

INTERNATIONAL NIAGARA BOARD OF CONTROL

Minutes of the March 22, 2011 Meeting Niagara Falls, NY

Colonel Drolet called the meeting to order at 1:15 pm in a conference room of the Crowne Plaza Hotel, Niagara Falls, New York. Those in attendance were:

<u>UNITED STATES</u>	<u>CANADA</u>
<u>BOARD MEMBERS</u>	
COL J. Drolet, Alt. Chair	Mr. A. Thompson
<u>SECRETARIES</u>	
Mr. J. Kangas	Mr. L. Falkiner
<u>WORKING COMMITTEE AND ASSOCIATES</u>	
LTC S. Bales	Dr. H. Goertz
Mr. E. Tauriainen	Mr. C. Southam
Mr. P. Yu	Dr. F. Seglenieks
Mr. D. Harding	Ms. J. Frain
Mr. G. Cross	Ms. C. Warwick
Mr. J. Oyler	
Mr. P. Cocca	
Mr. J. Scungio	
Ms. C. Fisher	
Mr. Z. Jeffries	
Dr. M. Colosimo	
CWO T. Gough	

Item 1. Approval of Agenda

The Board approved the agenda after adding an item under Item 5 (Encl 1).

Item 2. Update on Lake Erie/Niagara River conditions

Mr. Falkiner provided the Board with an update of levels, precipitation and net basin supplies for Lake Erie and the Niagara River. Precipitation over the Lake Erie basin was reported to be 7 % above average for the September 2010 – February 2011 period. Lakes Michigan-Huron level is lower than a year earlier and is expected to stay below average for the next 6 months. Lake Erie outflows were generally near average during the September 2010 – February 2011 period. Lake Erie water level rose sharply (38 cm, 15 in) from mid- February to the meeting time due to snowmelt and heavy

rainfall. Currently, the lake is at average. The 6-month forecast indicates that Lake Erie level and outflow will be slightly below average through the summer.

Item 3. Review of Ice Season Activities and Conditions

The Board was provided a summary of the 2010-2011 ice boom season to date. Under the Commission's 1999 Supplementary Order of Approval, installation of the boom's spans may begin when the Lake Erie water temperature at Buffalo reaches 4 °C (39 °F) or on December 16, whichever comes first. This ice season, the water temperature reached 4 °C (39 °F) on December 8. Installation began on December 12 (9 spans), continued on December 14 (1 span), continued on December 15 (7 spans) and was completed on December 16 (7 spans).

Ice first appeared in the Chippawa - Grass Island Pool on December 20. Ice cover on Lake Erie peaked at the end of January with about 98% of Lake Erie covered by ice. A helicopter flight ice thickness measurement on March 12 found ice thicknesses ranging from open water to 90 cm (35 in) thick ice at the six measurement sites used for monitoring purposes. As of the Board meeting, the eastern Lake Erie basin had about 40% ice coverage. Ice boom opening could be delayed beyond April 1 this year. Another ice thickness measurement flight is scheduled for the following week.

The new storage and work site for the ice boom, located about 3 kilometres (2 miles) inland on the shoreline of the Buffalo River, required a longer time to stage the ice boom (remove from storage, transport along the Buffalo River and tie spans to the breakwater).

Item 4. Chippawa-Grass Island Pool Operations

Mr. Falkiner discussed the operation and maintenance of the Chippawa-Grass Island Pool (CGIP) Control Structure during the reporting period. Tolerances for regulation of CGIP levels were suspended on September 26 for police activity; on February 2-3 for low flows; and, for 12 days in January, 9 days in February, and 1 day in March for ice management.

The major overhaul of Gate 10 was completed in November 2010. However, the gate remains out of service while an oil line leak, that presents no environmental hazard, is repaired. The hydraulic lines of Gates 1 – 13 will be replaced over the next 2-1/2 years. Work on Gate 2 started September 20 and was completed November 24. The hydraulic lines on Gates 14-18 do not need replacing.

Item 5. Review discharge measurement programs

a. Welland Canal. Dr. Herman Goertz reported on the Welland Canal measurement program. Measurements were made in May 2010, as scheduled, to verify the rating used to determine flow through the supply weir. However, due to the Seaway's inability to provide water level data, the flow measurements will need to be

repeated. The Board discussed and generally supported the possibility of Environment Canada installing a permanent gauge to preclude similar problems in the future. The Board asked the Working Committee to determine if there are any written commitments on the part of the Seaway to provide water level data.

b. Niagara River Mr. Tauriainen reported on the flow measurements taken in the Niagara River in 2010. Measurements were undertaken jointly by the Corps of Engineers and Environment Canada. Measurements were taken at the International Railway Bridge and at the Cableway sections. Due to communications, repairs and scheduling issues at NYPA, a portion of the Cableway measurements was not able to be completed. The Board received a letter from NYPA to explain the reasons. Mr. Tauriainen also distributed a schedule of future measurements; the next scheduled measurements are in 2012 at the International Railway Bridge and American Falls sections.

c. Analysis of 2010 measurements Mr. Tauriainen discussed the analysis of the 2010 Cableway and International Railway Bridge measurements. The Niagara Falls flows determined by the new Ashland Avenue rating were confirmed by the Cableway measurements. It appears that the measured flows at the International Railway Bridge section are higher than flows given by the Buffalo rating equation. This was the case with previous ADCP measurements, also. The Board discussed possible reasons for this. It may be that the area and bottom profile measured by the ADCP is different than the area and profile determined by lead line. The Working Committee was asked to evaluate the historic data and recommend to the Board whether the Buffalo equation should be revised.

d. Cableway removal The Board received an update on removal of the overhead cable at the Cableway measurement section. Mr. Harding reported that bids were let for the work to take place this year. It is expected that a contract will be awarded in April, with removal to be completed in the spring.

Item 6. OPG tunnel status and plant upgrades

Ms. Frain reported on the tunnel status. As of March 20, the Tunnel Boring Machine has progressed 10 089 m (33,100 ft), and is on schedule. This represents 99% of the total tunnel boring distance. A breakthrough ceremony is planned for later this spring, possibly in April. Placement of concrete in the arch portion of the tunnel is completed for 2000 m (6,560 ft). Work on the invert and profile restoration is completed for 6900 m (22,600 ft) and 3300 m (10,800 ft), respectively. The tunnel is expected to be available for use in December 2013.

Ms. Frain also noted that upgrades continue on the Beck 1 units. Replacement of the unit G9 runner was finished in December 2010. Upgrades to unit G7 are underway with completion expected this July. Work on unit G8 will follow.

Item 7. 2011 Meeting with the Public

The Board discussed the preliminary plans for the September 2011 annual meeting with the public. The meeting will be held in Ontario with the date and venue to be determined later. The last meeting with the public was held on September 15, 2010, at a hotel in Niagara Falls, New York.

Item 8. Review Semi-Annual Progress Report

The Board reviewed, revised and approved the 116th Semi-Annual Progress Report to the International Joint Commission. The report will be sent to the Commission the week of March 28. An advance copy will be furnished electronically.

Item 9. Other Business

There were no items to be considered under other business.

Item 10. Next Board meeting and IJC appearance

The Board noted that its Appearance with the IJC is scheduled for the morning of April 13; the Reception is that evening. The next Board meeting is tentatively scheduled for the week of September 12-16 period in the Quebec City region.

The meeting adjourned at 2:45 p.m.

INTERNATIONAL NIAGARA BOARD OF CONTROL
MEETING OF MARCH 22, 2011

Agenda

1. Approval of Agenda
2. Update on Lake Erie/Niagara River conditions
3. Review of ice season activities and conditions
4. Chippawa-Grass Island Pool operations
5. Review discharge measurements program
 - a. Welland Canal
 - b. Niagara River
 - c. Analysis of 2010 measurements
 - d. Cableway removal
6. OPG Tunnel status
7. 2011 Meeting with the Public
8. Review Semi-Annual Progress Report
9. Other Business
10. Next Board Meeting and IJC Appearance