



April 8, 2016

**Submission to the Independent Electricity System Operator (IESO)
Stakeholder Advisory Committee Preliminary Ontario Planning Outlook**

NRStor is pleased to make this submission to the IESO on the Preliminary Ontario Planning Outlook. NRStor is a Toronto-based, privately held leading energy storage developer, owner and operator focused on commercializing energy storage technologies.

NRStor is a founding member of Energy Storage Ontario, an advocacy organization representing the broad range of companies engaged in the energy storage business in Ontario. ESO has provided a submission to the IESO on the Preliminary Planning Outlook, which highlights a number of key considerations for long-term planning energy storage. NRStor strongly support the views identified by ESO:

ESO Submission Summary

- NRStor recommends that the IESO more fully integrate energy storage into its Ontario Planning Outlook.
- As uncertainty and risks are significant themes highlighted in the preliminary document, stronger consideration of energy storage services into the Planning Outlook is a proactive strategic decision to manage the risks raised in the IESO's demand/supply scenarios, while optimizing and deriving the best value out of existing resources.
- The proven ability of energy storage services to be response, flexible and versatile demonstrates there is clear system-wide benefit and economic benefits associated with energy storage.

NRStor currently has a 2 Megawatt (MW) flywheel energy storage facility, which has been providing regulation service to the IESO since July, 2014. When commissioned, the project was the first utility-scale, commercial flywheel facility in Canada. We believe this project not only demonstrates the success of local

Ontario companies to commercialize made-in-Ontario solutions, but the project has performed well and proven the value for shorter-duration energy storage on the Ontario power system.

NRStor was also recently awarded a contract from the IESO to deploy a 1.75MW/7MWh Compressed Air Energy Storage (CAES) facility in Ontario for long-duration capacity services. When operational, we expect this facility to be the largest CAES project in Canada. In 2015, NRStor released a report: [Unleashing the Value of Energy Storage](#), which indicated that large-scale long-duration CAES could save Ontario ratepayers up to \$8.3Bn over 20 years.

NRStor has also recently partnered with Tesla Energy and Opus One Solutions, to launch the distribution of Tesla's innovative Powerwall home battery energy storage system to residential customers across Canada. We have seen a tremendous demand for this product and we are excited to work with our technology partners, regulatory agencies and customers to deploy these units to put more control in customers' hands.

Energy storage technologies can significantly optimize existing transmission and distribution infrastructure to create a more reliable, clean and cost-effective power system. We believe by proactively including energy storage into the IESO's long-term plan, Ontario can continue to be an innovative energy leader in Canada – and internationally.

We welcome the opportunity to discuss these matters further with you.

Yours sincerely,



Annette Verschuren
Chair & CEO
NRStor Inc.