



**Wisconsin Electric**  
A WISCONSIN ENERGY COMPANY

ORIGINAL

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FILED  
OFFICE OF THE SECRETARY

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November 7, 2000

David Boergers, Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, D.C. 20426

FEDERAL ENERGY  
REGULATORY  
COMMISSION

RE: Chalk Hill Hydroelectric Project - FERC No. 2394-017 <sup>046</sup>  
White Rapids Hydroelectric Project - FERC No. 2357-003 <sup>046</sup>  
Article 405 Water Quality Monitoring Report

Wisconsin Electric is hereby filing one original and eight additional copies of the results of the water quality monitoring for the Chalk Hill and White Rapids Projects performed during the months of May, June, July, August and September of 2000 to fulfill the requirements of Article 405.

The Commission issued a new license on May 7, 1997 for the above projects and by order dated January 21, 1998 approved and modified Wisconsin Electric water quality monitoring plan. The monitoring plan assures that the Chalk Hill and White Rapids Hydroelectric Plants' discharge meets the state's water quality standards for temperature and dissolved oxygen (DO). The applicable mean temperature standards for the months of monitoring is shown in the table below:

Month	May	June	July	August	September
°F	70	80	83	81	74
°C	21.1	26.7	28.3	27.2	23.3

The applicable D.O. standard is 5.0 mg/l at all times.

The Plan as approved by FERC order dated January 21, 1998 includes the following two components:

- 1) **Continuous Water Quality Monitoring of temperature and Dissolved Oxygen (D.O.)**
  - From May 1, to September 30 of each year ;
  - For three years starting in 1998;
  - Two monitoring locations :
    - \* Upstream of the Chalk Hill plant adjacent to the USGS gauging station # 034066003 (Highway Z Bridge);
    - \* A point approximately 100 yards downstream of the White Rapids plant.
  - Monitoring results are to be filed no later than November 30th, of each year.
  
- 2) **Flowage Monitoring Plan**
  - Measurements to be made at 1.0 meter intervals in the deepest part of each flowage;
  - Measurements to be taken during December, January, February and March of each year monitored;
  - According to the approved plan, monitoring results are to be filed no later than May 1, of each year.

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The results of our 2000 monitoring for each component is as follows:

**I. Continuous water quality monitoring**

The enclosed table 1 : *Chalk Hill/White Rapids, 2000 Hydro Data Summary* documents 100% compliance with the standards stated above.

The data recovery from our monitoring instrument (Hydrolab Recorder - Water Quality Multiprobe Logger) was 94.3% at the Chalk Hill location upstream at Highway Z and 100 % at the White Rapids Tailrace for the entire 5 month period (May 1 through September 30). Exhibit 1 summarizes those periods for which data was not collected and the explanations.

A diskette containing the raw data and accompanying explanatory sheet is submitted to the agencies for their use.

**II. Flowage measurements**

As stated in the approved plan, the results will be subject of a report to be filed no later than May 1, 2001.


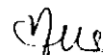
**Future Monitoring**

In light of the fact that this filing completes the requirements for continuous water quality monitoring as specified in the approved Water Quality Monitoring Plan, the Company is announcing its intent to consult with the WI DNR and MDEQ to revise the plan. Specifically, within the next three months, the company will provide both agencies with its recommendations as to when additional continuous water quality measurements will be conducted during the remaining years of the current licenses for both plants. The Commission will be notified as to the results of these consultations.

Enclosed is a proof of service to the agencies listed on the copy list.

Please call me at (414) 221-2413, if you have questions on this matter.

Sincerely,

  
William Rauscher 

Manager, Hydroelectric Operations

Enclosures

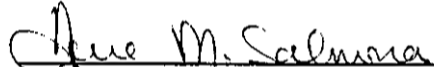
cc: Mr. Thomas Meronek, WDNR  
w/diskette  
Mr. Kurt Newman, MDNR w/  
diskette

Mr. Jim Fossum, USFWS  
Mr. James Grant, MDEQ

# Certificate of Service

I hereby certify that I have this day served the foregoing document upon all entities specified in the order to issue license to be consulted on matters related to the Commission filing. Service was done pursuant to Rule 2010 of FERC's Rules of Practice and Procedure 18 CFR, Section 385.2010

Dated this day Tuesday, November 07, 2000.



Annie Salmona  
Hydro Licensing  
Wisconsin Electric Power Co.

Annie Salmona  
Wisconsin Electric Power Co.  
333 W. Everett Street  
Milwaukee, WI 53203  
(414) 221-4151

## **Exhibit 1**

### **Chalk Hill / White Rapids Hydro Plant 2000 – Lost Data Summary**

#### **Chalk Hill Upstream at Hwy Z**

Captured 3462 of 3672 possible data points, a 94.3% recovery.

Lost hourly reading on 7/10/00 (0000) , probably during data processing.

Lost hourly reading on 8/3/00 (1500) during sonde change out.

Lost 208 readings between 8/20/00 to 8/30/00 when sonde was vandalized and pulled partially out of the water. Conductivity readings were used to determine which readings were taken under de-watered conditions and those readings were deleted.

#### **White Rapids Tailrace**

Captured 3672 of 3672 possible data points, a 100 % recovery.

### **CHALK HILL / WHITE RAPIDS HYDRO PLANT 2000 MONITORING DATA**

The diskette labeled Chalk Hill / White Rapids contains the 2000 monitoring data for the White Rapids tailrace (WHTRPD00.txt), and Chalk Hill upstream at Hwy Z station (CHALKZ00.txt).. The files contain the temperature, dissolved oxygen, and dissolved oxygen-percent saturation data for the above sites from May 1, 2000 through September 30, 2000. All files were saved as Formatted Text (Space Delimited) using Microsoft Excel Version 4.0 .The same information listed here can also be found in a Microsoft Word file called Readme.Doc on the diskette.

The data is entered in the following order and separated by spaces:

Date                   - mm/dd/yy  
Hour                   - 0-2300  
Temperature           - 00.0 Degree C  
Dissolved Oxygen     - 00.00 mg/l  
Dissolved Oxygen     - 000.0 Percent  
% Saturation

#### **Directory of Diskette:**

Readme.doc  
CHALKZ00.txt   Chalk Hill upstream at Hwy Z  
WHTRPD00.txt   White Rapids Tailrace

## Chalk Hill / White Rapids 2000 Hydro Data Summary

### Chalk Hill - Upstream at Hwy Z

Temperature (Degrees C)				
Month	Obs	Mean	Max	Min
5	744	16.1	20.3	11.5
6	720	19.5	23.0	15.2
7	743	22.0	25.5	18.7
8	535	22.4	24.8	19.3
9	720	16.7	23.6	12.1

Dissolved Oxygen (mg/l)				
Month	Obs	Mean	Max	Min
5	744	9.3	11.2	7.8
6	720	8.2	9.8	7.2
7	743	7.7	9.3	6.1
8	535	8.0	9.9	6.7
9	720	9.1	11.1	7.6

Dissolved Oxygen ( % Saturation)				
Month	Obs	Mean	Max	Min
5	744	97	119	83
6	720	92	110	80
7	743	92	109	74
8	535	95	120	79
9	720	95	112	86

### White Rapids Tailrace

Temperature (Degrees C)				
Month	Obs	Mean	Max	Min
5	744	16.4	19.7	12.7
6	720	19.9	22.3	17.1
7	744	22.2	25.1	20.3
8	744	22.7	24.5	20.7
9	720	17.4	23.0	13.6

Dissolved Oxygen (mg/l)				
Month	Obs	Mean	Max	Min
5	744	9.0	10.4	7.4
6	720	8.5	10.1	7.4
7	744	7.9	9.4	7.2
8	744	7.9	8.9	7.3
9	720	8.5	9.5	6.6

Dissolved Oxygen ( % Saturation)				
Month	Obs	Mean	Max	Min
5	744	94	106	80
6	720	96	115	80
7	744	92	116	81
8	744	94	104	84
9	720	91	98	66