## Feedback Form

## Local Achievable Potential Study Webinar – August 21, 2025

## Feedback Provided by:

Name: Shane Magee

Title: CEO

Organization: Eden Energy Equipment

Email:

Date: Sept 5<sup>th</sup> 2025

To promote transparency, feedback submitted will be posted on this <u>engagement webpage</u> unless otherwise requested by the sender.

Following the Toronto Local Achievable Potential Study (L-APS) webinar held on August 21, 2025, the Independent Electricity System Operator (IESO) is seeking feedback on the draft findings. A copy of the presentations as well as a recording of the session can be accessed from the <u>engagement web page.</u>

Please submit feedback to <a href="mailto:engagement@ieso.ca">engagement@ieso.ca</a> by September 11, 2025.

Topic	Feedback
What feedback do you have on the L-APS draft findings?	I think the draft findings are well done. I suspect an important potential contributor to energy efficiency and load flexibility might be



missing from the measures included in the scope of the L-APS. I believe this is due to the timing of available information in relation to the study. As reported recently by NRCAN and Navius Research, there are significant benefits that can be achieved from Thermal Energy Storage (TES), which are also known as thermal batteries. Several choices are commercially available in Canada today. It is unclear from the report if my assumption on whether these benefits might not be included yet is correct, but I am drawing this conclusion because of the general reference to "battery storage". It is often the case that reference to battery storage focuses on the storage of Watts. Terminology for battery storage has become more granular to include Battery Storage Systems (BESS), which store Watts, and Thermal Energy Storage (TES), which store BTUs, both of which are referred to as batteries.

Is there additional information that should be considered before L-APS findings are finalized?

Yes. A report was released by NRCAN and Navius Research in the early part of June 2025 titled, "Role of thermal energy storage in reducing peak load from building electrification". I have copied several key conclusions from the report below, notwithstanding the research focused on evaluating and comparing TES and BESS for the whole of Ontario. Several significant benefits identified include:

- + "Like BESS, distributed TES in commercial and residential buildings is good at dealing with peak load."
- + "The technology can charge during hours with lower electricity demand using electricity from heat pumps and discharge heat during hours of high electricity demand."
- + "TES effectively flattens the load curve and decreases peak load by 15,555 MW."
- + "This improves the load factor and reduces electricity prices by 11%."
- + "When both BESS and TES are available, they both help manage peak load in Ontario."
- + "This analysis finds that TES provides a larger

Торіс	Feedback
	benefit during the peakiest hours in Ontario and is better suited to reduce peak load and residential electricity prices."
Are there specific modelling methodology or assumption topics that you would like to see discussed in the final public report?	Yes, I would encourage a review of the gTech modelling system (gTech & IESD) utilized by Navius Research to arrive at the conclusions noted above. Further, it would be good to understand how much of the benefits identified by Navius for the Province of Ontario noted above would directly benefit Toronto.
How can the IESO best communicate with communities and stakeholders on actioning the additional electricity demand-side management opportunities identified in the study?	I think the IESO does an excellent job with engagement and communications.

## General Comments/Feedback

I will attach a copy of the research report to this email submittal. Thank you.