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21 September, 2023

To whom it may concern,

## RE: ESC comments on Nova Scotia Green Choice Program Draft RFP and PPA Documents

Energy Storage Canada (ESC) is the national trade association dedicated to accelerating the deployment of energy storage projects and technologies<sup>1</sup>. Please find enclosed ESC's feedback on the Green Choice Program (GCP): Request for Proposals (RFP) contents ahead of Power Purchase Agreement (PPA) issuance; and on the PPA contents ahead of submitting to the Nova Scotia Utility and Review Board (NSUARB) for approval.

- 1. According to Nova Scotia Power Inc. (NSPI), as the penetration of variable renewable electricity generation in Nova Scotia's supply-mix grows, many new measures must be implemented to assure power system stability and security, including: increasingly stringent technical requirements for Inverter Based Resources (IBR); and the integration of energy storage capacity such as Battery Energy Storage Systems (BESS). Amendments to the *Electricity Act* that received Royal Assent on April 12, 2023 (Bill 264) were intended to: "… open the door for more storage solutions for renewable electricity. "We need to accelerate the use of battery storage in Nova Scotia to help us get off coal and meet our renewable electricity targets," said Tory Rushton, Minister of Natural Resources and Renewables. "These amendments encourage innovation and early adoption of battery technology in the province."<sup>2</sup>
- 2. The GCP RFP states that "[o]nce the Projects are operational, the GCP is anticipated to help achieve the Province's Renewable Electricity Standard of 80% by 2030 and support the goal of achieving a 53% reduction in greenhouse gas emissions by 2030 and net-zero by 2050." It would be a lost opportunity to the potential detriment of ratepayers, and power system stability and security if the GCP RFP and PPA were not designed in such a way as to make it possible that GCP Projects have BESS at the same Point of Interconnection (POI) (whether at the same time as the Commercial Operation Date (COD), or through future modification and/or expansion post-COD).
  - 2.1. Material renewable curtailment is already happening in Nova Scotia, and is (according to the results of the 2022 NSPI Evergreen Integrated Resource Plan) expected to increase to enormous levels. As currently written (e.g., Section 4(d)), GCP Facilities would be compensated for curtailment. As standard practice, the province should enable and at a minimum not inhibit or preclude the future integration of BESS with

<sup>&</sup>lt;sup>1</sup> For further information, please visit: <u>www.energystoragecanada.org</u>

<sup>&</sup>lt;sup>2</sup> *Electricity Act* Amendments Allow More Energy Storage Solutions (March 22, 2023)

newly contracted generation facilities to increase and optimize renewable electricity supply, and reduce inefficiencies and waste where it is of benefit to ratepayers and system stability and security.

- 2.2. The GCP RFP anticipates that it may be beneficial and/or necessary in future for Ancillary Services (AS) to be purchased from GCP Projects beyond that which is provided by default today. The integration of BESS with renewable generation facilities significantly increases their ability to provide AS. In the event that NSPI or the System Operator seeks additional AS from a GCP Project, it would again be a lost opportunity for the Seller to not have the option to explore the potential to modify or expand the GCP Project to add BESS to increase a Project's capabilities to support system stability and security, to the benefit of ratepayers.
- 3. In order to not preclude or inhibit addition of BESS to GCP Projects, the GCP RFP and PPA must enable the following potential future instances:
  - 3.1. Project(s) may include BESS, or be modified or expanded post-COD to include BESS at its POI;
  - 3.2. Project(s)'s Energy may be stored in the BESS at certain times, and delivered to the GCP from the BESS;
  - 3.3. BESS may be charged by both the Facility, and/or by the grid; and
  - 3.4. Facility may receive additional revenue streams to that under contract in the GCP for the provision of Energy Arbitrage, Capacity or Ancillary Services (AS).
- 4. To provide certainty and clarity to proponents that such a GCP Project and its design and operations (i.e., see above 3.1 3.4, inclusive) would not be precluded or inhibited, ESC asks that there be:
  - 4.1. Confirmation that there is no inhibitive or preclusive legislation, regulations, or otherwise (including: the *Electricity Act*; *Renewable Electricity Regulations* and its definition of "renewable low-impact generation facility"; *Green Choice Program Regulations*) in force in the province.
  - 4.2. A clause in the PPA stating to the effect that NSPI and the Seller may negotiate in good faith to reach agreement as to the terms and conditions that shall govern such modifications and/or expansions (i.e., see above 3.1) and transactions (i.e., see above 3.2 3.4, inclusive). This clause would be complementary to Section 5.2 of the PPA that enables NSPI or the System Operator to request or direct the Seller to provide AS.

Thank you for the opportunity to participate in this important process.

Very best regards,

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