



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

DAIRYLAND POWER COÖPERATIVE

LA CROSSE BOILING WATER REACTOR

DOCKET NO. 50-409

AMENDMENT TO PROVISIONAL OPERATING LICENSE

Amendment No. 41
License No. DPP-45

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Dairyland Power Cooperative (the licensee) dated December 19, 1983, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public; and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 2.C(2) of Provisional Operating License No. DPR-45 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A issued October 31, 1969, with Authorization No. DPRA-6, as revised through Amendment No. 41, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

for Thomas V. Weinbach
John A. Zwolinski, Chief
Operating Reactors Branch #5
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 28, 1985.

ATTACHMENT TO LICENSE AMENDMENT NO. 41

PROVISIONAL OPERATING LICENSE NO. DPR-45

DOCKET NO. 50-409

Revise Appendix A Technical Specifications by adding the enclosed pages identified below. The new pages contain the the captioned amendment numbers and marginal lines which indicate the area of change.

REMOVE

1

29a

5-6

INSERT

1

29a, 29b

5-6

1. SITE

1.1 LOCATION

The La Crosse Boiling Water Reactor (LACBWR) is located on the east bank of the Mississippi River, approximately 19 miles south of the city of La Crosse, Wisconsin, and 1 mile south of the village of Genoa, Wisconsin.

1.2 EXCLUSION AND RESTRICTED AREAS

1.2.1 The distance from the centerline of the reactor building to the boundary of the exclusion area, as defined in 10 CFR 100, shall be at least 1109 feet. Any changes in occupancy of the exclusion area which lead to residential uses shall be noticed to the NRC.

1.3 PRINCIPAL ACTIVITIES

The principal activities carried on within the exclusion area shall be the operation of the reactor and associated power-generating equipment, and the operation of conventional steam-electric plants and electrical transmission switching and distribution centers, all of which shall be located within the site boundary.

2. DESIGN AND PERFORMANCE REQUIREMENTS

2.1 REACTOR BUILDING

2.1.1 Containment Vessel

2.1.1.1 The containment vessel shall be capable of containing an internal pressure of 52 psig at 280°F, and it shall be capable of withstanding an external-over-internal pressure of 0.5 psi.

2.1.1.2 The leakage rate from the containment vessel shall correspond to a leakage rate that, per 24-hr. period, does not exceed 0.1 percent by weight of a steam-air mixture at 273°F, 28.5 psig, and a steam-to-initial-air ratio of 2.2.

4.2.1.9 The containment building shall be isolated whenever the spent fuel storage well contains irradiated fuel which has decayed less than 43* days after exposure in a critical reactor and a shipping cask for irradiated fuel is being moved by the crane on the 701 foot level or located within one cask length of the top of the spent fuel storage well or is within the spent fuel storage well. During cask movement near or at the FESW the water level in the FESW must be * least 16 ft above the top of the fuel storage rack (no more than 7 feet below the top of the FESW).

4.2.2. Reactor Vessel, Coolant, and Auxiliary Systems

4.2.2.1 Additional penetrations to the systems containing reactor coolant shall be designed, manufactured, and tested according to the provisions of the ASME Boiler and Pressure Vessel Code and the ASA Code for Pressure Piping applicable as of June 1962. These additional penetrations shall be limited to instrument connections and piping connections, the latter being no larger than 1-in. inside diameter.

4.2.2.2 The reactor coolant shall be light water and shall conform to the following requirements.

CONDITION 1	Normal Limit	Maximum Limit
Chloride concentration	.2 ppm	.5 ppm
pH	5.3 - 8.6	NA
Conductivity	3 μ mho/cm	10 μ mho/cm

The time above 3 μ mho/cm at 70°F - 80°F and .2ppm chloride should not exceed 72 hours per incident, nor 2 weeks per year. When the single incident normal limit is exceeded an orderly shutdown shall be initiated within 4 hours unless returned to within the limits. When the maximum conductivity or chloride limits are exceeded an orderly shutdown should be initiated immediately. If the pH is outside the limits for a period of greater than 72 hours an orderly shutdown shall be initiated.

CONDITION 2 & 3	Normal Limit	Maximum Limit
Chloride concentration	.1 ppm	NA
pH	5.3 - 8.6	NA
Conductivity	5 μ mho/cm	NA

*43 days for off loading less than one half of the core, i.e. less than 36 fuel elements. 51 days for off loading more than 36 fuel elements.

The time above 5 umhos/cm at 70°F to 80°F and .1 ppm chloride concentration is restricted to 48 hours for any single occurrence during Condition 2. When this time limit in Condition 2 is exceeded the reactor shall be brought to the hot shutdown condition (Condition 3) until the limits are restored. If the limits can not be restored in an additional 7 days, the reactor shall be taken to the cold shutdown condition (Condition 4)

CONDITION 4 & 5	Normal Limit
Chloride concentration	.5 ppm
pH	5.3 - 8.6
Conductivity	10 umho/cm

The primary system chemistry parameters defined in this section shall be determined at least once every 72 hours in Condition 1, 2 & 3 and at least once every 7 days in Condition 4 and 5.

4.2.2.3 Deleted

5.2.3 The exterior surfaces of the LACBWR ventilation stack and the smoke stack of the conventional steam power generating station, Grade 3, adjacent to the LACBWR plant shall be inspected for structural integrity at an interval no longer than 5 years following the initial construction inspection, and at subsequent intervals no longer than 5 years apart.

5.2.4 The reactor vessel shall be hydrostatically tested at 1400 psig after any of its gasketed joints have been opened and resealed. All hydrostatic tests shall be performed with the vessel at a temperature no lower than that specified in Section 5.2.2.4.

5.2.5 The forced circulation system controls and automatically-operated valves shall be tested for proper operation at each refueling shutdown with test intervals not to exceed 18 months.

5.2.6 The shutdown condenser system control valves shall be tested at least quarterly to demonstrate their operability. The integrated system shall be tested for proper operation at each refueling shutdown with test intervals not to exceed 18 months. In addition, the condenser tube bundle shall be pressurized to greater than 1250 psig and tested for leakage at each refueling shutdown.

5.2.7 The high-pressure core spray system controls and remotely-operated valves shall be tested at each cold shutdown but not required more often than every 92 days to demonstrate their operability. The integrated system shall be tested for proper operation at each refueling shutdown with test intervals not to exceed 18 months. This functional test shall include a determination of the differential pressure between the coolant supply line and the reactor vessel.

5.2.8 The low-pressure coolant injection system controls and remotely-operated valves shall be tested at each cold shutdown but not required more often than every 92 days to demonstrate their operability. The integrated system shall be tested for proper operation at each refueling shutdown with test intervals not to exceed 18 months, with the supply line to the reactor vessel isolated and the coolant flow directed through the system and back to the river. In addition, a test shall be performed at each refueling shutdown with test intervals not to exceed 18 months to demonstrate that the check valves in the system are not stuck in a closed position.

5.2.9 The boron-injection system controls and the remotely-operated valves shall be tested for proper operation during cold shutdowns but not required more often than every 92 days.

5.2.10 The door seals on the containment personnel and emergency airlocks will be visually inspected for degradation every 72 hours.

5.2.11 The door seals on the containment personnel and emergency airlocks will be replaced periodically in accordance with manufacturers recommendations.