U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-409/82-12(DPRP)

Docket No. 50-409

License No. DPR-45

9-21-82

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: July 1 through August 31, 1982

Roger D. Walker for Inspector: M. W. Branch

Approved By: R. D. Walker

Projects Section 2C

Inspection Summary

Inspection on July 1 through August 31, 1982 (Report No. 50-409/82-12(DPRP)) Areas Inspected: Followup on Open Inspection Items; Routine Resident Inspection of Operational Safety Verification; Monthly Maintenance Observation; Monthly Surveillance Observation; Licensee Event Report Followup; Fire Protection/Prevention Annual Inspection. The inspection involved a total of 153 inspectorhours onsite by one NRC inspector including 23 inspector-hours onsite during offshifts.

Results: No items of noncompliance or deviations were identified.

DETAILS

1. Persons Contacted

- *J. Parkyn, Plant Superintendent
- *G. Boyd, Operations Supervisor
- *L. Goodman, Operations Engineer
- S. Rafferty, Reactor Engineer
- M. Polsean, Shift Supervisor
- W. Nowicki, Supervisor, Instrument & Electric
- R. Wery, QA Supervisor
- *G. Joseph, Security Director
- *L. Kelly, Assistant Operations Supervisor
- *P. Shafer, Radiation Protection Engineer
- *B. Zibung, Health & Safety Supervisor
- *R. Brimer, Electrical Engineer
- D. Rybarik, Mechanical Engineer

*Denotes those persons present at the exit interview.

2. Followup on Open Inspection Items

(Closed) Unresolved Item (409/81-21-01)¹: Automatic Spray Valve for Main Transformer Area Not in Automatic.

The inspector reviewed the schedule for the completion of the automatic spray system for the main transformer, contained in the February 13, 1981, letter from Crutchfield to Linder. The schedule called for the automatic system to be activated prior to November 1, 1981. This automatic activation of the system was verified complete prior to November 1, 1981.

(Closed) Unresolved Item (409/81-21-06)¹: TMI Item II.K.3.19, Interlock on Recirculation Pump Loops.

The licensee's position, that plant modification was not necessary, was accepted by NRR and documented in the August 17, 1982, letter from Crutchfield to Linder.

(Closed) Unresolved Item (409/81-21-08)¹: Reactor Scram of November 12, 1981, resulted in an Operational Event similar to that described in TMI Item II.K.3.19

This event was considered by NRR in their evaluation of the licensee's response to TMI Item II.K.3.19 and determined to be acceptable and did not require plant modification. This position is documented in the August 17, 1982, letter Crutchfield to Linder.

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(Closed) Open Item (409/82-07-03)²: Fire rating of bullet resistant firedoors. The licensee presented letters dated August 6 and 16, 1982, from Factory Mutual Engineering that indicated the modification that was made to the fire doors for security purpose did not reduce the fire rating of the door.

No items of noncompliance or deviations were noted.

3. Operational Safety Verification

The inspector observed control room operations, reviewed applicable logs and conducted discussions with control room operators during the months of July and August 1982. 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 July and August 1982, the inspector walked down the accessible portions of the Reactor Feed, Boron Injection and High Pressure Core Spray systems to verify operability. The inspector also witnessed portions of the radicactive 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.

The inspector reviewed the August 18, 1982 event of thermal stratification in the reactor vessel to determine if the licensee corrective actions were complete and effective to prevent recurrences. The thermal stratification was caused by the securing of the decay heat removal system for repairs while utilizing the normal reactor coolant purification system to remove decay heat. The flow path that was established with the purification system created a "Short Circuit" which allowed water to be removed from the bottom of the Reactor Vessel, cooled, then returned back to the bottom of the vessel. This "Short Circuit" allowed the water near the top of the Reactor Vessel to approach 212°F while the water in the bottom of the vessel remained at approximately 76°F. The license has initiated a change to procedure ACP 7.4 Log Sheet L71 to require that the Reactor Vessel Shell Temperature recorder remain operating and be monitored at all times. If this monitor had been operating, the licensee would have had earlier indication of the thermal stratification that was occurring in the Reactor Vessel. The licensee is also reassessing it's initial position to I/E Circular 81-11

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which addressed adverse effects of inadequate decay heat removal during shutdown.

No items of noncompliance or deviations 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 Post-Accident Sampling system (MR 0539, 0540 and 0576)
- Installation of new fire hose cabinets in turbine building (MR 0268)
- Installation of flow indicator in the High Pressure Core Spray system (FC 53-82-3)

Following completion of maintenance on the High Pressure Core Spray system, the inspector verified that this system had been returned to service properly.

No items of noncompliance or deviations were noted.

5. Monthly Surveillance Observation

The inspector observed the following Technical Specifications required surveillance testing 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.

a. 18 month test of Emergency Service Water Supply System (ESWSS) as required by Technical Specification 5.2.21.1.1.C.

The inspector also witnessed/reviewed portions of the following test activities:

- Weekly and quarterly test of station batteries dated July 20, 1982.
- b. Six month inspection of ESWSS engines and pumps dated August 27 and 28, 1982.

No items of noncompliance or deviations were noted.

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.

- a. (Closed) LER 82-03 (Failure of the main airlock to pass the March 13, 1982, Type "B" leak rate test due to improper conduct of test).
- b. (Closed) LER 82-06, including Revision (1) (Clad damage on fuel pin in fuel assembly AC 1-8).
- c. (Closed) LER 82-07 (Loss of normal power to the No. 1A and 1B essential buses).
- d. (Closed) LER 82-08 (Failure of the starter motor on the No. 1A High Pressure Service Water Diesel Pump).
- e. (Closed) LER 82-09 (Retention tank discharge valve failed to pass the May 20, 1982, Type "B" leak rate test).
- f. (Closed) LER 82-10 (Steam condensate return valve failed to pass the May 21, 1982, Type "B" leak rate test).
- g. (Closed) LER 82-11 (High Pressure Service Water Containment isolation valve failed the May 23, 1982, Type "B" leak rate test).
- h. (Closed) LER 82-12 (Maintenance on High Pressure Service Water valve required removing the containment building fire suppression system from service).

No items of noncompliance or deviations were identified.

7. Fire Protection/Prevention Annual Inspection

The inspector examined the licensee's installed fire detection and suppression systems, manual fire fighting equipment, fire brigade training and administrative controls over combustible materials and ignition sources. These aspects of the fire protection program were reviewed using the requirements in the facility Technical Specifications and the fire protection/prevention program implementing procedures.

a. Areas of Inspection

(1) Procedures

FPP No.	TITLE	ISSUE	DATE
FPP-01.1	Fire Protection Organization	0	4/16/82
FPP-02.2	Fire Brigade Training	0	9/18/81
FPP-02.3	Fire Watch Training and/or Con- tractor Indoctrination	0	9/18/81
FPP-06.1	Hydrostatic Testing of Fire Hoses	0	2/16/81
FPP-06.3	Semi-Annual Hydrant Inspection	0	2/16/81
FPP-06.4	Administrative Building Fire Protection	0	9/18/81
FPP-06.5	Semi-Annual Fire Extinguisher Inspection and Invertory	0	9/18/81
FPP-06.6	Weekly Safety and Fire Preven- tion Inspection	2	4/02/82
FPP-06.7	Fire Equipment Location and Inventory List	0	3/25/82
FPP-07.1	Removal of the Internal HPSW and Fire Water Systems for Inspections Repairs, Maintenance and/or Modifications	,	4/02/82
FPP-07.2	Removal of the External HPSW and Fire Water Systems for Inspection, Repair, Maintenance and/or Mod ⁺ :ation	0	4/02/82
ACP-02.5	Ar Drative Control for h eping, System and ant Cleanliness	3	10/15/81
ACP-17	ance Request	14	8/09/82

It should be noted that Dairyland Power is in the process of consolidating all procedures that govern the fire protection program into one group of procedures titled Fire Protection Procedures. This transition is expected to be completed by the spring of 1983 and will be reviewed by the inspector on a subsequent inspection.

(2) Plant Tours

The inspector examined combustible material and ignition source controls during tours of the Turbine Building, Reactor Building and the Crib House.

(3) Observations

The inspector observed portions of the welding process for the installation of a flow orifice in the High Pressure Core Spray system and the replacement of piping the High Pressure Service Water system. The inspector verified proper implementation of fire protection/prevention controls.

No items of noncompliance or deviations were noted.

8. Exit Interview

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