

FEDERAL ENERGY REGULATORY COMMISSION
Washington, D. C. 20426

OFFICE OF ENERGY PROJECTS

Project No. 2506-194--Michigan
Escanaba Hydroelectric Project
Wisconsin Public Service Corporation

Mr. Terry P. Jensky, Vice President
Energy Supply Operations
Wisconsin Public Service Corporation
700 North Adams Street
P.O. Box 19001
Green Bay, WI 54307-9001

MAR 16 2010

Subject: Reservoir Elevation Deviations from Article 402

Dear Mr. Jensky:

We received your letter filed December 16, 2009, reporting reservoir elevation deviations from the article 402 requirements for the Escanaba Hydroelectric Project, which occurred on December 6, December 7, December 10, and December 11, 2009.

Article 402 states that the licensee shall maintain the following target reservoir surface elevations: (1) 604.13 ± 0.34 ft. U.S. Geological Survey datum at the Dam No. 1 development; (2) 665.66 ± 0.34 ft. U.S. Geological Survey datum at the Dam No. 3 development; and (3) 906.17 ± 0.34 ft. U.S. Geological Survey datum at the Boney Falls development (Dam No.4).¹

These target reservoir surface elevations may be temporarily modified if required by operating emergencies beyond the control of the licensee, for short periods upon mutual agreement between the licensee and the Michigan Department of Natural Resources (MDNR), to implement the Flow Augmentation Plan as required by article 408 of this License, or to satisfy the requirements of the National Pollution Discharge Elimination System permit for Mead Publishing Paper Division's paper mill discharge located in the Dam No. 2 impoundment. If the reservoir water surface elevation is so modified, the licensee shall notify the Commission and the MDNR as soon as possible, but no later than 10 days after each such incident.

¹ This elevation was temporarily changed to 901.5 (± 0.5) feet by agreement between the licensee and the MDNR on November 6, 2008.

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Your December 16, 2009 letter reported that on December 6, 2009, at 8:33 EST, the reservoir elevation at the project's Dam No. 3 impoundment fell below the minimum reservoir elevation of 665.32 feet as a result of decreasing river flows. In response to the low level, you dispatched operating personnel to the site, who removed generation and opened a gate to raise the reservoir level. You restored the reservoir level at Dam No. 3 to normal elevation at 10:02 EST the same day. The minimum reservoir elevation reached during this event was 665.30 feet.

Your report also states that, on December 7, 2009, the reservoir at the Boney Falls Development exceeded the maximum temporary reservoir elevation limit of 902.0 feet as a result of increased river flow due to heavy snowfall. You responded by increasing generation and opening a gate to pass a higher volume of water. You reported that the reservoir returned to the required elevation at 00:18 EST on December 8, 2009, and that the maximum reservoir elevation reached during this event was 902.04 feet.

You also reported that on December 10, 2009, at 4:42 EST, the reservoir elevation at the project's Dam No. 3 impoundment again fell below the minimum reservoir elevation of 665.32 feet as a result of decreasing river flows. In response to the low level, you dispatched operating personnel to the site, who removed generation and opened a gate to raise the reservoir level. You restored the reservoir level at Dam No. 3 to normal elevation at 5:04 EST the same day. The minimum reservoir elevation reached during this event was 665.30 feet.

You also reported that on December 11, 2009, at 23:06 EST, the reservoir elevation at the project's Dam No. 3 impoundment once again fell below the minimum reservoir elevation of 665.32 feet as a result of decreasing river flows. In response to the low level, you dispatched operating personnel to the site, who removed generation and opened a gate to raise the reservoir level. You restored the reservoir level at Dam No. 3 to normal elevation at 00:16 EST on December 12, 2009. The minimum reservoir elevation reached during this event was 665.30 feet.

In your report, you state that the Escanaba River Hydroelectric Project controls will be replaced in 2010 with a more modern control system in which rate of change alarms will be added to alert the operator sooner of potential elevation deviations. You also state that in the interim, operator training needs will be re-evaluated to reduce the potential of these types of deviations occurring in the future.

Based on our review of your report and the available data, we conclude that the deviations you reported were due to streamflow conditions. For the reported incidents, you dispatched operating personnel to the sites, who returned the reservoirs to the authorized license elevations. You will also be implementing a more modern control

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system and re-evaluating operator training needs. You also reported that no adverse environmental impacts were observed as a result of the deviations in reservoir levels. You also notified the MDNR of the reservoir elevation deviations, as required by Article 402. As such, the incidents will not be considered violations.

Thank you for your cooperation. If you have any questions, please contact Tom Papsidero at (202) 502-6002.

Sincerely,

A handwritten signature in cursive script that reads "William Guey-Lee".

William Guey-Lee
Chief, Engineering & Jurisdiction Branch
Division of Hydropower Administration
and Compliance