers to their concerns with Core 7 reload calculators.

18. Exit Interview

The inspector met with licensee representatives (denoted in Paragraph 1) throughout the month and summarized the scope and findings of the inspection activities.

^{1/} IE Inspection Report No. 50-409/80-14, Paragraph 6.