



June 10, 2020

Jessica Savage Director

Independent Electricity System Operator 1600-120 Adelaide Street West Toronto ON M5H 1T1 via email: engagement@ieso.ca

RE: Storage Design Project Feedback – Long-term Design

Dear Ms. Savage,

This submission is in response to the IESO's request for feedback following the webinar held on May 20, 2020. We thank you for the opportunity to provide feedback and advice on the IESO's Storage Design Project.

Effective July 1, 2020, the members of CanWEA and CanSIA, will merge to become the Canadian Renewable Energy Association under the leadership of Robert Hornung, with a new mandate representing companies active in the wind energy, solar energy and energy storage industries in Canada.

Our vision for the Canadian Renewable Energy Association is a central role for wind energy, solar energy and energy storage in the transformation of Canada's energy mix. Making our vision a reality will require advocacy, stakeholder engagement and collaboration. This new Association is the right tool for our diverse members who are uniquely positioned to deliver clean, low-cost, reliable, flexible and scalable solutions for Canada's energy needs and as such we are well positioned to put forward this submission to the IESO to inform the Storage Design Project.

We recognize the importance of the Storage Design Project (SDP) and the effort that has been made by the IESO and other stakeholders to-date to enable greater participation for energy storage within the IESO-Administered Market (IAM). The focus of the webinar on May 20, 2020 was on the long-term vision for energy storage participation and integration into the IAM. We continue to recommend that the IESO explore options that can be undertaken in parallel with the IESO's advancement of the Market Renewal Program. We assert that the IESO needs to consider the implementability of the long-term design as well as how the storage design may affect near-term opportunities of energy storage, such as non-wires alternatives and hybrid energy systems (i.e., solar and/or wind plus energy storage).

While the IESO has objected to the inclusion of hybrid energy systems within the scope of the SDP, we note that other Canadian markets are incorporating the potential for hybrid energy systems within their framework. Specifically, the Alberta Electricity System Operator's (AESO's) short-term market implementation requirements for energy storage participation¹ sets out a clear participation model for hybrid energy systems. For the purpose of dispatch in the electricity markets, the AESO is proposing that a pool participant with a hybrid facility may choose to either aggregate the technologies on site under a single pool asset or keep the technologies as separate assets.

¹ <u>https://www.aeso.ca/assets/Uploads/Overview-of-Short-term-Market-Implementation-Requirements-for-Energy-Storage-</u> Participation-FINAL.pdf

The AESO has recognized the near-term potential for hybrid energy systems within the market as has been evidenced by recent market activity. For example, the Alberta Utilities Commission recently approved the Drumheller Solar & Battery Storage Project acknowledging that the project is in the public interest providing social, economic, and environmental benefits².

Additionally, we recently completed a discussion paper to reflect on the benefits of co-locating energy storage with variable renewable energy. While the discussion paper focuses on the broad, system-wide benefits of hybrid energy systems, it is attached to this submission for the IESO's further consideration.

Going forward, we recommend that the IESO dedicate more time for broader discussion with stakeholders to review options and present analysis. While the IESO has presented a significant amount of information during recent webinars, little time has been allocated for input from participants. Nor has the IESO taken the time to provide detailed responses to written feedback that has been received. As the IESO moves forward to finalize detailed design proposals it is imperative that feedback from the sector is incorporated into the IESO's plans to ensure support for future Market Rule amendments that may be required to integrate energy storage.

We thank you for this opportunity to provide comments, and we look forward to next steps in the discussion.

Sincerely,

R. Horning

Robert Hornung President Canadian Wind Energy Association and Incoming President and CEO **Canadian Renewable Energy Association**

Wesley Johnston Wesley Johnston President and CEO Canadian Solar Industries Association

Incl. Discussion Paper: Hybrid Energy Systems: Reviewing the Case for the Co-location of Renewables and **Energy Storage** Feedback form: esag-20200520-feedback-form-CanWEA_CanSIA FINAL.docx

Canadian Wind Energy Association & Canadian Solar Industries Association 2

² https://www.energy-storage.news/news/alberta-utilities-commission-approves-solar-plus-storage-project-as-in-the