ONTARIO ENERGY BOARD

IN THE MATTER OF the *Electricity Act, 1998,* c. 15 (Schedule A) and *Ontario Energy Board Act,* 1998, *c. 15 (Schedule B);*

IN THE MATTER OF an Application by Capital Power Corporation, Thorold CoGen L.P., Portlands Energy Centre L.P. doing business as Atura Power, St. Clair Power L.P., and TransALta (SC) L.P. ("NQS Generation Group") to the Ontario Energy Board for an Order or Orders under section 33 of the *Electricity Act, 1998*.

AFFIDAVIT OF MARC MANTHA SWORN DECEMBER 28, 2024

I, Marc Mantha, of the Town of Bowmanville, in the Province of Ontario, MAKE OATH AND SAY:

1. I am the Vice President and General Manager for the Canadian Operations of FirstLight, an intervener in this proceeding, and as such have knowledge of the following matters.

2. I am a licensed professional engineer with a specialization in power and control systems. I have been managing and operating hydroelectric generation assets for over 20 years, including their participation in the IESO-administered markets since 2002. A copy of my curriculum vitae is attached to this affidavit as Exhibit "A".

3. FirstLight's distribution connected hydroelectric generation facilities are currently settled under the OEB's *Retail Settlement Code* based on the Hourly Ontario Energy Price ("**HOEP**"). Broadly speaking, when HOEP is negative FirstLight's distribution

connected hydroelectric generation facilities are settled at their IESO Feed-in-Tariff (FIT) contract price minus the absolute value of the negative HOEP. There is no applicable floor price. This means the more negative the HOEP, the less revenues FirstLight receives for the electricity generated by its distribution connected facilities.

4. According to the IESO's public website, the Market Rule amendments for the implementation of the Market Renewal Program (the "**Amendments**") require the Ontario Energy Board's *Retail Settlement Code* to be updated to replace references to HOEP with a new uniform price, namely the Retail Settlement Code Price ("**RSCP**"). A copy of the IESO's public webpage explaining this change is attached to this affidavit as Exhibit "B".

5. The RSCP is the sum of the day-ahead market Ontario Zonal Price and the Load Forecast Deviation Adjustment. As explained in the IESO's evidence filed in this proceeding:

> "The Amendments create a single zonal price, called the Ontario Zonal Price, which is calculated as the <u>weighted</u> <u>average of the day-ahead LMPs</u>. Because the Ontario Zonal Price is based in part on the IESO's day-ahead load demand forecast, the IESO adjusts the Ontario Zonal Price to reflect differences between the day-ahead demand forecast and actual demand in real-time using a "Load Forecast Deviation Adjustment".¹ (underlining added)

¹ (EB-2024-0331) IESO MRP Objective Evidence, page 10, subsection 2.4.2.2, online: ">https://www.rds.oeb.ca/CMWebDrawer/Record/875538/File/document>.

6. There is a fundamental difference between the calculation of the HOEP and the calculation of the RSCP. The RSCP is the load <u>weighted average price</u> of all zones in the province whereas HOEP, in its simplest form, is a single marginal price (for energy).

7. In order to determine the economic impacts the Amendments will have on the settlement of FirstLight's distribution connected generation facilities, FirstLight asked the IESO during a virtual meeting on November 15, 2024 to provide forecasted LMPs for the renewed market. The IESO responded during that meeting that existing shadow prices (currently used to help determine actual dispatches) could be used as a reasonable proxy for LMPs under the renewed market. To FirstLight's knowledge, the IESO has not provided any analysis by which distribution connected generation facilities can determine the economic impacts of the Amendments.

8. Using the IESO's published shadow prices for the period January 2020 to December 2023, I conducted an analysis to calculate what the Ontario Zonal Price will be in the renewed market. My analysis indicates that negative pricing events calculated on a zonal weighted average basis may occur more frequently under the renewed market, and that each such event will be more negatively priced than under the current market.

9. Furthermore, my analysis suggests that certain weighted average price conditions in the renewed market may result in settlement of our distribution connected generation facilities based on a negative RSCP whereas under the current market the settlement would be based on a positive HOEP. This could occur, for instance, when there is high baseload generation in one or more dominant load zones exceeding load, thereby resulting in a negative zonal price that outweigh(s) the other load zonal prices.

10. Hydroelectric resources will be particularly vulnerable to revenue erosion resulting from RSCP-based settlement in the renewed market, in that negative pricing events can be expected to occur when non-electrical operational attributes (e.g. water management and control) require the facilities to be online. This means the above described adverse economic impacts resulting from the Amendments will be particularly harmful, or unjustly discriminatory, to FirstLight's distribution connected hydroelectric generation facilities as compared to other generators participating in the renewed market.

SWORN remotely by Marc Mantha at the Town of Bowmanville, in the Province of Ontario, before me AT THE City of Toronto, in the Province of Ontario on December 28, 2024, in accordance with O.Reg.431/20, Administering Oath or Declaration Remotely.

Commissioner for Taking Affidavits Reena Goyal (LSO No. 50324A)

MARC MANTHA

This is Exhibit "A" referred to in the Affidavit of Service of MARC MANTHA, sworn on December 28, 2024.

Commissioner for Taking Affidavits

MARC A. MANTHA, P.ENG.

20 MAXWELL COURT, BOWMANVILLE, ON L1C 4X6 marc.mantha@firstlight.energy

EDUCATION

UNIVERSITY OF OTTAWA Bachelor of Applied Science (Electrical Engineering), 1981 Specialization in Power and Control Systems

EXPERIENCE

FIRSTLIGHT POWER OSHAWA, ONTARIO Vice President & General Manager, Canadian Operations, December 2022-present

Manage and oversee the operation of the Company's hydroelectric and renewable generation, transmission and distribution assets in Ontario and Quebec, including daily operations, water management, strategic planning, maintenance and engineering. In the capacity of General Manager, represent the Canadian organization as liaison to the FirstLight organization as a member of the Executive team and has country responsibility for the safe operation and management of all sites and offices in Canada. Participate in the Company's acquisition and expansion efforts. Major accomplishments include leading the integration of the Hydromega operations team into the FirstLight organization.

H2O POWER HOLDING LP OSHAWA, ONTARIO Vice President, Operations, May 2011 – November 2022

Manage and supervise the operation of the Company's hydroelectric generation and transmission assets in Ontario and US, including daily operations, water management, strategic planning, maintenance and engineering. Manage and direct a staff complement charged with real time operations and water management assigned to these facilities. Engage and direct with service providers operating and maintaining US facilities. Participate in the Company's acquisition and expansion efforts. Major accomplishments include leading the upgrade of 23 units in 6 facilities and redevelopment of another with a total budget of \$110M.

ABITIBIBOWATER INC OSHAWA, ONTARIO ACH Operating Manager, May 2007 – May 2011 Manage and supervise the operation of the Company's Ontario hydroelectric generation assets, including daily operations, water management, strategic planning and engineering. Manage and direct a staff complement charged with real time operations and water management assigned to these facilities. The facilities include 8 generating stations totalling 48 units, along with associated transmission and distribution assets, 2 control dams and 3 watersheds. Provide guidance to the Company's Ontario load assets on matters relating to energy policy and developments.

Major accomplishments include establishment and start-up of a new state of the technology control centre, recruitment, selection and training of the assigned staff and development of associated procedures manuals.

NORTH BAY HYDRO North BAy, Ontario Manager, Operations, March 2005 – April 2007

Manage and direct the Utility's Engineering, Lines and Stations operations, including daily operations, maintenance, capital program and strategic planning. Manage and direct a staff complement of both non-union and unionized staff assigned to these facilities. The facilities include 16 municipal substations and a network of 4, 12, 22 and 44KV distribution lines.

ABITIBI CONSOLIDATED COMPANY OF CANADA IROQUOIS FALLS, ONTARIO Power Manager, November 1998 – March 2005

Manage and direct all aspects of the Abitibi Consolidated-Iroquois Falls generation and transmission operations, including daily operations, maintenance, water management, capital program and strategic planning. Manage and direct a staff complement of 3 non-union and 16 unionized staff assigned to these facilities. The facilities include 3 hydro-electric generation stations totalling 92 MW of capacity, 120 km of 115KV transmission lines and 10 km of 12 KV sub-transmission lines and a distribution bus delivering over 120MW of power to the Mill facilities.

Major accomplishments: (1) determined feasibility and secured funding for the redevelopment of the Iroquois Falls Generating Station. (2) oversaw execution of the Iroquois Falls GS redevelopment project (completed December 2004).

TEMBEC - SPRUCE FALLS INC KAPUSKASING, ONTARIO Electrical & Instrumentation Maintenance Engineer, June 1996 – October 1998

Provide engineering support for the maintenance and modifications of power distribution

facilities associated with the Spruce Falls Inc mill. Provide engineering support for all electrical aspects of the mill's TMP (thermo-mechanical pulping) facilities. Develop and monitor preventive maintenance practices associated with these areas. Monitor equipment and system performance and develop corrective measures as required.

Major accomplishments: (1) investigated and corrected numerous protection deficiencies which had been causing a series of power interruptions. Reduced outage rate from 18/yr to 0 internally caused outages. (2) designed & installed power system monitoring system including real time control & metering, data logging and sequence of events monitoring.

ALGONQUIN POWER SYSTEMS, INC Regional Supervisor - Operations, October 1993 - June 1996

Manage the operation of four hydroelectric generating stations and the staff assigned to their operation. Prepare, implement and monitor preventive maintenance programs for all aspects of the facilities, including electrical, mechanical and civil disciplines. Train staff in all aspects of plant operation. Provide engineering and operations support for other Algonquin Power projects, including both active and proposed projects.

Major accomplishments included: (1) devise and implement a maintenance and operation program for the Carmichael Falls generating station which brought the facility from a performance rate approaching 60% to well in excess of 95%. (2) Design, install and commission a 115KV switching station for the Nagagami Shekak NUG plant to connect the project to the Ontario Hydro grid.

ONTARIO HYDRO

Protection & Control Engineer/Regional Operating Supervisor/District Protection and Control Supervisor, May 1981 - October 1993

OTHER

- Ontario Waterpower Association (2000 2015). Founding member and Director. Held positions of Treasurer (April 2000 – November 2004), Chairman (November 2004-February 2005), Vice Chair (January 2008 – November 2015).
- Registered Professional Engineer with PEO. License #90412883.
- Fluently bilingual
- Recipient of the Ontario Waterpower Association's R.R. Dodokin award, which recognizes the outstanding contribution of an individual to the advancement of waterpower in Ontario.

This is Exhibit "B" referred to in the Affidavit of Service of MARC MANTHA, sworn on December 28, 2024.

M

Commissioner for Taking Affidavits

This web page will be updated on a regular basis to include information about group meetings and webinars that will be taking place. In addition, this webpage will include past presentation materials, webinar recordings, feedback and responses, as well as any other non-confidential information that may be relevant to all contract counterparties or broader stakeholders.

The IESO continues to encourage contract counterparties to ask questions related to their contract by emailing <u>Contract Management</u>.

+ IESO's Approach to Amending Contracts

+ Renewable Contracts

+ Clean Energy Supply (CES) Contracts

+ Storage Contracts

+ Non-Utility Generator (NUG)

- LDC-Settled Contracts

Approach to Address the Impacts of the Market Renewal Program (MRP) on Electricity Supply Contracts Settled by Local Distribution Companies (LDCs)

This update is for IESO-contracted suppliers (the "Suppliers") for generation facilities connected to the distribution system and for which payments are administered by Local Distribution Companies (the "LDC-Settled Contracts").

These contracts include most FIT and HCI contracts, as well as certain HESOP, LRP and RESOP contracts where the Suppliers are not Market Participants. These LDC-Settled Contracts contain references to the Hourly Ontario Electricity Price ("HOEP"), which upon the implementation of the MRP, planned for May 1, 2025, will no longer be available.

Since the definition of HOEP under the LDC-Settled Contracts provides for replacement pricing, the IESO intends to implement a replacement price to account for HOEP being eliminated as further described below.

The Retail Settlement Code ("RSC"), as issued and maintained by the Ontario Energy Board ("OEB"), determines the price(s) used by LDCs in the settlement of connected retail customers, including generators. In April 2024, the OEB issued a letter outlining the anticipated amendments to the RSC, including the replacement price for HOEP, that will be required when the IESO's Market Rule amendments related to the MRP take effect. Specifically, the OEB has identified that HOEP will need to be changed to a new uniform price (the "Retail Settlement Code Price") which is expected to be the sum of the day-ahead market Ontario Zonal Price and the Load Forecast Deviation Adjustment. The letter can be found on the OEB's website at the link below:

Anticipated Amendments to OEB Codes Associated with Planned
Implementation of the IESO's Market Renewal Program

The IESO intends to maintain alignment with the price that is prescribed for LDCs by adopting the Retail Settlement Code Price as the replacement price for HOEP in LDC-Settled Contracts.

No amendments to the LDC-Settled Contracts will therefore be required. Once the updates to the RSC have been finalized by the OEB, the IESO will provide notices to the Suppliers that hold LDC-Settled Contracts that confirms the replacement price to HOEP that will take effect after the implementation of the IESO's MRP.

microFIT contracts are not affected and will not receive a notice.

Please contact <u>mr.contractmanagement@ieso.ca</u> if you have any questions.

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