

**FEDERAL ENERGY REGULATORY COMMISSION
Washington D.C. 20426**

OFFICE OF ENERGY PROJECTS

Project No. 10856-104 -- Michigan
Au Train Hydroelectric Project
UP Hydro, LLC

December 28, 2016

Mr. Jason Kreuzscher
Vice President, Operations
Renewable World Energies, LLC
100 S. State Street
P.O. Box 264
Neshkoro, WI 54960

Subject: November 19 and 22, 2016 minimum flow deviations

Dear Mr. Kreuzscher:

This is in response to your report filed with the Federal Energy Regulatory Commission (Commission) on November 28, 2016, regarding a deviation from the minimum flow requirement specified in Article 401 and the siphon requirements specified in your Operations and Compliance Plan¹ required by Article 402 of the Au Train Hydroelectric Project license.²

License Requirements

Article 401 of your license, in part, requires you to operate the project in a modified run-of-river mode, with a steady drawdown of the reservoir in the winter and reservoir drawdowns as necessary at other times of the year to provide a continuous minimum powerhouse discharge of 50 cubic feet per second (cfs) for the protection and enhancement of fish and wildlife resources in the Au Train River. You may temporarily modify the minimum flow, if required by operating emergencies beyond your control or

¹ Order Approving Five-Year Update to the Operations and Compliance Plan Under Article 402 (149 FERC ¶ 62,149), issued December 2, 2014.

² Order Issuing Original License (79 FERC ¶ 62,217), issued June 26, 1997.

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for short periods of time upon mutual agreement between you, the Michigan Department of Natural Resources (Michigan DNR) and the U.S. Fish and Wildlife Service (FWS). If the flow is so modified, you must notify the Commission, the Michigan DNR, and the FWS as soon as possible, but no later than 7 days after each incident.

Article 402 of the project license requires you to implement an Operations and Compliance Plan (Plan). Your Plan, in part, states that during periods of project shutdown, you are required to start a siphon within 4 hours of a power outage or emergency that is capable of supplying 10 cfs to maintain adequate flows in the bypass when the reservoir level is less than 778.0 feet.

November 19, 2016 Deviation

According to your report, you deviated from the minimum flow and siphon requirements described in your Plan on November 19, 2016 from 1600 hours to 2100 hours when heavy snow and high winds caused a tree to fall on the project's transmission lines, resulting in a power outage. During this time, flows fell below the 50 cfs minimum flow requirement, with the lowest flow recorded at 23 cfs by a downstream U.S. Geological Survey (USGS) gage. You were unable to start the siphon, which would have been required at the 4-hour mark, due to weather conditions that made the site inaccessible. The transmission lines have since been repaired. You notified the required resource agencies of the deviation by letter dated November 28, 2016. No adverse environmental effects were observed as a result of the deviation.

November 22, 2016 Deviation

According to your report, you deviated from the minimum flow and siphon requirements between 0615 hours and 1815 hours on November 22, 2016, when the project was shut down due to electrical problems in the powerhouse. During this time, flows fell below the 50 cfs minimum flow requirement, with the lowest flow recorded at 24 cfs by a downstream USGS gage. You tried to start the siphon at 1200 hours (which exceeds the 4-hour requirement specified in your Plan) and then encountered icy conditions, which further delayed the start-up of the siphon. By 1500 hours, the siphon was operating. In your report, you state that the operator originally thought the electrical issue would be resolved within the 4-hour timeframe specified in your Plan, thus making the use of the siphon unnecessary; however, the problem took longer to resolve than anticipated, which was further complicated by icing. By the time the operator realized this and started the siphon, nearly 9 hours had passed. You notified the required resource agencies of the deviation by letter dated November 28, 2016. No adverse environmental effects were observed as a result of the deviation.

Conclusion

Based on our review of the available information, we have concluded that the deviations from the required minimum flow and siphon requirements on November 19 and 22, 2016 will not be considered violations of Article 401 or 402 (i.e., the Plan) of your license. The deviations were the result of harsh weather conditions and electrical problems, both of which you could not have anticipated. With regard to the November 22 deviation, we note that you did not attempt to activate the siphon until nearly 6 hours after the deviation began. Given that the requirement is to activate it within 4 hours, consider this a warning that in the future, you must activate it within the required timeframe. We understand that you did not anticipate needing to use the siphon; however, once the 4-hour mark passed, it still took you nearly 2 hours to activate it. We recommend that you modify your response protocol such that as the 4-hour mark approaches, you have staff ready to activate the siphon (if not sooner) so that you remain in compliance with that requirement. Further, while we acknowledge that icing can present challenges with the siphon, we also recall that when a similar incident occurred in February 2016 that resulted in a deviation from the siphon requirement, you committed to using heaters to reduce the potential for icing on the siphon.³ Therefore, we remind and encourage you to continue taking that approach with the siphon to hopefully prevent future deviations related to icing. Finally, we remind for a second time that when reporting future deviations, you should justify how you determined whether the deviation(s) resulted in any environmental impacts, and explain the protocol you implemented to arrive at your conclusion.⁴ These incidents will be made a part of the compliance history for the project and taken into consideration regarding any future similar events.

³ See the Commission's March 23, 2016 letter.

⁴ The first reminder was in the Commission's March 23, 2016 letter.

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Thank you for your cooperation. If you have any questions regarding this letter, please contact Joy Kurtz at (202) 502-6760.

Sincerely,

(for) Thomas J. LoVullo
Chief, Aquatic Resources Branch
Division of Hydropower Administration and
Compliance

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