



The state of the s

November 7, 2007

800 Industrial Park Drive Iron Mountain, MI 49801 Tel 906.779.2400 www.we-energies.com

2007 NOV -8 P 12: 14

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

Dear Ms. Salas:

RE: BRULE HYDROELECTRIC PROJECT (FERC NO. 2431)
ARTICLE 405 – WATER QUALITY MONITORING REPORT

Wisconsin Electric Power Company, doing business as We Energies, is hereby filing one original and eight additional copies of the results of the water quality monitoring for the Brule Project performed during the months of June, July, August and September of 2007.

The Commission issued a new license on August 29, 1995, for the above project and by orders dated September 10, 1997, and April 15, 1999, approved and modified Wisconsin Electric's (now We Energies') water quality monitoring plan. The monitoring plan assures that the Brule plants discharge meets the states water quality standards for temperature and dissolved oxygen (DO). The applicable mean temperature standards for the months of monitoring (June, July, August and September) are 80°F (26.7°C), 83°F (28.3 °C), 81°F (27.2°C) and 74°F (23.3°C), respectively. The applicable DO standard is 5.0 mg/l at all times.

The attached table and Figure 1, together with the actual hourly monitoring data (on CD), document 100% compliance with these standards for the plants tailrace when the plant was in operation. When the plant was off-line for barrier net maintenance, July 31-August 1, DO dropped slightly below 5.0 mg/l during four of the 48 hours. This was due to the fact that low DO water is present seasonally below the thermocline of the reservoir and that the depth of this thermocline is typically near the lower elevation of the intake openings for the turbines. This water can be entrained and released as leakage flow through the turbine.

By contrast, we note for the record that the monthly average temperature standards for June, August and September were exceeded on numerous occasions at the Brule Gauging Station monitoring location, which is upstream of project waters (see attached Table). Specifically, the June standard was exceeded 15 times; the August standard was exceeded nine times; and the September standard was exceeded 13 times. In addition, detached algae fouling of the sonde occurred during late August into September. We believe that this impacted some of the DO data as shown on Figure 2 and explained in the Table.

The temperature exceedances were most likely due to the exceptionally dry summer that occurred in this region. The dry conditions limited inflow to the Brule flowage.

Finally, it should be noted that data recovery from our monitoring instruments (Hydro lab Datasonde) was 100 % at the Brule Tailrace and 99.9% at the Brule Gauging Station monitoring locations for the entire four month period (June 1 through September 30, 2007).

Page 2 November 7, 2007 Ms. Magalie Salas

CD's containing the raw data and accompanying explanatory sheet are being submitted to the agencies for their use. Enclosed is a proof of service to the agencies listed on the copy list.

Please call me at (906) 779-2547, if you have questions on this matter.

Sincerely,

William Rauscher, Manager

Hydroelectric Operations Division

Enclosures

cc: Mr. Robert Martini - WDNR

Mr. John Suppnick – MDEQ Ms. Jessica Mistak – MDNR