

FRANK LINDER
General Manager

September 13, 1982

In reply please
refer to LAC-8585

Docket No. 50-409

Mr. Jerome Saltzman, Assistant Director
State and License Relations
Office of State Programs
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
Property Insurance Requirements

Reference: (1) NRC letter Saltzman to Linder
dated August 12, 1982

Dear Mr. Saltzman:

Your letter (Reference 1) acknowledged receipt of our request for exemption to the requirements of 10 CFR 50.54(w) for the La Crosse reactor and indicated that additional information is required to support our request.

Our response to your questions follows:

1. You indicate as the third basis for your exemption request that "the existing insurance is adequate to fully decontaminate and clean up LACBWR in the event of a major accident." Please cite studies that support or provide the basis for this assertion beyond what was stated in the letter.

As a corollary to the above assertion, in your fourth point you indicate that decontamination expenses that could be expected from an accident at LACBWR would be proportionately less than those at a large LWR. Again, please cite studies that support this.

Detailed studies to support our assertion that existing insurance is adequate to fully decontaminate and clean up LACBWR in the event of a major accident have not been undertaken.

In an internal technical report, we performed a study of the differences in off-site doses to the public by comparison of the lower radionuclide inventory from a smaller light water reactor to the higher radionuclide inventory of a larger 3200 MWT light water reactor (about the same size as TMI-2) to develop a logical rationale for determining the necessary prompt public notification system for the smaller reactor scaled-down commensurate with its lower potential public hazard.

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the original for the time
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Mr. Jerome Saltzman, Assistant Director
Page 2
September 13, 1982

In this report, LACBWR core inventory data was compared with values in the Manual of Protective Action Guides and Protective Actions for Nuclear Incidents (USEPA 1975) ratioing values to account for thermal power differences since the EPA document lists inventories of core fission products for a 3200 MWT light water reactor derived from WASH 1400. The LACBWR fission product inventory was observed to be approximately 29.5 times less than the larger BWR inventory at an average core life of 10,000 MWD/T.

The importance of this ratio for purposes of this response is that it can be used also to represent the ratio of potential contamination and thus decontamination effort upon release of curies due to an accident. While this ratioing represents a simple extrapolation it is possible that a comparison of accidents would show that the ratio of fission products released from a much larger reactor would be higher than 29.5. By accepting the 29.5 to 1 ratio therefore as an indicator of potential decontamination and applying TMI-2's clean up costs as 1 billion dollars, a conservative estimate of LACBWR's clean-up costs would be approximately 34 million dollars.

We contend that TMI's clean-up costs have been unnecessarily inflated due to excessive regulatory requirements, therefore more expeditious clean-up efforts would surely be less costly.

Further support for our argument that anticipated reduced clean-up costs at LACBWR could be achieved is obtained through a comparison of bulk materials, areas and volumes of a large PWR containment and LACBWR's. LACBWR contains only one-tenth the volume of bulk concrete as that of a large PWR containment. The containment inner surface area, most likely to require decontamination, is approximately one-third that of a large PWR. The containment inner volume, most likely subject to flooding in the event of a LOCA and post accident cooling is approximately one-seventh that of a large PWR. Since LACBWR only requires flooding to core mid-plane, another reduction in containment volume can be made for the consequences of post accident flooding.

It was noted in the EPRI Journal (June 1980 issue) that the estimate at that time to decontaminate and restore TMI-2 to operating condition was 400 million dollars. In our view, restoration costs would constitute the major portion of the post accident effort. We have stated that in the event of a major accident at LACBWR, the plant would probably not be returned to service.

Another argument for reduced property damage insurance coverage can be taken from examples presented by Dr. John Long in NUREG 0891 - "Nuclear Property Insurance: Status and Outlook" on page xiii. To quote ". . . given the historic pattern of property losses generally, most of the losses are unlikely to exceed 45 percent of the value of the property insured." At the present time total value at the plant site is \$69,680,000. Thus, 45 percent of site value would equal \$31,356,000.

We have examined decommissioning studies for Monticello and Prairie Island Nuclear Generating Plants (Nuclear Energy Services, Inc. Document Nos. 81A0622 and 81A0623 respectively). In the reports, summaries of decommissioning cost estimates prompt

Mr. Jerome Saltzman, Assistant Director
Page 3
September 13, 1982

removal/dismantling estimated costs were 54.6 million dollars and 66.5 million dollars.

In a recently published Department of Energy report (DOE/EIA - 03561 "Projected Costs of Electricity from Nuclear and Coal-Fired Plants") decommissioning costs were projected to range from \$135/KWe to \$305/KWe. Thus the high side estimate for LACBWR could be as low as 15 million dollars.

In the preparation and recent presentation to the NRC staff of a "Program Plan to Evaluate Accident Sequence Probabilities at the La Crosse Boiling Water Reactor" Mr. Saul Levine of NUS Corporation and Dr. Norman Rasmussen concluded as follows, "The judgment of Levine and Rasmussen is that the probability of a core melt and containment failure is likely to be relatively low." They also commented on backfitting as follows, "For some reactors, particularly those with a low power level, and an associated low radionuclide inventory, the imposition of backfits, developed to meet requirements for large power reactors as a means of achieving low public risk, may be of questionable validity." The value of this argument to us is that lumping LACBWR into the same property damage insurance requirements as a large reactor is also of questionable validity.

Based on their preliminary conclusions that the consequences of a severe accident would be negligible, we can find no merit in providing costly excessive property damage insurance for the smallest commercial U.S. reactor.

2. With respect to your seventh point on the cost of additional insurance required by 10 CFR 50.54(w), did Dairyland attempt to negotiate premiums so that they would reflect Dairyland's perceived risk of potential damage from an accident at the La Crosse plant? Also, did Dairyland contact both ANI and NEIL-II for the \$67 million in excess coverage? If so, what were the rates quoted by each carrier?

We did not attempt to negotiate premiums. In June of this year we did contact ANI/MAERP for premium rates for the \$67 million in excess coverage. The quoted rate then was \$3,000 per million dollars coverage.

We were advised that the pool planned to have an additional \$40 million available by the end of the year which would then bring the primary coverage to \$500 million.

The quoted premiums for various levels were as follows:

<u>Alternate 1</u>	<u>Coverage</u>	<u>Premium</u>
Basic Coverage - Site Value	\$ 55,000,000	\$201,850
Excess Decontamination	<u>55,000,000</u>	<u>70,400</u>
Total	\$110,000,000	\$272,250

Mr. Jerome Saltzman, Assistant Director
Page 4
September 13, 1982

<u>Alternate 2</u>	<u>Coverage</u>	<u>Premium</u>
Basic Coverage - Site Value	\$ 55,000,000	\$201,850
Excess Decontamination	<u>110,000,000</u>	<u>105,600</u>
Total	\$165,000,000	\$307,450

<u>Alternate 3</u>	<u>Coverage</u>	<u>Premium</u>
Basic Coverage - Site Value	\$ 55,000,000	\$201,850
Excess Decontamination	<u>165,000,000</u>	<u>140,800</u>
Total	\$220,000,000	\$342,650

<u>Alternate 4</u>	<u>Coverage</u>	<u>Premium</u>
Basic Coverage - Site Value	\$ 55,000,000	\$201,850
Excess Decontamination	<u>220,000,000</u>	<u>175,934</u>
Total	\$275,000,000	\$377,784

3. Has Dairyland evaluated or attempted to secure equivalent amounts of protection other than insurance as provided by 10 CFR 50.54(w)? Such protection could include secured lines of credit, letters of credit, surety bonds or other instruments.

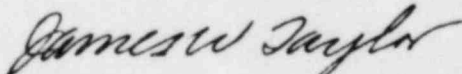
We have not attempted to secure equivalent amounts of protection other than insurance.

As of September 1, 1982, we have bound insurance in the amount of \$61,812,000 which represents 90 percent of the total value at the site.

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

Very truly yours,

DAIRYLAND POWER COOPERATIVE


for Frank Linder, General Manager

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LAC-8585

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