## FEDERAL ENERGY REGULATORY COMMISSION Washington, D. C. 20426

OFFICE OF ENERGY PROJECTS

Project No. 10854-077--Michigan Cataract Hydroelectric Project Upper Peninsula Power Company

Mr. Terry P. Jensky
Assistant Vice President – Energy Supply Operations
Upper Peninsula Power Company
700 North Adams Street
Green Bay, WI 54307-9001

SEP 2 7 2007

Reference: Article 401 Minimum Flow Deviations

Dear Mr. Jensky:

We received your letter filed August 31, 2007, providing notification of deviations from the requirement of Article 401 for the Cataract Hydroelectric Project No. 10854, located on the Middle Branch Escanaba River, in Marquette County, Michigan.

Article 401 of the license<sup>1</sup> requires the licensee to operate the project in a run-of-river mode for the protection and enhancement of water quality and aquatic resources in the Middle Branch Escanaba River. As part of this requirement, when project inflows are greater than 55 cubic feet per second (cfs) and less than 415 cfs, the Cataract Reservoir is to be maintained at a target surface elevation of 1,173.5 feet mean sea level (msl), with an operating range of +/- 0.25 feet. The licensee shall not operate between the low and high ends of the prescribed elevation range on a daily basis for the purposes of power system load following. Inflow to the project shall be determined using generation and water level records. When inflow to the project reservoir is 55 cfs or less, the licensee may continue to release up to 55 cfs from the powerhouse until the water surface elevation in the reservoir reaches 1,172.5 feet above mean sea level. At no time shall the licensee lower the water surface in the reservoir below 1,172.5 feet above mean sea level, except as provided for in the operating plan developed under Article 403.

<sup>&</sup>lt;sup>1</sup> 78 FERC ¶62,100, Order Issuing Original License, issued February 7, 1997.

Project No. 10854-077

-2-

Run-of-river operation may be temporarily modified if required by operating emergencies beyond the control of the licensee, and for short periods upon mutual agreement among the licensee, the Michigan Department of Natural Resources (MDNR), and the U.S. Fish and Wildlife Service (FWS). If the flow is so modified, the licensee shall notify the Commission, MDNR and FWS as soon as possible, but no later than 10 days after each such incident.

You reported that on July 31, 2007, discharge from the powerhouse was halted when the turbine/generator was taken offline. This was due to generator instability under minimum load/low flow conditions and the reservoir elevation was dropping approximately 0.10 feet per day. Stop logs were lifted at the dam to release approximately 59 cfs into the bypass in an effort to maintain run-of-river mode. Reservoir elevation at the time of the turbine/generator shutdown was 1,172.63 feet.

On August 5, 2007, the reservoir dropped to its lowest elevation of 1,172.51 feet. The reservoir has since recharged to 1,173.22 feet. The project has not been returned to normal operating conditions due to low inflow. The current measured inflow as of August 5, 2007, was 49 cfs and would not support turbine/generator operation and the mandatory 8 cfs required for the bypass reach. The minimum reservoir elevation of 1,172.5 feet, established for low inflow conditions, was not exceeded. No environmental impacts were observed during this event. Notification of this event was reported to the MDNR and FWS.

## Conclusion

Based upon our review of the available information, we have determined that the deviation which occurred does not constitute a violation of Article 401 of your license. The deviation was the result of low inflow conditions. Please notify the Commission when you return to normal operating conditions.

Thank you for your cooperation in this matter. If you have any questions regarding this letter, please contact Patricia W. Gillis at (202) 502-8735.

Villiam Luay of

William Guey-Lee

Chief, Engineering and Jurisdiction Branch Division of Hydropower Administration and Compliance