

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION
104 FERC ¶ 62,175

Oconto Electric Cooperative

Project No. 1981-014

ORDER MODIFYING AND APPROVING WATER QUALITY MONITORING
PLAN UNDER ARTICLE 404

(Issued September 11, 2003)

On July 31, 2003, Oconto Electric Cooperative (licensee) filed its water quality monitoring plan under article 404 of the license for the Stiles Hydroelectric Project (FERC No. 1981). The project is located on the Oconto River in Oconto County, Wisconsin.

LICENSE REQUIREMENTS

Article 404 requires the licensee to file, for Commission approval, a plan to monitor water quality (*i.e.*, temperature and dissolved oxygen [DO]) at the Stiles Hydroelectric Project, at 5 year intervals. The purpose of this monitoring plan is to ensure that applicable state water quality standards are being met in project waters and if not, whether or not violations are project-related. The plan must include: (1) the location of the temperature and DO monitoring sensors; (2) the frequency that measurements shall be recorded and the months when monitoring shall occur; (3) the specific instruments that shall be used to record the monitoring results and provisions for calibrating the instruments; (4) provisions for reporting the monitoring results to the Wisconsin Department of Natural Resources (WDNR) and U.S. Fish and Wildlife Service (USFWS) including: (a) data presentation format; (b) documentation of instrument calibration; (c) any violations of applicable water quality standards; (d) whether or not any violations are project-related; (e), if so, proposed measures to remediate the conditions that led to non-compliance; and (f) proposed follow-up actions if remediation is implemented; and (5) a schedule that specifies the years that monitoring shall occur and the date when the monitoring reports shall be submitted to WDNR and FWS.

LICENSEE'S PLAN

The WDNR has classified the Oconto River immediately below the project as a warm water sport fish community. The water temperature must not exceed 89°F for warm water fish. The licensee shall not cause the dissolved oxygen (DO) concentration to be less than 5.0 milligrams per liter (mg/l) at any time. 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.

Water temperature, DO, and pH data will be collected on an hourly basis (24 measurements per day, per location) from June 1 through August 31 each year using portable, programmable recording instrumentation. These variables will be collected at two sites along the Oconto River. The licensee proposes the following locations for compliance with the requirements set forth in the license: (1) below the Stiles Project, the licensee will monitor water temperature and DO concentration approximately 300 yards downstream of the dam at the railroad trestle, in the middle of the river; and (2) above the dam at the Stiles Project, near the intake to the powerhouse (Monitoring at this location is to determine the water quality prior to discharge through the powerhouse, as the City of Oconto Falls still operates a municipal wastewater plant that discharges into the Oconto River above the Stiles Project).

The licensee is required to operate the project in limited peaking mode for a period of 3 years from the effective date of the license (2003). At the conclusion of the 3-year test period, the licensee must operate the project in a run-of-river mode for the protection of water quality and aquatic resources. Water quality monitoring will begin in the first year of run-of-river operation (2006) and every 5 years thereafter for the duration of the license (2011, 2016, etc.).

Water temperature, DO, and pH data will be collected using portable water quality monitoring equipment. All monitoring equipment will be calibrated for pH and DO prior to deployment according to manufacturer instructions. The instruments will be cleaned and calibrated at least once every ten days during the annual monitoring period. At the time the monitoring equipment is removed from monitoring, a post-calibration will be performed per the manufacturer instructions to determine loss of DO calibration. The post-calibration will be performed on the DO monitoring equipment before any maintenance or cleaning of the probes occurs.

Per the equipment manufacturer, the monitoring equipment for DO has an accuracy of 0.20 mg/l, excluding any bio-fouling or water quality problems. The data collected will be corrected for any loss of calibration greater than 0.20 mg/l. Raw data will be adjusted assuming a linear degradation of calibration based upon a post-calibration of the equipment.

All water temperature, DO, and pH data collected will be compiled and summarized in an annual report submitted to the WDNR and USFWS. The report will be submitted within 60 days of the completion of the annual monitoring period. The following information will be provided: (1) data will be presented in graphical and tabular format -- graphical data will be provided to show the daily DO levels at each monitoring location; (2) all copies of instrument pre-deployment and post-deployment calibration sheets will be provided; (3) a summary of any water quality deviations observed during the monitoring period -- an evaluation of the relationship between any

observed temperature or DO deviations and other environmental factors, including project operations data, that may affect the water quality of the discharge; and (4) in the event that deviations are observed and are due to project related activities, the licensee will consult with the WDNR and USFWS to pursue appropriate actions.

AGENCY COMMENTS

By letters dated June 24, 2003, the licensee requested comments from the WDNR and USFWS on its water quality monitoring plan. The WDNR concurred with the licensee's plan by letter dated July 1, 2003. The USFWS deferred to the WDNR.

DISCUSSION

The licensee's plan contains all the provisions required under article 404 of the project license. So that the Commission can monitor the licensee's compliance with the requirements to meet state water quality standards, the licensee should be required to file a report with the Commission of any deviations from the applicable state water quality standards as proposed in its plan. The report should be filed within 30 days of the date that the data becomes available regarding the incident. The report should, 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 should also include: (1) operational data necessary to determine compliance with state water quality standards; (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. After reviewing the licensee's report, the Commission should reserve the right to require modifications to project operations or facilities to ensure future compliance.

The licensee's plan, with the above modification, should be adequate to measure the water quality of the Oconto River in the vicinity of the Stiles Project and should, therefore, be approved.

The Director orders:

(A) The water quality monitoring plan under article 404 of the license for the Stiles Hydroelectric Project (FERC No. 1981), filed on July 31, 2003, as modified by paragraph (B) below, is approved.

(B) If the project deviates from the requirements of the state water quality standards, 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 state water quality standards; (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.

(C) 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: DHAC, PJ-12.3
888 First Street, N.E.
Washington, D.C. 20426

(D) 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.

George H. Taylor
Chief, Biological Resources Branch
Division of Hydropower Administration
and Compliance