

# 84 FERC ¶ 62,228

## UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Wisconsin Public Service Corporation ) Project No. 2546-014

### ORDER MODIFYING AND APPROVING WATER QUALITY MONITORING PLAN SEP 15 1998

Wisconsin Public Service Corporation (licensee) filed, on June 19, 1998, its water quality monitoring plan under article 408 of the license for the Sandstone Rapids Project (FERC No. 2546). The project is located on the Peshtigo River, in Marinette County, Wisconsin.

#### BACKGROUND

Article 408 requires the licensee to file a plan to monitor dissolved oxygen (DO), water temperature, and pH of the Peshtigo River upstream and downstream of the Sandstone Rapids dam.

The purpose of the plan is to ensure that flow releases from the project, as measured immediately downstream from the dam, maintain the following standards, except when natural conditions prohibit attainment of the standards: (1) DO concentrations must not be less than 5.0 milligrams per liter (mg/L) at any time; (2) water temperature must not exceed 89 degrees Fahrenheit; and (3) the pH must be within the range of 6.0 to 9.0, with no change greater than 0.5 units outside the estimated natural seasonal maximum and minimum.

The plan is to include provisions for: (1) monitoring during one year out of every five; (2) monitoring upstream and downstream of the Sandstone Rapids dam, with sensor locations and monitoring frequency determined in consultation with the Wisconsin Department of Natural Resources (WDNR) and the U.S. Fish and Wildlife Service (USFWS); and (3) operating procedures, developed in consultation with the WDNR and the FWS, to address actions to be taken if water quality deviates from the above limits.

The plan is to include schedules for: (1) implementation of the monitoring program within 24 months from the date of license issuance; (2) review of the monitoring results with the WDNR and the USFWS; and (3) filing the results, agency comments, and licensee's response to agency comments with the Commission.

#### LICENSEE'S PLAN

The monitoring parameters will include pH, DO concentration, and water temperature. The data will be collected at one hour intervals continuously for the months of June, July, August, and September using a Hydrolab Datasonde or equivalent. All instrumentation will be cleaned, downloaded, and calibrated

FERC - DOCKETED

BR  
SEP 15 1998

980916.0117.3

Project No. 2546-014

-2-

according to manufacturers specifications every 7-10 days during the monitoring period. Calibration information will be recorded in a maintenance log for each piece of equipment.

The monitoring equipment will be located in the tailwater. The exact placement will be determined through consultation with the WDNR. Through consultation with the WDNR, it was determined that an upstream monitoring device will not be required due to the monitoring at the Johnson Falls Project (FERC No. 2522). Monitoring will begin in 1999 and again be conducted in 2004. Following the 2004 data collection, the monitoring will be conducted on a five-year schedule for the remainder of the license term.

When data is downloaded, it will be screened for periods of noncompliance with state standards. If periods of noncompliance are identified, the WDNR will be notified within five working days. The WDNR and USFWS will be provided with the results of monitoring by November 30 of the year in which the monitoring occurred. The monitoring results, agency comments, and responses to agency comments will be provided to the Commission by February 28 of the year following the year in which monitoring occurred.

#### AGENCY COMMENTS

The USFWS did not comment on the plan. The WDNR, by letter dated June 2, 1998, provided recommendations on the licensee's plan. The WDNR recommends continuous monitoring of DO, water temperature and pH occur in the project tailrace immediately below the powerhouse. The WDNR will not allow for a mixing zone to meet the water quality standards. The WDNR states the data collected in the tailwater of the Johnson Falls Project, assuming that the water quality monitoring at both projects takes place in the same year, could be used instead of collecting data at an additional upstream monitoring location.

The WDNR states monitoring should commence once the Sandstone Rapids Project switches to a peaking mode of operation in the summer and terminate on or after September 30. The WDNR also states beginning monitoring in 2004 is unacceptable and that it should begin in 1999. Finally, the WDNR recommends that it be immediately informed of any violations of state water quality standards and if violations are found the project should immediately be switched to run-of-river operation.

Project No. 2546-014

-3-

## DISCUSSION AND CONCLUSIONS

In Commission staff's Peshtigo River Multiple Project Final Environmental Impact Statement, 1/ staff indicated water quality at the Sandstone Rapids Project meets state water quality standards for a warm water fishery. Since the project now has a requirement to operate in a run-of-river mode between April 15-30 of each year continuing for 75 days, and to release a minimum flow of 250 cubic feet per second, water quality downstream of the project should improve compared to past years when the project shuts down during peaking operations, except possibly during July, August, and September.

The licensee should be required to continuously monitor water quality, both upstream and downstream of the project, and record the data on an hourly basis to ensure the standards identified in article 408 are met. As indicated in article 408, the location of the monitoring equipment should be determined in consultation with the WDNR and the USFWS. The WDNR indicates data collected in the tailwater of the Johnson Falls Project (FERC No. 2522), assuming that the water quality monitoring at both projects takes place in the same year, could be used instead of an upstream monitoring location. The licensee should be required to have the monitoring equipment installed to begin monitoring during the 1999 season.

By coordinating the timing of monitoring activities with the licensee's other projects on the river, 2/ results from each year of monitoring would provide a more comprehensive view of each project's impact on water quality throughout the river. The licensee should be required to conduct the second monitoring season in 2005 and then every five years thereafter to be consistent with the other projects on the river.

The WDNR recommended the licensee immediately notify the WDNR of any deviations from the water quality standards and to change project operations to run-of-river if violations are found. To be consistent with the requirements at the licensee's projects, the licensee should be required to provide notification of any DO deficiencies to the WDNR within five working days.

---

1/ Pesthigo River Multiple Project Final Environmental Impact Statement. March 1997. Prepared by staff of the Commission's Office of Hydropower Licensing.

2/ The licensee's other projects include: Caldron Falls Project (FERC No. 2525); High Falls Project (FERC No. 2595); Johnson Falls Project (FERC No. 2522); Potato Rapids Project (FERC No. 2560); and Peshtigo Project (FERC No. 2581).

Project No. 2546-014

-4-

As for the WDNR's recommendation that the project be required to operate in a run-of-river mode should a DO violation occur, this issue was addressed during the licensing process. The licensee is currently required to operate, under article 402, in a run-of-river mode starting in mid-April and continuing for 75 days. After the 75-day run-of-river period, the project license allows the licensee to operate in a peaking mode. Making changes to this mode of operation if a DO violation occurs, as recommended by the WDNR, would require a license amendment proceeding.

It is Commission staff's standard practice to require the licensee to report any deviation from its requirements. After reviewing the licensee's report, Commission staff can make a determination as to whether modifications to project operations or facilities are necessary.

So that the Commission can monitor the licensee's compliance with the water quality requirements of article 408, the licensee should be required to notify the Commission of any deviations from the requirements specified in article 408. Based upon the licensee's report and the Commission's evaluation of the incident, the Commission should reserve the right to require modifications to project facilities and operations to ensure compliance with the state's water quality standards.

The licensee's proposed water quality monitoring plan, with the above modifications, fulfills the requirements of article 408, and should, therefore, be approved.

The Director orders:

(A) The licensee's water quality monitoring plan, filed on June 19, 1998, under article 408 of the license for the Sandstone Rapids Project (FERC No. 2546), as modified by paragraphs (B) through (D) below, is approved.

(B) The licensee shall continuously monitor water quality from June 1 through September 30, both upstream and downstream of the project, and record the data on an hourly basis to ensure the standards identified in article 408 are met. The location of the monitoring equipment shall be determined in consultation with the Wisconsin Department of Natural Resources (WDNR) and the U.S. Fish and Wildlife Service. The licensee shall begin monitoring during the 1999 season. The licensee shall conduct the second monitoring season in 2005 and then every five years thereafter to be consistent with the other projects on the river.

Project No. 2546-014

-5-

(C) If the dissolved oxygen concentration, water temperature, or pH, as measured by the approved monitoring system, deviates from the requirements of article 408, the licensee shall file a report with the Commission within 30 days of the date that the data becomes available regarding the incident. The report shall, to the extent possible, identify the cause, severity, and duration of the incident, and any observed or reported adverse environmental impacts resulting from the incident. The report shall also include: (1) operational data necessary to determine compliance with article 408; (2) a description of any corrective measures implemented at the time of occurrence and the measures implemented or proposed to ensure that similar incidents do not recur; and (3) comments or correspondence, if any, received from the resource agencies regarding the incident. Based on the report and the Commission's evaluation of the incident, the Commission reserves the right to require modifications to project facilities and operations to ensure future compliance.

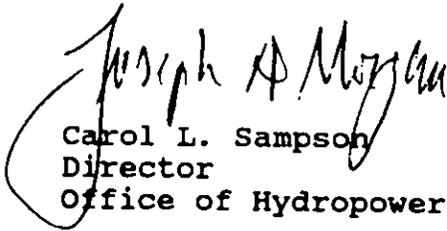
(D) The licensee shall notify the WDNR, within five working days, of any water quality deviations identified at the project.

(E) Unless otherwise directed in this order, the licensee shall file an original and seven copies of any filing required by this order with:

The Secretary  
Federal Energy Regulatory Commission  
Mail Code: DLC, HL-11.2  
888 First Street, N.E.  
Washington, D.C. 20426

In addition, the licensee shall serve copies of these filings on any entity specified in this order to be consulted on matters related to these filings. Proof of service on these entities shall accompany the filings with the Commission.

(F) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 CFR § 385.713.

  
Carol L. Sampson  
Director  
Office of Hydropower Licensing