Feedback Form

Enabling Resources – April 21, 2021

Feedback Provided by:

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Following the April 21, 2021 webinar on Enabling Resources, the IESO is seeking feedback from participants on the analysis, prioritization and sequencing approach and outcomes, the engagement plan objectives, and additional stakeholder inputs and considerations. The IESO will work to consider feedback and incorporate comments as appropriate and post responses on the engagement webpage.

The referenced presentation can be found under the April 21, 2021 entry on the <u>Enabling Resources</u> webpage.

Please provide feedback by May 12, 2021 to <u>engagement@ieso.ca</u>. Please use subject: *Feedback: Enabling Resources.* **To promote transparency, this feedback, if provided in an AODA-compliant format (e.g. using this form) will be posted on the <u>Enabling Resources webpage</u> unless otherwise requested by the sender.**

Thank you for your time.



Analysis and approach

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Are there resource enablement opportunities missing from this analysis?	 ESC recognizes that enabling energy storage is embedded within a number of the opportunities identified by the IESO: Front-of-the-meter storage Distribution connected storage, stand-alone or as part of aggregated resources (e.g., DERs) Behind-the-meter storage (e.g., DR) Hybrid generation + storage
	ESC suggests that the IESO also evaluate behind-the-meter (BTM) storage with the ability to inject electricity. Currently, DR resources are not permitted to inject electricity. BTM resources should be permitted to provide offers into the market that reflect its full capabilities including the ability to inject electricity.
	 With respect to DERs, we recommend that the IESO clarify that the following will be assessed: Enabling DER aggregations consisting of multiple technologies (e.g., residential solar + storage), as well as ability to participate in future Capacity Auctions or RFPs Enabling BTM and FTM DERs (including aggregations consisting of both BTM and FTM DERs).
	Further, IESO should consider 'dual use resources' that participate in the IESO electricity market and provide services to a local transmission/distribution system (e.g., non-wires alternative). Consideration should be given to how a resource could provide these two distinct types of services.

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Is the prioritization and sequencing approach sound and is there clear alignment between the approach and the analysis presented today?

In general, we are supportive of the IESO's approach to prioritization. We note the Ontario energy storage industry is well positioned to scale to meet emerging electricity needs, and that there is a strong interrelationship between enabling energy storage, and other enablement opportunities (as indicated above).

We also highlight the need to address and prioritize options for BTM DERs given the current installed capacity, and the potential for significant adoption in the coming decade.

While we appreciate that the IESO must balance internal resources (i.e., budget/human resources), ESC points out that other jurisdictions subject to FERC Order 2222 are removing barriers to wholesale market participation given that limiting participation of resources is "unjust and unreasonable" for electricity consumers. Therefore, where it is clear resources are available to compete, we recommend that the IESO prioritize and expedite the enablement opportunity. Delays in enabling resource could delay cost-savings for customers.

In addition, we recommend that the IESO consider prioritization alignment with government funding availability (e.g., NRCan, etc.), as well as community or consumer priorities to adopt DERs.

Additional input

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Do stakeholders have additional information or comments on input assumptions for consideration (e.g.,	ESC disagrees with the IESO's assessment of quantity and availability timing of energy

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limited resource life after contract expiration, additional contribution to meeting local system needs?)	storage provided on slide 29. In general, we believe that the potential quantity of energy storage available in Ontario that would be available to compete in the IAM exceeds 4000 MW (e.g., pumped storage, compressed air energy storage, battery-based storage, power-to-gas).
	We recommend that the IESO not limit the potential magnitude of energy storage projects to existing or contracted energy storage assets.
Do stakeholders agree with the prioritization outcomes?	We are supportive of the prioritization established by the IESO's presentation – particularly with respect to emphasis on Hybrids and DERs.
	That said, we believe that it is also appropriate to ensure front-of-the-meter energy storage is also a "high" priority given its linkages to other enablement opportunities. Further, IESO has already established a "design vision" for front-of-the meter energy storage, which should be built upon or serve as a foundation for other related enablement opportunities.
Are there any additional timing considerations IESO should be aware of (e.g., time-sensitive resource reinvestment decisions)?	As IESO recognizes, energy storage is well positioned to meet capacity needs arising in the mid-2020s. Energy storage developers need to have a clear view of the rules/framework to support investments in new projects. IESO's should consider timeframes required to develop new resources or uprates; the current process seems to imply that some priority will be given to resources currently contracted.

Engagement Plan

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Are stakeholders supportive of the objectives and approach detailed in the draft Enabling Resources Engagement Plan?	ESC asserts that IESO's workplan should establish metrics for success. For example, while the outcome of this engagement may be the development of an integrated workplan, a measure of success would be the implementation of the workplan within an agreed upon timeline, stakeholder buy-in and support of the workplan, and increased participation by resources. We are supportive of the approach in
	general.

General Comments/Feedback

ESC is very supportive of this ambitous undertaking by the IESO, and we commend the IESO and its staff on the work that has already been underway to enable participation in the IAM. As referenced above, we recommend that the IESO clarify the scope and priorities related to DERs, and in particular options for both BTM and FTM resources (e.g., injecting electricity from BTM supply, DER aggregations, etc.)

We look forward to the next steps of this enagement, and encourage the IESO to be as transparent as possible with its findings and recommendations to ensure broad support of the workplan.

Overall, ESC wishes to emphasize that time is of the essence to ensure Ontario can take advantage of potential federal investments in supporting non-emitting technologies. For example, Natural Resource Canada recently launched of the Smart Renewables and Electrification Pathways program, which will provide \$964 million over four years for smart renewable energy and grid modernization projects. The program is focused on funding construction of projects that use market ready technology and apply workplace equity, diversity, and inclusion components. In addition, Federal government's Strategic Innovation Fund plans to invest \$3 billion over 5 years through the Net Zero Accelerator fund to accelerate decarbonization projects with large emitters, scale-up clean technology, and accelerate industrial transformation across Canada's economy. It is pertinent for the IESO remove particiaption barriers ensure Ontarian's benefit from federal investments in energy storage and other enabling technologies.