

139 FERC ¶ 62,255  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

City of Kaukauna, Wisconsin

Project No. 2677-030

ORDER APPROVING WATER QUALITY  
MONITORING PLAN

(Issued June 25, 2012)

1. On May 1, 2012, the City of Kaukauna, Wisconsin (licensee) filed its water quality monitoring plan for the Badger-Rapide Croche Hydroelectric Project No. 2677 pursuant to license articles 401 and 406.<sup>1</sup> The project is located on the Fox River in Outagamie County, Wisconsin, and includes the Badger and Rapide Croche developments. The Badger development is located in the City of Kaukauna at the U.S. Army Corps of Engineers' (Corps) Kaukauna Dam. The Rapide Croche development is located in the Town of Buchanan at the Corps' Rapide Croche Dam.

LICENSE REQUIREMENTS

2. Article 401 requires the licensee to file plans, for Federal Energy Regulatory Commission (Commission) approval, pursuant to various conditions of the Water Quality Certification (WQC) issued by the Wisconsin Department of Natural Resources (WDNR). WQC Condition No. 11 requires the licensee to develop within one year of license issuance a water quality monitoring plan that describes the methodology used to conduct periodic water quality monitoring in accordance with a schedule approved by the WDNR.

3. Article 406 requires the licensee to file a plan to conduct water quality monitoring for a period of three years to begin upon completion of the proposed Badger powerhouse and implementation of minimum stream flows. The plan is required to include a description of how the licensee will implement a three-year water quality monitoring plan that would be used to evaluate the effects of year-round and walleye spawning flow releases on water temperature and dissolved oxygen (DO) upstream of the Badger intake at the downstream end of the Badger bypassed reach and in the tailrace. The Commission has reserved the right to require changes to the plan. Water quality monitoring may not begin until the licensee is notified by the Commission that the plan is

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<sup>1</sup> Order Issuing New License, issued May 18, 2011 (135 FERC ¶ 62,149).

approved. Upon Commission approval the licensee must implement the plan, including any changes required by the Commission. In addition, Article 406 allows the Commission to modify project structures or operations if the results of monitoring indicate that such changes are needed to protect fish resources.

#### LICENSEE'S PLAN

4. In order to demonstrate compliance with the State of Wisconsin's water quality criteria, the licensee proposes to record water temperature, DO, and pH on an hourly basis and compute a daily average for each variable at five locations: upstream of the Kaukauna Dam, downstream of the Badger powerhouse, in the Badger bypass reach and upstream and downstream of the Rapide Croche powerhouse. Data collection will be done using continuous recording instruments and begin after construction of the Badger powerhouse about February 2014 and end in February, 2017. Temperature measurements will begin annually on February 1 at the Kaukauna Dam to identify the start of spawning bypass flows for walleye. Data collection for pH and DO will begin on June 15 for that location. The licensee will file annual reports in the first two years of monitoring with a final report in the third year of monitoring. The final report will include recommendations for future monitoring and management.

5. Data collection at the other four locations for temperature, pH and DO will begin on June 15 and all data collection will conclude annually on September 30 at all five locations. The sampling locations are based on aerial photographs and site reconnaissance. They were designed to meet the criteria of the WQC, be secure from vandalism, would obtain a continuous flow of water representative of the inflow or discharge above and below the project features, would present safe sampling conditions, would not likely encounter severe depth variations such that probes could not be accessed, and would be less susceptible to sediment/bed load movement and biofouling.

6. The monitoring instruments will include a float sensor, continuous temperature sensor, and pH and DO probes in the forebay of Kaukauna Dam with a backup temperature probe. Other instrument locations are: 300 yards downstream of the Badger powerhouse near the railway bridge, on the railroad bridge span adjacent to Thilmany Mill near the downstream section of the bypass reach, upstream of the Rapide Croche powerhouse at the trashracks near Unit 3 and downstream of the Rapide Croche powerhouse near the downstream end of the training wall on the shout shore approximately 100 feet from the powerhouse discharge. Calibration of the DO sensors will be performed every two weeks. Downloaded data will be secured in two separate locations and available upon request and provided in electronic format.

7. Differences in upstream and downstream DO levels (daily averages) greater than two milligrams per liter for five consecutive days will be reported to WDNR during the sampling season within 24 hours or one business day. A one business day notification to

WDNR will be done for corroborated exceedances outside state criteria for pH, temperature, or instream flows as well. A plan to address the problem(s) will also be provided.

8. As noted above, an annual report will be prepared each year for three years and submitted to the Commission, WDNR, U.S. Fish and Wildlife Service (FWS) and the Outagamie County Land Conversation Department by December 31. The final 2017 report will review all three years of data with recommendations on whether monitoring should continue or be modified.

#### AGENCY CONSULTATION

9. The licensee provided the draft water quality monitoring plan to the WDNR and the FWS on October 28, 2011, for review and comment. The WDNR provided comments in an email communication dated April 2, 2012. The licensee concurred with the comments by WDNR, except for its request to collect nitrate data. The licensee explains that this parameter was not included in the Commission's requirements for a new license, is not caused or affected by the project, and the license does not know of any actions at the project that would ameliorate an out-of-compliant nitrate condition. The FWS did not provide comments.

#### DISCUSSION AND CONCLUSION

10. During review of the licensee's water quality monitoring plan, the WDNR requested that the licensee test for nitrate levels. In its response, the licensee stated its reasons why it should not be responsible for monitoring nitrates. We note that Condition 11 of the WQC states that the project should meet the most current water quality standards for surface waters, capable of supporting a warm water sport fish community. These standards, as presented in Condition 11, include water temperature, dissolved oxygen, and pH levels. Condition 11 does not include testing for nitrate or nitrate criteria that the project needs to meet. We find the licensee's reasons for and decision to not monitor for nitrates are justifiable and we will not require such.

11. In the monitoring plan the licensee has proposed to notify the WDNR within 24 hours of any deviation in dissolved oxygen levels. In our approval of the plan, we will require that the licensee also notify the Commission of any deviation, but within 30 days of such an event. In addition, the licensee should submit drafts of its annual monitoring reports with the agencies prior to filing the reports with the Commission and incorporate comments or recommendations for changes in the next year's monitoring, if any. The licensee is also reminded herein that it may need to file an extension of time to initiate monitoring if the powerhouse is not completed by February 2014.

12. With the modifications discussed above, we conclude that the licensee's water quality monitoring plan meets the requirements of articles 401 and 406 of the license and

Condition 11 of the WDNR WQC. The plan was designed in consultation with the WDNR, should give it and the Commission the ability to monitor the project's compliance with state water quality standards, and should be approved.

The Director orders:

(A) The City of Kaukauna, Wisconsin's (licensee) water quality monitoring plan, filed May 1, 2012, pursuant to articles 401 and 406 of the license for the Badger-Rapide Croche Hydroelectric Project and the Wisconsin Department of Natural Resources' (WDNR) Water Quality Certification Condition No. 11, as modified by paragraphs (B), (C) and (D), is approved.

(B) The licensee shall begin the water quality monitoring upon completion of the Badger powerhouse, scheduled for February 2014, for a period of three years. The licensee shall file a draft annual monitoring report with the WDNR, the U.S. Fish and Wildlife Service, and the Outagamie County Land Conversation Department (collectively, the agencies) by December 31, each year. The licensee shall then submit each annual report to the Federal Energy Regulatory Commission (Commission), including any comments and/or recommendations from the resource agencies and the licensee's response to the agency comments, by January 31 of the year following monitoring.

(C) The third and final monitoring report shall be filed by February 28, 2017, and shall include a review of all three years of data collection with recommendations on whether sampling protocols should be revised or continued. The report shall include the comments of the agencies along with any proposed changes in monitoring. If the licensee does not adopt a recommendation, the report shall include the licensee's reasons, based on project-specific information. The Commission reserves the right to require modifications to the monitoring plan based on the licensee's monitoring reports or new information, as it becomes available. In addition, the Commission reserves the right to require modifications to project facilities and operations in order to ensure future compliance.

(D) If monitoring reveals any deviations from state water quality standards for temperature, DO or pH, the licensee should file a report with the Commission within 30 days of 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 include, at a minimum: (1) any operational data necessary to determine compliance with Condition 11 of the Wisconsin WQC; (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 received from the WDNR regarding the incident. Based on

the report and the Commission's evaluation of the specific incident, the Commission reserves the right to require modifications to project facilities and operations in order to ensure future compliance.

(E) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance, as provided in section 313(a) of the Federal Power Act, 16 U.S.C. § 8251 (2006), and by the Commission's regulations at 18 C.F.R. § 385.713 (2011). The filing of a request for rehearing does not operate as a stay of the effective date of this order, or of any other date specified in this order. The licensee's failure to file a request for rehearing shall constitute acceptance of this order.

Thomas J. LoVullo  
Chief, Aquatic Resources Branch  
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Document Content(s)

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