

24 June, 2024

NOVA SCOTIA ENERGY BOARD

C/O CRYSTAL HENWOOD (CRYSTAL.HENWOOD@NOVASCOTIA.CA)

Dear Ms. Henwood,

M12247 - NS Power: Evergreen IRP Action Plan and Roadmap Update

Please accept this letter as Information Requests for Nova Scotia Power from Energy Storage Canada (ESC) in the Evergreen IRP Action Plan and Roadmap Update proceeding (M12247).

1. Please provide an update on the Effective Load Carrying Capacity Study (ELCC) in general, and as it relates to Battery Energy Storage Systems (BESS), and Long Duration Energy Storage (LDES). Has the consideration of BESS and LDES changed in this study *vis a vis* the previous one? If yes, please describe. Has stakeholder feedback resulted in changes to the scope of the study? If yes, please describe.
2. Please provide the Renewable Electricity Standard (RES) contributions by renewable energy source, and the corresponding installed capacity by renewable energy source, for the year 2024. And, please provide the anticipated RES contributions by renewable energy source, and the corresponding installed capacity by renewable energy source, for the years 2030 and 2035.
3. Please describe the generation profile of the fleet of thermal assets (e.g., annual capacity factor; hourly profile for average day; and hourly profile for highest utilization day) in 2030 and 2035.
4. Please describe how the IRP model optimizes for renewable curtailment versus building new storage. Please describe what factors the IRP model would consider before selecting energy storage to charge or discharge in the merit order.
5. Please provide the amount of renewable curtailment that occurred in 2022, 2023, and 2024 (annual MWh, and capacity factor of fleet curtailed), and that is expected by the IRP model (e.g., hourly

curtailment profile for highest curtailment day) in 2030 and 2035. Please describe where and when curtailment is expected to be most prevalent in the province in 2030 and 2035. Please describe the scope of the work related to renewable curtailment that remains ongoing following the Decision in M10905.

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

Very best regards,

Andrew Thiele

Andrew Thiele, Senior Director, Policy and Government Affairs, Energy Storage Canada (ESC)

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CC: Patrick D. Bateman, Principal Consultant & Strategic Advisor, PDBateman & Associates Inc.