



October 8, 2020

Ms. Cheryl Laatch
Wisconsin Department of Natural Resources
Office of Energy, Water Management Specialist
101 S. Webster St.
Madison, WI 53703

Mr. Nicholas Utrup
U.S. Fish & Wildlife Service
4101 American Blvd East
Bloomington, MN 55425

Dear Ms. Laatch and Mr. Utrup:

SUBJECT: 2020 Water Quality Monitoring Report

<u>Hydro</u>	<u>FERC Project No.</u>	<u>NATDAM No.</u>	<u>License Article</u>
High Falls	2595	WI-00754	406

Per the Order Amending Approved Water Quality Monitoring Plans under Article 406, dated October 13, 2015, Wisconsin Public Service Corporation (WPSC) is submitting water quality monitoring data collected during the 2020 monitoring season at the High Falls Hydroelectric project for your review and comment.

At the High Falls facility, WPSC is required to ensure 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 shall not be less than 5.0 milligrams per liter (mg/L) (minus the precision of the monitoring instrument) for more than 24 hours per year; (2) water temperature shall not exceed 89 degrees Fahrenheit; and (3) the pH shall 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. Natural conditions include inflows to the project less than the 95 percent exceedance flow.

As described in the water quality monitoring plan, monitoring is conducted downstream of the powerhouse annually from June 1 through September 30. The downstream monitoring equipment is located on the High Falls Road bridge near the middle of the river. Monitoring upstream of the project occurs every 5 years in conjunction with water quality monitoring conducted at the Caldron Falls Hydroelectric Project. The next upstream monitoring period is scheduled to occur in 2021.

Monitoring data was collected using portable water quality monitoring equipment manufactured by YSI, Inc. Monitoring for DO, temperature, and pH was conducted continuously on an hourly basis. As

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described in the water quality monitoring plan, the instrumentation was cleaned and calibrated according to manufacturer specification at least once every 14 days during the monitoring period. A post deployment calibration was conducted to determine the extent of calibration drift. Raw data was adjusted assuming a linear degradation of calibration based upon a post calibration of the equipment. The water quality monitoring equipment used to monitor DO has an accuracy of +/- 0.1 mg/l, per the manufacturer. For compliance purposes, DO concentrations more than 0.1 mg/l below the applicable water quality standard are potential deviations.

No deviations from the DO, pH, or temperature water quality standards were observed during the monitoring season. Enclosed with this report are excel spreadsheets containing the monitoring data in both tabular and graphical format. Please review the enclosed data and provide any comments you may have within 30 days of this letter. Should you have any questions or concerns, feel free to call me at (920) 433-1833.

Sincerely,

A handwritten signature in black ink that reads "Mark Metcalf". The signature is written in a cursive, flowing style.

Mark Metcalf
Principal Environmental Consultant

Enc. 2020 Water Quality Monitoring Data

cc: Mr. Bill Bosacki
Mr. Mike Grisar