

March 28<sup>th</sup>, 2017

Stakeholder Engagement  
IESO  
*Submitted via email*

**Re: Market Renewal – Draft Report by The Brattle Group**

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EnerNOC Ltd. (EnerNOC), a leading provider of Energy Intelligence Software and demand response solutions, is pleased to provide further comments on the draft Business Case presented by The Brattle Group for the Market Renewal initiative. EnerNOC has participated in demand response in the Ontario electricity system since 2008. As noted in previous comments submitted, EnerNOC supports the preliminary findings by The Brattle Group of the benefits for all three work streams – energy market, operability and capacity auction. EnerNOC has also offered its support that the results identified are sufficient to move forward to the next steps of market renewal. This support is confirmed with the release of the Draft Report by The Brattle Group, *The Future of Ontario's Electricity Market – A Benefits Case Assessment of the Market Renewal Project (The Brattle Report)*.

There is wide spread understanding and recognition by IESO, The Brattle Group and stakeholders that the electricity system is facing new challenges as the resource mix of the system changes. One of the challenges that is cited by the IESO as well as system operators throughout North America is the need for flexibility. The electricity system now has the time to review these challenges and make market reforms to meet the emerging needs. These changes should look to increase efficiency of the energy market and the ancillary services market/programs and develop a competitive procurement mechanism to maintain resource adequacy.

The design of each workstream in market renewal will be important to meet the benefits identified in *The Brattle Report* and stakeholders and the IESO need to commit the time and resources to ensure that we get it right. Ontario has the benefit of looking to other jurisdictions and *The Brattle Report* has examined benefits and results of various markets. Ontario is its own jurisdiction that has some features that are unique, but similarities do exist and those should be taken into account when examining the benefits and designing the market renewal initiatives.

**Operability Workstream:**

*The Brattle Report* outlines the changing supply mix of Ontario's electricity system which has resulted in less flexible and intermittent resources, leaving the system unable to meet its reliability requirements in a cost-effective manner. As noted by *The Brattle Group*, the use of Out of Market mechanisms to compensate flexible generation, the spilled or curtailment of surplus baseload generation, and the barriers for non-traditional resources to participate in certain services, demonstrates that although the system has a robust supply capacity at this time, it isn't the right mix nor does the system have the right market design to fully utilize the resources on the system. EnerNOC accepts that the Business Case outlined in *The Brattle Report* which identifies that the operability workstream will aim to modernize the market design to more fully and more cost-effectively utilize the flexible resource potential of the existing system and improve the incentive to develop more flexibility going forward.

**Energy Market Workstream:**

The Energy Market needs to be re-designed to prepare Ontario for uncertainties and enable the sector to more effectively adapt to change. EnerNOC supports this need. This includes being able to more cost-effectively integrate increasing amounts of distributed energy resources including demand response and storage, and more cost effectively adapt to public policy changes such as integrating increasing quantities of intermittent resources. Ontario needs to improve the efficiency of the resources that exist in Ontario today and that could exist in the future. The Brattle Report provides sufficient analysis to move forward with the Energy Market workstream.

**Capacity Market Workstream:**

As outlined in The Brattle Report, the current approach of procurement of resources in Ontario has met the province's resource adequacy needs and enabled rapid decarbonization. But the method has also contributed to excess capacity and associated costs. The IESO recognized the challenges of the long term contract approach, and has tested competitive procurement via an auction platform with the DR resource. The Brattle Report has outlined the benefits of this type of procurement including increasing the number of participants who participated in the first two DR Auctions and lowering the price of demand response 11% and 26% respectively over the former non-market mechanism.

EnerNOC supports the draft conclusions in the Report and the analysis that by more effectively harnessing competition among different resource types and between new and existing technologies, the capacity auction workstream will reduce the cost of meeting resource adequacy needs. As a Market Participant in a number of markets identified by The Brattle Report, EnerNOC acknowledges that capacity markets have created a level playing field that enables competition among new and existing generators, incumbents and new entrants, internal supply and imports, traditional and new types of technology, generation and demand side resources, and centralized and distributed resources. Non-traditional resources have been procured in early years of capacity market at competitive prices including demand response, increased imports and generation updates.

The Brattle Report provides examples of systems in the Northeast that have "successfully relied on capacity market to meet their reliability needs for more than a decade." PJM, ISO-NE and NYISO have attracted substantial quantities of low-cost capacity resources. These markets design are fluid and have met challenges which, as referenced above, Ontario can learn from. The markets in the Northeast have met or exceeded their resource adequacy requirements cost-effectively. This has been done through their market design, including clearly defining their capacity needs in reliability terms, and then procuring the needed supplies through non-discriminatory auctions open to all types of resources. The capacity markets have created a competitive playing field. The auction based format has proved effective at leveraging competitive forces to attract the lowest cost combination of available resources. EnerNOC supports the statement in The Brattle Report that they "expect that market participants in Ontario will similarly identify low-cost opportunities for incremental capacity when the need arises."

EnerNOC also agrees with the statement in The Brattle Report that a primary "disadvantage of capacity markets is that design and parameter changes have significant financial implications, and so tend to be the focus of contentious stakeholder debates". Constant change of rules in the capacity may impact the benefits identified in The Brattle Report, underscoring the importance of market design, applying best practices from other regions, and proper governance.

Although governance was not part of work defined in the project for The Brattle Group, governance is a key element of all established capacity markets and a topic that needs to be established in the market renewal process to assist in ensuring that the benefits outlined in the draft report are met. EnerNOC supports the recommendation that the IESO should “work with stakeholders and policymakers to identify governance and market design structures that reduce regulatory risks to investors”.

Ontario’s policy and regulatory environment, as outlined in The Brattle Report, does play a substantial role in determining how well a capacity market will function. The design element of the capacity market will impact how it will perform. It is imperative that a well-designed auction be created to enable competition and innovation to achieve the established objectives at least or reasonable costs. EnerNOC supports the view of The Brattle Group that the benefits of a capacity market and any market-based clean energy mechanism will be greater if more of the system-wide investment costs are recovered through these competitive mechanisms. EnerNOC also agrees that “Ontario will need to carefully evaluate its own policy environment, governance structure and interactions with clean energy policy in order to develop a well-designed incremental capacity auction tailored to achieve the needs of the province cost-effectively”

**Conclusion:**

The Brattle Report outlines sufficient analysis to move forward with the three workstreams – Energy Market, Operability and Capacity Auction – to the next stage of the Market Renewal process. In order for the workstreams to meet the benefits identified in the report, time and resources by all participants will be required to ensure the market design or re-design meets the objectives and goal of the market renewal process. EnerNOC is committed to the market renewal process and looks forward to starting the next stage.

Yours truly,



Sarah Griffiths  
EnerNOC Ltd.