

214 King St. West, Unit 210
Toronto, Ontario M5H 3S6
peakpowerenergy.com



February 17, 2021

Christine E. Long
Registrar
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street
Toronto ON
M4P 1E4

Delivered via email to registrar@oeb.ca
CC: Lenore.Robson@oeb.ca, Gona.Jaff@oeb.ca

Re: Sector Evolution Consultation EB-2018-0288 (Responding to Distributed Energy Resources) and EB-2018-0287 (Utility Remuneration) - Peak Power Submission

Dear Ms. Long,

Peak Power is pleased to provide the comments below in response to the January 18, 2021 report (“Ontario Distributed Energy Resources Impact Study”, prepared by ICF, herein “the Study”) and the associated webinar and presentation on February 2, 2021. Peak Power has been actively participating in this consultation and welcomes the OEB’s transparent and inclusive stakeholder engagement process.

Peak Power commends the OEB for actively engaging on this topic. A thoughtful and successful approach to DER integration will provide Ontarians the energy future we all deserve -- one that is affordable, reliable, decarbonized and supports customer choice, and DERs are a central pillar to that future. Peak Power supports the timely implementation of the actions recommended in the Study, with a few additional considerations:

Peak Power believes the capacity growth scenarios for distributed energy resources (DERs) in Ontario presented in the report are conservative, for the following reasons:

1. The view of DER has been taken is technically limiting. The Study examines only solar photovoltaic and battery storage. Most definitions are technologically much wider. For example, the IESO defines DERs as “solar panels, combined heat and power plants, electricity storage, small natural gas-fuelled generators, electric vehicles and controllable loads, such as HVAC systems and electric water heaters.”¹ A similar definition is adopted by the US Federal Energy Regulatory Commission (FERC).

¹ <https://www.ieso.ca/en/learn/ontario-power-system/a-smarter-grid/distributed-energy-resources>

2. The Study models only DERs adopted for behind-the-meter customers under existing financial constructs. This overlooks several other DER use cases, such as customer-owned DERs that are compensated through new distribution markets (such as distribution deferral), DERs owned and operated by local distributions companies (LDCs) to provide distribution services, and DERs deployed to support customers seeking additional choice.

Taking a more comprehensive view of DER technologies and their applications should illustrate the much greater potential of DERs poised for deployment in Ontario. For example, if electric vehicle (EV) sales projections hold, EVs will soon become the most ubiquitous DER with the largest available capacity and energy of any DER category. Market studies that are more comprehensive provide the best opportunity to invite competition and ultimately lower costs to consumers.

Peak Power recommends incorporating systems modernization into the actions taken to support DER integration and modernize Ontario's infrastructure. Successful integration of DERs requires advanced systems to forecast, source, assess hosting capacity, value and compensate DERs. On representative stakeholders such as the distribution system the system operator, and the transmission system, increased grid investments will be needed foundationally in order to digitalize the infrastructure to support increased monitoring, communication, and control.

Peak Power believes that, in order to ensure Ontario's competitiveness, it must accelerate its actions to support DER integration. The recommended actions put forth in the Study span out to 2030. Comparatively, FERC Order 2222, issued in September 2020, gave grid operators 270 days to submit a compliance filing and a plan for timely implementation. While the jurisdictional domains differ (the OEB's actions focus on LDCs while the FERC focuses on the transmission system operators), the scale and speed with which the US is moving potentially puts Ontario at a comparative disadvantage. Ontario can draw from the best practices and case studies of others around the world who have led their economies through this transition. Furthermore, the timing with FERC Order 2222 presents a unique opportunity to rationalize, where appropriate, market rules to invite competition and ultimately lower costs to consumers.

Peak Power appreciates the opportunity to provide feedback on this consultation. Please do not hesitate to reach out if you have any questions.

214 King St. West, Unit 210
Toronto, Ontario M5H 3S6
peakpowerenergy.com



Sincerely,

DocuSigned by:

Imran Noorani

8206F43B1FAF484...

Imran Noorani

VP, Strategy and Corporate Development

imran@peakpowerenergy.com

About Peak Power: Located in Toronto, Peak Power is an Ontario based Cleantech start-up that has developed energy solutions which use Artificial Intelligence to efficiently manage the operation of distributed energy resources (DERs) such as buildings, batteries, and electric vehicles. Peak Power was started by two best friends who were classmates at the McGill University Engineering program.

Peak Power has received seed funding from Osmington Inc., the investment office of David Thomson, Chairman of Thomson Reuters, and has been featured in BNN Bloomberg and Forbes. We are proud to have grown out of the Ontario AI and Innovation start-up ecosystem, including being awarded a \$7.6M, 0% loan from FedDev Ontario, having come through MaRS IAF, being invested in by the Ontario Centre of Excellence (OCE), and having won grants from the Low Carbon Innovation Fund (LCIF) and Sustainable Development Technology Canada (SDTC).

Our technology creates social, environmental, and economic benefits by reducing electricity costs for our customers, which include some of the largest real estate owners in Ontario. We are a chosen provider for Ontario Power Generation, and Kruger Energy, providing software services for grid management at nuclear sites, and we're working with the Independent Electricity System Operator (IESO) to model new approaches to incorporating DERs into the grid. We are a proud Canadian company, with projects both locally, and now in New York and California, gaining global brand awareness for ourselves and Canadian cleantech.