

WILLIAM L. BERG
President and CEO



DAIRYLAND POWER
C O O P E R A T I V E

March 19, 2008

In reply, please refer to LAC-14031

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
Radiological Environmental Monitoring Report

REFERENCES: (1) DPC Letter, Berg to Document Control Desk, dated February 25, 2008

Our referenced letter transmitted to you, "Radioactive Effluent Report and Radiological Environmental Monitoring Report" for the La Crosse Boiling Water Reactor (LACBWR) for 2007 has been updated. The Radiological Environmental Monitoring Report contained incomplete data in Section A as contractor results had not yet been received. We now have these results and have completed the tables on pages 7, 8, 9 and 10. Also updated is Section 8.0, page 13.

Please remove the original pages 7, 8, 9, 10 and 13 from your copy of the Radiological Environmental Monitoring Report and replace with the new pages enclosed.

If you have any questions, please contact us.

Sincerely,

DAIRYLAND POWER COOPERATIVE



William L. Berg, President & CEO

WLB: LLN: two

Enclosure

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

A Touchstone Energy® Cooperative 

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EFFLUENT AND WASTE DISPOSAL REPORT - (cont'd)

TABLE 1A

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT 2007

GASEOUS EFFLUENTS – SUMMATION OF ALL RELEASES

		UNIT	QTR	QTR	QTR	QTR	TOTAL
A. FISSION & ACTIVATION GASES							
1.	TOTAL RELEASE	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2.	AVERAGE RELEASE RATE FOR PERIOD	μCi/Sec	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
B. IODINE I-131 - No longer analyzed for.							
C. PARTICULATES							
1.	PARTICULATES WITH HALF-LIVES > 8 DAYS	Ci	3.90E-06	6.11E-06	1.11E-06	4.63E-07	1.16E-05
2.	AVERAGE RELEASE RATE FOR PERIOD	μCi/Sec	5.01E-07	7.77E-07	1.40E-07	5.82E-08	
3.	GROSS ALPHA RADIOACTIVITY	Ci	1.18E-06	1.41E-07	1.50E-07	2.10E-08	1.49E-06
D. TRITIUM							
1.	TOTAL RELEASE	Ci	3.20E-02	1.48E-02	9.39E-03	8.82E-03	6.50E-02
2.	AVERAGE RELEASE RATE FOR PERIOD	μCi/Sec	4.12E-03	1.88E-03	1.18E-03	1.11E-03	
E. PERCENTAGE OF ODCM DOSE LIMITS FOR GASEOUS EFFLUENT RELEASES							
			QTR	QTR	QTR	QTR	YEARLY
1.	NOBLE GAS RELEASE						
	GAMMA	%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	BETA	%	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2.	H-3 AND ALL RADIONUCLIDES IN PARTICULATE FORM WITH HALF-LIVES GREATER THAN 8 DAYS						
	GAMMA (Highest Organ)	%	2.74E-04	7.70E-04	3.65E-04	1.02E-04	7.20E-04

EFFLUENT AND WASTE DISPOSAL REPORT - (cont'd)

TABLE 1B

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT 2007

GASEOUS EFFLUENTS – ELEVATED RELEASE

		CONTINUOUS MODE					
		UNIT	QTR	QTR	QTR	QTR	TOTAL
NUCLIDES RELEASED							
1.	FISSION GASES						
	KRYPTON-85	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	TOTAL FOR PERIOD	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2.	IODINE I-131 - Analysis no longer required.						
3.	PARTICULATES						
	STRONTIUM-90	Ci	8.60E-08	4.50E-07	2.85E-07	8.20E-08	9.03E-07
	CESIUM-134	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	CESIUM-137	Ci	1.32E-06	5.02E-06	6.60E-07	0.00E+00	7.00E-06
	COBALT-60	Ci	2.49E-06	6.36E-07	1.67E-07	3.81E-07	3.67E-06
		Ci					
		Ci					
		Ci					
		Ci					
		Ci					
		Ci					
	TOTALS	Ci	3.90E-06	6.11E-06	1.11E-06	4.63E-07	1.16E-05

EFFLUENT AND WASTE DISPOSAL REPORT - (cont'd)

TABLE 2A

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT 2007

LIQUID EFFLUENTS – SUMMATION OF ALL RELEASES

		UNIT	QTR	QTR	QTR	QTR	TOTAL
A	FISSION & ACTIVATION PRODUCTS						
1.	TOTAL RELEASE (NOT INCL. TRITIUM, GASES, ALPHA)	Ci	1.70E-02	1.56E-01	7.21E-02	1.90E-02	2.65E-01
2.	AVERAGE DILUTED CONCENTRATION DURING PERIOD	μCi/ml	5.90E-09	3.65E-08	2.21E-08	1.96E-8	
B.	TRITIUM						
1.	TOTAL RELEASE	Ci	9.31E-03	3.26E-03	2.45E-03	1.10E-03	1.61E-02
	AVERAGE DILUTED CONCENTRATION DURING PERIOD	μCi/ml	3.23E-09	7.62E-10	7.52E-10	1.13E-09	
C.	DISSOLVED AND ENTRAINED GASES						
1.	TOTAL RELEASE	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2.	AVERAGE DILUTED CONCENTRATION DURING PERIOD	μCi/ml	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
D.	GROSS ALPHA RADIOACTIVITY						
1.	TOTAL RELEASE	Ci	4.58E-05	1.10E-04	7.20E-05	5.72E-05	2.85E-04
E.	VOLUME OF WASTE RELEASED (PRIOR TO DILUTION)						
		Liters	1.63E+05	8.38E+04	6.36E+04	2.23E+04	3.33E+05
F.	VOLUME OF DILUTION WATER USED DURING PERIOD						
		Liters	2.88E+09	4.29E+09	3.26E+09	9.73E+08	1.14E+10
G.	PERCENTAGE OF ODCM LIMITS FOR LIQUID RELEASES						
			QTR	QTR	QTR	QTR	YEARLY
	HIGHEST ORGAN	%	7.93	45.64	16.13	5.41	37.55
	WHOLE BODY	%	16.7	95.82	33.91	11.39	78.91

EFFLUENT AND WASTE DISPOSAL REPORT - (cont'd)

TABLE 2B

EFFLUENT AND WASTE DISPOSAL ANNUAL REPORT 2007

LIQUID EFFLUENTS

NUCLIDES RELEASED	UNIT	QTR	QTR	QTR	QTR
MANGANESE-54	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
IRON-55	Ci	0.00E+00	8.33E-05	3.50E-05	3.19E-06
COBALT-60	Ci	1.64E-03	2.27E-03	1.04E-03	3.01E-04
STRONTIUM-90	Ci	1.63E-04	5.83E-04	5.41E-04	2.17E-04
CESIUM-134	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CESIUM-137	Ci	1.52E-02	1.53E-01	7.04E-02	1.87E-02
TOTAL FOR PERIOD (ABOVE)	Ci	1.70E-02	1.56E-01	7.21E-02	1.93E-02
KRYPTON-85	Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00

8.0 OFFSITE DOSE CALCULATIONS SUMMARY AND CONCLUSIONS:

a. Gaseous Effluent Releases

The maximum quarterly offsite gamma dose due to noble gases was 0.00 mRad. The cumulative 2007 annual offsite gamma dose due to noble gases was 0.00 mRad.

The maximum quarterly offsite beta dose due to noble gases was 0.00 mRad. The cumulative 2007 annual offsite beta dose due to noble gases was 0.00 mRad.

The maximum quarterly offsite dose to any organ from the release of H-3 and all radionuclides in particulate form with half-lives greater than 8 days was approximately $5.77\text{E-}5$ mRem. The cumulative 2007 annual maximum organ dose from these radionuclides was also approximately $1.08\text{E-}4$ mRem.

The highest historical annual average X/Q equal to $1.82\text{E-}6$ sec/m³ for the period 1985-1987 for the worst case offsite receptor location, in accordance with the ODCM, was used to calculate these offsite dose values.

b. Liquid Effluent Releases

The maximum quarterly organ dose from liquid releases was approximately 2.28 mRem. The cumulative 2007 annual organ dose was approximately 3.76 mRem. The maximum quarterly total body dose for liquid releases was approximately 1.44 mRem, and the cumulative 2007 annual total body dose was approximately 2.37 mRem.

c. Conclusion

All calculated offsite doses were below ODCM limits.