we energies

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November 14, 2007

Ms. Magalie R. Salas, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

RE: PINE HYDROELECTRIC PROJECT (FERC NO. 2486)
ARTICLE 418 – WATER QUALITY MONITORING REPORT

Dear Ms. Salas:

Wisconsin Electric Power Company, doing business as We Energies, is hereby filing the results of the water quality monitoring conducted at the Pine Project during May, June, July, August, September and October of 2007. This filing also includes the results of the late winter, 2007 vertical profile measurements conducted in the project's impoundment.

The Commission issued a new license on December 19, 1995, for the above project and by order dated September 25, 1996, approved and modified Wisconsin Electric's water quality monitoring plan. The monitoring plan assures that the Pine plants discharge meets Wisconsin's water quality standards for temperature, dissolved oxygen (DO) and pH. The applicable standards are as follows:

Maximum Temperature	89°F (31.7°C);
DO	5.0 mg/l at all times;
pH	Between 6.0 and 9.0.

The attached table and figures document 100% compliance with the temperature and DO standards. During August, four pH measurements were slightly above the 9.0 standard. These measurements were thought to be due to a combination of factors including instrument drift, befouling and low flow conditions that existed during late summer.

It should also be noted that data recovery from our monitoring instruments for temperature, D.O. and pH was nearly100 % for the entire six month period.

A CD containing the raw data is being submitted to Mr. Michael Donofrio for the Wisconsin DNR's use.

Please contact Thomas Plante of our staff at (906)779-2513 if you have questions regarding this filing.

Sincerely,

W Rauscher

William Rauscher, Manager
Hydroelectric Operations Division

TAP/kng

cc: Mr. Michael Donofrio - WDNR (with CD)
Ms. Louise Clemency - FWS

We Energies 2007 Pine Hydro Plant

Temperature Limits: Maximum 31.7° C (89° F)
Dissolved Oxygen Limit: 5.0 mg/l
pH Limit: Between 6.0 - 9.0

Pine Tailrace - 2007 Data Summary

Month	OBS	Temp (Degrees C)			DO % Saturation			Dissolved Oxygen			pH	
		Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Max	Min
May	735	15.0	20.7	11.4	91.3	98.9	83.8	9.03	10.27	7.56	8.13	7.76
Jun	720	20.8	26.6	14.5	84.1	89.9	76.1	7.46	8.97	6.55	8.17	7.44
Jul	744	22.3	26.3	18.9	79.4	93.9	71.0	6.83	7.98	6.10	8.78	7.80
Aug	744	22.6	27.8	18.9	85.8	98.5	67.1	7.21	8.74	5.81	9.07	7.92
Sep	720	17.8	23.3	13.8	80.2	95.0	65.7	7.49	9.11	6.44	8.79	7.97
Oct	744	11.6	18.9	6.1	83.8	91.6	68.0	9.04	10.95	6.68	8.29	7.87

7/5/07 @0000 to 7/12/07 @1500 - Due to a pinhole found in the O_2 sensor membrane, the dissolved oxygen data for this period was invalid. This resulted in 560 valid Obs for D.O. and 744 for the other parameters in July.

100% Recovery for temperature and pH and 95.8% recovery for D.O.

The pH value was above 9.0 on four occasions, all during an extended period of tainter gate spilling, with no units running. The units were out from 7/31 @1000 - 8/29 @1800 with only tainter gate flow occurring.
The pH was above 9.0 on 8/7 @1400 - 9.02, 8/8 @0800 - 9.03, 8/8 @0900 - 9.06 and 8/8 @1000 - 9.07.
We believe these elevated readings were caused by a combination of bio-fouling, lower flows and the extended period of tainter gate only flow. Flows throughout the system were among the lowest in 100 years, which resulted in this long period of tainter gate only flows. The sonde that was changed out on 8/8 was very heavily green slimed and had a 1000 hour pH reading of 9.07. The sonde that was deployed at 1100 had a pH reading of 8.26 which matched the 8.3 reading from the independent instrument used to collect instantaneous readings.

Figure 2
Pine Hydro Plant - Tailrace pH Data from 5/1 @0900 thru 10/31 @2300

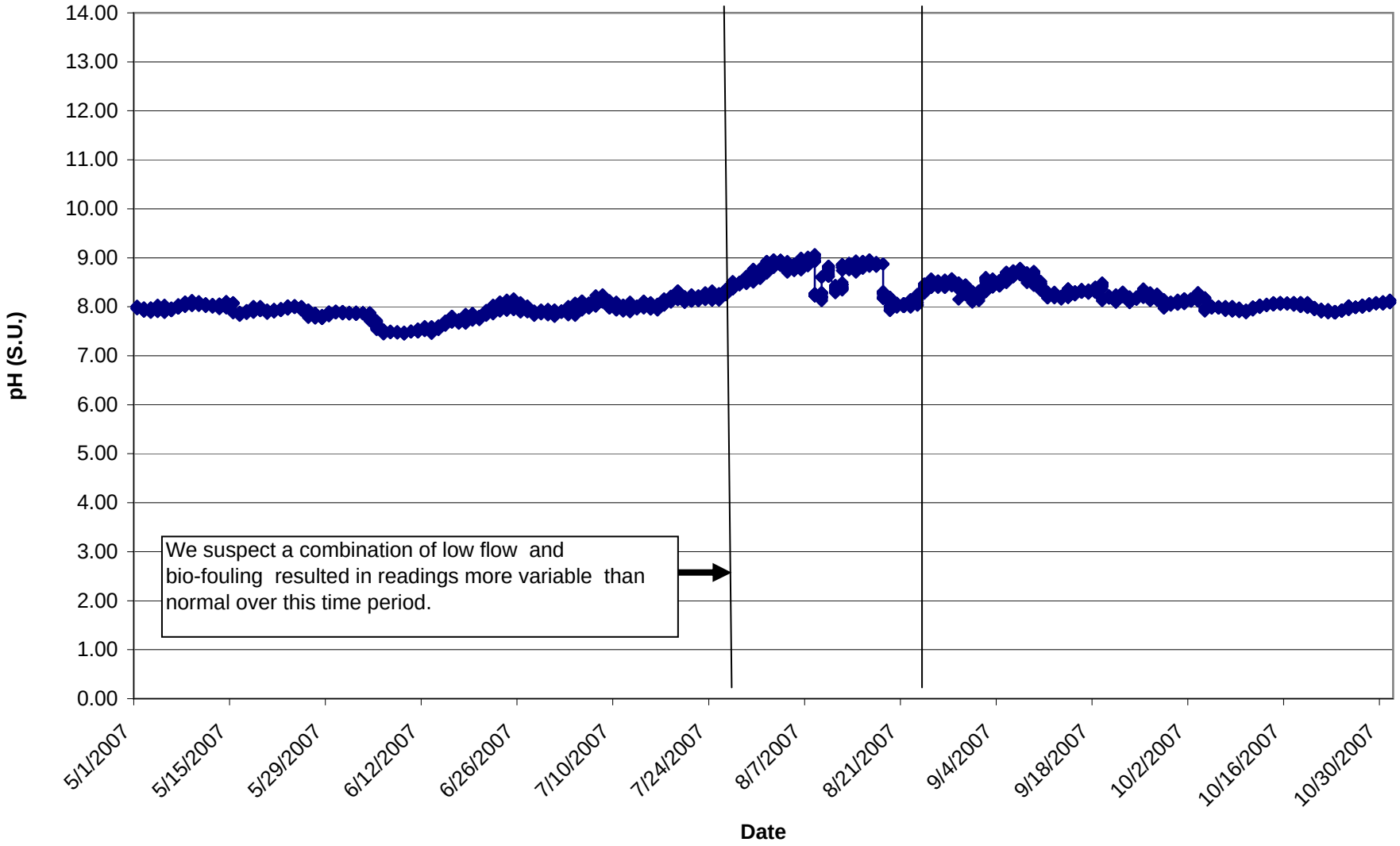
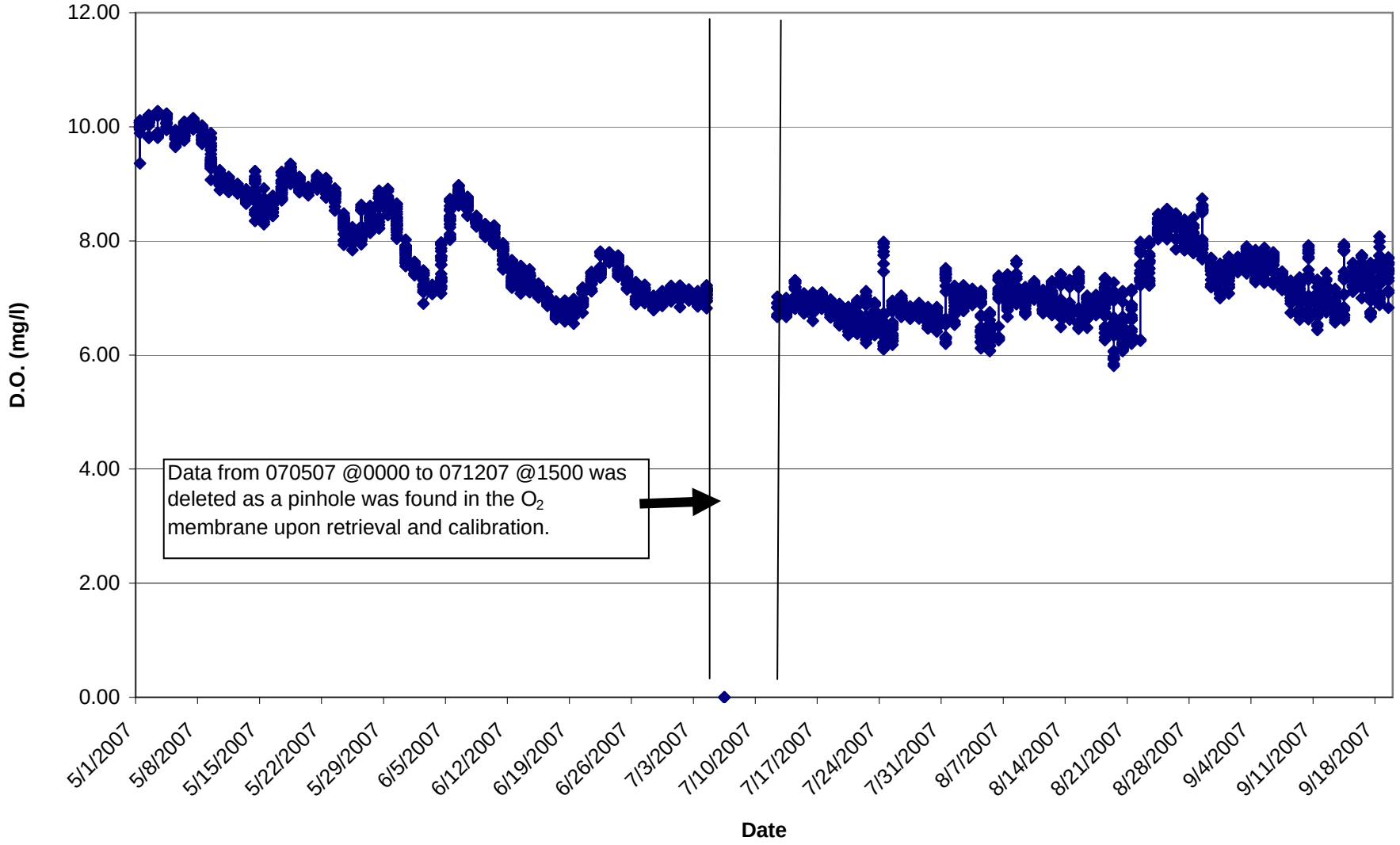


Figure 1
Pine Hydro Plant - Tailrace Dissolved Oxygen Data from 5/1 @0900 thru 10/31 @2300



Vertical Profile Data

1-Feb-07

Approximate air temp: -6.66 C
Secci Depth:6.0' water depth ~33' *Time:1530*
calm *sunny no clouds*
Taken in the flowage *bright sun*

Depth (m)	Temp. (C)	D.O. (mg/l)	D.O. % Saturation	Cond. (uS/cm)	pH (S.U.)
0.0	0.4	13.7	96.8	275	8.3
0.5	0.2	13.8	97.0	264	8.2
1.0	0.2	13.8	96.3	258	8.1
1.5	0.2	13.7	96.2	260	8.1
2.0	0.2	13.7	95.9	263	8.0
2.5	0.2	13.7	95.7	262	8.0
3.0	0.2	13.6	95.6	262	8.0
3.5	0.2	13.6	95.4	258	8.0
4.0	0.2	13.6	95.5	253	8.0
4.5	0.2	13.6	95.4	250	8.0
5.0	0.2	13.6	95.4	255	8.0
5.5	0.3	13.6	95.5	260	8.0
6.0	0.3	13.6	95.4	249	8.0
6.5	0.4	13.3	93.3	254	7.9
7.0	0.8	12.1	86.4	259	7.9
7.5	1.1	11.2	79.5	239	7.9
8.0	1.3	10.6	76.2	241	7.8
8.5	1.5	9.6	68.3	238	7.8
9.0	2.5	4.6	32.5	234	7.6
9.5	3.6	1.3	8.6	249	7.5
9.8	3.8	0.7	5.4	301	7.5

Indicates opening of intake forebay (10-15.5m)

Submission Contents