

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

REGION III

Report No. 50-409/79-10

Docket No. 50-409

License No. DPR-45

Licensee: Dairyland Power Cooperative  
2615 East Avenue - South  
La Crosse, WI 54601

Facility Name: La Crosse Boiling Water Reactor

Inspection At: La Crosse Site, Genoa, WI

Inspection Conducted: May 1-4 and 21-24, 1979

Inspector: *KR Ridgway*  
K. R. Ridgway

5/31/79

Approved By: *D. C. Boyd*  
D. C. Boyd, Acting Chief  
Reactor Projects Section 3

5/21/79

Inspection Summary

Inspection on May 1-4 and 21-24, 1979 (Report No. 50-409/79-10)

Areas Inspected: Special, unannounced inspection of licensee activities in response to IE Bulletin 79-08 including their response to the bulletin and the operability and availability of engineered safety features (ESF), administrative control of ESF, verification of ESF status, operating procedures, surveillance tests and operator training. The inspection involved 66 inspector-hours onsite by one NRC inspector.

Results: No items of noncompliance or deviations were identified in any of the areas inspected.

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## DETAILS

### 1. Persons Contacted

- \*R. Shimshak, Plant Superintendent
- \*J. Parkyn, Assistant Plant Superintendent
- \*G. Boyd, Operations Supervisor
  - P. Wiley, Assistant to Operations Supervisor
  - R. Prince, Radiation Protection Engineer
  - L. Krajewski, Health and Safety Supervisor
  - H. Towsley, Quality Assurance Supervisor
  - S. Rafferty, Reactor Engineer
  - L. Papworth, Operations Engineer
  - M. Polsean, Shift Supervisor
  - N. Hoefert, Mechanical Engineer
  - L. Kelley, Security and Fire Protection Supervisor
  - P. Gray, Supervisor, Mechanical Maintenance
  - D. Kabachinsky, Operator
  - G. Whynaucht, Operator
  - W. Fuller, Operator
  - G. Gadow, Operator
  - P. Crandall, Operator
  - G. Holmstadt, Operator
  - D. Stalsberg, Operator

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

\*Denotes those present at the exit interviews.

### 2. General

This inspection was conducted to review the response by the licensee to Inspection and Enforcement Bulletin 79-08 "Events Relevant to Boiling Water Power Reactors Identified During Three Mile Island Incident" and to verify that the actions requested in the bulletin with respect to operator training, NRC telecommunications, and reviews of engineered safety features (ESF) had been completed. In addition, the inspection consisted of an independent examination of ESF systems to verify that the systems were operable according to technical specifications by review of procedures, administrative controls, valve/breaker/switch checkoff lists, piping and instrument diagrams, and the actual alignments of valves, breakers and switches.

The following systems were considered to be Engineered Safety Systems in this inspection:

Emergency Core Spray (High and Low Pressure) (ECS)  
Alternate Core Spray (Low Pressure) (ACS)  
Shutdown Condenser System (SCS)  
Boron Injection System (BIS)  
Emergency Diesel Generators (EDG)  
Containment

The reactor protection actuation circuitry was also reviewed briefly as were portions of the nuclear steam system.

3. Engineered Safety Features (ESF) Availability and Operability

The inspection included a review of ESF alignment procedures against current piping and instrument diagrams to verify that the procedural alignments do not compromise the availability or operability of safety related components. Normal startup procedures from both cold and hot shutdown conditions require the completion of valve checklists before the startup can progress. This inspection also included a review of any surveillance, special, and maintenance procedures to establish that valves, breakers and/or switches in the ESF systems are returned to pretest conditions or that a normal prestartup check sheet verification would be completed before the system operability is required.

The licensee uses alignment checklists following extended outages or extensive maintenance to assure proper lineup of valves and valve switches. All alignments can be verified by indicator lights in the control room and in addition any open breakers, out of normal position valves and switches are carried in the "lock and tag" procedure which is under the control of the Shift Supervisor. The checklists along with operating procedures, surveillance test procedures, special procedures and maintenance procedures were compared with piping and instrument line drawings to verify correct positioning of valves and switches following tests and during normal operations.

The review of system lineups and test procedures did not identify any instances of improper lineup control, such that the operability or availability of ESF systems would be compromised. A number of inconsistencies between test procedures and data sheet checkoffs were noted. In all cases the procedures required the proper return to service of valves and switches but the data

sheets of the tests did not provide documentation that the systems had been returned to normal. A list of the inconsistencies were provided to the licensee for his followup.

No items of noncompliance were identified. ;

4. Administrative Control of Engineered Safety Features

Licensee administrative controls to assure proper return to service of ESF systems and components following maintenance or test activities and at the conclusion of extended outages are and have been subject to continuing review by the NRC inspector. These areas were cursorily reviewed during this inspection to determine if any changes had been made that might reduce the effectiveness of ACP 15.2, Equipment Lock and Tag Control; ACP 17.3, Maintenance Requests; ACP 2.1, Authorities and Responsibilities for LACBWR Operation and Shutdown; ACP 2.3, Shift Transition (turnover) Shift Conduct; ACP 6.2, Procedure Adherence and Temporary Changes; and ACP 15.1, Installation and Removal of Jumpers, Lifting and Replacement of Leads.

Based on this review, administrative controls are considered adequate to assure proper return to service.

Discussions with licensee personnel concerning independent verification of system lineups indicates that the lineup checks are made by qualified operators (licensed or unlicensed); the lineups and test data sheets are not reverified, but the sheets are approved by the Shift Supervisor and reviewed by the Operations Supervisor to verify completeness and accuracy of data.

Licensee tagging practice and procedures to provide control of equipment, was reviewed during this inspection. The purpose of the review was to determine the potential for tags to obscure position indicators, meters or alarm lights. It was noted that tags were either bent or held in place by rubber bands so that significant indicators would not be obscured.

The inspector also reviewed the recent surveillance tests of ESF systems to verify completeness and conformance to Technical Specifications.

No items of noncompliance were identified.

5. Current Status of Engineered Safety Features

This inspection included a verification by the inspector of the current valve, switch and breaker lineup of ESF systems. At the time of the inspection, the plant was concluding an eight week refueling - maintenance outage and startup preparations were in progress. Lineups were verified with checklists for normal operating conditions. The only valves to be found out of operational alignment were five in the Decay Heat System as maintenance work was in progress and the Decay Heat System is normally in operation during startup.

During the alignment verification, it was noted that there were inconsistencies in locked valves between procedures, checklists and actual conditions. There were several valves which the inspector concluded should be added to checklists. One valve identification was missing because of recent maintenance work. A list of these inconsistencies was given to the licensee to bring procedures, test data sheets and lineup checklists into agreement. This is considered an open item and will be reviewed during a subsequent inspection.

No items of noncompliance were identified.

6. Staff Training

The inspector reviewed the training actions taken by the licensee in response to IE Bulletin 79-08, by reviewing records and interviewing licensed operators. All operations personnel had reviewed IE Bulletin 79-05 and the licensee's response to IE Bulletin 79-08, dated May 2, 1979. Operations Memo, DPC-75 dated May 16, 1979 concerning manual override of automatic actions of ESF systems had been issued and reviewed by all operations personnel. Operations Memo, DPC-76 dated May 24, 1979 concerning immediate and uninterrupted telecommunications with NRC in the event of uncontrolled or unexpected reactor conditions had been issued and reviewed by all personnel.

No items of noncompliance were identified.

7. Operations Review

The inspector observed plant outage conditions, removal of the peripheral shroud for replacement, control room manning, lock and tag status of equipment, and valve/breaker/switch alignments of safety related systems for startup. Additionally, the

following records for the month of May 1979 to determine compliance with Technical Specifications and regulations and to determine if Night Order and Operational Memos conflicted in any way with operation of requirements:

- a. Night Order Instruction Book
- b. Shift Supervisors Log
- c. Outstanding Maintenance Orders
- d. New Operational Memos

No items of noncompliance were identified.

8. Management Interviews

Management interviews (as shown in Paragraph 1) were conducted on May 4, 1979 and at the conclusion of the inspection on May 24, 1979. The inspector discussed the scope and findings of the inspection. The following items were discussed:

- a. The inspector advised the licensee that the independent review of the ESF systems procedures, lineups and administrative controls had not identified any condition that would jeopardize ESF availability or operability.
- b. Notes made by the inspector relating to inconsistencies and apparent inaccuracies in procedures, test data sheets, and lineup checksheets were provided to the licensee. The inspector stated that the resolution of the list would be reviewed during a subsequent inspection.