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2 **INTERNATIONAL NIAGARA BOARD OF CONTROL (INBC)**

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4 Minutes of the September 20, 2023 Meeting  
5 Montreal, QC, Canada  
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7 Mr. Thompson participated in the meeting remotely and delegated the management of  
8 the meeting to Mr. Beach who participated in person. Mr. Beach called the meeting to  
9 order at 9:00 AM in Room N5121, Ministry of Economy, Innovation, and Energy, 380  
10 Saint-Antoine Street West, Montreal, Quebec, Canada. Several members and  
11 associates from both sides of the border participated by video conference call; these  
12 participants are noted by a (VTC) after their names. Those in attendance were:  
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**UNITED STATES**

**CANADA**

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**BOARD MEMBERS**

BG M. Quander, Co-Chair  
Mr. P. Johnson, Alt. Co-Chair  
Mr. D. Capka, Member (VTC)

Mr. A. Thompson, Co-Chair (VTC)  
Ms. J. Keyes, Member (VTC)

**SECRETARIES**

Mr. B. Carmichael

Mr. H. Ahmad

**WORKING COMMITTEE AND ASSOCIATES**

Mr. K. Kompoltowicz  
Mr. M. Asklar  
Mr. P. Cocca  
Ms. C. Fisher (VTC)  
Ms. L. Greer  
Mr. M. Wood  
Mr. K. Burgio  
Mr. G. Schmidt (VTC)

Mr. D. Beach  
Ms. J. Fooks (VTC)  
Dr. K. Kornelsen (VTC)  
Ms. C. Cho (VTC)  
Mr. R. Malier (VTC)  
Mr. S. Frick (VTC)

**OTHER**

Mr. Pierre Beland, IJC  
Mr. L. Yohe, IJC  
Ms. C. Suka, USG Observer

Ms. E. Klyszejko, IJC  
Mr. J. Allis, IJC

16 **Item 1. Opening Remarks, Introductions**

17 Mr. Beach welcomed attendees to the board meeting. Each attendee, both those present  
18 at the meeting location and those attending remotely, provided a brief introduction at the  
19 start of the meeting.

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21 **Item 2. Approval of Agenda**

22 The draft agenda was approved with no additions to the agenda and is attached.

23

24 **Item 3. Membership Changes, Roles and Responsibilities**

25 There was no change on the Canadian side, but two changes occurred among the US  
26 members of the board during this reporting period. On July 3, 2023, BG Mark Quander  
27 assumed the duties of the US Co-Chair, succeeding BG Kimberly Peeples, and Mr. Phil  
28 Johnson replaced Mr. Kyle McCune to become a new US alternate Co-Chair. One  
29 International Niagara Working Committee (INWC) member seat is still vacant on the  
30 Canadian side. Ms. Keyes will explore the possibilities regarding the new member  
31 appointment and will inform the Board.

32

33 **Item 4. Review of Previous Meeting Minutes**

34 The review of meeting minutes from the last board meeting on March 22, 2023, will be  
35 completed by email. A first draft was distributed to the board for comments by  
36 September 25, 2023.

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38 **Item 5. Update on Lake Erie/Niagara River Conditions**

39 The board received an update of water levels, precipitation, net basin supplies, and flows  
40 for Lake Erie and Niagara River for the reporting period. The water levels of Lake Erie  
41 were above average for the reporting period. Lake Erie began the reporting period with a  
42 March mean level of 43 cm (16.9 inches) above its period-of-record (1918-2022) average  
43 level for the month. The level of Lake Erie remained above average on a monthly basis from  
44 March through August. During its seasonal rise, Lake Erie's water level rose 6 cm (2.4  
45 inches) from March to June, compared to its average rise of 26 cm (10.2 inches). In June,  
46 the lake level decreased by 5 cm (2.0 inches) instead of its average increase of 4 cm (1.6  
47 inches) for the month. In July, the lake level remained the same instead of its average  
48 decrease of 2 cm (0.8 inches) for the month. Lake Erie levels ended the reporting period with  
49 an August monthly mean water level of 30 cm (11.8 inches) above average.

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51 **Item 6. Lake Erie – Niagara River Ice Boom**

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53 **a) 2022-23 Ice Boom Season Review**

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55 The Lake Erie – Niagara River Ice Boom was operated by the Power Entities in  
56 accordance with conditions of International Joint Commission (IJC) Order of

57 Approval. The 2022-2023 ice season typically consisted of seasonal and higher than  
58 seasonal temperatures. Ice cover over Lake Erie started increasing during the last  
59 week of December and fluctuated up and down in the following months. It peaked at  
60 about 32% during the first week of February but was predominately unstable and thin  
61 ice, which suddenly declined in the week of February 12 and disappeared for the  
62 remainder of the ice season.

63  
64 The helicopter and fixed wing flights to determine eastern Lake Erie ice conditions  
65 were deemed unnecessary due to the short-lived ice on the lake, and the formation  
66 of thin sheet of the ice. Satellite imagery was used to estimate the ice cover on the  
67 eastern basin of Lake Erie instead.

68  
69 A media advisory was issued by the board on March 1, 2023 informing the public that  
70 removal operations would begin on March 2. All spans were moved from Lake Erie  
71 and tied off to the Buffalo breakwall by March 7. All components of the boom were  
72 moved from Lake Erie to their summer storage facility by March 22, 2023, ending the  
73 2022–2023 ice boom season.

74  
75 **b) Status of 2022-23 Ice Boom Report**

76 The first draft of the report is still under progress. The board asked that the INWC  
77 present the Ice Boom report to them before the board meeting. All the contributors  
78 (e.g. the PEs) are requested to provide data on time for timely preparation of the  
79 report. The INWC aims to prepare the Ice Boom draft report in the summer from  
80 the next year onwards.

81  
82 **c) 2023-24 Ice Boom Installation**

83 For the 2022-2023 ice season, the 21-span ice boom was installed instead of the  
84 usual 22 spans due to safety concerns. The New York Power Authority (NYPA)  
85 cited sedimentation reducing lake depth near the last span, particularly near Fort  
86 Erie Beach in Ontario, Canada, around an old pier near junction 23. This poses a  
87 high risk of grounding for the barge used in installation, raising safety concerns for  
88 the crew and equipment. The Board's Working Committee had been in close  
89 communication with the Power Entities to determine their monitoring plans for 21-  
90 span ice boom. The PEs noted that the missing span allowed minimal ice flow past  
91 the ice boom and the ice arch formed in February despite missing span. In addition,  
92 the bathymetric survey and observations found no new conditions or obstructions.  
93 Silt deposition has cleared out naturally by wave action from wind. Therefore,  
94 NYPA intends to install full 22 span ice boom while looking into further study of ice  
95 boom performance and installation safety The ice boom performance study is also  
96 planned for the coming ice season as 2022-2023 was not a great ice year. In  
97 addition, NYPA plans to have regular bathymetric surveys to monitor sedimentation  
98 effects etc.

Some other important discussion points from the meeting are:

- The Board asked the INWC to add the Canadian Hydrographic Service (CHS) bathymetric data for sedimentation comparison in the upcoming ice boom 5-year review report.
- NYPA is considering studies about ice boom design, including the potential need to change the size of the pontoon and anchoring, etc.
- IJC indicated it may be possible to revise their Orders if needed (e.g. anchor cables could be relocated if necessary).

#### **Item 7. Falls Flow Violations**

During the reporting period, flow over Niagara Falls fell below the minimum Treaty requirement on June 1 to facilitate rescue operations conducted by the New York State Park Police, Niagara Parks Police, and Niagara Falls Fire Department, and for a few hours on June 27-29 to allow for planned Government flow measurements for the purpose of verifying the Ashland Avenue Flow Gauge measurements. The International Niagara Committee reviewed the circumstances surrounding these violations and agreed no further action was required. Flows over Niagara Falls met or exceeded the minimum Treaty requirements at all other times.

#### **Item 8. Chippawa-Grass Island Pool**

The board received a summary of the operation and maintenance of the Chippawa-Grass Island Pool (CGIP) and International Niagara Control Works (INCW).

##### **a) Compliance to Directive**

The Power Entities were able to comply with the board's directive at all times during the reporting period of March 1, 2023 through August 31, 2023.

##### **b) Operations and Maintenance**

The board received an update on regulatory gauge outages, regulatory reporting, INCW outages, and INCW environmental issues. The operations of CGIP and INCW were satisfactory for this reporting period. An update on regular maintenance of the INCW was provided.

All gauges required for the operation of the INCW were in service during this reporting period with minimal down time.

The Niagara River Water Level Gauge (WLG) house replacement project to address the poor conditions of gauge houses and to upgrade them is rescheduled to begin November 2023. To address the WLG communication failures, a new project is planned for 2025 to replace Niagara River WLG communication infrastructure. The gate hydraulic system project is now scheduled for 2024-2025.

138 The gate rehabilitation project is planned to start in 2026 to replace all gate  
139 components and controls; the project will run for 10 years until completion. The ice  
140 camera replacement project has a projected completion by the end of 2023.

141 **Item 9. Plant Upgrades and Unit Testing**

142 The board received a summary of the operation and maintenance of the power plant  
143 generating units.

144 **a) Ontario Power Generation (OPG)**

145 OPG is continuing a unit rehabilitation program which began in 2007. The board  
146 received an update on the ongoing upgrades. Sir Adam Beck 1 (SAB 1) G5 Gibson  
147 Test Report was completed and interim unit rating table issued. SAB 1 units G1  
148 and G2 frequency conversions are now complete and both units tested. Final rating  
149 tables are still pending. G4 is expected to be overhauled in 2025-2026. SAB 2 unit  
150 overhauls will begin in 2026. SAB PGS PG3 overhaul is underway and return to  
151 service is expected in 2024.

152 OPG is in the process of replacing the existing Water Record Accounting (WRA)  
153 system for both the SAB and DeCew GS. The Kisters WISKI product will be used  
154 and is currently undergoing testing for Niagara setup. The Niagara River Control  
155 Centre (NRCC) has a separate WRA system that will not be replaced by this  
156 project.

157  
158 **b) NYPA**

159 The board received an update on ongoing maintenance activities for the Lewiston  
160 Pump Generating Plant (LPGP) and Robert Moses Plant LEM. PG 5 repairs were  
161 initiated in May 2023, with a planned return to service on September 30, 2023. PG  
162 7 and PG 2 motor generator rework is ongoing due to conditions discovered on the  
163 upgraded units, and the expected completion date is December 2024. At the Robert  
164 Moses Plant, RM-6 controls and mechanical upgrades commenced in April 2023 for  
165 an expected 15-month outage. The Next Generation Niagara 13-unit upgrades at RM  
166 are expected to be completed by 2039.

167  
168 **Item 10. Review Discharge Measurement Programs**

169 **a) Overall Schedule** – Flow measurements are taken on a regular schedule to  
170 confirm the accuracy of the gauges used to determine the allocation of water from  
171 the Niagara River. This includes in the upper Niagara River at the International  
172 Railway Bridge, over Niagara Falls at the American Falls, in the lower Niagara  
173 River at the Ashland Avenue Rating Section, and finally in the Welland Canal. The  
174 schedule for these flow measurements were reviewed. The measurements at  
175 upper Niagara River were taken in May 2022 and in June 2023 at the lower  
176 Niagara River. There are no key issues with the current ratings.

- 177       **b) International Railway Bridge** – The last set of flow measurements in the upper  
178       Niagara River at the International Railway Bridge were taken in May 2022. The  
179       next measurements at this location are scheduled for spring 2025. Data  
180       processing and report writing for these measurements are in progress.
- 181       **c) Welland Canal** – The last set of flow measurements were taken in December  
182       2021. The measurements are currently under review. The next measurement  
183       series in the Welland Canal are planned for the fall of 2024.
- 184       **d) Ashland Avenue Rating Section** – The last set of flow measurements in the  
185       lower Niagara River were taken in June 2023. Data processing and report writing  
186       for these measurements are in progress. The next set of measurements is planned  
187       for Spring 2026.
- 188       **e) American Falls** – The last set of flow measurements were taken in May 2017. All  
189       reports are up to date at this location. The board was informed that the USA crew  
190       attempted to take the American Falls measurements in May 2022 but the flow  
191       measurements were unsuccessful due to some technical issues. Therefore, the  
192       measurements have been delayed until Fall 2023.
- 193       **f) Lower Niagara Index Velocity Gauge** – This gauge has been installed by  
194       USACE at Old Fort Niagara, Youngstown, New York. It is up and running and  
195       continues to monitor. The last set of measurements were taken by the USACE in  
196       May 2022. All reports are up to date for this location. The next set of  
197       measurements is planned for Fall 2023.

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199       **Item 11. 2023 Public Outreach Events**

200       The board participated in two separate INBC and ILOSLRB Virtual Public Webinars, one  
201       in English on August 30, 2023 and the other in French on August 31, 2023. The webinars  
202       were conducted in collaboration with the IJC commissioners and communications staff,  
203       and the International Lake Ontario – St. Lawrence River Board. The webinars provided  
204       members of the public an overview of the current and forecast conditions of the Great  
205       Lakes and discussed water levels throughout the system. A total of 68 members of the  
206       public participated in the English session and 24 people attended the French webinar.  
207       Questions were submitted prior to the webinar during registration, allowing the presenters  
208       to prepare accurate responses prior. Three INBC related questions were asked. The  
209       participants were encouraged to visit the board webpage for additional information and to  
210       submit any further questions.

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212       **Item 12. Review 141<sup>st</sup> Semi-Annual Progress Report**

213       The draft of the 141<sup>st</sup> progress report was distributed to the INBC members and associates  
214       for their review and the comments due by September 29, 2023. The final draft will be out  
215       for the board members' signature first week of October 2023.

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218 **Item 13. Other Business**

219 **a. Falls Recession**

220 The board was updated on monitoring of the Niagara Falls crest recession. There  
221 were no significant changes in the crest line as noted over the last reporting period  
222 based on available camera images of Niagara Falls on the internet.

223 **b. Board Webpage**

224 The main pages of the board's English website have been translated into French  
225 and uploaded to the French site, which is now live. The IJC is working on the  
226 board's interactive map, for which the board has already submitted its suggestions  
227 to the IJC. Any further suggestions should be sent to the board secretaries by  
228 September 29, 2023.

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230 **Item 14. IJC Appearance**

231 The next IJC Appearance is scheduled for October 18, 2023, 03:15-04:00 PM in Ottawa  
232 and via virtual meeting (MS Teams). A presentation for the IJC will be prepared based on  
233 requested requirements from the IJC and provided for comment.

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235 **Item 15. Next Board Meeting, Closing Remarks, and Adjourn**

236 The next board meeting is tentatively scheduled for March 2024 with location to be  
237 determined. The closing remarks were made and the meeting adjourned at 11:40 AM.

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**International Niagara Board of Control  
Fall Semi-annual Meeting  
September 20, 2023  
9:00 a.m. – 11:30 a.m.**

**Ministry of Economy, Innovation and Energy  
380 Saint-Antoine Street W, Montreal QC Canada**

**Agenda**

1. Opening Remarks, Introductions (Thompson) 9:00-9:05
2. Approval of Agenda 9:05-9:10
3. Membership Changes, Roles and Responsibilities (Ahmad/Carmichael) 9:10-9:15
4. Review of previous meeting minutes (Carmichael) 9:15-9:20
5. Update on Lake Erie/Niagara River Conditions (Ahmad/Cho) 9:20-9:30
6. Lake Erie – Niagara River Ice Boom
  - a) 2022-23 Ice Boom Season (Ahmad/Asklar) 9:30-9:35
  - b) Status of 2022-23 Ice Boom Report (Schifferle) 9:35-9:40
  - c) 2023-2024 Ice Boom installation (NYPA/OPG) 9:40-10:00
    - i. Summary of summer investigation Lake Erie bathymetry
    - ii. Plans for installation of ice boom
    - iii. Need/logistics for IJC Order for 2023/24
7. Falls flow violations (Ahmad/Beach) 10:00-10:05
8. Chippawa-Grass Island Pool
  - a) Compliance to Directive (Ahmad/Malier) 10:05-10:10
  - b) Operations and maintenance (Malier) 10:10-10:15
9. Plant Upgrades and Unit Testing
  - a) OPG (Kornelsen) 10:15-10:25
  - b) NYPA (Asklar) 10:25-10:35
10. Review discharge measurements program (Beach) 10:35-10:45
  - a) Overall schedule
  - b) International Railway Bridge (Buffalo and Fort Erie)
  - c) Welland Canal
  - d) Ashland Avenue Rating Section
  - e) American Falls
  - f) Lower Niagara Index Velocity Gauge
11. 2023 Public Outreach Events (Greer/Ahmad/Carmichael) 10:45-10:55
12. Review of 141<sup>st</sup> Semi-Annual Progress Report (Ahmad) 10:55-11:00
13. Other Business
  - a) Falls Recession (Cho/Beach/Ahmad) 11:00-11:05
  - b) Board webpage (Ahmad/Beach/Carmichael) 11:05-11:15

14. IJC Appearance – Date, topics for presentation 11:15-11:25
15. Next Board Meeting, Closing Remarks and Adjourn 11:25-11:30