

September 7, 1982

In reply, please  
refer to LAC-8553

DOCKET NO. 50-409

Director of Nuclear Reactor Regulation  
ATTN: Mr. Dennis M. Crutchfield, Chief  
Operating Reactors Branch #5  
Division of Operating Reactors  
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  
REPAIRS TO LACBWR FUEL ELEMENT STORAGE WELL LINER

- References:
- (1) DPC Summary Report of Repairs to the LACBWR Fuel Element Storage Well, LAC-TR-092, dated February 10, 1981
  - (2) "Repairs to Fuel Element Storage Well Liner at La Crosse Boiling Water Reactor," Final Report, Southwest Research Institute Project 17-6009, dated November, 1980
  - (3) Safety Evaluation Report by NRC Supporting Facility Modification to Increase the Capacity of the Spent Fuel Storage Pool, LACBWR Docket No. 50-409, dated July 13, 1979

Gentlemen:

Enclosed for your information is DPC summary report LAC-TR-092 (Reference 1) describing the repair work instituted at LACBWR to reduce leaks in the liner of the Fuel Element Storage Well (FESW). The submittal of this report is in response to the request contained in the NRC Safety Evaluation Report of Reference 3 above.

Leak repair attempts have been made in the past using welding techniques, but these were generally of limited success. More recently, because of the residence of stored irradiated fuel in the small 11' x 11' square FESW, and due to the inaccessibility of liner surfaces for welding, additional methods of repair were evaluated and an epoxy injection technique was undertaken. A review of alternate repair methods indicated that epoxy injection

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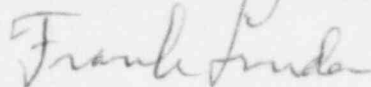
from the back concrete-side of the liner held the best probability for improving the leak tightness of the existing FESW stainless steel liner. The objective of the effort was to reduce the accumulation of plant waste water resulting from liner leakage and to reduce anticipated leak rate increases to values below historical rate increases observed over the past 10 years. The majority of the work was accomplished prior to and during the installation of new double-tiered fuel storage in racks at LACBWR in June 1980. Measurements and data have been taken over a period of several months to determine the effectiveness of this repair work. The FESW leakage was reduced by approximately 85% from 14.1 gallons per hour to 2.04 gallons per hour, as measured to February 1981, and the work is considered to be concluded as of that date. The measured leakage in the recent past has been 1.2 gallons per hour, with the FESW full of water. Further details of the work are reported in Reference 2.

The general methods used and the results of the work are contained in the attached summary report, LAC-TR-092. Continued surveillance of the leakage problem has been undertaken in an effort to minimize any deleterious effects upon structures, systems or components.

If you have any questions regarding this submittal, please contact us at any time.

Very truly yours,

DAIRYLAND POWER COOPERATIVE



Frank Linder, General Manager

FL:CWA:dh

Attachment

cc - NRC Resident Inspector  
J. G. Keppler, Reg. Admin., Reg. III