

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

REGION III

Report No. 50-409/81-06

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: March 1-31, 1981

Inspectors: W. L. Forney

M. W. Branch

Approved By: R. F. Warnick, Chief
Projects Section 2B

B. Diorelli for
A. Diorelli for
B. Diorelli for

Inspection Summary

Inspection on March 1-31, 1981 (Report No. 50-409/81-06)

Areas Inspected: Routine resident inspection of licensee's Operational Safety Verification; Monthly Surveillance Observations, Monthly Maintenance Observation; Followup on Items of Noncompliance and Open Items; Followup on IE Bulletins and Circulars; Followup on Plant Scrams; Review of Plant Operations; and TMI Action Plan Items. The inspection involved a total of 230 inspector-hours onsite by two NRC inspectors including 12 inspector-hours onsite during off-shifts.

Results: Of the eight areas inspected, no items of noncompliance were noted in seven areas. One item of noncompliance was noted in the area of Plant Scrams (paragraph 8) failure to follow procedures.

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, Quality Assurance 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

- a. During the month of March 1981, the plant experienced two additional plant scrams caused by Operator errors. The Resident Inspectors have expressed their concern to site management and have requested that positive action be taken. Plant management is presently reviewing several areas in an attempt to determine if there is a common cause that could be contributing to the problem of operator errors.
- b. The Resident Inspectors expressed a concern of how the Control room positions are manned in regards to the licensed and non-licensed operators and the amount of operator errors. After discussion with L.P.M. and License Examiner of NRR, plant agreed to modify Administration Control Procedures to clearly specify how licensed operations are controlled.

3. Operational Safety Verification

The inspector observed control room operations, reviewed applicable logs and conducted discussions with control room operators during the month of March, 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 month of March 1981, the inspector walked down the accessible portions of the Alternate Core Spray 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:

(MR 528) PM on 1A Emergency Electrical Generator.
Repair to CRD Oil Seals.

Following completion of maintenance on the 1A Emergency Electrical Generator, 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 1A Service Water Diesel Pump and 1A Emergency Diesel Generator 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.

No items of noncompliance were noted.

6. 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.

79-23 (Potential failure of Emergency Diesel Generator Field Exciter Transformer)

81-01 (Surveillance of Mechanical Snubbers)

No items of noncompliance were noted.

7. IE Circular Followup

For the IE Circulars listed below, the inspector verified that the Circular was received by the licensee management, that a review for applicability was performed, and that if the circular were applicable to the facility, appropriate corrective actions were taken or were scheduled to be taken

80-02 (Nuclear Power Plant Staff work hours)

80-22 (Confirmation of Employee Qualifications)

No items of noncompliance noted.

8. Plant Scrams

Following the plant scrams on March 9, 1981 and March 10, 1981 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 operation on March 12, 1981.

The following items were noted by the inspectors during the investigation of the above plant scrams and are considered items of noncompliance:

- a. The reactor scram that occurred on March 9, 1981, was caused by an operator error that occurred while transferring electrical power from reserve feed to normal generator output feed. This error caused a loss of the 1B 480 Vac bus causing 1B Emergency Diesel Generator to start to supply power to 1B 480 Vac Emergency Bus.
- b. The reactor scram that occurred on March 10, 1981, was caused by an operator error of improperly maintaining reactor vessel water level causing a high water level scram.

Reactor scrams at La Crosse Boiling Water Reactor due to operator error continue to be a concern to the NRC and indicate that positive management action must be initiated immediately in order to correct the situation.

9. Review of Plant Operations

During the month of March 1981, the inspector reviewed the following activities:

a. Training

The inspector reviewed the licensee's Program for qualification of non-licensed Plant Personnel whose actions may affect Reactor Safety. This review consisted of direct questioning of plant personnel and of the Training Supervisor. The following items of concern were noted and identified to licensee for resolution and are considered unresolved item 50-409/81-06-01:

1. Licensee is committed to ANSI N18.1-1971 which requires a suitable training program be established to prepare non-licensed operators for their assignment. Present policy at La Crosse Boiling Water Reactor is to assign operators to the position of turbine operator, roving operator and reactor operator while they are still considered to be in a training status. This policy was discussed with plant management and they have committed to issuing a policy statement to the effect that after sufficient time of on-the-job-training had been received an acceptable candidate would no longer be considered a trainee but would be certified to be fully qualified to execute the

position for which he has been trained. However, while an operator is in a training status, (non-licensed condition) the trainee shall be under the direction of a qualified licensed person.

10. TMI Task Action Plan

- a. The inspector verified that the licensee took appropriate action to meet written commitments to NRR. This inspection completed those actions specified in TI 2515/42 Revision 2 and 2515/43 Revision 3 and a summary of the inspection as contained in the following Attachment "A" and those items that indicate additional inspection effort are summarized below.
1. Item I.C.1, this item has an undetermined completion date and will be verified after NRR completes review of licensee re-analysis of Inadequate Core Cooling, Transients and Accidents. This is an unresolved item 50-409/81-06-02.
 2. Item I.C.6, licensee's change to ACP's did not address the requirement for two operators to verify isolation on safety related components. This was identified in IE 50-409/81-02 and is considered to be an unresolved item as indicated in that report.
 3. Item II.E.4.2, Licensee has proposed not to adjust containment pressure setpoints (LAC 7230). This is considered unresolved item 50-409/81-06-C until NRR agrees with this position.
 4. Item II.F.1, La Crosse Boiling Water Reactor has submitted their present indication of containment pressure and level to NRR for review. Also licensee plans to install H₂ monitor for containment and has initiated FC 71-80-1. These² items will be considered unresolved item 50-409/81-06-04.
 5. Item II.K.3(22), La Crosse Boiling Water Reactor does not have a RCIC system and sent reply to NRR (LAC 7112). This item is unresolved item 50-409/81-06-05 and will remain open until NRR agrees that the intent of this item does not relate to a system that La Crosse Boiling Water Reactor does have.

11. Followup on Open Inspection Items (011)

- a. Closed (OII 79-07)^{1/} Revise QA Program. Licensee has submitted a Revised Quality Assurance Program Description to NRR in LAC 7107 dated August 28, 1980.
- b. Closed (OII 79-12)^{2/} Valve 78-28-006 removed from system but still shown on Plan Drawings and valve lineup sheets. Verified valve has been removed from Drawing 41-30 176 and from valve lineup sheet 23-13.

1/ IE Inspection Report No. 50-409/79-02.

2/ IE Inspection Report No. 50-409/79-22.

- c. Closed (OII 80-13-NC-1)^{3/} Failure of Security Guard to maintain Pistol qualifications. Plant will not assign any person that has failed requalifications to any position where this qualification is necessary.
- d. Closed (OII 81-01-NC-2)^{4/} Maintenance personnel violating numerous Radiological Procedures. Plant personnel have been reinstructed and plant will accomplish more frequent coverage of actual or Potential High Radiation work areas by Health Physics Personnel.

12. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, items of noncompliance, or deviations. Unresolved items disclosed during the inspection are discussed in Paragraphs 9 and 10.

13. 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.

Attachment A: Status of
TMI Task Action Plan Items

^{3/} IE Inspection Report No. 50-409/80-13.
^{4/} IE Inspection Report No. 50-409/81-01.

TASK	SUBJECT	REFERENCES	INSPECTION
I.A.1.1	Shift Technical Advisor Interim Staffing	NUREG-0578, Section 2.2.1.b; Draft ANS 3.1, dtd 12/6/79, NUREG 0660 Generic Ltr 10/30/79, NUREG 0737	This item was verified and closed in IE 80-01 by a review of Memo STAC 80-1 and as approved by NRR's, SER dtd 4/25/80.
I.A.1.1	STA Trained Per Lessons Learned, Cat "B"	NUREG-0737, Section 1.A.1.1	Verified that licensee has developed and implemented a qualification and training program as outlined in (LAC 6853 & 7296). It should be noted that licensee took exceptions to NUREG 0737 recommendations.
I.A.1.2	Shift Supervisor Responsibilities	NUREG-0578, Section 2.2.1.a	This item was verified and closed in IR 80-01 by a review of Memo DPC-84 and as approved by NRR's SER dtd 4/25/80.
I.A.1.3	Shift Manning	NUREG-0737, Pages 3-6 and 3-7, clarification Note* this is an update of previous requirements	Verified that licensee's Admin. Procedure ACP 2.9 issued 10/31/80 meets the requirements recommended in NUREG 0737 and IE Circular 80-02.
I.A.2.1	Modify Training	NUREG-0737, 3/28/80 ltr, paragraph A.2.C on pages 3-21 and 3-22	Verified that licensee has developed and implemented a training program that meets the requirements of paragraph A.2.C of 3/28/80 ltr from Denton to all power reactors. LACBWR presented this program to NRR in LAC 7059
I.C.1	Short Term Accident & Procedure Review	NUREG-0660, Task 1.C.1	This item was verified and Closed in IR 80-02 and 80-14.
I.C.1	Short Term Accident & Procedure Review	NUREG 0737	This item has an undetermined completion date and will be verified after NRR reviews licensee reanalysis of ICC, transients and accidents.

TASK	SUBJECT	REFERENCES	INSPECTION
I.C.2	Shift Relief/ Turnover	NUREG-0578 2.2.1.c	This item was verified and closed in IE 80-01 by a review of ACP 2.3 and as approved in NRR's, SER dtd 4/25/80.
I.C.3	Shift Supervisor	NUREG-0578, Section 2.2.1.a	This item was verified and closed in IR 80-01 by a review of Memo DPC-84 and interview with Shift Supervisors. Licensee position of Shift Supervisor was approved in NRR's SER dtd 4/25/80.
I.C.4	Control Room Access	NUREG-0578, Section 2.2.2.a	This item was verified and closed in IR 80-01 by a review of Memo DPC-83 and as approved in NRR's, SER dtd 4/25/80.
I.C.5	Procedure for Operating Experience Feedback	NUREG-0585, Appendix A Section 6; ltr to all operating reactor licensees from Eisenhut dtd 5/7/80	Verified that licensee have provided a method for operating experience feedback in ACP 2.10 and that this meets the requirements of NUREG-0585.
I.C.6	Verification of Operating Activities	NUREG-0585, Appendix A, Section 5; Clarification ltr of 9/5/80. NUREG 0660 Item 1.3.6.	Licensee's change to ACPs did not address the requirement for two operators to verify isolations on safety related components this was documented in Report 81-02 and is unresolved item 50-409/81-02-03.

TASK	SUBJECT	REFERENCES	INSPECTION
II.B.4	Training for mitigating core damage	NUREG-0737, Item 11.B.4 ltr of 3/28/80 paragraph A.2.C (2)	Verified that licensee has developed and implemented a training program for Mitigating Core Damage and this training program is discussed in memo to file T-5-N. Licensee has determined what sections of Enclosure (3) to Denton's 3/28/80 letter are applicable to LACBWR.
II.D.1	Relief & Safety Valve Test Requirements	NUREG-0737	No IE Action (NRR verified that licensee is committed to test program being conducted by GE BWR owner group see SER dtd 4/25/80.)
II.E.4.2	Containment Isolation Dependability	NUREG-0737	LACBWR operates with the four 20" purge valves 90° open this has been allowed by SER dtd 12/12/80. Inspector verified that licensee installed Environmental Qualified Solenoids on the actuator for these valves.
II.F.2	Identification of and Recovery from Conditions Leading to Inadequate Core Cooling	NUREG-0578, Section 2.1.3.b; IE Bulletin 79-05C/06C, item 5; NSSS Guidelines, 9/13/79 ltr, 10/30/79 ltr	This item is for PWR only and is NA for LACBWR.
II.K.3	B&O Task Force	NUREG-0737, Item II.K.3(22)	LACBWR has taken the position that this item is N/A because they do not have a RCIC system (LAC 7112 dtd 9/3/80) this position has been discussed with LPM of NRR and he agrees with LACBWR's position. This item will remain open until NRR sends written SER to licensee.
III.D.1.1	Primary Coolant Outside Containment	NUREG-0737 10/30/79 ltr, 9/13/79 ltr, NUREG 0578	This item was verified and closed in IR 80-01 by verifying that a periodic leak test procedure had been established for the component cooling water system and off-gas system. NRR identified systems in SER dtd 4/25/80.

<u>TASK</u>	<u>SUBJECT</u>	<u>REFERENCES</u>	<u>INSPECTION</u>
II.B.1	Reactor Coolant System Vents	NUREG-0737	No I&E action required. Licensee submitted response in (LAC 6616 & 6680) NRR accepted position in SER dtd 4/25/80. I&E did verify adequate procedures were available and documented this in IR 80-01.
II.B.2	Plant Shielding	NUREG-0737	NO I&E action required on design review item 1, NUREG-0737.
II.D.3	Direct Indication of Relief and Safety Valve Positions	NUREG-0578, Section 2.1.3, ltr of 10/30/79	This item was verified and closed in IR 80-01 by verification of FC-64-80-1. NRR approved design concept in SER SER dtd 4/25/80.
II.E.1.2	Auxiliary Feedwater System Automatic Initiation (PWR)	NUREG-0578, Section 2.1.7.a, ltr of 10/30/79, NUREG-0737	N/A at LACBWR (PWR's only)
II.E.1.2	Auxiliary Feedwater System Automatic Initiation (PWR)	NUREG-0578, Section 2.1.7.a, NUREG-0737	N/A at LACBWR (PWR's only)
II.E.1.2	Auxiliary Feedwater System Flow Indication (PWR)	NUREG-0578, Section 2.1.7.b, ltr of 10/30/79, NUREG-0737	N/A at LACBWR (PWR's only)
II.E.1.2	Auxiliary Feedwater System Flow Indication (PWR)	NUREG-0578, Section 2.1.7.b, NUREG-0737	N/A at LACBWR (PWR's only)

TASK	SUBJECT	REFERENCES	INSPECTION
II.E.3.a	Emergency Power for Pressurizer Heaters	NUREG-0578, Section 2.1.1, ltr of 10/30/79	N/A at LACBWR (PWR's only)
III.E.4.1	Dedicated Hydrogen Penetrations	NUREG-0737	N/A at LACBWR. LACBWR's position is that this item is N/A (LAC 6616 & 6680). NRR accepted this position in SER dtd 4/25/80.
II.E.4.2	Containment Isolation Dependability	NUREG-0578, Section 2.1.4; Standard Review Plan 6.2.4, ltr of 10/30/79	Licensee's response to this item is contained in (LAC 6769 & 6853) NRR accepted this response in SER dtd 4/25/80 & I&E verified the modifications were complete see IR 80-01. Licensee has proposed not to adjust containment pressure set points (LAC 7320) will not close until NRR agrees.
II.F.1	Additional Accident Monitoring Instrumentation	NUREG-0578 clarifying ltr of 10/30/79, Section 2.1.9, NUREG 0737	LACBWR has submitted their present indications of containment pressure and level to NRR for review (LAC 6616 & 6680) will verify after NRR reply. Licensee has initiated FC 71-80-1 to install containment H ₂ monitor will verify after installation.
II.G.1	Power Supplies for Pressurizer Relief Valves, Block Valves & Level Indication (PWR)	NUREG-0578, Section 2.1.1, ltr of 10/30/79, NUREG-0737	This item as stated is NA for LACBWR (PWR only) however, NRR did relate this item to the Manual Depressurization System and Reactor level Detectors and accepted existing system in SER dtd 4/25/80.
II.K.3	B&O Task Force Items	NUREG-0737, Item 9	N/A at LACBWR (applies only to Westinghouse Facilities).