



DAIRYLAND POWER
COOPERATIVE

February 28, 2007

In reply, please refer to LAC-13973

DOCKET NO. 50-409

Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, DC 20555

SUBJECT: Dairyland Power Cooperative
La Crosse Boiling Water Reactor
Possession-Only License No. DPR-45
Annual Radioactive Effluent Report and
Radiological Environmental Monitoring Report

REFERENCES: (1) DPC Letter, Berg to Document Control Desk, dated February 28, 2007

Our referenced letter transmitted to you the Radioactive Effluent Report and Radiological Environmental Monitoring Report for the La Crosse Boiling Water Reactor (LACBWR) for 2006. The Radiological Environmental Monitoring Report contained incomplete information in Section B, "Radiological Environmental Monitoring Report," as pages 2-5 were inadvertently omitted. These pages are enclosed.

Please insert pages 2-5 into Section B of the "Radiological Environmental Monitoring Report."

If you have any questions, please contact us.

Sincerely,

DAIRYLAND POWER COOPERATIVE



Roger E. Christians, Plant Manager

REC:LLN:tco

Enclosures

cc/enc: Peter Lee, Ph.D., NRC Reg. III, Decommissioning Branch
Kristina Banovac, NRC Project Manager
Don Hendrikse, Wisc. Div. of Health

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1.0 SAMPLE COLLECTION

Environmental samples are collected from the area surrounding LACBWR at the frequencies outlined in the ODCM. A series of figures and tables are included in this report to better show LACBWR's environmental program.

FIGURE 1 This map includes the plant boundary, roads, other generation plants, and the relationship of the plant to the nearest local community.

FIGURE 2 This map shows the location of LACBWR's permanent environmental monitoring stations.

FIGURES 3&4 These maps show the location of LACBWR's TLDs.

TABLE 5 This table shows the sampling frequency of the various environmental samples and the analyses performed on these samples

TABLE 6 This table shows the permanent monitoring stations used in LACBWR's environmental program.

TABLE 7 This table shows the TLD locations.

TABLE 8 This table shows the number of various samples collected and analyzed during 2006.

2.0 RESULTS OF THE 2006 RADIO-ENVIRONMENTAL MONITORING SURVEYS

During 2006, activity levels in the local environment were normal, indicating no significant plant attributed radioactivity.

2.1 PENETRATING RADIATION

The environmental penetrating radiation dose is measured by thermoluminescent dosimeters consisting of four lithium fluoride (LiF) chips. These TLD's are changed on a quarterly basis and are sent to an outside contractor for reading. The TLD results for 2006 are shown on Table 9.

2.2 AIR PARTICULATE

Air samples are collected continuously from various sites (see Table 6) around LACBWR. An air sampler is also located 18 miles north of the plant in La Crosse, Wisconsin, to act as a control station.

Particulate air samples are collected at the rate of approximately 30-60 lpm with a Gelman Air Sampler. The air filter consists of a glass fiber filter with an associated pore size of approximately 0.45 μm . The particulate filters are analyzed weekly for gross beta activity with an internal proportional counter, and the monthly particulate composites are gamma analyzed for individual isotopic concentration.

TABLE 10 This table shows the weekly gross beta gamma activity concentration from the air particulate filters.

TABLE 11 This table shows the composite air particulate isotopic analysis.

Comparison between the control station at La Crosse and the other stations near LACBWR indicate that there was no significant plant attributable airborne particulate activity.

2.3 RIVER WATER

River water is collected monthly. River water samples above, at, and below the plant site are collected and are gamma analyzed for isotopic concentration. The river water gamma isotopic analysis results are shown in Table 12. The results indicate that there is insignificant plant-attributable radionuclides in the river water.

2.4 SEDIMENT SAMPLES

Sediment samples were collected twice per year above, at, and below the plant outfall. These samples were gamma analyzed and these results appear on Table 13. They indicated that small amounts of plant attributed radionuclides have accumulated in river sediments near the outfall. The amount of radionuclide in this sediment has been declining significantly since plant shutdown.

2.5 FISH

Fish samples were collected quarterly above and below the plant discharge. The results of gamma spectral analysis of edible portions of fish samples appear in Table 14. There has been no significant accumulation of plant attributed radionuclides in fish in the vicinity of LACBWR.

3.0 CONCLUSIONS

All environmental samples collected and analyzed during 2006 exhibited no significant contribution from LACBWR.

4.0 INTERLABORATORY COMPARISON PROGRAM RESULTS

During 2006, interlaboratory comparison samples were obtained from an outside contractor. The equipment used to analyze the environmental samples was tested against the contractors' results. The following is the result of this comparison.

ANALYSIS	LACBWR RESULTS	CONTRACTOR RESULTS	RATIO
GROSS BETA	181 pCi	194 pCi	0.93
GROSS ALPHA	46.8 pCi	65 pCi	0.72
Ce-141	175 pCi	182 pCi	0.96
Cr-51	272 pCi	268 pCi	1.01
Cs-134	78 pCi	91 pCi	0.86
Cs-137	150 pCi	147 pCi	1.02
Co-58	51 pCi	51.8 pCi	0.98
Mn-54	73 pCi	68.6 pCi	1.06
Fe-59	53 pCi	49.3 pCi	1.08
Zn-65	114 pCi	101 pCi	1.13
Co-60	176 pCi	174 pCi	1.01
H-3	15500 pCi/ℓ	14800 pCi/ℓ	1.05