

INTERNATIONAL LAKE SUPERIOR BOARD OF CONTROL

Minutes of the March 3, 2009 meeting

The International Lake Superior Board of Control met on March 3, 2009 in a conference room of the Chicago District, U.S. Army Corps of Engineers. Colonel Quarles convened the meeting at 8:40 a.m. The attendees were:

United States

COL V. Quarles, Alt. Member

Mr. J. Kangas

LTC J. Davis
Mr. S. Thieme, Alt.

Dr. M. Colosimo

Board Members

Secretaries

Regulation Representatives

Associates

Canada

Mr. D. Fay

Mr. R. Caldwell

Mr. R. Caldwell

Mr. J. DeLuzio
Mr. R. Stefano
Mr. T. McAuley

Item 1. Approval of Agenda

The agenda was approved as issued (encl 1).

Item 2. Update on Hydrologic Conditions and Regulation

Mr. Thieme updated the Board on hydrologic conditions for lakes Superior, Michigan-Huron, and Erie, and provided slides of recent net basin water supplies, levels (observed and forecasted), and Lakes Superior/Michigan-Huron water balance parameters. He also noted the location of two recently installed flow meters at the Bayfield dike, between the Edison Sault tailrace and Sugar Island.

- Water supplies to the Lake Superior basin in the past 6 months were below average; with only February being above average. Evaporation is estimated to have been about 18% above average the past 6 months. Lake Superior's surface temperature is the lowest of the past five years. Water supplies to the Lakes Michigan-Huron basin in the past six months were well above average, with December supplies being especially high due to high precipitation. Evaporation is estimated to have been slightly below average the past 6 months.
- Lakes Superior and Michigan-Huron levels are well below average, with Lake Superior continuing in its longest period of below-average levels (since April 1998) and Michigan-Huron in its second-longest period of below-average levels (since January 1999). Both lake systems have recovered significantly in the past year. Lake Superior is about 10 cm (4 in.) higher than last year at this time, while Michigan-Huron levels are about 29 cm (11.4 in.) higher than last year. Lakes Superior and Michigan-Huron were 14 and 27 cm (5.5 and 10.6 in.) lower than average, respectively, on March 1.

- Lake Superior outflows were below average from September through March, with Criterion (c) limiting outflows in September. Outflows were as specified by Regulation Plan 1977-A, and the gate setting at the Compensating Works remained equivalent to ½ gate open.
- The Board was presented a range of projected levels for the next 6 months, along with slides showing how levels compare to the previous two years. With average supplies, Lakes Superior and Michigan-Huron levels are expected to remain well below average. Lakes Superior is expected to rise above chart datum in May; Michigan-Huron levels are slightly above chart datum.
- The 1900-1986 “standardized departure” data as used in Plan 1977-A show that Lakes Superior and Lakes Michigan-Huron are in close balance.
- Lake Superior’s Ice cover is more extensive than last winter.
- Airborne measurements of the snow water equivalent on the Lake Superior basin will be made later in March.

Item 3. Update on Long Lac and Ogoki Diversions

Mr. Caldwell reported that Ontario Power Generation (OPG) provided the Board with an update on the discharges of the Long Lac and Ogoki Diversions. The Ogoki Diversion into Lake Nipigon (which flows into Lake Superior) averaged 128.5 m³/s (4,500 cfs) during September 2008 - February 2009. The Long Lac Diversion averaged 32.9 m³/s (1,200 cfs) for the same period. The total diversion was reported to be 116% of average for September to February. Heavy rains resulted in water being spilled north into the Ogoki River from October through December.

Mr. Caldwell also reported that since 1999 a continuous flow of at least 2 m³/s (70 cfs) has been maintained during the summer (Victoria Day weekend through Labor Day weekend) from the north outlet of Long Lake (Kenogami Dam). This agreement (i.e., the Aguabason Water Management Plan) between OPG and the local First Nations provides water for environmental enhancement of the Kenogami River, and reduces the amount diverted to Lake Superior. In 2008, OPG replaced wooden stop logs with new steel logs, which greatly reduced leakage. The Ontario Ministry of Natural Resources now requires a minimum flow of 0.55 m³/s during the rest of the year and has extended the 2 m³/s minimum requirement from Labor Day weekend to the end of October (i.e., Saturday of Victoria Day weekend through Halloween). Since it is difficult to change the flow during the winter, the logs were set to spill 0.9 m³/s on November 6, with the expectation that as Long Lake falls to its lowest level come spring, the spillage rate will be at or above the 0.55 m³/s minimum. An average of 1.1 m³/s (40 cfs) was spilled from September through February.

Item 4. Flow Measurements

4a) Hydropower plants. No measurements were conducted during the reporting period. Mr. Thieme reported on the August 2008 flow measurements that confirmed the accuracy of the new flow reporting software for the US Government plant. The reported flows are based on

head and wicket gate openings and are within 5%; consequently, the Board agreed to accept the reported flows as of November 1, 2008. There is a negative bias in the rating curve that will be discussed with the consultant who developed the rating curve. The Board's measurement report will also be forwarded to them.

Flow measurements are scheduled for all hydropower plants in 2010.

4b). Compensating Works. No flow measurements were conducted during the reporting period and none are expected for the Compensating Works until at least after the completion of the Canadian gate rehabilitation project in 2010.

Item 5. Hydropower Plant Maintenance

No significant maintenance items were reported for this year at ESELCO. There will be work in the canal and powerhouse over the next 2 years, but this will not impact their ability to discharge their flow allotment.

LTC Davis reported that a contract for a new impeller for Unit 10 is expected to be let later this year if funding is received.

Other routine maintenance was performed during the reporting period, and is expected over the next 6 months, for these two plants, as well as at the Brookfield Renewable Power plant. Mr. Stefano reported that Brookfield Renewable Power's 3 units would be taken out of service for maintenance, one at a time during April and May. This is not expected to affect their ability to pass their monthly water allocation since they still have sufficient capacity with the remaining units. The ice boom installed below the tailrace apparently failed in early March.

Item 6. Compensating Works

6a). Inspections. Routine inspections were conducted over the past 6 months; no major items were found.

6b). Maintenance. Brookfield Renewable Power dewatered, repainted, and repaired 2 of its 8 gates (Gates 4 and 7) of the Compensating Works last summer and fall. Similar work will be done to Gates 6 and 8 in 2009. The nose cones to some of the gates will be repaired while the gates are dewatered. The Board was informed that the railway bridge just below the Compensating Works has both under- and above-water detailed inspections on a 5-year basis and an above-water inspection annually. A copy of the most recent inspection reports has been requested.

Item 7. Peaking and Ponding Update

The Board noted that the levels below the Locks were high enough from the fall to the close of the navigation season in late January such that ponding was not restricted. No vessel delays were reported due to water levels. As Lakes Michigan-Huron are slightly above datum, it is not expected that ponding will be restricted during the next six months.

Item 8. 2009 Meeting With the Public

The Board made plans for its next meeting with the public. It agreed to utilize a telephone call-in method for public participation. The Board briefing will be posted to the web

page to allow those calling in to follow the presentation. The meeting was scheduled for June 4 at Lake Superior State University at Sault Ste. Marie, Michigan.

Item 9. Review semi-annual progress report

Mr. Kangas led a review of the revised progress report. The Board had several comments and revisions to be incorporated prior to sending the final report to the IJC.

Item 10. Other Business

10a). International Upper Great Lakes Study. Mr. Fay and Mr. Thieme reported on the International Upper Great Lakes Study. The St. Clair River report is scheduled to be completed in late spring, 2009. It appears that erosion of the St. Clair River has taken place in the lower portion of the river and is not linked to dredging. The navigation, hydropower and ecosystem task groups of the study will be looking at peaking and ponding at the Soo.

10b). Great Lakes – St. Lawrence Seaway Study LTC Davis reported that the Supplemental Report is expected to be sent out for review in the next several weeks. The St. Lawrence Seaway Development Corporation has some funds to begin work this fiscal year at the Snell and Eisenhower Locks on the St. Lawrence River.

10c). Status of Lock Replacement. LTC Davis reported that the latest Water Resources Development Act had authorized this project to be at full federal expense. Construction could begin this FY, depending on passage of the budget and/or inclusion of the project in the expected stimulus budget of the US Government.

11. Next Meeting and IJC Appearance

The IJC Appearance is scheduled for 10:30 a.m. on April 1. The fall Board meeting is tentatively scheduled for September 17 in the Niagara region.

There being no other business, the meeting adjourned at 3:22 p.m.

INTERNATIONAL LAKE SUPERIOR BOARD OF CONTROL
MEETING OF MARCH 3, 2009

Approved Agenda

1. Approval of agenda
2. Update on Hydrologic Conditions and Regulation
3. Update on Long Lac and Ogoki Diversions
4. Flow Measurements
 - a. Hydropower Plants
 - b. Compensating Works
5. Hydropower Plant Maintenance
6. Compensating Works
 - a. Inspections
 - b. Maintenance activities
7. Peaking and Ponding Update
8. 2009 Meeting With the Public
9. Review semi-annual progress report
10. Other Business
 - a. Status of Upper Great Lakes Study
 - b. Status of Great Lakes – St. Lawrence Seaway Study
 - c. Status of Lock Replacement
 - d.
11. Next Meeting and IJC Appearances