

DAIRYLAND POWER COOPERATIVE

La Crosse, Wisconsin

54601

November 20, 1978

In reply, please
refer to LAC-6004

DOCKET NO. 50-409

Director of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

SUBJECT: DAIRYLAND POWER COOPERATIVE
LA CROSSE BOILING WATER REACTOR (LACBWR)
PROVISIONAL OPERATING LICENSE NO. DPR-45
PROPOSED MODIFICATION - SPENT FUEL STORAGE

References: (1) NRC Letter, Ziemann to Madgett,
dated September 28, 1978.
(2) DPC Letter, LAC-5519, Madgett to
Director of Nuclear Reactor Regulation,
dated October 26, 1978.

Gentlemen:

Enclosed with this letter is a response to Question No. 9 of
Enclosure 1 - Questions for the La Crosse Spent Fuel Pool Mod-
ification submitted to us by Reference (1).

Responses to other questions contained in the enclosure were
previously submitted to you by Reference (2).

If there are any questions concerning this submittal, please
contact us.

Very truly yours,

DAIRYLAND POWER COOPERATIVE

Frank Linder, General Manager

FL:NLH:af

cc: (See attached list).

Director of Nuclear Reactor Regulation
Washington, D. C. 20555

LAC-6004
November 20, 1978

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NRC QUESTION

9. *Provide a discussion of the impact of the pool modification on pool leakage. Include in your discussion the pool leakage at different heights of water in the pool, the leakage expected after the pool modification and the capability of the radwaste system to process this water.*

DPC RESPONSE:

The impact of the pool modification on pool leakage is acceptable. By actual measurements of elapsed time during a given change in storage pool water level, leak rates were calculated with the water level at elevation 680 feet MSL (present water level) and at elevation 700 feet MSL (maximum water level). The respective leakage rates were determined to be 5.6 gallons per hour and 11.1 gallons per hour.

No increase in the leak rate of the fuel storage pool is anticipated for the next 4-5 years since the lower tier storage racks would provide sufficient storage capacity during that period of time.

When the upper tier is installed and used for storage of irradiated fuel, it is anticipated that the pool water level will be raised sufficiently to provide shielding above the top of the tier. It is estimated that this increase in water level may be approximately 15 feet above the present normal water level. The leak rate then would be expected to be 7-10 gallons per hour.

Water leaking from the pool is only moderately contaminated. This leakage contributes less than 10% of the monthly average volume of liquid rad waste processed. An increased leak rate from the storage pool as the result of a higher water level will not reduce the capability of the radwaste system to process the water.